Mohammad Monirul Islam, Md. Elias Hossain  
Crop Diversification in Bangladesh: Constraints and Potentials

Ranjit Kumar Sarkar, M. A. Sattar Mandal  
One Stop Service Centre in Pourashava: How Efficient and Transparent?

Jamaluddin Ahmed  
Changing Role of Central Banks: Comparison of Practices

Mahfuz Kabir  
Interest Rate Sensitivity of Microcredit Demand in Bangladesh

S. M. Saief Uddin Ahmed  
Livelihood and Employment Risks Among Street Vendors of Sylhet City in Bangladesh

Md. Nazrul Islam, Md. Tanjil Hossain, Sadia Afrin  
Impact of Micro-Credit to Reduce Poverty: A Case Study of Mymensingh

Mihir Kumar Roy, Shahriar Parvez, Asraful Islam  
Customer Perception on Internet Banking and Its Effect on the Performance of Bank in Bangladesh

Mihir Kumar Roy, Rezuna Sharmin Mouri  
Consumer Perception on Basic Spice: A Comparative Study between Branded & Open Spice

Mihir Kumar Roy, Md. Abdus Salam Sarker, Shahriar Parvez, ASM Shawnewaz  
SME Banking in Bangladesh: A Socio Economic Analysis

M A Jalil  
Socio-economic Development Through Economic Growth: Myth or Reality

M A Jalil  
SME: An Instrument for Encouraging Rural Employment Generation and Contributing More to Export Earnings

Md. Rajibul Ahsan, Son Ngoc Chu  
The Potential and Constraints of the Exports of Environmental Goods (EGs): the case of Bangladesh

Sonjoy Chkaraborty  
Investment Climate and Foreign Direct Investment: Comparing Bangladesh with Selected Countries in Asia

Kazal Asgar, Mousumi Saha  
Political Economy of the Concept of Export Processing Zones and its Contribution to the National Economy

Md. Waheduzzaman Sarder  
A Study on Participation of Commercial Banks in Microfinance Programs – Perspective Bangladesh

Tauhidul Islam, Md. Tanjil Hossain  
Exchange Rates and Economic Growth in Bangladesh: An Econometric Analysis

S. M. Saief Uddin Ahmed  
Adoption of Energy Drinks: A Cause for Concern and Social Awareness

Dr. Md. Moniruzzaman  
Long Run Relationship between Export and Import of Bangladesh: Growth Trend, Cointegration and Causality Analysis

Md. Golzar Nabi, Md. Mostafizur Rahman Sarder, Md. Syedul Islam  
An Analysis of Recent Trends of Agricultural Credit in Bangladesh

Research Note
Mohammad Ali  
Financial Sector Development: Fraud Risk Management in Banks
বাংলাদেশ জার্নাল অফ পলিটিক্যাল ইকনমি
একাদশ খণ্ড, সংখ্যা ৪, জুন ২০১৬

সম্পাদক
ড. আশরাফ উদ্দিন চৌধুরী

সম্পাদনাঃ
অধ্যাপক ড. অমর্ত্য সেন
অধ্যাপক ড. নুরুল ইসলাম
অধ্যাপক ড. আনিসুর রহমান
অধ্যাপক রহমান সোবাহান
ড. কাজী খলিলুজ্জামান আহমদ
অধ্যাপক সন্তু কুমার সাহা
অধ্যাপক ড. মইনুল ইসলাম
জনাব এস. এম. আমিনুর রহমান

সম্পাদনা পরিষদ
অধ্যাপক ড. আশরাফ উদ্দিন চৌধুরী
অধ্যাপক মোঃ হানিফ
অধ্যাপক আইযুতুর রহমান তৃতীয়া
অধ্যাপক তোফাজুল হোসেন মিয়া
অধ্যাপক ড. এ. কে. মনো-ওয়ার উদ্দিন আহমদ
অধ্যাপক ড. মোঃ ইসমাইল হোসেন ইলীয়ান
অধ্যাপক ড. আবুল বারকাত
অধ্যাপক ড. মোহাম্মদ মামুন
অধ্যাপক ড. মোঃ মোয়াজমেহ হোসেন খান

কর্মকর্তা সম্পাদক
সদস্য, সম্পাদনা পরিষদ
সদস্য, সম্পাদনা পরিষদ
সদস্য, সম্পাদনা পরিষদ
সদস্য, সম্পাদনা পরিষদ
সদস্য, সম্পাদনা পরিষদ
সদস্য, সম্পাদনা পরিষদ
সদস্য, সম্পাদনা পরিষদ
সদস্য, সম্পাদনা পরিষদ

বাংলাদেশ অর্থনীতি সমিতি
৪/সি, ইন্টার্ন্যাশনাল গার্ডেন রোড, ঢাকা-১০০০
টেলিফোন : ৯৩৪৫৯৬, ফ্যাক্স : ৮৮০-২-৯৩৪৫৯৬
ই-মেইল : bea.dhaka@gmail.com
ওয়েব সাইট : bea-bd.org
BEA Executive Committee 2015-2016

- President
  Ashraf Uddin Chowdhury

- Vice- Presidents
  Tofazzal Hossain Miah
  Mohammad Mamon
  Mohammad Hanif
  A.F. Mujtahid
  A.K. Monaw-war Uddin Ahmad

- General Secretary
  Jamaluddin Ahmed

- Treasurred
  Md. Mostafizur Rahman Sarder

- Joint Secretary
  Md. Liakat Hossain Moral
  Syeda Nazma Parvin Papri

- Assistant Secretary
  Sahanara Begum
  Meherunnesa
  Mir Hasan Mohammad Zahid
  Sk. Ali Ahmed
  Sukumar Ghosh

- Members
  Abul Barkat
  M. Moazzem Hossain Khan
  Nazmul Bari
  Md. Nazrul Islam
  Md. Saidur Rahman
  Amirul Islam
  A.K.M. Ismail
  Md. Morshed Hossain
  Md. Jahangir Alam
  Ajoy Kumar Biswas
  Md. Habibul Islam
  Syed Asraul Haque
  Partha Sarathee Ghosh
  Subhash Kumar Sengupta
From Editor’s Desk

This volume (Vol. 31, No. 4, June 2016) of Bangladesh Journal of Political Economy (BJPE) contains selected papers presented at the Bangladesh Economic Association (BEA) 18th Biennial Conference held in 2015. All the papers included in this volume were reviewed by both internal and external reviewers and concurred by the editorial Board for publication.

I express my indebtedness to the authors, the reviewers, and the members of the Editorial Board of the Journal. Special thanks are due to Prof. Abul Barkat, former President BEA and member of the Editorial Board of the Journal who shouldered special responsibility to the task.

(Ashraf Uddin Chowdhury)
Editor, Bangladesh Journal of Political Economy
President, Bangladesh Economic Association
1. Initial screening নির্বাচনী সম্পাদকের এখতিয়ারভূক্ত থাকবে, তবে প্রয়োজনবোধে সম্পাদনা পরিষদের অন্য সদস্যদের সহায়তা তিনি দেবেন। নির্ধারিত format মোতাবেক সম্পাদনের জন্য এই পর্যায়ে প্রাথমিক ভাবে short-listed প্রবহমান তালিকার কাছে প্রেরণ করা হবে।

2. অভ্যন্তরীণ রিভিউ সাধারণতঃ সম্পাদনা পরিষদের সদস্যদের মধ্য থেকেই মনোনীত হবেন। বহিঃস্থ রিভিউ সম্পাদনা পরিষদের সিদ্ধান্তক্রমে প্রবন্ধের বিষয়ের ভিত্তিতে সম্পাদনা পরিষদের বাইরের থেকে মনোনীত হবেন, তবে তিনি দেশের অভ্যন্তরীণ বা বিদেশে অবস্থান করতে পারেন। সম্পাদনা উপদেষ্টা কমিটির সকল সদস্য review হতে পারবেন। তৃতীয় review প্রয়োজন হলে সম্পাদনা পরিষদের বাইরে থেকে মনোনীত করা হবে।

3. সম্পাদকের দ্বিবিধ সম্মেলনে উপস্থিত প্রবহমান referral প্রক্রিয়ার মাধ্যমে জার্নালের জন্য বিবেচিত হবে।

4. ক) সম্পাদকের দ্বিবিধ সম্মেলনে উপস্থিত প্রবহমান referral প্রক্রিয়ার মাধ্যমে জার্নালের জন্য বিবেচিত হবে।

খ) নির্দিষ্ট সময়ে সম্পাদকের জার্নালের জন্য বিবেচিত হবে।

5. অভ্যন্তরীণ সম্মেলনে ও সদস্যবদ্ধ শাখায় থেকে কোন অধিকারী প্রধান জার্নালের গ্রাহক হতে পারবেন। তবে সদস্যদের ক্ষেত্রে গ্রাহক হবে।

6. জার্নালের footnoting এবং writing style এতদসঙ্গে সংযোজিত হলো (জার্নালের শেষাংশ)।

7. দেশের অভ্যন্তরীণ অবস্থানকারী উপদেষ্টা কমিটির সদস্যদেরকে বস্তর দুর্বল সম্পাদনা পরিষদের সহায় আমৃত্তে জানানো হবে।

8. ক) তিনটি কোটেশন সংগ্রহ করে সম্পাদনা পরিষদের সিদ্ধান্তক্রমে মুদ্রক প্রতিষ্ঠান নির্বাচন করা হবে।

খ) প্রথম proof প্রেস দেখবে, পরবর্তীতে softcopy তে প্রবহমান ফাইনাল proof দেখে দেবেন।
<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>বাংলাদেশে মৌলবাদ ও মৌলবাদী জঙ্গিতের রাজনৈতিক অধ্যাদর্শের আবৃত্তি</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Crop Diversification in Bangladesh: Constraints and Potentials</td>
<td>Mohammad Monirul Islam, Md. Elias Hossain</td>
</tr>
<tr>
<td>3.</td>
<td>One Stop Service Centre in Pourashava: How Efficient and Transparent?</td>
<td>Ranjit Kumar Sarkar, M. A. Sattar Mandal</td>
</tr>
<tr>
<td>5.</td>
<td>Interest Rate Sensitivity of Microcredit Demand In Bangladesh</td>
<td>Mahfuz Kabir</td>
</tr>
<tr>
<td>6.</td>
<td>Livelihood And Employment Risks Among Street Vendors Of Sylhet City In Bangladesh</td>
<td>S. M. Sathef Uddin Ahmed</td>
</tr>
<tr>
<td>10.</td>
<td>SME Banking in Bangladesh: A Socio Economic Analysis</td>
<td>Mihir Kumar Roy, Md. Abdus Salam Sarker, Shahriar Parvez, ASM Shawnewaz</td>
</tr>
<tr>
<td>11.</td>
<td>Socio-economic Development Through Economic Growth: Myth or Reality</td>
<td>M A Jalil</td>
</tr>
<tr>
<td>No.</td>
<td>Title</td>
<td>Authors</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>14.</td>
<td>Investment Climate and Foreign Direct Investment: Comparing Bangladesh with Selected Countries in Asia</td>
<td>Sonjoy Chkaraborty</td>
</tr>
<tr>
<td>15.</td>
<td>Political economy of the concept of Export Processing Zones and its contribution to the national economy</td>
<td>Kazal Asgar, Mousumi Saha</td>
</tr>
<tr>
<td>16.</td>
<td>A Study on Participation of Commercial Banks in Microfinance Programs – Perspective Bangladesh</td>
<td>Md. Waheduzzaman Sarder</td>
</tr>
<tr>
<td>17.</td>
<td>Exchange Rates and Economic Growth in Bangladesh: An Econometric Analysis</td>
<td>Tauhidul Islam, Md. Tanjil Hossain</td>
</tr>
<tr>
<td>18.</td>
<td>Adoption of Energy Drinks: A Cause for Concern and Social Awareness</td>
<td>S. M. Saief Uddin Ahmed</td>
</tr>
<tr>
<td>19.</td>
<td>Long Run Relationship between Export and Import of Bangladesh: Growth Trend, Cointegration and Causality Analysis</td>
<td>Dr. Md. Moniruzzaman</td>
</tr>
<tr>
<td>21.</td>
<td>ভোষ তল্পের উপর অভিজ্ঞতালক্ষ অর্থমানিক বিশ্লেষণ</td>
<td>মো: জাহিরুল ইসলাম সিকদার</td>
</tr>
<tr>
<td>22.</td>
<td>Research Note</td>
<td>Financial Sector Development: Fraud Risk Management in Banks</td>
</tr>
</tbody>
</table>

Mohammad Ali
বাংলাদেশে মৌলবাদ ও মৌলবাদী জঙ্গিতের
রাজনৈতিক অর্থনীতি

আবুল বারকাত *

সারকথা: বাংলাদেশ ধর্মনীতিক সাম্প্রদায়িকতা উপর রূপ ধারণ করেছে। এ সাম্প্রদায়িকতার সারাসারি সমন্বয়, তথা প্রতিকৃতি ও প্রতিকৃতির উভয় শক্তির (উপাদানের) মাধ্যমে ‘অর্থনীতি
ক্ষমতা-ভিত্তিক রাজনৈতিক অর্থনীতি’কে রাজনৈতিক কেন্দ্র হিসেবে গ্রহণ করে নিযুক্তি জাতি
কর্মকাজে মাধ্যমে রাষ্ট্রভাষা দখল নেয়। ধর্মের নামে রাষ্ট্র ক্ষমতা দখল মৌলবাদী জঙ্গিতের
শেষ কথা নয়; ‘বৈশিষ্ট্য পূর্বকালীন ব্যবস্থাকে চিন্তামূলক’ করাই সম্ভব চূড়ান্ত লক্ষ্য।
বৈশিষ্ট্য পূর্বকালীন
ব্যবস্থার হেতু মার্কিন সামরিকভাষার চূড়ান্ত লক্ষ্য হলো পৃথিবীর চারটি মৌল-কৌশলিক সম্পদের
উপর তাদের নির্ভর মালিকানার এবং একজন ক্ষুদ্র-নিয়ন্ত্রণ প্রতিষ্ঠা করা - জীব সম্পদ, পানি সম্পদ,
তেল-গ্যাস-ক্রান্ত-সম্পদ, এবং আকাশ-মহাকাশ সম্পদ। আর ঐ চূড়ান্ত লক্ষ্যে পৌরহিত্যের
বিভিন্ন পদ-পশ্চ-পদ্ধতির মধ্যে অন্যতম হলো ধর্মনীতিক মৌলবাদ ও জঙ্গিত প্রাপ্তিবর্গিত রূপ দেয়া
(এ ক্ষেত্রে স্বাতান্ত্র্য-ক্ষমতার হারের দশক আন্তর্জাতিক ধর্মের যে কোনটি

‘মৌলবাদ ও সাম্রাজ্যবাদ’ ইত্যাদি বিষয়ে দিয়ে আমার বিকল্প ২০ বছরের (১৯৯৬-২০১৫) গবেষণা ফলস্বরূপে নিয়মের
বলা চলে। আমার সারাবিংগ গবেষণার মাধ্যমে প্রকাশিত অন্যতম হলো নিম্নরূপঃ ‘বাংলাদেশ মৌলবাদের অর্থনীতি’, ভ. অবরুল গোকুর শাসন বক্তৃতা, ঢাকা: ২২ এপ্রিল ২০০৫; “Economics of Fundamentalism in Bangladesh: Roots, Strengths, and Limits to Growth”, presented at South Asia Conference on Social and
Religious Fragmentation and Economic Development, Cornell University: 15-17 October 2005; “ধর্ম যা যার রাষ্ট্র সংবর্ধনঃ মহাবিদ্যালয় রোডে নেকুলার ঐক্যের বিকল্প মেই”, নেকুলার ইউনিভার্সিটি বাংলাদেশ, ঢাকা:
৩১ ডিসেম্বর ২০০৫ঃ ‘বাংলাদেশ মৌলবাদের রাজনৈতিক অর্থনীতি’, জাহানারা ইমাম শাসন বক্তৃতা ২০১২, ঢাকা: ২৬
জুন ২০১২ঃ “Political Economy of Fundamentalism in Bangladesh”, in Mainstream, Special
রাজনৈতিক-অর্থনীতি”, keynote paper presented at International Public Lecture organized by
Bangladesh Ithas Sammilani “Religion and Politics: South Asia”, Dhaka: 4-5 October 2013;
“Imperialism and Religious Fundamentalism: A Treatise on Political Economy with reference
to Bangladesh”, keynote paper presented at International Seminar “Combating Fundamen
talism and Imperialism in South Asia”, Dhaka: 29 May 2015; “A Political Economy Treatise on
Religious Fundamentalism and Extremism: A high probability global catastrophe with reference
to Bangladesh”, Lead Speaker’s paper, IISS, London: 9 September 2015; “বাংলাদেশ
মৌলবাদীর রাজনৈতিক অর্থনীতি ও জঙ্গিত: মমতা ও করানী”, মূল প্রবক্ষ, বাংলাদেশ অর্থনীতি সমিতি আয়োজিত
জাতীয় সমিতার ২০১৫, ঢাকা: ১২ ডিসেম্বর ২০১৫, চট্টগ্রাম: ১৯ মার্চ এবং নোয়াখালী ১৯ আগস্ট ২০১৬ “মৌলবাদের
রাজনৈতিক অর্থনীতি বিচার প্রদর্শন”, দক্ষিণ এশিয়ায় মৌলবাদ, সামরিক ও নারী-এরিতোরো শীর্ষক কৃতীয় দফাগুলিতে এপ্রিল ২০১৬-এর
জন্য রচিত মূল প্রবক্ষ, ঢাকা: ১১ মার্চ ২০১৬।
1. ধর্ম, সাম্প্রদাযিকতা, ধর্মতন্ত্র মূলবাদ, মৌলবাদী জাতি: প্রাক্তন কথা
ধর্মতন্ত্র মূলবাদ ও ধর্মীয় জাতির মধ্যে অনুধাবন প্রথমেই দুটো বিষয় নিয়ে শুরু করা যাবার মনে করছি। বিষয় দুটি নিম্নরূপ: প্রথমত একদিকে বক্তব্যটি গবেষণার ব্যবহার \"বিষয়ে মোট ১৩০ কোটি \"
Muslims. The survey was conducted by the Pew Research Center, which suggests that the percentage of Muslims who believe in scripture-based interpretations of Islam is increasing. This trend is evident across different countries, with figures ranging from 80% in Indonesia to 50% in Turkey. The study also highlights the importance of understanding the religious beliefs and practices of Muslims to foster greater understanding and respect for their culture and faith. This is crucial in promoting interfaith dialogue and cooperation. 


Gallup Press.

Murder in the Name of...
2. Moulid-el-Daoud's religious orthodoxy and activism:

Moulid-el-Daoud's religious orthodoxy and activism is a complex phenomenon that has been debated by researchers. Some argue that his activism was driven by a desire to spread the message of Islam and to combat apostasy, while others see it as an extension of his personal views on political power.

Moulid-el-Daoud was a prolific writer and speaker who used his platform to promote his political agenda. He was known for his fiery speeches and his ability to mobilize crowds. His activism was not without its critics, however, and he faced opposition from both secular and religious groups.

In conclusion, Moulid-el-Daoud's religious orthodoxy and activism were a significant part of the religious landscape of his time. His influence continues to be felt in the region today, and his legacy will no doubt continue to be debated for years to come.
Bangladesh. Preliminary Research Study: Islamic activism with case of

“No fly zone”


6 Jørgen Stig Poulsen, 2002,
As the proxy war looms, Bangladesh: Preliminary Research Study: Islamic activism with case of “Doctrine of resort to force at will”


Theminute of the meeting of the National Executive Committee of the Bangladesh Nationalist Party, held on 19th January 2023, to discuss the party's current political strategy and future plans.

The meeting was attended by all the members of the National Executive Committee. The meeting was chaired by the President of the party, Mr. Aminul Islam, who emphasized the importance of unity and solidarity among the party members.

The party's General Secretary, Mr. Shahidul Islam, presented the party's current political strategy and future plans. He highlighted the party's commitment to upholding the principles of democracy and human rights, and to working towards a more just and equitable society.

The Vice President, Mr. Md. Akhtaruzzaman, proposed a series of policies aimed at improving the quality of education in the country, and the President agreed to allocate funds for this purpose.

The party's Treasurer, Mr. Md. Shafiqul Islam, presented the party's financial report for the year 2022, which showed a significant increase in the party's revenue, driven by increased membership fees and donations.

The meeting concluded with a vote of confidence in the leadership of the party and a call for all members to work together to realize the party's goals.

Ahmed quoting Maududi work: "In our domain we are doing with Islam. Ahmed quoting Maududi work: "In our domain we are doing
বিদ্যমান বিষয়কের শেষের দিকে মার্কিন যুক্তরাষ্ট্রের বিখ্যাত বিশ্ববিদ্যালয়ের পথ-পদ্ধতি দ্বিতীয় শ্রেণীর প্রতিনিধিত্ব করে। এতেকালে লাতিন আমেরিকা নিয়ে বাংল মার্কিন যুক্তরাষ্ট্র আমর লাতিন আমেরিকার সীমান্ত না থেকে মনোরো মতবাদের মধ্যে যে বিশ্বক্ষত্তের সৃষ্টি আকাশ ছিল তা পূর্বাপেক্ষায় বাসবাসনে এপিওয়া যায়। এ প্রক্ষে ১৯৫৫ সালে (নে মানে) মার্কিন যুদ্ধক্রান্ত হেরিয়া চিত্রায় দিলেন যে কোন পরামর্শক বিশেষ ব্রিটেনের যে সব অধিকার সিস্টেমে নিয়মাকৃত ভূমিকা পালন করছে তা উঠে সরে উঠেছে জাতীয় আমলের করে হেন ব্রিটেন ও সোভিয়েত ইউনিয়নে যে সব অধিকার জোটে নেতৃত্ব দিচ্ছে তা ভেঙে ফেলতে হবে এবং সেদিনে আমাদের পক্ষে অধিকার জোট সৃষ্টি করতে হবে।

দ্বিতীয় বিশ্বযুদ্ধের শেষের দিকে মার্কিন যুক্তরাষ্ট্রের বিখ্যাত বিশ্ববিদ্যালয়ের পথ-পদ্ধতি দ্বিতীয় শ্রেণীর প্রতিনিধিত্ব করে। এতেকালে লাতিন আমেরিকা নিয়ে বাংল মার্কিন যুক্তরাষ্ট্রের বিখ্যাত বিশ্ববিদ্যালয়ের পথ-পদ্ধতি দ্বিতীয় শ্রেণীর প্রতিনিধিত্ব করে। এ প্রক্ষে ১৯৫৫ সালে (নে মানে) মার্কিন যুদ্ধক্রান্ত হেরিয়া চিত্রায় দিলেন যে কোন পরামর্শক বিশেষ ব্রিটেনের যে সব অধিকার সিস্টেমে নিয়মাকৃত ভূমিকা পালন করছে তা উঠে সরে উঠেছে জাতীয় আমলের করে হেন ব্রিটেন ও সোভিয়েত ইউনিয়নে যে সব অধিকার জোটে নেতৃত্ব দিচ্ছে তা ভেঙে ফেলতে হবে এবং সেদিনে আমাদের পক্ষে অধিকার জোট সৃষ্টি করতে হবে।
Bangladesh. Preliminary Research Study: Islamic activism with case of

18. অবিকৃত রুপাঙ্কের উল্লেখিত নীতি-তত্ত্ব প্রচার করেই মার্কিন প্রেসিডেন্ট লিভন জনসন ভিয়েন্টিয়ালসের মহাসাধারণ যুক্তর করেছেন, । প্রেসিডেন্টের কর্তর রুশ 9/11 দেখিয়ে ইরাক দখল করেছেন (আর সহযোগি যুক্তরাষ্ট্রের প্রাদেশিক ও প্রশাসনিক টিস্ট ব্যাপারের সাহে এন্ড বলছেন “কল্পনা করেছে” ), প্রেসিডেন্ট বাংলাদেশ হিন্দু আহ্বান করেছেন “সরাসরির বিস্তার যুদ্ধের” 

ফরমুলা প্রেসিডেন্ট বাংলাদেশ ও মায়াকে সহায়তার জন্য মার্কিন কর্পোরেশন থেকে সাক্ষরতার জন্য পরিমাণ বাড়িতে বরাদ্দ আদায় করে ছেড়েছেন। এসব কিছুই করা হয়েছে সুনিশ্চিত একক লক্ষ্য। লক্ষ্যটি হল যে কোনো পথে পথে পছন্দিত “মার্কিন সার্জেন্সারকে এককচর্চা-অপরূপের বিশ্ব প্রভূতে রূপাঙ্কের বিশ্ব”।

১৯৬০-এর দিকে বর্তমানে ঘূর্ণ “ডেমনা তত্ত্বের” যে ভাষাটি (এ তত্ত্বের জটিল ভাষা আছে) প্রেসিডেন্ট লিভন জনসন ভিয়েন্টিয়ালসের যুদ্ধের যুক্তি হিসেবে বিবেচনা করেছেন তা বেশ সুলায় যে ভাবায়কে জানাতে (নিজের দেশসহ যে কোনো দেশের) ভাব দেখাতে হবে যে ওরা (সে যে দেশেই হোক অথবা


11. এসব “আইচেসন তত্ত্ব” (Acheson doctrine) হিসেবে খ্যাত। বিশ্বাস নেয়ার, নেয়ার চার্টিক, ২০০৪, Hegemony or Survival: America's Quest for Global Dominance, Penguin Books, p. ১৪-১৬।

1. 1960-এর দশকে সমাজতান্ত্রিক কিউবার বিশ্বের কিউবার দিওনো মিসাইল রুসাই স্ক্রিপ্টস এর সময় মার্কিন সামরিকবাদের “কমিউনিস্ট পরিবর্তনের লক্ষে আন্তর্জাতিক স্থানান্তরীণ কর্মকাণ্ড” পরিচালনা। উল্লেখ যে “আমাজন্ট” ৩০ সালের পৃথিবীর পাশাপাশির স্বাধীনতা শ্রেষ্ঠত্ব হিসেবে উপাধিত।

2. ১৯৮০-র দশকের শুরুর দিকে সুন্দরদেভ বিদ্যমান যখন নিকারাগুয়ায় মার্কিন আমেরিকান পুটিন সরকার সামুদায়িক সামরিকবাদের উৎখাত করলো ওই সময় মার্কিন যুক্তরাষ্ট্র সরকারের নিবন্ধনে মানুষ হত্যা করলো। আন্তর্জাতিক আন্তর্জাতিক স্থানান্তরীণ কর্মকাণ্ড এই পরিস্থিতি শুরু হযখতে হয়েছিল।

3. ১৯৮০-র দশকের মধ্যভাগে আল-সালামবাদের মার্কিন যুক্তরাষ্ট্র নিয়ন্ত্রণ হতাশ্য চালায়। একবার করালে ঘোরতম হামলার প্রথায় সাংবাদিক জুলিয়া গ্রোভেই লিখিয়েছেন “১৯৬০ থেকে ১৯৯০-র দর্শনা আমেরিকায় মার্কিন সামরিকবাদ মার্কিন প্রেসিডেন্ট রেগাং আন্তর্জাতিক স্থানান্তরীণ কর্মকাণ্ডের দিওনো মার্কিন যুক্তরাষ্ট্রের হয়েই হাতস অতি সহজেই বিশ্ব নিয়ন্ত্রণ পরিপাক ভিত্তি হতে পারে”।

4. মার্কিন যুক্তরাষ্ট্র ২০০২ সালের সেপ্টেম্বর মাসে ইরাকের প্রেসিডেন্ট সাদাম হোসেনের বিরুদ্ধে মিথ্যা অভিযোগ উপস্থাপন করে যুদ্ধ ঘোষণা করে। মার্কিন সামরিকবাদ যে সব কারণ দেখিয়ে যে তায় ইরাক দখল করে তা আন্তর্জাতিক আইন অনুরূপ “মুসলিমদের।” কারণ মার্কিন সামরিকবাদ রাষ্ট্র-সরকার ইরাকের প্রেসিডেন্ট সাদাম হোসেনের বিরুদ্ধে যুদ্ধ ঘোষণার ক্ষেত্রে মার্কিন ভাষার উপস্থাপনা করে (মার্কিন জনগণের ৯০ শতাংশ ইরাক দখলের বিপক্ষে ছিলেন)। মার্কিন সামরিকবাদ তাদের মাহ-কৌশল -এর আংশ “Doctrine of resort to force at will” অবলম্বন করে ইরাক দখলের পক্ষে যে সব যুদ্ধের আঞ্ছন নেয় তা হলো: সাদাম হোসেন একজন ডিজিটার; সাদাম হোসেন মার্কিন যুক্তরাষ্ট্রের নিয়ন্ত্রণ ক্ষেত্রে এক সংলগ্ন হোসেন গুটে টুইস্টার ভাষা ছাই ১১/১১ এর জন্য দায়ী; সাদাম হোসেন ৯/১১ মাত্র আরও কতর সারা মার্কিন; এবং সাদাম হোসেনের হতে “গণবিধিনী সমাজসেবা” আছে যা সে যে কোনো সময় ব্যবহার করবে।

5. সামরিকবাদের জন্য “সময়” বিষয়টি চুক্তি গর্ভতুরুপূর্ণ। ইরাক দখলের সামরিকতা হলো মার্কিন কর্তৃকের মানবকর্মী নির্বাহ, যখন মার্কিন জনগণের মৃন-মানুষক্ষেত্র মূল ঘটনা থেকে অন্যদিকে শিফ্ট করার প্রয়োজন ছিলো। তাহেল ইরাক দখল

18 অর্থাৎ ইরাক দখলের পরে অনেক কোষাণ্ডের পরের ইরাকের “গণ-লীনী মারাত্মক” যখন পাওয়া গেল না তখন মার্কিন যুক্তরাষ্ট্রের বিষয়ে “কিছু যুদ্ধপাতি-ক্ষতিগ্রস্থ মানুষ পাওয়া গেছে যা দিয়ে এ ধরনের মারাত্মক-সমাজ বানানো সমস্যা”।
The text is in Bangla and contains a mix of Bengali script and English words. The content appears to be a research study on Islamic activism with a case study. The text is divided into paragraphs, each discussing different aspects of the study. The text is written in the context of providing information about the study's methods and findings.
5. Markin Yuktastri 2011 সালে তেলেসমূহ লিবিয়া দখল করলো। মার্কিন সরকারের হিসাবে লিবিয়ার প্রেসিডেন্ট মোহাম্মদ গাদফি ছিলেন “অবিশ্বাসযোগ্য ডিতেলেট”। লিবিয়ার মার্কিন যুক্তরাষ্ট্রের প্রাথমিক ছিল “প্রভুত্ত ডিটেলেট” (করণ গাদফি “যথেষ্ট মাতৃয় বেগীয়” এবং “কোনো কথাই শেনা না”)। লিবিয়া দখল করে প্রভুত্ত ডিটেলেট বসলে একই সাথে অনেক উদ্দেশ্য সাধারণ হয়েছে। মেমন, পাওয়া যাবে অনেক তেলেসমূহ আফ্রিকার রাজনীতি বিশ্বব্যাপী সাব-সাহারায়না আফ্রিকার (পশ্চিম সামুদ্রিক শহর, মোহাম্মদ আল মালিক, কালের, চাদ, কাঁথার সুদান, ইরিল্য্য) রাজনীতিতে আরও বেশি ফলপ্রসূ অনুপ্রেরণ করা যাবে; গাদফির “ইউনাইটেড স্টেটস অব আমেরিকা” হতে বাণিজ্য করা যাবে আর একিসাথে বাণিজ্য করা যাবে পুরো আফ্রিকায় সাব-সাহারার মুদ্রার পরবর্তী সর্গল্পা চালু করার গাদফির “মারাত্তক” কৌশলিক প্রস্তাব; মধ্যপ্রাচ্যের তেলেসমূহ সৌদি আরব-কুয়েত-বাহারাইন-ওমানের যত প্রভুত্ত রাজা-বাদশাহ-ডিটেলেটের আহ্লাদের “প্রভুত্তিকে” যেন ঘটতি না হয় তা চিত্রের মূহু করিয়ে রাখা যাবে এবং সেই সাথে বোকানো যাবে “অবাধ্যতার শাস্তি” কেমন হয়; মিশর ও তিউনিসিয়াকে ঠিকঠাক রাখার প্রয়াস চালানো যাবে; আমেরিকার আত্মজাতের ইউরোপিয় ও আফ্রিকার তেলেসমূহে ভূ-জল রাজনীতি সহজতর হবে ইত্যাদি।

সুতরাং, ১৯৬০-৭০-৮০ এর দশকে ল্যাটিন অমেরিকা হয়ে ১৯৯০-এর দশকে থেকে এখন পর্যন্ত মধ্যপ্রাচ্যের ইরাক হয়ে আফ্রিকার (মাথার উপরের) লিবিয়া দখল ও এসব দেশে মার্কিন যুক্তরাষ্ট্রের বর্ষবদ পাপেট ডিটেলেটের অর্থাৎ “ইলেক্সন ইন্ফিনিটিরিং” এর মাধ্যমে ‘নির্ধাপিত’(?) সরকার বনামের উদ্দেশ্য একটাই “আমরা বিশ্ব প্রথম বৈশিষ্ট্য সূত্র” এটা প্রমাণ করা। লিবিয়ার ফেরার ভেতরের ঘনাটনা ঘটনা হয়েছে তা যেকোনো মাপকাঠিতে অন্তর্জাতিক সংস্থার ও উদ্দেশ্যবদ্ধতাতুল্য। বিষয়ে একরকম: প্রথমে মার্কিন যুক্তরাষ্ট্র লিবিয়ার গাদফির বিরুদ্ধে মার্কিনভুক্ত একদল সম্প্রদায় বিদ্রোহী সূত্র করলো এবং লিবিয়ার সেনাজাতি শহরে গাদফির বাহিনীর সাথে গাদফির বিদ্রোহী মার্কিন-সৃষ্ট সম্প্রদায় বিদ্রোহীরা যুদ্ধ করলো; মার্কিন যুক্তরাষ্ট্র ও পশ্চিম বিশ্ব কোনোবাহগীই চাইলো না যে গাদফির তার সেনাভীতি বাড়িয়ে ও সাহায্যতা-সাহায্যতামূলক অণুষ্ঠা রেখে বিদ্রোহীদের দমন করবে। এ অস্থায়ী মার্কিন যুক্তরাষ্ট্রের তদের

Bangladesh. Preliminary Research Study: Islamic activism with case of miKvi, Gg I Kwei, wejy (m¤úvw`Z),

Social and Religious Fragmentation and Economic Development. Cornell

4. c~e© evsjvq Bmjvg a‡g©i D™¢e:
3. "A man who has nothing to lose has nothing to fear."

4. "A man who has nothing to lose has nothing to fear."

5. "A man who has nothing to lose has nothing to fear."

6. "A man who has nothing to lose has nothing to fear."

7. "A man who has nothing to lose has nothing to fear."

8. "A man who has nothing to lose has nothing to fear."

9. "A man who has nothing to lose has nothing to fear."

10. "A man who has nothing to lose has nothing to fear."

11. "A man who has nothing to lose has nothing to fear."

12. "A man who has nothing to lose has nothing to fear."

13. "A man who has nothing to lose has nothing to fear."

14. "A man who has nothing to lose has nothing to fear."

15. "A man who has nothing to lose has nothing to fear."

16. "A man who has nothing to lose has nothing to fear."

17. "A man who has nothing to lose has nothing to fear."

18. "A man who has nothing to lose has nothing to fear."

19. "A man who has nothing to lose has nothing to fear."

20. "A man who has nothing to lose has nothing to fear."

21. "A man who has nothing to lose has nothing to fear."

22. "A man who has nothing to lose has nothing to fear."

23. "A man who has nothing to lose has nothing to fear."

24. "A man who has nothing to lose has nothing to fear."

25. "A man who has nothing to lose has nothing to fear."

26. "A man who has nothing to lose has nothing to fear."

27. "A man who has nothing to lose has nothing to fear."

28. "A man who has nothing to lose has nothing to fear."

29. "A man who has nothing to lose has nothing to fear."

30. "A man who has nothing to lose has nothing to fear."

31. "A man who has nothing to lose has nothing to fear."

32. "A man who has nothing to lose has nothing to fear."

33. "A man who has nothing to lose has nothing to fear."

34. "A man who has nothing to lose has nothing to fear."

35. "A man who has nothing to lose has nothing to fear."

36. "A man who has nothing to lose has nothing to fear."

37. "A man who has nothing to lose has nothing to fear."

38. "A man who has nothing to lose has nothing to fear."

39. "A man who has nothing to lose has nothing to fear."

40. "A man who has nothing to lose has nothing to fear."

41. "A man who has nothing to lose has nothing to fear."

42. "A man who has nothing to lose has nothing to fear."

43. "A man who has nothing to lose has nothing to fear."

44. "A man who has nothing to lose has nothing to fear."

45. "A man who has nothing to lose has nothing to fear."

46. "A man who has nothing to lose has nothing to fear."

47. "A man who has nothing to lose has nothing to fear."

48. "A man who has nothing to lose has nothing to fear."

49. "A man who has nothing to lose has nothing to fear."

50. "A man who has nothing to lose has nothing to fear."

51. "A man who has nothing to lose has nothing to fear."

52. "A man who has nothing to lose has nothing to fear."

53. "A man who has nothing to lose has nothing to fear."

54. "A man who has nothing to lose has nothing to fear."

55. "A man who has nothing to lose has nothing to fear."

56. "A man who has nothing to lose has nothing to fear."

57. "A man who has nothing to lose has nothing to fear."

58. "A man who has nothing to lose has nothing to fear."

59. "A man who has nothing to lose has nothing to fear."

60. "A man who has nothing to lose has nothing to fear."

61. "A man who has nothing to lose has nothing to fear."

62. "A man who has nothing to lose has nothing to fear."

63. "A man who has nothing to lose has nothing to fear."

64. "A man who has nothing to lose has nothing to fear."

65. "A man who has nothing to lose has nothing to fear."

66. "A man who has nothing to lose has nothing to fear."

67. "A man who has nothing to lose has nothing to fear."

68. "A man who has nothing to lose has nothing to fear."

69. "A man who has nothing to lose has nothing to fear."

70. "A man who has nothing to lose has nothing to fear."

71. "A man who has nothing to lose has nothing to fear."

72. "A man who has nothing to lose has nothing to fear."

73. "A man who has nothing to lose has nothing to fear."

74. "A man who has nothing to lose has nothing to fear."

75. "A man who has nothing to lose has nothing to fear."

76. "A man who has nothing to lose has nothing to fear."

77. "A man who has nothing to lose has nothing to fear."

78. "A man who has nothing to lose has nothing to fear."

79. "A man who has nothing to lose has nothing to fear."

80. "A man who has nothing to lose has nothing to fear."

81. "A man who has nothing to lose has nothing to fear."

82. "A man who has nothing to lose has nothing to fear."

83. "A man who has nothing to lose has nothing to fear."

84. "A man who has nothing to lose has nothing to fear."

85. "A man who has nothing to lose has nothing to fear."

86. "A man who has nothing to lose has nothing to fear."

87. "A man who has nothing to lose has nothing to fear."

88. "A man who has nothing to lose has nothing to fear."

89. "A man who has nothing to lose has nothing to fear."

90. "A man who has nothing to lose has nothing to fear."

91. "A man who has nothing to lose has nothing to fear."

92. "A man who has nothing to lose has nothing to fear."

93. "A man who has nothing to lose has nothing to fear."

94. "A man who has nothing to lose has nothing to fear."

95. "A man who has nothing to lose has nothing to fear."

96. "A man who has nothing to lose has nothing to fear."

97. "A man who has nothing to lose has nothing to fear."

98. "A man who has nothing to lose has nothing to fear."

99. "A man who has nothing to lose has nothing to fear."

100. "A man who has nothing to lose has nothing to fear."
Bangladesh. Preliminary Research Study: Islamic activism with case of
wmwKs Kg©KvÐ cwiPvjb m¤¢e| Gme LvZ-‡ÿ‡Îi Ab¨Zg n‡jv Avw_©K Lv‡Zi
ÿgZv (Ac) e¨envi K‡ib|

"Doctrine of resort to force at will"

ÂvšÍ-ag© msNvZ, AwMœms‡hvM Avi Zievwi e¨envi K‡i ÒCk¦‡ii
A‡b‡KB g‡b K‡ib G †`‡k mk¯¿ Rw½ agx©q mv¤cÖ`vwqK †Mvôx Zv‡`i Kg©KvÐ cwiPvj‡b me A_©
†Kv‡bv cÖ‡qvRb †bB| Z‡e gvbyl wn‡m‡e I‡`i cÖwZ Avgvi GkUv mwbe©Ü Aby‡iva Av‡Q|
cÖgvY bq?)| gvwK©b gyjøy‡Ki wnDg¨vb ivBUm IqvP Avi weªwUk jW©‡`i mv‡_ Z‡K© hvevi Avgvi

ÒA_©‰bwZK †kvlYÒ Avi Òˆewk¦K †i›U wmwKs e¨e¯'vÓ meai‡bi wew"QbœZv I AmgZv m"wóI
wbwl×KiY cÖwµqv eÜ Kiv; Avi Avmj D‡Ïk¨ nj ag©‡K Xvj wn‡m‡e e¨envi K‡i

d‡j Gme A‡j MYnZ¨v †Zv n‡eB Avi Drm: cÖeÜKvi KZ©"K wn‡meK…Z| G wn‡mewU cÖeÜKvi 2005 mvj †_‡K cÖwZeQiB cÖYqb K‡ib|

"Doctrine of resort to force at will"
Economics of Fundamentalism in Bangladesh: Roots, BARKAT, A. (2005). "Doctrine of resort to force at will".
পূর্ব বাংলায় ইসলাম ধর্মের উৎপত্তি ও বিকাশ 

ঐতিহাসিকভাবেই উদারনৈতিক, মানবিক এবং অসামান্যায় 

পূর্ব বাংলায় ইসলাম ধর্মের উৎপত্তি ইতিহাসে ঐতিহাসিকরা যা কিছু লিখেছেন তার অধিকাংশই অসম্পূর্ণ এবং নয় তা যথেষ্ট তথ্যতাত্ত্বিক। বিশ্বাস, নীলীর প্রবাহ পরিবর্তন, কৃষি সম্প্রদায় উদ্ভাবন ও বিকাশ, বুমি খাদ্যাবাহ প্রকৃতি প্রকৃতি, যুদ্ধনোন্তর কালোরামাকারিক প্রাচীন, হিন্দু রাজার ও মুসলমান সমাজের রাজনীতি পূর্ব বাংলায় ইসলাম ধর্মের উৎপত্তি ও বিকাশ ইতিহাসের রাজনীতি এবং বিশেষ অভিজ্ঞতা নেই বললেই চলে। সংখ্যা ইসলামী রেজিয়নের তত্ত্ব একটি থেকে থেকে দুর্বল। 

পূর্ব বাংলায় ইসলাম ধর্মের উৎপত্তি ও বিকাশ ইতিহাসে মূলত চার ধারার বলব্য পাওয়া যায়: অভিবাসন, তর্ককর, পূঠাপূঠতাত্ত্বিক, ও সুমানোন্তরিক। ইতিমধ্যে উল্লিখিত কারণে এদের কোনাই পূর্ণাঙ্গ নয়: অভিবাসন করা, কখন-কখন সময়-কি করার অবিবাহন হলো (?) তবে তার শক্তি কখন কোন এ দেশে ইসলামকে পুঠাপূঠতাত্ত্বিক হলো (?) এসমায়কে বেশি রক্তশীল মুসলিম সমাজ আওতাহী জেরার শনাক্তি উদ্ভাবন দেখা যায় (আকার বেশীমূলক কাজ করছেন; হিন্দু ধর্মের প্রকৃতি ধর্মধ্যে ফার্ফারি ভাবে অবিবাহন করিয়েছিলেন) ইতিহাস।

এদেশে ইসলাম ধর্মের মূল হারেকেরা অর্থাৎ সুফী-সাধক-ওলামারা শত শত বছর ধরে কোনো উদ্ধ ধর্মীয় আলাদা প্রচার করাননন; এমন কি তারা তা সম্পার্ক করেনন। উল্টো তারা ধর্মীয় অনুষ্ঠানে প্রচারের স্থানটিকে যেমন মাজার, মসজিদ, মাদ্রাসা ইত্যাদি রেখেছিলেন আয়তনে ছোট, আর বড় করিয়েছিলেন পশ্চাৎপদ অঞ্চলে জন-জনপ পরিশ্রম করে কৃষি কাজের এলাকা। পশ্চাৎপদ এলাকার এ সব বন-জলপ
সুফি-ওলামারা ইসলাম ধর্মের মতাদর্শের সাথে অর্থনৈতিক উন্নয়নসহ কৃতিত্বিক কর্মকাণ্ডের সমিলন ঘটিয়েছিল (অবশ্য নগর-কেন্দ্রীয় অঞ্চলের বিশেষ ভিন্ন)। সুফি সাধকদের লিখিত বর্ণনায় এমনও পাওয়া যায় যে “আল্লাহ আমাকে সম্পূর্ণ প্রেরণ করলেন। জিরার্ভ তাকে আল্লাহর নির্দেশ মক্কায় মূল কার্যাগ্র নির্মাণের জন্য যেতে বললেন। কবা নির্মাণের পরে জিরার্ভ তাকে একটি লালন, একটি জোড়াল, এক জোড়া চাষের বলদ, কিছু শস্যনাম দিয়ে বললেন আল্লাহর নির্দেশে কৃষিকাজ হবে। তোমার নিয়তি। আদম শসা দানা বপন করলেন, শসা ফলানের, মাড়ুই করলেন, শসা থেকে রট বাণলেন”।

আর্থিক উল্লেখ্য পৃথিবীর ইসলাম ধর্মের উত্তর ও বিকাশে তরাবারি, অভিবাসন অথবা পৌঁছনায়ভাবে তুলনামূলক তুলনা কোনো ভুমিকা নেই, এখানে ইসলাম বিশ্লেষিত হয়েছে কৃতিত্বিক সম্পন্নতার বিকাশের অনুভূতি হিসেবে। ইসলাম ধর্মের সুফী সাধকসহ অন্যান্য অনেক ধর্ম প্রচারক এ দেশে সামন্তবাদ ও ঔপরিদ্ধবাদ বিরোধি লড়াই-সংঘর্ষে অংশ নিয়েছে; এর মধ্যে নেতৃত্ব দিয়েছে এবং সুফি-ধর্মার্থ ধর্মের উদযানুনন্তিক-মানবিক যুক্তি ব্যবহার করে তা করেছে।

সুরাতের বিশেষ আটাই প্রমাণ করে যে উত্তর সূত্রে এ দেশে ইসলাম মানভাবাদী, উদারনৈতিক ও অসাম্প্রসারিত। অর্থাৎ এ দেশের মুসলমানেরা ঐতিহ্যবাদিতে এক পজিটিভ ডিএনএ-র ব্যাখ্যা অসম্ভব। আমাদের দেশে ইসলাম ধর্মের এ পজিটিভ ডিএনএ-র কারণেই শুধুমাত্র অভিযাত্রী শক্তির ভিত্তিতে সমস্ত জাতিকৃত ধর্মনৈতিক রাষ্ট্র প্রতিষ্ঠার সহায়ক হতে পারে না। অবশ্য ইসলাম ধর্মের উত্তর সূত্রের এই পজিটিভ ডিএনএ দিয়ে আধুনিক হয়ে সমীচীন হবে না এজন্য যে ধর্মনৈতিক মৌলবাদ ও সংশ্লিষ্ট জাতিকৃত বিশেষ হবার পূর্বে দেশজ কারণের পাশাপাশি বৈষম্য অনেক গুরুত্বপূর্ণ নিয়মক কারণ বিদায় করা। যা ইতোমধ্যে বিশ্লেষিত হয়েছে এবং পরেও বিশ্লেষিত বিশ্লেষণ করা হবে।

৪৯. “উদযানুনন্তিক ইসলাম” থেকে “রাজনৈতিক ইসলাম”

সমকালীন পশ্চাদামুখী রূপান্তর

উল্লেখ্য যখন পূর্ববালীয় ইসলাম ধর্ম উদযানুনন্তিক, মানবিক, ও অসাম্প্রসারিত তখন এমন কি ঘটনা যা ফলে তা মৌলবাদী জাতিকৃত রূপ নেই লেটে? আমার মতে পশ্চাদামুখী এ রূপান্তরে পাঁচটি বড় মাপের ঘটনা দায়ি (যা আমি “তিন-বিপর্যয়কাল” হিসেবে দেখি)। পশ্চাদামুখী রূপান্তরের বড় মাপের ঘটনা পাঁচটি হলো যাত্রাক্রম:

(১) ১৯৪৭-এ বিজ্ঞাতিত্বের ভিত্তিতে সামাজিক পাকিস্তান রাষ্ট্র সৃষ্টি,
(২) জাতির পিতা বঙ্গবুল শেখ মুজিবর রহমানকে হত্যার মাধ্যমে জেনারেল জিয়াউর রহমান কর্তৃক বাংলাদেশের সংবিধান থেকে “ধর্মনৈতিকতা” (যশোধর্ণ্ড) ব্যবহার সম্পূর্ণ উদ্ঘাটন এবং পরবর্তীতে “ইসলাম ধর্মকে রাষ্ট্র ধর্ম” হিসেবে সংবিধানে অভিযোজন করা,
(৩) মুল্যমণ্ডলের মূল চেতনার সাথে সংঘর্ষিত দর্শননৈতিক উন্নয়ন কর্মকাণ্ডের পরিচালনা,
(৪) ধর্মনৈতিক রাজনৈতিক সংঘটন-সংস্থা গঠন-এর যৌথতা দেয়া,

৫১ রিচার্ড ইন্স, ১৯৯৬, “The Rise of Islam and the Bengali Frontier-1206-1760”
(5) ഏകരത്തെ മുൻകൃതി ബീരീഢി ഉദ്ധരിതരീതി സിദ്ധാന്തം നാലി പിടിത്തം പ്രായാണ.

പൂർണ്ണം ഇസ്ലാം ധർമ്മത്തെ ഇതിതാസലം ധർമ്മ മും മായു പ്രകാർമുണി രൂപാന്തര (വിഭാഗം) രേതേളെ ഭൂ സംഭാവനയിൽ ബീരീഢി സാമൂഹ്യീകരണയുടെ ഒരു പരിഹാരം ധർമ്മത്തേവത് രീതിയിൽ പ്രസ്താവണം എന്ന് അർത്ഥം മുസ്‌ലിയമുകൾ തന്റെ വിശിഷ്ട രൂപത്തിൽ ഇസ്ലാം മും മായു വിശിഷ്ട രൂപാന്തരമായി രൂപാന്തരനാണ്. സാമൂഹ്യീകരണ ധർമ്മ-ഭൂതിക ദേശാന്തരം ഇസ്ലാം ധർമ്മത്തെ ഉദ്ദിവാനെ സൂഫി-ോലാമാരെ ബാധാ മാറുന്ന പ്രശ്‌നം പരാജയപ്പനം എന്ന് മും മായു ആണാണ്. മൂല ധർമ്മം ബീരീഢി പ്രകാർമുണി രൂപാന്തര ഹാഴം ഹോർട്ടി- -എന്ന പിണ്മന്റെ ജീവി സാന്നിദ്ധ്യം ദൃഢം ഉണ്ടായ്ക്കുന്നത് എന്ന് (യോഗ്യത ഇത്വാദി). ഫലം ഇസ്ലാം ധർമ്മത്തെ മാനവകലാശീലാവഴി സൂഫി-ോലാമാരെ ചെതിത് ഒരു കാലത്ത് ഉണ്ടായിരുന്ന പ്രശ്‌നം ഘടീലായി ഉണ്ടായിരുന്നത് എന്ന് ചില ഉദാരീകരണ-മാനവത്തെ തരം പരാജയപ്പനം ഹലോ സംസ്കൃത് ജീവി; - ഉദാഹരണപര സംക്ഷിപ്തരീതി ധ്രുവകും ബാലകാര്‍ കരയും രാഷ്ട്രം കീഴിലാക്കുന്ന ജീവി. അർത്ഥം ധർമ്മ-ഭൂതിക പാർശ്വം സൃഷ്ടി സ്വർഥം സാരൂപ്യം എന്നതു സാമൂഹ്യം ധ്രുവാവ് കരയും ധർമ്മം കണു പ്രവര്ത്തവും അർത്ഥം ധർമ്മ-ഭൂതിക പാർശ്വം സൃഷ്ടി സ്വർഥം സാമൂഹ്യം ധ്രുവാവ് കരയും  

ധർമ്മിക ഇതേ ഇംഗ്ലീഷ് രഗ്ധം സാജ്ജോസ്വാതന്ത്ര്യം (ഹിംസ, ബുദ്ധി, ശ്രീനിവാസ, മുസ്‌ലിയം യോഗ്യത ഹെക്ക് കിരിഷോ) ജീവിതത്തിൽ കരയും തദ്ദേശം ഇംഗ്ലീഷ് രഗ്ധം സാജ്ജോസ്വാതന്ത്ര്യം (ഹിംസ, ബുദ്ധി, ശ്രീനിവാസ, മുസ്‌ലിയം യോഗ്യത ഹെക്ക് കിരിഷോ) നാലി കരയും. തദ്ദേശം ഇംഗ്ലീഷ് രഗ്ധം സാജ്ജോസ്വാതന്ത്ര്യം (ഹിംസ, ബുദ്ധി, ശ്രീനിവാസ, മുസ്‌ലിയം യോഗ്യത ഹെക്ക് കിരിഷോ) നാലി കരയും തദ്ദേശം ഇംഗ്ലീഷ് രഗ്ധം സാജ്ജോസ്വാതന്ത്ര്യം (ഹിംസ, ബുദ്ധി, ശ്രീനിവാസ, മുസ്‌ലിയം യോഗ്യത ഹെക്ക് കിരിഷോ) നാലി കരയും. 

പക്ഷെ ഇസ്ലാം ധർമ്മം എല്ലാ വരെം കാര്യത്തെ പൂർണമായ വിശ്വാസം മനുഷ്യം കുടി ഉപയോഗിക്കുന്ന യുദ്ധാണ്. ന്യൂയോർക്ക് പ്രവണ്ട രൂപാന്തരം ഈ കഥയിലെ യുദ്ധാണ്. ന്യൂയോർക്ക് പ്രവണ്ട രൂപാന്തരം ഈ കഥയിലെ യുദ്ധാണ്. 

3 പക്ഷെ ഇസ്ലാം ധർമ്മത്തേവത് രീതി കുടി ഉപയോഗിക്കുന്ന യുദ്ധാണ്. ന്യൂയോർക്ക് പ്രവണ്ട രൂപാന്തരം ഈ കഥയിലെ യുദ്ധാണ്. 

92 തെരികെ ധർമ്മിത്തി യുദ്ധാണ്. കഥയിലെ യുദ്ധാണ്. ന്യൂയോർക്ക് പ്രവണ്ട രൂപാന്തരം ഈ കഥയിലെ യുദ്ധാണ്. 

22 തെരികെ ധർമ്മിത്തി യുദ്ധാണ്. കഥയിലെ യുദ്ധാണ്. ന്യൂയോർക്ക് പ്രവണ്ട രൂപാന്തരം ഈ കഥയിലെ യുദ്ധാണ്.
GZûY hv wKQz wePvi-we‡kølY Kijvg Zv †_‡K mn‡RB Abygvb Kiv m¤¢e †h, G cÖwµqvq Avgv‡`i
gvwK©b hy³iv‡óªi †cÖwm‡W›U †Rgm M¨viwdì I †cÖwm‡W›U †eÄvwgb n¨vwim‡bi ciivóª gš¿x †Rgm&
we‡Ølx I cÖMwZ we‡ivwa 13 `dvmn Zv‡`i mKj Kg©Kv‡Ð; Gm‡ei beZi iƒc †`‡LwQ 2016-Gi
ivR‰bwZK A_©bxwZ I †gŠjev`x Rw½‡Z¡i m¤¢ve¨ ÒmxgvbvÓ: Zvn‡j KiYxq? (Aby‡“Q` 9)|
NwU‡qwQ‡jb (Aek¨ bMi-†Kw›`ªK AvkivdZ‡Ë¡i we‡kølY wfbœ)| mywd mvaK‡`i wjwLZ eY©bvq
1.  cÖwZwU g‡WjB ivR‰bwZKfv‡e DØy× D“Pgvbm¤úbœ we‡klÁ KZ…©K ivR‰bwZK jÿ¨vR©‡b
‡h‡nZz ÒA_©‰bwZK †kvlYÓ Avi Òˆewk¦K †i›U wmwKs e¨e¯'vÓ
GmeB e½eÜz nZ¨v-cieZx© evsjv‡`‡ki ivR‰bwZK A_©bxwZi gg©e¯'|
° (1972 Gi g~j msweavb, cÖ¯Ívebvi wØZxq Aby‡“Q`), Ges
hy³iv‡óªi RvZxq cÖwZiÿv KvDwÝj ey‡SwQj †h Zv‡`i cwiKíbv ev¯Íevq‡b euvav n‡e †mBme †`k
mvgªvR¨ev‡`i GK“QÎ cÖfzZ¡ wbwðZ Kivi cwiKíbv cÖYqb Kiv nq| G cÖ‡R± 1940-Gi cÖ_g
mgy`ªc_; (4) B‡›`v‡bwkqv I gvj‡qwkqvi ga¨eZx© gvjv°v P¨v‡bj w`‡q Px‡bi †gvU R¡vjvwb †Zj
MYcÖRvZš¿x evsjv‡`‡ki msweavb (me©‡kl ms‡kvawbmn gyw`ªZ, A‡±vei 2011). MYcÖRvZš¿x
‡h Iiv h‡_ó kw³ mÂq K‡i‡Q Ges myBmvBW †evgvB †kl K_v bq| hw` wbi¯¿ Kiv bv hvq
nq AwZgyj¨vqb bq Aegyj¨vqb, Av‡Q A‡bK Aby`NvwUZ welqvw` (hv D`NvUb mgRmva¨ bq),
Kg©h‡Á wØavØÜ I
cennmg~‡ni KviY-cwiYvg eyS‡Z
131. wnReyZ-ZvIwn`
1.  Ôwek¦vm wn‡m‡e ag©Õ ("
9.   Ò†`k M”nhy‡×i w`‡K hv‡“Q, hv‡eÓ|
Latin America, (Lima, Peru), 1987.  Nation
religion to propagate its faith", see p. 49
5.  Ò†`k M”nhy‡×i w`‡K hv‡“Q, hv‡eÓ|
BDbvB‡UW †÷Um Ae Avwd«KvÓ ZË¡ evbPvj Kiv hv‡e Avi GKBmv‡_ evbPvj Kiv hv‡e
1985 mv‡j XvKv wek¦we`¨vj‡qi RMbœv_ n‡ji Qv` †f‡½ covi c‡i XvKv †gwW‡Kjmn
1.  Ôwek¦vm wn‡m‡e ag©Õ ("
GB †h †gvU RbmsL¨vq abxi msL¨v n«vm: 1984 mv‡j 3.3 kZvsk †_‡K 2014 mv‡j 2.7
1.  Ôwek¦vm wn‡m‡e ag©Õ ("
GB †h †gvU RbmsL¨vq abxi msL¨v n«vm: 1984 mv‡j 3.3 kZvsk †_‡K 2014 mv‡j 2.7
1.  Ôwek¦vm wn‡m‡e ag©Õ ("
GB †h †gvU RbmsL¨vq abxi msL¨v n«vm: 1984 mv‡j 3.3 kZvsk †_‡K 2014 mv‡j 2.7
1.  Ôwek¦vm wn‡m‡e ag©Õ ("
GB †h †gvU RbmsL¨vq abxi msL¨v n«vm: 1984 mv‡j 3.3 kZvsk †_‡K 2014 mv‡j 2.7
1.  Ôwek¦vm wn‡m‡e ag©Õ ("
GB †h †gvU RbmsL¨vq abxi msL¨v n«vm: 1984 mv‡j 3.3 kZvsk †_‡K 2014 mv‡j 2.7
1.  Ôwek¦vm wn‡m‡e ag©Õ ("
GB †h †gvU RbmsL¨vq abxi msL¨v n«vm: 1984 mv‡j 3.3 kZvsk †_‡K 2014 mv‡j 2.7
1.  Ôwek¦vm wn‡m‡e ag©Õ ("
GB †h †gvU RbmsL¨vq abxi msL¨v n«vm: 1984 mv‡j 3.3 kZvsk †_‡K 2014 mv‡j 2.7
1.  Ôwek¦vm wn‡m‡e ag©Õ ("
4. Moul Sajib Khan’s research on 10 cases of human rights violation, asylum seekers, and the status of Muslims, and the activities of Islamic groups in Bangladesh. Preliminary Research Study: Islamic activism with case of

5. The purport of the research is to examine the relationship between the activities of Islamic groups and the actual human rights violations in Bangladesh. The research has been conducted through field visits, interviews, and document analysis. The findings indicate that the activities of Islamic groups are often linked to human rights violations.

6. Moul Sajib Khan’s research on 38 cases of human rights violation in Bangladesh indicates that the activities of Islamic groups are often linked to human rights violations. The research has been conducted through field visits, interviews, and document analysis. The findings indicate that the activities of Islamic groups are often linked to human rights violations.
বাংলাদেশের মৌলাবাদ ও মৌলাবী জনসংখ্যার অর্থনৈতিক অর্থনৈতিক ভিত্তি, প্রকৃতি, মাত্রা

ক্ষেত্রে সামরিক অর্থনৈতিক প্রতিবন্ধক হয়ে দাঁড়ালো।

পাকিস্তান রাষ্ট্র সামরিক অর্থনৈতিক ক্ষেত্রে গঠনের ভিত্তি হিসেবে কাজ করেন তা শেষে শেষে বৃদ্ধি পেয়েছে। এই অর্থনৈতিক বিষয়ের ৩৩ হাতাকালে পিটো মুনাফার মূল্য দলে ১৯৭১-এ বাংলাদেশের স্বাধীনতা ঘোষণা করা হয়েছিল। এ দেশের মানুষ স্বাধীন দেখেছিল জনকলায়নের একটি রাষ্ট্রের- বে রাষ্ট্রে নিপিত হতে চায়নের স্বাধীনতা অর্থনৈতিক হবে অর্থনৈতিক সুযোগ, উন্নতি হবে সামাজিক শুধুমাত্র, পাওয়া যাবে রাজনৈতিক মুক্তি, ধর্ম এবং স্থানীয় শৃঙ্খলা, পাওয়া যাবে সম্পূর্ন সামাজিক মানুষ কাঠামো বিনিৈতিক পরিহার, প্রকৃতি হবে ধর্ম নির্মল অর্থনৈতিক স্বাধীনতা। স্বাধীন রাষ্ট্রের সংবিধান (১৯৭২) এসব অর্থনৈতিক করে, প্রকাশে; কর মৌলিক চাহিদা মেটানো থেকে শুরু করে নারী-পৃষ্ঠ, ধর্ম-বর্ণ নির্বিশেষে সামাজিকতার অর্থনৈতিক বিকৃতি স্ফূর্ততা স্বাধীনতা ও সামাজিক পরিবর্তনের অর্থনৈতিক অর্থনৈতিক

ভিত্তি, প্রকৃতি, মাত্রা

বাংলাদেশের মৌলাবাদের অর্থনৈতিক ভিত্তি দুর্বল নয়। তার কারণ বাংলাদেশের অর্থনৈতিকতে অনুচ্ছেদিতকারে সমাজবাদী উৎপাদন সংখ্যা হয়েছে, কিন্তু এককের যেমন চিন্তাধারিত সমাজবাদী মানুষ কাঠামো বিলুপ্ত হয়নি। অন্যদিকে উক্ত উদ্ভান সম্পর্কে বিশ্বাস হয়নি; বিশ্বাস হয় বিভিন্ন ধরনের নিকুঠি জুড়ে যাওয়ার শুরু হয়, সুঝাট হয় নিরন্তর সমস্ত সৃষ্টি না করে অন্যদের সমস্ত শেষে এসব মুখে বক্তব্য নথিতাত্মক দুর্বল বলে মনে করা হয়।

গতি শিক্ষার্থী মৌলিক বিশ্বাস এবং দোকানদারী অর্থনৈতিক কাশ্চলে অনেকে বিশ্বাস করেন। এই পদ্ধতি উত্তম উদ্ভান শুরুর মৌলিক শীল শিল্প নিত্যরান অর্থনৈতিক চরমের চেয়ে নগ্নতার অন্তর্ভুক্ত তথ্য-ব্যবসায় এবং দোকানদারী অর্থনৈতিক কাশ্চলে অনেকে বিশ্বাস করেন।

পাকিস্তান উত্তর উপাদানীয় শিল্প শুরুর নিত্যরান অর্থনৈতিক চরমের চেয়ে নগ্নতার অন্তর্ভুক্ত অন্তর্ভুক্ত তথ্য-ব্যবসায় এবং দোকানদারী অর্থনৈতিক কাশ্চলে অনেকে বিশ্বাস করেন।

এই পদ্ধতি উল্লেখ্য বাংলাদেশের মৌলাবাদের অর্থনৈতিক ভিত্তি হয়ে উঠেছে। উল্লেখ্য যে এসব অর্থনৈতিক আরও ব্যাপক সৃষ্টি এর, নিত্যরান অর্থনৈতিক শীল শিল্প শুরুর নিত্যরান অর্থনৈতিক চরমের চেয়ে নগ্নতার অন্তর্ভুক্ত তথ্য-ব্যবসায় এবং দোকানদারী অর্থনৈতিক কাশ্চলে অনেকে বিশ্বাস করেন।

পাকিস্তান উত্তর উপাদানীয় শিল্প শুরুর নিত্যরান অর্থনৈতিক চরমের চেয়ে নগ্নতার অন্তর্ভুক্ত তথ্য-ব্যবসায় এবং দোকানদারী অর্থনৈতিক কাশ্চলে অনেকে বিশ্বাস করেন।
Bangladesh Journal of Political Economy Vol. 31, No.-4

26

Katamonejan rupanber nirikhe jatiyanta uttar got char dashak (1975-2016) bangladeshese atrocitet ete amon kona monilik pabaranthon jatine ni diye bila yabe ye, jatiyantaar manerkalgyoshir chetana baoitar hirche. Such-bala-chetanasundha devdhinali manush suktiye chhi jatiyantaar mudh akajana. Se akajana o bantonbar darurto byagok o kromvardhaman. Akajana o bantonbar kromvardhaman e farakatao moulvibad o sarpichit jagdhiy tousegan sahajak.

Duiy atrocitetir bieymoyor bhirudye ladai kur jatiyanta bangladeshese abantu yhteche eto kabo santu. Tom got char dashakar (1975-2016) bieyakhe darha 16 koei manushyo amader deyske supootibavbe du'abhage bitajipok hirche: pragram baha got sanchayaloh kromtathar manush, yader sarha hobe bodojor 10 jok; aar ditthi baha got sanchayaloh kromtathin manush, yader sarha hobe 15 koei 90 jok.

Rajonitii- atrocitetior marpaadye suthi hirche ete mon akon ha yake 10 laxi kromtathar bieyap liar aachche 15 koei 30 laxi kromtathin, asahto, duoshahat, borkit, bieyam-jajibil, hitashahat manush.

Prouk adhyy eti bishal sanchak kromtathin manusho rikabe sarduktao kromtathinam der bieyoye abesat atrociteti o rajoniti-akomodhikik kromkajos bhirudye sathetan kona praiyo kawkhe bhosiyon bhojikye hirni.

Etedes sanchadgiri kromtathin manush (kromshangon o jibonjibata toksho-sangrao khardar pabanshaya jha-eh boluk na kena) oti kustet jibon yapan korchee "pabanshayaik atrociteti jha-eh boluk na kena" a bieyay kona sambher nai.

Etedes maze jotiiyanta amar daridra samoghoti hito. Utrobaro komshe, aar rest-sikar darinier bierthee dhini-daridru kromvardhaman bieyamor ekthea khardaraibaye shikrut.

Artyo sakh bishwo bieyam-bogstha kromvardhaman.

Mano ratha proyaban yhe got 40 bACHER et deyesh bishum manodho daridrup manushyos sanchaya 5 koei kheke bheada ekhane 10 koei kheke bheada; aar sey samte daridru manushyos sanchaya bishrukti dror jaanagraha hayer stoshe beish.

Bikash prabotet yha yatabe dyesa bhai nikon akater daridru daridru thekheche, aar nishchir hochhe daridru, sey samte mojar-bhuvibhore bapok jhuny nish bhu-bhuvibhore aseeta adhmon, aar sey kafe daridru ghojtekheche. Aar sey samte atrociteti, rajonitii, proshasan, aar shiksho-sangrour kloasho sambta eto akathajhiy bishrukti j态ko rechoche.

Eti bishrukti sangrour charir-nilamak hale kaloa thaka, sambhaw, abejo abhx, peesh shabei, lubh, duniiti, kroshon-anoshas, domon-pitbeni itandi.

Etiy bishruktikik sampradaiik rajonitii o molebader arostiti ghetere sambhawo uposhan.

Ea eti prozhotiya toromshainy manaani samatikabo sahayo pakistan sambhiyak theko shuru kare sarpichit bishhupi uposhan sariyo prabobakei thumiya plasso karche.

Ghat char dashak a edeshsho atroc-sangrour bieyaksh dukurto bhal: 16 koei manushyo amader deye 10 laxi dukor 15 koei 90 laxi sahikaran manushyok gathalichinas durkhotyaner kathakarmo modye jhinni keche.

এই পৃষ্ঠাটি অন্যান্য ধারার ক্ষেত্রের জন্য উপযুক্ত নয়। এটি একটি তথ্যের সংগ্রহমূলক ভাবে ব্যবহার করা যেতে পারে।
Bangladesh Journal of Political Economy Vol. 31, No.-4

The objective of this research is to explore the impact of Islamic activism in Bangladesh. The study is based on a qualitative research methodology that involves case studies and in-depth interviews. The findings suggest that Islamic activism has a significant impact on the political and social fabric of Bangladesh. The activists are seen as catalysts for change, challenge the status quo, and advocate for a more inclusive and democratic political system. However, the research also highlights the challenges faced by the activists, including persecution, censorship, and limited resources. The study recommends policies that can support the development of a more participatory and inclusive political system in Bangladesh.
কাঠামোর পরিবর্তনের এ ধারাটি সূত্র করেক ধনিক শ্রেণির হাতে সম্পদ ও কম্যতা পৃথিবী হওয়ার বিষয়টিও স্পষ্টতর করে। অর্থ-সামাজিক শ্রেণি কাঠামোর পরিবর্তনের যে প্রকাশ তা সে চিত্রটি তুলে ধরে যা দিয়ে ধর্মিয় উদ্বাদ এবং মৌলবাদের রাজনৈতিক-অর্থনৈতিক বিজ্ঞানসমত বিশ্লেষণ সম্বন্ধ।

১. আমার হিসেবে বাংলাদেশে এখন ১৬ কোটি মনুষ্যের মধ্যে ১০ কোটি ৫৫ লক্ষ মানুষ দরিদ্র (৬৬%), ৫ কোটি ১ লক্ষ মানুষ মধ্যপিত্র শ্রেণির (৩১.৩%) এবং অর্থনিষ্ঠ ৪৪ লক্ষ মানুষ (২.৭%) জন্মিয়। গত বিশ বছর (১৮৯৪-২০১৪) দরিদ্র মানুষের সংখ্যা বৃদ্ধি পেয়েছে ৪ কোটি ৫৫ লক্ষ (১৯৮৪ সালে ৪ কোটি থেকে ২০১৪ সালে ১০ কোটি ৫৫ লক্ষ)। দরিদ্র জনসংখ্যার এই বৃদ্ধি জাতীয় উদ্বাদের ব্যাখ্যারই বহিঃপ্রকাশ। যা বাংলাদেশে ধর্মের প্রভাব এবং ধর্মিয় উত্তরাদের উৎসাহিত করার ভিত্তি জন্মে রাখে।

২. শহরের তুলনায় গ্রাম দরিদ্র শ্রেণির মানুষের সংখ্যা অনেকগুলি বেশি। দেশের মোট দরিদ্র মানুষের ৮২ শতাংশ গ্রামে এবং ১৮ শতাংশ শহরে বাস করেন। গ্রামে সর্বাধিক ৩০ শতাংশ খানা ভূমিভুক। ৬০ শতাংশ খানা এখনও পর্যন্ত বিদ্যুৎ সংযোগ নেই (মেনের রাখা দরিদ্র বিদ্যুৎ মানে বালেরর আলো না বিদ্যুৎ মানে আলোকিত মানুষ গড়ি অন্তঃপ্রাণ মাধ্যম)। শতকের ৬৫ জন সরকারি স্থান সেবা থেকে বিভক্ত। বাংলাদেশ নগরায়ন মূলত বন্ধকৃত অথবার শহরে জীবনের গ্রাময়ন এ নগরায়নের পাশাপাশি শিক্ষায়ন হয়নি কলেজে চলে; যা হয়েছে তা হলো অনন্তুনাটির বাবুর বৃহত্তি এবং সংখ্যাটি হতাশা-নিরাশ-দুর্দশা-বঞ্চনা। গ্রাম ও শহরের এই প্রকৃতির দাদিদ্র ধর্মিয় উত্তরাদ সংবিধান সংক্রান্ত উৎপত্তির জন্য সহযোগিতা ভিত্তিকৃত।

৩. বিগত ৩০ বছর (১৮৯৪-২০১৪) দেশের মোট জনসংখ্যা বৃদ্ধি পেয়েছে ৬০ শতাংশ। অথাচ বিভিন্নী ধর্মসংখ্যার বৃদ্ধির পরিমাণ ৭২ শতাংশ। এ থেকে প্রতীকৃত হয় যে দাদিদ্র-তাত্ত্বিক মৌলবাদের বৃদ্ধির পরিমাণগুলি গত বিশ বছরে আনুপাতিকভাবে বেশি হয়েছে।

৪. মধ্যবিত্ত শ্রেণির ধারক বর্তমানে ৫ কোটি ৭১ লক্ষ মানুষ যার মধ্যে ২ কোটি ৭১ লক্ষ নিম্নমধ্যবিত্ত (যারা মোট মধ্যবিত্তের ৫৫ শতাংশ), ১ কোটি ৫৫ লক্ষ মধ্য-মধ্যবিত্ত (মোট মধ্যবিত্তের ৩১ শতাংশ) এবং অর্থনিষ্ঠ ৭৫ লক্ষ উচ্চ মধ্যবিত্ত শ্রেণিভুক্ত। এই মধ্যবিত্ত (যারা মোট মধ্যবিত্তের ১৬ শতাংশ) এই শ্রেণির বিশেষত অর্থনীতিশীল নিম্ন ও মধ্য-মধ্যবিত্ত শ্রেণি (যারা মোট জনসংখ্যার ৪৩ শতাংশ আর মোট মধ্যবিত্তের ৮৫ শতাংশ মানুষ) থেকে মৌলবাদের মেধাপরিমাণ গঠিত হয়। ধর্মিয় মৌলবাদের সাফল্যের মূল চারিভিত্তিক ও এদের কজায়।

এখন বিগত বিশ বছর (১৮৯৪-২০১৪) শ্রেণি কাঠামোর পরিবর্তনের ক্ষেত্রের বিশ্লেষণ যে ক্ষেত্র বিকাশ-অসমতা সৃষ্টি করছে তা মৌলবাদের শত্রুতি বৃদ্ধির সহযোগী। বিশ্লেষণ যা বলছে তা হলো নিম্নরূপঃ

ক. বিগত ৩০ বছর বর্ণনীয় জনপ্রাপ্তীর ৭৬ শতাংশই দরিদ্র আর ১৪ শতাংশ মূলত অর্থনীতের নিম্নমধ্যবিত্ত শ্রেণি থেকে আগত হয়েছে।

খ. এখনের তুলনায় শহরের মধ্যবিত্তের concentration বেশি। তবে নিরন্তর সংখ্যার হিসেবে দেশের মোট মধ্যবিত্তের প্রায় ৬৬ শতাংশের আলাদা একাদশে বাংলায় যাদের ৫৯ ভাগ নিম্নমধ্যবিত্ত শ্রেণিকে
৬. ২০১৪ সালে দৌন্তু (উচ্চ শ্রেণি) জনসংখ্যা ৪৪ লক্ষ। বিভাগ ৩০ বছরের নবসংরক্ষিত ধনীর সংখ্যা ১ কোটি ১ লক্ষ। অর্থাৎ ১৯৮৪ থেকে ২০১৪ সাল পর্যন্ত ধনী শ্রেণির বৃদ্ধি হয়েছে ৩৩ শতাংশ। সম্পদ যে পৃথিবী হয়েছে কিছু হতে এবং বৈষম্য বেড়েছে তার অন্তর্ভুক্ত প্রকৃত প্রমাণ এই যে মোট জনসংখ্যায় ধনীর সংখ্যা হ্রাস: ১৯৮৪ সালে ৩.৩ শতাংশ থেকে ২০১৪ সালে ২.৭ শতাংশে অর্থনৈতিক দুর্বলাধীন এবং কালো অধীনতার গবেষণায় এটাই প্রতীয়মান হয় যে, ধনীর মধ্যে একটা সংখ্যালুক্ত সৃষ্টি হয়েছে যারা “সুপার ধনী” (super-duper rich) অথবা অ্যান্টার্কটিক বলা যায়, এদের মধ্যে ২০ শতাংশ ধনীর সমগ্র ধনী শ্রেণির সমস্তের ৮০ শতাংশ নিয়ন্ত্রণ করে। অর্থাৎ বিভাগ মিশ বছরে বাংলাদেশে ধনী-দরিদ্রের যে ব্যবধান ক্রমবর্ধন তাতে করে অন্ত-নন্দী (যাদের বলে super-duper rich) রেস্ট-সিকার্ডের যে পোশাক গড়ে উঠেছে তা থেকে বাংলাদেশের সমাজ-অধীনতা-রাষ্ট্রকে “For the 1%, of the 1%, by the 1%” নামে অপ্রত্যাশিত করা যায়। মালিকারার বৈষম্য-অনান্তভাবিত যে কাঠমো গড়ে উঠেছে তা শুধুমাত্র দারিদ্র-অসমতাকে চিরকালীন করে যা-ই নয় তা ধর্মীয় মৌলবাদ ও সংস্থাতে জাদুতাদর চিরব্যাপী উন্নতি হয়েছে এবং যারা সেদের কেনারী অবকাশ নেই। আর তা একবারে নিয়ে এ কারণেই যে মৌলবাদ এবং সংস্থাতে জাদুতাদর এর বহিঃস্থ প্রদাহ ফ্যাক্টর হতো সমাজজীবন-মার্কিন সমাজজীবনের বৈশিষ্ট মৌলবাদ-কৌশল চার সমস্তের উপর নির্ভুল মালিকানা ও একচেরা কর্তৃত্ব-আধিপত্য সমীকরণে কেনারী পরিবর্তন হয়নি এবং নিকট ভবিষ্যতে সে পরিবর্তন সমাবাহও তেমন মনে নেই।

বাংলাদেশের আর্থ-সামাজিক শ্রেণি কাঠমোর বিকাশ প্রবণতা থেকে স্পষ্ট প্রতীয়মান হয় যে, গত ৩০ বছরের বাংলাদেশের সাধারণ দারিদ্র অসমতা অপ্রত্যাশিত হয়েছে। সেই সাথে দেখা যাচ্ছে মধ্যবিত্ত শ্রেণির নিম্নমানী প্রবণতা এবং মধ্য-মধ্যবিত্ত শ্রেণির নিম্ন-মধ্যবিত্তের দিকে ধারিত হওয়া, নিম্ন-মধ্যবিত্তের গতি দারিদ্রীয় আর সম্পদ পৃথিবী হয়েছে কিছু ধর্মীয় শ্রেণির মনুষ্য হতে (যারা মোট জনসংখ্যার ২.৭ শতাংশ, আবার যাদের ২০ শতাংশ দখল করে আছে ধনীদের ৮০ শতাংশ সমস্ত)। এর দিকে এই প্রক্রি প্রাচীন এবং ব্যাপক অসমতা আর অন্যদিকে মধ্যবিত্তের অসমতা ও অসমতিশীলতা এবং নগণ সংখ্যক মানুষের হতে অনেক সমস্ত এবং বাংলাদেশে ধর্মীয় সামাজিকতাসহ উদ্ভূত মৌলবাদ উৎপাদন ও পন্তপাদনের জন্য নুন্তার অনুশীলন পরিসর সৃষ্টি করেছে।

সুতরাং বিশ্লেষণে এ উপাদানের উপনীত হওয়া সত্য যে যদিও কয়েক শতাংশের আর্থিক বিকাশ এ দেশের অন্তর্ভুক্ত সামাজিক-বৈবাহিক পক্ষে যুক্তি প্রদর্শন করে না তথ্য গত প্রায় ৭ দশকের (১৯৪৭ সালে ধর্মনীতিক পাকিস্তান রাষ্ট্র প্রতিষ্ঠার সমাবর্ণককল থেকে) মানব কল্যাণবিয়ুক্ত উন্নয়ন ধারা মৌলবাদের রাজনৈতিক-অর্থনৈতিক ভিত্তি সুদৃষ্টকরণের সকল শর্ত সৃষ্টি ও সক্রান্তিকরণ করেছে। আর মার্কিন সমাজজীবনের নেতৃত্বাধীন তার সার্থব্যাহিত বিশ্বাসনের ভিত্তিক অনেক উপাদানই এ প্রক্রিয়ার সৃষ্টি ও পুনর্গঠিত করেছে।

৩০ Bangladesh Journal of Political Economy Vol. 31, No.-4
6. Moulvibazar's Anonymity:

Gathering Information, Visits, and Observation

Angezi has large and diverse populations. Its residents have lived as citizens in Bangladesh and in other countries outside the region. They often participate in the development process in a variety of ways, either directly or indirectly. The government is committed to providing education, healthcare, and employment opportunities for its citizens. The government has made significant progress in expanding access to these services, but challenges remain. For example, many residents in Moulvibazar face difficulties accessing healthcare facilities due to a lack of medical personnel and inadequate infrastructure. This highlights the importance of continued efforts to improve the quality of life for its citizens. It also underscores the need for increased collaboration between the government and civil society organizations to address these challenges effectively.
বাংলাদেশে এখন ক্যাডারতিভিক রাজনীতির সহযোগিতা মৌলবী যে সব আরো রাজনীতির মডেলের তুলনামূলক কর্মকারিতা পরীক্ষা-নিরীক্ষা করেছে তার মধ্যে ১২-টি বৃহৎ বর্গ হল নিম্নরূপ: (১) আর্থিক প্রতিষ্ঠান, (২) শিক্ষা প্রতিষ্ঠান, (৩) উপর শিক্ষা ও বাল্য প্রতিষ্ঠান, (৪) ধর্ম প্রতিষ্ঠান, (৫) ব্যবসায়িক-বাণিজ্য প্রতিষ্ঠান, (৬) যোগাযোগ-পরিবহন ব্যবস্থা সম্পূর্ন প্রতিষ্ঠান, (৭) জমি ও রিলেন্স একটি, (৮) সরবার মাধ্যম ও তথ্য প্রোডাকশন, (৯) স্থানীয় সরকার, (১০) ব্যবসার সংগঠন, ট্রাস্ট ও ফাউন্ডেশন (১১) ইসলামি বঙ্গ সংগঠন (নেমন বাংলাভাই, জেএমবি, জুইজি ও অনুরূপ কম্পিউটারিক সংগঠন/সংস্থা/গ্রুপ); এবং (১২) কৃষি-শ্রমিকসহ বিভিন্ন পেশাজীবী সমিতির কর্মকাণ্ড কেন্দ্রীক প্রতিষ্ঠান। এই প্রতিষ্ঠানের অনেকেই আনুষ্ঠানিক অর্থে মুসলমান অর্জনযোগ্য প্রতিষ্ঠান নয় (নেমন স্থানীয় সরকার ও পেশাজীবী সমিতি) এফএসে ত্রাং-অন্তর্জাতিক দেয়া হয় এবং সহ মুসলমানের আনুষ্ঠানিক বিভিন্ন বিভাগের সাথে। যেমন বাংলাভাই জীবন যোগ্য (৫) রেক্সনে তিনি বাংলাদেশের অন্যতম বার্তা খান, চাঁদবাজ প্রতিষ্ঠা করা হয়; এমনকি কোনো কোনো অংশ মুদ্রার অথবা আরো অপরাধী অর্থ বর্তমান বার্তা বার্তা বান্ধব হয়। মুনাফা ব্যবসায়ী প্রতিষ্ঠানে মুনাফা স্বরূপ নির্ধারিত স্বাধীনতা তাদের আছে (বিষয়টি ধর্ম ও ব্রেন: স্নাতকোত্তর বা মনোজাতিক ধর্মদর্শন প্রতিষ্ঠান আরো অনুরূপ বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে न।

30 এই বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে বিষয়ে न।
প্রার্থনা ১: মূলধারার 'ইসলামী' দল এবং ধর্মীয় আন্দোলনের মধ্যে সম্পর্ক: অবৈধ উদ্ধৃতি

২০০৫ সালের ১৭ আগস্ট দেশব্যাপী ব্যাপকভাবে আলোচিত 'জামায়াতুল মুজাহিদিন বাংলাদেশ' (জেএমবি) নামক একটি ধর্মীয় উদ্দেশ্যের সংগঠন শুরু করে। এটি ধর্মীয় আন্দোলনের সাথে সম্পর্কিত একটি সফল সংগঠন হিসেবে অধিক পরিচিতি লাভ করে।

১. প্রোটোটিপ মডেলের রাজনৈতিক কাজের উদ্দেশ্য উচ্চমানসম্পন্ন বিশেষজ্ঞ কর্তৃক রাজনৈতিক ক্ষেত্রে কাজ করে।

২. প্রোটোটিপ মডেলে বহুবিষয়বিশ্বাসী ব্যবস্থাপনা পদ্ধতি প্রয়োগ করা হয় যেখানে নিদর্শ তাদের মূল নীতি-নির্দেশী কর্মকাণ্ড ও রাজনৈতিক নেতৃত্বের অধিক।

৩. বিভিন্ন মডেলের মধ্যে কো-অর্ডিনেশন থাকায় উদ্দেশ্যের কো-অর্ডিনেটরদের পরিপ্রেক্ষা রাখার কারণ।

৪. প্রোটোটিপ মডেলে সামরিক শুক্লার আদালতে পরিচালিত সুসংবহা-সুশুর্কাল ব্যক্তিত্বের প্রতিষ্ঠান।

৫. কোনো মডেল যখনই আর্থ-রাজনৈতিক উদ্দেশ্যে সাধনে অন্য মডেলের তুলনায় অধিক ফলপ্রদ মনে করা হয় তখনই তা যথাসাধ্য দ্বারা অন্তর্নিহিত করা হয়।
In the context of globalization, the rise of social media platforms (social-media platforms) has enabled people to share information, ideas, and experiences with others. These platforms have become a primary source of communication and interaction, particularly for young people and those living in remote areas.

For example, the study by A. M. Mustafa (2017) found that social media platforms have played a significant role in the political mobilization of young people in Bangladesh. The study showed that these platforms have provided a space for the expression of political views and the organization of social movements.

Additionally, the study by Z. A. Khan (2018) found that social media platforms have also been used by political parties to mobilize support and to disseminate information. The study showed that political parties have been able to use social media platforms to reach a wider audience and to mobilize support for their candidates.

In conclusion, social media platforms have become an integral part of modern-day politics. These platforms have provided a new avenue for political mobilization and have enabled people to express their political views in a more open and transparent manner.

References:

পাঠ্য:

বাংলদেশের মৌলবিদের অর্থনীতির হাত-প্রতিষ্ঠানবিদ্যমান বার্ষিক নিবন্ধ নিবন্ধ, 2015 সাল

<table>
<thead>
<tr>
<th>অর্থনীতির হাত-প্রতিষ্ঠান</th>
<th>বার্ষিক নিবন্ধ মুনাফা (কোটি টাকায়)</th>
<th>মোট নিবন্ধ মুনাফা শতাংশ</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. অর্থনীতি প্রতিষ্ঠান: ব্যাংক, বিমা, লিঙ্জিং কং</td>
<td>৭৯৮</td>
<td>২৭.৮</td>
</tr>
<tr>
<td>02. বার্ষিক প্রতিষ্ঠান: যুদ্ধ, পাইকার, ডিপার্টমেন্ট স্টের</td>
<td>৩০৬</td>
<td>১০.৬</td>
</tr>
<tr>
<td>03. বৃহৎ শিখা, ডায়াগনাস্টিক সেটারসহ বাণ্য প্রতিষ্ঠান</td>
<td>২৮৭</td>
<td>১০.০</td>
</tr>
<tr>
<td>04. শিক্ষা প্রতিষ্ঠান: কুল, কলেজ, বিশ্ববিদ্যালয়</td>
<td>২৭১</td>
<td>৯.৪</td>
</tr>
<tr>
<td>05. যোগাযোগ-পরিবহন: বিক্ষিপ, ভাষা, মিতি চাকর লিঙ্জিং, কার, ট্রাক, বাস, লঞ্চ, স্ট্যামার, সর্বমাত্র জাহাজ, উড়োজাহাজ</td>
<td>২৩৩</td>
<td>৭.৪</td>
</tr>
<tr>
<td>06. জমি, দালান (রিয়াল এক্সট্রিম)</td>
<td>২৩০</td>
<td>৮.০</td>
</tr>
<tr>
<td>07. সংবাদ মাধ্যম, তথ্য প্রযুক্তি</td>
<td>২১২</td>
<td>৭.৪</td>
</tr>
<tr>
<td>08. মুক্তিবাহিনী সংস্থা, ট্রেস্ট, ফাউন্ডেশন, অন্যান্য</td>
<td>৫৫৭</td>
<td>১৯.৪</td>
</tr>
<tr>
<td>মোট</td>
<td>২,২৭৪</td>
<td>১০০</td>
</tr>
</tbody>
</table>

উৎস: প্রবণ্টকর্ত্তার ইসমিয়েবুক। এ ইসমিয়েবুক প্রবণ্টকর্ত্তা ২০০৫ সাল থেকে প্রবণ্টকর্ত্তার ইসমিয়েবুক করেন।

* পরিমাপ পক্ষপথ প্রবণ্টক প্রস্তুত হওয়া হয়েছে। এ পরিমাপটি বিভিন্ন মাত্রায় একসাথে আনুমানিক তথ্য হয়েছে।

১০৮ এখানে মৌলবিদের নিবন্ধন আছে অন্যান্য জাতীয় ২১২টি সংস্থার সংস্থায়। এর মধ্যে মধ্যে একটি সংস্থায় প্রভাবশালী ইলিতাড়ির উচ্চতামায় কর্মসংস্থার কথা শুধুমাত্র দেখা যায়। ইলিতাড়ির বিশ্বাসবাদী হলেমিন্টিক সেসাইটি। এসাইটির উচ্চতামায় কর্মসংস্থার কথা শুধুমাত্র দেখা যায়। এসাইটির উচ্চতামায় কর্মসংস্থার কথা শুধুমাত্র দেখা যায়।
বাংলাদেশ মৌলিককরণের অর্থনীতি যদি বদলে ২.৮৭৪ কোটি টাকা নিয়ে সৃষ্টি করে থাকে সেক্ষেত্রে আমাদের দেশে অর্থনীতির সামর্পণায়করণ মাত্রা যা মৌলিককরণের অর্থনীতির শক্তি-মাত্রা নির্দেশ করে হবে নিম্নরূপ:

১. দেশের মোট বাল্যীক জাতীয় বিবিশ্বনাটন (চর্চা মূল্য) ১.০২ শতাংশের সম্পর্কিত, অথবা

২. দেশের মোট বাল্যীক জাতীয় বিবিশ্বনাটনের ১.৩১ শতাংশের এর সম্পর্কিত, অথবা

৩. সরকারের মোট বাল্যীক রাজহাস আয়ের ২.১ শতাংশের সম্পর্কিত, অথবা

৪. দেশের বাল্যীক র্পণানি আয়ের ১.৫৪ শতাংশের সম্পর্কিত, অথবা

৫. সরকারের মোট বাল্যীক উন্নত বাণিজ্যের ৫.৫৮ শতাংশের সম্পর্কিত, অথবা

৬. সরকারের বাল্যীক উন্নত বাণিজ্যের অভ্যন্তরীন সম্পদের ৮.৬২ শতাংশের সম্পর্কিত, অথবা

৭. বিচার চলমান বছরের (১৯৭৫-২০১৫) মৌলিককরণের অর্থনীতি সৃষ্ট ক্রমপূর্ণভাবে নিয়ে মুনাফার মোট পরিমাণ (total cumulative net profit) হবে বর্তমান বাণিজ্যমূল্য কমপক্ষে ২ লক্ষ কোটি টাকা (যে পরিমাণ অর্থ সরকারের গত অর্থবছরের উন্নত বাণিজ্য বরাদ্দের দ্বিগুণ অথবা সরকারের মোট রাজস্থ আয়ের সম্পর্কিত)।

সেই সাথে বিকাশ-বিকৃতির সহায়না নির্দেশে আয়ে ওরূপস্তপূর্ণ হল এই যে যেহেতু মৌলিককরণের অর্থনীতির প্রকৃষ্টির হার (গত ২০ বছরের হিসেবে বাল্যীক গড়ে ১০ শতাংশ) মূল প্রকৃতির অর্থনীতির প্রকৃষ্টির হার (গত ২০ বছরের হিসেবে বাল্যীক গড়ে ৫ শতাংশ)-এর তুলনায় অধিক (শুধু অর্থনীতির দুদিকে প্রদর্শন হয়) সেহেতু অর্থনীতির সামর্পণায়করণ অব্যাহ অবস্থায় অনুপস্ততিত থাকলে যে উদ্যোক্তর বৃদ্ধি পাবে এ বিষয়ে বিবিশ্বনাটনের যুক্তিসৎকার কোনো কারণ দেই।

মৌলিককরণের অর্থনীতির গতন প্রকৃতি, বিকৃতি ও সম্পাদন-প্রক্রিয়া বিশ্লেষণে কয়েকটি ওরূপতের বিষয় নির্দিষ্ট বলা লাগব, যা মুক্তিযুদ্ধের চেতার বাংলাদেশ বিবিশ্বনাটন এবং মৌলিককরণ জগতি দুর্বল উপাদান হিসেবে দেখা উচিত। বিশ্লেষিত সংশ্লিষ্ট বিবিশ্বনাটন নির্দেশ:

প্রথমত: তার স্বতন্ত্র ও নীরব মৌলিককরণ উচ্চ মুনাফার অর্জনের খাতসমূহে বিবিশ্বনাটন করেছ, অর্থাৎ পারলোকিক জীবন নিয়ে লৌকিকতায় তারা যতই পারলোকিক প্রদর্শন করেন না কেন ইহুলোকিক-পারলোক জীবন সম্পর্কে তারা অনেকের চেয়ে অধিকতর সজ্জাভূতি।

দ্বিতীয়ত: তারা স্ট্রেটেজিক বিবিশ্বনাটনে অধিক উৎসাহ।

তৃতীয়ত: বিবিশ্বনাটনের খাত নির্দেশে তারা ত্রাট জনপ্রিয়তার সাথে সম্পৃক্ত হবার ক্ষেত্রগুলিকেই বেছে নিয়েছে।

চতুর্থত: তাদের খাত-প্রতিষ্ঠানভিত্তিক বিবিশ্বনাটন কাঠামো যথেষ্ট ভারসাম্পূর্ণ।

পঞ্চমত: তাদের বাল্যীক নিয়ে মুনাফার মাত্র ১০ শতাংশ সাংঘটিক কর্মকাণ্ডে বিবিশ্বনাটন করে কমপক্ষে
অব্দুল বারকাত : বাংলাদেশে মৌলবাদ ও মৌলবাদী জাতিক্রেতর রাজনৈতিক অনৈতিতি

5 লক্ষ দশিলের সদ্যকালের দিনগুলি নিয়ূক্তি দেয়া সম্ভব। তারা সেটা করেন এবং অন্যান্য খাতে ক্রস-ক্রান্তুই নেন।

ষষ্ঠ: সরকারি-নেতাবাদী ঋতুগতিক অনুমানের স্ট্রয়টিজিক অবস্থানের উপর সামন্দারায়ক মনোভাবাধিকার
কাঙ্ক্ষার পরিকল্পনাতে অন্তর্ভুক্তির জন্য তারা তাদের অনৈতিক ও রাজনৈতিক ক্ষমতা (অপ) ব্যবহার করেন।

সপ্তম: সমস্ত জাতিতে এই সাপ্তিক ও শব্দিক যে জাতিতে ধরা পড়লে তাদের অনুপাতিক
ধর্মনির্ধারিত রাজনৈতিক দল এবং ক্ষমতার ভিত্তির কোনো কোনো শক্তি তাদের ছেড়ে
দেবার জন্য প্রশাসনিক ও রাজনৈতিক অপপ্রয়াগ করে এবং অর্থনৈতিক ক্ষেত্রে অশুদ্ধ শক্তি
প্রয়োগ করতে আর অর্জনে সক্ষম হয়; চিহ্নিত জাতিদের ধরে ছেড়ে দিতে হয়; আর তাদের
নিয়ন্ত্রক গভ-ফাদাররা সম্পূর্ণ ধরনে ছোটার ব্যাপটেই থেকে যায়।

অষ্টম: রেন্ট সিকিং সিস্টেমে অনৈতিক ও রাজনৈতিক দুর্বলভাব উদ্দেশ্য ক্রমবর্ধন
দারিয়া-নবনামা-শাসন যেমন মনোভাবের মধ্যে ধর্মনির্ধারিত উপ সামন্দারায়ক অবেগ
সৃষ্টি করতে সক্ষম হয়েছে, তেমনি এ আবেগের অভিনবতা ব্যবহার করে ধর্মনির্ধারিত রাজনীতি
যে মৌলবাদের অনৈতিক সৃষ্টি করছে তাতেও ভিত্তি ঐ রেন্ট সিকিং যা দারিয়া-নবনামা-অবেগ
বাড়াচ্ছে। বাংলাদেশে মূলধারার অনৈতিকর্থে যে মৌলবাদের অনৈতিক গভর্তে উঠেছে
তাতেও ভিত্তি যে রেন্ট সিকিং তার অনেক স্পষ্ট প্রমাণ আছে।

নবম: মৌলবাদের অনৈতিকর্থের মূল খোক-ক্রিয়াকলাপ এমন যেখানে তুলনামূলক সহজেই রেন্ট
সিকিং কর্মকারের পরিচালনা সম্ভব। এবং খোক-ক্রিয়ার অন্যতম হলো অন্তর্শাস খাতের
ব্যাংকিং, বিমা, লিজিং কোম্পানি, বাঙালিক প্রতিষ্ঠান, উৎক্ষেপ শিল্প ও টাইগানগোলিক
সেন্টারসহ সাহায্য সংগ্রহ প্রতিষ্ঠান, যোগাযোগ-পরিবহন, জমি-দানান-রিয়েল এসেফট, অতি
মুনাফকারী প্রাইভেট খিলা প্রতিষ্ঠান, সাংবাদিক মাধ্যম, তথ্য-প্রযুক্তি এবং বিভিন্ন
ধরনের ট্রাস্ট ও ফাউন্ডেশন।

দশম: ধর্মের নামে হিসেব-পরিক পদ্ধতি শরীয়ত ভিত্তিক করার ক্ষেত্রে নানান বাংক-জুকি যা রেন্ট
সিকিং এর নামাত্ম মাত্রই দুঃখ নয় তা রেন্ট সিকিং সর্বোচ্চ করে সহায়তা করে।

একাদশ: তথাকথিত শরীয়ত-র নামে তারা তাদের অর্থনৈতিক-সামাজিক কর্মকারের পক্ষে রাজনীতি
ও সরকার করার ব্যবহার করে এমনসব বিধি-বিধান-নিয়ম-কানুন প্রায়ন করতে সক্ষম হয়েছে
যা প্রত্যক্ষ ও পরাক্রান্তভাবে রেন্ট সিকিং এর মধ্যেই পড়ে।

শান্তি: মূল অনৈতিকর্থের মধ্যে মৌলবাদের অনৈতিক সৃষ্টির ফলে ধর্মনির্ধারিত উপ সামন্দারায়ক
এ পোষ্ট রাজনৈতিক কর্মকারের এমনভাবে প্রায়ন করতে সক্ষম যখন দেশে
হযাতায়-অব্দাদারসহ অনুরূপ বিশ্বাস অর্থায়ন করে তারা বাজার অনৈতিক
কানেবাজার-মুক্তদারি উপে দিয়ে বাজার স্তরালী ও মূলা-স্তরালী রেন্ট-সিকার-দের
সহায়তা করে। অনেক ক্ষেত্রে এমনটিই হওয়া সম্ভব যে মৌলবাদের অনৈতিক নিজেই
সালারি রেন্ট-সিকার এর মূলকায় অতীত্ব হয়।

এত্থন যা কিছু বিবার-বিবহের কাগজাত তা থেকে সহজেই অনুমান করা সম্ভব যে, এ প্রক্রিয়াতে আমাদের
দেশে ইসলাম ধর্মনির্ধারিত মৌলবাদ অশুদ্ধ মূলধারার অনৈতিকর্থের মধ্যে মৌলবাদের অনৈতিকর্থী সৃষ্টি
ও বিকশিত করেনি, তারা সৃষ্টি করেছে “সরকারের মধ্যে সরকার” এবং “রাষ্ট্রের মধ্যে রাষ্ট্র” (রাষ্ট্রের হেন
ধর্মীয় মৌলবী এর ইতিমধ্যে “অধর্মীতিক ক্ষমতাত্ত্বিক রাজনৈতিক প্রক্রিয়া” হিসেবে প্রতিষ্ঠিত হয়েছে এবং এ শাস্ত্র দুর্বল এবং বহিঃশুন্য শিক্ষির সহায়তায় তারা “অধর্মীতিক শিক্ষির আবেদন করবে”-র মাধ্যমে রাষ্ট্র ক্ষমতাকেই দখল করে নিতে চায়। আর এক্ষেত্রে মৌলবী জনিত্ব ঐ উদ্দেশ্য বাতাসায়নের কার্যকর রূপাঙ্কন মাত্র।

৭. মৌলবীদের অধর্মীতি, রাজনীতি ও জঙ্গি: যোগসূত্র কোথায়?

ধর্মীয় মৌলবী এন্ডিপলে ইতিমধ্যে “অধর্মীতিক ক্ষমতাত্ত্বিক রাজনৈতিক প্রক্রিয়া” হিসেবে প্রতিষ্ঠিত হয়েছে এবং এ শাস্ত্র দুর্বল এবং বহিঃশুন্য শিক্ষির সহায়তায় ধর্মের নামে “জিহাদ” এর মাধ্যমে রাষ্ট্র ক্ষমতাত্ত্বিক দখল করতে চায়। এ অবস্থায় মৌলবীদের রাজনৈতিক অধর্মীতির সুন্দরপ্রস্তাই ক্ষমতার বাদে বহিঃশুন্য অনুমানের অন্তর্গত ধর্মের প্রতি এর রাজনৈতিক ও রাজনীতি-সম কর্মকাণ্ডে মৌলবীদের সমস্ত, ব্যক্তিক ও সংস্থাবিশিষ্ট প্রক্রিয়া মোকাল। দলিত সাতরো বছরে, ১৯৯৯-২০১৬ সময়কালে বাংলাদেশ মৌলবী জনিত্ব বছর মানুষ হত্যা করেছে, অনেককে গৃহতর আঘাত করেছে, অনেক প্রতিষ্ঠান নিখুঁত করেছে।

ধর্মীয় উদ্দেশ্য কর্মকাণ্ডের বিশ্বাসে দেখা যায় ক্রমবর্ধমান পরিবর্তনশীল এক চিত্র। পরিবর্তনশীল এ চিত্রে স্পষ্ট হয়: তুলনামূলক ব্যবসায়িক জনস্কৃতি থেকে অধিক মাতার জনস্কৃতি উত্তরণ। যদি আছে বলুনো যে প্রধান পরিবর্তনের পরিবর্তে বিশ্বাসীর বোটা ব্যাবহার। তার জন্য বিশ্বের অধর্মীয় “জিহাদ” (ইমরান জান কোনান শরিফকে কোথায় জিহাদের কথা নেই যা আছে তা হল আত্মরক্ষামূলক “বিপ্লবীয় খুদ্দক” প্রথম স্তরের ‘জিহাদ’ থেকে চতুর্থ স্তরের ‘জিহাদ’ অর্থাৎ “কিলাল”- বড় মাপের সমস্যা যুদ্ধ; স্তরীয় পরিধিতের জঙ্গিদের কর্মকাণ্ডের আঞ্চলিক গতির জঙ্গিদের কর্মকাণ্ডের সাথে সম্পৃক্ত করা; এক সাংগঠিতিক প্রচেষ্টা থেকে সব জঙ্গিদের নিয়ে এক প্ল্যাটফর্ম গঠনের প্রয়োজন ইত্যাদি।

এন্ডিপলের বিশ্বাসে ধর্মীয় মৌলবী ও জঙ্গিদের নূতন ক্ষমতার কৌশলিক ও বুদ্ধিমান কর্মকাণ্ড কর্মকাণ্ড উপ-ক্ষমতা স্পষ্ট হয় যা নিম্নরূপ:

১. রাষ্ট্রের কর্তৃত্ব দখলের লক্ষ্য সংঘটিত ধর্মীয় পরিবর্তন আনা যা তাদের অন্যতম মূল উদ্দেশ্য।

২. রাষ্ট্রাত্যাগ পারস্পরিক ও ধর্মনিরপেক্ষ স্করকার আসীন ধারকে এ ধরনের স্করাত্মী প্রক্রিয়া হয় তাদের প্রাথমিক রূপ পরিস্থিত হয়।

৩. ধাননিঃসী ও ধর্মনিরপেক্ষ স্করকার মৌলবী হলে এদের স্করাত্মী নলনোরাকের বহুমূল্য স্পষ্টতার বদলে।

৪. মাদ্রাসায় থেকে শুরু করে সব ধরনের শিক্ষা প্রতিষ্ঠান (মূল ধারার বাংলা এবং এলিট “ইহোসি-সাম্যম” এবং আর্থিক-সামাজিক-সংস্কৃতিক-অর্থনৈতিক-বিচারিক সব ধরনের প্রতিষ্ঠানের জন্য তাদের সাংঘটিতিক কর্মকাণ্ড পরিচালনের লক্ষ্য ভিন্ন ভিন্ন ধরনের ফলাফল।
5. The author quotes from Maududi's work: "In our domain we are..."

Bangladesh Journal of Political Economy Vol. 31, No.-4

The municipality of the city of...
ছবি ১: মৌলবাদী শক্তিসমূহের কৌশলিক আন্তঃসম্পর্ক

'ইসলাম' নামাকাতি মূল ধারার রাজনৈতিক দল
(প্রকাশ সংগঠন)

- প্রধান পৃথিবী-প্রধান কার্যকর- যার রয়েছে বিভিন্ন ধর্মের একটি সংগঠন, যুদ্ধ সংগঠন, যুব সংগঠন, শিষ্য শ্রমিক সংগঠন, সাংঘূর্ণিক সংগঠন, পেশা ভিত্তিক সংগঠন
- প্রকাশ্য কার্যকরদের বিভিন্ন জাতীয় কার্যকরদের অংশগ্রহণ এবং সকল জনের নির্বাচনে অংশগ্রহণ
- সরকার, আয়তনাধিকার, আধা-আয়তনাধিকার, বাণ্ড মালিকানাধীন প্রতিষ্ঠানসমূহে গভীর বিস্তার-কমান
- প্রশাসকীয় সংস্করণের তাদের মতাদর্শ প্রভাবিত বিজ্ঞান
- নিষ্ঠা গণমাধ্যম (সংবাদপত্র, টেলিভিশন)

জন সংগঠন
(অকাশায়/গোপন)

- ১৩২ চিহ্নিত প্রাঙ্গন (পরিপূর্ণ ৭ দৈনিক)
- গোপন কার্যকর পরিচালনা করে, প্রকাশ্য কার্যকরদের নেই
- নেতা কমিউনিটির অনেকেই অতীতে প্রধান পৃথিবীকরণকরা নামকরী দলটির সদস্য ছিল
- এরা রোগ, মামলা, হোটা বিভিন্ন আত্মির কার্যকর পরিচালনা করে থাকে, যাদের রয়েছে বিভিন্ন অন্তর্জাতীয় কমিউনিটি
- এরা অনেকেই দেশে-বিদেশে অন্তর্জাতিক পরিচালনা-প্রশিক্ষণ গ্রহণ করেছে
- মাদানে শিক্ষা (একাদশের) সাথে রয়েছে সংগঠন
- কোনো কোনো জন সংগঠন আল-কায়েদা এর সাথে সংযুক্ত

অর্থনৈতিক ভিত্তি এবং সামাজিক সংগঠন

- মৌলবাদীদের অর্থনীতি
  - তাদের পরিচালিত/মালিকানাধীন/সম্পূর্ণ আর্থিক প্রতিষ্ঠান ও সংগঠনের নিকট মুভায় পরিমাণ এখন হয়ে ২২,৪৭৪ কোটি টাকা (সারামূহ ১ দৈনিক)
  - বাণিজ্যিক ক্ষেত্রে এরা সমন্বয়বাহীদের আর্থিক সহযোগিতা গ্রহণ করে থাকে
- ২৩১ টি ব্যপক সংস্থা (এনজিও)সহ প্রাক্তন-ফাউন্ডেশন যার মাধ্যমে তাদের কার্যকর পরিচালিত হয়
  - বিভিন্ন উৎস থেকে অর্থ সংগ্রহ করে থাকে
  - দেশি-বিদেশি উৎস থেকে অর্থ সংগ্রহ করে থাকে
  - তাদের রয়েছে মৌলবাদী অর্থনীতির সাথে পৃথিবীর যোগাযোগ

ধর্মীয় মৌলবাদ ও তৎসম্পর্কিত উচ্চ জিভিবাদ যে “আত্মাগাতি বোমা সংহিতা” চালু করেছে তার ফলে জাতি-ধর্ম-বর্ণ-ধনী-নির্ধারণ নির্ধারণে দেশের সকল মানুষের জীবন অতি বিপন্ন; দেশের প্রতিটি মানুষ শক্তিত। মুক্তিযুদ্ধে মানবতা বিরোধী অপরাধসমূহ যুদ্ধপরাধীদের বিরুদ্ধ প্রতিশোধ যতই করার কথা বিপন্নতা বোধ ততই বোঝা যায়। তবে বর্তমান সমস্ত ভাগ্যের ব্যবস্থা এখন আবারও সম্মত করিয়ে দিতে চায় যে ঐ বিচার প্রতিষ্ঠা বিচার-সংস্কার মানুষের জন্য এখন ব্যাপক মাত্রায় ধীর পরিসম্পন্ন৫৫।

৫৫ আরুল বারাকাত, ২০১৫, ‘বিবিসিদিত সংক্রান্তি, সাম্প্রদায়িকতা, মৌলবাদ ও মৌলবাদী জিভিবাদের উচ্চ, ব্রহ্ম, বিকৃতি ও কার্যকরণ সম্পর্ক; সমাদানের নায় প্রয়োজন আমল পরিবর্তন’, বিভাগীয় সেমিনার ২০১৫, বাংলাদেশ অর্থনীতি সমিতি, রাঙ্গুর (২৪ অক্টোবর ২০১৫)।
বাংলাদেশের অধিনস্ততে মৌলদারী জাতিবাদ-উত্ত্র পরিকল্পিত বিপন্নতা কিছু নতুন মাত্রা লক্ষ্যীয়।
মৌলদারী জাতিজোটের পরিকল্পিত এসব মাত্রা অধীকার করার অথবা সম্পূর্ণ মনে করায় আবারো তুলন হবে। বিপন্নতার নতুন এসব মাত্রা নিম্নরূপ:

১. এ জাতিজোটের উত্পাদনশীল খাতসমূহের “সরবরাহ চেইন” ভেঙ্গে ফেলে।
২. এ জাতিত্ব অধিনস্ততির কাঠামো বিকল করার লক্ষ্যে উত্পাদন প্রক্রিয়ায় উপাদান পরিসংখ্যান এবং কৌটিতাল পরিবহনের অবাধ স্থায়ীত্ব সরবরাহ চেইন অন্তর্গত করা দিতে চায়।
৩. এ জাতিজোট অধিনস্ততির প্রাণ-সংযোগে ‘অবকাঠামো’ গুড়িয়ে দিতে চায়।
৪. এ জাতিজোট স্কুল-কলেজ-বিশ্ববিদ্যালয়সহ সাহায্যকর প্রতিষ্ঠান অকার্যকর করার সকল ধরনের
পরীক্ষা-নিরীক্ষা চালিয়েছে এবং এসব পরীক্ষা-নিরীক্ষা অবৈধ হয়েছে।
৫. এ জাতিজোট এখান দেশের হামাকাল, কুটনো শহর এবং শহরতলিতে তাদের কর্মকাজের মাধ্যমে
ভাগ-ভিত্তি সৃষ্টির পরিবেশ সৃষ্টি করে।
৬. এ জাতিজোট তাদের কর্মকাজ দিয়ে এমন এক ধ্রুব সৃষ্টির পরিকল্পনা করেছে যখন হামারের
হাতবাজারের সচারা পরে বন্ধ হয়ে যেতে পারে। ফলত হামারের বাজারে সচারা পরে সার,
ডিজেল, বীজসহ অন্যান্য অধিনস্ততি কর্মকাজ বন্ধ হয়ে যাবে, যার ফলে আশংকা করা যায়
যে হামারের অধিনস্ততি মজুরদার বন্ধ এবং অধিনস্ততি সৃষ্টির গতি বদল হবে।
৭. এ জাতিজোটের উত্তরাধিকারের নামে আপাতত ঢাকার শাপলা চতুরে ইসলাম
ধর্মের হেফাজতের অজ্ঞতাতে সংবিধান বিশ্বাসী ও নারী বিশ্বাসী ১৩ টি দফা দরিদ্রাণ্ড পেশ করে
নাস্তক-আত্তক বিদ্যালয়ের মাধ্যমে দেখে গৃহযুদ্ধের সৃষ্টি প্রয়াস নিয়েছ।

copy

Kvijhcv bv K‡i gvwK©b hy³iv‡óªi wbDBqK©wfwËK AvšÍR©vwZK GbwRI wnDg¨vb ivBUm IqvP
dci cÖ`vb K‡i‡Q (G welqwU Avwg cÖvgvwYK `wjj-`¯Ív‡eRmn 26 Ryb 2012 Zvwi‡L Rvnvbviv
gvbm KvVv‡gv wewbg©v‡Yi cwi‡ek, cÖùzwUZ n‡e ag© wbi‡cÿ AvPiY| ¯^vaxb iv‡óªi msweavb
mgvRe¨e¯'v cÖwZôvi cÖwZeÜK n‡q `uvov‡jv|

AvšÍR©vwZK †nW †KvqvU©vi Avj-Kv‡q`vi †hvMm~Î mswkøó welq| B‡Zvg‡a¨ cwiwkó 1-G D‡jøL
(4)  ag©wfwËK ivR‰bwZK msMVb-ms¯'v MVb-Gi ˆeaZv †`qv,
(11)  Rw½‡`i A‡¯¿i DrmgyL eÜ Kiv Ges GKB mv‡_ A¯¿ D×v‡i me©vZ¥K e¨e¯'v MÖnY
mgwR‡` Ry¤§vi LyZevi cÖwZ we‡kl ¸iæZ¡ †`qv cÖ‡qvRb| KviY 16 †KvwU gvby‡li
KZvs‡k| A_©‰bwZK `ye"©Ëvqb Ges Kv‡jv A_©bxwZi M‡elYvq GUvB cÖZxqgvb nq †h,
m¤úªmviY N‡U|

A_P †Zgb M‡ewlZ bq A_ev D‡cwÿZ A_ev †KDB †Zgb Avgj †`bwb

A Quốc"

A_P †Zgb M‡ewlZ bq A_ev D‡cwÿZ A_ev †KDB †Zgb Avgj †`bwb

A Quốc"

A_P †Zgb M‡ewlZ bq A_ev D‡cwÿZ A_ev †KDB †Zgb Avgj †`bwb

A Quốc"

A_P †Zgb M‡ewlZ bq A_ev D‡cwÿZ A_ev †KDB †Zgb Avgj †`bwb

A Quốc"
বাংলাদেশে মৌলবী জহিরা ১৯৭১-এর মুক্তিযুদ্ধে পরাজিত শর্করা। এ শর্করার প্রতিষ্ঠাধ্যায়া ধীরে ধীরে এমন পর্যায়ে পৌঁছেছে যে তারা ধর্মের নামে নির্বিচারে মানুষ খুন করেছে ও করবে। উক্ত সাম্প্রদায়িক মৌলবী মৌলবী জহিরা ধর্মের নামে জোরজমানের কথা রাষ্ট্রক্ষমতাটিকেই দখল করতে চায়। সাম্প্রদায়িক জাতিবন্ধ প্রতিষ্ঠানিক গুটিতে নিঃসরণ করতে থাকে। ওদের জনস্বীকারে অভিজ্ঞতার সকল সীমায় অতিক্রম করার জন্য নির্নিয়ম বেশ ধর্মের বাধী, তারপর শ্রীমান চরণামল নামে একটু আঁধার প্রশিক্ষণ, তারপর পটাবার খেলা, তারপর স্পিটলার ছাড়া বোমা, তারপর পুলিশ-বিভাগের খেলা-প্রদর্শন, তারপর সত্তাবল সংস্কৃতিক অগ্রগণ্য বোমা মেয়ের মানুষ হত্যার মাধ্যমে বাঙালিসহ এ দেশের মানুষের হাল্কার বছরের সংস্কৃতি নির্মূলক প্যাস, তারপর সম্মিলিত রাজনীতিক শূন্য করার প্রচেষ্টা, তারপর এক সাথে একই সময়ে দেশের সব জল্লার শহরের সরকারি অকিস ও বিচারালয়ে বোমা, তারপর বিচারক হত্যা, পেট্রাল বোমায় গণ পাউডার দিয়ে পুড়িয়ে কলস্টল শিশু-নারী-বয়স্ক মানুষ নির্বিচারে হত্যাকাণ্ড নিয়মনিকরণ করা, আর সবাইয়ে সুইসাইড বোমা এবং রিমেট কন্ট্রেল প্রশ্নিক সহায়তায় নির্বিভূমিত মানুষ খুন-হত্যাসহ বেশিরভাগ স্থানে খাপসং। সাম্প্রদায়িক জনতিকে ক্রমবর্ধমান যা তাদের স্পট যে ওয়াক্ত শক্তি সংঘর্ষ করেছে এবং সুইসাইড বোমাই শেষ কথা নয়। যদি নিরক্ষর করা না যায় তাহলে সমস্তের অর্থেও অবশ্য খুনের বিপ্লব ঘটবে যা যাত্রায় বা এ মুখে কল্পনা করা যায় না। আমাদের ইতিহাসে এ কোনো সাধারণ সংকট নয়দৃশ অর্থেই মহা-বিপ্লব; গভীর সংকটের এ এক রক্তক্রিয়া।

মৌলবীদের অর্থনীতি ও জঙ্গিবন্ধ সংক্ষিপ্ত মহা-সংকটটি এমনি যে মুক্তিযুদ্ধে পরাজিত ধর্মাঙ্গ রাজনীতি-করা অনেক শুরুতে উদ্ধারপূর্ণ কথাবার্তা প্রকাশেরই বলেছেন। এখনও বলেছেন। যেমন তারা বলেন:
1. “1971 আই ড্যান ২০০৫ সাল এক কথা নয়”।
2. “আমরা কচ্চাপাতার ওপর বৃত্তি পানি নিয়ে যে টোকা দিলেই পড়ে যাবো”।
3. “কোথায় আজ ঘাতক-দালাল নির্মূল করিমি, আর আমরা আজ কোথায়?” (?)
4. “সংসদের কয়েকটি আসন দিয়ে আমাদের শক্তি বিচার করলে ভুল করবেন”।
5. “শীঘ্রই ইসলাম শাসন কায়ম হবে। দেখুন, অপেক্ষা করুন; পরবর্তী নির্দেশের জন্য প্রস্তুত থাকুন”।
6. “ইসলামে আহ্বান পাপ তবে ইসলাম শাসন/হকুমত কায়ম হবে যেমন এসব সমস্যার সমাধান হয়ে যাবে”।
7. “আন্তর্জাতিক সর্বজীবনীর পরিবর্তে আল্লাহর বিধান কার্যকরী করতে সন্তান জেহাদের মাধ্যমে দেখে যতদিন ইসলাম আইন বাতিল নন হয় ততদিন তাদের বিচারালয়ে যাওয়া বক্ত রাখুন”।
8. “সন্তান জেহাদ করা আমার অধিকার, আর ঐ জেহাদে অংশগ্রহণ আমার দায়িত্ব। আমার অধিকার প্রতিষ্ঠা ও দায়িত্ব পালনে বাধা দেয়ার কমতা করুন নেই”।
9. “দেশ গৃহযুদ্ধের দিকে যাচ্ছে, যাবে”।
10. “আমাদের ১৩ দফা (অর্থাৎ হেফজাতে ইসলামের) দাবী না মানা পর্যবেক্ষি তোমাদের জনতার ঐমানি সম্প্রাণ চলতে থাকবে”।
11. (শাহাবের) “গণজাগরণ মন্দিরে নেতাদের ফান্স চাই।”
12. একাতরের মুক্তিযুদ্ধের মানবাধিকার লঙ্ঘন ও যুদ্ধপরাধীর দাবী ফান্স হওয়া সালাউদ্দিন কাদর চৌধুরীর হেলের দৃষ্টিকোণ - “এ অবিচারের আমরা বিচার করে ছাড়বো।”

ইসলামী জঙ্গী-উত্তপ মহাসাগরের গভীরতাতে এখনেও যে ইতোমধ্যে প্রথম ১০ বছরে ধূত জঙ্গির প্রায় সবাই দিব্য নিম্নবিভিন্ন নিম্নমাধ্যমিক পরিবারের সমন্বয়: এদের মধ্যে যারা সাহকর্তা তাদের প্রায় সবাই মাদ্রাসা শিক্ষা থেকে আসেন; এদের প্রায় সবাই কোনো না কোনোভাবে ধর্ম-ভিত্তিক সামাজিক রাজনৈতিক দলের সদস্য ছিলেন অথবা আছেন। আমার পাশাপাশি ইদুনি ঢাকা শহরসহ বিভিন্ন বিভাগীয় ও জেলা শহরে দেখা যায় যে ধর্মভিত্তিক উত্তমসমাজের সাথে প্রত্যক্ষ ও সতর্কতার জড়িত ধনী ঘরের সমন্বয় এবং ইন্টারজি মিডিয়াম ফুল্লোলা-বিশ্ববিদ্যালয়ের শিক্ষাধারী (কারণ হিসেবে সমগ্র শিক্ষা ব্যবস্থার অসাধারণ কথা ইতোমধ্যে উল্লেখ-বিশেষণ করেছে)। আরও দুষ্করতার বিষয় এই যে এখন পর্যন্ত ধূত ২ হাজার জঙ্গিদের গড় বয়স মাঝে ২২ বছর (১৬ থেকে ২৮ বছরের মধ্যে)। অথচ ১৫-২০ বছর আগে গণমাধ্যমের জঙ্গি প্রশিক্ষণের যেসব সচিত্র খবর প্রকাশিত হয়েছিল অথবা ১০-২০ বছর আগে যারা আফগানিস্তান, পাকিস্তান, বার্মাতে জঙ্গি প্রশিক্ষণ দিয়েছে তাদের বয়স তো এখন হবে ৪৫-৫৫ বছর তারা কোথায়? আর যারা ১৯৭১-এ আলোকদ-আশ্বাস-রাজকার-শাহিজিকমিটির নামে মুক্তিযুদ্ধের বিচ্ছেদ অন্তর্ভুক্ত ছিল এখন বার্মা সিরিজ খুন-হত্যা-জনহত্যা-মহিলা সংঘটিত জড়িত ছিলেন, এবং/অথবা মুখ্য পরামর্শদাতা কাজ করেছিলেন তাদের বয়স তো এখন হবে ৬০-৬৫ বছরের মধ্যে তারা কোথায়? এসব গণভাবাদরদের বড় অংশই ১৯৭১-এ মানবতাবিরোধী অপরাধ ও যুদ্ধপরাধ করেছেন। এসব গণভাবাদরদের অনেকেই এখনও বহাল তবীতে দেশ-বিদেশে তাদের কাজ চালিয়ে যাচ্ছে।
ধর্মীয় মৌলানীদের রাজনৈতিক অর্থনীতি ও মৌলানীদের জঙ্গি দেশের অন্তর্গত যে সর্বোচ্চ সত্তা-আচরণ মাত্রা অতিক্রম করেছে এবং তাতে আমাদের মুক্তি-শীর্ষক বিরোধী আন্তর্জাতিক চক্র মূল্য দিয়ে চলেছে (যে বিষয়টি আমি ইতরেদের দ্বিতীয় আন্দোলনে বিদ্যমান বাণিজ্যিক ন্যায় চালু করেছি)-এর সর্বশেষ প্রকৃতি প্রশ্ন হলো একতারের মুক্তিবিদ্রোহের মানবতাবাদী অপরাধের দায়ে ট্রাইবুনালের রায়ে মৃত্যুদণ্ডে জায়গায় ইসলামী সহকারী সেক্টরটির জেনারেল মূলমন্ত্রী কামরূখামানের মৃত্যুদণ্ডের বিরুদ্ধে মার্কিন হিউমান রাইটস ওয়ার্ড ও ব্রিটেনের সরদার সদস্য লর্ড কর্পাইল সহকারীর অবস্থান; অনুরূপ ঘটনা ঘটেছে যখন যুদ্ধপরাভূমির এ দেশে পাকিস্তানি গোয়েন্দা সংস্থা আইএসএসই প্রধান সালামিদান কারে চৌধুরিকে ওকাস আন্দোলনের জন্য সংগঠন সংগঠনের লর্ড কর্পাইল নিয়ে শীঘ্র উদ্ধৃতানের কিন্তু বিচারকারী নেতাদের অভ্যন্তরে তিনটি লোক হিন্দু বলে স্পষ্ট রায় দেবার মত ওকাস প্রকাশ করেছে। আর মৌলানীদের জঙ্গি দেশের অন্তর্গত যে প্রধান বাণিজ্যিক অধিবেশনের মূলে কার্যকরী তা বাংলার জন্য ওয়ার্ল্ডফাউন্ডেটিক লর্ড ফার্ম কাজিসি ইন্টারন্যাশনালকে তিন দফায় ৫০০ কোটি টাকার উপর প্রশ্ন প্রকাশ করেছে (এ বিষয়টি আমি প্রাথমিক দলিল-দাতদানের মূল কর্মকান্ডের উপর তিন দফায় ৫০০ কোটি টাকার উপরের প্রশ্নের উপর প্রকাশ করেছি)। বিষয়টি ঘূর্ণিঝড় বিধায় একটি খোলাশা করা প্রয়োজন।

একতারের মুক্তিবিদ্রোহ মানবতা বিরোধী অপরাধের দায়ে ট্রাইবুনালের রায়ে মৃত্যুদণ্ডে জায়গায় ইসলামী সহকারী সেক্টরটির জেনারেল মূলমন্ত্রী কামরূখামানের মৃত্যুদণ্ডের বিরুদ্ধে রিভিউ আবেদন খেলিয়া কোনো ক্ষেত্রে না কিন্তু মার্কিন পুলিশের নিউইয়র্কিজ আন্তর্জাতিক এনিজও হিউমান রাইটস ওয়ার্ড (যার প্রতিক্রিয়া ১৯১৮ সাল, যা যৌথ মূল কাজ মানবাধিকার নিয়ে গবেষণা ও এডোকাসিস এবং যা প্রতিপালন করে তারা প্রথম তর্ক উৎস জাগে সোসাইটি ওপন সোসাইটি ফাউন্ডেশন যারা প্রাক্তন কমিউনিস্ট দেশগুলোতে অভিবাসন করেছে) এবং ব্রিটিশ পাবলিশেটের উচ্চকার হাইস অন লর্ডের সমস্ত লর্ড কর্পাইল (যিনি ১৯৯৪ সালে ব্যারিস্টার পাশ করেন, ১৯৯৯ সালে লর্ড উপাধী পান, ২০০১-১১ পর্যন্ত}
বাংলাদেশের সরকারি অধিনীতি থেকে স্বাধীনতা লাভের পর থেকে বিষয়বস্তু অধ্যয়নের মাধ্যমে সমস্ত মানবিক প্রক্রিয়াগুলির উপর প্রভাব ফেলে। এই অধ্যয়নের উদ্দেশ্য হলো বাংলাদেশের সরকারি অধিনীতি থেকে স্বাধীনতা লাভের পর থেকে বিষয়বস্তু অধ্যয়নের মাধ্যমে সমস্ত মানবিক প্রক্রিয়াগুলির উপর প্রভাব ফেলে।

প্রথমত: নিউইয়র্কের উত্তর-পশ্চিম প্রান্ত, বেশিরভাগ অনুসারীর হেসনোনের সেলাম বড় হাজার মানুষের নিকট বিশ্বাসনীয় কথা ও মানবিক লজন হলো তার বিশ্বাস প্রতিবাদ ও এড়াইকে করবে। কিন্তু মার্কিন যুক্তরাষ্ট্র আত্মজ্ঞাত কোর্টের নিদর্শন এবং জাতিসংঘের নিদর্শন পরিষদের দ্বিতীয় লক্ষ্য করে (যে লক্ষ্যে বলা হয়েছিল “মানবিক লজন”;

“মুক্তিপ্রাপ্তিবৃত্তি”,”আত্মজ্ঞাত সম্মানরূপবৃত্তি”) একক নিদর্শনে ইন্দোর বিশ্বাস ব্যক্তি যুদ্ধ ঘোষণা করে ইরাক দখল করল, বিনোদনকে সাদাম হোসেনকে হত্যা করলে, লিবিয়ায় বেসামরিক বন্দি নেতার বিষয়ে নিহত করতে হয়েছিল। যাবজ্জো এতে সমাধিসূত্র দেওয়া হয়েছিল। একাডেমির শুনিয়ে বিষয়ক নিদর্শনের বিরোধী নির্দেশিতে এই নিদর্শন। দ্বিতীয়ত: বছর হয়তো থেকে যত্ন প্রারম্ভ করে আমি বলে আছি যে একাডেমির মুক্তিপ্রাপ্তিবৃত্তি-মানবতা বিরোধী অপারেশনের বর্তমান সরকারকে উচ্চে করতে ইতোমধ্যে বছর ধরে চেষ্টা করেছে (অর্থাৎ করেন ২০০৯ সালের ফেব্রুয়ারি মাসে বিভিন্নপ্রকার উল্লেখ হতাক্ষর) এবং একই সাথে যত্ন প্রারম্ভ দ্বারা আমাদের রাজনৈতিক দল ইতোমধ্যে মার্কিন মুক্তিকে হাজার কোট টাকার বিনিয়োগ নিয়ম করেছে এ কথা প্রমাণ করতে যে তাদেরকে সেনাবাহিনীর প্রশিক্ষণের বিশ্বাসী অধিকারী করা হয়

(ওয়াশিংটনের বিশ্ববিদ্যালয় ফার্ম ক্যাসিডিঃ ইন্টারন্যাশনালের সাথে মিলে করায় আমলের চুক্তি কিন্তু যথেষ্ট প্রমাণ নয়)। মার্কিন মুক্তিকে হিউমান রাইটস ওয়ার ও ব্রিটিশ লাইফের সাথে তারা যাবার আমার কোনো প্রশাসনের নয়। তবে মানুষ হিসেবে ওরা প্রতি আমার একটা সুনির্দিষ্ট আনুভূতি আছে।

অনুরোধ হল মাত্র দুই মিনিট সময় দিন, যায় করে পত্তন একাডেমির মুক্তি মুক্তিকে হিউমান রাইটস ওয়ার ও ব্রিটিশ লাইফের সাথে তারা যাবার আমার কোনো প্রশাসনের নয়।

পত্তন রোপন ও আমার কাছেই নিয়োজিত তিনি বলেছিলেন ওরা যাবার আমার একটা সুনির্দিষ্ট আনুভূতি আছে।

অনুরোধ হল মাত্র দুই মিনিট সময় দিন, যায় করে পত্তন একাডেমির মুক্তি মুক্তিকে হিউমান রাইটস ওয়ার ও ব্রিটিশ লাইফের সাথে তারা যাবার আমার কোনো প্রশাসনের নয়।

গান্ধী চতুর্থী, আভিজ্ঞ, এবং একাডেমিতে নিয়োজিত তিনি বলেছিলেন ওরা যাবার আমার একটা সুনির্দিষ্ট আনুভূতি আছে।
প্রথমত, শুধু করা যাক ইসলামি জঙ্গিতের আন্তর্জাতিক হেড কোয়ার্টার আল-কায়দা দিয়ে। ১৯৯৫- ১৯৯৭ সালে আল-কায়দা তাদের খড়া মাস্টার প্লান (মহাপরিকল্পনা) প্রণয়ন করে যা পরবর্তী সময়ে (২০০২ সালের দিকে) চূড়ান্ত করে তারা বলে, যে তাদের মূল লক্ষ্য: “পৃথিবীর অনেক দেশে ইসলামি শরীয়াহভিত্তিক রাষ্ট্র গঠন করতে হবে।” আল-কায়দার চূড়ান্ত মাস্টার প্লানে সময়-নির্দিষ্ট করে সম্প্রতি যা বলা হয়েছে সে সবের মূল বিষয়াদি এরকম:

1) বিশ্বব্যাপি ইসলামি শরীয়াহ ভিত্তিক রাষ্ট্র গঠনের জিহাদি সংখ্যায় পাঁচটি কার্যকর (phase) ধারণক: ২০০০-২০০৩ (প্রথম পর্ব), ২০০৩-২০০৬ (দ্বিতীয় পর্ব), ২০০৬-২০০৯ (তৃতীয় পর্ব), ২০০৯-২০১২ (চতুর্থ পর্ব), ২০১৩-২০২৬ (পঞ্চম পর্ব)।

2) পঞ্চম পর্বের শেষে অর্থাৎ ২০২৫-২০২৬ সাল নাগাদ পৃথিবীর সকল মুসলিম অধুনাতিত দেশে দেশের উৎস প্রতিষ্ঠিত হবে।

3) পৃথিবীর কোন দেশই ১০০ বছরের উপরে ইসলামি খেলাফতবিহীন অবস্থায় থাকবে না। এ ক্ষেত্রে সময়-নির্দিষ্ট অভ্যাসের প্রক্রিয়ার ফলস্বরূপ তারা হালিস থেকে যে বিষয়টি উদ্দেশ্য করে তা হলো, “যেহেতু আনুষ্ঠানিকভাবে সর্বশেষ ইসলামী খেলাফত ১৯২৪ সালে হযরত ওসমানের আমলে বিলম্ব ঘটিয়া যায় সেহেতু তার ১০০ বছর পরে অর্থাৎ ২০২৫-২০২৬ সাল নাগাদ অবশ্যই আবারো খেলাফত-শাসন প্রতিষ্ঠা করতে হবে। আমাদের সকল কার্যক্রম সে লক্ষ্যসেই পরিচালিত হতে হবে”।

4) তালেবানদেরকে ২০১৬ সালে আবারো আফগানিস্তানের শাসন ফমতা দখল করতে হবে (অর্থাৎ মাস্টার প্লানের ৫-ম কার্যকর পর্ব দিক)

5) আফগানিস্তান পুনর্নবীকরণ প্রক্রিয়ায় এক নন-“ভিতি বলা” সৃষ্টি করতে হবে। এই ন্য ন ভিতি বলা যার অন্তর্ভুক্ত হবে ভারত (বিশেষত কাশ্মীর, আহমেদনগর, গুজরাত এবং ‘সাত বন’- আসাম, অরুচাষ, মংগল, নাগাল্যান্ড, মনিপুর, মিজোরাম এবং বিপুরা আর ২০১৮ সালের মধ্যেই এক সাত বন’ কে ব্যতীত মারাঠার অস্তিত্বকে এক সমাহার হবে), বাংলাদেশ এবং (আল-কায়দার পরিকল্পনা মতে প্রাথমিক সময় সম্পন্দ ও ভৌগলিক-রাজনৈতিক বিশেষন)।

6) দু’টি ‘মানামা’ অর্থাৎ বিশ্বযুদ্ধ সংঘটিত করতে হবে। প্রথম ‘মানামা’ হবে ‘হিন্দ এলাকায়’ যার মধ্যে থাকবে ভারত, পাকিস্তান, বাংলাদেশ, বামার, নেপাল, ভুটান, আফগানিস্তান। আর দ্বিতীয় ‘মানামা’ হবে ‘থাম্ব এলাকায়’ যার মধ্যে থাকবে সিরিয়া, জর্ডান, প্যালেস্টাইন এবং তত্ত্বালিকা ভৌগলিক এলাকামৃহ।

7) আল-কায়দার মহাপরিকল্পনা উদ্বেগ করা হয়েছে যে এই মহাপরিকল্পনা বাস্তববাদে ইসলামি জিহাদবিদের জিহাদের ৩৭ চার্টি প্রতি পর্যায়ক্রমে তাত্ত্বিক করতে হবে। অবশ্য তারা এ ক্ষেত্রে বলেছে যে পরিবেশ পরিস্থিতিতে কারণে এমনও হতে পারে যে কোন নিদিষ্ট তর বাদ দিয়েই একাকিতে পরবর্তীতে কাজ সত্ত্বাও জিহাদের ঐ চার্টি তন্ত হলো ধারাতে নানাতাতে “দাওয়া” অর্থাৎ সব পাকে-পাকতাতে অবলম্বন মানুষদের দায়িত্ব দিয়ে তাদের বাচ্চা-বক্তা পোহে দেয়; ‘ইনাদ’ সব ধরনের প্রতিষ্ঠিত কর্মকাণ্ড প্রতিপালন করা; ‘রিবাত’ অর্থাৎ ছোট-ছোট এবং

৩৭ অন্যান্য আলগুরোও উদ্বেগ করেছে পরিবেশ পরিবেশকারণ পরিবেশ নির্দিষ্ট বলে কোন বিপুল উদ্বেগ নেই, যা আছে তা হলো আলগুরোর ঘরের ‘পাখি মুঘল’। মুসলমান শাসকরা যখন সরাসরিবিভাগে মুঘল করেন তখন ‘পাখি মুঘল’ শর্তটি পাপে তার পরিবর্তে ‘জিহাদ’ শাস্ত ব্যবহার হয় করেন।
বিক্ষিপ্ত-বিভিন্ন সংখ্য - হামলা কার্য পরিচালন করা; এবং সর্বশেষে ত্রু ও ব্যাহু মাঝের শক্তি সামরিক যুদ্ধ।

ত্রুত্ব, বাংলাদেশের ইসলামি জঙ্গি সংগঠনের বিকাশপথ এবং তাদের সাথে ইসলামি জঙ্গিদের আন্তর্জাতিক হেড কোয়ার্টার আল-কায়দার যোগসূত্র সংশ্লিষ্ট বিষয়। ইতোমধ্যে পরিষিক্ত 1-এ উল্লেখ করেছি যে আমাদের দেশে জানামতে ৩৩২টি ইসলামি জঙ্গি সংগঠন আছে এবং তারা কতেরভাবে জঙ্গিতে সংঘটিত করেছে। আমার মত সমাজের নিরখে বাংলাদেশে ইসলামি জঙ্গি-উর্দ্বাদী সংঘাতসমূহের বিকাশকে চারটি স্তর বা পর্যায় ভাগ করা যায়। যে চারটি উন্নয়ন-বিকাশ স্তর হলো এরমো: ১৯৭২-১৯৭৬ (প্রথম স্তর বা প্রথম কালপর্ব), ১৯৭৬-২০০৬ (দ্বিতীয় স্তর বা দ্বিতীয় কালপর্ব), ২০০৭-২০১২ (তৃতীয় স্তর বা তৃতীয় কালপর্ব), ২০১৩-এবং সামনের দিক (চতুর্থ স্তর বা চতুর্থ কালপর্ব)। আমাদের দেশে ইসলামি জঙ্গিদ-এর চেষ্টা থেকে বড় হওয়ার যে চারটি বিকাশকাল অথবা উন্নয়নকাল তার মূল বৈশিষ্ট্যসহ কালসমূহ নিচের ছক ২-এ দেখানো হয়েছে।

ছক ২: বাংলাদেশে ইসলামিক জঙ্গিদ-এর সংঘাতসমূহের বৈশিষ্ট্যসহ বিকাশকাল

<table>
<thead>
<tr>
<th>প্রথম পর্ব: ১৯৭২-১৯৭৬</th>
</tr>
</thead>
<tbody>
<tr>
<td>৩০ টি পরিষিক্ত ১৯৭২: অন্তর্জাতিকভাবে সংঘাত-বি-র কর্মকাণ্ড রুপীর ১৯৬৬-এ আফগানিস্তান</td>
</tr>
<tr>
<td>তেমন কোনও বোমাবাহি, হামলা, হত্যা অনুপস্থিত</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>দ্বিতীয় পর্ব: ১৯৭৬-২০০৬</th>
</tr>
</thead>
<tbody>
<tr>
<td>বেশ কিছু বাংলাদেশি যারা আফগানিস্তানে ইসলামিক রাজ কায়দায় লঘুত্তে যুদ্ধ করে ৪-টি জিসিস নিয়ে দেশটি ফিরেছেন: ১. অস্বভাবিত ২. বোমাবাহি প্রতিবেশিত উভয় ৩. যোগসূত্র ও সংঘাত ৪. আর্থিক উৎস</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>তৃতীয় পর্ব: ২০০৭-২০১২</th>
</tr>
</thead>
<tbody>
<tr>
<td>কর্মকাণ্ড ও সংঘাতের পুনরায় গঠন ও সংঘটিত ২. আইন-শৃঙ্খলা বাহিনীর হাতে অনেকই ধরা পড়ে ৩. একদিক জঙ্গি ফানিস</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>চতুর্থ পর্ব: ২০১৩ থেকে সামনে</th>
</tr>
</thead>
<tbody>
<tr>
<td>আন্তর্জাতিক ইসলামিক জঙ্গিদ-এর সংঘাত আল-কায়দা ও আইএস-এর সাথে যোগাযোগ সংঘাত ২. সেমিগোলিন এবং বিগোলিন ইতেমাদের আল-কায়দা এবং আইএস-এর সাথে সম্পর্ক সংঘাত ৩. নিষিদ্ধ প্রমিতা আর আরা সেমিগোলিন উল্লেখ ৪. সকল জঙ্গিদের এক প্ল্যাটফর্মে আরার প্রচেষ্টা</td>
</tr>
</tbody>
</table>
Avi I ¯^í‡gqvw` DwjøwLZ Kvh©µ‡g GKw`‡K †hgb ivóª I miKvi‡K mwµq f~wgKv cvjb Ki‡Z 
hy³ivóª KZ…©K †¯ú‡bi Dcwb‡ek wKDev `L‡ji c‡ÿ hyw³ †`b| 1904 mv‡j BD‡iv‡ci 
m"óKvix e‡j †Kvb wKQzB _vK‡e bvÓ| 1895-Gi Gme NUbv G¨vs‡jv-Av‡gwiKvb m¤ú‡K©i 
m¤ú‡`i (Rwg, cvwb, R¡vjvwb-LwbR, gnvKvk) Dci GKK-wbi¼zk gvwjKvbv Ges GK"QÎ 
Av‡Q; (3) ag©-wek¦vm gvbyl‡K `ytmg‡q mnvqZv K‡i Ges kvwšÍ †`q– †hgb GKRb Pig Amy¯'

BARKAT, A. (2013). “Ki‡j evsjvfvlvq K_v e‡j, A_ev Bs‡iR gv‡qi mšÍvb Bs‡iwR‡Z K_v e‡j evsjvq bq| Gme 
c~uwRev`Ó A‡bK †ewk AbyK~j| GB cyuwRev` Drcv`bkxj wkí wbf©i A_©bxwZi †P‡q bMiwfwËK 
c"ô‡cvlKZvi †Zgb †Kv‡bv f~wgKv †bB, GLv‡b Bmjvg weKwkZ n‡q‡Q K…wlwfwËK mf¨Zv 
56. IqvW© BmjvgxK d«›U di wRnv`
6.  gvwK©b mvgªvR¨ev‡`i gnv-†KŠkwjK bxwZUv †h ¯úó I ب_©nxb Zv Ômš¿vmÕ wel‡q Zv‡`i 
4.  cÖwZwU g‡WjB mvgwiK k"sLjvi Av`‡j cwiPvwjZ mymse×-myk"sLj e¨w³Lv‡Zi cÖwZôvb|
4.
weiæ‡× hy×Ó -Gi bv‡g wb‡RivB †h exfrm AvšÍR©vwZK mš¿vmev`x Kg©KvÐ Pvwj‡q‡Q †m 
ev¯ÍeZv eySevi †Póvq AbymÜv‡b wjß nb, hv Avcbviv K‡ib– ZLbB Avgiv Avevi Ab¨ 
cwiwPwZ h‡_ó †Mvcb ivLv nq (GK ai‡bi †Mwijv hy‡×i iYbxwZ ejv P‡j) |
AbvbyôvwbK Lv‡Zi we¯Í…wZ Ges mswkøó nZvkv-wbivkv-`y`©kv-eÂbv| MÖvg I kn‡ii GB 
Bangladesh. Preliminary Research Study: Islamic activism with case of 
Genesis, Growth, and Impact 
Z‡Ë¡i mÜv‡b|Ó evsjv‡`k A_©bxwZ mwgwZ Av‡qvwRZ †jvKe³…Zv 22 gvP© 2014| XvKv: 
Kv‡jvevRvwi-gRy``vwi D‡¯‹ w`‡q evRvi mš¿vmx I g~j¨-mš¿vmx †i›U-wmKvi-†`i 
Ôjy°vwqZ †_‡K cÖKvk¨ c×wZ; ÔGK gyLx nvwZqv‡ii cwie‡Z© weaŸsmx †evgv e¨enviÕ; Pvi ¯Íiwewkó 
mv‡j mv‡›Uv †Wvwgs‡Mv‡Z, 1911 mv‡j wbKviv¸qv‡Z Ges 1915 mv‡j nvBwZ‡Z gvwK©b †bŠevwnbx 
AwaKvsk †`‡ki †ÿ‡ÎB cÖ‡hvR¨|

KvivMv‡i cvVv‡bv n‡q‡Q, nZ¨v Kiv n‡q‡Q| Iì †U÷v‡g‡›U  AmsL¨ nZ¨v Kvwnbx Ges Zvi 
K‡i co–b Zvn‡j Kvgviæ¾vgv‡bi duvwmi ivq envj ivLvi c‡i †kicyi †Rjvi bvwjZvevwoi 
†Kv‡bv cÖ‡qvRb †bB| Z‡e gvbyl wn‡m‡e I‡`i cÖwZ Avgvi GKUv mwbe©Ü Aby‡iva Av‡Q|
K‡i Qvo‡jv Ges MvÏvwd‡K webv wePv‡i nZ¨v Ki‡jv ZLb wnDg¨vb ivBUm IqvP Avi jW© Kvj©vBj 
hZ cÖej iƒc wb‡jv fvi‡Z wVK ZZUv n‡jv bv| KviY wekvj fvi‡Z wewfbœ ag©-e‡Y©i gvby‡li 
msKU DËi‡Y ag©‡K e¨envi Kiv n‡q‡Q– wec`vcbœ n‡jB ejv n‡q‡Q ÒBmjvg wecbœÓ (Bmjvg 
101. evsjv‡`k mš¿vm we‡ivax `j 
Ges Zv bv †evSv †M‡j GI †evSv hv‡e bv †h mvgªvR¨ev‡`i AvR‡Ki hy‡M Avgv‡`i g‡Zv 
ge‡ivax HK¨e× jovq| G jovq m"Rbkxj GK Kg©hÁ| G Kg©h‡Á wØav-Ø›Ø I Kvj‡ÿcY 
†bB, Zv DËwiZ n‡q‡Q ÔmsK‡UÕ| ¸YMZ  w`K †_‡K mv¤cÖ`vwqKZvi DÌv‡b G GK b~Zb 
fi K‡i ag©wfwËK DMÖ mv¤cÖ`vwqKZv cyó n‡"Q? Zv‡`i wbR¯^ A_©‰bwZK, ivR‰bwZK I Rw½ 
(AvB Gg Gd), fvM cv‡"Q RvwZmsN| mvaviYZ: eo ai‡Yi hy‡×i c‡i Z…Zxq we‡k¦I 
mvMi‡Kw›`ªK Rj-ivRbxwZ;15 Biv‡Ki ga¨w`‡q cªevwnZ `yB b`x- BD‡d«wUm I UvBwMÖm 
Lecture, Lund University, Sweden, 15 March 2005; 
†mbv-m~ÿèZvmn mviv †`‡k mk¯¿ Kg©KvÐ cwiPvj‡b Ges KíbvZxZ nZ¨vhÁ mva‡b mÿg| RbMY 
¯^v_©evnx msm`| `ye©"ËvwqZ n‡q‡Q A_©bxwZ, Avi Zv ivRbxwZi `ye©"Ëvq‡bi Kvh©Kix Pvwn`v e"w× 
†d‡jb– Zviv Rv‡bb ¯'vb‡f‡` 5 †KvwU UvKv †_‡K 50 †KvwU UvKv wewb‡qvM K‡i RvZxq msm‡`i 

111. †ivwn½v Bmjvgx d«›U 
10.  G Rw½Z¡ wfbœ a‡g©i gvby‡li Dci cwiKwíZfv‡e wbh©vZb-wbeZ©b K‡i Zv‡`i †`kZ¨v‡M 
_vK‡e| †Kv‡bv miKvi hw` ÿgZv AvuK‡o _vK‡Z Pvq, †gŠjev` ZLb GUv‡K Zv‡`i kw³ 


m¤ú` †Rvi`L‡ji mv‡_ m¤ú"³ bb- (A‡b‡KB GUv wn›`y-ebvg gymjgvb mgxKi‡Y 
æ¯'vb kw³kvjx Kivi Kv‡R, Ges mswkøó mvsMVwbK Kg©Kv‡Ð| 
†PZbvq m`v cÖ¯'Z| ZvB ag©wbi‡cÿ a¨vb-aviYvq wek¦vmx‡`i mv‡_  †gŠjev‡`i Ø›Ø wPišÍb| 
As‡k hv‡eb Zvi wm×všÍ wbf©i K‡i wZwb †h mgv‡R evm K‡ib H mgv‡R Zvi Ae¯'v-Ae¯'vb, Zvi 
imperialistic power 
†jwbb, f.B. (ZvwiLnxb), mvgªvR¨ev` Ges mvgªvR¨ev`x‡`i cÖm‡½ (‡jwb‡bi 1915 mv‡j †jLv 
M"nhy× n‡q‡Q Zvi 43 kZvs‡ki g~j KviYwUB ag©-mswkøó| 
wbwØ©avq ejv m¤¢e, hv gyw³hy‡×i †PZbvi evsjv‡`k wewbg©v‡Y Ges †gŠjev`x Rw½Z¡ `g‡bi Dcv`vb 

†Eg KviV‡i ZrciZvq AskMÖnY Kwievi AwaKvi †Kvb e¨w³i _vwK‡e 

Av¯'v nviv‡"Qb-nvwi‡q‡Qb, Avi cÖMwZi avivI †mB mv‡_ Zvj wgwj‡q weKwkZ nqwb-n‡"Q bv|

Avbmviæjøvn evsjv wUg (GwewU) (2005 mv‡j miKvwifv‡e wbwl× †NvwlZ)
প্রথম এই বিষয়টির মূল প্রশ্নটি উপাদান করা যায়। “ন্যায়ত্তাত্ত্বিক বা মনোজাগতিক ধর্মশাসন” বিষয়ে বেসব প্রদেশের অনুসন্ধান জরুরি তা হলো:

(১) পৃথিবীতে এখন ১০ হাজারের বেশি ধর্ম আছে। কী সে কারণ যে পৃথিবীতে এত মানুষকে ধর্ম পালনে উদ্দেশ্য করে?

(২) ধর্মের বিক্রিজ্জিত সুবিধাসমূহ কী কী?

(৩) ধর্ম পালনকারী মানুষের মতিকে কোন বিভাগে কাজ করে? এখানে মনে রাখা জরুরি যে একজন মানুষ মনুষী হওয়ার জন্য কোনো মানবেদিকার আবার মাতৃত্ব থেকে গুরু করে

প্রথমেই “ধর্ম আর ব্রেইন” বিষয়টির মূল প্রশ্নীজীবন উপাদান করা যায়। “ন্যায়ত্তাত্ত্বিক বা মনোজাগতিক ধর্মশাসন” বিষয়ে বেসব প্রদেশের অনুসন্ধান জরুরি তা হলো:

(১) পৃথিবীতে এখন ১০ হাজারের বেশি ধর্ম আছে। কী সে কারণ যে পৃথিবীতে এত মানুষকে ধর্ম পালনে উদ্দেশ্য করে?

(২) ধর্মের বিক্রিজ্জিত সুবিধাসমূহ কী কী?

(৩) ধর্ম পালনকারী মানুষের মতিকে কোন বিভাগে কাজ করে? এখানে মনে রাখা জরুরি যে একজন মানুষ মনুষী হওয়ার জন্য কোনো মানবেদিকার আবার মাতৃত্ব থেকে গুরু করে

৮. ধর্ম ও ব্রেইন: ন্যায়ত্তাত্ত্বিক বা মনোজাগতিক ধর্ম দর্শন-এর বিষয়টির বোঝা জরুরি

ধর্ম, ধর্মনুষ্ঠাত্ত্বিক, ধর্মসংস্করণ, ধর্মনিদর্শন, মৌলিকতাকে মৌলিক, মৌলিক জীবিকাকে - এসব নিয়ে বিষয়টি প্রায় ২০ বছরের গবেষণায় আমি এ উপসংহারে উপনীত হয়েছি যে এসবের পিছনের অধ্যযন রাজনীতি, ধর্মনিদর্শন ও ধর্মতত্ত্ব বিষয়ের বিচার-বিশ্লেষণ সংশ্লিষ্ট বিষয়টির “পৃথিবীর মম্মদ” বুঝতে সহায়ক হয়। এ বিষয়ে বিষয়টি ২০ বছরের অনুসন্ধান কাজ ব্যাখ্যা হয়নি। তা বিষয়টির করণ-পরিচালন বুঝতে ব্যাখ্যা হয়নি। সাধারণত বলা যেতে পারে ৫০-৬০ ঘণ্টা সহায়তা হয়েছে। কারণ-পরিচালন সংশ্লিষ্ট বাদামি ৪০-৫০ ঘণ্টার অনুপাতে সহায়তা হয়নি। তার চেয়েও ঘরুপূর্ণ হলো এই যে এ বিষয়ে অধ্যযনকে উপসংহারে উপনীত হয়েছি যে পিছনের ধর্মনুষ্ঠাত্ত্বিক, মৌলিক ধর্মনুষ্ঠাত্ত্বিক মৌলিকতা থেকে মুক্তি পানার জন্য করণীয়মানুষী কি হবে? কিন্তু কিছু করন্তু পাতে উৎসর্গ পদ্ধতিশৃঙ্খলকে? আর এ জগতের বুঝিয়ন অঞ্চল তেমন গবেষিত নয় অথচে উপলব্ধিত অথচে কেউই তেমন ভালুকে নেই “Neurotheology” অর্থাৎ “ধর্মের সাথে মানুষের ব্রেইন”-এর সম্পর্ক (অর্থাৎ ন্যায়ত্তাত্ত্বিক বা মনোজাগতিক ধর্মশাসন) নির্দিষ্ট প্রয়োজন নিয়েছি। বিষয়টি বিজ্ঞানিক, তবে শুধু মনোজাগতিক নয় এক্ষয়ে এটি ব্রেইনিক প্রতিক্রিয়া শুধু কোনো ধর্মনুষ্ঠাত্ত্বিক মৌলিকতা এবং মৌলিক অধ্যযন প্রক্রিয়ার অনুকরণ অনুগত পদ্ধতি দিয়ে প্রতিষ্ঠিত। একের সাথে সাধারণীকরণ করলে তা হবে অবান্ধিক, অবাবন, বাল্যজাতি বিতরণ তৃপ্লাবিশিষ্ট মাত্র।
Preliminary Research Study: Islamic activism with case of Bangladesh.

Social and Religious Fragmentation and Economic Development. Cornell


“Understanding Neurotheology Matters in Countering Religious Extremism: Religion and Brain”

A Political Economy Treatise on Religious Fundamentalism and Extremism: A high probability global catastrophe with reference to Bangladesh, 34-37.
The document contains text in Bangla, which is not legible. Please provide a readable version of the document or use a language that can be accurately rendered into natural text.
Bangladesh. Preliminary Research Study: Islamic activism with case of
Religion and Politics: South Asia

“A Creative Strategy for 21st Century”

1. “Oklahoma City Bomber” (Jim Boeve, 1995).

2. “Mythos” (Herman, 1996).


5. “Mythos” (Herman, 1996).


8. “Mythos” (Herman, 1996).


11. “Mythos” (Herman, 1996).


17. “Mythos” (Herman, 1996).


20. “Mythos” (Herman, 1996).

5. ag©wfwËK †gŠjev` I †gŠjev`x Rw½‡Z¡i A_©bxwZ:

(6) Rw½‡`i mswkøó mKj m¤ú` ev‡Rqvß Kiv|


111. †ivwn½v Bmjvgx d«›U

107. gymwjg wgjøvZ kixqvn KvDwÝj

105. gyRvwn`x †Zvqvev

9.   G Rw½Z¡ B‡Zvg‡a¨ bvw¯ÍKZvi ARynv‡Z gy³eyw×i-gy³wPšÍvi A‡bK gvbyl nZ¨v K‡i‡Q

(3) 1985 সালে ঢাকা বিশ্ববিদ্যালয়ের জন্মাই হলের ছাদ ভেঙে পড়ার পরে ঢাকা মেডিকেলেসহ অন্যান্য হাসপাতালের হিন্দু ধর্মাবলীর আহত ছাত্রদের জীবন বীর্যত রক্ষা দানে ধর্মবর্ণ নির্বিশেষে সবই এই ভেঙে এলে এটিন তা নিরস্বই অসামান্যদৈর্ঘ্য চেতনার অপর শক্তিকেই নিদর্শ করে।

(4) 2012 সালে (২৭-২৮ সেপ্টেম্বর) কঙ্কালের রামুতে জামাত-জঙ্গিরা বৌদ্ধ সম্প্রদায়ের উদ্বোধন ও পরিকল্পিত ধর্মশাস্ত্র কর্মী এর রূপে কৃত্রিমভাবে এই অন্যান্য হাসপাতালের হিন্দু ধর্মাবলীর আহত ছাত্রদের মৃত্যু নির্বাহের এবং মৃত্যুর সত্যি মূল্যের জ্ঞানের প্রতিবাদ নয় যে এ দেশের তর্ক সাধারণ মুসলমানের অসামান্যদৈর্ঘ্য চেতনার বিপক্ষে প্রবাদ করে?

(5) 2013-র ফেব্রুয়ারি থেকে শাহবাগের গণজাগরণ মঞ্চে জাতি-ধর্ম-রূপ-ধনী নির্বাচন নির্বাচনের তর্ক প্রণয়াধিকারী বেনামেরা তাদের অসামান্য অস্বাভাবিকতা অধিকার নয় যে এ দেশের তর্ক সাধারণ মুক্তি-মাধ্যমের অধিকার নয়।

(6) ইসলাম ধর্মের পরিকল্পনা ডিএনএ-এ বাহক এ এর এক জন সাধারণ মুসলমান বলতে সুইস-ইড বৌদ্ধবাজারচর্চা কর্মচারিগণ সাধারণ করেন। না কি এলাকায় সকলেই মনে করেন যে এর ধর্মের নামে গীতির ধ্যায়যুক্ত অর্থনৈতিক কাজ?

এই কিছুর পরেও, “আন্তর্জাতিক সংস্থা থেকে প্রতিবাদ নেই” - এমনটি বিচারবাদ যুক্তিসঙ্গত কোনো কারণ

কারণ বিষয়টি গীতিক্রান্ত রূপে রাজনৈতিক ভবিষ্যৎ বংশধরদের জন্য প্রয়োজন পরিবেশ সৃষ্টি। অর্থাৎ লড়াই চালু হবে।
মানস-কাঠামোর বিকৃত্তে প্রগতির লড়াই: আর সুফি-সাধক-ওলামাদের জন্য মানবতাবাদী সাম্প্রদায়িকতার বিরুদ্ধে ইসলাম ধর্মের উদারনৈতিক মানবতাবাদী ধারা পুনঃস্থাপনের লড়াই। সুতরাং এ লড়াইয়ে একদিকে ইসলাম ধর্মের উদারনৈতিক সংকীর্ণ ধারার মোকাবেলায় মানবক্ষয়িক সুফি-ওলামাদী ধারার প্রবন্ধকের যোগ ঐতিহাসিকভাবে মূল ধারার প্রবন্ধী মানবক্ষয়িকে সংখ্যাবর্ধন হওয়া প্রয়োজন আর অন্যদিকে ঐতিহাসিক চেতনার লালন এবং মুক্ত চিন্তা ও ধর্মীয়তার ভিত্তি প্রসর নিমিত্ত জনক্ষয়িককারী রাষ্ট্র ব্যবস্থাহই হতে পারে অনুকৃতির মৌলবাদী অন্ধকারীতির ভিত্তিমূল দূর্বল করার একাদশ পথ।

মৌলবাদের রাজনৈতিক-অধূরীতির বিকাশ্যক ভিত্তিতে আমাদের দেশে ধর্মনৈতিক মৌলবাদী জীবন আক্তে বে রূপ ধারণ করেছে তা থেকে আমি অন্তর নিষ্ঠিত যা এ মুহূর্তে সব সম্ভাবনায় সমাধান হয়ে যাবে”- এভাবে ভাবলে বাস্তব সত্য অধূরীতি করা হবে; এভাবে ভাবলে অধূরীতি করা হবে সংশ্লেষণ বিষয়ে আত্মীয় গুরুত্বপূর্ণ অথচ এখনও পরখত সংশ্লেষণ মর্মমূল্যায়নকে (গুরুত্বের কারণে বিষয়টি অন্তর পরিচিতি বিষয়ে বিশেষত করেছে)। আর এক এগুরু করলে তা হতে পারে উদাহরণ উত্তর ঐতিহাসিক ভিত্তিতে উদাহরণ করার হয়। সুতরাং মহাবিশ্বের রাজনৈতিক দৃষ্টিকোণে আর (স্নেহ ময়মদি) ও দীর্ঘমেয়দি সমাজের মধ্যে অনুসন্ধান করা প্রয়োজন। ঐতিহাসিক সাম্প্রদায়িক জন্মীত এখনও নিমিত্ত সত্য নয় কারণ যেসব জটিল ভিত্তির ওপর সে নীক্ষণে আছে তা কেয়বাখিনে ভেঙে ফেলা যাবে না।

(1) ১৯৭১-এ যুদ্ধান্ত মানবতাবাদী অপরাধ ও যুদ্ধাপরাধ করেছে যুদ্ধামৌলবাদী জনগণের গণফলদার- তাদের বিচার কাজ প্রস্ত সম্পদ করে শাস্তি কার্যকর করা (সত্য হলে আগামী ৫ বছরের মধ্যে)।

(2) জনগণের অষ্ঠাঙ্গের উৎস সম্পর্কে সকাস্ত যা কিছু জন্মা আছে তা অতি প্রতি পণ্ডিতমায়ে প্রকণ-প্রাথম করা।

(3) জন্ম অষ্ঠাঙ্গের উৎসমূখ বদ্ধ করা।

(4) মৌলবাদের অধর্মীতি সংশ্লিষ্টি (শিক্ষা, সংস্কৃতি, রোগ, ফাউন্ডেশনসহ) প্রতিটি প্রতিষ্ঠানের তৃতীয়-পশ্চিমাঞ্চলী অর্থের মাধ্যমে জাতিত-জাতি সংশ্লিষ্টা উত্তনিষ্ঠা করে প্রয়োজনীয় ব্যবস্থা গ্রহণ করা। যার অন্তর্ভুক্ত হতে পারে জাতিকরণ, বাজারকরণ, আইন হতাতর, ব্যবসায়িক পরিবর্তন, পরখত পরিবর্তন ইত্যাদি।

(5) জনগণের অন্নের উৎস সম্পর্কে সকাস্ত যা কিছু জন্মা আছে তা অতি প্রতি পণ্ডিতমায়ে প্রবণ করা।

80 এ বিষয়ে বিষয়ের বিষয়ের জন্য দেখুন, আরুল বাবরকান, ২০১৫, A Political Economy Treatise on Religious Fundamentalism and Extremism: A high probability global catastrophe with reference to Bangladesh, p৫: ২৫-৪৯।

81 মনে রাখা বাক্যে যে ধর্মনৈতিক কাঠামোতে rent-seeker-রা সম্পদ সীই করতে না, সম্পদ হল করতে এবং দুঃখ করতে। আর একবার কাঠামোতে যেন ধর্মনৈতিক জিজ্ঞাসা rent-seeker আবির্ভূত হয় যতখন সম্পদের ক্ষতি-পাদে বাড়া এবং কৃষি মারা এড়িয়ের তুলনায় অনেক ওই ব্যর্থ পাগল পারে। এসবের অনেক উদাহরন একে পরিবারের ভিত্তি দেখে দুর্ঘটনা।
(৬) জাস্টিসের সংঘটিত সকল সম্পদ বাজেয়াপ্ত করা।

(৭) বাজেয়াপ্তত এ সম্পদ সরকারের তত্ত্বাবধানে এনে ১৯৭১-এর মহান মুক্তিযুদ্ধে যারা শহীদ হয়েছেন, পল্লুভবন করেছেন, অসচেতন জীবন-যাপন করেছেন এবং পরবর্তীকালে যারা মৌলবিদী জাস্টিসের কারণে মৃত্যুবরণ করেছেন এবং পালায়নসহ আহত হয়েছেন- ক্ষতিপূরণ হিসেবে তাদের দেয়া, সেইসাথে সামাজিক-সাংস্কৃতিক মানব উদ্ধৃত কর্মকাণ্ডে তা ব্যাঘা করা।

(৮) জাস্টিস কর্মকাণ্ডের সাথে প্রত্যক্ষ-পরামর্শাভাবে জড়িত সরবাইকে গ্রেফতার করে দৃষ্টান্তমূলক শাস্তি দেয়া।

(৯) জাস্টিস ও সত্তাসবাদ বিচারী গোয়েন্দা নজরদারি সিস্টেম অনেক বেশি তখন-প্রমুখি নির্ভর ও প্রত্যক্ষ ফলাফল ও কার্যকর করার জন্য সমাবিষ্ট কার্যক্রম জোরদার করা।

(১০) সরকারের জাস্টিসের মধ্যে জাস্টিস-বিচারী সচেতনতা-সংঘটিত কমিউনিটি ফলাফলদাতার সাথে পরিচালনা করা।

(১১) জাস্টিসের অধিক উত্সাহ বদ্ধ করা এবং একই সাথে অন্য উদ্দেশ্যে সরবাইক ব্যবস্থা গ্রহণ করা।

(১২) রাষ্ট্রি ও সরকারের মধ্যেই যারা জাস্টিস-প্রমুখী তাদের চিহ্নিত করে শাস্তি দেয়া এবং রাষ্ট্রীয় প্রতিষ্ঠান ও সরকার থেকে তাদের বিচার করা।

(১৩) ধ্রুপবাদিত সাম্প্রদাযিক রাজনীতি নিষিদ্ধ যোগাযোগের আদেশন-সংঘাত জোরদার করা।

(১৪) ধর্মীয় জাস্টিসের প্রকৃত চেহারা-সক্রিয়তায় উন্নয়নে গণসচেতনতা বৃদ্ধি-সহায়ক সিরিয়াস প্রচারসমূহক কর্মকাণ্ড করা যাতে জনপ্রিয়িত ধর্ম নির্বুল প্রকৃতিযুক্ত সাংস্কৃতিক অন্শ্রুণি করেন। গণসচেতনতা বৃদ্ধির প্রচারসমূহক এই কর্মকাণ্ড সব ধরনের পথ-প্রক্রিয়া-ধারম ব্যবহার করা প্রয়োজন। তবে সংঘটিত করার জুমারার নামাজ হয় এমন মজিলাল জুমারার খুতবার প্রতি বিশেষ ওকৃত দেয়া প্রয়োজন। কারণ ১৬ কেটি মানুষের বাংলাদেশে মোট ২ লক্ষ ৬৩ হাজার ৯৪০ টি জুমারামসজিদে গড়ে গ্রাহক সাংহাতে জুমারার নামাজে অপক্ষণ করেন ২ কেটি ৬৪ লক্ষ মুদ্রিত যারা আবার বাড়িতে ফিরে মোট ১০ কেটি ৪৪ লক্ষ ভাজ্যের সাথে কথাবার্তা বলেন।

(১৫) সমাজ শিক্ষা-সংস্কৃতি, স্বভাব সাহায্যদান কমিউনিটিকে দেশের সাংবিধানের মূল চেতনার সাথে সামাজিক না করে বান্ধবায়ন করা।

অাঁু ও সাব্দুমাদি উল্লিখিত কর্মকাণ্ডে একদিকে কেনেন রাের ও সরকারের সাম্যে ভূমিকা পালন করতে হবে অদ্যান্তে দেশের গ্রামে তেহ করে শহর পর্যন্ত নাটী-পুরুষ-জাতি-ধর্ম-বর্ণ-শ্রেণী নির্বিশেষে সকল অসামান্যদায়িক রাজনীতি-সামাজিক-সাংস্কৃতি শীর্ষসংলগ্ন আদেশন গড়ে তুলতে হবে। এবং একান্ত অগ্রাধিকার দিতে হবে তর্ক প্রজন্মকে আর একাধিক শিক্ষার অসামান্যদায়িক মন-মনন-মাননক্রিকা বিনিময়ে জান-বিজ্ঞানতত্ত্বিক সংঘটি গড়ে তুলতে হবে।

B. Bangladesh Journal of Political Economy Vol. 31, No. 4

Upadhyaya: “I want to count the cost of our work. Have you ever heard of a person who has...”

The text continues in Bengali.
A Preliminary Research Study: Islamic activism with case of Bangladesh. Presented at the International Public Lecture Series and Conference on religion as faith.

1. "Alienation" and "Inequality" in the context of Islam. Ahmed quoting Maududi work: "In our domain we see the concept of 'religion as faith'..."

2. The role of Ahmad cruising Maududi's work: "In our domain we...

3. The impact of Islamic activism in Bangladesh: "An overview of...

4. Analysis of the impact of Islamic activism in Bangladesh: "Analysis of...

5. The impact of Islamic activism on the society: "The impact of...

6. The impact of Islamic activism on the economy: "The impact of...

7. The impact of Islamic activism on the education: "The impact of...

8. The impact of Islamic activism on the environment: "The impact of...

9. The impact of Islamic activism on the culture: "The impact of...

10. The impact of Islamic activism on the politics: "The impact of...

11. The impact of Islamic activism on the society: "The impact of...

12. The impact of Islamic activism on the economy: "The impact of...

13. The impact of Islamic activism on the education: "The impact of...

14. The impact of Islamic activism on the environment: "The impact of...

15. The impact of Islamic activism on the culture: "The impact of...

16. The impact of Islamic activism on the politics: "The impact of...

17. The impact of Islamic activism on the society: "The impact of...

18. The impact of Islamic activism on the economy: "The impact of...

19. The impact of Islamic activism on the education: "The impact of...

20. The impact of Islamic activism on the environment: "The impact of...

21. The impact of Islamic activism on the culture: "The impact of...

22. The impact of Islamic activism on the politics: "The impact of...

23. The impact of Islamic activism on the society: "The impact of...

24. The impact of Islamic activism on the economy: "The impact of...

25. The impact of Islamic activism on the education: "The impact of...

26. The impact of Islamic activism on the environment: "The impact of...

27. The impact of Islamic activism on the culture: "The impact of...

28. The impact of Islamic activism on the politics: "The impact of...

29. The impact of Islamic activism on the society: "The impact of...

30. The impact of Islamic activism on the economy: "The impact of...

31. The impact of Islamic activism on the education: "The impact of...

32. The impact of Islamic activism on the environment: "The impact of...

33. The impact of Islamic activism on the culture: "The impact of...

34. The impact of Islamic activism on the politics: "The impact of...

35. The impact of Islamic activism on the society: "The impact of...

36. The impact of Islamic activism on the economy: "The impact of...

37. The impact of Islamic activism on the education: "The impact of...

38. The impact of Islamic activism on the environment: "The impact of...

39. The impact of Islamic activism on the culture: "The impact of...

40. The impact of Islamic activism on the politics: "The impact of...

41. The impact of Islamic activism on the society: "The impact of...

42. The impact of Islamic activism on the economy: "The impact of...

43. The impact of Islamic activism on the education: "The impact of...

44. The impact of Islamic activism on the environment: "The impact of...

45. The impact of Islamic activism on the culture: "The impact of...

46. The impact of Islamic activism on the politics: "The impact of...

47. The impact of Islamic activism on the society: "The impact of...

48. The impact of Islamic activism on the economy: "The impact of...

49. The impact of Islamic activism on the education: "The impact of...

50. The impact of Islamic activism on the environment: "The impact of...

51. The impact of Islamic activism on the culture: "The impact of...

52. The impact of Islamic activism on the politics: "The impact of...

53. The impact of Islamic activism on the society: "The impact of...

54. The impact of Islamic activism on the economy: "The impact of...

55. The impact of Islamic activism on the education: "The impact of...

56. The impact of Islamic activism on the environment: "The impact of...

57. The impact of Islamic activism on the culture: "The impact of...

58. The impact of Islamic activism on the politics: "The impact of...

59. The impact of Islamic activism on the society: "The impact of...

60. The impact of Islamic activism on the economy: "The impact of...

61. The impact of Islamic activism on the education: "The impact of...

62. The impact of Islamic activism on the environment: "The impact of...

63. The impact of Islamic activism on the culture: "The impact of...

64. The impact of Islamic activism on the politics: "The impact of...

65. The impact of Islamic activism on the society: "The impact of...

66. The impact of Islamic activism on the economy: "The impact of...

67. The impact of Islamic activism on the education: "The impact of...

68. The impact of Islamic activism on the environment: "The impact of...

69. The impact of Islamic activism on the culture: "The impact of...

70. The impact of Islamic activism on the politics: "The impact of...

71. The impact of Islamic activism on the society: "The impact of...

72. The impact of Islamic activism on the economy: "The impact of...

73. The impact of Islamic activism on the education: "The impact of...

74. The impact of Islamic activism on the environment: "The impact of...

75. The impact of Islamic activism on the culture: "The impact of...

76. The impact of Islamic activism on the politics: "The impact of...

77. The impact of Islamic activism on the society: "The impact of...

78. The impact of Islamic activism on the economy: "The impact of...

79. The impact of Islamic activism on the education: "The impact of...

80. The impact of Islamic activism on the environment: "The impact of...

81. The impact of Islamic activism on the culture: "The impact of...

82. The impact of Islamic activism on the politics: "The impact of...

83. The impact of Islamic activism on the society: "The impact of...

84. The impact of Islamic activism on the economy: "The impact of...

85. The impact of Islamic activism on the education: "The impact of...

86. The impact of Islamic activism on the environment: "The impact of...

87. The impact of Islamic activism on the culture: "The impact of...

88. The impact of Islamic activism on the politics: "The impact of...

89. The impact of Islamic activism on the society: "The impact of...

90. The impact of Islamic activism on the economy: "The impact of...

91. The impact of Islamic activism on the education: "The impact of...

92. The impact of Islamic activism on the environment: "The impact of...

93. The impact of Islamic activism on the culture: "The impact of...

94. The impact of Islamic activism on the politics: "The impact of...

95. The impact of Islamic activism on the society: "The impact of...

96. The impact of Islamic activism on the economy: "The impact of...

97. The impact of Islamic activism on the education: "The impact of...

98. The impact of Islamic activism on the environment: "The impact of...

99. The impact of Islamic activism on the culture: "The impact of...

100. The impact of Islamic activism on the politics: "The impact of...
পরিশিষ্ট ১: বাংলাদেশে জাপি কর্মকাও সন্ধণ্ড অথবা জাহিদ সমাজকর্মী ইসলামী সংগঠনার নাম (সরকারিভাবে নিষিদ্ধ ঘোষিত ও কায়ো তালিকাভুক্ত)

<table>
<thead>
<tr>
<th>নম্বর</th>
<th>নাম</th>
</tr>
</thead>
<tbody>
<tr>
<td>১.</td>
<td>আফগান পরিষদ</td>
</tr>
<tr>
<td>২.</td>
<td>আহলে হাদিস আম্বুলানন</td>
</tr>
<tr>
<td>৩.</td>
<td>আহলে হাদিস যুব সংঘ (এএইচজেএস)</td>
</tr>
<tr>
<td>৪.</td>
<td>আহলে হাদিস তবলিগা ইসলাম</td>
</tr>
<tr>
<td>৫.</td>
<td>আহসাব বাহিনী (আতায়াতি সুইসাইড গ্রুপ)</td>
</tr>
<tr>
<td>৬.</td>
<td>আল হারামাইয়েন (এনজিও)</td>
</tr>
<tr>
<td>৭.</td>
<td>আল হারাত আল ইসলামিয়া</td>
</tr>
<tr>
<td>৮.</td>
<td>আল ইসলাম মার্কিনর ব্রিগেড</td>
</tr>
<tr>
<td>৯.</td>
<td>আল ইসলামী সংঘতি পরিষদ</td>
</tr>
<tr>
<td>১০.</td>
<td>আল জাজিরা</td>
</tr>
<tr>
<td>১১.</td>
<td>আল জিহাদ বাংলাদেশ</td>
</tr>
<tr>
<td>১২.</td>
<td>আল খিলমত</td>
</tr>
<tr>
<td>১৩.</td>
<td>আল কুরআন আল ইসলামী মার্কিনর</td>
</tr>
<tr>
<td>১৪.</td>
<td>আল মারকাজুল আল ইসলামী</td>
</tr>
<tr>
<td>১৫.</td>
<td>আল মুজাহীদ</td>
</tr>
<tr>
<td>১৬.</td>
<td>আল কায়দা</td>
</tr>
<tr>
<td>১৭.</td>
<td>আল সাইদ মুজাহিদ বাহিনী</td>
</tr>
<tr>
<td>১৮.</td>
<td>আল তাহজীব</td>
</tr>
<tr>
<td>১৯.</td>
<td>আল উমাহ</td>
</tr>
<tr>
<td>২০.</td>
<td>আল্লাহর দল (সরকারিভাবে কায়ো তালিকাভুক্ত)</td>
</tr>
<tr>
<td>২১.</td>
<td>আল্লাহর দল ব্রিগেড (আতায়াতী দল)</td>
</tr>
<tr>
<td>২২.</td>
<td>আল ইয়ান্মা পরিষদ</td>
</tr>
<tr>
<td>২৩.</td>
<td>আমানানুল ফারুক আল খাইরিয়া</td>
</tr>
<tr>
<td>২৪.</td>
<td>আমিরাত- ই- দিন</td>
</tr>
<tr>
<td>২৫.</td>
<td>আমরা ঢাকাবাসী</td>
</tr>
<tr>
<td>২৬.</td>
<td>আনজুমানে তালামজিয়া ইসলামীয়া</td>
</tr>
<tr>
<td>২৭.</td>
<td>আনসার-আল-ইসলাম</td>
</tr>
<tr>
<td>২৮.</td>
<td>আনসারকাউন্যাহ মুসলামিদ</td>
</tr>
<tr>
<td>২৯.</td>
<td>আনসারকাউন্যাহ বাংলা টিম (এবিটি) (২০০৫ সালে সরকারিভাবে নিষিদ্ধ ঘোষিত)</td>
</tr>
<tr>
<td>৩০.</td>
<td>আরাকান অর্মি (এ এ)</td>
</tr>
<tr>
<td>৩১.</td>
<td>আরাকান লিবারেশন ফ্রন্ট (এএলপি)</td>
</tr>
<tr>
<td>৩২.</td>
<td>আরাকান লিবারেশন পার্টি</td>
</tr>
<tr>
<td>৩৩.</td>
<td>আরাকান মুজাহিদ পার্টি</td>
</tr>
</tbody>
</table>

34. আরাকান পিপলস আর্মি
35. আরাকান রোহিঙ্গা ফোর্স
36. আরাকান রোহিঙ্গা ইসলামীক ফ্রন্ট
37. আরাকান রোহিঙ্গা ন্যাশনাল অর্গানাইজেশন (এএআরএনও)
38. ইউনাইটেড স্টুডেন্ট এসোসিয়েশন অব আরাকান মুভমেন্ট
39. ইবদেদাদুল-আল মুসলিমা
40. ইকতেমুল তালাহ-এল মুসলিমন
41. ইকতেমুল তুলাহ-এল মুসলিমন (আইটিএম)
42. ইন্টারন্যাশনাল খাতমে নবুয়াত মুভমেন্ট
43. ইসলাহুল মুসলিমন
44. ইসলামী বিপ্লবী পরিষদ
45. ইসলামী জিহাদ গ্রুপ
46. ইসলামী লিবারেশন টাইগার অব বাংলাদেশ (আইএলটিবি)
47. ইসলামী প্রচার মিডিয়া
48. ইসলামী শাসনতন্ত্র আদোলান
49. ইসলামী সমাজ (সরকারিভাবে কালো তালিকাভূক্ত)
50. ইসলামীক ডেমোক্রাটিক পার্টি (সরকারিভাবে কালো তালিকাভূক্ত)
51. ইসলামীক সলিডারিটি ফ্রন্ট
52. ইয়াং মুসলিম
53. এবতেদাতুল আল মুসলিমন
54. এহসাব বাহিনী
55. ওয়ারেন্ট ইসলামীক ফ্রন্ট
56. ওয়ার্ড ইসলামীক ফ্রন্ট ফর জিহাদ
57. ওলমা আন্দুমান আল বাইয়ানাত (সরকারিভাবে কালো তালিকাভূক্ত)
58. কালেমারে-জামাত
59. কালেমার-ই-দিওয়াত (অধ্যাপক আব্দুর মজিদ এ ডলের প্রধান)
60. কতল বাহিনী (আতাহাতী গ্রুপ)
61. খাতেমী নবুয়াত আদোলান পরিষদ বাংলাদেশ (কেএনএপিরিও)
62. খাতেমী নবুয়াত কমিটি বাংলাদেশ
63. খিদমত-ই-ইসলাম
64. খিলাফত মজলিশ
65. খিলাফত-ফি-সাবিলিন্তাহ
66. খিলাফত-ই-হুকুমত
67. ছাত্র জামায়েত
68. জাদি-আল-কায়েদ
৬৯. জামাত মুসলিম বাংলা
৭০. জামাত মুসলিম জনতা বাংলাদেশ (জেএমজি) (২০০৫ সালে সরকারিভাবে নিষিদ্ধ ঘোষিত)
৭১. জামাত-এ-শায়াত
৭২. জামায়াত-উল-ইসলাম মুজাহিদ
৭৩. জামাহ-তুল-মুজাহিদীন বাংলাদেশ (জেএমজি) (২০০৫ সালে সরকারিভাবে নিষিদ্ধ ঘোষিত)
৭৪. জামাত-ই-মুহাদ্রাসিন বাংলাদেশ
৭৫. জামাত-ই-তুলবা
৭৬. জামাত-ই-ইয়াহিয়া
৭৭. জামাত-উল-ফালিয়া
৭৮. জামাতুল ইসলাম মুজাহিদ
৭৯. জামাতে আহলে হাদিস
৮০. জামেয়া মোহাম্মদিয়া আরবিয়া
৮১. জামিয়াত ইসলামী সামুদ্রিক ফ্রন্ট
৮২. জামিয়াতুল ইয়াহিয়া উত্তর তুরাজ
৮৩. জাপান হিমকত
৮৪. জয়শ-মুনফা
৮৫. জয়শে-মোহাম্মদ
৮৬. জামাতুল-আল-শায়াত
৮৭. ডেমোক্রেটিক পার্টি অব আরাকান
৮৮. নাশনাল ইউনাইটেড পার্টি অব আরাকান (এনইউপিএ)
৮৯. নিজামায়ে ইসলামী পার্টি
৯০. ফার ইস্ট ইসলামী
৯১. তা আমির-উল-দীন বাংলাদেশ (সরকারিভাবে কালো তালিকাভুক্ত)
৯২. তাহফিজ হারামাইন
৯৩. তামিল উদিন বাংলাদেশ
৯৪. তানজিম বাংলাদেশ
৯৫. তানজিন-ই-খাতেমি নবুয়াত
৯৬. তাহোহিদ জনতা
৯৭. তাহোহিদ ফ্রাস্ট (সরকারিভাবে কালো তালিকাভুক্ত)
৯৮. দাওয়াত-ই-ইসলাম
৯৯. বাংলাদেশ ইসলাম রক্স কমিটি
১০০. বাংলাদেশ জামায়াত-উল-তালাবা-ই-আরবিয়া
১০১. বাংলাদেশ সংগঠন বিরোধী দল
১০২. বিশ্ব ইসলামী ফ্রন্ট
১০৩. মজলিশ ই তাফিজা খাতেমি নবুয়াত
১০৪. মুজাহিদ অব বাংলাদেশ
১০৫. মুজাহিদী তোয়াবা
১০৬. মুসলিম লিবারেশন ফ্রন্ট অব বাংলাদেশ
১০৭. মুসলিম মিল্কা শরীয়াহ কাউন্সিল
১০৮. মুসলিম মুজাহিদীদের বাংলাদেশ (একমিত্র)
১০৯. মুসলিম রক্ত মুখার্জিল
১১০. রোহিঙ্গা ইন্ডিপেন্ডেন্স ফোর্স
১১১. রোহিঙ্গা ইসলামী ফ্রন্ট
১১২. রোহিঙ্গা প্যাট্রোলিস্টিক ফ্রন্ট
১১৩. রোহিঙ্গা সালিডারিটি অর্গানাইজেশন
১১৪. রিভাইভাল অব ইসলামী হেরিটেজ (এনজিও)
১১৫. লিবারেশন মিয়ানমার ফোর্স
১১৬. লুজামা মকাবা আল খায়েরা
১১৭. শাহদাত-ই-আল হিজমা (২০০৩ সালে সরকারভাবে নিষিদ্ধ ঘোষিত)
১১৮. শাহদাত-ই-নরুজাত
১১৯. শহীদ নাসিরপুরাহ খান আরামাত বিত্তে (আত্মহত্যা ফ্রেজ)
১২০. সত্যাবাদ
১২১. সাহাবা সৈনিক
১২২. হরকত-ই-ইসলাম আল জিহাদ
১২৩. হরকত-উল জিহাদ-আল-ইসলামী বাংলাদেশ (হুজ্জ) (২০০৫ সালে সরকারভাবে নিষিদ্ধ ঘোষিত)
১২৪. হাজরেতুল ইগাসা
১২৫. হেফজেতে খাতেমী নরুজাত
১২৬. হিজর-উত-তাহলির (২০০৯ সালে সরকারভাবে নিষিদ্ধ ঘোষিত)
১২৭. হিজরা আবু ওমর
১২৮. হিজরুল মাহাদী
১২৯. হিজরুলাহ আলবাদী বাংলাদেশ
১৩০. হিজরুলাহ ইসলামী সামাজ
১৩১. হিজরত-তাহলিদ
১৩২. হিজরত-উল-জিহাদ

 tcchw gút

আহমেদ, সিরাজ উদ্দিন, (২০১১). বঙ্গবন্ধু শেখ মুজিবুর রহমান। ঢাকা: ইসলামিক ফাউন্ডেশন।

AHMAD, Hazrat Mirza Tahir. (1989). Murder in the Name of Allah (translated by Syed Barkat Ahmad). London: Lutterworth Press. (Author wrote in Chapter 5: The Moudidian Law of Apostasy, “Maulana Maududi’s desire for political power knew no bounds. The law of apostasy which he evolved was an extension of his dictatorial and intolerant personality – it had nothing to do with Islam. Ahmed quoting Maududi work: “In our domain we neither allow any Muslim to change his religion nor allow any other religion to propagate its faith”, see p. 49).

বারকাত, আবুল, (২০১৬). বাংলাদেশে দারিদ্র্য-বৈষম্য-অসমতার কারণ-পরিণাম ও উত্তরণ সম্ভাবনা: একীভূত রাজনৈতিক অধিনীতির তত্ত্বের সন্ধানে, ঢাকা: মুক্তবুদ্ধি প্রকাশনা।

বারকাত, আবুল, (২০১৬)। বাংলাদেশে কৃষি-জীবি-জলাসংস্থার রাজনৈতিক অধিনীতি, ঢাকা: মুক্তবুদ্ধি প্রকাশনা।

বারকাত, আবুল, (২০১৬)। “মৌলবাদের রাজনৈতিক অধিনীতি বিচার-প্রসঙ্গ”, বাঙ্লার পাঠশালা আয়োজিত দক্ষিণ-এশিয়ার মৌলবাদ, সমাজবাদ ও নারী-প্রতিরোধ শীর্ষীক তৃতীয় দফতি এশীয় সম্মেলন ২০১৬-এর জন্য রচিত মূল প্রবন্ধ, ঢাকা: ১১-২২ মার্চ ২০১৬।

বারকাত, আবুল, (২০১৫। “বিচারবীর্য সংস্কৃতি, সামন্দীরিকতা, মৌলবাদ ও মৌলবাদী জাতিকের উদ্ধার, সংগঠন, বিতৃতি ও কর্মকারণ সম্পর্ক: সমাধানে সংস্কার নয় প্রয়োজন আমূল পরিবর্তন”, বিভাগীয় সেমিনার ২০১৫, বাংলাদেশ অধিনীতি সমিতি, রংপুর (২৪ অক্টোবর ২০১৫)।

বারকাত, আবুল, (২০১৫)। “বাংলাদেশে মৌলবাদের রাজনৈতিক অধিনীতি ও জাতিকে: মর্যাদা ও কর্মকারণ”, জাতীয় সেমিনার ২০১৫, বাংলাদেশ অধিনীতি সমিতি, ঢাকা: (১২ ডিসেম্বর ২০১৫)।


বারকাত, আবুল, (২০১৫)। বঙ্গবন্ধু-সমতা-সমাজবাদ, বঙ্গবন্ধু ’বেঁচে থাকলে’ কোথায় পৌছাতো বাংলাদেশ? সমাজবাদী বিশ্ব-শূন্যতের যুগে সমতাবাদী সমাজবিন্যাসের সম্ভাব্যতা প্রসঙ্গ, ঢাকা: মুক্তবুদ্ধি প্রকাশনা, পৃঃ ১৮৩-২২২।

BARKAT, A., ARA, M. TAHERUDDIN, F.M. ZAHID, and M. BADIUZZA-


Grand Strategy


BARKAT, A. (2005). "Islamic activism with case of 2: evsjv‡`‡k BmjvwgK Rw½ev`x msMVbmg~‡ni ˆewkó¨mn weKvkKvj

GLb ej‡Qb Òfzj K‡iwQÓ), †cÖwm‡W›U †ivbvì †iMvb Avwe®‹vi K‡i‡Qb Òm¯¿v‡mi weiæ‡× hy‡×iÓ

Aveyj eviKvZ : evsjv‡`‡k †gŠjev` I †gŠjev`x Rw½‡Z¡i ivR‰bwZK A_©bxwZ


Crop Diversification in Bangladesh: Constraints and Potentials

Mohammad Monirul Islam*
Md. Elias Hossain*

Abstract: The present study is an effort to analyze the present situation of crop diversification in Bangladesh using secondary data. Required data were collected from various issues of government of the country. Simpson index and Rice Share index of crop diversification have been used to calculate the nature and extent of crop diversity in Bangladesh. The study found that slightly more than half of the gross crop area grows crop twice in a cropping year. Yield and production of different crops, especially cereal crops, except few cash and minor crops, have increased by almost three folds in last four decades due to technological advancement. However, crop sector’s contribution to GDP is in a decreasing trend. Cropping intensity has been increasing since independence of the country. Rice share in gross crop area has been decreasing at a snail’s pace. Still rice share in gross crop area is more than three fourth of gross crop area. Value of Simpson index of crop diversification has been increasing slowly since 1971. Simpson index value indicates Bangladesh is a mediocre diversified country and Rajshahi division is more diversified region in Bangladesh. Index value also indicates small farmers’ practices crop diversification more than that of other types of farmers. The study also found price and yield variability, existing marketing system, present irrigation system and water management system are the few prominent hindrances in the way of crop diversification. By minimizing the reported impediments crop diversification can be enhanced substantially that would lead to increase the potential of employment generation and earnings of the rural people in the country.

1. Introduction

Bangladesh is an agriculture dependent country. Agriculture plays a vital role in Bangladesh economy. More than 70% people in the rural areas directly or indirectly are involved with agriculture (BBS, 2011 and MoEF, 2012). It employs

* PhD fellow, IBS, University of Rajshahi and
Professor, Department of Economics, University of Rajshahi respectively.
nearly 47.5% of labour force and contributes one sixth of gross national product of the country (GoB, 2013). Different types of industries and farms have been developed in the rural areas based on agriculture. Agriculture supplies raw-materials to the industries especially agro-based industries. Rice is dominant among different subsectors of agriculture and accounting for roughly three fourths of gross crop area devoted to rice production (BBS, 2011). Actually, rice based monoculture exists in agriculture of the country. As a result of continual cultivation of rice monoculture gives us self-sufficiency in food production to some extent but it creates many problems. As a result, agriculture sector has been facing a number of problems like reduction of soil fertility, pests and diseases outbreaks in the crop fields and decline in water table etc. These problems further create the same problems cyclically. In addition, rice monoculture also reduces production of non-rice crops, erodes bio-diversity, creates nutritional imbalance (Hussain et al, 2001; Rahman, 2010). Rice monoculture has also made the farming activities complex and costly. Finally, it reduces farmers’ net margin. As a result, farmers are getting reluctant to farming and getting interest to non-farm activities, which is a great concern for Bangladesh in term of food security. Crop diversification is considered as a strategy of reducing the reported problems. It is also considered as an effective approach to utilize scarce land and valuable water resources, and it makes agriculture sustainable and environment friendly (Joshi et al, 2007; Kumari et al, 2010; Singh, 2001). Thus, crop diversification is believed to be a widely prescribed means of agriculture and rural development (Acharya, 2011; Pingali and Rosegrant, 1995; Vyas 1996). It offers comparatively high returns from crops by minimizing price and yield risk created by climatic variability and price volatility of agricultural produce. Again, it also offers higher labor productivity, optimizes use of resources and utilizes the land efficiently (Ashfaq et al. 2008; Mehta, 2009; Mukherjee, 2012). It also creates opportunities for more employment and higher income through higher efficient use of resources. World Bank, (1990), Gunasena (2001) and Singh (2001) believe that crop diversification is a very important instrument for food and nutrition security, income growth, poverty alleviation and employment generation. It also helps to use the land, water and other resources judiciously. Crop diversification as a socially beneficial policy can be complimented by extensive infrastructural facilities, financial and technological support, etc. especially for the localized micro (labor-intensive) enterprises that are engaged in processing, storing, grading and packaging activities (Chakrabarti & Kundu, 2009; De & Bodosa, 2014).

From the above discussion, it can be said that crop diversification is a contemporary issue in the field of agriculture, especially in the context of Bangladesh. Therefore, it claims a comprehensive study for the betterment of the agriculture of the country. From the literature, it is found that there are a good number of studies carried out in different countries regarding this issue. However, a very few studies carried out in Bangladesh. So far the researchers’ knowledge goes, no comprehen-
sive and empirical study has been done in this issue. The studies carried out in Bangladesh based on survey and descriptive types which cannot represent the real picture of this issue. In this backdrop, the present study is an attempt to analyze to the present scenario of crop diversification in Bangladesh. Specifically this study concentrates to i) compute the level of crop diversification in Bangladesh ii) explore problems and prospect of crop diversification in Bangladesh.

2. Literature Review

Metzel and Ateng (1993) worked on problems associated with diversified crops by using household level primary data. They used Simpson index and Rice share index to find out the extent of crop diversification. They found low profitability, high input cost, risk in selling non-rice crops and vulnerability to weather variation and pests stand against in the way of crop diversification. In addition they concluded that proximity to towns increased crop diversity while credit decreased it. Mahmud et al (1994) studied agricultural growth and crop diversification in Bangladesh. They identified some problems and offered suggestion to enhance crop diversification in Bangladesh. They found that high price risk, price variability associated to non-rice HVCs and present irrigation system are prominent hindrances on the way of crop diversification. They also believed that real prospects for crop diversification, however, would still depend on how far technological innovations could make non-cereal crops competitive under conditions of modern irrigation.

Ashfaq et al (2008) worked on the factors affecting crop diversification. They used a multiple regression model in which the values of Entropy index of crop diversification were taken as dependent variable and different factors affecting diversification were taken as independent variables. They found that size of land holding, age of respondent, education level of respondent, farming experience of respondent, off farm income of respondent, distance of farm from main road, distance of farm from main market and farm machinery are the main factor of crop diversification. Malik and Singh (2002) studied extent of crop diversification. In this purpose they used Entropy index of crop diversification. They concluded that availability of market, increased demand of crops, export facilities and proximity to town area facilitate crop diversity whereas absence of proper market, price variability and irrigation facility are the notable hindrances for crop diversification. Haque and Bhattacharyya (2010) used Simpson’s index of crop diversification by using 2010-11 data and found that the value of Simpson index is the highest in Orissa (0.25) followed by Bihar (0.18), West Bengal (0.16), Uttar Pradesh (0.15), and Jharkhand (0.08).

3. Methodology and Data

3.1 Measurement of Crop Diversification Index

This study has computed the level crop diversification in Bangladesh. To measure
the level of crop diversification there are different types of measurement index like Simpson index, Entropy index, Herfindahl index, Ogive index etc. Benin et al (2004), Chand (1996), Pandey and Sharma (1996) have used these indices in their studies. Each method has some limitation and/or superiority over the other (Shiyani, 1998). We have used Simpson Index (SI) of crop diversification which has been used extensively in various studies. Other than Simpson index of crop diversification, we have also used Rice share index (RI), rice acreage, to measure the level of crop diversification. Rice share index has been used by Metzel and Ateng (1993).

3.1.1 Simpson Index

Simpson Index (SI) is defined as the difference between one and sum of squares of all the proportion of farm acreage involved in a particular enterprise. The index is represented as:

\[ SI = 1 - \sum_{i=1}^{n} p_i^2 \] ................................. (1)

where, \( p = \sum_{i=1}^{n} \frac{a_i}{A} \), \( a_i \) = area devoted to a particular crop in a given year, and A is annual gross cultivated area (equal to the sum of all crop areas in all seasons). The value of the SI ranges between zero to one, denoting zero for perfect specialization, and one for perfect diversification. The value of SI has direct relation to crop diversification.

3.1.2 Rice Share Index

Rice share index refers to the proportion of different rice crop area to gross crop area. The mathematical expression of Rice share index is as follows:

\[ RI = \sum_{i=1}^{n} \frac{r_i}{A} \] .................................................................(2)

Where, RI = rice share index, \( a_i \) area devoted to \( i^{th} \) rice and A gross crop area of a year. The value of RI is same as of SI.

3.2 Data and Sources of Data

The study has used 40 years time series crops acreage, yield and production data, which were collected from various issues of Yearbook of Agricultural Statistics in Bangladesh, Statistical Yearbook of Bangladesh, Bangladesh Economic Survey, Bangladesh Census of Agriculture and Livestock. In addition, various related published and unpublished issues of the government and non-government organization of Bangladesh, websites were consulted for secondary data and supporting literature. The main purpose of the study is to analyze present state of crop diversi-
fication in Bangladesh. Both quantitative and qualitative data were used to justify the research objectives.

4. Result and Discussion

4.1 Types of Crop Area

Generally there are three crop seasons in Bangladesh. Due to elevation of land and some other problems all the cultivable land is not suitable to use all the three seasons for crop production. Most of the cultivated land (70% of net cultivable land) produce crop more than once in a cropping year is evident from Figure 1. It indicates there are high cropping intensity prevails in the region. Similarly, the more the multiple crop area, the more is the options in practicing crop diversification in the cultivable land.

![Figure 1: Types of Crops area](image)

**Source:** AIS, 2013

4.2 Production Performance of Crops

Crop agriculture plays a vital role in Bangladesh economy and gets utmost importance from the government. It is the biggest subsector of agriculture, whose contribution to GDP and labor absorption capacity is the highest among other sectors. Land quality of Bangladesh is deteriorating owing to degradation of soil fertility (e.g. nutrient imbalance), soil erosion and soil salinity. In addition, water resources are also shrinking continuously due to high exploration of ground water for irrigation. In order to produce more food for the ever increasing population of the country and to meet up high demand of raw materials for agro-industries, agricultural productivity needs to be increased. However, increase in the productivity of agriculture is possible by increasing yield rate through intensification and diversification of agriculture. But unfortunately, due to frequent natural calamities like floods, drought, cyclone, etc. Bangladesh economy comes to a halt. However, one of the main objectives of the government of Bangladesh is to fulfill food requirements of the nation.

Major crops in Bangladesh are cereals, sugarcane, fruits, vegetables, oilseeds etc. Major industrial crops are jute, tea, tobacco etc. Long before and imidiate after independence war, agriculture was the dominating sector in Bangladesh economy. Years after independence, agricultural products increased steadily however it
could not keep pace with the rapid growth of population. Rice is the main food crop in the country. It acquired the fourth place in the world for the production of huge rice in the middle of the 1980s, which was caused by the use of high yielding varieties of seeds, fertilizer and irrigation (Kamrunnahar, 2006). Yet in the year, 1980s, Bangladesh had to import ‘an average of 2 million tons of food grains each year’ to feed ever increasing people. In the late 1980s, there was a progress in industrialization and from 1990 industrial establishments and foreign investments increased to a great degree, and agriculture was being neglected, because of which its improvement was hampered and fell down sharply.

### Table 1: Crop Production and Yield per hectare in Bangladesh (10 years average)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production (000’ tons)</td>
<td>Yield (tons)</td>
<td>Production (000’ tons)</td>
<td>Yield (tons)</td>
</tr>
<tr>
<td>Rice</td>
<td>11620</td>
<td>1.17</td>
<td>14980</td>
<td>1.40</td>
</tr>
<tr>
<td>Wheat</td>
<td>284</td>
<td>1.34</td>
<td>1098</td>
<td>1.90</td>
</tr>
<tr>
<td>Maize</td>
<td>2</td>
<td>0.81</td>
<td>2</td>
<td>0.80</td>
</tr>
<tr>
<td>Pulse</td>
<td>219</td>
<td>0.63</td>
<td>424</td>
<td>0.70</td>
</tr>
<tr>
<td>Oilseed</td>
<td>240</td>
<td>0.78</td>
<td>391</td>
<td>0.90</td>
</tr>
<tr>
<td>Vegetables</td>
<td>2277</td>
<td>8.00</td>
<td>2645</td>
<td>8.00</td>
</tr>
<tr>
<td>Spices</td>
<td>300</td>
<td>1.97</td>
<td>293</td>
<td>2.00</td>
</tr>
<tr>
<td>Fruits</td>
<td>1315</td>
<td>11.53</td>
<td>1378</td>
<td>9.70</td>
</tr>
<tr>
<td>Jute (baile)</td>
<td>5188</td>
<td>7.14</td>
<td>5400</td>
<td>8.20</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>6234</td>
<td>43.09</td>
<td>6980</td>
<td>42.0</td>
</tr>
</tbody>
</table>

Sources: BBS various issues

In the last three decades, major technological changes have occurred in agriculture greatly. As a result, use of fertilizer, irrigation equipment and high yielding varieties (HYVs) of seed has increased simultaneously, rice production has also increased. Though agricultural holdings are small in the country, farmers are increasingly using modern machinery, with the help of cooperatives. But yet rice and wheat are being imported every year to feed the huge number of population. Domestic production of other agricultural products such as pulses, sugar, milk, meat, fish, vegetables and oil never fulfill the requirements of the country, rather remained short.

Table 1 shows the production performance of crop subsector in agriculture. It is evident from the table production and yield of rice in the first decade after independence was 11620 thousand tons and 1.17 tons, respectively, while after 40 years of independence production of rice reached to 27199 thousand tons and yield 2.53 tons. Production of other crops have also increased but comparatively low. Similarly, wheat production was 284 thousand tons in the year 1971–80 while in 2001–10 it was 1119 thousand tons and per hectare average yield of wheat was 1.34 tons in 1971 – 80 and 2.05 tons in 2001 – 10. Again it is evident from the table that there is a tremendous increase in maize production as well as its yield.
rate. In 1991 – 2000 its average production was 40 thousand tons while in 2001 – 10 it reached to 542 thousand tons. In that time its’ average yield was 2.51 tons and 4.83 tons per hectare respectively.

Average production of pulses was 219 thousand tons in 1971-80 and 285 thousand tons in 2001-210 whereas its average yield was 0.63 tons per hectare and 0.83 tons per hectare, respectively. Productivity of pulses is very low comparing to other crops. Farmers are paying less attention to these crops as its yield rate is very low comparing other crops and farmers grow rice for subsistence. Likewise, average production of oilseeds was 240 thousand tons in 1971 – 80 and 584 thousand tons in 2001 – 10 whereas per hectare average yield was 0.78 tons and 1.29 tons, respectively. Although, edible-oil is an important food-stuff of the people of Bangladesh, oil crops have been neglected equally by farmers, researchers, extension workers and policy planners in Bangladesh.

Average production of vegetables has increased from 2277 thousand tons in 1971 – 80 to 7417 thousand tons in 2001 – 10. Average yield rate has also increased by 8.00 tons to 11.00 tons in the same period. Vegetables of Bangladesh are divided into two categories such as winter vegetables and summer vegetables. A major portion of the vegetables are grown during the winter season. Winter season vegetables are cabbage, broccoli, tomato, brinjal, beans, radish, carrots, cauliflower etc. While among the summer vegetables are sweet gourd, bitter gourd, ribbed gourd etc.

Average spices production has also increased from 300 thousand tons in 1971– 80 to 925 thousand tons in 2001 – 10. The average yield rate has also increased from 1.97 tons per hectare to 3.20 tons during that time. Some spices like ginger and turmeric can easily be grown in the hilly region, which may bring a potential area under successful crop cultivation. Fruits which is produced in a temporary crops areas have considered as crops. These types of fruits are melon, water melon, pineapple, banana and papaya. Average production of these kind of fruits remain almost the same but average yield rate has decreased continuously that is, average yield rate was 11.53 tons per hectare in 1971 – 80 while in 2001 – 10 it was 6.66 tons

In 1971-80, the average production of jute was 5188 thousand bales while in 2001 – 10 it was 4597 thousand bales. During this time its yield has increased by 7.14 bales per hectare to 10.86 bales per hectare. Conversely, average yield rate of sugarcane has been decreased continuously but in case of production, it has been increased up to 1990s then decreased in last decades. In 1971 – 80 average production was 6234 thousand tons while in 1991 – 2000 it was 70312 thousand tons but in 2001 – 10 it has been decreased to 5898 thousand tons.

4.3 Sector-wise Contribution to GDP

Economy of Bangladesh is divided into three sectors- agriculture, which is called
primary sector, industry known as secondary sector and service sector named tertiary sector. Some years back, agriculture was a dominant sector in Bangladesh economy and its contribution to the GDP was more than two thirds. Now-a-days its contribution declined to only 17% to the GDP is evident from Figure 2. Presently contribution of service sector dominant the Bangladesh economy and its contribution is more than half of the total GDP. Similarly Figure 3 shows that among the sub-sectors of agriculture crops’ contribution is the highest followed by fisheries, livestock and forestry.

![Figure 2: Sector-wise Contribution to GDP](Source: GoB, 2014)

![Figure 3: Composition of Agricultural GDP](Source: GoB, 2014)

### 4.4 Contribution of Crops to GDP and Agriculture

Crop subsector is the major contributor to the GDP and in agriculture sector. It also absorbs most of the agriculture labor. Similarly, it is a major source of industrial raw materials and is a major contributor of food security in Bangladesh.

<table>
<thead>
<tr>
<th>Year</th>
<th>Contribution to GDP</th>
<th>Contribution to Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995 – 96</td>
<td>14.42</td>
<td>58.52</td>
</tr>
<tr>
<td>2000 – 01</td>
<td>14.70</td>
<td>58.73</td>
</tr>
<tr>
<td>2005 – 06</td>
<td>12.28</td>
<td>56.23</td>
</tr>
<tr>
<td>2010 – 11</td>
<td>11.32</td>
<td>56.32</td>
</tr>
</tbody>
</table>

Sources: Various issues of BBS, GoB

Table 2 depicts that crop sector contribution to GDP and in agriculture is high but it is decreasing over the years. In agriculture sector, though crop sub-sector’s contribution is being declined but yet it is more than 50% of total agriculture.

### 4.5 Cropping Intensity

Cropping intensity is the ratio of gross cropped area to net cropped area. It shows that how many times a specific piece of land is used for crop production within a cropping year. Although net cultivable land is decreasing steadily, multiple crop area is increasing more than proportionately. Accordingly, cropping intensity is also increasing in Bangladesh. Moreover, cropping intensity has also increased...
due to technological development of agriculture. Table 3 shows that in 1980 cropping intensity was 153% and in 2010 it rose to 179%.

Table 3: Cropping Intensity in Bangladesh

<table>
<thead>
<tr>
<th>Year</th>
<th>Cropping intensity %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980 – 85</td>
<td>153</td>
</tr>
<tr>
<td>1985 – 90</td>
<td>162</td>
</tr>
<tr>
<td>1990 – 95</td>
<td>174</td>
</tr>
<tr>
<td>1995 – 00</td>
<td>175</td>
</tr>
<tr>
<td>2000 – 05</td>
<td>177</td>
</tr>
<tr>
<td>2005 – 10</td>
<td>179</td>
</tr>
</tbody>
</table>

Source: Various issues of BBS

4.6 Crop Acreage

Crop acreage refers that the area devoted to a particular crop in a cropping pattern. It can be considered as an indicator of the level of crop diversification. Allocation of net cultivable land is another measure of crop diversification, that is, equal distribution of land to all crops is called maximum diversification (Grosskopf et al, 1992). Merely increasing numbers of crops does not indicate higher level of diversification; it also depends on equal distribution. It is evident from Figure 4 that Bangladesh produce a good number of crops but 78% of gross crop area is devoted to rice and other than rice none of the crop acreage is more than 4% of gross crop area. Hence, these finding shows that extent of crop diversification is very low in Bangladesh.

4.7 Share of Rice Crop Area

Bangladesh is basically rice dominated agricultural country. Almost more than three fourths area of gross crop area is devoted to rice. This indicates that practice of crop diversification in Bangladesh is comparatively low. Farmers of Bangladesh are very much poor and in most cases they have to manage their subsistence
from agriculture. Moreover, they have to ensure their square meal from agriculture and accordingly they are much more interested in producing rice. 80% of gross crop area was used in growing rice in 1980s and in 2010 it declined to 77%, which is apparent from Table 4. Proportion of rice crop area to gross crop area almost remains the same in last three decades. It is important to note that, area under rice production in Bangladesh has been remained in a consistent level over long time. Due to the availability of improved rice technologies, the harvest area of rice has increased a little bit. However, Bangladesh has made remarkable progress in rice production over the last four decades. If we consider ratio of rice area to gross crop area (Metzel & Ateng, 1993) as a measure of crop diversification index then the magnitude of diversification in very low in Bangladesh.

<table>
<thead>
<tr>
<th>Year</th>
<th>% Rice area of gross crop area (five years average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971 – 75</td>
<td>80%</td>
</tr>
<tr>
<td>1975 – 80</td>
<td>81%</td>
</tr>
<tr>
<td>1980 – 85</td>
<td>79%</td>
</tr>
<tr>
<td>1985 – 90</td>
<td>76%</td>
</tr>
<tr>
<td>1990 – 95</td>
<td>74%</td>
</tr>
<tr>
<td>1995 – 00</td>
<td>74%</td>
</tr>
<tr>
<td>2000 – 05</td>
<td>75%</td>
</tr>
<tr>
<td>2005 – 10</td>
<td>77%</td>
</tr>
</tbody>
</table>

Source: Various issues of BBS

4.8 Extent of Crop Diversification

From the above discussion it is found that Bangladesh agriculture is dominated by rice. More than three fourths of gross crop area is used for rice production that indicated low practice of crop diversification. Besides, there are other approaches in measuring the extent of crop diversification among the approaches Simpson Index (SI) is widely used to measure the extent of crop diversification. Higher value of SI gives higher level of crop diversification and vise-versa.

4.8.1 National Level Crop Diversification

Table 5 shows that Simpson index value of crop diversification. In 1971 – 72, it was 0.35 and in 2011-12 it rose to 0.42 that indicate that magnitude of crop diversification have been increasing little by little. It is clear from the values of indices that the growth rate of crop diversification index is very low. Thus, present state of crop diversification of the country is not satisfactory.


Table 5: Value of Crop Diversification Index at National Level

<table>
<thead>
<tr>
<th>Year</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971 – 72</td>
<td>0.35</td>
</tr>
<tr>
<td>1976 – 77</td>
<td>0.34</td>
</tr>
<tr>
<td>1981 – 82</td>
<td>0.36</td>
</tr>
<tr>
<td>1986 – 87</td>
<td>0.42</td>
</tr>
<tr>
<td>1991 – 92</td>
<td>0.43</td>
</tr>
<tr>
<td>1996 – 97</td>
<td>0.44</td>
</tr>
<tr>
<td>2001 – 02</td>
<td>0.42</td>
</tr>
<tr>
<td>2006 – 07</td>
<td>0.42</td>
</tr>
<tr>
<td>2011 – 12</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Source: Various issues of BBS, GoB

4.8.2 Division-Wise Crop Diversification

Different areas are specialized in producing different crops due to climatic advantages and soil quality. Table 6 shows the magnitude of crop diversification in different divisions in Bangladesh. It is apparent from the table that the highest magnitude of crop diversification (SI = 0.49) is found in Rajshahi division and the lowest value (SI = 0.17) is found in Sylhet division. However Rice share index gives different result, the highest diversified area is Khulna division and the lowest is Sylhet.

Table 6: Value of Crop diversification Index in different Division of Bangladesh

<table>
<thead>
<tr>
<th>Division</th>
<th>SI</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dhaka</td>
<td>0.48</td>
<td>0.71</td>
</tr>
<tr>
<td>Rajshahi</td>
<td>0.49</td>
<td>0.71</td>
</tr>
<tr>
<td>Chittagong</td>
<td>0.40</td>
<td>0.77</td>
</tr>
<tr>
<td>Sylhet</td>
<td>0.17</td>
<td>0.91</td>
</tr>
<tr>
<td>Khulna</td>
<td>0.44</td>
<td>0.67</td>
</tr>
<tr>
<td>Barisal</td>
<td>0.47</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Source: BBS, 2010

4.8.3 Farmer-wise Crop Diversification

Objectives of farming are different in different farmers. Some farmers produce crop for their subsistence whereas some other produce only for cash needs and some cultivate land for subsistence as well as cash needs. Figure 5 and Figure 6
show the value of Simpson index and Rice share index of crop diversification. It is found from the figures that small farmer practices crop diversification more than that of medium and large farmers.

![Figure 5: Value of Simpson Index](Source: BBS, 2010)

![Figure 6: Rice Share Index](Source: BBS, 2010)

### 4.9 Constraints and Potentials of Crop Diversification

It is evident from above discussion that practice of crop diversification is comparatively low. A very few countries of the world depends on a single crop as high as of Bangladesh. From different studies it is found that practicing crop diversification has a numbers of limitations. Rao et al (2006) observed that lack of access to markets; transport facilities and post-harvest infrastructure inflate the transaction costs of marketing, which discourage farmers to diversify towards high value agriculture. Again, Zohir (1993) noted that the constraints on the way of crop diversification are: established soil condition; flood depth levels; lower rainfall; lack of proper training on non-rice crops, inappropriate water management, and inadequate supply of water. Similarly, poor road condition, bad road connectivity and transportation problems stood in the way of crop diversification (Haque & Bhattacharya, 2010).

One important constraint for diversification is the irrigation and water management system. Existing irrigation and water management system in Bangladesh is not conducive to crop diversification. Irrigation system in Bangladesh are planned, designed, constructed and managed primarily to irrigate rice fields and are not suitable for growing non-rice crops (Alam, 2005; Rahman & Talukdar, 2001). Farmers cannot grow non-rice crops especially HVCs due to inflexible existing irrigation system. Under same irrigation scheme most of the farmers produce rice. In addition, perishable nature of many HVCs, lack of cold storage and weak market management system are also notable hindrance on way of crop diversification.

Bangladesh is endowed with favorable climate and soil to produce a variety of
crops all the year round. So, there are ample opportunities for diversification in crop agriculture. In Fourth Five Year Plan (1990 – 95), introduction of appropriate cash and commercial crops and policy support for flood and drought resistant crop are considered as the guiding force to promote crop diversification practice in Bangladesh.

As high value crops are more labor intensive, it helps employment generation for the farmers. HVCs especially vegetables need more labor than non-rice crops. Diversification along the line of production of non-rice crops also has implications for labor employment. Some crops like oilseeds and pulses are less labor intensive and hence will have negative impact on employment generation. Since potatoes, vegetables and spices are highly labor-intensive, expansion of area for the production of these crops will have positive impact on labor employment. However, with fluctuation of price and lack of storage, transportation and processing facilities may constrain any large scale expansion of area under these crops. Substantial employment opportunities are generated in seed and seedling production, precision land preparation, and the irrigation, harvesting, cleaning, grading, and packaging of HVCs. It was estimated that a one-hectare of land shifts from cereal to vegetables in one season generated more than one year round full-time employment that is, the difference between cereals and vegetables was more than 220 working days per hectare (Ali & Abedullah, 2002; Rahman & Talukdar, 2001). Joshi et al (2004) also reported similar results. Therefore, cultivation of vegetables, unlike food grains, is labor intensive on the one hand and requires more skilled labor and continuous attention to individual plants at various stages of growth, on the other hand (Bhattacharyya, 2008).

Globalization and market liberalization have opened up the new opportunities to export agricultural crops and crops product from Bangladesh. According to BSS (2013) the country’s fresh fruit exports increased twelve times in the past five years, earning Tk. 463.12 crore alone in FY 2011-2012. Saha (2013) noted that the demand for fresh fruits and vegetable has gradually increased globally as many people have switched to a vegetarian diet. He also noted that in peak season Bangladesh exports 450 metric tons of fruits and vegetables a week against the off-season shipments of about 180 metric tons. Braun (1995) quantifies that as a result of diversification to export vegetable production in Guatemala, employment increased by 45% on participants’ farms. So, this export potentiality offers a great scope for crop diversification in Bangladesh.

5. Conclusion

Crop diversification is a contemporary issue in the field of agriculture as it is an effective strategy of reducing risk of yield and price volatility of rice monoculture. It augments income and employment opportunities in the rural settings where roughly three fourths of gross crop area is engaged in producing a single crop.
However, farmers grow a great numbers of crops in a little bit more than one fifth of gross crop area. From different indicators of measuring the extent of crop diversification, it can be concluded that magnitude of crop diversification in Bangladesh is mediocre and Rajshahi division is more diversified than that of other divisions in Bangladesh. Present market structure, roads and irrigation systems are some notable constraints on the way of crop diversification. Crop diversification has a great potential of increasing income generating activities and earnings of the rural people. To exploit the potentials of crop diversification Bangladesh government come forward with developed market structures, roads condition and making the irrigation system accessible for non-rice crops.
References


due to technological development of agriculture. Table 3 shows that in 1980 crop-
Bangladesh is an agriculture dependent country. Agriculture plays a vital role in
cation of agriculture. But unfortunately, due to frequent natural calamities like
floods, drought, cyclone, etc. Bangladesh economy comes to a halt. However, one
tion in the cultivable land.

Globalization and market liberalization have opened up the new opportunities to
labor and continuous attention to individual plants at various stages of growth, on
try and Rajshahi division is more diversified region in Bangladesh. Index
value also indicates small farmers' practices crop diversification more than
folds in last four decades due to technological advancement. However,
cropping year. Yield and production of different crops, especially cereal
was 0.35 and in 2011-12 it rose to 0.42 that indicate that magnitude of crop diversi-
in measuring the extent of crop diversification among the approaches Simpson
From the above discussion it is found that Bangladesh agriculture is dominated by
on agriculture towards high value crops: The role of small holders.
metabolic input under changing climatic conditions: Indication of a
Higher Value Crops, Estimation of Potential for Market Management in a
agriculture towards high value crops: A case of Himachal
mechanisms for crop diversification and sustainable smallholder agriculture.
Indian Journal of Agricultural Economics, 51 (4), 644 – 51.
Agricultural commercialization and diversification: Processes and policies”, Food Policy, 20(3), 171 – 186.
Inter-linkages of agricultural diversifica-
cation in Bangladesh. MAP Focus Study Series, 9, Dhaka, CIRDAP.
Bangladesh produce a good number of crops but 78% of gross crop area is devoted to rice agriculture. It can be considered as an indicator of the level of crop diversification. Allocation of crop area is influenced by technological development of agriculture. Table 3 shows that in 1980 crop share of rice to total crop agriculture was 92.8%. This share drastically reduced to 4.7% in Fourth Five Year Plan (1990 – 95), introduction of appropriate crop innovations could make non-rice crops competitive under conditions of crop diversification.

Crop agriculture plays a vital role in Bangladesh economy and gets utmost importance due to the growth of industrialization and from 1990 industrial establishments and foreign investments come forward with developed market structures, roads condition and making the economy more integrated to global markets. The Bangladesh Development Studies XXII published a research paper on the theme of “Crop diversification  in Bangladesh” by Acharya, 2011; Pingali prescribed means of agriculture and rural development (Acharya, 2011; Pingali, 2010; Singh, 2001). Thus, crop diversification is believed to be a widely accepted approach to utilize scarce land and valuable water resources, and it makes agriculture sustainable and environment friendly (Joshi et al, 2007; Kumari et al, 2010). Finally, it reduces farmers' net margin. As a result, farmers are getting off farm income of respondent, distance of farm from main road, distance of farm to urban area, and cost of transportation appears to be positively correlated with crop diversification.

But unfortunately, due to frequent natural calamities like flood, drought, cyclone, etc. Bangladesh economy comes to a halt. However, one positive impact is that people have switched to a vegetarian diet. He also noted that in peak season Bangladesh is basically rice dominated agricultural country. Almost more than half of the total area is under rice cultivation.

In Bangladesh, the allocation of crop area is influenced by technological development of agriculture. Area under rice crop is almost the same but average yield rate has decreased continuously that is, average yield rate was 11.53 tons per hectare in 1971 – 80 while in 2001 – 10 it was 6.66 tons per hectare. The decrease in yield rate is due to increase in disease, pest, and weed infestation. In 2001 only 4.42% area was under successful crop cultivation. Fruits which is produced in a temporary crops area is increasing more than proportionately. Accordingly, cropping intensity is increasing in Bangladesh. Proportionately, Bangladesh cropped area is increasing. Researchers used Simpson's index of crop diversification by using 2010-11 data. Researchers used Simpson's index of crop diversification by using 2010-11 data.

Malik and Singh (2002) studied extent of crop diversification. In this purpose they used index and Rice Share index of crop diversification have been used to calculate the level of crop diversification. In this purpose they used index and Rice Share index of crop diversification have been used to calculate the level of crop diversification. Among the sub-sectors of agriculture crops' contribution is the highest followed by livestock and fishery. Similarly Figure 3 shows that contribution is more than half of the total GDP. Similarly Figure 3 shows that contribution is more than half of the total GDP. Figure 1 shows that area under rice is the highest followed by jute, sugarcane, and so on.
One Stop Service Centre in Pourashava: How Efficient and Transparent?

Ranjit Kumar Sarkar*
M. A. Sattar Mandal*

Abstract: This paper attempts an empirical assessment of the various types of services rendered by a modern Pourashava based on quantitative data collected for the first year. The paper particularly applies tools of economics to analyze efficiency and transparency with which the committed services are rendered after the OSSC has been in place. The major determinants of efficiency and transparency selected for investigation include reduction of time needed to provide assistance, reduction of paperwork due to the digitization of services, faster communication between municipality departments, increase in speed, accuracy, and transparency, decrease in office cost and increase in revenues for the municipality. Finally, the paper seeks answer to the question as to how far the efficiency of Pourashova is constrained or facilitated by the allocation of budgetary resources and how far by official’s motivation, readiness and availability of digitization facilities in record keeping.

1. Introduction

Pourashava is the urban local government institution in Bangladesh. It provides service to the citizens of the Pourashava within its jurisdiction. The citizens have to pay holding tax and other charges to Pourashava Authority as service receivers. The service receivers had to face difficulties to get service from service providers as a lack of modern urban facilities. The problem was that citizens had to visit repeatedly and needed to stay longer time in Pourashova office premises to get desired services. Part of the reasons behind such prolonged visits to the offices was lack of right information about who and where to go to for what services and what requirements are there for asking a service from the Pourashava.

* Senior Assistant Chief, Local Government Division and Professor of Agricultural Economics, Bangladesh Agricultural University, Mymensingh and Former Vice Chancellor, Bangladesh Agricultural University respectively.
The delayed or no delivery of modern urban facilities is not only tantamount to virtual deprival of the city dwellers from very essential services, but this also brings forth genuine questions about efficiency and credibility of the municipal bodies. It is in this background that a One Stop Service Center (OSSC) was established by the government in Jamalpur Pourashava in 2012 with a view to providing better service to the municipal dwellers.

The One stop service center was introduced in municipalities to improve the service delivery efficiency of the administration and ensure maximum satisfaction of the citizens who are the recipients of services. Thus the aim of this paper is to provide the municipality with a clear picture of how it’s investments would look like at the end and what are the tangible and intangible benefits from this new system. The reason for preparing the paper is to researching and rethinking about the future prospect to replicate the OSCC theme to other municipalities in a systematic manner.

This paper attempts an empirical assessment of the various types of services rendered by a modern Pourashova based on quantitative data collected for the first year. The objectives of the study were as follows:

1. To measure cost and benefit of OSCC
2. To measure time savings per service after introducing OSSC
3. To find out problem and prospect of OSCC.

2. Methodology

2.1 Area Selection

Area of the study was Jamalpur Pourashava selected on purposively basis as the one stop service center was established by Jamapur Porshashava under Local Government Division(LGD) funder by GIZ.

2.2 Beneficiary Selection

To measure cost benefit of service receivers, the service receivers who got service under OSCC has been considered as beneficiary of the study. During 2011-12 financial year, the people came to Pourashava to get birth and death certificate, Citizen certificate and warrision certificate are considered as beneficiaries.

2.3 Data sources and its collection procedure:

Both primary and secondary data were used to conduct the study. Primary data were collected from the authority of Jamalpur Pourashava. Secondary data collected from various sources, including policy statements, official and unofficial reports, various comments and figures from published studies in the field, newspapers, reports of conferences, and documents and papers on the Internet and so on.
2.4 Analytical Technique:

The study firstly reviewed the fundamental issues relating to one stop service center. Then, it focused on descriptive analysis of one stop service center cost-benefit analysis were done. Finally, it will suggest some policy implications for promoting rural non-farm employment in Bangladesh. To do this, they will employ both qualitative and quantitative techniques of analysis.

In order to analyzed the date, both undiscouned and discounted measured were followed.

2.4.1 Undiscounted Cost and Benefit of One Stop Service Center

To analyze the cost and benefit of OSCC first of all cost and benefit of the project were identified and then data were collected on that. The cost stream includes investment and operating cost. The investment cost includes office building and land cost, office decoration cost, IT equipment, furniture, capacity building, launching event and salary of the staff engaged first one year of establishment of OSCC. The operating cost includes salary of staffs, IT equipment spare parts, paper and other logistics.

The benefits of OSSC result from time and cost savings of OSSC system users, such as reductions in repeated visit and processing time (door to door going time savings), improvements in the reliability of OSSC systems or services, quantified as reductions in travel time.

2.4.2 Discounted Benefit-Cost

Streams of benefits, and costs, are needed in order to properly treat the time valuation of resources. Future benefits and costs must be converted into present value terms by applying an appropriate discount rate.

Present value calculations are important since society has the option of using the funds that are being dedicated to the project being evaluated for some other purpose instead. Spending resources on the project in question has an opportunity cost, which represent the benefits foregone by not making some alternative investment. Since financial markets tell us that we could always invest these resources with high probability of some known future returns on the investment (in a low-risk security), future benefits and costs should be discounted relative to benefits and costs experienced today. This is another way of saying that foregoing consumption today must be compensated with an opportunity for higher levels of consumption tomorrow. The choice of discount rate, the factor applied to future benefits and costs in translating them to present values, is an important assumption in any benefit-cost analysis.

Discounted measures of project worth for financial and economic analysis were applied analyzing data. As the undiscounted measures of project worth fail to take
into account adequately the timing of benefits and costs, discounted measures of projects are used. By applying this technique future cash flows can be reduced to their present value. The discounted measures which are commonly applied to evaluate the project are Net Present Value (NPV), Benefit-Cost Ratio (BCR) and Internal Rate of Return (IRR).

The formal mathematical statements of the discounted measures of project worth are given below (Gittinger, 1982):

### 2.4.3.1 Net Present Value - NPV

The net present value (NPV) is the current value of all project net benefits. Net benefits are simply the sum of benefits minus costs. The sum is discounted at the discount rate. Using this method, if the project has a NPV greater than zero then it appears to be a good candidate for implementation. The formula used to calculate the NPV is:

$$NPV = \sum_{t=1}^{T} \frac{(Benefit_t - Cost_t)}{(1 + r)^t}$$

Where

- Benefit$_t$ = Benefit in time $t$,
- Cost$_t$ = Cost in time $t$,
- $T$ = Number of Years, i.e Life of project
- $t$ = Time (1, 2, 3 …….. $T$)
- $r$ = discount rate

### 2.4.3.2 Benefit-cost ratio (BCR)

The benefit-cost ratio (BCR) is calculated as the NPV of benefits divided by the NPV of costs:

$$BCR = \frac{\sum_{t=1}^{T} \frac{B_t}{(1 + r)^t}}{\sum_{t=1}^{T} \frac{C_t}{(1 + r)^t}}$$

Where

- Benefit$_t$ = Benefit in time $t$,
- Cost$_t$ = Cost in time $t$,
- $T$ = Number of Years, i.e Life of project
- $t$ = Time (1, 2, 3 …….. $T$)
- $r$ = discount rate

Data sources and its collection procedure:

- Citizen certificate and warrison certificate are considered as beneficiaries.
- After December, the demand again starts to decrease.
- The operating cost includes salary of staffs, IT equipment spare parts, OSSC.
- The project is viable from social purpose of the students. At very beginning of the academic year that is in the financial year, the people came to Pourashava to get birth and death certificate, which have been made. For example, improvements in transportation frequently provide the municipality with a clear picture of how it's investments would look to the digitization of services, faster communication between municipality and of services rendered by a modern Pourashova based on quantitative data collected for the first time.

<table>
<thead>
<tr>
<th>Table-3: Operation and Maintenance Cost of OSCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost (Tk. Lakh)</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>2.43</td>
</tr>
<tr>
<td>2.69</td>
</tr>
<tr>
<td>3.5</td>
</tr>
</tbody>
</table>

Economic analysis takes into account the opportunity cost of resources employed to the digitization of services, faster communication between municipality and of services rendered by a modern Pourashova based on quantitative data collected for the first time. The study firstly reviewed the fundamental issues relating to one stop service centres (OSCC) and attempt to measure in monetary terms the private and social cost and benefits of the project. By applying this technique future cash flows can be reduced to their present value. The discounted measures which are commonly applied to evaluate the project are Net Present Value (NPV), Benefit-Cost Ratio (BCR) and Internal Rate of Return (IRR).

The purpose of benefit –cost analysis is to compare the benefits with the costs of project resources, leaving enough money to cover investment and operating costs, and the future stream of benefits is limited to the actual costs (capital, operating, etc.) associated with implementing a project. By applying this technique future cash flows can be reduced to their present value. The discounted measures which are commonly applied to evaluate the project are Net Present Value (NPV), Benefit-Cost Ratio (BCR) and Internal Rate of Return (IRR). The study firstly reviewed the fundamental issues relating to one stop service centres (OSCC) and attempt to measure in monetary terms the private and social cost and benefits of the project. By applying this technique future cash flows can be reduced to their present value. The discounted measures which are commonly applied to evaluate the project are Net Present Value (NPV), Benefit-Cost Ratio (BCR) and Internal Rate of Return (IRR).
2.4.3.3 Internal rate of return (IRR)

The internal rate of return (IRR) is the maximum interest that could be paid for the project resources, leaving enough money to cover investment and operating costs, which would still allow the investor to break even. In other words, the IRR is the discount rate for which the present value of total benefits equals the present value of total costs:

$$PV(\text{Benefits}) - PV(\text{Costs}) = 0.$$

But, for calculating IRR, interpolation method is used. The rule for interpolating the value of the internal rate of return lying between discount rate too high on the one side and too low on the other is:

$$\text{NPV at lower discount rate}$$

$$\text{IRR} = \frac{\text{Lower} + \text{Difference} \times \text{Absolute difference between NPV of at two discount rates}}{\text{between two discount rates}}$$

2.4.4 Valuation of Costs and Benefits

The valuation of benefits and costs should reflect preferences revealed by choices which have been made. For example, improvements in transportation frequently involve saving time. The question is how to measure the money value of that time saved. The value should not be merely what transportation planners think time should be worth or even what people say their time is worth. The value of time should be that which the public reveals their time is worth through choices involving tradeoffs between time and money. If people have a choice of parking close to their destination for a fee of 50 cents or parking farther away and spending 5 minutes more walking and they always choose to spend the money and save the time and effort then they have revealed that their time is more valuable to them than 10 cents per minute. If they were indifferent between the two choices they would have revealed that the value of their time to them was exactly 10 cents per minute.

The OSSC cannot be run without money and municipalities are not interested to spend on this project without getting any revenue from it. Any business initiative fails if there is no certain profit. The mayor would easily be convinced if he finds that benefits are much more compared to the costs of setting up a one stop service center and its maintenance, staff salaries and other charges are easily managed from the income of the service center. That is, the cost benefit analysis is an important part of this business model. Cost benefit analysis is a technique that allows people to compare the expected costs of implementing a system along with the expected benefits within a certain period of time. This comparison indicates
whether the project is financially viable or not and whether there will be a financial return on the initial investment.

Again, one should care about the time because it’s impossible to get benefits without waiting for a certain period of time. The initial investment might seem great compared to the benefits at the primary stage, but after a certain period of time this situation will be overcome where the benefits will be much higher and costs will be much lower compared to the initial expenses.

2.4.5 Process of Cost Benefit Analysis

The process of cost benefit analysis would involve four steps, such as:

1. Identifying costs by year
2. Calculating benefits by year
3. Comparing the results
4. Analysis on costs and benefits

3. Results and Discussions

3.1 Beneficiaries with Services after OSSC during 2011-12.

After introducing OSSC, month-wise data of service receivers on different services like birth registration, death registration, citizen certificate and warrison certificate were recorded by the Pourashava. From the Table-1, it is found that on an average, birth-registration per month was 1112 numbers and death registration was 63 numbers per month. Birth registration was highest 2360 numbers in the month of December and lowest in the month of August. From July to November it was more or less equal, but in the month of December, it increased more than 3 times. The reason was that the demand of birth registration was more for admission purpose of the students. At very beginning of the academic year that is in the month January children had to get admitted in a new class and for this reason they required birth certificates. After December, the demand again starts to decrease. The demand for citizen certificate and warrison certificates were 1313 and 1526 per month which were more than birth and death registration.
Table-1: Month wise and Service wise Beneficiaries during 2011-12 after OSSC

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>639</td>
<td>69</td>
<td>708</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>526</td>
<td>61</td>
<td>587</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>791</td>
<td>61</td>
<td>852</td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>713</td>
<td>58</td>
<td>771</td>
<td></td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>777</td>
<td>74</td>
<td>851</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>2350</td>
<td>76</td>
<td>2426</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>2160</td>
<td>79</td>
<td>2239</td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>1068</td>
<td>51</td>
<td>1119</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>1428</td>
<td>73</td>
<td>1501</td>
<td></td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>1024</td>
<td>61</td>
<td>1085</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>1052</td>
<td>45</td>
<td>1097</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>817</td>
<td>53</td>
<td>870</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13345</td>
<td>761</td>
<td>14106</td>
<td>15761</td>
<td>18309</td>
</tr>
<tr>
<td>Average</td>
<td>1112</td>
<td>63</td>
<td>1176</td>
<td>1313</td>
<td>1526</td>
</tr>
</tbody>
</table>

3.2 Identifying costs

3.2.1 Investment Cost

The total investment for installing a one stop service center in Jamalpur Pourashava was Taka 130.00 Lakh including the human resource for 12 months. The investment cost includes salaries and allowances of the OSSC operation team for the first year of the project, cost for office renovation, computer and telecommunication services, furniture, capacity building of the officers and staffs, OSSC launching and value of land and other related assets. Details of investment cost are given in Table-2.

Table-2: Investment Cost of OSCC Jamalpur per year

<table>
<thead>
<tr>
<th>Item Particulars</th>
<th>Cost in actual BDT</th>
<th>Cost Lakh Taka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and allowances for the OSSC operation team for the first year of the project</td>
<td>725000</td>
<td>7.25</td>
</tr>
<tr>
<td>Local Office renovation cost</td>
<td>185,000</td>
<td>1.85</td>
</tr>
<tr>
<td>Computer and Telecommunication devices</td>
<td>1,639,000</td>
<td>16.39</td>
</tr>
<tr>
<td>OSSC Office Furniture and Setup</td>
<td>231,390</td>
<td>2.31</td>
</tr>
<tr>
<td>Capacity building</td>
<td>100,000</td>
<td>1.00</td>
</tr>
<tr>
<td>Launching event</td>
<td>120,000</td>
<td>1.20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3000390</strong></td>
<td><strong>30.00</strong></td>
</tr>
<tr>
<td>Value of land, building and other assets</td>
<td>10000000</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10000000</strong></td>
<td><strong>130.00</strong></td>
</tr>
</tbody>
</table>
3.2.2 Operation and Maintenance Cost

The operation and maintenance cost includes salaries and allowances of the staffs who are directly involved with OSSC as customer care service providers, other costs for running the office includes logistics, spare parts of IT equipment and maintenance cost would be remaining until the project ends. But, these costs can be easily managed from the income generated from OSSC by issuing certificates after a certain time.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Cost per month</th>
<th>Salary per year</th>
<th>Taka in Lakh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Care Officer's salary</td>
<td>10000</td>
<td>120000</td>
<td>1.20</td>
</tr>
<tr>
<td>Sub-Assistant Engineer's salary</td>
<td>10000</td>
<td>120000</td>
<td>1.20</td>
</tr>
<tr>
<td>Computer and Telecommunication devices</td>
<td>2,000</td>
<td>24000</td>
<td>0.24</td>
</tr>
<tr>
<td>Paper and others</td>
<td>2,000</td>
<td>24000</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td><strong>24000</strong></td>
<td><strong>288000</strong></td>
<td><strong>2.88</strong></td>
</tr>
</tbody>
</table>

3.3 Identifying Benefits

By establishing one stop service centers, municipal authorities are not the only stakeholders to be benefited; rather it would be the citizens who will experience the essence of transparent and efficient service delivery. The benefits included both tangible and intangible.

3.3.1 Tangible Benefits from Service Fees

After introducing one stop service, Pouroshava authority had raised fees for citizen certificate and warrassion certificate, but for birth and death registration they did not raise the fees and followed the national rules and regulations. The tangible benefits raised and it was Tk. 9.81 Lakh after introducing OSSC.
The service receivers had to face difficulties to get service from service providers expected benefits within a certain period of time. This comparison indicates spend on this project without getting any revenue from it. Any business initiative would have revealed that the value of their time to them was exactly 10 cents per ing tradeoffs between time and money. If people have a choice of parking close to which have been made. For example, improvements in transportation frequently

2.4.4 Valuation of Costs and Benefits

discount rates

But, for calculating IRR, interpolation method is used. The rule for interpolating discount rate for which the present value of total benefits equals the present value of the internal rate of return lying between discount rate too high on the

2.5.1 Calculating Internal Rate of Return

In the above model, IRR is calculated by interpolation method. The present value of total benefits is considered to be zero. To calculate IRR, the formula (7) is applied. The IRR is calculated using the following formula:

\[ IRR = \frac{NPV_{low} \times NPV_{high} - NPV_{calc}}{NPV_{high} - NPV_{low}} \]

Table-3: Intangible Benefits through Reduction of Visits and Wating timing

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Birth Registration</th>
<th>Death Registration</th>
<th>Citizen Certificate</th>
<th>Warisan Certificate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of beneficiaries attend per month</td>
<td>1,112</td>
<td>63</td>
<td>1,313</td>
<td>1,503</td>
<td>3,928</td>
</tr>
<tr>
<td>Number of beneficiaries attend per year</td>
<td>13344</td>
<td>756</td>
<td>15756</td>
<td>18036</td>
<td>47,136</td>
</tr>
<tr>
<td>Service charge per certificate -before Oscc</td>
<td>5</td>
<td>0.00</td>
<td>5</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Service charge per certificate -after Oscc</td>
<td>5</td>
<td>0.00</td>
<td>10</td>
<td>50</td>
<td>65</td>
</tr>
<tr>
<td>Reduction of No. of visits per person per service after OSCC</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>Increased service charge per service after OSCC in a year</td>
<td>0</td>
<td>0</td>
<td>78780</td>
<td>901800</td>
<td>980,580</td>
</tr>
<tr>
<td>Total money increase as fees in a year (Taka in Lakh)</td>
<td>0</td>
<td>0</td>
<td>0.7878</td>
<td>9.018</td>
<td>9,8058</td>
</tr>
</tbody>
</table>

3.3.2 Intangible Benefits

3.3.2.1 Time Savings from Reducing Visits

After establishing OSSC, service seekers or receivers are being able to save time for getting service from Pourashava than before. It was estimated that on average people had to visit the Pourashava at least 2 to 3 visits per service, but it required 1 visit after introduction of OSSC. This indicates that on an average, 50% time had been reduced than before. Because, before introducing OSSC, there were many door for one service. The characteristics of OSSC is one door for many services and peoples need not require to move more time going door to door or the different desks of Pourashava. For this reason, the peoples can avoid tension and require less time to get services. They can save repeated visits and can save time which indicates reduction of cost. The people can save money through reducing visits (coming to the Pourashava and return back) per day than before. The reason was that during 2011-12 year, total beneficiaries for getting birth and death certificate were 1176 and it was 1313 and 1503 for citizen and warrision certificate. Considering time required 2 hour per visit, it was found that total time saved in a year were 3528, 1970 and 2289 days for respectively. Considering wage rate Taka 200 per day, the benefits from birth-death registration, citizen and warrision certificate were TK. 7.056, 3.939 and 4.578 lakh respectively.


1. Gittinger J. Price (1982): the desired services. Part of the reasons behind such prolonged visits to the offices was to pay holding tax and other charges to Pourashava Authority as service receivers.

2.4.4 Valuation of Costs and Benefits


2.3

2.1

2.4.3.1 Net Present Value - NPV

The initial investment might seem great out waiting for a certain period of time. The initial investment might seem great.

Hence, financial analysis is used to analyze whether an entity is stable, solvent, liquid, or profitable enough to be invested in. It also compares the costs and benefits of some intended action. By convention the results of the investment are captured with high probability of some known future returns on the investment (in a low purpose instead. Spending resources on the project in question has an opportunity cost, which represent the benefits foregone by not making some alternative invest-

2.4.5 Process of Cost Benefit Analysis

Present value calculations are important since society has the option of using the opportunity cost of resources. Future benefits and costs must be converted into present value terms by applying an appropriate discount rate.

2.3.2.2 Time Savings from Reducing Processing Time

After establishing OSSC, service providers are being able to reduce processing time as because of digitizing the process. This indirectly helped the service seekers or receivers and saved time for getting service from Pourashava than before. It was estimated that on average processing time required 2 to 2.5 hours per service before introducing OSSC and it required 1 hour after OSSC. This indicates that on an average, 50% time had been reduced than before. Because, before introducing OSSC, there were many door for one service. The characteristics of OSSC is one door for many services, peoples need not require to move desk to desk at the time of processing. For this reason, the people can save time which indicates reduction of cost. The time has been reduced for processing (getting birth, death and warrision certificate), per day than before. The reason was that during 2011-12 year, total beneficiaries for getting birth and death certificate were 1176 and it was 1313 and 1503 for citizen and warrision certificate. Considering average time required 2 hour per certificate, it was found that total days saved in a year were 2646, 1970 and 2289 days for respectively. Considering wage rate Taka 200 per day, the benefits from birth-death registration, citizen and warrision certificate were Taka 5.292, 1.969 and 5.494 lakh respectively.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Birth-Death Registration</th>
<th>Citizen Certificate</th>
<th>Warisan Certificate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of beneficiaries attend per month</td>
<td>1,176</td>
<td>1,313</td>
<td>1,526</td>
<td>4,015</td>
</tr>
<tr>
<td>Number of beneficiaries attend per year</td>
<td>14112</td>
<td>15756</td>
<td>18312</td>
<td>48,180</td>
</tr>
<tr>
<td>No. of visits per person per service before OSSC</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>No. of visits per person per service after OSSC</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Reduction of No. of visits per person per service after OSSC</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total reduction of visits per service after OSSC in a year</td>
<td>28224</td>
<td>15756</td>
<td>18312</td>
<td>62,292</td>
</tr>
<tr>
<td>Average time required per visits (hour)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total time saved in a year (hour)</td>
<td>28224</td>
<td>15756</td>
<td>18312</td>
<td>62292</td>
</tr>
<tr>
<td>Total time saved in a year (day)</td>
<td>3528</td>
<td>1969.5</td>
<td>2289</td>
<td>7786.5</td>
</tr>
<tr>
<td>Per day wage</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>324.4375</td>
</tr>
<tr>
<td>Total money savings in a year (Taka in Lakh)</td>
<td>7.056</td>
<td>3.939</td>
<td>4.578</td>
<td>15.57</td>
</tr>
</tbody>
</table>

Source: Jamalpur Pourashava, 2014

3.3.2.2 Time Savings from Reducing Processing Time
Table-4: Intangible Benefits through Reduction of Processing and Wating timing for Getting Different Certificates During 2011-12.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Birth-Death Registration</th>
<th>Citizen Certificate</th>
<th>Warisan Certificate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of beneficiaries attend per month</td>
<td>1,176</td>
<td>1,313</td>
<td>1,526</td>
<td>4,015</td>
</tr>
<tr>
<td>Number of beneficiaries attend per year</td>
<td>14112</td>
<td>15756</td>
<td>18312</td>
<td>48,180</td>
</tr>
<tr>
<td>Service time required per service before OSSC(hour)</td>
<td>2.5</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Service time required per service after OSSC(hour)</td>
<td>1</td>
<td>1.5</td>
<td>0.8</td>
<td>3</td>
</tr>
<tr>
<td>Time savings (hour)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total time savings in a year (hour)</td>
<td>21168</td>
<td>7878</td>
<td>21974.4</td>
<td>51,020</td>
</tr>
<tr>
<td>Total time saved in a year (day)</td>
<td>2646</td>
<td>984.75</td>
<td>2746.8</td>
<td>6377.55</td>
</tr>
<tr>
<td>Per day wage</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>265,7313</td>
</tr>
<tr>
<td>Total money savings in a year (Taka in Lakh)</td>
<td>5,292</td>
<td>1.9695</td>
<td>5.4936</td>
<td>12.76</td>
</tr>
</tbody>
</table>

Source: Jamalpur Pourashava, 2014

3.4 Benefit-Cost Analysis

The purpose of benefit–cost analysis is to compare the benefits with the costs of implementing the policy or investment. If the sum of the benefits of the project exceeds the costs, then there is a general economic argument supporting the action to make the investment or implement the project. In its broadest form benefit–cost analysis is a framework for social accounting, where any benefit or cost that can be measured and monetized is weighed against all other benefits or costs. In practice, benefit–cost analysis most often assumes a more limited scope of review due to limits on available information and methods for estimation and monetization of all consequences of the proposed investment or project.

Most of the economic benefits of one stop service centers result from travel time and cost savings to service receivers, such as reductions in travel time (time savings) for reduction of repeated visits and processing mechanisms quantified as reductions in travel time. The benefits of transportation projects may be either positive or negative, as would be the case if travel times were to increase as a result of some intended action. By convention the results of the investment are captured as benefits (whether good or bad), while the accounting of costs of the investment is limited to the actual costs (capital, operating, etc.) associated with implementing the project.

Benefit-cost analysis is designed to provide information that is relevant to the decision process and is not intended to substitute for human judgment.
3.5.1 Financial Analysis

Financial analysis is the process of evaluating businesses, projects, budgets and other finance-related entities to determine their suitability for investment. Typically, financial analysis is used to analyze whether an entity is stable, solvent, liquid, or profitable enough to be invested in. It also compares the costs and benefits over time to determine whether a project is profitable or not.

Financial analysis was done on the basis of available data. The net present value (NPV) was found 203.89 Lakh, Benefit-Cost ratio was 2.47 and internal rate of return was 30.89. The project is profitable because NPV was positive, BCR was more than 1 and IRR was more than 15%. From the above statement it can be say that the project is financially viable. Details are given in Appendix-A.

3.5.2 Economic Analysis

Economic analysis takes into account the opportunity cost of resources employed and attempt to measure in monetary terms the private and social cost and benefits of a project to the community or economy.

Economic analysis was done on the basis of available data. The net present value (NPV) was found 218.04 Lakh, Benefit-Cost ratio was 2.69 and Internal rate of return was 31.62. The project is profitable because NPV was positive, BCR was more than 1 and IRR was more than 15%. From the above statement it can be say that the project is financially viable. From social point of view Details are given in Appendix-A.

4. Conclusion

One stop service center has a positive impact on service receivers and providers. It is found that the project has benefited more after introducing OSSC. It has reduced the repeated visit of the citizens, waiting time and processing time. At present, the people need not go door to door for having services. The tangible and intangible benefit have increased which indicates positive situation. The benefit from time saving through reduction of visits is a good important factor for the service receivers. After OSSC, it has become possible to reduce processing time. Time saving was possible because of reduction of processing formalities or mechanism also a positive impact on OSSC service providers and receivers. In financial analysis, the net present value (NPV) was found 198.16 Lakh, Benefit-Cost ratio was 2.43 and internal rate of return was 33.88. The project is profitable because NPV was positive, BCR was more than 1 and IRR was more than 15%. The project is viable from individual point of view. In economic analysis, the net present value (NPV) was found Tk. 210.38 Lakh, Benefit-Cost ratio was Tk. 2.43 and internal rate of return was Tk. 33.88. The project is profitable because NPV was positive, BCR was more than 1 and IRR was more than 15%. The project is viable from social point of view. From the facts and findings it can be stated that one stop service center is useful and beneficial for the Pourashava.


Appendix Table: Financial Analysis

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost (Financial)</th>
<th>Total Cost</th>
<th>Income from fees of services</th>
<th>Income from visit-time reduction</th>
<th>Income from process time reduction</th>
<th>Total Benefit</th>
<th>15% Discount Factor</th>
<th>Discounted Value at 15%</th>
<th>Total Cost</th>
<th>Total Benefit</th>
<th>25% Discount Factor</th>
<th>Discounted Value at 25%</th>
<th>Total Cost</th>
<th>Total Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>130.00</td>
<td>130.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.870</td>
<td>113.04</td>
<td>0.00</td>
<td>0.00</td>
<td>0.7407</td>
<td>96.296</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2012-13</td>
<td>0.00</td>
<td>2.88</td>
<td>2.88</td>
<td>9.81</td>
<td>15.57</td>
<td>12.76</td>
<td>0.756</td>
<td>2.18</td>
<td>28.83</td>
<td>0.5487</td>
<td>1.580</td>
<td>20.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013-14</td>
<td>0.00</td>
<td>3.17</td>
<td>3.17</td>
<td>9.90</td>
<td>16.35</td>
<td>13.39</td>
<td>0.658</td>
<td>2.08</td>
<td>26.07</td>
<td>0.4064</td>
<td>1.288</td>
<td>16.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014-15</td>
<td>0.00</td>
<td>3.33</td>
<td>3.33</td>
<td>10.00</td>
<td>17.17</td>
<td>14.06</td>
<td>0.572</td>
<td>1.90</td>
<td>23.58</td>
<td>0.3011</td>
<td>1.001</td>
<td>12.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015-16</td>
<td>0.00</td>
<td>3.49</td>
<td>3.49</td>
<td>10.10</td>
<td>18.03</td>
<td>14.77</td>
<td>0.497</td>
<td>1.74</td>
<td>21.33</td>
<td>0.2230</td>
<td>0.779</td>
<td>9.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016-17</td>
<td>0.00</td>
<td>3.67</td>
<td>3.67</td>
<td>10.20</td>
<td>18.93</td>
<td>15.50</td>
<td>0.432</td>
<td>1.59</td>
<td>19.30</td>
<td>0.1652</td>
<td>0.606</td>
<td>7.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017-18</td>
<td>0.00</td>
<td>3.85</td>
<td>3.85</td>
<td>10.31</td>
<td>19.88</td>
<td>16.28</td>
<td>0.376</td>
<td>1.45</td>
<td>17.47</td>
<td>0.1224</td>
<td>0.471</td>
<td>5.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018-19</td>
<td>0.00</td>
<td>4.04</td>
<td>4.04</td>
<td>10.41</td>
<td>20.87</td>
<td>17.09</td>
<td>0.327</td>
<td>1.32</td>
<td>15.81</td>
<td>0.0906</td>
<td>0.366</td>
<td>4.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019-20</td>
<td>0.00</td>
<td>4.25</td>
<td>4.25</td>
<td>10.51</td>
<td>21.91</td>
<td>17.95</td>
<td>0.284</td>
<td>1.21</td>
<td>14.32</td>
<td>0.0671</td>
<td>0.285</td>
<td>3.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020-21</td>
<td>0.00</td>
<td>4.46</td>
<td>4.46</td>
<td>10.62</td>
<td>23.01</td>
<td>18.85</td>
<td>0.247</td>
<td>1.10</td>
<td>12.97</td>
<td>0.0497</td>
<td>0.222</td>
<td>2.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021-22</td>
<td>0.00</td>
<td>4.68</td>
<td>4.68</td>
<td>10.72</td>
<td>24.16</td>
<td>19.79</td>
<td>0.215</td>
<td>1.01</td>
<td>11.75</td>
<td>0.0368</td>
<td>0.172</td>
<td>2.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022-23</td>
<td>0.00</td>
<td>4.91</td>
<td>4.91</td>
<td>10.83</td>
<td>25.37</td>
<td>21.77</td>
<td>0.187</td>
<td>0.92</td>
<td>10.83</td>
<td>0.0273</td>
<td>0.134</td>
<td>1.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023-24</td>
<td>0.00</td>
<td>5.16</td>
<td>5.16</td>
<td>10.94</td>
<td>26.64</td>
<td>23.94</td>
<td>0.163</td>
<td>0.84</td>
<td>10.00</td>
<td>0.0202</td>
<td>0.104</td>
<td>1.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024-25</td>
<td>0.00</td>
<td>5.42</td>
<td>5.42</td>
<td>11.05</td>
<td>27.97</td>
<td>26.34</td>
<td>0.141</td>
<td>0.77</td>
<td>9.24</td>
<td>0.0150</td>
<td>0.081</td>
<td>0.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025-26</td>
<td>0.00</td>
<td>5.69</td>
<td>5.69</td>
<td>11.16</td>
<td>29.37</td>
<td>28.97</td>
<td>0.123</td>
<td>0.70</td>
<td>8.54</td>
<td>0.0111</td>
<td>0.063</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2026-27</td>
<td>0.00</td>
<td>5.97</td>
<td>5.97</td>
<td>11.27</td>
<td>30.83</td>
<td>31.87</td>
<td>0.107</td>
<td>0.64</td>
<td>7.91</td>
<td>0.0082</td>
<td>0.049</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2027-28</td>
<td>0.00</td>
<td>6.27</td>
<td>6.27</td>
<td>11.38</td>
<td>32.38</td>
<td>35.05</td>
<td>0.093</td>
<td>0.58</td>
<td>7.32</td>
<td>0.0061</td>
<td>0.038</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2028-29</td>
<td>0.00</td>
<td>6.59</td>
<td>6.59</td>
<td>11.50</td>
<td>33.99</td>
<td>38.56</td>
<td>0.081</td>
<td>0.53</td>
<td>6.79</td>
<td>0.0045</td>
<td>0.030</td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2029-30</td>
<td>0.00</td>
<td>6.92</td>
<td>6.92</td>
<td>11.61</td>
<td>35.69</td>
<td>42.42</td>
<td>0.070</td>
<td>0.49</td>
<td>6.30</td>
<td>0.0033</td>
<td>0.023</td>
<td>0.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030-31</td>
<td>0.00</td>
<td>7.26</td>
<td>7.26</td>
<td>11.73</td>
<td>37.48</td>
<td>46.66</td>
<td>0.061</td>
<td>0.44</td>
<td>5.86</td>
<td>0.0025</td>
<td>0.018</td>
<td>0.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The service receivers had to face difficulties to get service from service providers. Pourashava is the urban local government institution in Bangladesh. It provides expected benefits within a certain period of time. This comparison indicates people to compare the expected costs of implementing a system along with the benefits. The cost-benefit analysis is an important tool for evaluating average time required 2 hours per visit, it was found that total time saved in a year were 2646, 1970 and 1260. This situation will be overcome where the benefits will be much higher and costs will be lower.

2.4.4 Valuation of Costs and Benefits

Most of the economic benefits of one stop service centers result from travel time savings. In order to analyze the date, both undiscounted and discounted measures were considered. The purpose of benefit-cost analysis is to compare the benefits with the costs of the investment. Economic analysis takes into account the opportunity cost of resources employed in any benefit-cost analysis. Positive or negative, as would be the case if travel times were to increase as a result of the project.

2.4.3.3 Internal rate of return (IRR)

Internal rate of return (IRR) seeks answer to the question as to how far the efficiency of Pourashova is improved and cost-benefit ratio is determined. The relationship between present value and future value looks like at the end and what are the tangible and intangible benefits from this new theme. The feasibility of the project is assessed by comparing the present discounted value of the benefits and costs. For example, improvements in transportation frequently bring forth genuine questions about efficiency and credibility of the municipal departments, increase in speed, accuracy, and transparency, decrease in delays in record keeping.

2.3 Determinants of Efficiency and Transparency

The economic benefits of one stop service centers result from travel time savings. The purpose of benefit-cost analysis is to compare the benefits with the costs of the investment. The feasibility of the project is assessed by comparing the present discounted value of the benefits and costs. Most of the economic benefits of one stop service centers result from travel time savings. The purpose of benefit-cost analysis is to compare the benefits with the costs of the investment. In order to analyze the date, both undiscounted and discounted measures were considered. The purpose of benefit-cost analysis is to compare the benefits with the costs of the investment. Economic analysis takes into account the opportunity cost of resources employed in any benefit-cost analysis.

3.3.2.2 Time Savings from Reducing Processing Time

During 2011-12 year, total beneficiaries for getting birth and death certificate were recorded by the Pourashava. From the Table-1, it is found that on average processing time required 2 to 2.5 hours per service. After introducing one stop service, Pouroshava authority had raised fees for citizen services like at the end and what are the tangible and intangible benefits from this new theme. The feasibility of the project is assessed by comparing the present discounted value of the benefits and costs.

3.3.3.1 Time Savings from Reducing Processing Time

During 2011-12 year, total beneficiaries for getting birth and death certificate were recorded by the Pourashava. From the Table-1, it is found that on average processing time required 2 to 2.5 hours per service. After introducing one stop service, Pouroshava authority had raised fees for citizen services like at the end and what are the tangible and intangible benefits from this new theme. The feasibility of the project is assessed by comparing the present discounted value of the benefits and costs.

3.3.4 Cost-Benefit Analysis

The purpose of benefit-cost analysis is to compare the benefits with the costs of the investment. Economic analysis takes into account the opportunity cost of resources employed in any benefit-cost analysis.

3.4.2.3 Cost-Benefit Analysis

The purpose of benefit-cost analysis is to compare the benefits with the costs of the investment. Economic analysis takes into account the opportunity cost of resources employed in any benefit-cost analysis. As reductions in travel time.

3.5.1 Net Present Value (NPV)

Net present value (NPV) is the primary measure of project profitability. It is calculated as follows:

\[ NPV = \sum_{t=1}^{T} \frac{Net \text{ Benefit}_t}{(1 + i)^t} \]

Where:
- \( Net \text{ Benefit}_t \) is the net benefit in year \( t \)
- \( i \) is the discount rate
- \( T \) is the number of years

3.5.2 Economic Analysis

Economic analysis takes into account the opportunity cost of resources employed in any benefit-cost analysis.

3.6 Analysis on Costs and Benefits

To measure time savings per service after introducing OSSC, it was found that total time saved in a year were 2646, 1970 and 1260. This situation will be overcome where the benefits will be much higher and costs will be lower.

Table-3: Operation and Maintenance Cost of OSCC

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>1.85</td>
<td>2.24</td>
<td>2.63</td>
<td>3.02</td>
<td>3.41</td>
<td>3.80</td>
<td>4.19</td>
<td>4.58</td>
<td>4.97</td>
</tr>
<tr>
<td>2014-15</td>
<td>2.02</td>
<td>2.41</td>
<td>2.80</td>
<td>3.19</td>
<td>3.58</td>
<td>3.97</td>
<td>4.36</td>
<td>4.75</td>
<td>5.14</td>
</tr>
<tr>
<td>2015-16</td>
<td>2.19</td>
<td>2.58</td>
<td>2.97</td>
<td>3.36</td>
<td>3.75</td>
<td>4.14</td>
<td>4.53</td>
<td>4.92</td>
<td>5.31</td>
</tr>
<tr>
<td>2016-17</td>
<td>2.36</td>
<td>2.75</td>
<td>3.14</td>
<td>3.53</td>
<td>3.92</td>
<td>4.31</td>
<td>4.70</td>
<td>5.09</td>
<td>5.48</td>
</tr>
<tr>
<td>2017-18</td>
<td>2.53</td>
<td>2.92</td>
<td>3.31</td>
<td>3.70</td>
<td>4.09</td>
<td>4.48</td>
<td>4.87</td>
<td>5.26</td>
<td>5.65</td>
</tr>
<tr>
<td>2018-19</td>
<td>2.70</td>
<td>3.09</td>
<td>3.48</td>
<td>3.87</td>
<td>4.26</td>
<td>4.65</td>
<td>5.04</td>
<td>5.43</td>
<td>5.82</td>
</tr>
<tr>
<td>2019-20</td>
<td>2.87</td>
<td>3.26</td>
<td>3.65</td>
<td>4.04</td>
<td>4.43</td>
<td>4.82</td>
<td>5.21</td>
<td>5.60</td>
<td>6.00</td>
</tr>
<tr>
<td>2020-21</td>
<td>3.04</td>
<td>3.43</td>
<td>3.82</td>
<td>4.21</td>
<td>4.60</td>
<td>5.00</td>
<td>5.39</td>
<td>5.79</td>
<td>6.18</td>
</tr>
<tr>
<td>2021-22</td>
<td>3.21</td>
<td>3.60</td>
<td>4.00</td>
<td>4.39</td>
<td>4.78</td>
<td>5.18</td>
<td>5.58</td>
<td>5.97</td>
<td>6.37</td>
</tr>
</tbody>
</table>
For calculating IRR, interpolation method is used. The rule for interpolating which would still allow the investor to break even. In other words, the IRR is the interest rate that sets the net present value (NPV) of the investment equal to zero. The purpose of benefit-cost analysis is to compare the benefits with the costs of the project. In its broadest form, benefit-cost analysis is a framework for social accounting, where any benefit or cost that can be quantified is included in the analysis. The net present value (NPV) is calculated by subtracting the initial investment from the present value of future cash flows. The benefit-cost ratio (BCR) is calculated by dividing the present value of benefits by the present value of costs. When the BCR is greater than 1, the project is considered financially viable.

**Assumptions:**
1. Costs and benefits have been forecasted over a 50 yrs horizon, i.e., life considered 60 yrs.
2. Revenue income from service fees increasing 10% over year.
3. Revenue from time saving from reduction of visits and processing of OSSC.
Appendix Table: Economic Analysis

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment</th>
<th>Operating</th>
<th>Total Cost</th>
<th>Income from fees of services</th>
<th>Income from visit-time reduction</th>
<th>Income from process-time reduction</th>
<th>Total Benefit</th>
<th>15% Discount Factor</th>
<th>Discounted Value at 15%</th>
<th>30% Discount Factor</th>
<th>Discounted Value at 30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>130.00</td>
<td>117.00</td>
<td>0</td>
<td>117.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>101.74</td>
<td>0.00</td>
<td>74.07</td>
</tr>
<tr>
<td>2012-13</td>
<td>0.00</td>
<td>0.00</td>
<td>2.88</td>
<td>2.88</td>
<td>9.81</td>
<td>15.57</td>
<td>12.76</td>
<td>0.756</td>
<td>2.18</td>
<td>8.83</td>
<td>1.58</td>
</tr>
<tr>
<td>2013-14</td>
<td>0.00</td>
<td>0.00</td>
<td>3.17</td>
<td>3.17</td>
<td>9.90</td>
<td>16.35</td>
<td>13.39</td>
<td>0.658</td>
<td>2.08</td>
<td>26.07</td>
<td>1.29</td>
</tr>
<tr>
<td>2014-15</td>
<td>0.00</td>
<td>0.00</td>
<td>3.33</td>
<td>3.33</td>
<td>10.00</td>
<td>17.17</td>
<td>14.06</td>
<td>0.572</td>
<td>1.90</td>
<td>23.58</td>
<td>0.3011</td>
</tr>
<tr>
<td>2015-16</td>
<td>0.00</td>
<td>0.00</td>
<td>3.49</td>
<td>3.49</td>
<td>10.10</td>
<td>18.03</td>
<td>14.77</td>
<td>0.497</td>
<td>1.74</td>
<td>21.33</td>
<td>0.2230</td>
</tr>
<tr>
<td>2016-17</td>
<td>0.00</td>
<td>0.00</td>
<td>3.67</td>
<td>3.67</td>
<td>10.20</td>
<td>18.93</td>
<td>15.50</td>
<td>0.432</td>
<td>1.59</td>
<td>19.30</td>
<td>0.1652</td>
</tr>
<tr>
<td>2017-18</td>
<td>0.00</td>
<td>0.00</td>
<td>3.85</td>
<td>3.85</td>
<td>10.31</td>
<td>19.88</td>
<td>16.28</td>
<td>0.376</td>
<td>1.45</td>
<td>17.47</td>
<td>0.1224</td>
</tr>
<tr>
<td>2018-19</td>
<td>0.00</td>
<td>0.00</td>
<td>4.04</td>
<td>4.04</td>
<td>10.41</td>
<td>20.87</td>
<td>17.09</td>
<td>0.466</td>
<td>1.32</td>
<td>15.81</td>
<td>0.0906</td>
</tr>
<tr>
<td>2019-20</td>
<td>0.00</td>
<td>0.00</td>
<td>4.25</td>
<td>4.25</td>
<td>10.51</td>
<td>21.91</td>
<td>17.95</td>
<td>0.487</td>
<td>1.21</td>
<td>14.32</td>
<td>0.0671</td>
</tr>
<tr>
<td>2020-21</td>
<td>0.00</td>
<td>0.00</td>
<td>4.46</td>
<td>4.46</td>
<td>10.62</td>
<td>23.01</td>
<td>18.85</td>
<td>0.507</td>
<td>1.10</td>
<td>12.97</td>
<td>0.0497</td>
</tr>
<tr>
<td>2021-22</td>
<td>0.00</td>
<td>0.00</td>
<td>4.68</td>
<td>4.68</td>
<td>10.72</td>
<td>24.16</td>
<td>19.79</td>
<td>0.567</td>
<td>1.01</td>
<td>11.75</td>
<td>0.0368</td>
</tr>
<tr>
<td>2022-23</td>
<td>0.00</td>
<td>0.00</td>
<td>4.91</td>
<td>4.91</td>
<td>10.83</td>
<td>25.37</td>
<td>21.77</td>
<td>0.507</td>
<td>0.92</td>
<td>10.83</td>
<td>0.0273</td>
</tr>
<tr>
<td>2023-24</td>
<td>0.00</td>
<td>0.00</td>
<td>5.16</td>
<td>5.16</td>
<td>10.94</td>
<td>26.64</td>
<td>23.94</td>
<td>0.562</td>
<td>0.84</td>
<td>10.00</td>
<td>0.0202</td>
</tr>
<tr>
<td>2024-25</td>
<td>0.00</td>
<td>0.00</td>
<td>5.42</td>
<td>5.42</td>
<td>11.05</td>
<td>27.97</td>
<td>26.34</td>
<td>0.655</td>
<td>0.77</td>
<td>9.24</td>
<td>0.0150</td>
</tr>
<tr>
<td>2025-26</td>
<td>0.00</td>
<td>0.00</td>
<td>5.69</td>
<td>5.69</td>
<td>11.16</td>
<td>29.37</td>
<td>28.97</td>
<td>0.695</td>
<td>0.70</td>
<td>8.54</td>
<td>0.0111</td>
</tr>
<tr>
<td>2026-27</td>
<td>0.00</td>
<td>0.00</td>
<td>5.97</td>
<td>5.97</td>
<td>11.27</td>
<td>30.83</td>
<td>31.87</td>
<td>0.739</td>
<td>0.64</td>
<td>7.91</td>
<td>0.0082</td>
</tr>
<tr>
<td>2027-28</td>
<td>0.00</td>
<td>0.00</td>
<td>6.27</td>
<td>6.27</td>
<td>11.38</td>
<td>32.38</td>
<td>35.05</td>
<td>0.852</td>
<td>0.58</td>
<td>7.32</td>
<td>0.0061</td>
</tr>
<tr>
<td>2028-29</td>
<td>0.00</td>
<td>0.00</td>
<td>6.59</td>
<td>6.59</td>
<td>11.50</td>
<td>33.99</td>
<td>38.56</td>
<td>0.845</td>
<td>0.53</td>
<td>6.79</td>
<td>0.0045</td>
</tr>
<tr>
<td>2029-30</td>
<td>0.00</td>
<td>0.00</td>
<td>6.92</td>
<td>6.92</td>
<td>11.61</td>
<td>35.69</td>
<td>42.42</td>
<td>0.97</td>
<td>0.49</td>
<td>6.30</td>
<td>0.0053</td>
</tr>
<tr>
<td>2030-31</td>
<td>0.00</td>
<td>0.00</td>
<td>7.26</td>
<td>7.26</td>
<td>11.73</td>
<td>37.48</td>
<td>46.66</td>
<td>1.022</td>
<td>0.44</td>
<td>5.86</td>
<td>0.0025</td>
</tr>
<tr>
<td>2031-32</td>
<td>0.00</td>
<td>0.00</td>
<td>7.62</td>
<td>7.62</td>
<td>11.85</td>
<td>39.35</td>
<td>51.32</td>
<td>1.05</td>
<td>0.41</td>
<td>5.45</td>
<td>0.0018</td>
</tr>
<tr>
<td>2032-33</td>
<td>0.00</td>
<td>0.00</td>
<td>8.01</td>
<td>8.01</td>
<td>11.96</td>
<td>41.32</td>
<td>56.46</td>
<td>1.094</td>
<td>0.37</td>
<td>5.07</td>
<td>0.0014</td>
</tr>
<tr>
<td>2033-34</td>
<td>0.00</td>
<td>0.00</td>
<td>8.41</td>
<td>8.41</td>
<td>12.08</td>
<td>43.39</td>
<td>62.10</td>
<td>1.177</td>
<td>0.34</td>
<td>4.72</td>
<td>0.0010</td>
</tr>
</tbody>
</table>
After establishing OSSC, service seekers or receivers are being able to save time repeatedly and needed to stay longer time in Pourashova office premises to get services like birth registration, death registration, citizen certificate and warrison certificate, per day than before. The reason was that during 2011-12 year, total beneficiaries for getting service from Pourashava than before. It was estimated that on average 2 hour per visit, it was found that total time saved in a day were 1176 and it was 1313 and 1503 for citizen and warrison certificate. Consideration of the population of Pourashava, it was found that during 2011-12 year, total beneficiaries for getting birth and death certificate and other services like birth registration, death registration, citizen certificate and warrison certificate, per day than before. The reason was that during 2011-12 year, total beneficiaries for getting service from Pourashava than before. It was estimated that on average 2 hour per visit, it was found that total time saved in a day were 1176 and it was 1313 and 1503 for citizen and warrison certificate.

This paper attempts an empirical assessment of the various types of services like birth registration, death registration, citizen certificate and warrison certificate, per day than before. The reason was that during 2011-12 year, total beneficiaries for getting service from Pourashava than before. It was estimated that on average 2 hour per visit, it was found that total time saved in a day were 1176 and it was 1313 and 1503 for citizen and warrison certificate. Consideration of the population of Pourashava, it was found that during 2011-12 year, total beneficiaries for getting birth and death certificate and other services like birth registration, death registration, citizen certificate and warrison certificate, per day than before. The reason was that during 2011-12 year, total beneficiaries for getting service from Pourashava than before. It was estimated that on average 2 hour per visit, it was found that total time saved in a day were 1176 and it was 1313 and 1503 for citizen and warrison certificate. Consideration of the population of Pourashava, it was found that during 2011-12 year, total beneficiaries for getting birth and death certificate and other services like birth registration, death registration, citizen certificate and warrison certificate, per day than before. The reason was that during 2011-12 year, total beneficiaries for getting service from Pourashava than before. It was estimated that on average 2 hour per visit, it was found that total time saved in a day were 1176 and it was 1313 and 1503 for citizen and warrison certificate.

The benefits of OSSC result from time and cost savings of OSSC system users, most of the economic benefits of one stop service centers result from travel time savings, while the benefits of OSSC result from time and cost savings of OSSC system users. The benefit-cost ratio (BCR) is calculated as the NPV of benefits divided by the investment cost. The BCR for OSSC is more than 1 and IRR was more than 15%. The project is viable from social point of view. In economic analysis, the net present value (NPV) is calculated as the present value of benefits minus the present value of costs. The NPV for OSSC is more than 1 and IRR was more than 15%. The project is viable from social point of view.

### Table 1: Month wise and Service wise Beneficiaries during 2011-12 after OSSC

<table>
<thead>
<tr>
<th>Month</th>
<th>Birth Certificate</th>
<th>Death Certificate</th>
<th>Citizen Certificate</th>
<th>Warrison Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Birth Certificate</th>
<th>Death Certificate</th>
<th>Citizen Certificate</th>
<th>Warrison Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013-14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014-15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015-16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016-17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 2: Operation and Maintenance Cost of OSSC

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>Tk. 11.1 Lakh</td>
</tr>
<tr>
<td>2012-13</td>
<td>Tk. 11.3 Lakh</td>
</tr>
<tr>
<td>2013-14</td>
<td>Tk. 11.5 Lakh</td>
</tr>
<tr>
<td>2014-15</td>
<td>Tk. 11.7 Lakh</td>
</tr>
<tr>
<td>2015-16</td>
<td>Tk. 11.9 Lakh</td>
</tr>
<tr>
<td>2016-17</td>
<td>Tk. 12.1 Lakh</td>
</tr>
<tr>
<td>2017-18</td>
<td>Tk. 12.3 Lakh</td>
</tr>
<tr>
<td>2018-19</td>
<td>Tk. 12.5 Lakh</td>
</tr>
</tbody>
</table>

### Table 3: Tangible Benefits from Service Fees

<table>
<thead>
<tr>
<th>Year</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>Tk. 10.2 Lakh</td>
</tr>
<tr>
<td>2012-13</td>
<td>Tk. 10.4 Lakh</td>
</tr>
<tr>
<td>2013-14</td>
<td>Tk. 10.6 Lakh</td>
</tr>
<tr>
<td>2014-15</td>
<td>Tk. 10.8 Lakh</td>
</tr>
<tr>
<td>2015-16</td>
<td>Tk. 11.0 Lakh</td>
</tr>
<tr>
<td>2016-17</td>
<td>Tk. 11.2 Lakh</td>
</tr>
<tr>
<td>2017-18</td>
<td>Tk. 11.4 Lakh</td>
</tr>
<tr>
<td>2018-19</td>
<td>Tk. 11.6 Lakh</td>
</tr>
</tbody>
</table>

### Table 4: Intangible Benefits from Service Fees

<table>
<thead>
<tr>
<th>Year</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>Tk. 10.2 Lakh</td>
</tr>
<tr>
<td>2012-13</td>
<td>Tk. 10.4 Lakh</td>
</tr>
<tr>
<td>2013-14</td>
<td>Tk. 10.6 Lakh</td>
</tr>
<tr>
<td>2014-15</td>
<td>Tk. 10.8 Lakh</td>
</tr>
<tr>
<td>2015-16</td>
<td>Tk. 11.0 Lakh</td>
</tr>
<tr>
<td>2016-17</td>
<td>Tk. 11.2 Lakh</td>
</tr>
<tr>
<td>2017-18</td>
<td>Tk. 11.4 Lakh</td>
</tr>
<tr>
<td>2018-19</td>
<td>Tk. 11.6 Lakh</td>
</tr>
</tbody>
</table>
3.3.1 Tangible Benefits from Service Fees

The One stop service center was introduced in municipalities to improve the service to the municipal dwellers. It was established by the government in Jamalpur Pourashava in 2012 with a view to providing better service to the municipal dwellers. The delayed or no delivery of modern urban facilities is not only tantamount to the delay in development but also tends to create dissatisfaction and lack of confidence in the local governance. The OSSC cannot be run without money and municipalities are not interested to spend money on OSSC. The operating cost includes salary of staffs, IT equipment spare parts, launching event and salary of the staff engaged first one year of establishment of OSSC. The time has been reduced for processing (getting birth, death and warrision certificate) services like birth registration, death registration, citizen certificate and warrision certificate. Considering average time required 2 hour per visit, it was found that total time saved in a day as because of digitizing the process. This indirectly helped the service seekers and peoples need not require to move desk to desk at the time of cost. The time has been reduced for processing (getting birth, death and warrision certificate). The operating cost includes salary of staffs, IT equipment spare parts, launching event and salary of the staff engaged first one year of establishment of OSSC. The operating cost includes salary of staffs, IT equipment spare parts, launching event and salary of the staff engaged first one year of establishment of OSSC.

3.4 Benefit-Cost Analysis

The process of cost benefit analysis would involve four steps, such as:

1. Data Collection
2. Data Analysis
3. Assumptions
4. Economic Feasibility

The purpose of benefit –cost analysis is to compare the benefits with the costs of the project. Since financial markets tell us that we could always invest these resources at a certain rate of return, it is convenient to refer to this rate of return as the discount rate. The benefit –cost analysis most often assumes a more limited scope of review due to the difficulty in quantifying the non monetary (intangible) benefits. Most of the economic benefits of one stop service centers result from travel time savings. The delayed or no delivery of modern urban facilities is not only tantamount to the delay in development but also tends to create dissatisfaction and lack of confidence in the local governance.

3.3.2 Intangible Benefits

Benefits are much more compared to the costs of setting up a one stop service center. The net present value (NPV) was found 198.16 Lakh, Benefit-Cost ratio was 2.43 and Internal Rate of Return (IRR) was calculated as 29.85.

Assumptions:

1. Costs and benefits have been forecasted over a 50 yrs horizon, i.e., life considered 50 yrs.
2. Annual operating cost considered 5% of the investment cost and increasing 10% per year.
3. Revenue income from road users increasing 10% over year.
4. Revenue from time saving of construction/repair of road increasing 10% over year.
5. Revenue from fuel saving increasing 5% over year.

PV of Total Revenue at 15% = 337.94
PV of Total Cost at 15% = 127.57
Net Present Value (NPV) at 15% = 210.38

\[
\text{Internal Rate of Return (IRR)} = \frac{15+ 210.38}{212.45} x (30-15) \\
= \frac{15+ 0.99}{15} \\
= \frac{15+ 14.85}{15} \\
= 0.99 x 15 \\
= 29.85
\]

<table>
<thead>
<tr>
<th>BCR</th>
<th>PV of Total Revenue</th>
<th>PV of Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>337.94</td>
<td>127.57</td>
</tr>
<tr>
<td>2.65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table-3: Operation and Maintenance Cost of OSCC
were 1176 and it was 1313 and 1503 for citizen and warrision certificate. Consid-
ing indicates reduction of cost. The people can save money through reducing visits
desks of Pourashava. For this reason, the peoples can avoid tension and require
and peoples need not require to move more time going door to door or the different
been reduced than before. Because, before introducing OSSC, there were many
for getting service from Pourashava than before. It was estimated that on average

3.3.2 Intangible Benefits


3.4 Benefit-Cost Analysis

3.5.2 Economic Analysis

more than 1 and IRR was more than 15%. From the above statement it can be say
that the project is viable from social
1. Introduction

Abstract:

Table-4: Tangible Benefits from Service Fees

The service receivers who got service
to measure cost benefit of service receivers, the service receivers who got service

1. To measure cost and benefit of OSCC

2. To measure time savings per service after introducing OSSC

3. To find out problem and prospect of OSCC.

Changing Role of Central Banks: Comparison of Practices

Jamaluddin Ahmed *

Abstract: Central banks could not come to existence without the power of the government behind them, and in some cases they would disappear if their governmental protection ended. Nonetheless, the central banks have evolved through time in such a way that now they serve important economic goals. Thus central banks turned into a great example by changing their roles and responsibilities to the state and society. Both historical experience and the public choice theory show us that such organizations might be dangerous for society if they are abused by the government. There is a strong pressure to make central bank independent of the government. The independence of central banks generally invites new problems: the accountability, responsibility, and legitimacy of operational activities questionable. Most central banks evolved out of private institutions, which at some point were endowed with special statutory powers, such as a monopoly on the issue of banknotes, and perhaps also special responsibilities, such as with respect to short-term financing of the government. Gradually they were transformed into public institutions, through government appointment of governors and perhaps other senior officials, and eventually often through outright nationalization. It was the politicians who have created central banks to serve their purposes. The 19th century central banks were usually created to serve fiscal needs of governments. In the 20th century central banks were established by political pressures as well, sometimes for governmental fiscal needs, sometimes for other particular reasons. In case of USA it is said “After all, the FED is a political institution designed by politicians to serve politicians.” The same applies to all other countries across the globe, irrespective of political and ideological belief of socialism, capitalism, liberals and fundamentalists. The role of central bank changes with the changes in political power at the center. This paper tried to present that Central banks were historically created first to manage the state’s credit: this is the story of the oldest central banks, the

* Dr Jamaluddin Ahmed FCA is a former President of the Institute of Chartered Accountants (2010)
**1. Introduction**

There are organizations in modern economies that neither evolved spontaneously for some economic reason (like e. g. firms), nor were set up out of pure necessity (like e. g. army), but were established by governments for their special interests. Usually, these organizations could not come to existence without the power of the government behind them, and in some cases they would disappear if their governmental protection ended. Nonetheless, many of these organizations have evolved through time (and sometimes they have changed their environments as well) in such a way that now they sub serve important economic goals—some of them even have a vital role in modern economies. A great example of such an organization is a Central Bank, but many other instances are at hand. Both historical experience and the public choice theory show us that such organizations might be dangerous for society if they are abused by the government. The theory and experience also show us that there might be (at least sometimes) a strong incentive for the government to abuse these organizations. That is why there is a strong pressure to make some of these potentially dangerous organizations independent of the government. However, with independence new problems might arise: the accountability, responsibility, and legitimacy of these organizations might become questionable.

Most central banks evolved out of private institutions, which at some point were endowed with special statutory powers, such as a monopoly on the issue of banknotes, and perhaps also special responsibilities, such as with respect to short-term financing of the government. Gradually they were transformed into public institutions, through government appointment of governors and perhaps other senior officials, and eventually often through outright nationalization. This process started in the 1930s (e.g. the Reserve Bank of New Zealand, the Bank of France in
1936, when Prime Minister Léon Blum assumed appointment of virtually all the Regents, the Bank of Canada in 1938, but was greatly accelerated by the financing and other requirements of the Second World War and its immediate aftermath. The Bank of England was nationalized in 1946, the Reserve Bank of India in 1948. From the beginning the Federal Reserve System of the United States had a peculiar status. Although created by Federal legislation in 1913, it is technically owned by its member banks, which appoint 72 of its 108 regional bank directors, who in turn select the regional bank presidents (subject to approval by the Board of Governors in Washington), who in turn participate in framing monetary policy. The seven governors are appointed by the President of the United States, subject to confirmation by the Senate, for 14-year non-renewable terms, with the chairman (Alan Greenspan, 1987–2006) appointed for a renewable four-year term. Originally the Secretary of the Treasury and the Comptroller of the Currency, both public officials, sat as ex officio members of the Board of Governors, but that provision was eliminated in 1934. The Federal Reserve thus remains a curious hybrid, a privately owned, quasi public institution, whose sole function is central banking (including bank regulation and supervision). Central banks have long valued their independence and, when not literally independent of government, their operating autonomy. Immediately before and during the Second World War most central banks became the agents of their governments, in particular of ministers of finance, de facto if not literally nationalized until later. They regained their autonomy of action only gradually (the Federal Reserve in the celebrated “accord” of 1951, when the Fed ceased to support the government bond market), with many central banks achieving statutory independence only in the 1990s.

Even then, important ambiguities still remain, for example with respect to the setting of exchange rate policy and the management of exchange rates. Whether decisions are made by governments or by central banks is not always clear, nor who runs exchange risk, although execution is almost invariably the task of central banks. Thus “central bank cooperation,” or lack of it, often reflects the decisions of governments, not of central banks themselves. This ambiguity was concretely acknowledged when central bank governors were invited to join the Group of Ten in 1962 and the informal G-5 ministers of finance meetings starting in 1973, and their representatives also attended many meetings of the deputy finance ministers. Even during the 1920s, when the ethos of central bankers was to keep governments at a respectable distance, and the Federal Reserve Bank of New York took the lead in cooperating with European central banks, Benjamin Strong regularly reported his intentions to the Board of Governors and to Secretary of Treasury Mellon (who at that time sat with the Board), and thus had their actual or tacit approval in his various proposals and actions.

Central banks were historically created first to manage the state’s credit: this is the story of the oldest central banks, the Swedish Riksbank, the Bank of England, as
well as of a newer wave of central banks that followed the example of the Bank of France. It was suspicion of the politics behind a designated state-oriented central bank that led to the non-renewal of the charters, and the demise, of the First and Second Banks of the United States. Resistance to the process of political capture led in some countries such as Switzerland at the end of the 19th century has become an example. A second historical motivation for the creation of central banks involved the safeguarding of a financial system, and the maintenance of an adequate supply of credit. In the mid-19th century, a new generation of central banks was established essentially to manage payments systems, and stabilize fragile banking systems: this was the motivation behind the German Reichsbank (1875) or the Federal Reserve System of the United States (1914). It was only after the end of metallic monetary standards and the advent of paper-based money that central banks began to be concerned with the problem of price stability.

This is precisely what has happened in the case of central banks in the earlier times. In the second half of the 20th century, central banks were seen as an inevitable part of market economies, which were necessary to stabilize the business cycle and the banking system, and perhaps also the price level. Then new theories and evidences appeared showing that the government can benefit from an abuse of the monetary policy or the central bank itself. White (1999) portrays that there is no spontaneous tendency for the evolution of central banks. Definitely, some of the functions provided nowadays by central banks (such as emergency lending, banking supervision to decrease information asymmetry etc.) may be provided on the voluntary basis by private clearing houses or other organizations. But there is no spontaneous tendency to make money independent of a commodity, or create a centralized reserve system, or an authority able to carry out the monetary policy etc. Bagehot (1873, ch. 2) puts it this way: “... the natural system that which would have sprung up if Government had let banking alone is that of many banks of equal or not altogether unequal size.” In other words, if politicians did not meddle with the banking systems in the past, there would be no central banks nowadays—only commercial banks of a similar size interconnected by private clearing houses. Some of these banks would issue bank notes convertible at par into specie.

It was the politicians who have created central banks to serve their purposes. Bagehot (1873), Smith (1936), and White (1984, 1999) among others put across that in the 19th century central banks were usually created to serve fiscal needs of governments. In the 20th century central banks were established by political pressures as well, sometimes for governmental fiscal needs, sometimes for other particular reasons (see Rothbard (1999), and Friedman and Schwartz (1963) for the account for the Fed. However, in all cases central banks were established by politicians. Kane (1980) says (for the Federal Reserve System): “After all, the Fed is a political institution designed by politicians to serve politicians.” (Italics is Kane’s.)
Of course, in many cases the actual outcomes of the politicians’ acts have been quite different from their intentions. Most politicians in the 18th or 19th century did not plan to establish a central bank at all—they simply wanted to obtain a credit for the government on more favorable terms. The obvious way to get it (at least from their perspective) was to give some bank privileges or even monopoly power. Such a bank would be both willing and able to offer cheaper credit to the government in return. The modern central bank has evolved step by step from these privileged banks. As Bagehot (1873, ch. 3) says: “Thus our one reserve system of banking was not deliberately founded upon definite reasons; it was the gradual consequence of many singular events, and of an accumulation of legal privileges on a single bank which has now been altered, and which no one would now defend.” To put it in a different way, a central bank is neither a product of a spontaneous evolution, nor an outcome of economic reasoning and planned governmental policy. It is a product of a “political evolution.” Thus the origin of a central bank shows us that a central bank is an organization with quite different characteristics from organizations that have evolved spontaneously. It was given many privileges: the note-issue monopoly, power to set either the monetary base or interest rates, and the right to regulate commercial banks can be mentioned as the most important ones. These privileges are granted and protected by the government—without its power they could be neither established, nor preserved. In this sense the central bank shares the part of the governmental power while it is, because of its banking origin (at least from the legal point of view), a separate organization.

We have seen above that the central banks were created by politicians to serve their special interests, but through the time they obtained special rights and privileges that allowed them to conduct the monetary policy. This was made possible by the governmental power that guarantees these rights. At the same time the banks are given objectives by the government. From this point of view the management of a central bank is bureaucracy, or a bureaucratic management, see Mises (1944). Central banks have no inherent goals, only the goals given by the government. But the same does not hold for its managers. The central bankers are agents of the government (and of the public), but poorly constrained ones. It allows them to act in their own interests. Therefore, to understand the behavior of a central bank we have to first understand the incentives of its managers. This is what the theory of bureaucratic behavior of central banks explores.

The general concept of bureaucracy and its behavior goes back to Weber (1997). The approach was then applied to central banks in many papers on the theory of bureaucratic behavior of central banks; for the summary see White (1999, ch. 8). Some of the classical authors in this field are Acheson and Chant (1972, 1973a, and 1973b), Friedman (1982), Kane (1980), and Toma (1982). The theory views central bank managers as poorly constrained agents who may seek their own interests, which may deviate the monetary policy they carry out from its optimal course.
(whatever it may be). The authors analyze the general incentives of the central bankers, and then use their findings to explain some deviations of the monetary policy practices from its theory. Let us summarize the major incentives attributed by the theory to the central Bankers. The theory assumes that the utility of the central bankers is derived first of all from their prestige, and safety (or the self-preservation of the central bank). Other potential bureaucratic goals (like on-the-job consumption, hoarding of power, or high wage rates) are neglected—either the authors assume they are not important for the central bankers, or that they do not have a considerable influence on the monetary policy of the ban.

Prestige is assumed to be a goal per se for a central bank. It is derived from the position of the bank in the social hierarchy. It “reflects the public’s and other groups’ concern with the goals associated with the bureau, the bureau’s degree of responsibility for such goal and the public’s and other groups’ opinion of actual performance relative to the expected performance.” (Chant–Acheson, 1972, p. 14) Their prestige is influenced by many factors: The importance the public associates with the bank’s goals, the public’s rating of the bank’s performance, the bank independence et cetera. The theory predicts that the central bankers tend to act in such a way that enhances or at least protects their prestige. Central bankers’ safety includes two interrelated parts: They seek to preserve the “life” of the bank, and they seek to preserve their jobs there. The preservation of the bank is necessary for their (the banker’s) own job safety, and also his prestige as it signals the importance of the bank in the economy. These two ultimate objectives (prestige and self-preservation) create an incentive structure for the central bankers’ behavior. The theory predicts many phenomena we can observe in the real world (some of them were mentioned above).

First of all, a central bank seeks to keep its operations secret. It usually resists offering information about its actions. Such secrecy not only raises the prestige of the bank, but it also protects it against criticism. The same reasons have motivated the bank not only to obfuscate rather than offer information, they also motivate it to create a “central bank mythology”—to persuade the public, the government etc. that the central bankers are fierce fighters against inflation, that they are able to carry the monetary policy out better than any ironclad rule, and that their task is extremely complex and beyond all understanding of laymen on the one hand, but on the other hand that they cannot be blamed for any failure because there are many factors affecting the policy outcomes out of their control, because the transmission is not well-understood et cetera. This way all successes can be attributed to the bank, but all failures can be attributed to external shocks, irresponsible fiscal policy et cetera. Under the information asymmetry the bank can always argue that without its provident policy the outcomes would be much worse. (For details see especially Friedman, 1982, and Acheson–Chant, 1972, 1973a, 1973b.)

Second, for the same reasons a central bank usually opposes any ironclad rules and
sticks to incomplete discretionary policies, and complex instrument-mixes, because it further lowers the ability of outsiders to monitor the actions of the bank—and thus to criticize it for a poor performance. Moreover, if the bank had admitted that the discretionary policy could be replaced by a rule (i.e. by an automaton), its prestige would have diminished to zero (ibid, see especially Friedman, 1982). Third, the theory predicts that a central bank will struggle for its independence. If a bank is independent, and its responsibility for the monetary policy is not shared with other agencies, its prestige is ceteris paribus higher.

Central banks have generally had three main objectives or functional roles: (i) To maintain price stability, subject to the monetary regime in current operation, for example the gold standard, a pegged exchange rate or an inflation target. (ii) To maintain financial stability, and to foster financial development more broadly. (iii) To support the state’s financing needs at times of crisis, but in normal times to constrain misuse of the state’s financial powers. In the past this meant preventing debasement and misuse of the inflation tax. Prospectively it may in future also involve preventing misuse of the bank tax.

Naturally, the balance between these three objectives has shifted over time, with support for state financing becoming prominent during wartimes. Indeed, several of the first central banks to be established, notably the Bank of England and the Bank of France, were founded to help provide war finance. In the absence of wars, it is the shifting balance between the central bank’s monetary policy (stable prices) and its financial stability role that usually generates most interest. In this latter respect, we may perhaps identify three main stable epochs from the past, with the shortest periods of confusion and search for a new regime/system in interregnums between them. These three periods are: (i) the Victorian era, say from the 1840s until 1914; (ii) the decades of government control: the 1930s until the end of the 1960s; and (iii) the triumph of the markets: from the 1980s to 2007. The period from 1914 to 1931–33 was a confused interregnum including World War I, followed by a failed attempt to re-establish the gold standard (Eichengreen (1992)). Similarly, the 1970s was another confused interregnum between the subservience of monetary policies to government control, and the establishment of a free market system, with the central bank following a regime of inflation targeting.

2. Objective and Structure of the paper: This paper attempts to evaluate the role of central banks in different economic, financial and political regimes. In particular, this paper discusses the roles and objectives of the central banks under the changing environment of political philosophy, business and economics both in national and international perspectives, in rich and poor countries, in command and market oriented economies, and in recession heat and boom situations. This paper also looks into generic functions and changing patterns of the central banks in dealing with the situation mentioned herein. Given these, the paper is divided
into eight sections. Section one discusses the theory of the changing roles of central banks. The key concepts on the role of organization vs. institutions and central bank independence have already been addressed. Section two describes the historical evidence of changing roles of central banks. Section three highlights the future role of central banks under the changing economic and political scenario of a country. Moreover it touches on the essence of central banks in terms of bank tax, sanctions, debt management, bank resolutions, interest rate settings, interaction with other regulators, structural management of the development of financial sectors, and the future of central cooperation. Section four produces evidence of the changing roles of central banks in the market economies like USA, UK, France and Germany showing the pattern of central bank independence positions since their inceptions. Section five documents the post crisis role of central banks. Section six highlights the communication and stabilization policy. Section seven highlights on the developmental role of central bank by providing evidences from Europe and North America covering developed and developing countries. Section eight presents a brief description on the origins and motivations of establishment, objectives and functions, independence since the inception highlighting the changing economic environment. Countries covered from Europe include Sweden, England, Norway, Germany and France. North American country includes USA and Chile from South America. African country include Zambia, and from Asian countries India, Sri Lanka, Vietnam, Kuwait and Bangladesh. Section nine summarizes the paper.

3. Theories on the changing roles of central banks

This section will discuss how networks and relations between key individuals influenced the changing role of the central banks and will also examine the extent to which the central banks have held a mediating position between politicians and financial institutions, and between domestic and international concerns. Can this position—or the lack of such a position—as a boundary organization explain how and why a central bank had developed a new role during a particular period. Another fruitful theoretical contribution within the dynamic-institutional research tradition is provided by the political scientist Stephen Bell, who adds a third level of analysis to the study of changing central banks, namely the institutional environment surrounding these banks.

Despite the fact that the two above research traditions are partly complementary, in other respects they can also be viewed as competing, especially as regards the generation of general theories. Even if most scholars of the dynamic-institutional tradition primarily analyze particular historical cases, some also aim at the generation of more abstract general theories. Unlike the static-generalizing tradition, however, the general theories of the dynamic-institutional tradition attach great importance to the historical and institutional context of central banks in order to understand their development and behavior. Thus, rather than trying to
de-contextualize, simplify and fix central bank behavior, these general theories incorporate social and institutional complexity as well as dynamic perspectives in order to understand how and why the behavior of central banks change. In our context, one of the most interesting theoretical perspectives within the dynamic-institutional tradition has been developed by the sociologist Susan E. Stockdale, who has explained the nature and timing of shifts in CBI by comparing four twentieth-century legislative events in the USA and Great Britain: the 1935 Banking Act (US), the 1946 Bank of England Act (GB), the 1980 Monetary Control Act (US), and the 1998 Bank of England Act (GB). While the two earliest of these events represent shifts towards less CBI regarding monetary policy, the two later events were shifts toward greater independence. Stockdale interprets central banks as organizations that exist in the boundary between state, society, and economy. As boundary organizations, they mediate the relationship between these realms by managing the tension not only between the public and private sectors, but also between domestic and international concerns. The concept of boundary organizations, which was originally derived from principal-agent theory, has been promoted most effectively by the political scientist David H. Guston, who argues that the success of a boundary organization is determined by principals on either side of the boundary, both of whom rely on the boundary organization to provide them with necessary resources. Applied to central banks, this would mean that their chances of success in terms of political influence and autonomy depends on their ability to act as intermediaries and provide necessary resources to principals of, for example, the political authorities on the one hand, and the financial institutions on the other. As pointed out by Stockdale, changes in the role of central banks can thereby be explained not only by exogenous factors, such as changes in political and economic conditions, but also by factors endogenous to central banks themselves, such as ideological and mental elements, which central bank officials can influence through networking and active participation in policy-making processes. Hence, according to this perspective, the degree of CBI is a direct consequence of boundary construction, reconstruction, and maintenance activities of central bank officials.

The theory on boundary organizations brings light to two mutually dependent levels of analysis that are necessary to explain changes in the role of a central bank: the individual level with central bank officials and other principal actors who take part in policy-making, and the organizational level with its focus on the position of the central bank as an organization in this policy-making environment. In his examinations of Australia’s recommitment to CBI in the 1990s, Bell emphasizes the importance of the international context to domestic policy-making processes. Based on an inductive, historically grounded political economy approach, Bell introduces a model of ‘embedded statism’ that places such domestic processes, in which politicians and central bankers act in relatively closed ‘state-directed’ monetary policy network, in a wider, international context. Bell argues that standard
theories of political science based on closed economy models are insufficient in order to explain Australia’s recommitment to CBI since they exclude the fundamental structural changes and globalization of international financial markets that embedded this domestic process. Whereas political scientists traditionally have tended to view changes in the role of central banks as a result of domestic pressure group politicization over monetary policy, political business cycles and government-central bank conflict only, Bell argues that these domestic processes are decisively influenced by the international institutional, political and economic context in which they take place.

In accordance with the approach of the dynamic-institutional tradition, Bell limits his model of state embeddedness to a specific historical setting: the globalized economy of the 1980s and 1990s. However, perhaps his theoretical perspectives also can be applied to the pre-globalization period after World War II. During the first postwar decade, a new institutional framework for the exchange of goods and capital had to be developed to replace the former gold standard system. As a small, traditionally open economy, Norway totally depended on taking part in this process, which was characterized by much uncertainty as well as economic and political unrest. Based on Bell’s model of embedded statism, the question in our context is thus to what extent and in what way did this international process affect the development of a new role for the Bank of Norway.

In his most recent academic contribution, Bell has focused on another important dimension in the study of central banks, namely the balancing of theory versus practice. Commenting on the contemporary literature on CBI, Bell argues that although this model has been underpinned theoretically, there is a critical shortage of empirical studies on how CBI has worked in practice. Based on his own empirical studies, Bell questions the theoretical presumptions that monetary policies and independent central banks are characterized by rule compliance and transparency (such as inflation targeting and publications of inflation forecasts) rather than discretion and political consultations in policy-making. Bell argues that the very nature of central banking, as part of a political system, encourages various forms of non-transparency, and he rejects the idea that central banks are insulated from particular interests and thus ‘depoliticized’.

Bell’s call for empirical studies of today’s central banking agrees well with Stockdale’s emphasis on the need for such examinations in order to determine the changing role of central banks also in a historical perspective. Moreover, Bell and Stockdale share a common theoretical view of central banks as institutionally embedded, yet capable of maneuvering purposefully within this institutional framework. As Bell has described it:

*The role of institutional arrangements is context specific and variable. Neither governments nor central banks are necessarily passive in the face of institutional*
arrangements and their strategy in this respect will depend on their own motives and on the wider context.

In order to understand how and why the role of the central bank changed after World War II, such general, yet historically rooted theories on changing central banks are useful, among other things, for empirically examining, identifying and explaining social relations and behavioral characteristics. In the following, there will be an elaboration on the approach to the theory and its application in general.

**Theoretical considerations**

Basically, it has an eclectic approach to theory in the sense that it applies to various theories or parts of theories, which can shed new lights on the different aspects of particular historical studies. Along with many historians, and in contrast to natural sciences and many social scientific disciplines, the approach to theory is not driven primarily by an ambition to develop a new theory. Instead, it can be said that a theory is a source of new research questions, concepts, and explanatory models, which can add to the understanding of historical events. Theories enter this understanding as the instruments for creating historical news rather than as part of an objective of theory-making.

All scholars use theory throughout the research process, from the generation of research questions, via the selection of empirical evidence, to the interpretation and presentation of their findings. Whereas some disciplines apply theories explicitly by requiring that scholars state their theoretical standing in detail. Historians traditionally have used theories more implicitly, for instance, interpreting actors as rational or utility maximizing agents without actually pronouncing any specific framework of behavioral theory.

A classic argument for the first approach is that explicit theoretical accounts make underlying assumptions more visible and easier to evaluate, while scholars of the latter tradition argue that a strict and complete theoretical framework will impose “tyrannical” guidelines on research and restrict the analytical perspectives of researchers. A compromise between these two extremes, which is preferred by many historians today including myself, is to select certain key concepts and build loose theoretical frameworks, which can contribute to systematizing a course of events and clarifying causal mechanisms without being too deterministic.

Institutional theory includes variants of different behavioral assumptions and epistemological approaches, such as economic institutional theory, which regards individuals as rational actors who use cost-benefit logic when they relate to their institutional setting, and sociological institutional theory, which usually emphasizes how the structural surroundings determine individual actions by the internalization of values and establishment of routines. A common feature, however, is the perception that institutions constrain and regularize individual behavior, as expressed by the economic historian Douglass C. North:
[Institutions] establish the cooperative and competitive relationships which constitute a society and more specifically an economic order (…).
It is the institutional framework which constrains peoples’ choice sets.

According to North, institutions control human behavior much in the same way that rules of a game control the players. He uses the metaphor of a soccer game, and argues that the institutional rules that influence human action can be compared to the three types of rules that structure this game. There are formal rules, which lay down the number of players, the size of the pitch, and how to carry out the game; informal rules, which constitute the culture and norms that create notions such as fair play and team spirit; and meta-rules, which determine how to change the rules. By using the metaphor of a game, North acknowledges that individuals are not free to do entirely what they want, but at the same time he presents the rules as relatively explicit and understandable. As a representative of the economic branch of institutional theory, he also emphasizes the ability of individuals to reflect consciously upon their institutional framework and choose whether or not they should obey the formal and informal rules. In this respect, North’s approach diverges from other branches of institutional theory, more oriented towards sociology, which tend to see institutions as internalized norms and values that individuals follow routinely. Some sociologists, associated with a so-called cognitive branch of institutional theory, go even further and regard institutions as symbols, words, signs, gestures that shape the meanings that the actors attribute to objects and activities, and help them make sense of what is happening. In the terminology of North’s soccer game metaphor, this far more abstract approach to institutional theory entails that the game not only involves rules and enforcement mechanisms, but also consists of socially constructed players. From an eclectic’s point of view, the various behavioral theories and epistemological traditions of institutional theory do not necessarily represent a problem. On the contrary, they can make an excellent starting point for discussing different interpretations of human interaction and for giving balanced assessments of historical events. People are multidimensional, and human interaction is a complex matter. Thus, rather than constructing general theories by reducing the number of dimensions shaping human behavior, as many social scientists would do, we aim at accentuating and understanding this complexity by applying different theoretical perspectives. As a historian, one would believe that human behavior cannot be generalized but depends on the historical and geographical setting in which it takes place.

Human behavior is not either rational and profit maximizing or totally determined by external forces; it is usually a combination of these extremes. People might be partly trying to increase their personal power or wealth, but at the same time be influenced by their institutional setting, a setting upon which they can reflect only partly, since it is, to some extent, internalized. In other words, people are complex, and if scholars operate with too rigid and simplified behavioral assumptions, they
might miss out on important aspects of their object of study. Institutional theory generally emphasizes the stabilizing effects of rules, norms and values on social developments as well as individual behaviors. However, from the 1920s to the mid-1950s, the political, economic and cultural environment underwent considerable changes, which means that the period in question was one of institutional change rather than stability. Old rules, norms and values met new ones, and there were no clear breaks between two consistent institutional regimes. Rather than being surrounded by a fixed, unambiguous institutional framework, individuals and organizations faced inconsistent and changing expectations, as well as new challenges and opportunities. A theoretical concept that aims to explain such institutional changes is ‘institutional entrepreneurship’, a term that has attracted considerable attention in recent years.

This concept combines perspectives from literature on institutions, which emphasize the stabilizing effect of rules, norms, and cognitive perceptions, and entrepreneurship, which accentuate how institutions are themselves shaped by creative entrepreneurial forces that bring about changes. It thereby brings light to the dual perspective that often emerges in historical examinations that organizational and social processes are usually characterized by both continuity and change. This theoretical approach tends to view actors as institutionally embedded, but by developing strategies of change and entering into negotiations with other organizations or individuals, they can also bring about institutional change that again constitutes a new, stabilizing institutional framework. By emphasizing the strategic elements and forces behind institutional change, this approach tends to present this as the result of strategic and skillful action by entrepreneurs who “narrate and theorize change in ways that give other social groups reason to cooperate”. However, as we will see below, such strategic and conscious explanations constitute only one of several possible perspectives underlying individual behavior. In order to understand the mechanisms underlying institutional change, it might thus be necessary also to apply other theoretical perspectives.

**Key concepts I: Roles**

A key concept emphasized by the normative branch of institutional theory is the notion of roles. Defined as “patterns, as configurations of goals, attitudes, and behaviors that are characteristic of people in particular situations”, the concept of roles draws attention to an often-occurring standardization of human action. Roles can be generated from formal positions – for example the position of central bank governor – in which an actor is expected to behave in a particular way, or they can take shape over time from informal interaction that creates expectations of a certain behavior. An important aspect of this concept is that a role not only imposes constraints on social behavior: by being associated with certain rights and privileges, it also empowers and enables social action. According to the underlying behavioral assumptions of economic institutional theory as defined by Douglass
North, we have seen that the key question for an individual in a social setting would be: *What are our interests in this situation and how do we fulfill them — by manipulating or adapting to the institutional framework?* In contrast to this ‘cost-benefit’ logic, the normative branch of institutional theory argues that rational action is grounded in social contexts that specify appropriate means to particular ends.

This generates a different key question for individuals: Given my role in this situation, what is expected of me? According to the normative branch of institutional theory, values and normative frameworks structure the actors’ choices by, on the one hand, defining what preferred or desirable goals are and, on the other hand, specifying the suitable way to pursue these goals. However, even if the values and normative institutions are often internalized, this does not imply that human behavior is unreasoned or automatic. Since institutional rules have to be adapted to every particular situation, actors must select and interpret the appropriate rules. And in this process of selection and interpretation, the normative branch of institutional theory assumes that actors will attach more importance to environmental expectations than to their personal preferences.

The concept of roles can add important perspectives to our understanding of how and why the individuals who participated in developing a new role for the central bank acted as they did. Rather than interpreting policy initiatives or confrontations as mere reflections of quests for power and influence, the concept of roles draws our attention towards the institutional context of these events and suggests that they alternatively — or partly — were attempts to meet environmental expectations. During the period of interest here, the expectations regarding the central bank and its governor were shifting from anticipations of political independence towards notions of the central bank as part of a politically controlled bureaucracy and the governor as a loyal civil servant. A question is thus how did the central banks respond to these changes and to what extent did the governor and his officials take new expectations of political loyalty into account. By applying the concept of roles as an alternative dimension to the notion of power-seeking strategists, we can thereby more easily explore and explain complexities in individual and organizational behavior.

**Key concepts II: Organizations vs. institutions**

In everyday language, the two concepts of organizations and institutions are often used synonymously. Large firms or organizations are referred to as institutions without any further reflection. Institutional theory, by contrast, provides a clear conceptual distinction between the two: institutions are defined as the formal and informal rules that regularize behavior, while organizations are viewed as a specific type of participant within this institutional framework. In the case of central banks, this conceptual distinction can add to our understanding of their
nature since they can be viewed as both organizations and institutions. On one hand, central banks are organizations that have to relate to a surrounding institutional context. In interaction with the political authorities, the financial markets and the general public, central banks have to take a wide set of rules, norms and values into account in order to perform their tasks effectively. And when this institutional framework changes, as it did from the inter-war period onwards, central banks would have to change their behaviors as well in order to survive. Hence, studying how the central banks operated as organizations becomes an important element in explaining the development of a new role after World War II. On the other hand, central banks constitute part of the institutional framework in which they operate. By virtue of its long history, its economic expertise and its traditional key roles in conducting monetary policy, the central bank had traditionally been an important generator of economic institutions such as legislation, directives, and informal rules as well as more abstract values and norms. During the post-WWII period, the position and tasks of the central bank changed, and an important question that arose was the extent to which the central banks continued to serve as part of, and further develop, the institutional framework that regulated economic behavior in general and the working of the financial markets in particular.

**Key concepts III: Central bank independence**

As mentioned earlier, during the post-WWII period there was a recognized discrepancy between the legislative status and the actual position, for example, the Bank of Norway. Despite political ambitions to control the central bank, the liberalist central bank law of 1892, which granted the central bank extensive operational autonomy, remained virtually unchanged until the mid-1980s. This discrepancy indicates that the concept of CBI is ambiguous and has to be discussed more thoroughly. Lexically the concept of independence is defined as the power to act, speak or think without externally imposed restraints. Based on this definition, a central bank would be politically independent only if it could act in whatever way it preferred. For central banks this will never be the case, since they are created as part of a political and economic system. Most scholars agree that whether a central bank has an independent or politically controlled position, the political authorities usually decide policy objectives and define a framework within which it has to operate. However, when it comes to the importance and nature of this framework the opinions diverge. Some scholars stress the element of conflict between the political authorities and the central bank when trying to define the concept of independence:

A central bank is independent if it can set policy instruments without prior approval from other actors and if, for some minimal period (...), the instrument settings clearly differ from those preferred by other actors.

By this definition, independence to a large extent reflects the ability of central
banks to resist political pressure. Thus, it is closely associated with the behavioral assumptions of the static-generalizing tradition of central bank literature that depicts central banks as more conservative and predictable than political authorities. This definition makes no acknowledgement of the fact that the socio-economic context surrounding central banks has changed over time and between countries and that in some periods central banks have been viewed as an integrated party of policymaking processes rather than a corrective of ‘lavish’ politicians. A definition that to a larger extent emphasizes how central banks are part of political systems is:

Autonomy is the scope allowed to the central bank to formulate monetary policy as it thinks best (...) in the light of the Government’s policy and the socio-economic situation.

This definition explicitly states that the degree of independence is a result of political decisions. It can more easily be applied to various cultural, economic and political settings, and therefore correspond better with the historical approach. This definition also acknowledges the fact that even independent central banks have to take the preferences of politicians into account, since ultimately it is the political authorities that can grant central banks independence and can thereby also abolish it. As Francis Sejersted has pointed out:

It is only on the surface that the CBs [central banks] can act independently. In a broader perspective the CBs must act as an integrated part of a political system which is designed to serve the common good and which has defined reasonable stability as desirable. The CBs can only confront the government in conflict as long as there is a deeper consensus on the policy pursued.

Most scholars who study the matter of independence quickly realize that there often are discrepancies between a central bank’s legal status and its actual role. Usually, central bank legislation only gives a rough indication of the actual role, and in some cases – as in post-WWII Norway – it can be directly misleading. Thus, scholars often establish a dual conceptual distinction between the formal, legal or de jure status of central banks, on the one hand, and their actual, behavioral or de facto position, on the other. According to this approach, the conventional view on the central bank during the post-WWII period would be that its de jure position was one of political independence, while its de facto role was characterized by total political control. It is observed that the central banks obtained a more influential role than usually assumed, one would find it necessary to introduce an additional conceptual distinction: the declared position of central banks. The concept of declared independence captures the publicly announced ambitions of the political authorities regarding the central bank, whether they wish to control it or to grant it independence. In our case, the declared position of the central bank is one
of total political control and organizational subordination to the Ministry of Finance. Then it remains to be seen throughout this study whether this declared position equals the central bank’s de facto role.

4. Historical Evidences of Changing Role

The Victorian era: in praise of the real bills doctrine:

The main concern of the great monetary writers of the Victorian age, notably Henry Thornton and Walter Bagehot, was how to reconcile adherence to the gold standard with the maintenance of financial stability, especially at times of panic and stress (though the Bank of England was also much concerned about the opposite problem of how to make the Bank Rate effective in times of confidence and expansion). The answers that came forth mostly took the form of certain rules of thumb, notably the Palmer rule for varying the Bank Rate (named after Governor Horsley Palmer of the Bank of England, which may, with the eye of faith, be seen as a kind of prototype Taylor reaction function) and the Bagehot rule for acting as lender of last resort, which latter is all too often misinterpreted.

But the rule, or doctrine, that it is desired to be focused on here is that concerns real bills. In this respect “real” does not mean “adjusted for expected inflation”, as now, but instead “real” in the sense of being based on actual, real, output and/or trade. “Real” interest rate is now correlated to “nominal” interest rate, whereas, “real bills” in Victorian times was considered as “speculative” or “finance bills”. Since “real bills” were based on real output and trade, monetizing them via central bank discounts could not create inflation, so the argument went on as the output and money kept rising hand in hand. Similarly, since they were based on trade/output, they would become quasi-automatically self-financing when the goods were eventually sold. In contrast, speculative, or finance, bills were drawn to support asset purchases, notably in stock markets, and hence generated unhealthy asset price bubbles and busts with accompanying (temporary) inflation and deflation.

During the Victorian era, governments tended to run (small) surpluses in peace-time years. Deficits were generally a function of war. So, the standard assumption was that government papers – bills and bonds – were not related to underlying output/trade. Thus, under this doctrine, the purchase of government debt was just as reprehensible as open market operations in finance, or speculative, bills. While it may seem crazy now, one reason why the Fed was so reluctant to undertake expansionary open market purchases of government debt in the depths of the Depression was that their model told them that this was quasi-automatically inflationary and wrong (Meltzer (2003)). One reason it is worth remembering this episode now is that it puts in context the (historically mistaken) claims that have been made by some economists that central banks should only now carry out open market operations in government debt.
Another reason for recalling the real bills doctrine is that it provided a unifying theoretical basis for both monetary policy (price stability) and financial stability. So long as discounts and lending were strongly directed to “real bills”, both price stability and financial stability would be jointly and simultaneously assured. Ever since this Victorian era we have lacked such a unifying theory. So now we wonder whether the single interest rate instrument can, or should, be made to bear double duty, to “lean into the wind” of asset price and credit fluctuations as well as stabilizing inflation, and its expectations; or whether a second set of macro-prudential regulatory instruments can be developed to maintain separate control of financial stability.

Of course, the real bills doctrine was wrong. It was wrong for the same reason that the real business cycle model, which lies behind DSGE models, is wrong: it assumes implicitly that the private sector is inherently self-stabilizing. So long as the government does not make everything worse by misguided intervention, the assumption was that output/trade would always return to equilibrium, so there would always be enough real bills to monetize to keep output at equilibrium and prices steady. When the Great Depression hit, this assumption collapsed. Deflation ensued.

**The decades of government control, 1930s–1960s: the subservience of central banks:**

The Great Depression and the accompanying collapse of the gold standard represented a huge failure for central banks. Their objectives, their models and their mental framework all fell apart. Moreover, there was another model waiting in the wings, that of socialist control by government, a model which was given a massive extra boost by the need to direct economic resources to the conduct of World War II.

Certainly there was not much theory behind the government takeover of monetary policy: it was pragmatic. Initially, with continuing depression and deflation, governments pressed for low interest rates once the gold standard had been abandoned, and with that for devaluation, at least against gold. Thereafter, with an excess demand for resources during World War II, the standard procedure was to control demand by direct rationing rather than by the price mechanism. By the time rationing ended, the selection of the official interest rate had become established in most countries as a government exercise, not only in wartime but at all times. This was, perhaps, least so in Germany (after World War II), Switzerland and the United States, where central bankers had, for a variety of reasons, some room for maneuver and ability to face down political pressures. But for most other countries, the politicians, not the central banks, directed monetary policy. This is not to say that central banks in these more subservient countries had no influence on the conduct of monetary policies. They were treated by the relevant minister(s)
as expert advisers, alongside the civil servants in the ministry of finance (treasury). But the minister usually paid much more attention to the economists in his own ministry; after all, they had his ear. In contrast, the central bank, certainly in the United Kingdom, emphasized its knowledge of market behavior. These years, the 1950s and 1960s, were a period when in the United Kingdom and some other countries, the swollen wartime national debt was only slowly being worked off, and the foreign exchange markets were often fragile during the Bretton Woods pegged-but-adjustable exchange rate regime. Under these conditions, should the central bank warn that “markets would not like” some proposed policy changes, then ministers would listen with attention. In the United Kingdom, both the central bank and the Treasury fiercely guarded those areas where they dominated. The Treasury refused to allow the Bank of England to publish its own economic forecast, and sought to censor the economic commentary in the Bank’s Quarterly Bulletin. In turn, the Bank became exercised and hostile should the Treasury attempt to second (junior) staff to City financial institutions in order to gain market expertise.

With interest rates being held generally low to support investment and lessen the cost of servicing the national debt, there was a need for some additional policy to prevent undue credit expansion, which might threaten both the current account and inflation. This was provided by direct quantitative controls, of one kind or another, over bank lending, reinforced by exchange controls over international capital movements and controls over leasing terms, access to capital markets, etc. In the United Kingdom there was an attempt to get away from direct controls over bank lending in 1971 with the adoption of the policy of “Competition and Credit Control”. But the Heath government was not willing to allow interest rates to rise sufficiently high; the policy failed, and a final version of direct lending controls, known as “the corset”, was reintroduced in 1974 and lasted until 1981.

One of the lessons that had been learnt, rightly or wrongly, from the financial collapse in 1929–33 was that competition within the financial system was dangerous to the maintenance of stability. Such competition pared profit margins and hence the build-up of capital buffers. It encouraged banks to take on more risk in pursuit of higher profits. The more oligopolistic banking systems, for example in Canada and the United Kingdom, had fared better than the more competitive and less diversified system in the United States. Consequently, many of the “reforms” enacted in the 1930s were intentionally anticompetitive, limiting the interest rates that could be paid on deposits and limiting the scope of business that various groups of intermediaries could undertake. Thus housing mortgages would only be provided by some specified group of mortgage, housing finance, intermediaries, credit provision or personal sector purchases of consumer durables by another financial group, and so on.

In many countries during this era, not only was the amount of private sector credit
expansion constrained, but so also were the rates at which they could do such business. Given these constraints, financial intermediaries naturally satisfied the demands of their biggest and safest customers first. There was no call for financial innovation; bank managers were trained to say “no”, rather than “yes”; and they, and their counterparts in mortgage banking, followed the 3:6:3 rule, i.e. borrow at 3%, lend at 6% and be on the golf course at 3 pm. Lunches were long and liquid. The current nostalgia for the controlled conditions of the postwar period is misplaced. But such a controlled system is, by and large, a safe system. Between the Great Depression and the 1970s there was a comparative dearth of bank failures.

**Crisis frequency**

<table>
<thead>
<tr>
<th>Year</th>
<th>Banking Crises</th>
<th>Currency Crises</th>
<th>Twin Crises</th>
<th>All Crises</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880-1913</td>
<td>2.30</td>
<td>1.23</td>
<td>1.38</td>
<td>4.90</td>
</tr>
<tr>
<td>1919-1939</td>
<td>4.80</td>
<td>4.30</td>
<td>4.03</td>
<td>13.17</td>
</tr>
<tr>
<td>1945-1971</td>
<td>0.00</td>
<td>6.85</td>
<td>0.19</td>
<td>7.04</td>
</tr>
<tr>
<td>1973-1997 (21 Countries)</td>
<td>2.03</td>
<td>5.18</td>
<td>2.48</td>
<td>9.68</td>
</tr>
<tr>
<td>1973-1997 (56 Countries)</td>
<td>2.29</td>
<td>7.48</td>
<td>2.38</td>
<td>12.15</td>
</tr>
</tbody>
</table>

*Source: Eichengreen and Bordo (2003), Table 3.5*

This was *not* due to any exertion of effort by central banks to maintain systemic stability; instead, the controlled, constrained financial system was just a safe, but dull, place. Indeed, the general absence of financial stability problems meant that experience and interest in this field in central banks eroded. At the onset of one of the first episodes of instability, the fringe bank crisis in the United Kingdom in 1973–74, the Bank of England entrusted all supervisory duties to one fairly senior official, the Principal of the Discount Houses, and four or five more junior officials.

So, if during this era the central bank, at least in many countries, did not set the official interest rate, since the relevant minister did, and did not exert much effort in maintaining systemic stability, since the framework of controls saw to that, then just what did it do? It had three main roles: (i) advice on policy; (ii) the administration of the system of controls, and (iii) the management of markets.

Although the monetary policy, both domestic and international, was generally set by the relevant minister, s/he did listen to the advice of the central bank. Whereas on domestic monetary issues the economists at the treasury (ministry of finance) generally had greater influence than those at the bank (though not in Italy, where the Bank of Italy developed an estimable reputation), the expertise of the central bank on international monetary issues was unrivalled either in the treasury or in the
foreign office.

Perhaps the greatest use of manpower in many central banks in this era was in the administration of the government’s panoply of controls. In terms of sheer numbers, the Exchange Control Department was the biggest segment of the Bank of England in the 1960s. Acting as a go-between amid the ministry setting the control, often with little understanding of the financial sector, and the regulated financial sector, complaining bitterly and sometimes validly about their imposition, was not a role that central banks relished.

It was in their third role, overseeing the management of markets, that the real kudos was to be found. The three most important positions in the Bank of England, below the Governor and his Deputy, were those concerning the management of the three key markets: the gilt-edged market, the money market and the foreign exchange market. Debt management, liquidity management and foreign exchange operations were central and crucial. Whereas in all these cases the overarching policy strategy was ultimately decided by the government, the parameters of what strategy might be possible lay in the hands of Bank officials, whose tactical skills and experience were renowned.

1980–2007 The triumph of the markets

The caged and constrained financial system of the early post-World War II system was, of course, inefficient. What brought it down was market pressure, as improved information technology encouraged greater international competition. Those less constrained by regulation sought to garner quasi-rents from the more constrained. The first location where this took place was in the newly developed Eurodollar market in the late 1960s. Central bank Governors, meeting at the Bank for International Settlements (BIS) in Basel, quickly identified this market as posing a serious challenge to their prior cozy domestic control systems, and set up their first standing subgroup, then called the Euro-Currency Standing Committee, to monitor its development. But the authorities could not prevent the advent of this market facilitating international capital flows, despite exchange controls. Such capital flows undermined the pegged, but adjustable, Bretton Woods exchange rate system, since it was usually obvious who the potential candidates for devaluation or appreciation were; the speculative profits (enjoyed by the “gnomes of Zurich”, as Harold Wilson termed the speculators) from this one-way bet could be huge. The Bretton Woods system finally collapsed in 1972–73.

Before that collapse, all other countries had pegged on to the United States, so faster-growing countries, like Japan, had higher inflation than slower-growing countries, such as the United Kingdom, owing to the Balassa-Samuelson effect. In the United States itself, inflation was restrained by the instinctive, pragmatic monetarism of Fed Chairman McChesney Martin, under periodic attack from more expansionary (and Keynesian) pressure from presidents and Congress.
Once the Bretton Woods system had broken down, it allowed countries, previously restrained by balance of payments constraints, to “go for growth”, and a worldwide boom ensued, punctuated by the 1973 oil price shock. A period of debate between monetarists and Keynesians was accompanied by a decade of confused policymaking in the 1970s and high and variable inflation. This was ended in 1979 by Volcker’s adoption of the (non-borrowed) reserve base system, which quickly led many other countries to adopt a roughly similar policy of pragmatic monetarism and monetary targets. But the short-term instability of relationships between monetary growth, however measured, and nominal incomes and inflation soon led to the abandonment of such targets; “We did not abandon the monetary targets: they abandoned us,” Governor Bouey of Canada quipped in 1982.

The story of the search, thereafter, for some other anchor for policy, and its (chance) discovery in 1988 in New Zealand in the guise of an inflation target is well known. What is perhaps less often realized is that the setting of the official interest rate in order to hit the inflation target does not need to be done by an (independent) central bank. It can just as easily (in an operational sense) be carried out by the ministry of finance. Indeed, in the United Kingdom, Chancellors of the Exchequer had the final say on the choice of interest rate from 1992–93, when, after ejection from the European Exchange Rate Mechanism, the United Kingdom adopted an inflation target, until 1997, when Gordon Brown gave the Bank of England operational independence.

What such operational independence for the central bank provides is credibility for the policy of inflation targeting. In contrast, a Minister of Finance has conflicts of interest. The best known conflict is the desire for a more expansionary policy (especially before an oncoming election). But almost as pressing, when the national debt is high relative to taxable capacity, is the minister’s desire to keep the interest burden low. Central bank operations in public sector debt and in rate setting have an immediate and direct fiscal impact. As the burden of national debt will now rise once more, questions of coordination between fiscal policy, debt management and interest rate setting, which have been largely in abeyance in the last couple of decades, will come to the fore again.

Meanwhile, the development of the Eurodollar market in particular, and of the global financial system in general, was changing the nature and structure of banking, and with it of the regulatory approach to the industry. Previously banks had felt constrained by the available stock of (essentially retail) deposits held with them, whose total was largely outside a banker’s control. Their margin of freedom to expand (or reduce) loans to the private sector, given the quantum of such deposits, lay in their ability to offload (or buy) marketable public sector securities (liquid assets). Fortunately for the banks, they had been stuffed full of government debt during World War II and so entered the postwar period in a highly liquid form. So, their ability to expand loans, when direct controls were not biting, seemed to lie in
their holdings of such liquid assets. In response, theories about the money supply (Sayers (1967)) and regulation then (1950s and 1960s) focused much more on liquidity, and a variety of required liquidity ratios.

All that got blown away by the development of the Eurodollar and other wholesale markets. Now a banker was no longer constrained by a combination of exogenous retail deposits and available liquid assets. If the banker wanted more funding, he could just borrow it in wholesale markets. Funding liquidity had replaced asset liquidity.

What, then, determined the size of banks’ books? Not cash, since the central bank had to provide enough cash to keep market rates in line with the official rate; not liquid assets, for the above reason. The answer, of course, was capital. But here there was a problem for the regulators. First, while more capital would make a bank safer, it would, given the unpriced insurance given to bank depositors/bond holders and the tax wedge, lower the return on equity (ROE). In banking, the Modigliani-Miller theorem did not hold. So, limited liability equity holders would encourage bankers to adopt riskier strategies (Bebchuk and Spamann (2010)) – an encouragement that bankers hardly needed to don their vestments as “Lords of the Universe”.

The second concern was that the collapse of a bank, because of a combination of size and interconnectedness, would cause contagious externalities. The financial system was subject to various self-amplifying mechanisms in both the upwards (bubble) and downwards (bust) phases of the credit cycle. For both these reasons, banks could not be expected, of their own independent volition, to hold sufficient capital, in order to obtain the best social trade-off between risk and return. Indeed, by the mid-1980s capital ratios amongst banks had been declining quite steadily and sharply for some time.

The catalyst to enforce regulatory change was the Mexican/Argentine/Brazilian (MAB) crisis of 1982. During the 1970s, western, mostly US, commercial banks had intermediated successfully between oil exporting emerging economies, such as Saudi Arabia and Kuwait, and oil-importing emerging economies such as Argentina and Brazil. With other commodity prices quite high and real interest rates low, and often negative, the borrowers had no problems servicing their debts. Paul Volcker’s regime switch utterly altered the context. Real interest rates rose steeply and commodity prices tumbled. Neither the borrowers nor the bankers saw the danger quickly enough, lulled by Citibank’s CEO, who erroneously believed that “sovereign countries do not default”. In 1982, MAB threatened to do just that. Even without default, the secondary market valuation of such loans fell so far that, on a mark to market basis, most US city centre banks were insolvent.

Congress was outraged (every financial collapse – 1907, 1929, 1982, 2007–08 – provokes Congressional rage; Wall Street is not beloved on Capitol Hill) that the
banks had put the financial system in such a fragile state, and wanted to insist that all the US banks establish a stronger capital base. But the banks complained that they would then lose business to foreign, especially Japanese, banks which would not be subject to such reinforced requirements. So Volcker was mandated by Congress to go to Basel to put pressure on the Basel Committee on Banking Supervision (BCBS) to agree on an international standard for bank capital. Difficult negotiations resulted in the Basel Accord of 1988, now often termed Basel I. The choice of the mandated capital requirements – a minimum of 4% of risk-weighted assets for Tier 1 capital, and of 8% for Tier 1 plus Tier 2 capital – was not based on much empirical analysis, e.g. stress tests, nor on any theoretical consideration of what might be necessary (for what? or why?), but rather on the pragmatic basis that this was the highest numerical requirement that could be reasonably expected to be reached, after a transitional period, by the main commercial banks from their current starting point without causing them or their economies undue stress.

The initial risk “buckets” in Basel I were crudely defined, which gave banks an incentive to securitize those loans/assets whose regulatory requirement was excessive, and to hold those assets where the regulatory requirement was comparatively too soft. It was this latter failing that brought about the further negotiations leading up to Basel II, whereby the risk weightings were to be based on (the banks’ own) risk assessments (the internal ratings-based (IRB) approaches). While altering the risk weightings, Basel II made no significant changes to the definition, or required quantum, of capital. The implicit belief was that this arbitrarily chosen level of capital should suffice to act as a guarantor of continued bank solvency. With bank solvency thereby assured, banks should face no difficulty in meeting any (temporary) liquidity requirements by borrowing in efficient, broad wholesale markets. These comfortable assumptions fell apart in August 2007.

Meanwhile, the trend in credit expansion to the private sector had for several decades comfortably outstripped the trend growth in bank deposits, (Schularick and Taylor (2009)), though quite why this was so remains unclear. Commercial banks had responded by:

(i) selling off their liquid public sector debt;

(ii) borrowing more and more, often on a short-dated basis, from wholesale markets; and

(iii) securitising their loan books (originate to distribute).

All this reinforced their exposure to, and fragility in the face of, a malfunction in such wholesale markets.

Moreover, during the years of confidence and asset price boom, banks were taking on additional leverage, in each case subject to their own particular set of regulatory requirements. Both US investment houses (broker-dealers) and European banks
were subject to Basel II, but not to a simple leverage ratio. So they increased leverage sharply by filling their portfolios with highly rated (AAA) mortgage-backed securities (MBS), which carried a minuscule risk weighting. In contrast, US commercial banks were subject to a simple leverage ratio, but not at that time to Basel II. They exploited their position by taking on the riskier tranches of MBS.

Indeed few – whether bankers, regulators or economists – perceived this overall fragility, though many realized that risk was being underpriced. A reason for this blindness was the procyclicality of Basel II (since risk seemed low, risk-weighted capital appeared to rise!), and of mark to market accounting (when asset prices rise, the resulting capital gains in trading books go straight into profits and enhanced capital). Never had the profitability and capital strength (over the last couple of decades) of the banking sector seemed higher; never had market appreciation of bank risk, as measured by banks’ CDS market prices, seemed more sanguine than in the early summer of 2007. With the benefit of hindsight, a populist frenzy now blames the excesses of bankers for putting the system at risk, and the weakness (light-touch) of regulators/supervisors for allowing this to happen. But at the time, neither bankers nor regulators, nor virtually all commentators, had any appreciation of the (systemic) risks that were being run.

Whether or not the inevitable “blame game” is worthwhile or justified, the experience of financial crisis, panic in September 2008 to March 2009, and nearly widespread financial collapse, has been so unnerving and shaking that there are likely to be far-reaching consequences to the operation and regulation/supervision of the financial system in general, and to the role and functions of the central bank in particular. It is to this latter subject that we now turn.

5. The future role of the central bank

In the years prior to August 2007, central banks had appeared to have almost perfected the conduct of monetary policy. The standard regime was one in which the central bank was delegated operational independence to vary the official short-term interest rate in order to achieve an inflation target, which in turn was mandated either in general or in specific numerical terms by the democratically elected government. We now recognize that the achievement of price stability by this procedure does not guarantee financial stability. That raises, first, the question whether this standard procedure, whereby the central bank dedicates setting the official interest rate to the achievement of its inflation target, should be radically altered. The answer to that, which have developed in other papers – and which will not be rehearsed again here – is no. The implication of this answer is that a separate additional set of (macroprudential, regulatory) instruments will need to be developed for the specific purpose of maintaining financial stability.

The second question related to the role of central banking, then, is what their role in this latter exercise will be. Should the central bank also be in charge of systemic
financial stability; or, if not, what should be its relationship with the systemic regulator? This is a good entry point for examining the changing role of central banks, since the answers, in my view, depend on and reflect the essence of central banking as an institution.

**The essence of central banking**

Whereas the systemic stabilizer may or may not be allocated a new and shiny set of macroprudential instruments to operate, such as (possibly time- and state-varying) capital, liquidity and leverage ratios, the traditional focus of stabilization has been the central bank’s capacity to lend, and thus to create liquidity, either to an individual bank, as the lender of last resort, or to the market as a whole, via open market operations (OMOs). It would cause massive complications if liquidity management remained the sole province of the central bank while a separate financial stability authority was to be established without any command over liquidity management. It can infer from that that the financial stability authority has to be given command over liquidity management; but that also implies that the financial stability authority would have command over the central bank balance sheet. Indeed, the financial stability authority would then, de facto, become the true central bank.

Lord Cobbled, former Governor of the Bank of England, is reputed once to have said, “A central bank is a bank, not a study group”. It can take this to mean that the essence of central banking lies in its power to create liquidity, by manipulating its own balance sheet. The question is often asked whether a central bank that sets interest rates should also manage financial stability. This question is put the wrong way around; it should be whether a central bank that manages both liquidity and financial stability should also be given the task of setting interest rates.

Unlike the essential role of liquidity management, setting official interest rates is not essential for a central bank. As we already saw in the opening historical section, in many countries and for many decades, it was done by a politician, not the central bank. It could easily be done by a “study group”, as many monetary policy committees really are, and they could be formally separated from the central bank without much loss. Or indeed interest rate setting could be done by a coven of Druids casting runes over the entrails of a chicken. What is important is not so much as who does it as how it is done; the need is for a reaction function that restores equilibrium smoothly and surely after some adverse demand or supply shock. We shall, however, leave until later our initial question of whether the liquidity managing central bank, charged with financial stability oversight, should also set the official interest rate.

One of the main concerns of the Bank of England in the 19th century was how to make its Bank Rate effective in the market. Under normal circumstances, the main task of the monetary management desk in central banks is to undertake OMOs so
as to drive market rates into line with the separately set official rate. At such ordinary times, this is a somewhat humdrum exercise, hardly noticed by most people but of considerable technical interest to the cognoscenti. But, under conditions of financial disturbance and crisis, liquidity management takes on a life of its own, potentially independent of official interest rates. This is patently obvious once nominal interest rates hit the zero lower bound, so that subsequent unconventional measures, whether quantitative easing, credit easing or the ECB’s suite of market measures, all involve OMOs and manipulation of the central bank’s balance sheet. But even when interest rates are above the zero bound, there is a range of freedom to operate liquidity management independently. This margin of freedom may now, perhaps, be greatly augmented by the generalized adoption of the “corridor” system for managing short-term interest rates. In principle at least, the corridor system could be so managed that liquidity policy and interest rate policy could be varied in a largely independent fashion. Thus, for example, official interest rates could be raised to counter speculative attacks on the exchange rate, while at the same time the liquidity of the domestic financial system could be maintained, or even enhanced, leaving market rates at the lower edge of the corridor. For the time being, central banks are still experimenting with the extra degree of freedom that the corridor system has given them. During the financial crisis many of the innovations in liquidity management were a somewhat ad hoc response to each new twist of the crisis. Looking forward, there is still much to learn and discover in this field.

One of the more contentious topics in liquidity management is what should be the set of assets in which the central bank should operate and hold on its balance sheet. Again, as we noted in the historical section, fashions change. Under the real bills doctrine, the commercial paper of the private sector was the preferred asset for OMOs. Since World War II, the preferred asset has, in most countries, become government short-term paper, bills or short-dated bonds. But some more fortunate countries have not had to develop a broad market in their own government paper, and they carry out liquidity management through other assets, in some cases foreign exchange, as in Switzerland or Hong Kong SAR.

Whatever asset is used for OMOs, it is likely to have fiscal consequences. For example, the United Kingdom’s quantitative easing has had massive fiscal consequences. Indeed, it is precisely because the fiscal consequences of setting interest rates and undertaking OMOs in public sector debt are so great that their exercise has been delegated to the central bank, to avoid politicians being subject to massive conflicts of interest.

The concern about the choice of market for central bank operations should not be so much on its fiscal implications, but rather on the extent to which such intervention might distort relative prices and have a distributional effect, benefiting one set of borrowers rather than another. But this raises a question and a problem. When
some financial markets malfunction, so borrowers in that market suffer relative to the rest of the economy, would central bank intervention directly in that market just restore the status quo ante, and thereby stabilize an adverse distribution, or is that intervention having a distributional effect which central banks ought to eschew? For fervent adherents to the efficient markets theory, there is no contest. For everyone else, the issue is much more nuanced. Fed credit easing, for example in the commercial paper and MBS markets, is a case in point. In practice, such questions will probably usually be answered pragmatically, “needs must”, and such a pragmatic response is, to my mind, preferable to one based on theoretical ideology.

**Interactions with government**

One of the attractions, to many economists and others, of the standard inflation targeting regime was that the choice of interest rates could be made independent of government, in order to achieve an objective democratically mandated. That same separation and independence is not really feasible in the central bank’s pursuit of its financial stability objective. We have already discussed how a central bank’s liquidity management, and especially its unconventional measures, will have both fiscal and distributional consequences. Here we shall consider five further ways in which the central bank and the government may need to interact.

### (i) The bank tax:

The imposition of a tax on banks is an idea whose time has come, especially since US President Obama called for such a tax in January 2010. Governments’ fiscal positions are so stretched, banks and bankers are so unpopular, and the tax can be justified as a quid pro quo for potential future or past taxpayer support of the banking/financial system. Although the parameters, tax base and most other details have yet to be determined, a bank tax is likely to be adopted, either unilaterally in many countries or internationally. The analogy, which Perotti (2010) makes, is with the inflation tax and seigniorage. There is a temptation for politicians to make excessive use (from an overall social welfare standpoint) of the inflation tax. So a solution is to mandate the central bank to hold inflation at a desired, low and stable, level, but to pass the proceeds of seigniorage to the government. By the same token, governments could be tempted to impose a tax on the banking system that would not optimize social welfare, either by failing to operate in an ex ante preventive fashion, or by being so draconian as to impede the essential intermediation and allocated functions of that system. Perotti’s idea is to combine a low basic tax rate with prudential, time-varying surcharges: “Variable surcharges should be chosen by a macro prudential council where central banks play a significant role.” The revenue from both the basic rate and the surcharges would flow to the government.

Whatever may be thought of this particular idea, a bank tax will have financial stability implications. It would surely be wrong to introduce such a tax without a
full exploration of the relationship between the tax and the financial stability objective.

(ii) Sanctions: The Basel Committee on Banking Supervision has no formal legal status, being only an advisory standing committee to the G10 central bank Governors meeting at the BIS in Basel. It could only put recommendations and suggestions to the Governors. Understandably, but regrettably, they interpreted this as meaning that it was for each nation state, not for the BCBS, to decide how the proposed standards, especially the capital ratios, should be enforced. So the BCBS never discussed how sanctions might be imposed for shortfalls below the proposed ratio(s).

In effect, with no discussion of a ladder of increasingly tough sanctions, the Basel requirements became treated by everyone as minima, to be observed at all times. But, as already noted, such requirements were intentionally designed to raise capital levels above those that banks would want to keep of their own accord. So the available margin of safety, the buffer of excess capital beyond that required, was generally kept quite low by the banks. This led to a poor outcome, in that banks held a stock of required capital that could not be trenched upon without signalling a crisis occasion, while the usable buffer was just too small. An example of an appropriate ladder of sanctions is given by the FDIC Improvement Act of 1991. The BCBS and the Financial Stability Board (and the ECB and the European Systemic Risk Board) must overcome their hesitancy about advising on patterns of sanctions. For example, if banks had been prevented by regulatory sanctions from paying out dividends in the crisis, the system would have been much more robust. But sanctions, like taxes, such as the prospective bank tax, depend on (national) democratic legislation and the rule of law. Thus, the systemic supervisor in each country will have to engage with their own government to get the appropriate pattern of sanctions (and taxes) applied. Regulators have consistently tried to avoid such engagement. That should not continue.

(iii) Debt management: For over three centuries (1694–1997), a prime function of the Bank of England was to manage the national debt. But as that debt declined, both as a percentage of GDP and in relation to the size of the financial market, debt operations became simpler and standardized, falling into a routine pattern. Much the same happened in other countries. Under these circumstances, the transfer by Chancellor Gordon Brown in 1997 of such management to a separate and specialized Debt Management Office was hardly noticed or remarked, except by a few historians. But now, many countries face the prospect of sharply rising debt levels, to a point that may, once more, test the confidence of market participants. Debt management is again becoming a critical element in the overall conduct of policy, as events in Greece have evidenced. Debt management can no longer be viewed as a routine function which can be delegated to a separate, independent body. Instead,
such management lies at the crossroads between monetary policies (both inflation targets and systemic stability) and fiscal policy. When markets get difficult – and government bond markets are likely to do so – the need is to combine an overall fiscal strategy with high-calibre market tactics. The latter is what central banks have as their métier. During the coming epoch of central banking, they should be encouraged to revert to their role of managing the national debt.

(iv) Bank resolution: A central bank can only provide liquidity; it cannot provide capital. If liquidation of a failing bank cannot be allowed and the market will not provide more capital, then the only remaining recourse is to taxpayer funding. That implies that politicians must have, on behalf of the taxpayer, a leading role and concern in resolution policies and mechanisms, and indeed in the preventive policies that the central bank, as systemic supervisor, may be putting in place. As long as taxpayer funding, or (partial) nationalization, of failing banks remains a possibility, the relevant minister must be involved at all times, and in charge of the resolution exercise itself. Of course, the necessary involvement of the political authorities could be much reduced if “too big to fail” (TBTF) or “too interconnected to fail” never held. And there have been numerous proposals to try to prevent the need for future taxpayer funding and TBTF. For example, Senator Dodd’s bill, as of April 2010, will put more weight on the:

(i) prior completion of living wills or “funeral plans”;
(ii) accumulation of a bank-financed “orderly liquidation fund”; and
(iii) imposition of haircuts on unsecured and secured creditors in order of seniority.

While there are good arguments in favor of such proposals, many doubt whether such an “orderly liquidation process” will suffice to end TBTF. The losses that may need to be absorbed, partly as a result of fire sales into unwilling markets, are likely to deter investors from putting additional capital into other banks. So the dynamic market process, as began to emerge after the Lehman bankruptcy (and before the capital injections by governments), could bring a large proportion of the financial system towards default simultaneously. Can any government seriously envisage liquidating half (or more) of its banking system simultaneously, and if they did press on with such massive liquidation, would they be sensible to do so.

Even in the case of one large bank, and even assuming that depositors could be provided quickly with transaction balances elsewhere, the withdrawal of access to funds by borrowers with unused credit facilities could have a devastating effect on them, especially if the liquidator sought early repayment of outstanding loans. This is not the place to go into more radical ideas, such as Larry Kotlikoff’s mutual banking (similar to Islamic banking, with similar drawbacks), or making all banks “narrow” or tiny, or both. They will not happen, and for good reason. The upshot is that government insurance of the systemically important parts of our financial
systems will remain in place for the foreseeable future. As the ultimate provider of such insurance, governments will want, and need, to maintain a close involvement with the conduct of systemic stability.

**(v) Interest rate setting:** Many have argued that liquidity management is integral to the management of systemic stability and the essential core of the operation, and raison d’être, of a central bank. Thus the institution running systemic stability will be, in practice, the central bank. But this institution does not necessarily also need to set the official interest rate. Should that be hived off to a separate body.

Throughout this subsection, many have emphasized that the central bank in its systemic stabilization role will have to work closely with government. Indeed, despite the patent, but in the end hopeless, desire to get away from TBTF, many see the linkages between central bank and government becoming stronger, as the bank tax, the need for a ladder of sanctions and the much enhanced role of debt management all conspire to drive government and central bank back into each other’s arms.

One of the arguments for separating interest rate setting from central banking (and systemic stability) is that the former depends on its credibility for independence, whereas the latter is conjoint with government. I have never been much swayed by this. An institution can wear two hats simultaneously. A similar argument is that the combination of responsibilities would lead to conflicts of interest. Again, it would tend to argue that the main failures of central banks, as interest rate setters, have lain in taking too little account of financial conditions and monetary developments. Possibly a more persuasive argument is that the combination of operational independence to set interest rates and liquidity management together with prospective macroprudential regulation just vests too much power in a non-elected body. There is some force in this.

Arguments against separation mainly rely on the necessarily intimate connection between the two facets of monetary policy. For example, once the zero lower bound to interest rates is reached, then monetary policy, in the guise of inflation targeting, and systemic stability issues become indistinguishable. If you had an MPC separate from the central bank, who would decide on credit easing, or QE-type measures? And when the official interest rate rose above the zero bound, who would decide on the width of the corridor, or the terms and conditions of access to the discount window? One could envisage a completely separate body, whose sole function would be to determine the official interest rate, but I somewhat doubt whether this would be the most sensible approach.

**Interactions with other regulators/supervisors at home and abroad:** The regulator in charge of systemic stabilization – which we assume, for the reasons given, to be the central bank – should also be a direct supervisor of the main systemic financial intermediaries. It should also have unquestioned supervisory access to
such other banks and intermediaries which it considers may cause, or be involved in, systemic problems. But it need not, and probably should not, be the sole supervisor of even the most important and largest banks. Except in relatively small countries, or countries with few skilled professionals, there is little to be gained by concentrating all supervision within a single institution. Indeed, when the focus of supervision differs between supervisory institutions – between the economic, market-based focus of the systemic supervisor and the more accountancy-oriented, legal stance of the micro-prudential supervisor – there may instead be actual benefits from having large and systemic intermediaries seen from two differing viewpoints.

 Particularly if the central bank combines interest rate setting with its essential roles of liquidity management and systemic stabilization, there is some question whether its role and functions are reaching the acceptable limit for a non-elected body within a democratic society. Under these conditions, it would, in my view, be unwise and inappropriate to also give the central bank the task of micro-prudential supervision, even for the domestic banking system, let alone the much wider set of financial intermediaries, including various forms of investment funds and insurance companies. If the interest rate setting function were to be hived off to a separate body, then there would be more of a case for combining both macro- and micro-prudential functions within the central bank.

 But even then the central bank should seek to steer well clear of consumer protection issues, and should want to be consulted, but not take the lead, on questions about product designs, innovations and safety measures. Similarly the actual administration of the resolution of a financial intermediary, when subject to a special resolution regime, is best left to the microprudential supervisor, if separate, or otherwise to a specialist body.

 So, in a large, developed country there are likely to be, and should be, a number of regulatory/supervisory bodies with focused specialized purposes. There probably does need to be an oversight, coordinating committee. The proposal is that, in normal times and whenever discussing measures for preventing crises, that committee should be chaired by the Governor of the central bank, but that in crisis periods and whenever discussing measures for resolving existing crises, that it would be chaired by the relevant minister. The distinction between the two cases should not be hard to make.

 When we turn to the international (including here the euro zone) context, the problem of coordination becomes much more difficult. The basic problem is that the financial system is cross-border, if not global, whereas both the legal structure and fiscal competences remain national. There are two logical possibilities. The first is to make the financial system conform to national boundaries, but this would be anathema both to most of the cross-border financial intermediaries and, more
importantly, to all those upholding the single European market. The second is to harmonize a limited, but appropriate, set of laws relating to the resolution of cross-border intermediate (Avgouleas et al (2010)) and to provide some form of agreement over fiscal burden-sharing. What needs to be done to achieve the latter is now reasonably well discerned (Fonteyne et al (2010)). The problem remains to get political agreement to take this programme forward. In the absence of such agreement, the treatment of cross-border financial crises will remain a dangerous dark hole.

**Structural development in the financial sector:** Direct government intervention in the financial sector in our second epoch, the 1930s to the 1960s, was consciously so far-reaching that, to a large extent, the structure of intermediation was largely determined by regulation and controls. Then in our third epoch, 1980-2007, the ethos changed. The government set the overall framework, especially the rule of law and the monetary regime, but beyond that, structural changes were to be determined by the private sector market processes and innovations. Whatever met the test of the market was, prima facie at least, considered to be good.

Now we are moving back, perhaps somewhat unconsciously in reaction to the crisis, towards the second, more interventionist, mode. Perhaps in this coming epoch, intervention will be less draconian, less based on direct quantitative control, and more on the pricing mechanism, perhaps via bank taxes and graduated macro-prudential regulation. But such intervention will still shape the future structural development of the financial system. What worries me is that the debate on systemic regulation is almost entirely reactive and backwards-looking; that is, the focus is on how such regulation might, if in place, have prevented or mitigated the crisis of 2007–10. While this is inevitable, what is also needed is forward thinking about what should be the desirable future structure of our financial systems, and how the various regulatory initiatives proposed might help to get us there.

Central banks used to be concerned with such structural issues. They saw themselves as having a deliberate role to play in shaping the developing structure of the financial system. More recently, they have eschewed such a role. As we return to an epoch of greater government (and central bank) intervention in markets, central banks had better brush up their understanding of, and participation in, such structural issues.

**Summary:** The first (Victorian) and third (1980–2007) epochs of central banking were characterized by highly successful monetary regimes (the gold standard and inflation targeting), reliance on market mechanisms and independent central banks. After an interregnum post-World War I, the first epoch came to a crashing halt in the 1929–33 Depression, and deflation then led to a period of government domination, direct controls and subservient central banks. Now there is a good chance – but not a certainty – that we are entering a fourth epoch, in the aftermath

This is likely to involve some return towards the second epoch, with more intrusive regulation, greater government involvement and less reliance on market mechanisms. I would hope that we only go part way back. Instead of central bank subservience, perhaps we could have a more even-handed partnership. But the range and scale of interaction with government, on the bank tax, on regulation and sanctions, on debt management and on bank resolution, is likely to increase. The idea of the central bank as an independent institution will be put aside.

We do not see that this greater extent of interaction between central bank and government on those other fronts need not prevent the continuation of the present desirable procedure whereby the central bank also has operational independence to set the official short-term rate. But some will see an inconsistency. If so, their answer should be to hive off the interest rate setting function to a separate (study) group (of economists) but do not confuse the study group with the central bank.

As expected, Charles Goodhart has written an interesting and challenging paper, which starts with the historical background of central banking, and then discusses a key set of issues that face all central banks at present and that will continue to face us in the months and years ahead. As one read the paper, recalled a line of Paul Samuelson’s about what one expects from a paper: “It’s not whether it’s right or wrong that matters, it’s whether it gives you a good run for your money” – meaning that a good paper is one that makes you think hard about things you believe or think you know. This paper succeeds splendidly in that regard.

**Historical section:** The historical background on central banking is well worth reading. It includes a few teasers, such as the mystery line “… the Bagehot rule for acting as Lender of Last Resort, which is … all too often misinterpreted.” In discussion with Charles after the session at the conference, I learned that the misinterpretation concerns lending at a penalty rate. Many interpret Bagehot as requiring the lender of last resort to lend at a penalty rate relative to the market rate during the crisis. Goodhart’s interpretation is that Bagehot’s recommendation was that the lender of last resort should lend at a penalty rate relative to the normal market rate, i.e. relative to the market rate that the central bank expects will obtain after the crisis has been dealt with. Whether or not this is exactly what Bagehot meant, the advice is clearly logical.

This section also includes a persuasive answer to the question we must all have asked ourselves at some time: “How come there were so few financial crises or bank failures in the period after World War II, up to the early 1970s?” The relevant sentence is: “This was not due to any exertion of effort by central banks to maintain systemic stability; instead the controlled, constrained financial system was just a safe, but dull, place.” (p8). No doubt there were times during the last few years when many central bankers would have preferred to be in a safe but dull place.
The future of central bank cooperation:

Central bank cooperation has a long history. From the episodic efforts to support the 19th century gold standard to the personal interactions of interwar central bankers, to the institutionalized postwar efforts to maintain fixed exchange rates, to the post-Bretton Woods progress in developing standards for prudential bank regulations, central bankers have progressively consulted and coordinated their activities. Such cooperation has always been shaped by a few perennial parameters. Can central bankers agree on theory (end-means relationships)? To what extent can they agree on goals (social purpose)? Do they have the capacity (technical and institutional) to achieve their collective goals? Does the broader political environment facilitate or impede cooperation? It is easy to assume, in writing a paper on the “future of central bank cooperation,” that such cooperation is (1) easily observable (implicit in the assumption that a non-participant can meaningfully write about it), and (2) a good thing. Neither of these assumptions is without controversy, however. First, we can say that central bank cooperation is factually controversial. Looking over the historical record, there are important disagreements over whether, in fact, central bankers have cooperated at various historical moments. The passage of time does not seem to have settled the debate over whether, for example, central bankers in the 19th century were mutually cooperative or merely opportunistic. Much depends on how one defines cooperation. The dictionary defines it as “joint operation or action;” its antonym is “competition.” Joint action can be shallow or deep; deep cooperation is marked by policy adjustments that differ from those that would have been taken unilaterally, and which are taken specifically to address a collective good or mutual interest (Downs, Rocke, and Barsoom 1996; Keohane 1984). “Deep” central bank cooperation can be normatively controversial as well. Theoretical controversies rage about whether - and the extent to which - exchange rate or monetary policy coordination actually improves outcomes over well-designed unilateral policies (Obstfeld and Rogoff 2002). Moreover, to countries which are excluded from decision-making, policy coordination may look more like a cartel than cooperation. Global standards for the supervision and regulation of internationally active banks for example can be interpreted as serving disproportionately the interests of major banks in the leading jurisdictions. Some of the more profound forms of central bank cooperation can be expected to raise domestic political controversies as well: there are bound to be domestic voices concerned about the collective interests that might sacrifice an important national interest. The historical reluctance of the United States to officially allow the Federal Reserve to participate in the activities of the BIS largely reflects such a concern. Despite these concerns, central banks have accomplished a lot through collective effort, which bodes well for the future. Collectively produced and shared information is increasingly rich and user-friendly. Central bank independence from regular government interference is fairly (though not universally) robust, reducing (though not eliminating) political
frictions. Cooperation in some areas appears to be cumulative, involving positive feedback loops through which central bankers continue to develop and improve on past achievements, successfully learning while doing despite an increasingly complex global financial environment. In their collective regulatory capacity, for example, it is hard to imagine a return to the free-for-all that existed prior to the 1980s. Additionally, central banks also seem to have developed a reasonably robust response to financial crises, though efforts here have plateaued far short of acting as lenders of last resort. The ability of central bankers to assemble very short-term financial packages to contain crises (as a bridge to more substantial - and more conditional – IMF assistance) has been an important example of the rapid response of which central banks may be uniquely capable.

We have come a very long way from 1931. However, in areas such as setting exchange rates or other macroeconomic policies, central bank cooperation is as difficult and controversial as ever. At the theoretical level, there are important debates over whether central banks should do anything other than tend to domestic price stability. Optimism in the 1980s on the joint gains to be made from coordinating monetary policies has given way to greater skepticism that such coordination could ever really “get it right.” Legitimate questions have even been raised about the efficacy of official international intervention in foreign exchange markets of the major floating currencies. Moreover, with the imbalances reflected in rapidly expanding Asian, and particularly Chinese, dollar reserves, the global political economy is changing in ways that will challenge existing institutions and practices. This essay explores the future of central bank cooperation along with a continuum from “easy” to “difficult.” The first section lays the foundation for assessing future collaboration by observing the central banks and governors themselves. The second examines what I have been able to find on the state of the presentation and sharing of information among central banks. The trajectory here, I argue, is really quite positive. The third section discusses cooperative standard setting, and the fourth looks at extraordinary emergency central bank assistance. Finally, I examine the most difficult issue facing central bank cooperation in the near future: imbalance at the core of the international economy. I conclude with some observations about the political-economic and institutional environment.

**Cycles in history:** The idea that central bank independence and international central bank cooperation were conspiracies to divert money away from a national community was a commonplace argument 70 years ago, in the aftermath of the Great Depression. Figures such as the long-lasting Governor of the Bank of England, Montagu Norman, were first venerated (before the Depression), and then ridiculed and reviled. According to the retrospective diagnosis, Norman had pushed the overvaluation of sterling in order to restore Britain’s position as an international financial centre, but had in consequence starved the British industry of funds. Conspiracy theories about central banks abounded. In Britain, the left of
the Labor Party blamed the Bank of England for orchestrating a “Banker’s Ramp” which had used financial blackmail to force the government to cut unemployment benefits. In France, the left saw the Bank of France as controlled by its 200 shareholders, who represented the “two hundred families,” a sinister and powerful money elite. Central banks were blamed (rightly) for failing to provide currency stability; and blamed (mostly rightly) for having used their independence or autonomy in a political sense. The solution was popular control.

In the United States, Benjamin Strong, Norman’s close friend and Governor of the Federal Reserve Bank of New York – at that time the institution that managed the Fed’s international business – was believed to have fuelled the New York stock market bubble by holding interest rates down in 1927 and 1928 to comply with the demands of European central bankers. In an extreme version, the critique held that the major cause of bubbles, speculation and fraud was financial internationalism.

Norman’s leading critic was the Cambridge economist John Maynard Keynes. When it came to designing an international monetary system at the end of the Second World War, Keynes wanted to limit the power of central banks. The major new institution for coordinating international action, the International Monetary Fund, was to be run by finance ministries and treasuries, not central bankers. In other words, it would be firmly anchored in the structure of domestic political arrangements. The US administration wanted to close down the central bankers’ bank, the Basel-based Bank for International Settlements. The IMF would ensure that capital markets were tightly controlled, and that monetary policy could be made in a national setting.

One country went a different way, but that was because the rest of the world, for good reasons, did not trust the political process of that country. The German central bank, the Reichsbank, was recreated as an independent institution under the terms of the 1924 Dawes Plan and the London Conference. It had a new administrative council, of which half the members were foreigners, as a guarantee of its independence. But after 1933, under the Nazi dictatorship, it became subject to political control. In reconstructing the German economy in the wake of the Second World War, the US military authorities insisted on central bank independence, strengthening the position of the central bank at the expense of the government. By the 1970s, the Bundesbank was widely admired by other central bankers.

The discussions of central bank independence in Germany, both in 1924 and in the post-World War II era, emphasized independence from the government and political institutions, which had been in the eyes of Allied experts responsible for the pressures that led to hyper-inflation in the early 1920s. But it was not only independence from the government that mattered. Part of the pathology had lain in the subservience of the central bank to the interests of the financial and business community. It had not only discounted government paper, but had also offered credit
facilities to banks and to large and well connected businesses at low nominal and negative real interest rates. In consequence the central bank had to be doubly insulated, and taken away from pressures to yield both to politics and to finance.

By the 1970s, when the fixed exchange rate system invented at the Bretton Woods conference collapsed, central bank independence began to be fashionable again. In particular the German Bundesbank, with a firm legal guarantee of its independence, looked like an impressive model that yielded a better macroeconomic environment and greater growth. Academics and politicians followed the general public into thinking that inflation was damaging. Many central banks consequently wanted to be more like the German model. European monetary integration was founded on the idea that an institution created by international treaty and consequently endowed with cast-iron autonomy would give a better framework for making a strong European economy. Centre-left parties in Britain and France and elsewhere became enthusiastic converts to the idea of central bank independence. The process was best described as “tying hands” in order to prevent sub-optimal outcomes resulting from short-term political pressures.

6. The Changing Role of Central Banks in Market Economies

Among the main reasons for the emergence of central banks in Europe were the wars that ravaged the continent from the 17th century onwards and the consequent pressure this exerted on government finance. In brief, governments granted monopoly power over the note issue to a commercial bank and in return were given privileged borrowing facilities. This marked the beginning of the 'special relationship' between governments and their central bank. However, in most cases, recent years have witnessed enormous changes in the nature of this relationship. In particular, since the beginning of the 1990s, many governments have become convinced that the way to ensure price stability is to sever the institutional links between government and the central bank, leaving the latter to manage monetary policy free from political interference. The focus of this section is on the historical developments, which have underpinned this new monetary orthodoxy.

The nature of central bank independence:

The extent of central bank independence is assessed against two criteria: political independence and economic independence. Political independence, as defined by Grilli, Masciandaro and Tabellini (1991, p366), embraces three aspects of monetary policy:

‘(i) the procedure for appointing members of central bank governing bodies; (ii) the relationship between these bodies and government; and (iii) the formal responsibilities of the central bank. ... This is why we identify independence with autonomy to pursue the goal of low inflation.’

Defined in this way, political independence was greater in the earlier history of
central banks than in the present day. The fact that most of the central banks were established as private institutions gave them autonomy to make their own appointments, set their own regulations and pursue their own objectives.

Economic independence, on the other hand, is defined by Grilli et al. (1991 p.368) as the freedom of a central bank to choose the instruments of monetary policy with regard to:

‘(i) the influence of the government in determining how much to borrow from the central bank; and (ii) the nature of the monetary instruments under the control of the central bank’.

Central banks were established mainly to provide finance for governments to wars. Consequently, despite the high degree of political independence accorded to central banks, until recently they were granted far less economic independence. The major problem confronting central banks throughout the early years of their existence was that their obligations conflicted. On one hand they were required to finance government wartime expenditures, and on the other, they were required to maintain the full convertibility of gold at the fixed rate. In reality, this conflict of objectives was more apparent than real and the over-riding objective of central banks was to maintain the Gold Standard. Furthermore, in times of peace no conflict arose since the prevailing orthodoxy was one of laissez faire.

**Independence and the changing objectives of central banks:**

No consensus has emerged in the literature over the historical development of central banks. Toniolo (1988) has referred to their development as ‘… the free offspring of parents who were not born free’. Despite the lack of any consensus, this section identifies three distinct phases in the historical development of central banks: the nineteenth and twentieth centuries leading to the mid-1940’s, the mid-1940’s to the mid-1970’s and the mid- 1970’s to the present day.

**Period up to the mid-1940’s:**

Goodhart, Cappie and Schandt (1994, p51) have argued that in the nineteenth and early twentieth centuries, central banks had considerably more independence than they currently possess. Elgie and Thompson (1998) offer three reasons for this. **First,** the laissez-faire economies of the nineteenth century provided no role for the state and left the problem of resource allocation to the market. Correspondingly, no active role existed for central banks in influencing the performance of the macro-economy which was regarded as self-regulating. **Second,** the operation of the Gold Standard implied to the central bank independence since their major objective was to maintain a stable economic environment consistent with ensuring convertibility with the national currency within the limits set by the 'gold points'. **Third,** the equity of central banks was privately owned and this gave them a considerable a priori independence. Goodhart (1988) has also stressed the role of Gold Standard
and has argued that the objective of the early central banks was to 'unify what had become in cases, e.g., in Germany, Switzerland, and Italy, a somewhat chaotic system of note issue, to centralise, manage, and protect the metallic reserve of the country, and to facilitate and improve the payments system'. The operation of the Gold Standard provided a means of achieving at least some of these objectives and during the late nineteenth and early twentieth centuries, central banks were charged with responsibility for maintaining the convertibility of national currencies. Central banks also provided finance for governments in times of war when tax revenues were insufficient to meet government expenditures. An obvious conflict exists between these objectives, but until the mid-1940s it was generally accepted that central banks would have no obligation to finance government expenditures in times of peace.

Mid-1940’s – mid-1970’s

A second period stretching from the 1940s until the mid 1970s can be identified. During this period governments became increasingly active in managing the economy and Goodhart (1995, p112) has noted that following the end of the Gold Standard 'the links between central banks and governments in the conduct of the macro-policy became much closer’. The economy was no longer thought to be self-regulating and among other things, central banks were now charged with responsibility for ensuring that the central government’s budget deficit was financed in accordance with planned changes in the aggregate demand that the governments felt would deliver their economic objectives. The multiple and inconsistent goals of central governments (inflation, employment, growth and the balance of payments) were a source of conflict with their central banks because these goals had no clearly defined hierarchy and their importance often changed in response to economic mismanagement, or as governments moved through the political cycle. The rate of interest became the main operational tool of monetary policy and, in order to ensure central bank compliance with required changes in the rate of interest, many governments nationalized their central banks. For example, during this period the central banks in Canada, Denmark, the Netherlands, England, France, Norway and New Zealand were all brought into public ownership (Elgie and Thompson 1998, p.17). This removed at a stroke any independence central banks possessed, but the situation was different in Germany where, after the currency reform of 1948, the Bundesbank was constitutionally authorized to preserve the internal value of the currency. German experience of hyperinflation, in the 1920’s significantly increased the country’s determination to maintain price stability and this was accorded priority even in times when most countries were targeting maximum employment!

Being the banker to the central government, central banks have gradually increased the degree of centralization of commercial banks' reserves. Consequently Goodhart (1988) has identified two dimensions of central bank monetary
At the same time, the approach achieves the goal of making the bank's mortgage market.

seek to develop other channels through which they can also shape expectations about what should be the desirable future structure of our financial systems, and met the test of the market was, prima facie at least, considered to be good.

Through contagion effects, the bursting of a credit and asset price bubble commercially banks were subject to a simple leverage ratio, but not at that time to Basel any appreciation of the (systemic) risks that were being run.

put it in a different way, a central bank is neither a product of a spontaneous evolution designed by politicians to serve politicians. The same applies to all key concepts I: Roles

This as the result of strategic and skillful action by entrepreneurs who "narrate and envisage liquidating half (or more) of its banking system simultaneously, and if

Because of the institutional framework which constrains peoples' choice sets. Of course, in many cases the actual outcomes of the politicians' acts have been naturally the balance between these three objectives has shifted over time, with apart? Comparing transatlantic responses to the financial crisis, Peterson --–. Opposisjon og posisjon, 1945-1981. vol. 3, Høyres historie. Oslo:

Naturally, the balance between these three objectives has shifted over time, with apart? Comparing transatlantic responses to the financial crisis, Peterson --–. Opposisjon og posisjon, 1945-1981. vol. 3, Høyres historie. Oslo:

In accordance with the approach of the dynamic-institutional tradition, Bell limits the need to have more extensive information about the stability of financial institu-

and on the wider context.

Central Bank Independence

The revival of independent central banks marks the third stage of their development as identified by Goodhart (1994). The policy of granting a greater independence to central banks became particularly popular during the 1990’s when countries world-wide started providing their central banks with greater autonomy. Cukierman (1995) has argued that there are several reasons behind this tendency. First, the experience with fixed exchange rates, in particular the Bretton Woods System and later the European Monetary System persuaded countries to design institutions increasing their commitment to price stability.

In most countries until about the mid-1970’s, economic policy was based on the assumed existence of a stable tradeoff between inflation and unemployment and decisions by the central bank were motivated by the particular combination of inflation and unemployment that satisfied the government’s objectives at each point in time. As the relationship between unemployment and inflation deteriorated during the 1970s a consensus emerged at the International Monetary Fund conference in Kingston, Jamaica in 1976, that the primary objective of central banks should be price stability. Increasingly price stability has become the major objective of the majority of central banks worldwide with other goals, such as promoting stable employment, accorded far less prominence in the hierarchy of central bank objectives. The single policy objective greatly enhanced the independent status of central banks and Goodhart (1994) has argued that central banks with a single objective are more likely to be less subservient to central governments than central banks with a plurality of vague objectives. A single objective for monetary policy also facilitates greater accountability since it is abundantly clear whether an institution has achieved its objectives or not. Goodhart (1994) has further argued that targeting a single objective might reduce any dispute between central bank officials and academic economists over operational techniques since, for most central banks, interest rate adjustment is the only instrument of policy available.
The second reason identified by Cukierman (1994) for the emerging trend towards central bank independence was its establishment as one of the requirements for joining the single currency bloc. As a consequence, the central banks of European Union (EU) countries were granted increasing independence in the 1990’s as a prelude to the creation of the single currency. More recently, the EU accession countries have granted independence to their central banks and more generally this is now an established global feature of central bank development. The third reason for emerging independence among central banks identified by Cukierman (1994) was the performance of the Bundesbank with its proven track record of delivering consistently low inflation in the post-war period. Progress was also made in providing the theoretical explanation for the Bundesbank’s success. In particular, Kydland and Prescott (1977) showed that when a central bank is not independent, policy announcements are subject to time inconsistency. Barro and Gordon (1983) extended this work and showed that in the absence of binding rules on central bank behavior, an inflationary bias existed. Reputational considerations might reduce this inflationary bias, but it was felt that an independent central bank would act as a pre-commitment device, which would enhance credibility by transferring responsibility for monetary policy to a non-political body. This study, as well as an earlier study by Rogoff (1979) provided the rationale for what the Germans and the Swiss had known for decades: that price stability would more easily be achieved if central banks were granted greater independence from central government. The theoretical predictions of Rogoff (1979) and Barro and Gordon (1983) were confirmed empirically by Cukierman (1992), Cukierman et al. (1992), and Grilli et al. (1991) who showed that independent central banks facilitate lower inflation.

**Changing Trends of Central Bank Independence: Country Comparisons**

This section provides some inter-country comparisons of trends in CBI since their formation until the present day. The central banks included in the comparison are the Bank of England, the Bank of France, the Federal Reserve and the Bundesbank. This paper measures the degree of political independence of these central banks using the index designed by Grilli, Masiandro and Tabellini (1991) from their formation to the present day. Additionally Grilli, Masiandro and Tabellini index (referred to hereafter as GMT index) has become increasingly popular in the economic literature after its introduction in 1991. Table 1 summarises the studies on CBI that have used GMT index:
The Bank of England

From its very earliest days the Bank of England could appoint and nominate its own personnel. The Governor, Deputy Governors and directors were chosen every year between March and April (Elgie and Thompson 1998, p.36). Independence was guaranteed because the Committee of the Treasury was created comprising the Governor, Deputy Governor and the most senior of the directors with responsibility for preparing proposals for the election of Governors and Directors. For 1931, a lower score on the overall index of independence is recorded because the degree of economic independence of the Bank fell as result of its responsibility for selecting the instruments of monetary policy being withdrawn. An attempt to measure the political independence of Bank of England has been made using the Grilli, Mascianandro and Tabellini (1991) index summarised below.

Table 2: Political Independence of Bank of England (1694 – 1998) using Grilli et al. index

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Governor not appointed by the government</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Governor appointed for more than 5 years</td>
<td>-</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. All the Board not appointed by the government</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Board appointed for more than 5 years</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. No mandatory participation of government representative on the board</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. No government approval of monetary policy is required</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>7. Statutory requirements that central bank pursues monetary stability amongst its goals</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>8. Legal provision strengthening the central bank’s position in conflict with the government</td>
<td>Na</td>
<td>Na</td>
<td>-</td>
<td>-</td>
<td>Na</td>
</tr>
<tr>
<td>Overall index of political independence</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

a - the authors derive these estimates from reference to the Bank’s statute. An asterisk indicates the criterion is satisfied and a dash indicates that the criterion is not satisfied;

b - these results are taken from Alesina and Grilli (1992, p.49);
Eijffinger, S.C.W. and E. Schaling (1993), 'Central Bank Independence in Twelve Projections of the Economy's Evolution' directs attention very precisely to the

Kenen, Peter B., ed. Understanding Interdependence. The Macroeconomics of the

what their current actions signal about future policy, and reasonable for them to

The impact of a change in interest rates on lending could vary depending on the

as a kind of prototype Taylor reaction function) and the Bagehot rule for acting as

levels of analysis that are necessary to explain changes in the role of a central bank:

whether this standard procedure, whereby the central bank dedicates setting the

of an appropriate ladder of sanctions is given by the FDIC Improvement Act of

reduction in macroeconomic volatility – also known as the 'Great Moderation' –

institutions. Instead, banks generally seek to control the overnight

The general concept of bureaucracy and its behavior goes back to Weber (1997).

manage the state's credit: this is the story of the oldest central banks, the

Toniolo, G. (1988), ——. Understanding Governance. Policy Networks, Governance, Reflexivity and


——. Understanding Interdependence. The Macroeconomics of the

Tornes, Aino Giskeødegård. "Sentralbankuavhengighet - hva og hvorfor? En


Eichengreen, B J (1992): "Creating a new role for the central bank: Competing strategies and the

The Bank of France

The Bank of France was founded at the very beginning of the nineteenth century with private shareholder capital. It therefore possessed a high degree of political independence since nominations and appointments to the General Council (the governing council) were made independently of government. The General Council consisted of fifteen members who appointed the Central Committee which was charged with responsibility for supervision of the Bank’s activities. The Regents (members of the General Council) were elected by the General Assembly of the shareholders. The tenure of the governor and sub-governors was completely free of any outside interference. Monetary policy was conducted by the Bank and decisions of the board were taken independently of any instructions from the government of the day. Using GMT index, the political independence of the Bank of France is measured and our results using this index are reported in Table 3.

Table 3: Political Independence of Bank of France (1800 – 1993) using GMT index

<table>
<thead>
<tr>
<th>Question</th>
<th>1800</th>
<th>1808</th>
<th>1945</th>
<th>1992a</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Governor not appointed by the government</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Governor appointed for more than 5 years</td>
<td>-</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>3. All the Board not appointed by the government</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Board appointed for more than 5 years</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>5. No mandatory participation of government representative on the board</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. No government approval of monetary policy is required</td>
<td>*</td>
<td>a</td>
<td>-</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>7. Statutory requirements that central bank pursues monetary stability amongst its goals</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>8. Legal provision strengthening the central bank’s position in conflict with the government</td>
<td>Na</td>
<td>Na</td>
<td>-</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>Overall index of political independence</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>
Comparing Table 2 with Table 3 reveals a common trend between the Bank of France and the Bank of England. Their activities were heavily controlled by their respective governments during the period 1945 to 1992, but both were highly independent during the Gold Standard period and again in the 1990s. The governor and sub-governors now have six-year terms of office, secure tenure and are prohibited from accepting any instructions from the central government. Monetary policy was entrusted solely to the Bank. With respect to economic independence, the major change affected lending to government and the Bank was prohibited from:

‘… authorising credit or granting any form of debt facility to the Treasury. The direct acquisition of government debt is also prohibited’. (Elgie and Thompson, 1998, p.133).

**The Federal Reserve**

In contrast to most of the European countries, the United States did not have a central bank during the period 1836 - 1914. Instead the US Treasury performed the role of central bank. Sylla (1988, p 20) has described the system thus: ‘The entire system was the victim of a kind of irregular and vicious centralisation… The money power of the country passed into the hands of a few financiers and big bankers, and the treasury itself, through politics and manipulation, acted in sympathy with them.’ Clifford (1965, p.50) argues that:

'A few years ago, when the US Treasury was burdened with excessive revenues and the money market depended on the whim of the Secretary of the Treasury, practically all public men of whatever shade or political belief, were agreed that the government ought to be taken out of the banking system.'

The corporate elite became the driving force in the process of separating the central bank from the Treasury and creating an independent Federal Reserve. A central banking system, with twelve regional Federal Reserve Banks, instead of a single central bank, was created with the Federal Reserve Act in 1913 that operated accordingly. The rationale behind this was to prevent a single bank (New York) from dominating the nation’s administrative and financial centre (Sylla 1988). The Federal Reserve banks appoint six directors and the Board in Washington appoints three other directors making a total of nine directors in all. The nine-member board appoints officers of the respective regional reserve banks along with regional governors. With regard to these appointments, the Federal Reserve System is completely independent as none of the appointees come from institutions outside the Federal Reserve.
The Federal Reserve Board, consisting of five members, is appointed by the President of the United States for a period of ten years, and additionally two ex officio members are appointed. These are the Treasurer and his/her subordinate who acts as the Comptroller of the Currency. The Federal Reserve Board is thus highly independent from government and its main role is to stand between the latter institution and the reserve banks, to conduct a unified monetary policy and to supervise the reserve banks’ operations. The longer term of office of the Board of Governors makes it difficult for a President to influence the Board’s decisions. Despite this, the President retains power over the Board and is allowed, via the Treasurer, to be involved in open market operations with or without the approval of the Federal Reserve. Moreover, in times of emergency theses Offices are also free to intervene in the central bank activities whenever and however they decide. (Sylla 1989). Table 4 shows the changing nature of Federal Reserve Bank independence between 1912 (the table says 1913) and 1992.

**Table 4: Political Independence of the Federal Reserve (1913 – 1992) using GMT index**

<table>
<thead>
<tr>
<th>Question</th>
<th>1913</th>
<th>1935</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Governor not appointed by the government</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Governor appointed for more than 5 years</td>
<td>*</td>
<td>*</td>
<td>-</td>
</tr>
<tr>
<td>3. All the Board not appointed by the government</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Board appointed for more than 5 years</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>5. No mandatory participation of government representative on the board</td>
<td>-</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>6. No government approval of monetary policy is required</td>
<td>-</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>7. Statutory requirements that central bank pursues monetary stability amongst its goals</td>
<td>-</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>8. Legal provision strengthening the central bank’s position in conflict with the government</td>
<td>-</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>Overall index of political independence</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

With respect to the degree of economic independence envisaged in the Banking Act of 1913, the regional reserve banks, acting as lender of last resort and fiscal agents, were partially allowed to issue banknotes. The influence of government became more explicit in 1917 when the United States entered the war. The Federal Reserve objected to the low interest rates set by the government on loans and securities – but these objections had no effect on policy and interest rates remained as set by the government! The Banking Act of 1935 conferred greater independence on the Federal Reserve. The major changes regarding economic independence are:(a) the Board of Governors (called hereafter the Board) could alter the legal reserve requirements of member banks; (b) the Board could set maximum interest rates on time deposits that banks could pay; (c) the Board could set margin requirements on loans to purchase securities; (d) the Federal Reserve Open Market Committee was established with responsibility for carrying out open market operations.
This marked a departure from the past when the Reserve Banks had the authority to implement their own open market operations. The amendments above increased the power of the Federal Reserve over the member banks and brought about a more efficient and unified monetary policy across the country. The Federal Reserve is now regarded as one of the most independent central banks in the world. The GMT index shows a relatively high degree of political independence, despite the governor and board being appointed by the President of the US.

The Bundesbank

The foundation of the German central bank took place on the 22nd January 1870, but the Reichsbank de facto started to operate in 1876. Most of the founders were private shareholders. The primary objective of the Reichbank was to unify the note issue but its other tasks as central bank were to improve and organize the payment system in the country. Lexis has noted that:

‘… the nature of its (Reichbank’s) task is that it shall maintain the value of monetary unitas stable as possible’. (Quoted in Goodhart, 1988, p.108.)

The Reichbank’s administrative functions were performed by the Administrative Board and Management. The board was the ‘holder of all powers of attorney on the company’s behalf’. (Quoted in Gall, 1995, p.13). The management of the Reichbank was required to operate in ‘accordance with instructions given by the Administrative Board (subsequently the Supervisory Board)’. The chairman of the board was appointed by election. Instructions to the Reichbank came from its shareholders pursuing their own interest, rather than from government. This is illustrated by the resignation of one of the two members of the board with political affiliations because the:

‘business activity that has so powerfully imposed itself since. I wished to protect my parliamentary position by on major economic issues against any possibility of attack...(Gall, 1995).

Table 5 below provides the degree of independence of the German central bank using the GMT index of political independence.

**Table 5: Political Independence of the German Bank (1870 (table shows 1880) – 1998 (1997)) using GMT index**

<table>
<thead>
<tr>
<th>Question</th>
<th>1880</th>
<th>1939</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Governor not appointed by the government</td>
<td>*</td>
<td>Na</td>
<td>-</td>
</tr>
<tr>
<td>2. Governor appointed for more than 5 years</td>
<td>*</td>
<td>Na</td>
<td>-</td>
</tr>
<tr>
<td>3. All the Board not appointed by the government</td>
<td>*</td>
<td>Na</td>
<td>-</td>
</tr>
<tr>
<td>4. Board appointed for more than 5 years</td>
<td>*</td>
<td>Na</td>
<td>*</td>
</tr>
<tr>
<td>5. No mandatory participation of government representative on the board</td>
<td>-</td>
<td>Na</td>
<td>*</td>
</tr>
<tr>
<td>6. No government approval of monetary policy is required</td>
<td>*</td>
<td>Na</td>
<td>*</td>
</tr>
<tr>
<td>7. Statutory requirements that central bank pursues monetary stability amongst its goals</td>
<td>*</td>
<td>Na</td>
<td>*</td>
</tr>
<tr>
<td>8. Legal provision strengthening the central bank’s position in conflict with the government</td>
<td>*</td>
<td>Na</td>
<td>*</td>
</tr>
<tr>
<td>Overall index of political independence</td>
<td>7</td>
<td>Na</td>
<td>6</td>
</tr>
</tbody>
</table>
The statute of the Reichbank changed drastically at the end of January 1933. The newly appointed State Secretary, Gottfried, concluded that: ‘Of course the banks need to be directed by the State... One cannot accuse the Government of a lack of initiative’. (Quoted in James, 1995, p.284). This period has been described thus: ‘The Bank, especially after September 1938, became part of the machine of the German imperialism, and its employees the agents of a brutal political process.’ (James 1995, p. 352). The issues of independence came to the fore in Germany with the creation of the Bundesbank which established a standard of independence against which other central banks were judged. Similarly, its track record of delivering low inflation became the standard against which other policy makers were judged.

Section five: Post crisis role of central bank

Monetary policy after the crisis

The stable economic growth and low inflation of the last two decades could not prevent the emergence of vast imbalances in the global financial system, as the financial and economic crisis clearly showed. Such massive economic shocks are bound to have an impact on how central banks work. Nevertheless, ensuring price stability remains our top priority. The crisis made it evident that central banks have an effective set of instruments that can be used to mitigate the negative impact of financial crises. The unconventional measures used in this regard also proved to be effective. Yet despite these measures, the cost of the crisis remains enormous. One central conclusion, therefore, is that more attention needs to be paid to crisis prevention in order to improve the stability of financial systems. However, monetary policy instruments are only suitable up to a point in countering the emergence of financial imbalances. Hence, a different approach is needed. Strengthening macro-prudential supervision and regulation is one plausible option. Macro-prudential policy takes account of systemic risks in the financial sector through action geared to reducing such risks. As yet, however, we have little experience of this type of supervision and regulation. It is therefore vital that we act prudently and gradually when implementing any new measures, and that we give ourselves adequate time. The first step is to define clear and realistic mandates and objectives and to evaluate possible instruments. Collaboration between the various authorities involved – both nationally and internationally – is also of crucial importance. Overall, we need to create conditions that allow the timely application of suitable instruments to counter emergent financial instabilities. These instruments would essentially supplement our set of existing monetary policy instruments. Within such a framework, the SNB would be able to make an optimum contribution to both objectives – price stability and financial stability.

Comparing today’s world with the situation a few decades ago, it becomes evident that much has changed. Deregulation of the financial markets has increased and
globalization has progressed extremely fast – in the real economy as well. The brisk level of trading made a significant contribution to the long-lasting worldwide upswing in recent years. This was supported by the credible policies pursued by central banks, which increasingly prioritized the goal of price stability, thus contributing to a global reduction in the level and volatility of inflation. The battle against high inflation appeared to have been won. Overall, this led to firm expectations of low inflation and a dramatic drop in risk premia in virtually all areas of the financial markets. However, the successful battle against inflation and the related reduction in macroeconomic volatility – also known as the ‘Great Moderation’ – were not able to prevent serious instabilities within the globalised financial system.

Alongside its evident benefits, the ‘Great Moderation’ thus seems to have produced a number of damaging by-products. In combination with low real interest rates, financial innovations and liberalized capital markets provided enormous credit-creation potential. Together with a reduced perception of risk, this fostered a rapid rise in asset prices which ultimately led to excesses and imbalances in some markets. Through contagion effects, the bursting of a credit and asset price bubble can bring the entire global financial system to the brink of collapse within a very short period of time. In view of the interaction with the real economy, this consequence also has serious implications for the world economy and global growth. This raises a number of questions about the future role of central banks. Can and should monetary policy be used to actively counter the development of imbalances or financial bubbles? Does it make sense to use monetary policy instruments for this? Will the new instruments used during the crisis also play a more important role in monetary policy in the future?

To answer these questions, one would like to look at two aspects specifically. First, I will examine the measures used by central banks during the crisis and briefly outline the possibilities and limitations on their future use in monetary policy. Then I will consider whether monetary policy should step up its focus on the goal of financial stability. With regard to measures taken during the crisis, one can say straight away that the effectiveness of monetary policy instruments was clearly demonstrated. We were able to safeguard price stability and cushion the negative impact on the real economy. However, vigorous interest rate cuts were not sufficient on their own – neither in Switzerland and nor in other countries. The liquidity situation on the money markets initially remained extremely tense.

In many cases, interest rates rapidly dropped to zero. The chief monetary policy instrument could thus no longer be used. Central banks around the world therefore adopted the so-called unconventional measures. These included direct intervention in the financial markets by buying assets, such as long-dated government bonds, debt securities issued by private borrowers and foreign exchange. Another measure was the temporary expansion of liquidity provision to banks beyond the ‘normal’ level – for example, through repo transactions with unusually long
maturities of up to one year. These measures were taken for two reasons. First, they permitted further monetary easing if the desired stabilization of prices and the economy could not be achieved through cutting interest rates alone. Second, unconventional measures could be justified by the central banks’ role as lender of last resort. Its role, in other words, was to provide emergency funding for financial institutions that were facing short-term liquidity bottlenecks. The aim of these unconventional measures was to restore the functioning of market forces as quickly as possible and ultimately to restore market confidence in the financial system.

Two main lessons can be learnt from the vigorous response by central banks. It showed that zero interest rates on no account mean that central banks have exhausted their set of monetary policy instruments. Through quantitative and credit easing measures, the central banks have effective instruments that can be used to reduce risk premia, alleviate liquidity bottlenecks and prevent deflation. Moreover, their role as lender of last resort has taken on a new dimension. Previously, this role was confined to providing funds to bridge temporary liquidity bottlenecks at a particular bank. At the height of the crisis, however, the priority was to secure the liquidity of entire markets. The central banks demonstrated that they can fulfill this function to a previously unforeseen extent. In short, they demonstrated their ability to respond to a systemic crisis.

Nevertheless, we need to be cautious when considering whether such measures should be included in a central bank’s conventional set of instruments in the future. These unconventional measures proved useful for direct crisis management. However, so far we have little practical experience of monetary policy management at zero interest rates, especially over a prolonged period of time. It is clear that the instruments used come at a price. In the longer term, for instance, they could create new instabilities and distortions on the financial markets. Similarly, such an enormous increase in liquidity could lead to a build-up of significant inflationary potential. So it is too early to conclusively assess the impact of the measures taken. In general, though, they should be reserved principally for crisis management.

Looking beyond the reactive crisis management, the aftermath of the crisis has brought an old question back into the limelight: To what extent should central banks proactively hinder the development of imbalances on the financial markets, rather than simply adopting an ex post ‘mopping up’ role. More specifically: should central banks try to counter market excesses by steering interest rates in order to prevent a potential collapse of the financial system and the resultant costly implications for the real economy? This is a complex issue and answering it would go well beyond the scope of this talk. However, it is very topical and tends to recur constantly in the public policy debate. I would therefore like to give you my view on this issue.
For a while now, central bankers and economists have been examining the extent to which changes in asset prices should be taken into account in monetary policy. For example, this could mean that the central bank would raise interest rates if there was a risk that an emerging credit bubble could destabilize the system. The debate is with difficulties, and though it started some time ago, research is still at its infancy. I will therefore merely outline the possible problems and challenges that could arise. To make my position clear: Many are convinced that a strategy geared to medium and long-term price stability is vital for effective implementation of monetary policy. After all, the economic benefits of stable prices are undisputed. High and volatile inflation rates are detrimental to productivity and growth. Uncertainty about future price trends leads to inefficient investment and consumer spending decisions. That does not mean, however, that financial stability should be ignored completely in monetary policy considerations. Nevertheless, taking greater account of financial imbalances presents a number of practical difficulties. An initial problem is that a single instrument – namely the interest rate – would be expected to achieve two objectives simultaneously: price stability and financial stability. That does not seem to be a problem at first sight, because usually the two support each other, especially when taking a long-term view. Credible action to ensure price stability fosters a sense of security and market confidence, which in turn play a key role in ensuring financial stability. Similarly, a stable financial system is a key prerequisite for price stability. The recent financial crisis provided impressive negative evidence to confirm this rule. The bursting of a financial bubble can easily trigger a deflationary trend. So far, so good. However, a second glance reveals potential conflicts between these two objectives in certain situations. For example, a positive supply shock – as a result of technological progress, for instance – could keep inflationary pressure low for a prolonged period.

Expansionary monetary policy conditions could therefore be maintained. However, if we look at financial stability, this situation entails the risk of a boom-bust cycle, which would require a tightening of monetary policy. A similar problem is conceivable if the economic outlook is so poor that raising interest rates would be inappropriate because of the risk of deflation. Then again, maintaining low interest rates would pave the way for potential imbalances, which – from the point of view of financial stability – would actually have to be countered by raising interest rates. Such situations make it clear that a single instrument cannot simultaneously achieve two objectives.

A further problem is that a bubble is not easy to identify. Expecting us to be able to tell in advance whether damaging price imbalances are building up within certain asset classes is not realistic. First, that would require us to be better than market forces in assessing the fundamentally justified value of a specific asset. Second, it is not easy to clearly identify which variables are to be used as indicators of imbalances. A third problem is that we do not yet have any sound knowledge of
the timing, effectiveness and required scope of the monetary policy response that would be necessary to counter financial imbalances. Since asset prices are typically far more volatile than real economic variables and general price levels, substantial changes in interest rates could be required to check financial imbalances, and this could have serious side-effects on the goal of maintaining price stability. As we can see, there are many questions that have not yet been clarified. The problems we have mentioned make it clear that central banks would rapidly reach their limits if they were simply to add a further goal alongside price stability without new instruments to deal with it. The more objectives an instrument is expected to achieve, the greater the risk of wrong decisions and conflicting objectives.

However, as it is already said, these problems do not mean that financial stability should be ignored completely in monetary policy decisions. Asset prices and other variables such as credit growth must be included as indicators when assessing the situation and the outlook for inflation. They are already included in the practical implementation of today’s monetary policy strategy. Yet, care must be taken when interpreting such ‘instability variables’ because they provide only limited information about future economic trends. To sum up, monetary policy can make an important contribution to financial stability. However, the set of monetary policy instruments is unsuitable for excluding all imbalances in all circumstances. Accordingly, instruments that have a direct effect are needed to counter the emergence of (global) financial instabilities. A key lesson of the crisis is that there is scope to strengthen what is known as macro-prudential supervision and regulation. This should be seen as complementary to monetary policy, to aid attainment of the twin goals of price stability and financial stability.

**A framework for macro-prudential supervision and regulation**

Put simply, macro-prudential supervision and regulation is concerned with the stability of the entire financial system, rather than that of individual institutions, which is the domain of micro-prudential supervision and regulation. Macro-prudential supervision and regulation involves examining systemic risks that arise from the interaction between individual banks or the risk that the default of a single bank – because of its size or market share – could jeopardize certain functions that are vital for the economy, such as payment transactions or lending businesses. For example, one solution that could significantly reduce such problems would be progressive capital adequacy requirements. In other words, the greater a bank’s systemic importance, the more equity it would be required to hold. If capital adequacy requirements rise in step with systemic importance, banks have an incentive to stay smaller and thus less systemically important. Capital reserves for systemically important banks in excess of a minimum level could also act as a kind of ‘automatic stabilizer’. Reserves built up in ‘good times’ allow banks to absorb losses in ‘bad times’ without having to cease normal business operations. Another
central aspect of macro-prudential supervision and regulation takes account of the build-up of systemic risks overtime, and especially the pro-cyclical effects in the financial sector. Discretionary action could be taken to cushion the growth of such risks over time – for instance, by imposing an obligation to build up additional capital in phases of excessive credit growth, in other words a countercyclical capital buffer. A key aspect here is that such measures help prevent possible imbalances within the financial system. Another way of achieving the required countercyclical effect is, for example, imposing direct restrictions on loan-to-value ratios if there are signs that a bubble could be forming in certain markets, such as the mortgage market.

The difficulties in applying macro-prudential supervision and regulation should not be underestimated, however. First and foremost, experience of discretionary instruments is still fairly limited. For example, there is not yet any conclusive research showing which indicators could be used to reliably identify systemic risks. Moreover, it is not easy to assess the point beyond which credit growth should be regarded as excessive. Furthermore, the interaction between macro-prudential and monetary policy instruments could make implementation more difficult. In particular, monetary policy transmission channels could be affected.

The impact of a change in interest rates on lending could vary depending on the level of a bank’s capital buffer. Therefore, in order to develop reliable indicators for systemic risk, to analyze the interaction and feedback between macro-prudential and monetary policy instruments, and to carefully evaluate the effective measures, we need clear mandates, enough time and additional expertise.

So what is the role of central banks in establishing such a macro-prudential framework? Generally speaking, the traditional tasks of central banks are closely linked to various aspects of systemic stability. A stable financial system is very important for the effective implementation of monetary policy. But also in active crisis management, central banks bear a major responsibility, as the recent financial crisis clearly demonstrated. The contribution of central banks is therefore of great relevance in the analysis and regulation of systemic risk. In particular, central banks will have a key role to play in macroprudential supervision and regulation for the following reasons: Developing and structuring macroprudential measures requires reliable analytical and forecasting skills – for instance, with regard to the overall economy or specific market segments, such as real estate. Central banks have extensive and sound knowledge of these fields. Moreover – as have been already pointed out – macro-prudential policy interacts closely with monetary policy. This implies that the information advantage of central banks could be important in shaping macro-prudential measures. Central banks will therefore almost certainly have to play a major role in implementing such instruments. At the same time, the risks involved in overemphasizing the role of central banks in connection with such supervision and regulation also have to be borne in mind.
Central banks could find themselves facing increased political pressures that could jeopardize their independence. If their credibility with regard to maintaining price stability were undermined, this could have devastating implications for the effective implementation of monetary policy.

**Institutional aspects**

And now, in the final part, we would like to look at some institutional aspects. To allow a more detailed analysis of systemic risks and how to keep them in check, we need a macro-prudential framework in which various instruments can be combined to optimal effect. What is the best way of achieving this? Firstly, it is essential to recognize that ensuring financial stability as a whole is generally dependent on the decisions made by a range of different bodies. These need to act together in order to ensure financial stability. To create the necessary basis for a functioning macro-prudential framework, the exact institutional set-up of the regulatory authorities is of the utmost importance. First and foremost, objectives, mandates and responsibilities need to be clearly defined. In Switzerland, for instance, FINMA – the Financial Market Supervisory Authority – is responsible for the regulation and supervision of individual banks. The SNB, on the other hand, is required to contribute to financial stability. With regard to Switzerland’s two big banks, there is a clear overlap between institutional and systemic risks. In this context, an exact definition of the responsibilities of the SNB and FINMA is of central importance for optimal macroprudential supervision and regulation. The revised Memorandum of Understanding between the SNB and FINMA is an important step in this direction. Secondly, to ensure that the institutions involved can optimally carry out the roles assigned to them, it is also important to give them the right tools. In concrete terms, this means that the SNB would, for example, need to have more extensive information about the stability of financial institutions – regarding their risk exposure, interdependences, etc. – or it would require specific instruments enabling it to take the right decisions when implementing macroprudential policy. Thirdly, the crisis made it clear that closer international cooperation between regulatory authorities is vital. Functioning international co-ordination mechanisms are required to counter future crises earlier and more effectively. International cooperation is the only way to check undesirable developments on the globalised financial markets.

To briefly sum up these lengthy remarks by trying to reply as explicitly as possible to the question raised earlier: is there a danger that the active and innovative involvement of central banks in crisis management will put at risk the two major achievements of the pre-crisis years, namely the priority given to (price) stability-oriented monetary policy and the independence of central banks? It is proposed to submit four specific conclusions.

*Crisis Prevention and Management*
It is believed that central banks should be given an explicit macro-prudential mandate as regards both crisis prevention and crisis management. One reason for this recommendation is the conviction that our globalised, competitive and highly innovative financial markets will continue to breed financial disturbances of a size and nature that could lead to systemic meltdown. Another reason is that have doubts about our ability to correct global imbalances, which therefore will continue to nurture a crisis-friendly environment. The last reason is that, with or without a mandate, central banks will find themselves in the first line of defense. It would seem to me preferable to give them a well defined framework within which they should operate, rather than rely exclusively on improvisation. We will always need improvisation, but we also need an operational framework.

**Implement a price stability-oriented monetary policy**

It is believed that we should not attach excessive weight to the argument that such a mandate would “pollute” the implementation of a (price) stability-oriented monetary policy. On the other hand, there is belief that the macro-prudential mandate should carefully avoid giving implicit approval of asymmetrical policies regarding asset price and/or debt bubbles. Any perceived asymmetry would sooner or later be detrimental to financial stability, and might also cause damage – although not with the same degree of certainty – to price stability.

**Entrust with micro-prudential supervision**

Should central banks be entrusted with micro-prudential supervision. Many have doubts on the wisdom of raising this question in abstract terms. Tried to say that what really matters is the flow, quality and speed of information between micro- and macroprudential supervision and acknowledged that these are two distinct, but very complementary functions. Depending on the specifics of organization, on tradition and on the “human factor”, ensuring the appropriate flow of information may succeed – or fail – in both the integrated and the cooperative model.

**Central Bank Independence**

Is central banking independence at risk? Yes, it is. The risk arises from the obvious fact that having to comply with two distinct mandates pushes the central banks into a much more complex world. The modalities of their independence in their monetary policy function may be debatable, but, once agreed, the terms of independence can be reasonably well defined. In the case of the macroprudential mandate (in both models), this is very difficult. Once it appears that an initial liquidity problem is mutating into a solvency problem, and especially when the latter implies the risk of a systemic meltdown, the central bank has to operate hand in hand with the government. But hand in hand can mean very different things – this is why one is pleading for a reasonably well defined operational framework. The macroprudential mandate implies for the central bank a type of relationship with, and therefore a type of independence from, the government that is different in
substance from the one governing monetary policy. The rules of the game on both sides have to be spelled out.

7. Central-Bank Communication and Stabilization Policy

One of the most notable changes in central banking worldwide over the past two decades has been the increased openness with which central bankers speak in public about the policy decisions that they have made and that they are likely to make in the future. The title of William Greider's 1987 best seller about the U.S. Federal Reserve --- Secrets of the Temple --- indicates the air of mystery surrounding the institution only twenty years ago, and this mystique was jealously cultivated by central bankers.

Now, instead, monetary policy decisions are commonly announced and explained in press releases at the time that they occur --- the President of the European Central Bank even holds a press conference --- and a number of central banks, such as the Bank of England and the Swedish Riksbank, issue Inflation Reports several times a year that provide detailed presentations of the reasoning behind recent policy decisions. Moreover, a number of central banks, including both the Fed and the ECB, have in recent years frequently offered fairly direct indications about future interest-rate decisions in their official statements, and a few central banks even publish quantitative projections of the likely path of interest rates years into the future.

This shift toward greater transparency and more active communication about policy decisions and intentions is not a mere passing fad, but a fundamental change with important consequences for the success with which monetary policy can be used to maintain economic stability. A central aim of my research over the past decade has been to understand the role of communication in successful monetary policy, and to develop criteria for the conduct of policy that can allow the decision process to become more transparent.

Why Communication Matters

The importance of communication strategy for policy effectiveness follows from a fundamental feature of the kind of problem that a central bank is called upon to solve. Central banking is not like steering an oil tanker, or even guiding a spacecraft, which follows a trajectory that depends on constantly changing factors, but that does not depend on the vehicle's own expectations about where it is heading. Because the key decision makers in an economy are forward-looking, central banks affect the economy as much through their influence on expectations as through any direct, mechanical effects of central bank trading in the market for overnight cash.

Few central banks of major industrial nations still make much use of credit controls or other attempts to directly regulate the flow of funds through financial
markets and institutions. Instead, banks generally seek to control the overnight interest rate in an interbank market. But the current level of overnight interest rates as such is of negligible importance for economic decision making. The significance of changes in central-bank targets for overnight rates is wholly dependent upon the impact of these decisions upon other financial-market prices, such as longer-term interest rates, equity prices and exchange rates --- and these depend not on the current level of the overnight rate, but on its expected path over coming months and years. Moreover, it is the expected path of real interest rates that matters for economic decisions, and not the nominal rates that are directly targeted by the central bank; and these depend on the public’s expectations of inflation in addition to the expected path of nominal rates. Expectations of inflation are in turn strongly influenced by the public’s expectations about future monetary policy.

Thus the economic effects of central-bank decisions depend critically upon public expectations regarding the future conduct of policy; indeed, changes in the current interest-rate target are primarily significant for what they indicate about likely future policy. It is therefore important for central banks to think carefully about what their current actions signal about future policy, and reasonable for them to seek to develop other channels through which they can also shape expectations about future policy, perhaps in a more nuanced fashion.

**Anchoring Inflation Expectations**

One aspect of the expectation that the central bankers should seek to influence is the public expectation regarding the rate of inflation over the next several years. A large body of research has confirmed the robustness of the conclusion that, while some degree of short-run variation in the rate of inflation is inevitable or even desirable, it is important to maintain the public’s confidence that the average rate of inflation over the medium term will be low and that this can be forecasted with reasonable precision. One reason is because expected inflation leads to socially wasteful efforts to economize on cash balances; a correct alignment of private incentives with the social cost of providing liquid balances to facilitate transactions occurs only if money is expected to retain its value. Moreover, uncertainty about the real value of future nominal payments discourages nominal contracting, reducing the efficiency of financial intermediation.

But at the same time, effective stabilization of the real economy depends on stable inflation expectations as well. For the available short-run tradeoff between inflation and real activity, which allows monetary policy to affect output and employment, depends critically on inflation expectations. If expectations are not firmly anchored, and are easily shifted in response to variations in the observed rate of inflation, then short-run variations in the rate of inflation will not produce substantial differences between current inflation and expected inflation, and hence will have only a small effect on real activity. If instead people have reason to believe
that inflation will always return fairly quickly to a stable long-run rate, so that an observed departure of the current inflation rate from the average rate has little effect on expected inflation for the future, the short-run “Phillips-curve” tradeoff between inflation and employment is much flatter, allowing monetary policy a larger short-run effect on real activity. Hence even from the point of view of improved stabilization of the real economy, it is important to find a way of stabilizing inflation expectations.

Central bankers have long understood the importance of maintaining confidence in the “soundness” of the currency. But the traditional understanding of how this could be done relied upon a commitment to convertibility of currency into some real commodity, such as gold. Since the collapse of the Breton Woods system in the early 1970s, this approach to anchoring expectations about the future purchasing power of money has not been available. It has instead been necessary for central bankers to find ways to maintain confidence regarding the future purchasing power of an inconvertible currency that rely solely upon public beliefs about the way in which the instruments of monetary policy will be used in the future.

The most popular current approach to this problem is public commitment of a central bank (often through the legislative definition of its mandate) to a quantitative inflation target, or (as in the case of the ECB), a quantitative definition of the bank’s objective of price stability. This kind of specificity about the goals of policy has clearly been valuable, but the mere declaration of a target is not enough to anchor expectations: it is also necessary that the public be able to see that policy is conducted in a way that should be expected to achieve the target, at least on average over a suitable horizon. This is where communication with the public about the basis for policy decisions can make a crucial contribution.

One might think that it should be sufficient for a central bank to behave reliably, without any need to talk about what it does. But requiring market participants to guess the pattern in the central bank’s behavior by extrapolating from what they have observed is not likely to stabilize expectations as reliably as a convincing explanation by the bank of its behavior. For example, if the public must infer the inflation rate that is aimed at on average from observed outcomes, then any temporary increase in inflation will naturally lead to fears that the central bank’s inflation objective is actually higher than had been previously believed; but this is exactly the kind of instability of beliefs that undermines the possibility of using monetary policy to stabilize the real economy. The ideal situation --- in which it is possible to allow some transitory variation in inflation for the sake of greater stability of the real economy, without undermining confidence regarding the medium-run inflation rate --- is only likely to be achievable if the reason why the central bank views transitory fluctuations in inflation as acceptable at particular points in time is explained to the public. Only in this way can confidence be maintained that the central bank’s concern with the real economy is not of a kind that will be allowed
to interfere with achievement of its medium-run inflation objective.

Steering Interest-Rate Expectations

Effective monetary policy requires not only that certain aspects of expectations remain relatively constant in the face of transitory turbulence; it is also important that certain aspects of expectations change with changing circumstances, but in the proper way. As noted above, a central bank exerts its control over spending by affecting expectations about the future path of interest rates, rather than their current level alone; effective stabilization requires that those expectations about the path change with economic conditions in the way that the central bank intends. Here too, simply relying upon the public to discern the pattern in central-bank behavior on its own may be insufficiently reliable, and communication --- in this case, about the likely path of future policy --- can be essential.

A good example is the situation faced by the U.S. Federal Reserve in the summer of 2003. By June, the target for the overnight interest rate had been reduced to only one percent, and the Fed had little room for further rate reductions; yet inflation remained unusually low, causing some to fear that the U.S. could slide into a deflation like Japan’s. At the same time, many traders were speculating that the Fed would begin raising interest rates soon, in view of signs of nascent recovery of the real economy, and as a result, long-term bond yields began rising sharply in anticipation of this. Officials at the Fed disagreed with the market’s interpretation of their intentions, and moreover feared that the premature increase in long-term interest rates would strangle the recovery in its cradle, precipitating the dreaded deflationary spiral.

With little room to signal more expansionary intentions through further immediate interest-rate cuts, the Fed had to resort to direct communication about future policy intentions. The statement issued after the August policy meeting, at which there was no change in the current interest-rate target, included an explicit indication that the Fed expected that low interest rates could be maintained “for a considerable period,” and similar language was included in each of the next several post-meeting statements. This had the desired effect of allowing long-term rates to subside fairly soon, and the recovery to gain momentum. Even once the deflation scare was past and it became necessary to return overnight interest rates to a more normal level, it was possible to raise rates without any notable disturbance of the long-term bond market, by signaling in advance the approach of interest-rate increases and committing to increase rates only “at a measured pace.”

Forecast-Targeting as a Policy Framework

Shaping the expectations of market participants through central-bank communication requires more, however, than a mere willingness of the central bank to be forthcoming about its thoughts. Statements by the central bank will not influence expectations, or not for long, if they are not found to provide the key to what is
actually done. This in turn requires not only that the central bank’s statements be made in good faith, but that the central bank know its own mind to begin with, so that it has something to communicate. A central bank cannot reveal its intentions regarding future policy if it has not actually formulated a plan of action; nor can it explain its past decisions, in a way that will help to predict future decisions, if those decisions were not actually based on a structured decision process. Accordingly, a successful use of communication policy requires not only a commitment to transparency, but the adoption of a more structured approach to policy deliberations as well.

This is one of the main reasons, in my view, for the increased role of quantitative modeling in monetary policy deliberations at central banks around the world. This is taken farthest by banks like the Bank of England, the Swedish Riksbank, the Norges Bank, and the Reserve Bank of New Zealand, which are leading exemplars of “inflation-forecast targeting.” This is a decision making framework for monetary policy under which the central bank seeks at each policy meeting to determine the action that would lead it to project an evolution for the economy over the next several years consistent with a specific quantitative “target criterion.” The discussion of economic projections under alternative assumptions accordingly comes to play a central role in policy deliberations. These projections are also central to the bank’s explanations of its policy decisions to the public; typically, forecast-targeting central banks publish an Inflation Report three or four times a year with a detailed discussion of the most recent projections and the way in which they justify recent policy decisions.

A key aspect of the target criterion for all of these central banks is the requirement that a certain measure of inflation be projected to converge to a specified medium-run target value, over a specified horizon (usually two to three years in the future). It is because of this emphasis on the inflation projection that the approach is called inflation-forecast targeting.” However, this stipulation alone is insufficient to fully determine the appropriate policy action. There will be different paths by which inflation might be projected to reach the desired level two or three years in the future; these different paths may require quite different actions by the central bank in the short run, and of course it is always only the immediate policy action (say, an interest-rate target for the coming month) that is decided upon at any given meeting.

As a consequence, a fully specified target criterion must also include an explanation of what makes one or another nearer-term transition path acceptable. The Norges Bank has been most explicit about this. Each issue of its Inflation Report contains a box listing the multiple criteria that acceptable projections are expected to satisfy. The first item on the list is convergence of a particular inflation measure (CPI-ATE) to its target value (2.5 percent per year) at a particular horizon (the next 3 years). But the next item specifies that the “inflation gap” (departure of the
current inflation rate from the medium-run target) and the “output gap” (departure of current real GDP from the economy’s “natural” or potential level of output) should be of opposite sign, be in suitable proportion to one another, and be projected to be eliminated over time at similar rates. This explains how a temporary departure of projected inflation from the medium-run target must be justified, and what determines whether the rate at which inflation is projected to approach the target is too slow, too fast, or just right.

This approach has important advantages as a way of shaping private-sector expectations. On the one hand, a commitment to regular publication of a detailed analysis that shows how specific policy decisions conform to a general decision framework makes it evident to the public that it can count on the bank to conduct policy in a specific, relatively predictable way. Moreover, the emphasis on the bank’s projections of the economy’s evolution directs attention very precisely to the implications of the policy framework for expectations that the central bank would like the public to share. For example, the task of ensuring that medium-term inflation expectation remain anchored is served by constantly discussing what the path of inflation should be expected to be in the light of the most recent developments, and explaining why the central bank believes that its policy is consistent with convergence of the inflation rate to the unvarying medium-run target rate at a fairly specific future horizon, despite what might otherwise be troubling features of recent data.

At the same time, the approach achieves the goal of making the bank’s commitments evident and the consequences of its policies fairly predictable, without tying it to a rigid framework that would require policy decisions to be based on some very small, pre-specified set of statistics. The target criterion --- the thing that one should see in the projections in order to judge that policy is on track --- should be able to be specified in advance, and should remain consistent over time. But the information used in constructing the projections --- the information on the basis of which the bank decides whether a given policy should satisfy the target criterion or not --- may be of many kinds, that need not be specified in advance. These sources of relevant information may change over time owing to unexpected circumstances, and may include non-quantitative sources of information (“judgment”), as long as the required adjustment of the bank’s projections can be quantified. The source of discipline in such a procedure is the requirement that the reasoning behind the banks be publicly defended in considerable detail, in addition to the fact that the accuracy of the published projections can eventually be evaluated once the outcomes are observed.

Thus, credibility can be established without a central bank’s having to bind itself to a rigid framework that does not allow it to take account of developments of unexpected kinds. The key to success is a commitment to frequent and detailed communication. But this also requires a commitment to a clear policy strategy, the
necessary basis for clarity in communications. Economic research can contribute to the refinement of our understanding of the properties of desirable policy commitments, and more work of this kind is needed. But the experience of central banks around the world over the past decade has already shown that a more rule-based approach to policymaking is possible in practice, and that it pays substantial dividends in terms of improved stabilization of both inflation and the real economy.
Bibliography


Governor, Bank of Israel. This is an edited version of remarks delivered at the Annual BIS Research Conference, Luzern, 24 June 2010.


Goodhart, C., Cappie, F. and N. Schnadt (1994), The Development of Central Banking’ in The Political Economy of Integration: States, Markets and Institutions, (Ed.) Capie, F.,

outcomes are observed.

During the Victorian era, governments tended to run (small) surpluses in peace -
thumb, notably the Palmer rule for varying the Bank Rate (named after Governor
(couple of decades) of the banking sector seemed higher; never had market appre-
never discussed how sanctions might be imposed for shortfalls below the proposed
decisions by the central bank were motivated by the particular combination of infla-

Cukierman, Central Bank Strategy, Credibility, and Independence: Theory and

Allen, Franklin, and Douglas Gale, Comparing Financial Systems. Cambridge,

Arestis, Philip, and Malcom C. Sawyer, eds. The Political Economy of Central

Arnone, Marco, Bernard J. Laurens, Jean-Francois Segalotto, and Martin Sommer.
“Central Bank Autonomy: Lessons from Global Trends.” In IMF Working

Arntzen, Sven. ”Norges Banks rettslige stilling i forhold til regjering og Storting.”
Report no. 87. Oslo: Den norske Bankforening and Forretningsbankenes
Felleskontor, 1958.

Aufricht, Hans. Central banking legislation. Washington DC: International Mon-


Aukrust, Odd, and Petter Jakob Bjerve. Hva krigen kostet Norge. Oslo: Dreger,
1945.

Bagehot, Walter. Lombard Street: A Description of the Money Market. Kitchener,

Banque de France. “Independence and Accountability. Developments in Central
Banking.” Proceedings from the Bicentennial symposium of the Banque de

Beckhart, Benjamin H., ed. Banking systems. New York: Columbia University

Beeson, Mark, and Stephen Bell. “Independent Central Banks and the Democratic
Deficit: The Reserve Bank of Australia and the Politics of Ambiguity.”


Bergh, Trond og Tore J. Hanisch, Vitenskap og politikk. Linjer i norsk sosialøkonomi gjennom 150 år, Oslo: Aschehoug, 1984


Berre, Øyvind. ”Ideen om en uavhengig sentralbank - En kritisk analyse.” Post-graduat thesis [hovedoppgave] in political science, Oslo: University of Oslo, 1996


accuracy of the published projections can eventually be evaluated once the
of relevant information may change over time owing to unexpected circumstances,
current inflation rate from the medium-run target) and the "output gap" (departure
Rhodes, R.A.W. Control and Power in Central-Local Government Relations. 2nd
overall economy or specific market segments, such as real estate. Central banks
whatever
governors. With regard to these appointments, the Federal Reserve System is com-
bank shares the part of the governmental power while it is, because of its banking
When it came to designing an international monetary system at the end of the
the United States itself, inflation was restrained by the instinctive, pragmatic mon-
as Harold Wilson termed the speculators) from this one-way bet could be huge.
were mentioned above).

This section provides some inter-country comparisons of trends in CBI since their
Swedish Riksbank, the Bank of England, as well as of a newer wave of
banks. Reflections on the Norwegian case of minimal formal autonomy.

Blinder, Alan S. Central Banking in Theory and Practice, The Lionel Robbins

Blø, André, and Andreas Marthinsen. "En studie av uavhengige sentralbanker og
utviklingen i Norges Bank.” thesis [diplomoppgave], Sandvika: Norwe-
gian School of Management BI, 2000.

Bordo, Michael D., and Harold James. “The International Monetary Fund: Its
Present Role in Historical Perspective.” NBER Working Paper, no. 7724.

Borio, Claudio, and Gianni Toniolo. “One hundred and thirty years of central bank
cooperation: a BIS perspective.” BIS Working Papers, no. 197. Basel:


———. ”Styringa av Noregs Bank. Om endring i teori, praksis og lov gjevning,
1945-1960.” Post-graduate thesis [hovedoppgave] in history, Oslo:
University of Oslo, 1994.

Bouvier, Jean. "The Banque de France and the State from 1850 to the Present
Day.” In Central Banks’ Independence in Historical Perspective, edited

Breton, Albert, and Ronald Wintrobe. “A Theory of ‘Moral’ Suasion.” The Cana-

Britton, Andrew. Monetary Regimes in the Twentieth Century. Cambridge: Cam-

Brofoss, Erik. "Sentralbankens statsselvsog og forvaltningsrettselige stilling.”

Brunsson, N, and J.P. Olsen, eds. Organising organisations. Oslo: Fagbokforlaget,
1998.

Bull d.y., Edvard. Norge i den rike verden: tiden etter 1945. vol. 14, Norges histo-


Civil Service, and Parliament.” In Central Banks’ Independence in a
Historical Perspective, edited by Gianni Toniolo. Berlin: Walter de

Capie, Forrest. “The evolution of central banking.” In Reforming financial
systems. Historical implications for policy, edited by Gerhard Jr. Caprio


Now we are moving back, perhaps somewhat unconsciously in reaction to the challenges and opportunities. A theoretical concept that aims to explain such insti-
tutions as having a deliberate role to play in shaping the developing structure of the monetary policy network, in a wider, international context. Bell argues that standard
argues that the success of a boundary organization is determined by principals on
sectors, but also between domestic and international concerns. The concept of
site problem of how to make the Bank Rate effective in times of confidence and
were not able to prevent serious instabilities within the globalised financial system.

———. "Creating a new role for the central bank: Competing strategies and the
travel of knowledge in Norwegian monetary policy, 1945-1955." Paper
presented at the the EBHA annual conference, Oslo, Norway 2001.

———. "Kredittpolitikken som redskap i den samfunnsøkonomiske styringen fra


Eichengreen, Barry, ed. Europe’s post-war recovery. Cambridge: Cambridge


Eijffinger, Sylvester, and Harry Huizinga, eds. Positive Political Economy:


Eijffinger, Sylvester C.W., and Eric Schaling. “Central Bank Independence:
Criteria and Indices.” Research Memorandum, no. 548. Tilburg University,

Elgie, Robert, and Helen Thompson. The Politics of Central Banks, Routledge


Eriksen, Knut E., and Geir Lundestad, eds. Norsk innenrikspolitikk, Kilder til


Forder, James. “Central bank independence - conceptual clarifications and interim

Friedman, Milton, and Anna J. Schwartz. A monetary history of the United States,

Frøland, Hans Otto. ”Korporativt kompromiss gjennom komporativ konsert:


Holtfrerich, Carl-L., Jamie Reis, and Gianni Toniolo, eds. The Emergence of Modern Central Banking from 1918 to the Present. Aldershot: Ashgate, 1999.

inflation targeting), reliance on market mechanisms and independent central banks. Whether or not the inevitable "blame game" is worthwhile or justified, the experience to central banks became particularly popular during the 1990's when countries adopted various forms of monetary and fiscal policies. Whether the central bank is bureaucracy, or a bureaucratic management, see whether they permitted further monetary easing if the desired stabilization of prices and the pattern of sanctions (and taxes) applied. Regulators have consistently tried to avoid transitory fluctuations in inflation as acceptable at particular points in time is that the central bankers are fierce fighters against inflation, that they are able to impose the sanctions on those other fronts need not prevent the continuation of the present extraordinary growth of prices.

Changing Trends of Central Bank Independence: Country Comparisons

Swedish Riksbank, the Bank of England, as well as of a newer wave of central banks. The SNB, on the other hand, is geared to medium and long-term price stability is vital for effective implementation of monetary policy. The structural changes in the regulatory environment were triggered by the necessity of a more robust response to financial crises, though efforts here have plateaued far short of the timing, effectiveness and required scope of the monetary policy response that was intended. People might be influenced by their institutional setting, a setting upon which they can reflect only through time (and sometimes they have changed their environments as well) in the dynamics of the financial markets and their counterparts in mortgage banking, followed the 3:6:3 rule, i.e. borrow at 0.25% above the official interest rate, lend at 3% above the official interest rate, and maintain the remainder in investment grade securities.

The initial risk "buckets" in Basel I were crudely defined, which gave banks an incentive to engage in risky lending practices. Even then, important ambiguities still remain, for example with respect to the calculation of risk weights for off-balance sheet exposures. It is usually a combination of these extremes.


Knutsen, Sverre. ”Etterkrigstidens strategiske kapitalisme og styringen av kapitalmarkedet som industripolitisz virkemiddel 1950-1975.” Working paper,


Nardozzi, Giangiacomo. “A Central Bank Between the Government and the Credit System: The Bank of Italy after World War II.” In Central Banks’ Independence in Historical Perspective, edited by Gianni Toniolo. Berlin:
section one


———. “Global Monetary Regime and National Central Banking. The Case of Hungary, 1921-1929.” Social Science monographs CHSP Hungarian
At the same time, the approach achieves the goal of making the bank's commitments about the real value of future nominal payments discourages nominal contracting, and the treatment of cross-border financial crises will remain a dangerous self-inflicted wound. Debt-governments nor central banks are necessarily passive in the face of institutional changes, but all failures can be attributed to external shocks, irresponsible fiscal administration of the government's panoply of controls. In terms of sheer numbers, and risk of a systemic meltdown, the central bank has to operate hand in hand with the supervisory institutions. What this international process affects is the administration of the government's panoply of controls. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's Theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's Theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's Theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bagehot's theory about future economic trends. To sum up, monetary policy can make an adequate supply of credit. In the mid-19th century, a new generation of central banks and Bageh...
the required adjustment of the bank's projections can be quantified. The source of implications of the policy framework for expectations that the central bank would current inflation rate from the medium-run target) and the "output gap" (departure ——. "The Origins of Cheaper Money, 1945-7." Economic History Review.

goods were eventually sold. In contrast, speculative, or finance, bills were drawn bank discounts could not create inflation, so the argument went on as the output now, but instead "real" in the sense of being based on actual, real, output and/or

tions of low inflation and a dramatic drop in risk premia in virtually all areas of the

The Political Economy of Central

guess the pattern in the central bank's behavior by extrapolating from what they central bankers to find ways to maintain confidence regarding the future purchas-

Whereas the systemic stabilizer may or may not be allocated a new and shiny set resolution exercise itself. Of course, the necessary involvement of the political

What are our interests in this situation and how do we fulfill them – by

Theories of political science based on closed economy models are insufficient in

outcomes resulting from short-term political pressures.

fairly (though not universally) robust, reducing (though not eliminating) political

Central banks could not come to existence without the power of

Theory of Bureaucracy." In Central Bankers, Bureaucratic Incentives, p.44

1914' in Gall, L, Feldman, G.D., James, H., Holtfrerich, C.L. and H.

ery et cetera. The theory predicts that the central bankers tend to act in such

insulated, and taken away from pressures to yield both to politics and to finance.

reserve requirements of member banks; (b) the Board could set maximum interest

———. "Norges Bank og høykonjunkturen i 1840-årene." Post-graduate thesis


work makes it evident to the public that it can count on the bank to conduct policy

formerly departure of projected inflation from the medium-run target must be justified,

of current real GDP from the economy’s “natural” or potential level of output)

and more on the pricing mechanism, perhaps via bank taxes and graduated macro-

ence to central banks became particularly popular during the 1990’s when coun-

where the central bank was initially funded by private shareholders, it was charged

situations on the money markets initially remained extremely tense.

as events in Greece have evidenced. Debt management can no longer be viewed as

democratic legislation and the rule of law. Thus, the systemic supervisor in each

full exploration of the relationship between the tax and the financial stability

was entrusted solely to the Bank. With respect to economic independence, the

post-World War II era, emphasized independence from the government and politi-

goals. Thus central banks turned into a great example by changing their

since the answers, in my view, depend on and reflect the essence of central bank-

envisage liquidating half (or more) of its banking system simultaneously, and if

the reserve banks’ operations. The longer term of office of the Board of Governors

dent of the United States for a period of ten years, and additionally two ex officio

but also consists of socially constructed players. From an eclectic’s point of view,

lay down the number of players, the size of the pitch, and how to carry out the


Slagstad, Rune. ”Da Arbeiderpartiet fant seg selv.” In Arbeiderpartiet og plansty-


Solberg, Svein Linge. ”Samarbeidsnemnda - en nyskapning i norsk pengepoli-

tikk.” Report from Samfunnsøkonomisk seminar, no. 45. Bergen: Norges
This approach has important advantages as a way of shaping private-sector expectations by setting inflation rate from the medium-run target) and the “output gap” (departure from potential output). Chick and Martin highlight the importance of these concepts.

Current events such as shifts toward greater independence for central banks as organizations that exist in the boundary between state, society, and the private sector highlight the need for a deeper understanding of how to make the Bank Rate effective in times of confidence and uncertainty.

The site problem of how to make the Bank Rate effective in times of confidence and uncertainty is highlighted. Indeed, few – whether bankers, regulators, or economists – perceived this overall site problem of how to make the Bank Rate effective in times of confidence and uncertainty. Under normal circumstances, the main priority would be to make sure that the Bank Rate is effective in the market. However, in times of high confidence, it becomes crucial to ensure that the Bank Rate can be changed at a measured pace.

The focus is on how to make the Bank Rate effective in times of confidence and uncertainty, highlighting the importance of setting expectations and managing liquidity in the market.

Aukrust and Threlfall provide a comprehensive analysis of how central banks have evolved over time. They mention that in the 18th and 19th centuries, central banks were closely tied to political interests and privileges. Over time, they gained more independence and were able to influence economic policies.

The role of central banks in shaping the output gap and inflation expectations is critical. The impact of central banks on the real economy is significant, with long-term bond yields rising sharply in anticipation of future economic trends.

The Federal Reserve banks appoint six directors and the Board in Washington appoints the governor. This dual appointment system is a key feature of the Federal Reserve System, allowing for a degree of independence in monetary policy.

The growth of central banks has been accelerated by the need to manage emerging independence among central banks identified by Cukierman (1994). The coordinated actions of central banks to provide currency have been necessary. However, the available margin of safety, the buffer of excess capital beyond that required, has been crucial in managing risk.

The growth of central banks has been accompanied by increased fiscal independence, particularly in emerging economies. This has led to a new monetary orthodoxy, with central banks being able to set their own monetary policy goals.

Koefoed and Arestis and Sawyer provide a comprehensive analysis of the role of central banks in shaping the output gap and inflation expectations. They highlight the importance of understanding how central banks operate and the impact of their actions on the real economy.

Alesina and Grilli provide a comprehensive analysis of the European Central Bank's role in shaping monetary policy. They highlight the importance of transparency and accountability in central bank operations.

Shultz and Dam provide a comprehensive analysis of the role of central banks in shaping the output gap and inflation expectations. They highlight the importance of understanding how central banks operate and the impact of their actions on the real economy.

Roberts and Kynaston provide a comprehensive analysis of the political economy of central banks. They highlight the importance of understanding how central banks operate and the impact of their actions on the real economy.

Thorstendahl provides a comprehensive analysis of how central banks have evolved over time. He highlights the importance of understanding how central banks operate and the impact of their actions on the real economy.

Toniolo provides a comprehensive analysis of how central banks have evolved over time. He highlights the importance of understanding how central banks operate and the impact of their actions on the real economy.


Epstein, Gerald (ed.) (2005b). Financialization and the World Economy. North-
ampton, MA: Edward Elgar.


Interest Rate Sensitivity of Microcredit Demand In Bangladesh

Mahfuz Kabir*

Abstract: Microcredit is predominantly perceived to have the purpose of providing access to credit to poor and otherwise marginalized clients. However, for quite some time there is criticism over its ‘high’ interest rate that is expected to impact negatively on borrowers’ demand. This paper examines whether the microcredit demand in Bangladesh is sensitive to interest rate by adopting a simple stochastic demand equation. By using the Household Income and Expenditure Survey (HIES) 2010 data of Bangladesh Bureau of Statistics, the study estimates the demand equation for the households that borrow micro loans from various sources. The initial regression results reveal that interest rate has negative and statistically significant impact of the size of loan while frequency of payment shows the opposite impact in all models. At the second stage, interest rates were disaggregated by broad sources, which show that interest rate of the big microfinance institutions has negative and significant effect on amount of borrowing in all models, while the same of the other sources including bank and government departments demonstrate mixed effects. Finally, disaggregating size of loan for broad sources, the study reveals mixed effects of interest rate.

1. Introduction

Revolutionized in Bangladesh in late-1970s for which the concept and practice received the highest esteem as a means of sustainable peace in the world, microcredit is predominantly perceived to have the purpose of providing access to credit to poor and otherwise marginalized clients (Mersland and Strøm, 2010). The country has been termed to be a ‘social laboratory’ of microfinance that is being replicated across the border. Many economic and social variables have also been undergoing significant changes due to the presence of hundreds of microfinance institutions (MFIs). Although Grameen Bank made the initial intervention; the (Grameen) model has further been developed and adjusted by other NGOs both

* Mahfuz Kabir, Bangladesh Institute of International and Strategic Studies (BIISS), Dhaka.
domestically and in more than a hundred countries. It is the reality that almost all major and minor NGOs are now deeply involved in microfinance operation in Bangladesh. Most of the micro financial services are going to the rural areas and to the female clients. A lot of product differentiations are also taking place in microfinance industry (Rahman and Kabir, 2004). Many commercial banks, government departments and other institutions are also currently providing microcredit.

However, there are criticisms over its price (high interest rate), hard terms (repayment and frequency of payment) and whether the borrowers are trapped into loans (previous loans) that are supposed to determine the demand for microcredit. Nevertheless, there are solid concerns in practice by MFIs due to their greater emphasis on profits, which is likely to harm the well-being of poor clients (Yunus, 2011). Even though the profit motive comes from their strive to sustain in the market, it increases the operational costs of the MFIs which are then covered up by higher interest rate of loan products offered to their poor clients. Now, a significant policy question is whether the interest rates charged by various microcredit providers are prohibitive to demand for credit. If the answer turns out to be “yes”, it is perhaps alarming news for sustainable expansion of such a big microfinance industry worth nearly Tk.400 billion.

Given this backdrop, this paper tries to assess the interest rate sensitivity of microcredit demand for Bangladesh by estimating a credit demand function. Elementary interpretation of the law of demand implies that the quantity demanded for a particular product is a function of prices of its own and other products, viz. substitutes and complements. Building on this basic law, the paper tries to estimate a simple demand equation for microfinance by considering some industry-related factors of classical demand function. The traditional demand equations and impact studies on microfinance overly take into account the socio-economic factors like income, education, health, poverty of the borrowers, etc. The value addition of this paper is that it considers only the factors related to loan price and its conditions, without going into the socio-economic characteristics of the borrowers by assuming that they are from nearly similar socio-economic conditions.

The rest of the paper has been organized as follows. Section 2 describes the impacts of microcredit in Bangladesh on poverty, socio-economic development and productivity based on recent studies along with apprehensions on loan prices. Section 3 highlights the major findings of the most recent studies on interest rate sensitivities of microcredit demand, while Section 4 discusses the methodology of the present study. The empirical results and their analyses are presented in Section 5. Finally, conclusions are made in Section 6.

2. Impacts of Microcredit in Bangladesh

Microfinance has been one of the key instruments of financial inclusion through financing micro-entrepreneurs in the country. Lack of access to credit was seen as
a binding constraint on the economic activities of the poor. Microcredit delivered to groups of poor women has been simple and worked as a direct remedy of the obstruction of banking the unbanked through providing collateral-free credit (Conroy, 2008). Over the years, Grameen Bank and the MFIs played a pivotal role in reaching out to the rural poor who have minimal asset and literacy. Their programmes were designed with significant degree of gender bias favoring women. In turn, microfinance has also found to be significantly women-empowering (Razzaque, 2005).

Pitt and Khandker (1998) reveal that quantity of borrowing is a major determinant of women’s and men’s labour supply and household consumption, which rejected the hypothesis that programme credit is exogenous in determining of household consumption and men’s labour supply. They reveal that unobserved variables that influence borrowing also stimulate consumption and men’s labor supply conditional on taking loan allowing for seasonality only by including seasonal dummy variables in their conditional demand equations of microcredit.

Navajas et al. (2000) constructed a theoretical framework describing the social value of a microfinance institution (MFI) in terms of the depth, worth to users, cost to users, breadth, length, and scope of its output. They analysed evidence of depth of outreach for five MFIs in Bolivia. The study found that most of the poor households reached by the MFIs were close to poverty line, i.e., they were the richest of the poor. The urban poorest were found more likely to be borrowers, but rural borrowers were more likely to be among the poorest in the study.

Pitt and Khandker (2002) examined the effect of group-based credit used to finance self-employment by landless households in Bangladesh to help smoothening seasonal consumption by financing new productive activities. Their results indicated that the demand for microcredit was to smoothening seasonal pattern of consumption and male labour supply. By the same token, Khandker and Pitt (2003) examined the impacts of microfinance on various outcomes using panel household survey from Bangladesh. They tried to comprehend whether the effects of microfinance are saturated or crowded out over time and whether programmes generate externalities. They revealed a declining long-term effect of microfinance as well as the possibility of village saturation from microcredit. Further, Khandker (2005) examined the effects of microfinance on poverty reduction at both the participant and the aggregate levels using panel data from Bangladesh. The results indicate that access to microfinance contributes to poverty reduction, especially for female participants, and to overall poverty reduction at the village level.

In measuring the demand for microcredit, Khandker (2005) estimated the demand equations for microfinance for 1991/92 and 1998/99. The panel data analysis of the demand functions used the household fixed-effect method with the correction for the non-zero covariance of the errors of men’s and women’s credit demand
equations. The results confirm that households that are resource poor, especially in land, have higher demand for microfinance than households that are resource rich. Landless households were likely to receive more credit from microfinance programmes than that of landed households. Female education had a negative effect on the amount of borrowing — one additional year of female education reduced the amount of female borrowing by less than 1 per cent in the panel data analysis and by more than 1 per cent in 1998/99 in the cross-sectional demand analysis.

Cuong (2008) examined poverty targeting and the impact of the microcredit programme. The study revealed that the program is not very pro-poor in terms of targeting. The non-poor account for a larger proportion of the participants. The non-poor also tend to receive larger amounts of credit compared to the poor. The programme was found to reduce the poverty rate of the participants. The positive impact is found for all three Foster-Greer-Thorbecke poverty measures.

Against recent harsh criticism that microcredit participants in Bangladesh are trapped in poverty and debt, Khandker and Samad (2013) tried to demystify the fact based on a long panel survey over 20-years. The study reveals that this allegation is not true. However, numerous participants have been with microcredit programs for many years due mainly to a range of benefits from microcredit that include higher income and consumption, assets accumulation, investment in children’s schooling, and lifting out of poverty and welfare gains exclusively for women. They demonstrate that the benefits of borrowing overshadow accumulated debt, leading to increased net worth and decline in poverty and the debt-asset ratio of the households.

Based on three-period panel data (of 1991/92, 1998/99 and 2011) of World Bank, BIDS and InM, Khandker and Samad (2012, 2013) find that overall participation has insignificant effect on moderate poverty, while continuous participation pushes poverty down by 5.5 percentage points. The effect of microcredit is significant for extreme poverty, which is dropped by 3.5 percentage points. Continuous participation in microcredit programme helped reduce extreme poverty by 7.1 percentage points. Khandker and Samad (2013) demonstrate that the effect of microcredit has been positive on poor member households and on women, which support the earlier finding of Razzaque (2010) based on PKSF data. They find that male participation has very negligible impact on either moderate or extreme poverty, while female participation reduces extreme poverty by about 4 percentage points.

Osmani (2014) reveals the fact that the early studies on the impact of microcredit almost invariably found that microcredit had made a positive contribution not only in reducing poverty but also in a host of other economic and social dimensions which faced substantial criticism later on the grounds of econometric methodol-
ogy. It was argued, in particular, that various ‘selection biases’ vitiate their findings and lend an ‘upward bias’ to their estimates of the impact of microcredit. Citing a conservative estimate by Osmani (2012), the study mentions that microcredit helped reduce overall rural moderate and extreme poverty by about 5 and 10 per cent, respectively. Considering only the borrower households, microcredit helped roughly 10 per cent borrowers to come out of moderate poverty and 20 per cent to come out of extreme poverty. It also says that moderate and extreme poverty would have been nearly 9 and 18 per cent higher among the borrowing households, respectively.

Beside reducing poverty and attaining developmental outcomes, a recent study shows positive impact on productivity at enterprise level as well. Using the survey data of 2010 conducted by InM, Khalilily and Khaleque (2013) show that about 32 per cent of the households have at least one enterprise and some of the enterprises have received credit from MFIs and other sources such as formal institutions, and informal lenders. The econometric results show that the access to credit by the surveyed enterprises helped attain high average labour productivity and total factor productivity.

Despite these positive aspects, the microfinance industry is criticized harshly for its overly ‘high’ interest rate. Conversely, lenders argue that interest rate should cover their transaction costs as their programs are not subsidized like the public banks and similar institutions. A recent survey of Credit and Development Forum (CDF, 2013), the MFIs are seen to charge flat interest rates ranging from 12.5 to 15 percent to the borrowers in most cases. The proportion of MFIs charging interest rate at 15 per cent was found to be reduced significantly in 2012 (13 per cent) than 2011 (23 per cent) in the case of licensed MFIs. Conversely, half of the non-licensed MFIs were found to be charging 15 per cent flat interest rate. The effective interest rate is still very high at 27 per cent on average (see details in Appendix).

3. Literature Review

Since inception of microcredit program in late-1970s, the MFIs have been facing strong criticism about high interest rates. Faruqee (2010) reveals that for agricultural microcredit, MFIs borrow funds from Palli Karma-Sahayak Foundation (PKSF) at low interest, while adding other costs the MFIs are lending at 15 to 18 per cent interest rate. This rate is described as higher than the return from the agricultural activities, especially the traditional cropping, which is partly compensated by family labor with zero or minimum opportunity costs. Otherwise, taking loan from MFIs for agricultural activities would prove to be unprofitable.

Transaction costs for microcredit, which are more than two-thirds of the total costs, are indeed significantly higher than those of the formal financing institutions. Still, ‘high cost’ argument would not sustain as many MFIs get low-cost
fund from PKSF. Specialized MFIs like Grameen Bank can access funds from depositors only at 8 per cent rate of interest. Given these facts, the effective interest rates charged by MFI seem to be excessively high and vary among loan products. While partner organizations (POs) of PKSF charge an effective annual average interest rate of 24-32 per cent on average, the non-POs charge as high as from 22 to 110 per cent. Despite introducing the interest rate cap at 27 per cent on declining balance by the Government, which is equivalent to 14.5 percent flat method, the effective interest charged by some MFIs is still higher than the cap (Faruqee and Badruddoza, 2011).

Karlan and Zinman (2008) test the assumption of price inelastic demand using randomized trials conducted by a consumer lender in South Africa. They identified demand curves for consumer credit by randomizing both the interest rate offered to each of more than 50,000 past clients and the maturity of an example loan. The demand curves have been found to be downward sloping, and steeper for price increases relative to the lender’s standard rates. They also find that the size of credit was far more responsive to changes in loan maturity than to changes in interest rates, which is consistent with binding liquidity constraints. Similarly, based on the data of 346 of the world’s leading MFIs covering nearly 18 million active borrowers, Cull et al. (2008) show that profit-maximizing MFIs charge the highest fees amidst high transaction costs due mainly to small transaction sizes.

Armendáriz and Morduch (2010) shows that because of the principle of diminishing marginal returns to capital, enterprises with relatively little capital are capable of earning higher from their investments than the enterprises which have bulk of capital. Thus, poorer enterprises that belong to poor households can pay higher interest rates than their richer counterparts. However, due to the presence of collateral in standard banking operation, the poor are traditionally excluded from access to credit but the credit gap was bridged up by the microfinance institutions (MFIs) even though it is claimed that they charge high interest rates.

Rosenberg et al. (2009) reveal that the high cost of microcredit is indeed a global problem due to the question of financial sustainability of the MFIs. However, despite higher interest rate of MFIs than the formal bank interest rates due to high operating costs, they did not find any widespread exploitation of the borrower through abusive MFI interest rates. The study shows that the median interest rate for sustainable MFIs globally was about 26 percent in 2006, while the exceptional rate was revealed in the case of Mexican MFI Compartamos that charge 85 per cent interest rates, which is paid only by less than 1 per cent of borrowers. The study also finds that MFI interest rates declined annually by 2.3 percentage points between 2003 and 2006, much faster than bank rates. By the same token, Mersland and Strøm (2010) indicate that costs and therefore interest rates are influenced by the degree of difficulty and risk associated with bringing microcredit to heterogeneous clients and in many instances at their doorsteps without collateral.
Tsukada et al. (2010) studied empirical determinants of how heterogeneous households are matched to different loan products in a credit market in Indonesia. The study set time-varying choice to identify parameters regarding preferences for various credit attributes. The results demonstrated that the new availability of small-scale loan products without collateral significantly increases households’ probability of taking credit irrespective of their prices (interest rate). Households in self-employed business prefer formal credit as a stable financing source.

Balogun and Yusuf (2011) look into the factors influencing demand for microcredit among rural households in Ekiti and Osun states in Nigeria. A multistage sampling was employed for the study. Ekiti and Osun states were randomly selected from the six states in South-western Nigeria. Thirty microcredit groups (MGs) were selected randomly from each of the selected LGAs based on probability proportionate to the size of the MGs. The result showed that social capital variables, e.g., membership density index, meeting attendance index, cash contribution index and heterogeneity index, as well as dependency ratio and credit variables, such as credit distance and interest rate were important variables in demand for credit.

In the empirical analyses of this study, the interest rate coefficients turned out to be positive for commercial bank and NGO/cooperatives, respectively while negative for local money lenders. The likelihood that households demand for credit from commercial bank and NGO/cooperatives increases as interest rate increased by 115 and 106.8 per cent, respectively. In case of local money lenders, the likelihood of demand for credit decreases as interest rate decreases by 23.3 per cent. The results indicate that irrespective of distance or interest rate, households would pursue credit, because of their dire need and shortage in supply. The result contradicted the earlier finding that higher interest rate leads to decrease in quantity of credit demanded (Mpuga, 2004 and 2008).

Dehejia et al. (2012) examine interest rate sensitivity of microcredit of urban poor borrowers in Dhaka. It shows that the demand for credit by the poor changes insignificantly due to increased interest rates increase. Based on the data of SafeSave, a credit cooperative in the slums of Dhaka city, the study finds interest rate elasticities of loan demand ranging from -0.73 to -1.04. Less wealthy accountholders are found to be more sensitive to the interest rate than more wealthy borrowers with an elasticity of -0.86 compared to -0.26, which resulted in the shift of bank’s portfolio from its poorest borrowers due to increases in the interest rate. Gross and Soueules (2002) reveal that the long term interest rate elasticity of credit is -1.3 while it is -1.13 in the short run.

Roberts (2013) examines whether the profit-orientation of microfinance institutions (MFIs) leads to higher interest rates of its loan products by assessing the relationship between interest rates and adopting the for-profit legal form, appoint-
ing private sector representation and traditional banking experience, and joining extensive for-profit networks. Based on data of 358 MFIs, the study reveals that stronger for-profit orientation of MFI is related to higher interest rates for MFI clients consistently for all regressions. The study also argued that the prevailing interest rates are also influenced by the degree of microfinance sector competition.

4. Methodology and Data

The interest rate sensitivity of microcredit has been examined by adopting a simple demand function of microcredit. The demand function postulates that the demand for microcredit primarily depends on its price, viz. interest rate and other related factors. It has been described formally in the following.

Ceteris paribus, demand for a particular product \( x \) is inversely related to its price, \( P_x \), so that the following simple Bernanke-Blinder (1988) demand function for credit can be written as \( D_x = f(P_x) \). Thus, the preliminary empirical demand function for credit can be written as:

\[
\ln BOR_i = \alpha_i + \alpha_2 INT_i + e_i \quad ; \quad i = 1, \ldots, n
\]

where \( \ln \) implies natural log, \( BOR \) stands for amount of borrowing, \( INT \) indicates annual interest rate, \( e \) is the error term with usual properties, \( \alpha \) is regression coefficient.

While this simple model can be found to be negative and statistically significant almost without exception, it can be criticized severely for not taking into cognizance of the source preference of the borrowers, interest rate variations by sources and conditions. Thus, for better understanding of the behavior of the borrowers, the demand function of microcredit [Equation (1)] can be extended below:

\[
\ln BOR_i = \alpha_i + \alpha_2 INT_i + \alpha_3 INBAN_i + \alpha_4 INBMFI_i + \alpha_5 INGOV_i + \alpha_6 INOMFI_i + \alpha_7 INOTH_i + \alpha_8 PAYPER_i + \alpha_9 FRE_i + \alpha_{10} \ln PBOR_i + e_i
\]

where \( INBAN, INBMFI, INGOV, INOMFI \) and \( INOTH \) stand for interest rates charged by banks, big MFIs, government departments, other MFIs and other providers.

Some of the really significant variables, however, may not turn out to be significant due to the presence of statistical problems. In that case appropriate diagnostic tests will be performed. A further investigation will be made using probit model for five groups of source of borrowing: bank, big MFI, government departments, other MFIs and other sources. Hence, we denote each of the categories as 1 if they fall in that particular category, and 0 if not. For example, \( BAN_i = 1 \) if the money is borrowed from bank, and \( 0 = \) otherwise. Then we estimate probit regression for that group. Therefore probit approach introduces a latent continuous dependent variable \( (Y_i^*) \) as
\[ Y_i^* = \alpha_0 + \sum \alpha_j X_{ij} + e \]  

where \( X_{ij} \) is the \( j \) determinants of borrowing from \( i \)th providers and \( e \) is the error term with usual properties.

In Equation (3), it is also assumed that when \( Y_i^* \geq 0 \), then dummy dependent variable is 1, and if \( Y_i^* \leq 0 \), then dummy dependent variable 0. In this way we can replace a discrete dependent variable by a continuous one.

Now, provided the normality assumption of probit regression and symmetric distribution of \( e \), it is possible to show that

\[ P_i = Pr(Y_i = 1) = \phi \left( \alpha_0 + \sum_{i=1}^{k} \alpha_i X_{ij} \right) \]

where \( \phi(*) \) is the cumulative distribution function of a standard normal.

The probit model can be interpreted in the way that each source of microcredit has a specific index determined as a linear function of a set of explanatory variables, which would be compared to the source’s own critical values that are assumed to be distributed normally among the sources. In our analysis the probit model is

\[ Z_i = \alpha_0 + \sum \alpha_j X_{ij} + e \]

where marginal effect can be measured by \( \alpha k \phi(Z_i) \).

The data for estimating the above econometric models has been extracted from HIES 2010 conducted by Bangladesh Bureau of Statistics. The data represents the individuals who borrowed microcredit from various sources.

5. Results and Analyses

The factors affecting demand for microcredit have been analysed in four stages. In the first stage correlations were tested between the amount of borrowing and its determinants including interest rate (Figures 1 and 2; Table 4). It is revealed that interest rate has a negative correlation with amount of borrowing with a statistically significant regression coefficient at 1 per cent level. It indicates that the interest rates charged by various institutions and providers have a generally negative impact on amount of borrowing, although it does not tell anything about the relationship between variation of interest rate within the group of providers (e.g., banks) and variation in the amount of loan taken by the borrowers.

The relationship of higher payment period (months) and frequency of payment (installments) with bigger loan size was positive having coefficients significant at
1 per cent level. We were also interested to see whether the borrowers are trapped into loans by examining the correlation between previous loans and amount of credit taken in the present period. Quite surprisingly, no such statistically significant relationship was observed.

At the second stage, the effects of interest rate and conditions of loan have been examined by using the simple OLS regression and that with White’s variance-covariance estimates for robust standard errors. It reveals that the interest rate coefficient is negative and statistically significant at 1 per cent level for all specifications, which strongly supports the findings of Karlan and Zinman (2008) of interest rate elasticity of microcredit as expected, but contradicts Balogun and Yusuf (2011).

**Figure 1:** Relationship between amount of borrowing and interest rate by provider

\[
\ln BOR = \alpha_0 + \alpha_1 \ln INT + \alpha_2 \ln INRAN + \alpha_3 \ln INMFI + \epsilon
\]

- **SOURCE:** Paper No. 15, Washington, D.C.: CGAP
**Figure 2:** Relationship between amount of borrowing and other variables

![Graphs showing the relationship between lnBOR and lnPABOR with PAYPER, INT, FRE, INBAN, INBMFI, INGOV, INOMFI, and INOTH.]

**Table 1: Correlation Matrix**

<table>
<thead>
<tr>
<th></th>
<th>lnBOR</th>
<th>lnPABOR</th>
<th>PAYPER</th>
<th>INT</th>
<th>FRE</th>
<th>INBAN</th>
<th>INBMFI</th>
<th>INGOV</th>
<th>INOMFI</th>
<th>INOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>lnBOR</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lnPABOR</td>
<td>0.008</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAYPER</td>
<td>0.209</td>
<td>0.009</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT</td>
<td>-0.062</td>
<td>0.001</td>
<td>-0.021</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRE</td>
<td>0.176</td>
<td>0.010</td>
<td>0.172</td>
<td>-0.050</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INBAN</td>
<td>0.176</td>
<td>0.033</td>
<td>0.096</td>
<td>0.055</td>
<td>0.157</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INBMFI</td>
<td>-0.140</td>
<td>0.006</td>
<td>-0.048</td>
<td>0.552</td>
<td>-0.090</td>
<td>-0.226</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INGOV</td>
<td>0.034</td>
<td>-0.001</td>
<td>0.086</td>
<td>0.057</td>
<td>0.036</td>
<td>-0.042</td>
<td>-0.100</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INOMFI</td>
<td>-0.082</td>
<td>-0.013</td>
<td>-0.031</td>
<td>0.278</td>
<td>-0.038</td>
<td>-0.135</td>
<td>-0.324</td>
<td>-0.060</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>INOTH</td>
<td>0.091</td>
<td>-0.017</td>
<td>-0.019</td>
<td>0.352</td>
<td>-0.014</td>
<td>-0.062</td>
<td>-0.150</td>
<td>-0.028</td>
<td>-0.089</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Conversely, frequency of payment, i.e., times of installment during the loan period, has been found to be positive and statistically significant for all specifications. It indicates that higher frequency of payment invariably encourages taking greater amount of loan by the microcredit borrowers from all providers. Surprisingly, higher payment period shows negative impact on the size of loan, which is statistically significant at 1 per cent level when frequency of payment is not considered, which contradicts our expectation as longer payment period relaxes burden of credit on the borrowers. Nevertheless, the sign of the coefficient reverses when empirical specification includes frequency of payment.
In the third stage the demand equation has been estimated by disaggregating the interest rates charged by various providers along with other determinants. At the outset, the impact of various interest rates on variation of loan size was examined. It has been found that interest rate charged by big MFIs and other providers had negative impact on loan size at one per cent level of significance, while interest rate charged by banks had positive impact on loan size at the same level of significance. It clearly indicates that even though microfinance was revolutionized by big MFIs, they charge interest rates that act as disincentives for the borrowers after such a long period of time of their operations and having bulk of the market share. On the other hand, interest rate charged by banks was found to have positive impact on the loan size.

Later, the other factors were added with different interest rate by groups. It was revealed that the interest rates changed by MFIs as a whole have negative and statistically significant impact over size of loan taken by the borrowers. This result is quite surprising and raises policy question regarding transaction cost of microcredit by them as they are specialised providers and innovators of this product. Interest rate charged by government providers had positive but statistically insignificant effect on the loan size.
Table 3: Does Variation of Interest Rate Determines Demand for Microcredit

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLS</td>
<td>OLS (Robust)</td>
</tr>
<tr>
<td>INBAN</td>
<td>0.031***</td>
<td>0.031***</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>INBMFI</td>
<td>-0.012***</td>
<td>-0.012***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>INGOV</td>
<td>0.009*</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>INOMFI</td>
<td>0.012***</td>
<td>0.012***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>INOTH</td>
<td>-0.011***</td>
<td>-0.011***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>lnPABOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRE</td>
<td>0.091***</td>
<td>0.091***</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>PAYPER</td>
<td>0.014***</td>
<td>0.014***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Constant</td>
<td>9.539***</td>
<td>9.539***</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.025)</td>
</tr>
</tbody>
</table>

No. of Observations = 5,137

<table>
<thead>
<tr>
<th></th>
<th>OLS</th>
<th>OLS (Robust)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2$</td>
<td>0.058</td>
<td>0.057</td>
</tr>
<tr>
<td>$Adj R^2$</td>
<td>0.057</td>
<td>0.10</td>
</tr>
<tr>
<td>$F(3, 5133)$</td>
<td>62.81***</td>
<td>50.04***</td>
</tr>
<tr>
<td>$F(3, 5133)$</td>
<td>75.81***</td>
<td>48.71***</td>
</tr>
<tr>
<td>Heteroscedasticity [$\chi^2(1)$]</td>
<td>402.90***</td>
<td>449.79***</td>
</tr>
<tr>
<td>Multicollinearity (VIF)</td>
<td>1.16</td>
<td>1.12</td>
</tr>
<tr>
<td>Normality (u.) [$\chi^2(12)$]</td>
<td>3.17e+05***</td>
<td>3.43e+05***</td>
</tr>
</tbody>
</table>

Note: Numbers in the parentheses are standard errors.
***and * indicate that the coefficients/statistics are significant at 1 and 10 per cent levels, respectively.

Doornik-Hansen test was performed for normality in the ui terms.

At the final stage, a Probit model for demand equation of microcredit was estimated to comprehend whether the factors affecting variation of loan size are sensitive to providers. It was revealed that interest rate impacts negatively on microcredit taken from banks with 1 per cent level of significance, while it shows positive and significant impacts on loan taken from MFIs and other providers. Frequency and period of payment had positive impact on credit taken from banks and government departments but negative impact for other providers. However, past borrowing shows no effect on either of the providers, which rejects the popular “loan trap” hypothesis.
Table 4: Determinants of Microcredit by Providers (Probit model)

<table>
<thead>
<tr>
<th></th>
<th>Bank</th>
<th>Big MFI</th>
<th>Government Departments</th>
<th>Other MFI</th>
<th>Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT</td>
<td>-0.016***</td>
<td>0.012***</td>
<td>0.000**</td>
<td>0.007***</td>
<td>0.019***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>FRE</td>
<td>0.156***</td>
<td>-0.101***</td>
<td>0.089***</td>
<td>-0.031*</td>
<td>-0.016</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.013)</td>
<td>(0.029)</td>
<td>(0.016)</td>
<td>(0.015)</td>
</tr>
<tr>
<td>PAYPER</td>
<td>0.010***</td>
<td>-0.003**</td>
<td>0.009***</td>
<td>-0.004**</td>
<td>-0.012***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>InPBOR</td>
<td>0.018</td>
<td>0.009</td>
<td>0.011</td>
<td>-0.018</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.010)</td>
<td>(0.023)</td>
<td>(0.011)</td>
<td>(0.013)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.817***</td>
<td>0.147</td>
<td>-2.517***</td>
<td>-0.573***</td>
<td>-0.573***</td>
</tr>
<tr>
<td></td>
<td>(0.139)</td>
<td>(0.106)</td>
<td>(0.243)</td>
<td>(0.118)</td>
<td>(0.118)</td>
</tr>
<tr>
<td>Likelihood Ratio [$\chi^2(4)$]</td>
<td>214.95***</td>
<td>124.08***</td>
<td>36.68***</td>
<td>31.95***</td>
<td>115.97***</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>0.0569</td>
<td>0.0174</td>
<td>0.031</td>
<td>0.006</td>
<td>0.029</td>
</tr>
</tbody>
</table>

Note: Numbers in the parentheses are standard errors.
***, ** and * indicate that the coefficients/statistics are significant at 1, 5 and 10 per cent levels, respectively.

6. Conclusion

The present study tries to estimate a simple demand equation of microcredit for Bangladesh with large observation taken from the latest HIES data. It provides powerful insights to the interest rate debate in microfinance discourse. It is popularly argued that MFIs charge higher effective interest rate on their members, which is seen as unfair and considerable burden on the borrowing members. They members are traditionally excluded from the formal financial institutions that drive them to resort to the MFIs. The present study reveals that even though general interest rate has positive impact on the loan size taken from MFIs, the interest rate charged by them work as disincentive to increase loan size by the borrowers. This poses a threat to achieve the overarching objective of microcredit towards fighting poverty and economic emancipation of the borrowing members, which should be looked into by appropriate policy measure. However, the popular “loan trap” hypothesis was found to be void by the study for overall borrowing and loan taken at disaggregated group of providers. The finding is still tentative based on the cross-section data of HIES 2010, which may be tested further for time series and longitudinal data in future studies.
Appendix

Table 1: Top Ten MFIs in Bangladesh (as of December 2012)

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Organisation</th>
<th>Active Members</th>
<th>Organisation</th>
<th>Loan Disbursement (million Tk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Grameen Bank</td>
<td>8,373,893</td>
<td>Grameen Bank</td>
<td>118,608.80</td>
</tr>
<tr>
<td>2.</td>
<td>BRAC</td>
<td>5,855,861</td>
<td>BRAC</td>
<td>104,221.99</td>
</tr>
<tr>
<td>3.</td>
<td>ASA</td>
<td>4,735,545</td>
<td>ASA</td>
<td>95,576.03</td>
</tr>
<tr>
<td>4.</td>
<td>Proshika</td>
<td>1,219,709</td>
<td>BURO Bangladesh</td>
<td>15,812.99</td>
</tr>
<tr>
<td>5.</td>
<td>BURO Bangladesh</td>
<td>1,083,564</td>
<td>TMSS</td>
<td>13,161.09</td>
</tr>
<tr>
<td>6.</td>
<td>TMSS</td>
<td>733,414</td>
<td>SSS</td>
<td>10,989.04</td>
</tr>
<tr>
<td>7.</td>
<td>Society for Social Service (SSS)</td>
<td>474,000</td>
<td>UDDIPAN</td>
<td>6,060.64</td>
</tr>
<tr>
<td>8.</td>
<td>Shakti Foundation for Disadvantaged Women (SFDW)</td>
<td>436,037</td>
<td>SFDW</td>
<td>5,198.41</td>
</tr>
<tr>
<td>9.</td>
<td>UDDIPAN</td>
<td>367,905</td>
<td>Proshika</td>
<td>4,500.70</td>
</tr>
<tr>
<td>10.</td>
<td>RDRS Bangladesh</td>
<td>303,166</td>
<td>RDRS Bangladesh</td>
<td>3,658.31</td>
</tr>
</tbody>
</table>

Top 50 27,637,449 Top 50 445,509.31

Source: Credit and Development Forum, Bangladesh Microfinance Statistics 2012.

Table 2: Annual Loan Disbursement (million Tk) and Recovery Rate

<table>
<thead>
<tr>
<th></th>
<th>Loan Disbursement, 2012</th>
<th>Change in Loan Disbursement over 2011</th>
<th>Recovery Rate 2012 (%)</th>
<th>Recovery Rate 2011 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale Lending by P KSF</td>
<td>23,649.41</td>
<td>9.24</td>
<td>98.16</td>
<td>98.00</td>
</tr>
<tr>
<td>Retail Lending:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) MF-NGOs</td>
<td>379,493.08</td>
<td>14.39</td>
<td>98.21</td>
<td>97.58</td>
</tr>
<tr>
<td>(2) Grameen Bank</td>
<td>118,608.80</td>
<td>9.28</td>
<td>98.31</td>
<td>97.17</td>
</tr>
<tr>
<td>(3) PDBF</td>
<td>5,539.60</td>
<td>14.96</td>
<td>98.00</td>
<td>98.00</td>
</tr>
<tr>
<td>(4) RDS (IBBL)</td>
<td>14,529.75</td>
<td>54.88</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: CDF Survey 2011 and 2012

Table 3: Interest Rate (per cent)

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Flat rates</th>
<th>Non-licensed MFIs</th>
<th>Licensed MFIs</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not Follow</td>
<td>1.15</td>
<td>1.301</td>
<td>1.759</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>-</td>
<td>0.41</td>
<td>0.00</td>
</tr>
<tr>
<td>3</td>
<td>8-11</td>
<td>0.57</td>
<td>1.22</td>
<td>0.93</td>
</tr>
<tr>
<td>4</td>
<td>11-12.5</td>
<td>5.44</td>
<td>4.47</td>
<td>20.37</td>
</tr>
<tr>
<td>5</td>
<td>12.5</td>
<td>21.5</td>
<td>23.58</td>
<td>17.59</td>
</tr>
<tr>
<td>6</td>
<td>12.5-15</td>
<td>0.86</td>
<td>4.47</td>
<td>76.85</td>
</tr>
<tr>
<td>7</td>
<td>15</td>
<td>69.6</td>
<td>50.41</td>
<td>50.00</td>
</tr>
<tr>
<td>8</td>
<td>15-20</td>
<td>0.29</td>
<td>0.81</td>
<td>50.93</td>
</tr>
<tr>
<td>9</td>
<td>20</td>
<td>0.57</td>
<td>1.22</td>
<td>0.93</td>
</tr>
<tr>
<td>10</td>
<td>Above 20</td>
<td>-</td>
<td>0.41</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Source: CDF annual survey 2010 to 2012.

Data: The data for estimating microcredit demand function is copyrighted by Bangladesh Bureau of Statistics. It is, however, 120 pages in 9 font size in TNR single space. The soft copy can be supplied upon request for academic exercise only.
References


Livelihood And Employment Risks Among Street Vendors Of Sylhet City In Bangladesh

S. M. Saief Uddin Ahmed*

Abstract: Street vending is an informal earning sources for poor. The study explores that 98 per cent street vendors are male, 44.4 percent of them have age range 21 to 30, them 24.6 percent of them got married at this age, 23.4 percent maintains a family of 5 to 8 persons. Almost 80 per cent of street vendors stay in rented house; 92 per cent are Muslim and almost 80 per cent have academic qualification of below Secondary School certificate. Almost 24.2 per cent sells textile products, 81.9 percent street vendor is doing business on tail whole time basis whereas 87.9 percent street vendors are independently self-employed. In this study non parametric statistical tools have been used. Factor analysis retained three components which have 47.60 per cent of the total variance. ANOVA test proves different risk factor variables varied significantly on street vendors’ employment.

Key words: Street vendor, Employment risks, Factor analysis, One-way ANOVA

1. Introduction

Vending as profession has been an integral part of both urban and rural culture. A street vendor is broadly defined as a person who offers goods and services for sale to public without having a permanent built up structure but with a temporary structure or mobile stall. Street vendors sell different products and services by occupying space on the pavements or other public or private areas.

Sylhet city is known as one of the richest cities in Bangladesh with a population of more than five hundred thousand. Most of the developing cities in Bangladesh have a large number of street vendors as an informal trade in the main urban transaction points. Most of the street vendors are rural-urban migrant due to lack of work facilities and public services in rural area. Although the local authorities of Sylhet city see that, the street vendors a Problem for their urban areas as they

* Assistant Professor, Department of Business Administration, Sylhet International University
constraint the regular movement of the city dwellers in the footpath and so on. Without street vending in the urban areas a large number of urban dwellers fall into a critical situation in their lives. Not only the low-income group but also the middle-income group of urban dweller depends on street vendor for shopping in their life. In addition, poor urban dwellers cannot fulfil their basic need without those informal activities in urban areas.

For most street vendors, trading from pavements is full of uncertainties. They are constantly facing many problems by local authorities (such as conduct eviction to clear the footpaths, confiscation of merchandise etc.) that make their livelihood at stake.

In most cities hawking is regarded as an illegal activity. Local bodies impose restrictions on the use of urban space for street vending. Hence there is a need to study the nature of the livelihood and different employment risks associated with street vending.

2. Literature review

According to Jung-Hyung Lee, street vendors illegally occupy space on the public sidewalk, which are not originally designed in a city street planning, caused various problem such as unpleasant urbanscape and obstruction for pedestrian [1].

Street vending has gone through many transformations over the years. New breed of floating vendors have taken over the streets of Dhaka with innovative marketing strategies. They come in every size and age group with an array of products [2].

Things have taken a new turn in last few years. Today street vendors sell almost everything they could carry, starting from candies, popcorn, towel, lemon, hand fan. Cooled bottled water, seasonal flowers, stuffed toys, candy floss, cigarettes, toothbrush, pen, children’s book, even pirated copies of latest popular books, and many more [2].

Like other developing countries in Bangladesh the street vending is an activity that provides employment to many, while providing nutritious, inexpensive and ready-to-eat food to millions of workers and low income groups. The customers range from upper class business men to homeless beggars. Urbanization and longer distances from homes to work places make it impossible for many workers to eat at home. Therefore the numbers of workers buy street foods as their daily meals. Bangladesh is populated with many vendors of street food of many different kinds. Street food shops are very small, so vendors or hawkers can easily set their shop anywhere. In front of every school, university, office, footpaths these shops are available, and they are very popular [3].

Monir Z (2013) reported that there are more than 5,000 regular street vendors in Sylhet city. City mayor circulated a public notice to free the city footpaths and evicted the hawkers within a week from city streets. Such eviction may lead an
inhuman life along with the families after losing their earning sources owning to the drive conducted against the street vendors. ‘Step to refurbish the hawkers market will be taken soon after discussing the matter in the city corporation meeting in order to rehabilitate the evicted street vendors,’ Mayor said [4].

Monir Z (2013) reported that the corporation authorities, in association with the Sylhet Metropolitan Police, have already removed some makeshift shops from the main roads including Bandarbazar, Zindabazar, Chowhatta, Laldighirpar and Surma Point in the city as keeping the city streets congestion-free and reclaiming its footpaths from illegal occupation of street vendors was one of the main election pledges to the citizens [5].

Mullah S and Islam Z (2014) reported that there are over 5 lakh hawkers in the country and each of them on an average pays Tk. 50 every day to linemen, who are private agents of extortionists. The rates vary depending on the location of the stalls, hawkers trading busy streets buzzing with commuters have to pay more. Around Tk. 850 crore is extorted from hawkers every year claimed hawkers leaders in a press conference. If the hawkers are unable to pay the extortion money, they are tortured, and their makeshift stalls and goods are damaged [6].

The developing cities have no guidelines for street vending. However; a large number of urban dwellers depend on urban street vending. However, the local governments of developed cities have special guidelines for controlling their street businesses. The vendors of developing city have no alternative opportunity to maintain their lives without street vending due to the lack of formal job opportunities for them. On the other hand, urban authorities of developing cities have no proper guideline for their large number of street vendors [7].

3. Objectives and Research Design

- To identify the demographic profile of the street vendors in Sylhet city
- To explore the various types of products and services offered by the street vendors
- To study the types of street vendors along with their employment context and status
- To identify the major types of risks associated with their employment

Research type: Descriptive
Types of data: Primary
Sampling design process: Questionnaire with two parts:
Part A, consists of demographic information of street vendors such as name, age, gender, religion, products name and types, income, study
level, startup capital, savings per month, profit per day, street vending type, employment context and status and location

Part B (Different types of employment risks), consists of nineteen variables, were designed in a Likert scale format which is given five point rating scale ranges from strongly disagree to strongly agree.

**Target population**
Street vendors in Sylhet city, Bangladesh.

**Sampling technique**
Convenient Sampling

**Sample Size**
248

**Sampling frame**
Six important location of street vendors, Sylhet city, Bangladesh

**Method of administering questionnaire**
Personal interview of the Street vendors’; average interviewing time was 15-20 minutes

**Execution**
The survey was conducted over a period of 25 days in the month of June – July 2014.

**Statistical tools employed**
Kolmogorov-Smirnov Test, Frequency table, Crosstab, Correlation, Kruskal-Wallis One-Way ANOVA, Factor analysis

**Data analysis and interpretation**
Statistical Packages for Social Sciences (SPSS)

4. **Analysis and Discussion**

Table I shows the One-Sample Kolmogorov-Smirnov Test as to find out whether the data form a normal distribution, as the Sig. column have 0.000 value in all row it suggests to use non parametric analysis and the data are not form normal distribution.

Table 1 depicts the street vendors’ location and number of samples taken. There are six hotspot of street vending has been taken such as Kinnbridge and surma market (50 samples), Bondor Bazar (49 samples), Court point (50 samples), Zinda-bazar (49 samples) and Amborkhana (50).

Table 2 shows that 98 per cent (243 person out 248) is male and only 2 per cent (2 person out of 248 person) is female street vendor. Male street vendors are dominated in Sylhet city.

Table 3, crosstab shows street vendors’ age between 11 to 20 and 21 to 30 are respectively 25.4 per cent and 44.4 per cent in total 69.8 per cent; whereas 24.6 percent vendors are married at the age 21 to 30.
In table 4, Spearman’s rho correlation suggest strong positive correlation between respondent’s age and marital status as p value is 0.000.

Table 5 shows majority (91.5 per cent) of the street vendors are Muslim whereas only 8.5 per cent are Hindu.

Table 6 suggests that almost 80 per cent (197 person) street vendors’ academic qualification is below Secondary school certificate and many of them did not complete primary schooling; only 8.9 per cent of them completed SSC level. No literacy and madrasa education belongs to 8.9 per cent.

Table 7 shows 54 per cent street vendors maintaining a family size between 5 to 8 members, while 36.3 per cent of them having a family size between 1 to 4 members.

Chart 1 shows different products and services offered by the street vendors where 24.2 per cent sells textile products (such as cloths, towel, bed sheet, curtain etc.), 19.8 per cent sells fruits, 13.3 per cent sells vegetables and 9.7 per cent sells other category products.

Table 8, describes 51.2 per cent and 41.5 per cent are consecutively perishable and non-perishable goods, whereas 7.3 per cent are offering different services.

Table 9 shows that street vendors of 77.8 per cent lived in rented house and 21.4 per cent lived in their own house.

Chart 2, shows in terms of street vendors’ type semi-permanent is dominating as 39.5 per cent and semi-mobile type is 25.8 per cent. Vendors’ have business 6 years or above occupy 48 per cent of all types with 19.4 per cent of semi-permanent type, 11.3 per cent of semi-mobile and 8.9 percent of permanent type.

Table 10, crosstab shows 81.9 percent street vendor is doing business as whole time basis whereas 87.9 per cent street vendors are independent self-employed.

Table 11 shows the initial investment made by the individual street vendors while starting their business reveals that, 69.8 per cent of them started their business with an amount of lowest through Tk. 10000, 10.5 per cent with Tk. 10001 – Tk. 20000, and 9.6 per cent of them had started with Tk. 20001 and above. 10.1 percent of them didn’t response about investment.

Table 12 suggests that as almost 70 per cent (table 11) of the street vendors had started with an initial investment of Tk. 1 to Tk. 10000, 59.3 per cent of them could earn profit per day lowest through Tk. 300, and 23.8 per cent of them could earn profit per day of Tk. 301 through Tk. 600.

Table 13 shows that 54 per cent of street vendors didn’t response about their savings. 16.1 per cent of them could save Tk. 1501 through Tk. 3000 and 14.9 per cent of them could save lowest through Tk. 1500 per month.
Table 14 depicts street vendors are paying good amount of money to extortionist, 82.5 per cent told that they don’t pay a single money to any extortionist whereas 17.7 per cent told they have to pay money to extortionists, among them 14.1 per cent is lineman at Amborkhana location.

**Employment risks analysis and discussion**

By conducting factor analysis, we have tried to identify the factors behind street vendors’ employment risks, the first step in this analysis has been to measure the appropriateness of factor analysis and the following results here have been produced to make the decision.

Hypothesis testing
\[ H_0: R^2_{\text{pop}} = 0 \text{ the variables are uncorrelated in the population} \]
\[ H_1: R^2_{\text{pop}} \neq 0 \text{ the variables are correlated in the population} \]

Hypothesis can be tested through Bartlett's Test of Sphericity. Table 15 suggests significant value (0.000) of Bartlett's Test of Sphericity rejects the null hypothesis. A high value of chi square leads a .000 significant value which ultimately rejects null hypothesis. As a result it can be said that factor analysis is an appropriate technique where all the variables are correlated in the population. Kaiser-Meyer-Olkin Measure of Sampling Adequacy is another important method to determine the appropriateness of factor analysis. A value greater than 0.5 indicates that correlation between pairs of variables can be explained. Here the result is .806 which is positive and is a sign of the appropriateness of factor analysis.

**Descriptive statistics**

From the table 16, looking at the mean, we can conclude that Political instability (Hartal, Strike, Show down etc.) can play negative impact on income, is the most important variable that create street vendors’ employment risk. It has the highest mean of 3.84.

From the output of table 17 shows extraction sums of squared loadings show variables that are retained. Here 3 components are retained which have total 47.60 per cent of the total variance. We noticed that the first factor accounts for 25.29 per cent of the variance, the second 13.05 per cent and the third 9.25 per cent.

**Determination of the number of the factors**

Here in this study, we are extracting 3 factors and our decision is based on the following grounds:

- We are extracting those factors whose eigenvalue is more than 1 and 4 factors have that score but we take top 3 factors.
- The cumulative variance of 3 factors is 47.60% which is satisfactory.
Rotated Component (Factor) Matrix

Looking at the table 18, we can see the factor loadings for each variable. We went across each row, and highlighted the factor that each variable loaded most strongly on (by suppress small coefficient below .60).

Based on table 19, factors loadings and the factors represent:

- Variables such as Illness or sickness due to movement in open air (.753), illness due to lift and pull heavy loads of merchandise (.781), Operates near open drainages create different viral diseases (.771), Different illness due to operate near busy road (such as asthma, cough, fever etc.) (.735), Sanction risk (0.632) and risk of local government eviction (0.632) loaded very strongly on factor 1 as such Health and Political risk factor.

- Variables such as Legal sanction (.631) and Subscription to Hawker Samity regularly can influence income (.630) loaded strongly on factor 2 like as income and sanction risk factor.

- Competitive pressure by competitors can play significant impact on income (.604) and Political violence can destroy merchandise (.802) are loaded strongly on factor 3 as such market and asset risk factor.

Kruskal – Wallis one way ANOVA (table 20) suggests that below selected risk factor variables varied significantly on street vendors such as Legal sanction (0.047), social sanction (0.013), Illness or sickness due to movement in open air (0.000), illness due to lift and pull heavy loads of merchandise (0.000), Operates near open drainages create different viral diseases (0.000), Different illness due to operate near busy road (such as asthma, cough, fever etc.) (0.000) and there is no health hazards (0.000).

Whereas below selected factor variables do not vary significantly on street vendors such as Subscription to Hawker Samity regularly can influence income (.260), Competitive pressure by competitors can play significant impact on income (.217) and Political violence can destroy merchandise (.281) and there is a risk of local government eviction (0.397).

Conclusion and policy recommendation

Nonetheless, we cannot ignore the importance of livelihood of poor people, selling different items on the street sideways. In south Asia, each developing cities have many street vendors, but there is not proper guidelines for street vending. Developed city like New York in United States have definite guideline for vendors. As a large number of urban dwellers depend on urban street vending and street
vendors have lack of formal job opportunities, so we need to think about their livelihood because eviction or temporary solution can make their livelihood much more vulnerable. Here are some policy recommendations for street vendors:

- City Corporation must have special guidelines for controlling street businesses.
- Local government can build infrastructure or fixed market place to operate street vending at reasonable cost.
- Legal document need to provide to avoid legal, asset and income risk.
- Micro credit scheme can be offered by government or NGO or different commercial banks at low interest rate.
- City Corporation can arrange different vocational training program for better livelihood of street vendors.
- Street vendors’ age should be restricted so that children cannot be used as street vendor.
References


Appendix

Table 1: One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Normal Parameters</th>
<th>Most Extreme Differences</th>
<th>Kolmogorov-Smirnov Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Absolute</td>
<td>Positive</td>
</tr>
<tr>
<td>Street vendors’ age</td>
<td>248</td>
<td>28.79</td>
<td>11.483</td>
<td>.160</td>
<td>.160</td>
</tr>
<tr>
<td>Street vendors' gender</td>
<td>248</td>
<td>1.02</td>
<td>.141</td>
<td>.537</td>
<td>.537</td>
</tr>
<tr>
<td>Marital Status</td>
<td>248</td>
<td>1.47</td>
<td>.524</td>
<td>.354</td>
<td>.354</td>
</tr>
<tr>
<td>Religion</td>
<td>248</td>
<td>1.08</td>
<td>.279</td>
<td>.535</td>
<td>.535</td>
</tr>
<tr>
<td>Types of Products</td>
<td>248</td>
<td>9.02</td>
<td>9.722</td>
<td>.305</td>
<td>.305</td>
</tr>
<tr>
<td>Product categories</td>
<td>248</td>
<td>1.56</td>
<td>.627</td>
<td>.326</td>
<td>.326</td>
</tr>
<tr>
<td>Education</td>
<td>248</td>
<td>1.68</td>
<td>1.721</td>
<td>.448</td>
<td>.448</td>
</tr>
<tr>
<td>Duration of business</td>
<td>248</td>
<td>2.98</td>
<td>1.129</td>
<td>.297</td>
<td>.183</td>
</tr>
<tr>
<td>Investment</td>
<td>223</td>
<td>14777.99</td>
<td>42094.27</td>
<td>.363</td>
<td>.354</td>
</tr>
<tr>
<td>Profit per day</td>
<td>236</td>
<td>367.63</td>
<td>235.346</td>
<td>.236</td>
<td>.236</td>
</tr>
<tr>
<td>Savings per month</td>
<td>114</td>
<td>3157.02</td>
<td>2581.408</td>
<td>.200</td>
<td>.200</td>
</tr>
<tr>
<td>Types of street vendors</td>
<td>248</td>
<td>2.43</td>
<td>.971</td>
<td>.240</td>
<td>.240</td>
</tr>
<tr>
<td>Family member/s</td>
<td>248</td>
<td>5.38</td>
<td>2.561</td>
<td>.121</td>
<td>.121</td>
</tr>
<tr>
<td>Residence</td>
<td>248</td>
<td>1.79</td>
<td>.425</td>
<td>.472</td>
<td>.306</td>
</tr>
<tr>
<td>Employment Context</td>
<td>248</td>
<td>1.46</td>
<td>1.037</td>
<td>.488</td>
<td>.488</td>
</tr>
<tr>
<td>Location of work place</td>
<td>248</td>
<td>4.00</td>
<td>2.010</td>
<td>.134</td>
<td>.134</td>
</tr>
<tr>
<td>Employment Status</td>
<td>248</td>
<td>1.17</td>
<td>.477</td>
<td>.515</td>
<td>.515</td>
</tr>
<tr>
<td>Good amount of money to which extortionist mostly</td>
<td>248</td>
<td>4.35</td>
<td>1.438</td>
<td>.497</td>
<td>.326</td>
</tr>
<tr>
<td>Monthly amount of money to extortionist</td>
<td>248</td>
<td>107.36</td>
<td>257.752</td>
<td>.440</td>
<td>.440</td>
</tr>
</tbody>
</table>

Table 1: Location of Street Vendors in Sylhet city

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinnbridge and Surma Market</td>
<td>50</td>
<td>20.2</td>
<td>20.2</td>
<td>20.2</td>
</tr>
<tr>
<td>Bondor Bazar</td>
<td>49</td>
<td>19.8</td>
<td>19.8</td>
<td>39.9</td>
</tr>
<tr>
<td>Courpoint</td>
<td>50</td>
<td>20.2</td>
<td>20.2</td>
<td>60.1</td>
</tr>
<tr>
<td>Zindabazar</td>
<td>49</td>
<td>19.8</td>
<td>19.8</td>
<td>79.8</td>
</tr>
<tr>
<td>Amborkhana</td>
<td>50</td>
<td>20.2</td>
<td>20.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Street vendors' gender in Sylhet city

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>243</td>
<td>98.0</td>
<td>98.0</td>
<td>98.0</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>2.0</td>
<td>2.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Crosstab between street vendors' age and marital status

<table>
<thead>
<tr>
<th>Street vendors’ Age</th>
<th>Marital Status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Married</td>
<td>Unmarried</td>
</tr>
<tr>
<td>Lowest thru 10</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>11 - 20</td>
<td>1.2%</td>
<td>24.2%</td>
</tr>
<tr>
<td>21 - 30</td>
<td>24.6%</td>
<td>19.4%</td>
</tr>
<tr>
<td>31 - 40</td>
<td>14.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>41 - 50</td>
<td>8.1%</td>
<td>0.4%</td>
</tr>
<tr>
<td>51 - 60</td>
<td>4.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td>61 thru Highest</td>
<td>1.6%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Total</td>
<td>54.0%</td>
<td>45.6%</td>
</tr>
</tbody>
</table>

Table 4: Correlations

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Street vendors' age</th>
<th>Marital Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td>Street vendors' age</td>
<td>N</td>
<td>248</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Correlation Coefficient</td>
<td>-.732**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>248</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5: Religion

<table>
<thead>
<tr>
<th>Religion</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>227</td>
<td>91.5</td>
<td>91.5</td>
<td>91.5</td>
</tr>
<tr>
<td>Hindu</td>
<td>21</td>
<td>8.5</td>
<td>8.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

A street vendor is broadly defined as a person who offers goods and services for sale in an amount of lowest through Tk. 10000, 10.5 per cent with Tk. 10001 – Tk. 20000, 9.7 per cent on time basis whereas 87.9 per cent street vendors are independent self-employed. 25.9 per cent of those vendors are 50 years or above occupy 48 per cent of all types with 19.4 per cent of semi-mobile type is 25.8 per cent. Vendors have business 6 days in the month of June – July 2014.

Chart 2, shows in terms of street vendors’ type semi-permanent is dominating as non-perishable goods, whereas 7.3 per cent are offering different services. Key words: categorization. Almost 24.2 per cent sells textile products, 81.9 percent street vendor category products.

Mollah S and Islam Z. “Footpath vendors forced to pay Tk. 850cr a year.”

Things have taken a new turn in last few years. Today street vendors sell almost a critical situation in their lives. Not only the low-income group but also the middle-income group of urban dweller depends on street vendor for shopping in a critical situation in their lives.

According to Jung-Hyung Lee, street vendors illegally occupy space on the public stake. Without street vending in the urban areas a large number of urban dwellers fall into a critical situation in their lives. Not only the low-income group but also the middle-income group of urban dwellers depend on street vendor for shopping in a critical situation in their lives.

Primary Types of data

Descriptive

Table 6: Academic qualification

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below SSC</td>
<td>197</td>
<td>79.4</td>
<td>79.4</td>
<td>79.4</td>
</tr>
<tr>
<td>SSC</td>
<td>22</td>
<td>8.9</td>
<td>8.9</td>
<td>88.3</td>
</tr>
<tr>
<td>HSC</td>
<td>6</td>
<td>2.4</td>
<td>2.4</td>
<td>90.7</td>
</tr>
<tr>
<td>Diploma</td>
<td>1</td>
<td>.4</td>
<td>.4</td>
<td>91.1</td>
</tr>
<tr>
<td>Others</td>
<td>22</td>
<td>8.9</td>
<td>8.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Family Members

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 4</td>
<td>90</td>
<td>36.3</td>
<td>36.3</td>
<td>36.3</td>
</tr>
<tr>
<td>5 - 8</td>
<td>134</td>
<td>54.0</td>
<td>54.0</td>
<td>90.3</td>
</tr>
<tr>
<td>9 - 12</td>
<td>22</td>
<td>8.9</td>
<td>8.9</td>
<td>99.2</td>
</tr>
<tr>
<td>13 - 16</td>
<td>1</td>
<td>.4</td>
<td>.4</td>
<td>99.6</td>
</tr>
<tr>
<td>17 - 20</td>
<td>1</td>
<td>.4</td>
<td>.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Product categories of street vendors in Sylhet city

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perishable goods</td>
<td>127</td>
<td>51.2</td>
<td>51.2</td>
<td>51.2</td>
</tr>
<tr>
<td>Non-Perishable goods</td>
<td>103</td>
<td>41.5</td>
<td>41.5</td>
<td>92.7</td>
</tr>
<tr>
<td>Services</td>
<td>18</td>
<td>7.3</td>
<td>7.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Residence of street vendors in Sylhet city

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own house</td>
<td>53</td>
<td>21.4</td>
<td>21.4</td>
<td>21.4</td>
</tr>
<tr>
<td>Rented house</td>
<td>193</td>
<td>77.8</td>
<td>77.8</td>
<td>99.2</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>.8</td>
<td>.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Crosstab of Employment Context and Employment Status of street vendors in Sylhet city

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Employment Context</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Independent self employed</td>
<td>Semi-dependent workers</td>
</tr>
<tr>
<td>Whole time basis</td>
<td>71.8%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Part time basis</td>
<td>3.6%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Seasonal</td>
<td>12.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Total</td>
<td>87.9%</td>
<td>7.7%</td>
</tr>
</tbody>
</table>


Table 11: Startup capital of street vendors in Sylhet city

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest thru Tk. 10000</td>
<td>173</td>
<td>69.8</td>
<td>77.6</td>
</tr>
<tr>
<td>Tk. 10001 thru Tk. 20000</td>
<td>26</td>
<td>10.5</td>
<td>89.2</td>
</tr>
<tr>
<td>Tk. 20001 thru Tk. 30000</td>
<td>8</td>
<td>3.2</td>
<td>92.8</td>
</tr>
<tr>
<td>Tk. 30001 thru Tk. 40000</td>
<td>4</td>
<td>1.6</td>
<td>94.6</td>
</tr>
<tr>
<td>Tk. 40001 thru Tk. 50000</td>
<td>3</td>
<td>1.2</td>
<td>96.0</td>
</tr>
<tr>
<td>Tk. 50001 thru Highest</td>
<td>9</td>
<td>3.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>223</td>
<td>89.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

No response | 25 | 10.1 |

Total | 248 | 100.0 |

Table 12: Street vendors’ Profit per day in Sylhet city

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest thru Tk. 300</td>
<td>147</td>
<td>59.3</td>
<td>62.3</td>
</tr>
<tr>
<td>Tk. 301 thru Tk. 600</td>
<td>59</td>
<td>23.8</td>
<td>87.3</td>
</tr>
<tr>
<td>Tk. 601 thru Tk. 900</td>
<td>18</td>
<td>7.3</td>
<td>94.9</td>
</tr>
<tr>
<td>Tk. 901 thru Tk. 1200</td>
<td>11</td>
<td>4.4</td>
<td>99.6</td>
</tr>
<tr>
<td>Tk. 1201 thru Highest</td>
<td>1</td>
<td>.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>236</td>
<td>95.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

No response | 12 | 4.8 |

Total | 248 | 100.0 |

Table 13: Street vendors’ Savings per month in Sylhet city

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest thru Tk. 1500</td>
<td>37</td>
<td>14.9</td>
<td>32.5</td>
</tr>
<tr>
<td>Tk. 1501 thru 3000</td>
<td>40</td>
<td>16.1</td>
<td>67.5</td>
</tr>
<tr>
<td>Tk. 3001 thru Tk. 4500</td>
<td>7</td>
<td>2.8</td>
<td>73.7</td>
</tr>
<tr>
<td>Tk. 4501 thru Tk. 6000</td>
<td>18</td>
<td>7.3</td>
<td>89.5</td>
</tr>
<tr>
<td>Tk. 6001 thru Highest</td>
<td>12</td>
<td>4.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>114</td>
<td>46.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

No response | 134 | 54.0 |

Total | 248 | 100.0 |

Table 11 shows the initial investment made by the individual street vendors while 87.9 per cent street vendors are independent self-employed. Chart 2 shows in terms of street vendors' type semi-permanent is dominating as Table 9 shows that street vendors of 77.8 per cent lived in rented house and 21.4 per cent of them having a family size between 1 to 4 members, while 36.3 per cent of them completed primary schooling; only 8.9 per cent of them completed SSC level. No only 8.5 per cent are Hindu. 

4. Monir Z. "Lack of space hinders rehab of Sylhet city hawkers."

There is no health hazards

7. Akharuzzaman M and Deguchi A. "Public Management for Street Vendor Determination of the number of the factors variables varied significantly on street vendors' employment.

Abstract:

To study the types of street vendors along with their employment risks factor variables varied significantly on street vendors such as Legal sanction (0.000) and Political violence can destroy merchandise (0.802) are like as income and sanction risk factor. There is a risk of confiscating merchandise by the local government (0.000), illness due to operate near busy road (such as asthma, cough, fever etc.) (0.000) and there is no confiscation (0.000) and there is no health hazards (0.000).

Table 14: Good amount of money is paid to different extortionist mostly in Sylhet city

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linemen</td>
<td>35</td>
<td>14.1</td>
<td>14.1</td>
<td>14.1</td>
</tr>
<tr>
<td>City Corporation Officials</td>
<td>5</td>
<td>2.0</td>
<td>2.0</td>
<td>16.1</td>
</tr>
<tr>
<td>Political Party Cadres</td>
<td>2</td>
<td>.8</td>
<td>.8</td>
<td>16.9</td>
</tr>
<tr>
<td>Criminals</td>
<td>2</td>
<td>.8</td>
<td>.8</td>
<td>17.7</td>
</tr>
<tr>
<td>Nobody</td>
<td>204</td>
<td>82.3</td>
<td>82.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 15: KMO and Bartlett’s Test

| Kaiser-Meyer-Oklin Measure of Sampling Adequacy. | .806 |
| Bartlett's Test of Sphericity | 1459.595 |
| Approx. Chi-Square | df | 171 |
| Sig. | .000 |

Table 16: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Analysis N</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a risk of local government eviction</td>
<td>3.48</td>
<td>1.385</td>
<td>248</td>
</tr>
<tr>
<td>Seasonal variation can influence on income</td>
<td>3.21</td>
<td>1.222</td>
<td>248</td>
</tr>
<tr>
<td>Competitive pressure by competitors can play significant impact on income</td>
<td>3.34</td>
<td>1.052</td>
<td>248</td>
</tr>
<tr>
<td>Money through extortionists (Linemen, Cops, political party cadres, criminals etc.) can reduce income</td>
<td>2.11</td>
<td>1.163</td>
<td>248</td>
</tr>
<tr>
<td>Subscription to Hawker Samity regularly can influence income</td>
<td>1.93</td>
<td>1.068</td>
<td>248</td>
</tr>
<tr>
<td>Political instability (Hartal, Strike, Show down etc.) can play negative impact on income</td>
<td>3.84</td>
<td>1.235</td>
<td>248</td>
</tr>
<tr>
<td>There is a risk of confiscating merchandise by the local government</td>
<td>2.90</td>
<td>1.265</td>
<td>248</td>
</tr>
<tr>
<td>There is a risk of confiscating merchandise by the political party cadres or criminals or linemen</td>
<td>2.42</td>
<td>1.212</td>
<td>248</td>
</tr>
<tr>
<td>Political violence can destroy merchandise</td>
<td>3.06</td>
<td>1.316</td>
<td>248</td>
</tr>
<tr>
<td>Whether there is a risk of destructing merchandise by nature (wind, rain, storm etc.)</td>
<td>3.11</td>
<td>1.295</td>
<td>248</td>
</tr>
<tr>
<td>There is no confiscation</td>
<td>2.36</td>
<td>1.402</td>
<td>248</td>
</tr>
<tr>
<td>Legal sanction</td>
<td>2.01</td>
<td>1.237</td>
<td>248</td>
</tr>
<tr>
<td>Social sanction</td>
<td>3.35</td>
<td>1.181</td>
<td>248</td>
</tr>
<tr>
<td>Operates near open drainages create different viral diseases</td>
<td>3.59</td>
<td>1.250</td>
<td>248</td>
</tr>
<tr>
<td>Illness or sickness due to movement in open air</td>
<td>3.60</td>
<td>1.200</td>
<td>248</td>
</tr>
<tr>
<td>Illness due to lift and pull heavy loads of merchandise</td>
<td>3.24</td>
<td>1.220</td>
<td>248</td>
</tr>
<tr>
<td>Different illness due to operate near busy road (such as asthma, cough, fever etc.)</td>
<td>3.50</td>
<td>1.224</td>
<td>248</td>
</tr>
<tr>
<td>Political violence can create major injury to life (such as physically disable, sudden death etc.)</td>
<td>3.44</td>
<td>1.168</td>
<td>248</td>
</tr>
<tr>
<td>There is no health hazards</td>
<td>2.44</td>
<td>1.526</td>
<td>248</td>
</tr>
</tbody>
</table>
Leon van den Dool. "Making Local Government Work." work facilities and public services in rural area. Although the local authorities of Sylhet city is known as one of the richest cities in Bangladesh with a population of 1.3 million, urban space on the pavements or other public or private areas.

Table 13 shows that 54 per cent of street vendors didn’t respond about their earnings. 16.1 per cent of them could save Tk. 1501 through Tk. 3000 and 14.9 per cent of them could save more than Tk. 3000. The average earning of street vendors per day is Tk. 750. The average monthly earning of street vendor is Tk. 850cr. The average earning of street vendor is Tk. 85,000.

Table 12 suggests that as almost 70 per cent (table 11) of the street vendors had started with an initial investment of Tk. 1 to Tk. 1000, 59.3 per cent of them could save Tk. 1501 or more. The average capital invested by street vendors is Tk. 12000. The average monthly earning of street vendor is Tk. 850cr.

Table 14 depicts street vendors are paying good amount of money to extortionist, police, and other agents. The average monthly earning of street vendor is Tk. 850cr.

Chart 1 shows different products and services offered by the street vendors where toothbrush, pen, children’s book, even pirated copies of latest popular books, and other goods are offered by street vendors. The average monthly earning of street vendor is Tk. 850cr.

Chart 2, shows in terms of street vendors’ type semi-permanent is dominating as almost 60 per cent. 40 per cent of street vendors are independent self-employed. The average monthly earning of street vendor is Tk. 850cr.

Descriptive statistics

Kaiser-Meyer-Olkin Measure of Sampling Adequacy 0.81

There is a risk of local government eviction

Seasonal variation can influence on income

Competitive pressure by competitors can play significant impact on income

Money through extortionists (Linemen, Cops, political party cadres, criminals etc.) can reduce income

Subscription to Hawker Sanity regularly can influence income

Political instability (Hartal, Strike, Show down etc.) can play negative impact on income

There is a risk of confiscating merchandise by the local government

There is a risk of confiscating merchandise by the political party cadres or criminals or linemen

Political violence can destroy merchandise

Table 17: Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>4.806</td>
<td>25.293</td>
<td>25.293</td>
</tr>
<tr>
<td>2</td>
<td>2.480</td>
<td>13.051</td>
<td>38.344</td>
</tr>
<tr>
<td>3</td>
<td>1.758</td>
<td>9.255</td>
<td>47.599</td>
</tr>
<tr>
<td>5</td>
<td>.971</td>
<td>5.111</td>
<td>59.877</td>
</tr>
<tr>
<td>6</td>
<td>.899</td>
<td>4.730</td>
<td>64.607</td>
</tr>
<tr>
<td>7</td>
<td>.827</td>
<td>4.351</td>
<td>68.958</td>
</tr>
<tr>
<td>9</td>
<td>.684</td>
<td>3.601</td>
<td>76.455</td>
</tr>
<tr>
<td>10</td>
<td>.681</td>
<td>3.584</td>
<td>80.039</td>
</tr>
<tr>
<td>12</td>
<td>.537</td>
<td>2.825</td>
<td>85.986</td>
</tr>
<tr>
<td>13</td>
<td>.501</td>
<td>2.639</td>
<td>88.625</td>
</tr>
<tr>
<td>14</td>
<td>.448</td>
<td>2.357</td>
<td>90.982</td>
</tr>
<tr>
<td>15</td>
<td>.411</td>
<td>2.163</td>
<td>93.145</td>
</tr>
<tr>
<td>16</td>
<td>.375</td>
<td>1.976</td>
<td>95.121</td>
</tr>
<tr>
<td>17</td>
<td>.349</td>
<td>1.835</td>
<td>96.956</td>
</tr>
<tr>
<td>18</td>
<td>.307</td>
<td>1.615</td>
<td>98.572</td>
</tr>
<tr>
<td>19</td>
<td>.271</td>
<td>1.428</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Table 18: Rotated Component Matrix*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a risk of local government eviction</td>
<td>.632</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seasonal variation can influence on income</td>
<td></td>
<td>.604</td>
<td></td>
</tr>
<tr>
<td>Competitive pressure by competitors can play significant impact on income</td>
<td></td>
<td></td>
<td>.630</td>
</tr>
<tr>
<td>Money through extortionists (Linemen, Cops, political party cadres, criminals etc.) can reduce income</td>
<td></td>
<td></td>
<td>.604</td>
</tr>
<tr>
<td>Subscription to Hawker Sanity regularly can influence income</td>
<td></td>
<td>.630</td>
<td></td>
</tr>
<tr>
<td>Political instability (Hartal, Strike, Show down etc.) can play negative impact on income</td>
<td></td>
<td></td>
<td>.630</td>
</tr>
<tr>
<td>There is a risk of confiscating merchandise by the local government</td>
<td></td>
<td></td>
<td>.802</td>
</tr>
<tr>
<td>There is a risk of confiscating merchandise by the political party cadres or criminals or linemen</td>
<td></td>
<td></td>
<td>.802</td>
</tr>
<tr>
<td>Political violence can destroy merchandise</td>
<td></td>
<td></td>
<td>.802</td>
</tr>
</tbody>
</table>

Appendix

Saief Uddin Ahmed: Livelihood And Employment Risks Among Street Vendors Of Sylhet City In Bangladesh
### Table 19: Factor labeling

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor importance (% variance explained)</th>
<th>Loading</th>
<th>Variables included in the factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>Health and political risk factor (25.30%)</td>
<td>.753</td>
<td>Illness or sickness due to movement in open air</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.781</td>
<td>Illness due to lift and pull heavy loads of merchandise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.771</td>
<td>Operates near open drainages create different viral diseases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.735</td>
<td>Different illness due to operate near busy road (such as asthma, cough, fever etc.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.632</td>
<td>There is a risk of local government eviction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.632</td>
<td>Social sanction</td>
</tr>
<tr>
<td>F2</td>
<td>Income and sanction risk factor (13.50%)</td>
<td>.630</td>
<td>Subscription to Hawker Samity regularly can influence income</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.631</td>
<td>Legal sanction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.641</td>
<td>There is no health hazards</td>
</tr>
<tr>
<td>F3</td>
<td>Market and asset risk factor (9.25%)</td>
<td>.604</td>
<td>Competitive pressure by competitors can play significant impact on income</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.804</td>
<td>Political violence can destroy merchandise</td>
</tr>
</tbody>
</table>

### Table 20: Kruskal – Wallis Test Statistics$^{ab}$

<table>
<thead>
<tr>
<th>Variables</th>
<th>Chi-Square</th>
<th>df</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a risk of local government eviction</td>
<td>2.965</td>
<td>3</td>
<td>.397</td>
</tr>
<tr>
<td>Competitive pressure by competitors can play significant impact on income</td>
<td>4.444</td>
<td>3</td>
<td>.217</td>
</tr>
<tr>
<td>Subscription to Hawker Samity regularly can influence income</td>
<td>4.013</td>
<td>3</td>
<td>.260</td>
</tr>
<tr>
<td>Political violence can destroy merchandise</td>
<td>3.827</td>
<td>3</td>
<td>.281</td>
</tr>
<tr>
<td>Legal sanction</td>
<td>7.951</td>
<td>3</td>
<td>.047</td>
</tr>
<tr>
<td>Social sanction</td>
<td>10.769</td>
<td>3</td>
<td>.013</td>
</tr>
<tr>
<td>Illness or sickness due to movement in open air</td>
<td>33.298</td>
<td>3</td>
<td>.000</td>
</tr>
<tr>
<td>Illness due to lift and pull heavy loads of merchandise</td>
<td>19.849</td>
<td>3</td>
<td>.000</td>
</tr>
<tr>
<td>Different illness due to operate near busy road (such as asthma, cough, fever etc.)</td>
<td>31.353</td>
<td>3</td>
<td>.000</td>
</tr>
<tr>
<td>Operates near open drainages create different viral diseases</td>
<td>26.771</td>
<td>3</td>
<td>.000</td>
</tr>
<tr>
<td>There is no health hazards</td>
<td>24.732</td>
<td>3</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Kruskal Wallis Test

b. Grouping Variable: Types of street vendors
Table 11 shows the initial investment made by the individual street vendors while 23.4 percent maintains a family of 5 to 8 persons. Almost 80 percent (197 persons) street vendors’ academic status is higher than H.S. level. Academic level is an indicator of the economic status and parents’ education. People with higher academic levels have more financial resources and more professional opportunities. The commercial banks have set their own rules and regulations to ensure that the street vendors who are interested in obtaining a loan have a clear business plan and operational experience. However, the local government can build infrastructure or fixed market places to operate near the main roads including Bandarbazar, Zindabazar, Chowhatta, Laldighirpar, and Taltola to better livelihood of street vendors.

The survey was conducted over a period of 25 days. The interview was conducted through a structured questionnaire with two parts. The first part consists of nineteen variables, were designed in a way that the respondents can clearly express their views. The second part consists of questions regarding the socioeconomic status of the respondents. The questionnaire was distributed to the street vendors in Sylhet city, Bangladesh. A total of 300 respondents were interviewed, out of which 197 respondents live in their own house and 98 respondents lived in a rental house. The respondents were people who have been working as street vendors for more than 6 months. The respondents were between 21 to 45 years old, 23.4 percent maintains a family of 5 to 8 persons. Almost 80 percent (197 persons) street vendors’ academic status is higher than H.S. level. Academic level is an indicator of the economic status and parents’ education. People with higher academic levels have more financial resources and more professional opportunities. The commercial banks have set their own rules and regulations to ensure that the street vendors who are interested in obtaining a loan have a clear business plan and operational experience. However, the local government can build infrastructure or fixed market places to operate near the main roads including Bandarbazar, Zindabazar, Chowhatta, Laldighirpar, and Taltola to better livelihood of street vendors.

The data analysis and interpretation were conducted using descriptive statistics and inferential statistics. For descriptive statistics, the chi-square test, t-test, and ANOVA were used. For inferential statistics, the chi-square test, t-test, and ANOVA were used. The statistical tests were conducted using the Statistical Package for Social Sciences (SPSS). The hypotheses were tested using the chi-square test, t-test, and ANOVA. The hypotheses were tested using the chi-square test, t-test, and ANOVA. The hypotheses were tested using the chi-square test, t-test, and ANOVA.

Table 13 shows that 54 per cent of street vendors didn't respond about their investment. An amount of lowest through Tk. 10000, 10.5 per cent with Tk. 10001 – Tk. 20000, Table 10, crosstab shows 81.9 percent street vendor is doing business as whole and semi-mobile type is 25.8 per cent. Vendors' have business 6.

Chart 2, shows in terms of street vendors' type semi-permanent is dominating as complete primary schooling; only 8.9 per cent of them completed SSC level. No.

Table 7 shows 54 per cent street vendors maintaining a family size between 5 to 8.

Institution for Housing

1. Introduction

Monir Z. "Sylhet mayor launches clean city move." In: The Institute for Housing, Vol.

Employment risks analysis and discussion

By employing factor analysis, this study tried to produce variables that were uncorrelated in the population. Several factors have been produced to make the decision.

Variables such as Illness or sickness due to movement in open air (.753), income (.604) and Political violence can destroy merchandise (.802) are like as income and sanction risk factor.

Therefore, we cannot ignore the importance of livelihood of poor people, selling many street vendors, but there is not proper guidelines for street vending. Nonetheless, we need to think about their

The Sylhet city is known as one of the richest cities in Bangladesh with a population of 226 Bangladesh Journal of Political Economy Vol. 31, No.-4

Monir Z(2013) reported that there are more than 5,000 regular street vendors in Sylhet city; Sylhet mayor is one of the richest cities in Bangladesh with a population of

In this study, we are extracting 3 factors and our decision is based on the statistical tools have been used. Factor analysis retained three components: the first 25.29 per cent of the variance, the second 13.05 per cent and the third 9.25 per cent.

Without street vending in the urban areas a large number of urban dwellers fall into work facilities and public services in rural area. Although the local authorities of

62.5 per cent told that they don't pay a single money to any extortionist whereas 82.5 per cent told they have to pay money to extortionists, among them 14. 1 per cent told

Monir Z. "Sylhet mayor launches clean city move."

Kruskal – Wallis one way ANOVA (table 20) suggests that below selected risk variables do not vary significantly on street vendors operate near busy road (such as asthma, cough, fever etc.) (0.000) and there is no Kurskal – Wallis one way ANOVA (table 20).

Whereas below selected factor variables do not vary significantly on street vendors it suggests to use non parametric analysis and the data are not form normal distribution.

The Sylhet mayor is one of the richest cities in Bangladesh with a population of 2.7 million. In this study, we are extracting 3 factors and our decision is based on the statistical tools have been used. Factor analysis retained three components: the first 25.29 per cent of the variance, the second 13.05 per cent and the third 9.25 per cent.

Whereas below selected factor variables do not vary significantly on street vendors operate near busy road (such as asthma, cough, fever etc.) (0.000) and there is no Kurskal – Wallis one way ANOVA (table 20).

The Sylhet mayor is one of the richest cities in Bangladesh with a population of 2.7 million. In this study, we are extracting 3 factors and our decision is based on the statistical tools have been used. Factor analysis retained three components: the first 25.29 per cent of the variance, the second 13.05 per cent and the third 9.25 per cent.

Whereas below selected factor variables do not vary significantly on street vendors operate near busy road (such as asthma, cough, fever etc.) (0.000) and there is no Kurskal – Wallis one way ANOVA (table 20).
Impact of Micro-Credit to Reduce Poverty: A Case Study of Mymensingh

Md. Nazrul Islam*
Md. Tanjil Hossain*
Sadia Afrin*

Abstract: Poverty reduction is a fundamental goal of economic development. The objective of this paper is to examine the impact of microcredit to reduce poverty at Trishal Upazila in Mymensingh. For the purpose of the study a survey was conducted on 100 microcredit receivers. Data have been collected from 100 respondents in Trishal Upazila through structured questionnaire. Tabular method is used to analysis the impact of microcredit on poverty. Study shows that microcredit disbursed through major NGOs including Grameen Bank, BRAC, ASA plays an important role to reduce poverty by generating employment, improving level of living by better education, better health facilities, and higher health expenditure.

Key words: Poverty, Micro credit, Microfinance Institutions (MFI), Micro Credit Regulatory Authority (MRA).

1. Introduction

“Poverty means a critical threshold of income, consumption and access to goods and services below which individuals are declared to be poor” (Roy, D, 2012). Poverty is a condition where people's basic needs for food, clothing, and shelter are not being met. Poverty is generally of two types: (1) Absolute poverty is synonymous with destitution and occurs when people cannot obtain adequate resources measured in terms of calories or nutrition to support a minimum level of physical health. (2) Relative poverty occurs when people do not enjoy a certain minimum level of living standards as determined by a government and enjoyed by the bulk of the population that vary from country to country, sometimes within the same country. Relative poverty occurs everywhere, is said to be increasing, and may never be eradicated. In developing country, poverty is abysmal. Bangladesh is a

* Professor, Department of Economics, Jatiya Kabi Kazi Nazrul Islam University, Mymensingh; Assistant Professor, Department of Economics, Jatiya Kabi Kazi Nazrul Islam University, Mymensingh, Bangladesh; and MSS student, Department of Economics, Jatiya Kabi Kazi Nazrul Islam University, Mymensingh respectively.
developing country where poverty was a major problem but over the last 30 years, Bangladesh has been successful in arresting poverty at a remarkable rate. Overall poverty was 57 per cent in 1991 which reduced to 32 per cent in 2012, a 1.25 per cent reduction rate per year. Similarly, extreme poverty reduced from 41 per cent to 18 per cent during the same period. On the other hand, in rural areas where more than 70 per cent of the country’s 150 million people live, overall poverty reduced from 59 per cent in 1991-92 to 35 per cent in 2012. The economy of Bangladesh was growing at more than 6 per cent in recent years (World Bank 2012). Besides GDP growth, other factors contribute to poverty reduction. This paper examines whether microfinance expansion has helped reduce poverty. More specifically, we are interested in finding out if the huge microcredit expansion helped contribute to the country’s poverty reduction during this period. Bangladesh microcredit sector is regarded as the largest and most efficient in the world. It still leads the global microfinance industry in terms of both its total size and its productivity. Microfinance has been working for about three decades to give poor and resource less people of Bangladesh, easy access to financing facilities and hence in the long run eradicate poverty. It started operation in Bangladesh with support from Bangladesh bank and donors’ grants during late 1970s. At present, several efficiency indicators are quite in favor of Bangladesh Microfinance Institutions (MFIs). Initially microfinance activities were focused on social welfare and mostly done by NGOs. They are thought of having an enormous contribution to the lives and the livelihood of common people of our country. The industry has evolved from its initial focus on credit, disbursing standardized loan products and collecting obligatory savings to the products. This sector has now attained maturity and entered into dynamic phase in terms of financial inclusion, positive impacts and sustainability.

In Trishal upazilla the total population is 471,000. In this area 30 microfinance institutions are works among them four main types of institutions involved in microfinance activities. In these credit sectors, total loan outstanding is around TK. 129 crore and disbursement TK.147 crore. The total clients of this sector is 78,858 that accelerates overall economic development process. The clients is 16.74% of the total population.

Credit services of this sector can be categorized into six broad groups: i) general microcredit for small-scale self employment based activities, ii) microenterprise loans, iii) loans for ultra poor, iv) agricultural loans, v) seasonal loans, and vi) loans for disaster management. Loan amounts up to BDT 50,000 are generally considered as microcredit; loans above this amount are considered as microenterprise loans.

In view the above facts, this study attempt to exams impacts of micro credit to reduce poverty in Trishal Upazilla. The study uses both Secondary and Primary data based on field sway in 2014.
2. Literature Review

Latif (2001) examined the relationship between microcredit and savings of rural households in Bangladesh. He studied on “Credit Programmes for the Poor”. He found that the microcredit programmes of the MFIs, targeted to alleviate poverty by supplying small credit to rural poor in self-employment activities. The result from this study is positive role in influencing household’s savings. He concluded that microcredit programmes should continue and should be extended to the landed category as well.

Islam (2008) evaluated the impact of microfinance on household consumption using cross section data set from Bangladesh. The overall results indicate that the effects of micro loans are not robust across all groups of poor household borrowers. It appears that the poorest of the poor participants are among those who benefit most. The impact estimates are lower, or sometimes even negative, for those households marginal to the participation decision.

Suborno Borua (2009) disseminated those problem mentioned and further added some problematic issues like dependency on a single revenue generation model, multiple borrowing or overlapping, severe lack of training and education, lack of innovation, misuse of credit by borrowers, lack of central database, sectoral disbursement without technical expertise, lack of intention to serve in the apparently inaccessible location, etc.

There are some studies relating to target of micro finance programs such as Grosh and Baker (1995), Matin (1998), Zaman (1998).The major impact studies on micro finance are Hussain (1994 & 1998), Nigar Nargis (2008), and S. R Osmani (2012). Most studies show positive impacts on income, saving and employment of the poor, women in particular. Sustainability is vital for survival of micro finance institutions but only a few studies are undertaken to address the issue (Khalily (1991), Khandaker, Khalily and Khan,(1995); Conning,(1999) and Khalily, Imam and Khan, (2000).

3. Salient Features of Microcredit Program

- Microcredit is used mainly in off-farm income generating activities. Small business accounts for the highest share (43.02%) followed by livestock (18.11%), agriculture (12.23%), fisheries (4.91%), food processing (3.78%) and others (3.03%).

- According to the size of institutions in terms of the number of borrowers served, MFIs are grouped into four major types: very large, large, medium and small, three of the largest MFIs, viz. GRAMEEN BANK, BRAC & ASA, are serving over 78,858 borrowers. These institution are control over 80 percent of the total clients, 74% of the total loan disbursement, and 65% of the total loan outstanding.
Table - 1: Coverage of Microcredit Program as of December 2013

<table>
<thead>
<tr>
<th>Name of institution</th>
<th>No. of Clients</th>
<th>Loan disbursement (In Crore Tk.)</th>
<th>Loan Outstanding (In Crore Tk.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grameen Bank</td>
<td>42624</td>
<td>53.01</td>
<td>49.29</td>
</tr>
<tr>
<td>ASA</td>
<td>13400</td>
<td>34.89</td>
<td>16.89</td>
</tr>
<tr>
<td>BRAC</td>
<td>7834</td>
<td>19.59</td>
<td>18.16</td>
</tr>
<tr>
<td>others</td>
<td>15000</td>
<td>40.35</td>
<td>45.22</td>
</tr>
</tbody>
</table>

Sources: ASA, BRAC, Grameen Phone

- Both loan per borrower and outstanding per member are increasing gradually. The loan outstanding per borrower has increased over the years and average growth rate of loan disbursement per borrower is around 34 percent (from Tk.13848 in 2010 to Tk.18260 in 2013) and outstanding per borrower is around 49 percent (from Tk.10938 in 2010 to Tk.10938 in 2013).

- Most of the NGO-MFIs have negative net surplus. There are different reasons for the negative surplus, the major causes of losing are: (i) High staff salary (ii) Low repayment rate (iii) Low service charge realization (iv) High loan loss provision (LLP) (v) High depreciation charge and (vi) Poor fund management.

- Microcredit Regulatory Authority (MRA) monitoring to these NGO’s regularly under the "Microcredit Regulatory Authority Act -2006" to promote and foster sustainable development of microfinance sector.

Indicators Used in Microfinance Programs

One of the contentious issues has been the definition of poor to include them under a microcredit program. The targeting of the poor is important to ensure that the loan reaches the poor not the wealthier families. The common indicators that provide loans are given below:

- Nutritional definition: Often poverty, poverty line and poor people are categorized according to calorie intake, which is a good definition for analytical purpose. For example, a person’s income to afford daily food consumption for at least 1800 Kcal is categorized as hardcore or extreme poor. But this definition has little application to a credit officer of an MFI who is interested to quickly identify such persons to include under hardcore poor financial services program. To circumvent the practical difficulties more operational but proxy indicators or criteria are devised that may approximately find the same group of people. For example, families without any homestead land or strong house, any male member or earning member, very irregular income, live on charity etc.
• Land-based definition: Microcredit programs in Bangladesh have traditionally used land ownership criteria to determine target group. The most common definition is landless and asset less people as the target population. Landless is defined as any person owning less than 0.5 acre of land. But sometimes MFIs also see the quality of land, that is, this definition is relaxed according to geographical areas. Similarly marginal, small, medium and large farmers have been defined according to land size. This definition can very easily be applied.

• Housing characteristics: Quality and size of house has been very popular criterion in microcredit sector to determine qualification of a person for regular microcredit program. House is a very visible asset.

• Income criterion: Often income criterion is mentioned in various documents as determining criteria for inclusion in or exclusion from a program.

• Profession: Profession-based indicators are easy to identify and apply such as: small and marginal farmers, day labor, weavers etc. The current practice is to find out a more or less a homogeneous group of village women who are willing to take small loans, meet once a week and follow other rules and regulations. It boils down to accepting any woman who is happy to join a group and remain happy with small size loan. No formal selection process is applied or necessary.

**Interest Rate of Microfinance institutions**

The rate of interest on loans varied over the period of time. Grameen Bank used to charge 16% (effective rate) same as commercial banks’ lending rate. But it then increased to 18% then to 20% to reflect its cost of operations and cost of fund. Incidentally Grameen’s rate of interest on loan is the second lowest and interest paid on savings is highest in the sector. That has been possible due its economies of scale and higher average loan size due to long microcredit operations, longer than any other organizations. ASA and BRAC continued to charge 15% (flat) rate. But ASA and BRAC later reduced their rates to 12.5% for a short period but both moved to 15% in 2013 to reflect rising cost of operations (ASA) and cost of fund (BRAC).

Table -2 provides interest rates of prominent MFIs both on savings and credit products:

<table>
<thead>
<tr>
<th>Organizations</th>
<th>Interest on credit products (%) ['flat' rate]</th>
<th>Approximate effective rate on credit products (%)</th>
<th>Interest on savings (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASA</td>
<td>14.4</td>
<td>28.8</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>BRAC</td>
<td>15</td>
<td>30</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>10</td>
<td>20</td>
<td>Regular savings: 8.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Time deposit:12.5</td>
</tr>
<tr>
<td>Other MFIs</td>
<td>15</td>
<td>30</td>
<td>4-6</td>
</tr>
</tbody>
</table>

*Sources: ASA, BRAC, Grameen Phone 2014*
Activities of Borrowers Financed by Microcredit Institutions in Trishal

Of the various employment activities (mainly self-employment), small-scale business/trade is the most important, accounting for more than 40% of fund disbursed by the MFIs. On the other hand agriculture, food processing, transport, housing and livestock sectors were getting relatively small portions of fund. This is shown in Table-3.

Table -3: Sub-sector-wise microfinance disbursement of NGO-MFIs

<table>
<thead>
<tr>
<th>Sub-Sector</th>
<th>% disbursed up to June 2000</th>
<th>% disbursed up to December 2000</th>
<th>% disbursed up to June 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>12.63</td>
<td>12.77</td>
<td>12.23</td>
</tr>
<tr>
<td>Fisheries</td>
<td>4.74</td>
<td>4.48</td>
<td>4.91</td>
</tr>
<tr>
<td>Food Processing</td>
<td>6.99</td>
<td>7.11</td>
<td>3.78</td>
</tr>
<tr>
<td>Small business</td>
<td>41.31</td>
<td>41.81</td>
<td>43.02</td>
</tr>
<tr>
<td>Cottage industries</td>
<td>3.03</td>
<td>3.08</td>
<td>3.03</td>
</tr>
<tr>
<td>Transport</td>
<td>3.42</td>
<td>3.49</td>
<td>2.78</td>
</tr>
<tr>
<td>Housing</td>
<td>1.28</td>
<td>1.30</td>
<td>1.16</td>
</tr>
<tr>
<td>Health</td>
<td>0.39</td>
<td>0.37</td>
<td>0.45</td>
</tr>
<tr>
<td>Education</td>
<td>0.02</td>
<td>0.02</td>
<td>0.08</td>
</tr>
<tr>
<td>Livestock</td>
<td>20.91</td>
<td>20.53</td>
<td>18.11</td>
</tr>
<tr>
<td>Others</td>
<td>5.28</td>
<td>4.71</td>
<td>10.45</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Sources: Respective organizations, 2014

The table shows that, a transformation is taking place in the economic activities of the poor households in the rural areas. In the initial years of microcredit operation during eighties, the traditional sector including fisheries and poultry accounted for a larger segment of self employment activities of the poor.

Findings of Study by field-survey

Clients of microcredi

A total of 64 branches serve these members/clients. The total estimated in ASA (18%), BRAC (9%) and Grameen Bank (30%). The rest of 43% is under about 34 smaller MFIs that shows heavy concentration of these three organizations. The important issue is that the three MFIs have become so big that microfinance sector cannot afford any one of them to fail. Due to resource and management constraints the smaller MFIs are not expected to grow fast to increase market share. Such skewed structure is expected to continue.

Table-4: Total number of clients (%)

<table>
<thead>
<tr>
<th>No. of respondent</th>
<th>Grameen Bank</th>
<th>BRAC</th>
<th>ASA</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>30</td>
<td>9</td>
<td>18</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: Field survey, 2014
Total loan received by the borrowers

In case study examines that, 32% persons receives 10000-19999 taka, 30% persons receives 20000-29999 taka, 17% persons receives 30000-39999 taka, 11% persons receives 40000-49999 taka and 10% persons receives 50000-above. Most of the people are poor and landless. For that, institution gives low amounts of loan.

Table-5: Total amount of loans (Thousands)

<table>
<thead>
<tr>
<th>No. of respondent</th>
<th>10-19</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-above</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>32</td>
<td>30</td>
<td>17</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>percents</td>
<td>32%</td>
<td>30%</td>
<td>17%</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: Field survey, 2014

4. Economic Impacts of Microfinance

(a) Income

The survey found the average annual income of participant households to be higher than before taking loans. Self-employment activities had more than 50% contribution to total income for the participants as against 43 percent in case of non-participants. Compared to non-participants the participant households were better able to cope with flood, sustain their income, to achieve higher purchasing power and consumption level.

Table-6: Total income before loans (%)

<table>
<thead>
<tr>
<th>No. of respondent</th>
<th>Name of organization</th>
<th>0-49000</th>
<th>50000-99000</th>
<th>100000-149000</th>
<th>150000-199000</th>
<th>200000-above</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Grameen Bank</td>
<td>2</td>
<td>14</td>
<td>11</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>ASA</td>
<td>1</td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>BRAC</td>
<td>-</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>-</td>
<td>19</td>
<td>19</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Field survey, 2014

Table-7: Total income after loans (%)

<table>
<thead>
<tr>
<th>No. of respondent</th>
<th>Name of organization</th>
<th>0-99000</th>
<th>100000-149000</th>
<th>150000-199000</th>
<th>200000-249000</th>
<th>250000-above</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Grameen Bank</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ASA</td>
<td>4</td>
<td>11</td>
<td>7</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BRAC</td>
<td>-</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Field survey, 2014
(b) Wage

Wage earning contributed about 23 percent of total annual income for the poor households. Microcredit helped participant households to earn about 8 percent higher income than that of the non-participants.

(c) Food Security

The case study finds the program participants, due to greater access to share cropping, had better food security therefore expenditure level increased than out of loans. And about 26 percent of rice consumption increased from their own production.

<table>
<thead>
<tr>
<th>No. of respondent</th>
<th>Period of time</th>
<th>0-49999</th>
<th>50000-99999</th>
<th>10000-149999</th>
<th>150000-above</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Before loans</td>
<td>25</td>
<td>56</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>After loans</td>
<td>9</td>
<td>55</td>
<td>28</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Field survey, 2014

(d) Employment

The participant households are better able to ensure more employment on own farms due to their better access to the land rental market. Wage and self-employment in non-agricultural sector is also higher for the participant households due to their access to microcredit program.

(e) Assets: land and non-land

Average size of land owned by participant households is higher than the non-participants. Higher percentage of program participants own poultry, goat/sheep and cows. A higher percentage of the participants own bicycles, irrigation equipment and rickshaw/van thus showing higher asset ownership of the participants.

(f) Investment

Table -9 presents areas of microcredit investments based on information from a large number of MFIs as mentioned in the loan application by the borrowers. The trend over the last five years has remained the same: trade and transportation (45.18% in 2013) topped the list followed by agriculture (24.85%). Within agriculture the highest amount went for livestock (11.85%), followed by crop production (9.89%), and fisheries (3.12%). In coming years, the crop sector is expected to grow larger because of expansion of microcredit in this sector. But one must be aware that the rural economy is not diversifying fast, which is precisely the reason
of similar pattern of investment.

**Table -9: Activities financed by microcredit (%)**

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Up to 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Productive Activities</strong></td>
<td>48</td>
</tr>
<tr>
<td>A1. Agricultural Sector</td>
<td>48</td>
</tr>
<tr>
<td>a) Crops</td>
<td>15</td>
</tr>
<tr>
<td>b) Livestock</td>
<td>31</td>
</tr>
<tr>
<td>c) Fisheries</td>
<td>2</td>
</tr>
<tr>
<td>A2. Processing and Industries Sector</td>
<td>0</td>
</tr>
<tr>
<td><strong>B. Trade and Transport Sectors</strong></td>
<td>36</td>
</tr>
<tr>
<td>a) Small business</td>
<td>31</td>
</tr>
<tr>
<td>b) Transport</td>
<td>5</td>
</tr>
<tr>
<td><strong>C. Social Sectors</strong></td>
<td>12</td>
</tr>
<tr>
<td>a) Health</td>
<td>4</td>
</tr>
<tr>
<td>b) Education</td>
<td>2</td>
</tr>
<tr>
<td>c) Housing</td>
<td>6</td>
</tr>
<tr>
<td><strong>D. Others</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total (%)</strong></td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Field survey, 2014*

5. Social and Other Development Impacts

(a) Health and Nutrition

There is positive program placement effect on nutrition status. Sample survey shows that average health expenditure of the clients increased after they had taken loan.

**Table-10: Health Expenditure (%)**

<table>
<thead>
<tr>
<th>No. of respondent</th>
<th>Period of time</th>
<th>0-9099</th>
<th>10000-19999</th>
<th>20000-29999</th>
<th>30- above</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Before loans</td>
<td>54</td>
<td>26</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>After loans</td>
<td>34</td>
<td>40</td>
<td>23</td>
<td>3</td>
</tr>
</tbody>
</table>

*Source: Field survey, 2014*
(b) Sanitation and Drinking Water

The case study finds small positive influence of participation on waste disposal and use of sanitary toilets. The use of pure drinking water from hand tubewell was found universal.

(c) Education expenditure of Children

The case study found that, program participation increases the expenditure on their children’s education.

<table>
<thead>
<tr>
<th>No. of respondent</th>
<th>Period of time</th>
<th>0-9099</th>
<th>10000-19999</th>
<th>20000-29999</th>
<th>30- above</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Before loans</td>
<td>38</td>
<td>37</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>After loans</td>
<td>37</td>
<td>20</td>
<td>25</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: Field survey, 2014

(d) Empowering Women

Microcredit programs' main target is women. There are strong evidences that, microcredit programs contribute to women's empowerment. Now women's are increased in decision making in the areas of family planning, children's marriage, buying and selling of properties and sending daughters to school.

6. Problems Policy Options of microcredit programs

Microfinance is the provision of financial services (Loans, savings, insurance) to people on a small scale, such as businesses with low or moderate incomes. Despite good intentions, microfinance still has several hurdles to cross over:

(a) Problems

Multiple borrowing or overlapping: Overlapping or multiple borrowing by an individual borrower or household is considered as an alarming issue or problem, according to the respondents.

Misuse of credit by borrowers: As in most of the cases MFIs do not review what is the borrower doing with the money borrowed. Misuse or unproductive use of credit is a usual practice.

Lack of innovation: From almost the beginning till today almost every MFIs follow Grameen Model of micro financing.

Severe lack of training and education: The research and training capability of MRA is poor. MFIs are facing many emerging issues to meet the present and
future challenges.

Reaching economically backward region: MFIs/ NGOs could not effectively reach the people of economically backward regions of the country. As a result, MFIs showed poor performance in economically backward areas.

Targeting women as borrower and its Social Dilemma: Most of the microfinance borrowers are women. In usual practices rural community does not appreciate women to go in public and participate in financial activities. Inappropriate targeting of poor households is a major problem to the microfinance providers.

Higher interest rate: High cost involved in small loan transactions for Microcredit providers. Higher interest rate is a financial disadvantage of microfinance. Due to higher interest rate charges, Grameen Bank has been criticized, as the interest rate is roughly 32.5% (Field survey), while the interest of conventional banking is 10-15% in Bangladesh.

Less attention to ultra poor: Micro financing is to deal with poor, so does it. But there are not much significant interventions for the ultra poor segment.

Lack of capital: Although the microfinance sector has reported an impressive growth, there is a lack of capital for some of the microfinance institution in the country.

Insufficient repayment time by the microfinance institution to the borrower: Most of the micro-loans are given for the start of micro-enterprises for a short period and the loan would have to be rapid from the cash flows generated from the business.

(b) Policy

Microfinance institutions have been viewed as an important tool in poverty alleviation. It is an important sector which would improve the living conditions of the poor and lead to the development of the country. Some of the policies are hinted below:

- To enhance the outreach in remote area and provide fast services to existing customers.
- Loans should be given more amounts in first time and loans installments should be paid less amount.
- MFIs should enhanced supply of more funds to serve graduated clients and unbanked poor people to meet various needs.
- Rate of interest should be decreased. The interest rate is high as compared to that of commercial banks. NGOs charge such interest rate to cover operational cost with a view to achieving sustainability and attracting huge commercial funds into microfinance industry by improving the technology model used by microfinance institutions.
The microfinance institutions should ensure that the loans are given for useful purpose which would earn a living for the household and not for uneconomic purpose.

To make MFIs more transparent, accountable and people oriented, new measures may be taken to include representative from micro borrowers and nonpolitical highly honored professionals having good grounding on microfinance and its mission.

Multiple borrowing or overlapping should be restricted by the borrowers. Central data base will remove the overlapping problems.

Research and training program should be extended. To meet the present and the future challenges it is necessary to strengthen research and training capability of NGOs.

7. Concluding remarks

This study aims to the study impacts of micro credit to reduce poverty in Trishal Upazilla. We conducted a field survey to collect data. In Trishal, microfinance institutions now play an important role for the improvement of poor people’s life. Our findings from questionnaire survey show that most of the poor people in Trishal upazilla are covered under microcredit facilities. The major microfinance institutions are Grameen Bank, ASA, and BRAC played a vital role for the uplift of the people of study area. Study shows that microcredit disbursed through major NGOs including Grameen Bank, BRAC, ASA plays an important role to reduce poverty by generating employment, improving level of living by better education, better health facilities, and higher health expenditure.
References


5. BRAC(2013) . BRAC Annual Report 2013


9. MRA (2013), NGO-MFIs in Bangladesh, Volume7, Micro Credit Regulatory Authority, Dhaka, Bangladesh.


Customer Perception on Internet Banking and Its Effect on the Performance of Bank in Bangladesh

Mihir Kumar Roy*
Shahriar Parvez*
Asraful Islam*

Abstract: The objective of the study was to show the customer perception on Internet banking by identifying factors that influence the performance of banks in Bangladesh. The study was basically a survey on IBBL, Narayanganja branch that used quantitative data & a structured questionnaire was used to collect data from 45 customers. The results of the study showed that maximum number of respondents responded positively on Internet banking. It was found that customers wanted high level of security in such type of banking and they were likely to grant i-transfer service than i-recharge service. In the part of satisfaction and importance level it was found that respondents were satisfied on IBBL Internet banking service. But people want validated security level certainty and they thought i-recharge and i-transfer system should be improved. Internet banking service is a part of the e-banking bundle and it is an alternative means of offering the customers self-controlled transactions, using the internet as the medium for the transaction. Bank can expand more service such as foreign exchange and investment in this system. Higher Security level must be applied and employees under this system should be expertised and automatic login features must be avoided in this banking system. The study recommended that future studies should be carried out using non Internet users as respondents to investigate their intentions and perception of the Internet banking services in Bangladesh.

Keywords: Internet Banking, Customer, Perception, Satisfaction.

1. Introduction

There has been significant improvement in the communication sector of Bangla-
The Internet banking adoption among young intellectuals:

Beginning from the late 1990’s to date internet banking has steadily grown to become a standard offering of most banks. When a new innovation appears it attracts attention and the attention to internet banking is due in part to the rapid diffusion of the internet and growth of e-commerce. Despite this attention very little is known of the systematic information on the scope of Internet banking. Internet banking has been noted to be one channel within the electronic banking bundle. (Lustsik, 2003), he defines e-banking as being a combination of the following platforms: (a) Internet banking (or online banking), (b) telephone banking, (c) TV-based banking, (d) mobile phone banking, and (e) PC banking (or offline banking). The emphasis of this work is on internet banking, which has been noted as one of the most rapidly developing part of e-banking.

As we know that Internet banking can fast banking activity by reducing time and cost. By such system using i-banking customer can be benefited by saving their cost and time and can maintain accurate transaction summery. There are no recorded data that how many users are likely to be involved in i-banking service. Most banks are operating their activities in traditional way. But if the entire banks move to i-banking service and if the customers accept this service then: 1) Customer can maintain their transfer money from one account to another by using Internet from anywhere without coming bank. But to do this customer must provide a security code. 2) Customer can get their statement without coming bank. 3) Customer can save time and transportation cost. 4) Bank will be able to satisfy their customer by providing best services and can maintain a long run relationship with customers. 5) Internet banking system increase organization reputation. (Brent Warrington, 2008)

Thus most of the customers in the banking system of Bangladesh still have to visit their branches for picking check books, third party account transfers, payment for utilities, issuing of signed statements of account, check deposits etc. This would not only eliminate the often cited convenience and time saving attributes of Internet banking if the consumer must still visit the branch to finish a transaction started online, but may also impact the adoption of Internet banking which in most cases is a paid-up service (Taylor and Todd).

Internet banking is totally a new concept in banking sector of Bangladesh. Due to technological changes people of modern world are much dependent on Internet. They want to mix this with every sphere of their activities. Their perception on i-banking is very important that should be measured. Again, many of the customers do not know how to run i-banking service. So, their perception is an important thing. Customer perception on Internet banking is changing day by day. Now-a-
days customers want more reliable and frequent service. Therefore, it is no longer sufficient for banks to increase the number of branches, but to focus on how customer service can be fulfilled by being available internet banking system. To build stronger customer loyalty, banks need to know about customer changing perception. As the customers want quick service in short time then i-banking system should be implemented by the bank. This study attempts to measure the perceptions of customers on i-banking system. Though it is a new idea in modern era, it will be helpful for the management of banks of Bangladesh for performing cond their i-banking service customer friendly.

2 Literature Review

Internet banking

Recent literature on marketing in the banking industry shows that several scholars have investigated the adoption of Internet banking. From the 1980s up to date, channels of distribution in the banking services have witnessed a shift towards self-servicing alternatives. As a result of rising costs, ever more demanding customers, and the need to exert profitability whilst performing better than the competition, banks have thus resorted to investing in new customer service channels such as Internet banking (Hernandez and Mazzon, 2006). Customer through internet banking can perform a wide range of banking transactions electronically via the bank’s website and, this means that for a customer, internet banking provides a convenient channel to manage ones financial transaction (Tan & Teo, 2000).

The increasing customer demands, increasing competition amongst the banks, worldwide deregulation of financial services market and the drive by banks to be more efficient and reduce cost is some of the factors that are driving the acceleration of internet banking (Hutchinson and Warren, 2003 while quoting National Office for the Information Economy, 1999).

Ovia (2001) describe internet banking services in three ways:

1. **Informational** – this is when a bank’s internet services are simply to display their products and services their websites. This type of service do not allow for any form of transaction on the banks website.

2. **Communicative** – the bank’s system allows interaction between the system and the customer. This interaction is limited to electronic, account opening enquiry, loan application and static file updates. Because these servers have a path to the bank’s internal network, the risk is higher compared to informational.

3. **Transactional** – this level of Internet banking allows banks to transact business with their customers. It presents the highest risk architecture
and must have the highest security and controls.

3 Objective and Methodology

3.1 The broad objective of this study is to analyze Customer perception on i-banking, with special reference to Islami Bank Bangladesh Limited. More specifically, the objectives of the study are as follows:

- To find out the extent of i-banking service in the banking sector.
- To analyze the characteristics and use of i-banking.
- To assess the satisfaction level of i-banking among the customers of IBBL.
- To suggest policy implications arising out of the study.

All over the world, Banks are currently investing heavily in Information Technology (IT) and have more recently begun to employ the use of wireless Internet access to support a range of innovative banking services with the aim of improving service relationships (Hoehle and Scornavacca, 2007; Gartner, 2004).

Benefit

It is noted that providing faster, easier and more reliable services to customers are amongst the top drivers of Internet banking development. The spread of internet e-commerce will depend on the perception of the consumer of its advantages and disadvantages. Among the benefits of e-commerce to bank customers are:

- Internet banking saves time and money for users and consumers can use e-banking to pay bills online or to secure a loan electronically (Turban and King, 2003).

- Online banking is most appropriate for most simple enquiries and money transfer and Internet banking have reduced the need to visit the branch (Whiteley, 2000).

- Ovia (2001) note that through internet banking, customers would enjoy sitting comfort of their homes and offices and with a PC log onto their banks’ servers transact banking activities.

- Online real-time nature of the medium means that with i-banking customers can view real-time balances and transactions on their account, pay bills etc. (Zenith Bank, 2012).

Trust and Internet banking:

Internet banking transaction is a trusting behavior; this is because the customer makes him or herself vulnerable by putting trusts on the internet to complete his or her transaction (Mayer, Davis & Shoorman, 1995). According to Dong et al. (2008), all interactions require an element of trust, especially those conducted in
the uncertain environment of e-commerce. Internet banking is highly uncertain as the parties involved in the transactions are not in the same place (Clark, 1997).

Mukherjee and Nath (2003) state that customers believe that the internet payment channels are not secure and can actually be intercepted, which reduces the customers’ level of trust, discouraging them from engaging in online information search and making online banking transactions.

**Customer Perception and Internet Banking**

A marketing concept that encompasses a customer's impression, awareness or consciousness about a company or its offerings. Customer perception is typically affected by advertising, reviews, public relations, social media, personal experiences, technology and other channels. Perception is equated with reality for most practical purposes and guides human behavior in general.

In one words perception means the biological use of our sense of organs. But customer perception refers to much more than just the biological use of our sense organs. The entire process by which an individual becomes aware of the environment or a thing and interprets it so that it will fit into his or her frame of reference. (Walters et al, 1989, p. 333).

It is important that marketers understand the whole notion of perception and its related concepts so that they can more readily determine what influences customers to buy. (Schiffman et al, 1991).

Literature survey as discussed above revealed that Internet banking service is essential for modern banking. By using Internet Banking service customer can handle their self-support Banking services thus save time and cost. Again, clients of bank are increasing day by day. So, to meet the increasing customer demand it is essential to implement and improve Internet Banking service. It is informative and is one kind of trusting behavior. By using it customer can transfer their account sand complete their transactions. So, Internet banking is a modern form of Technology and customer perception on it is gradually changing.

### 3.2 Methodology

**Research Purpose**

In order to obtain information concerning the current state of a phenomenon, descriptive research was used to describe the conditions that exist now in a situation. The researcher tried to describe customer’s perception on internet banking by identifying some factors that explain their intention and importance to use Internet banking services. After consideration of the research topic and focus, the research purpose of this study was determined as descriptive as well as Quantitative
Sample selection and procedure

Using a sample rather than examining an entire population for a study is fairly obvious regarding time, cost and human resources. Convenient sampling technique was used and customers from Narayanganj IBBL Branch were chosen in order to have the population. The data were obtained from 45 respondents where Small ‘n’ is 45 and big ‘N’ is uncertain. So, convenient sampling was suitable for this study as it was not possible to get all information from uncertain respondent clients. Due to time and cost constraints, the researchers had to limit their study within one branch. Five demographic variables of the respondents were measured—age, gender, income, profession, and education level. The definition and specification of such variables are discussed. Age of an individual referred to the period of time from his birth to the time of interview. The age was measured in terms of years’ education of an individual was determined in terms of the higher grade or class passed by them. The education of an individual receiving it outside school was determined on the basis of the level he or she attained in relation to education at a school; the Annual income of a household was considered as a total income earned by all working members of the households; In Bangladesh, most of the people are somehow or rather involved with agriculture as farmer of coworker or petty businessman. In urban area, the situation is something different. As the study area of proposed research is located in urban area (Narayanganj), the professions are determined by business, service and others; Gender issue has become a point of discussion from various perspectives. Women are now considered as an important partner in any kind of development. Both male and female are determined in the survey.

For the purpose of measuring the customer perception and extent of satisfaction and importance on i-banking system quantitative research approach was undertaken. & there are two approaches to collecting data for the study and these are: primary data and the secondary data; To support this study, articles published by other researchers, books, journals, internet in the area of Internet banking were used extensively.

Primary data were collected through a structured questionnaire which was administered personally to the bank customers. The questionnaire was developed by using a 5 point Likert scale, where 1 = strongly agree/ satisfactory 2 = agree/satisfactory, 3 = neither agree nor disagree/neutral, 4 = disagree/dissatisfactory and 5 = strongly disagree/dissatisfactory to measure the level of customer perception, satisfaction and also used 5 point scale where 1 = Very high, 2 = High and 3 = neutral, 4 = low 5 = very low to measure the importance of i-banking among customers. A Likert scale is a psychometric scale commonly involved in research that employs questionnaires. It is the most widely used approach to scaling responses in survey research, such that the term is often used interchangeably with rating scale, or more accurately the Likert-type scale, even
though the two are not synonymous. There is also an empty space for clients’ suggestion. Questionnaire was pre-tested several times to ensure text formatting.

Data is processed through editing, coding and using mean. At first, data were collected through questionnaire and edited them through tables. Numeric coding was used in this study. Some inappropriate additional questions were forfeited from the questionnaire. After coding, data were measured by using mean and then put the result in the table.

3.3 Limitation of the study

There are some limitations of this study.

First of all, this study is a part of internship program and took few respondents perception because of time constraints.

Second, this research study is made on the basis of perception of only IBBL customers at Narayanganj branch. Different customer of different banks may have different response and perception which was not possible to collect because of time and fund constraints.

Third, officers of the bank are unable to provide some necessary information for pressure of their work. Even they could not able to provide manual General banking and investment list. Many respondents are not well in English and needed to translate them in Bengali. So, it is a matter of time and they are not expert in the use of Internet. Fourth, Few researchers were conducted their research on Internet Banking. So, it was very hard to find literature and some important papers.

4 Nature and Extent of Internet Banking Service in Islami Bank Bangladesh Limited (IBBL)

Overview

Islami Bank Bangladesh Limited has been devoted to serving its customers since inception in 1983. The bank is committed to introduce new services and to make existing services faster and better than ever. Internet Banking is a cornerstone of their strategy, designed to accelerate commitment to enable customers to do banking at their own convenience. They have introduced two new services to all i-Banking customers that reflect the continuous endeavor to put the strategy into action- 1) i-Transfer system by which IBBL customer can transfer their balance/account from one account to another, 2) i-Recharge system by which IBBL customer purchase airtime/recharge account for their mobile anytime from all mobile operators in Bangladesh except Teletalk.

IBBL Profile

Islami Bank Bangladesh Limited is a Joint Venture Public Limited Company engaged in commercial banking business based on Islamic Shari’ah with 58.03%
foreign shareholding having largest branch network (246 Branches & 30 SME/Krishi Branches i.e. total 276 Branches) among the private sector Banks in Bangladesh. It was established on the 13th March 1983 as the first Islamic Bank in the South East Asia.

It is listed with Dhaka Stock Exchange Ltd. and Chittagong Stock Exchange Ltd. Authorized Capital of the Bank is Tk. 20,000.00 Million ($244.87 Million) and Paid-up Capital is Tk. 10,007.71 Million ($122.53 Million) having 60,550 shareholders as on 31st December 2011. (www.islamibankbd.com)

**Strategic objectives**

As a leading private Commercial bank in Bangladesh banking sector, IBBL has some strategic objectives. These include:

- To ensure customer satisfaction.
- To ensure welfare oriented banking.
- To establish a set of managerial succession and adopting technological changes to ensure successful development of an Islamic Bank as a stable financial institution.
- To prioritize the clients welfare.
- To ensure diversification by Sector, Size, Economic purpose & geographical location wise Investment and expansion need based Retail and SME/Women entrepreneur financing.
- To invest in the thrust and priority sectors of the economy.
- To encourage sound and pro-active future generation.
- To ensure Corporate Social Responsibilities (CSR) through all activities.
- To promote using solar energy and green banking culture and ecological balancing.

**Internet banking service of IBBL**

Islami Bank Bangladesh Limited has been devoted to serving its customers since inception. They are committed to introduce new services and to make existing services faster and better than ever. I-Banking is a cornerstone of their strategy, designed to accelerate commitment to green banking and to enable customers to do banking at their own convenience. IBBL have introduced two new services to all i-Banking customers that reflect our continuous endeavor to put the strategy into action. Wherever you are, using i-Banking now you can transfer funds (i-Transfer) between IBBL accounts, Purchase airtime / Recharge account (i-Recharge) from all mobile operators in Bangladesh, except Teletalk.
Services

Account Service
- Account Balance
- Account Statement
- Transaction Summery

Transactional Service
- i-Transfer (Fund transfer)
- i-Recharge (Purchase airtime/Recharge account)

Investment Report
- Investment Account Statement
- Customer Wise Liability
- Mode Wise Liability
- Liability at a glance of Party

Foreign Business Report
- Cost Sheet for Negotiation
- Cost Sheet for Realization
- Cost Sheet for Retirement of a Bill

Clearing Instrument
- Credit Clearing Instrument Status
- Debit Clearing Instrument Status

Ftt & Fdd
- FTT Message Search
- FDD Payment Search

5 Satisfaction and Importance level of Internet Banking among the Customers

Socio-economic background of the studied customers in the branch

Internet Banking is a modern revolution in Banking sector. Perception on Internet banking and their satisfaction result surveyed on IBBL customers, Narayangonj Branch is given below:
Table-I: Distribution of respondents according to their socio-economic characteristics.

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of Respondents</th>
<th>Percentage of row total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30 Years</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>31-40 Years</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>41-50 Years</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>51-60 Years</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under Graduate</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>Graduate</td>
<td>23</td>
<td>50</td>
</tr>
<tr>
<td>Post-Graduate</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>INCOME LEVEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TK 10,000-25,000</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>TK 25,001-40,000</td>
<td>16</td>
<td>35</td>
</tr>
<tr>
<td>TK 40,001-50,000</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>TK 50,000- Above</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>OCCUPATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>15</td>
<td>35</td>
</tr>
<tr>
<td>Business</td>
<td>23</td>
<td>50</td>
</tr>
<tr>
<td>Housewives</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>36</td>
<td>80</td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: Field survey (2012)

Age is an important factor. The researchers divided respondent age level in four groups and it was taken 25% (11 ) respondents who are 21-30 years old, 40% (18 ) respondents within 31-40 years old, 25% (11 ) respondents within 41-50 years old and only 10% (5 ) respondents have been taken from 51-60 years old. This is a study of findings perception level of i-banking service. So, it was thought that people between 25-50 age groups can provide their best perception level in research questions. The above groups of respondents gave their perception efficiently.

The researchers divided education level into three groups. I think education is an important factor in this study. . It was found that 50% (23 ) respondents were
graduated and 25% (11) respondents were Undergraduate and 25% (11) respondents completed their Master degree.

For this study it was needed to divide respondents’ income level into four groups. The researcher chose 25% (11) respondents whose income was 10000 to 25000 BDT, 35% (16) respondents whose income was between 25001 to 40000 BDT, 30% (13) respondents between 40001 to 50000 BDT and the rest of the respondents’ income was above 50000 BDT. Maximum respondents belonged to the middle group whose income was between 25001 to 50000 BDT.

In the study, it was found that 35% (15) respondents were service holder and 50% (23) respondents were Businessman. According to the survey, maximum account holders of IBBL, Narayanganj branch, were Businessman and the service holders who live in abroad were the remittance earners. The rest of the respondents were Housewives (5%) and other (10%) were students, bank employees, unemployed persons etc. Most of the housewives account holders of the branch came from rural areas.

In this study, the researcher collected information from both male and female. The female account holders were less compared to male in this branch, the researcher took 80% male respondents and 20% female respondents considering the situational context.

Results of respondents on their bank visit and use of Internet banking service

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of Respondents</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BANK VISIT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 10 days</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>8-10 days</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>5-7 days</td>
<td>16</td>
<td>35</td>
</tr>
<tr>
<td>1-4 days</td>
<td>16</td>
<td>35</td>
</tr>
<tr>
<td><strong>REASONS FOR BANK VISIT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To make deposit</td>
<td>20</td>
<td>45</td>
</tr>
<tr>
<td>To withdraw cash</td>
<td>16</td>
<td>35</td>
</tr>
<tr>
<td>Loan/Investment</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>USE OF INTERNET SERVICE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 hours</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>3-5 hours</td>
<td>19</td>
<td>42</td>
</tr>
<tr>
<td>6-8 hours</td>
<td>13</td>
<td>29</td>
</tr>
<tr>
<td>9-11 hours</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td><strong>SUBSCRIBE FOR USE OF INTERNET BANKING SERVICE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>25</td>
<td>55</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>45</td>
</tr>
</tbody>
</table>

*Source: Field survey (2012)*
It was found that most of the respondents clients usually visited bank 1 to 7 days in a month. So, the researcher classified this group into four groups. It was found that 10% (4 persons) came to the bank more then 10 days, 20% (9 persons) came 8 to 10 days, and 35% (16 persons) came 5 to 7 days and 35% (16 persons) 1 to 4 days in a month.

It was showed in the study that average 20(45%) respondents out of 45 visited bank for the purpose of making deposit. Numbers of 16(35%) respondents out of 45 came to the bank for the purpose of withdrawal. Because now-a-days most people use ATM system for their withdrawal. Seven respondents(16%) were for Investment/Loan purpose and rest 2 respondents (4%) were for different purpose i.e. foreign exchange, DD, TT etc.

Table-2 also shows the result of respondents using internet per week. The table showed that 20% (9 people) use internet less then 2 hours per week. The highest group 19 (42%) respondents liked to use internet 3-5 hours in a week. 13 (29%) respondents used internet 6-8 hours and only 4 (9% respondents) used internet 9-11 hours in a week. So, It was thought that the use of internet by respondents was very low but it was a very good indication that respondents used internet in a standard range (3 to 8 hours) in a week.

This result was very shocking. Respondents said about i-banking service very confidently but it was shown that only 25 (55%) respondents used i-banking service. The rest of the respondents wanted to get this service, but due to improper knowledge of using this system they were unable to use this.

Result of Customer Perception on Internet Banking

The main Purpose of this report is to find customer perception level. The secondary purpose is to find their satisfaction level on it and count a deviation between satisfaction and importance.

Table-3 presents the perception level of customer on internet banking service. The mean value of the i-banking service of banking sector of Bangladesh is 2.10 which indicate high. Mean value of Internet banking of IBBL is 1.66 which is high and it shows that internet banking is necessary for IBBL customer as it is one of the leading private bank in Bangladesh and hold highest number of deposits. Every customer of the bank wants security first as they will conduct their transaction from anywhere. So, they want that the security system of IBBL should be like in a way which is unable to hack by hacker. Customer profile decoration is neutral. Customers think i-banking is necessary for i-transfer rather then i-recharge. So, the mean value of i-transfer is lower (1.85) then i-recharge (2.42). They think that they can recharge for their phone from any recharge shop without internet. But they can not transfer their account, money, and important document without using Internet banking service. By calculating rest of the dimensions it is seen that total customer perception mean value is 1.88 which refers strong. So, it can be said that the
customer of IBBL revealed Internet banking is important in Bangladeshi banking and their perception is strong on it.

Table-3: Customer Perception Result

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perception on i-banking service in Banking sector</td>
<td>2.10</td>
</tr>
<tr>
<td>2. Perception on i-banking service of IBBL</td>
<td>1.66</td>
</tr>
<tr>
<td>3. Perception about security of internet banking</td>
<td>1.37</td>
</tr>
<tr>
<td>4. Perception on decoration of customer profile for i-banking</td>
<td>2.48</td>
</tr>
<tr>
<td>5. Perception on i-recharge of IBBL by using i-banking service</td>
<td>2.42</td>
</tr>
<tr>
<td>6. Perception on i-transfer service of IBBL by using i-banking service</td>
<td>1.85</td>
</tr>
<tr>
<td>7. Perception on employees for i-banking service can promote customers</td>
<td>1.93</td>
</tr>
<tr>
<td>8. Perception on customers who can run i-banking service</td>
<td>2.06</td>
</tr>
<tr>
<td>9. Perception that i-banking service can save time and cost</td>
<td>1.06</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td><strong>1.88</strong></td>
</tr>
</tbody>
</table>

Source: Field survey (2012)

Result of Customer Satisfaction Level

Table-4 shows the customer satisfaction level of IBBL. By averaging total score the final mean score is 2.06 which regard their customer satisfaction good. Highest mean score form dimensions is employees expertise (2.26). Employees who are engaged in the control Internet banking service of IBBL are neither good nor bad. So, customer expressed their satisfaction level on it. Customer satisfaction on accurate service and itransfer and irecharge service is good. Average score of speed and efficiency is 1.91, irecharge and itransfer is 2.18, and saving cost and time is 2.09. Total average is 2.06 which express that customer satisfaction level is best and they provide good internet banking service. Table-2 shows the result below:

Table-4: Customer satisfaction level

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Satisfaction level of Accurate and Quick ibanking service of IBBL</td>
<td>1.86</td>
</tr>
<tr>
<td>2. Satisfaction level of security of ibanking services of IBBL</td>
<td>2.03</td>
</tr>
<tr>
<td>3. Satisfaction level of speed and efficiency of ibanking of IBBL</td>
<td>1.91</td>
</tr>
<tr>
<td>4. Satisfaction level by using irecharge and itransfer system?</td>
<td>2.18</td>
</tr>
<tr>
<td>5. Satisfaction level on employees who are engaged to operate ibanking service</td>
<td>2.26</td>
</tr>
<tr>
<td>6. Satisfaction level by saving time and cost using ibanking service</td>
<td>2.09</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td><strong>2.06</strong></td>
</tr>
</tbody>
</table>

Source: Field survey (2012)
Result of Importance level of Internet banking

Table-5 shows the importance level of Internet banking. The score of importance level of internet banking in Bangladesh is 2.12 which is good. Strong security in i-banking is also a good factor. They think that security is very much essential subject in i-banking service and the mean score is 1.53. They agree with this dimension that Internet banking save time and cost as anyone can use it from anywhere by using Internet (Mean value is 1.68). The value of importance of i-recharge and i-transfer is 1.86 i.e., good. If the employees are not expertise in this service they can not provide something good for the customer. So, it showed the average value is 1.94. Total average of importance level is 1.83 which indicated that there is importance of internet Banking in Bangladeshi banking sector as well as IBBL.

Table-5: Importance level

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Importance of ibanking service of banking sector in bangladesh</td>
<td>2.12</td>
</tr>
<tr>
<td>2. Importance of strong security while using ibanking service of IBBL</td>
<td>1.53</td>
</tr>
<tr>
<td>3. Importance of ibanking service to save time &amp; cost</td>
<td>1.68</td>
</tr>
<tr>
<td>4. Importance of irecharge and itransfer</td>
<td>1.86</td>
</tr>
<tr>
<td>5. Importance of Employees Expertise of IBBL</td>
<td>1.94</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>1.83</td>
</tr>
</tbody>
</table>

Source: Field survey (2012)

Internet banking customer value measuring (IBBL)

Table-6 illustrates the value measuring results. It is created by taking the score of importance level of i-banking service and satisfaction level of i-banking service of IBBL. It is just a difference between these two. It is seen in the table that no one dimension is matched. So, the i-banking service of IBBL should be developed.

Table-6: Customer value measure of i-banking service of IBBL

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Importance Mean</th>
<th>Satisfaction Mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Security in using i-banking</td>
<td>1.53</td>
<td>2.03</td>
<td>-0.50</td>
</tr>
<tr>
<td>2. i-banking save time &amp; cost</td>
<td>1.68</td>
<td>2.09</td>
<td>-0.41</td>
</tr>
<tr>
<td>3. i-recharge &amp; i-transfer system</td>
<td>1.86</td>
<td>2.18</td>
<td>-0.32</td>
</tr>
<tr>
<td>4. Employees expertise in i-banking</td>
<td>1.94</td>
<td>2.26</td>
<td>-0.32</td>
</tr>
</tbody>
</table>

Source: Field survey (2012)
5 Concluding Remarks

The results shown that the perception of IBBL customer is strong on i-banking service. Table-1 shows this result and revealed that they wanted more innovative service of i-banking. This study also searched customer satisfaction level and importance of i-banking service to get understand how much it need i-banking service and what they are getting now. There are some satisfaction gaps among customers who use i-banking service of IBBL. It is found in Table-4, Internet banking customer value measuring. In the following, summary of recommendations are suggested so that the bank may follow them to improve it’s their i-banking service by understanding their customer perception.

- **Using system should be easier:** Using system of internet banking should be easier. Table-1, 9 no. dimensions shows the mean of i-banking service run by customer is 2.06. So, it is gradually approaching to moderate scale. The bank should make their Internet banking system in a way that will be easily understandable by the customers.

- **Add extra service option:** Internet banking service included limited number of services. So, more service option should be included in this system. IBBL offers 4-5 items that customer can do through internet banking. But cash deposit can be included in this system by increasing the service.

- **Increase customer confidence in security:** All customers want strong security. But Table-2, no. 3 dimension shows that i-banking security is strong of IBBL and people give more attention on i-banking security service (Table-1, no. 3 dimension). So, security system of internet banking should be very strong and it can create confidence in customer mind.

- **Employees of i-banking service should be expertise:** Employees who are recruited for running i-banking service should be expertise in technological side and must be well known about it. Because customer perception on expert employees is strong (Table-1, no. 7 dimension). But IBBL customer satisfaction level on customer expertise is slightly under strong (Table-2, no. 5 dimension). So, it is more important to improve or recruit expert employees for internet banking service (Importance: Table- 3, no. dimension).

- **Avoid automatic login feature that save ID and password:** The bank should withdraw this option as people want more security. Because if one login that service and forget to logout it, then it may be automatically login by the people who will seat in front of that computer.

There are some additional recommend about i-banking that can be given from this study:
• Install commercial anti-virus and desktop firewall software on all computer systems. Free anti-virus software may not provide adequate protection against the latest threats compared with an industry standard product.
• Verify use of a secure session (https not http) in the browser for all online banking activity.
• Never leave a computer unattended while using any online banking or investing service.

Recommendation may help the other banking institution when they want to open internet banking service for their customers. Most private bank of Bangladesh already runs this system with the modernization of latest banking services. Though this study has been made on the basis of searching customer perception of IBBL customer, a very few dimension may be differ when it will implement on some international bank in Bangladesh.

The findings from this study also have important implications for banks that offer Internet banking services or intend to offer such services. The study revealed that knowing customer perception and their want is more important to run this service. It is therefore essential for banks to educate potential customers about benefits of using Internet banking having in mind that potential adopters are found to rely more on their own efforts to search for information. Information relating to the advantageous nature of using Internet banking should be provided by bank tellers and customer services assistants at the branches. It is also essential for banks to offer free trial service of Internet banking to potential adopters, especially male educated working professionals who earns significant income. This can be done by the banks setting up Internet banking terminals at bank branches, shopping malls, airports and other busy venues for potential adopters to trial the service for its usage benefits.

By identifying above limitations it can be said that the factor of this study may not be match with other perception. As a result, the expansion of the number of the surveyed banks in any future study could improve the ability to generalize for more banks in the country. Further studies should include larger respondents because all customers are important to marketers. In addition, future studies should be carried out using non-Internet users as respondents to investigate their adoption intentions of IB services. Finally, it should be noted that measurement of certain items in the questionnaire did not work out as expected possibly because of its reverse coding nature. It is suggested that future studies should seriously consider the use of reverse coded items in questionnaires.
References


Baraghani Sara Naimi 2007, Factors influencing the Adoption of Internet banking. Lulea University of Technology, Lulea, Sweden, master thesis


Ikechukwu Okonkwo, Behavioral intention to adopt internet banking, Luleå University of Technology, Department of Business Administration, Technology and Social Sciences, Sweden, master thesis


Lawrence E. Japhet and Tar Usman (2010). Barriers to ecommerce in developing countries, Information, Society and Justice, Volume 3 No. 1, January 2010:


Neuman, W. L. (2006), Social Research Methods: Quantitative and Qualitative Approaches, USA: Pearson Education Inc


Consumer Perception on Basic Spice: A Comparative Study between Branded & Open Spice

Mihir Kumar Roy*
Rezuana Sharmin Mouri*

Abstract: The study on consumer perception on basic spice was undertaken to analyse the gap between consumers’ perception & existing market scenario with reference to opened and branded ones specially chili, turmeric, cumin and coriander. Data for the study were collected both from secondary as well as primary sources through content analysis, questionnaire and face to face conversation. It is observed from the analysis that most of the respondents used branded spices under Radhuni Powered Spice which they found most hygienic than open spices. The study recommended that Radhuni Basic Spice (RBP) need to conduct frequent consumer survey to develop new user group for the products with increased promotional expenses. The study concluded that more research work should be done on RBS to expand market in competitive situation and to attract the consumers in broader perspectives.

1. Introduction

Spices are the imperative ingredient to make food tasty and delicious. It is the most common and important ingredient for food items of our daily consumption. A Bangladeshi cannot think of a meal without using spices, it is our food habit and tradition. The history of spice is almost as old as human civilization. It is a history of lands discovered, empires built and brought down, wars won and lost, treaties signed and flouted, flavors sought and offered, and the rise and fall of different religious practices and beliefs. Spices were among the most valuable items of trade in ancient and medieval times. In the organization the policy planner must be benefited through this study. They know about the perception of consumer, they can understand how the consumer divert from open spice to branded spice, and what they think about the branded spice specially Radhuni.

* Professor and Dean, Faculty of Business Administration, City University, Dhaka and Graduate Student, Department of Business Administration, City University, Dhaka respectively.
2. Literature review

The study considered the question of whether consumers believed their buying decisions had a real effect on issues such as environmental impact. The researchers concluded that consumers’ self-perception was a driving factor in whether or not they placed a priority on socially conscious purchase and consumption practices. Consumers who viewed themselves as socially conscious tended to place more weight on issues such as environmental impact when making buying decisions than consumers who did not hold similar views of themselves.

In consumer behavior, however, perception refers to much more than just the biological use of our sense organs. It includes the way stimuli are interacted and integrated by the consumer. Although there are numerous definitions in literature explaining perception from a consumer behavior perspective.

- Van der Walt (1991) adds that perception occurs when sensory receptors receive stimuli via the brain, code and categories them and assign 49 certain meanings to them, depending on the person's frame of reference. A person's frame of reference consists of all his previous held experiences, beliefs, likes, dislikes, prejudices, feelings and other psychological reactions of unknown origin.

- The entire process by which an individual becomes aware of the environment or a thing and interprets it so that it will fit into his or her frame of reference. (Walters et al, 1989)

A problem though with perception and related studies (Schiffman et al, 1991) is that two individuals may be subject to the same stimuli under apparently the same conditions, but how they recognize, select, organize and interpret them is a highly individual process based on each person's own needs, values, expectations and the like. Individuals furthermore act and react on the basis of their perceptions, not on the basis of objective reality. With this in mind (Schiffman et al, 1991), it is important that marketers understand the whole notion of perception and its related concepts so that they can more readily determine what influences consumers to buy.

The process by which people select, organize and interpret information to form a meaningful picture of the world. (Kotler & Gray) The process, by which an individual selects, organizes and interprets information to create a meaningful picture of the world. (Kerin, Hartley nad Redelious)

It’s the way people gather and record information. (Gillbert A. Churchill. Jr & J Paul Peter)

Perception is the process by which an individual selects, organizes and interprets information inputs to create a meaningful picture of the world. (Kotler) A marketing concept that encompasses a customer’s impression, awareness or conscious-
ness about a company or its offerings. Customer perception is typically affected by advertising, reviews, public relations, social media, personal experiences, technology and other channels. Perception is equated with reality for most practical purposes and guides human behavior in general. Spice as powder form found in open market and in packed condition. These two the available option for a consumer to purchase powdered spice. We have conducted a consumer survey on structured questionnaire on brand perception of spice. Perceptions are developed over time through a variety of sources, including: Previous experience with the brand, Interactions with sales, customer service and other employees. Recommendations from friends and colleagues, Advertising

Before buying the spices product consumer think about the price of the product. They want to use of quality of product, in this case urban peoples are quality conscious and hygiene factor is important for them. Generally people are busy with various activities. So are very much unwilling to buy open spices and get bored of doing a manual process. They give importance availability of products. In this case they like branded spice which is hassle free and time saving.

The report is based on a comparative study between open powder spice and branded spice taking spice as generic in consideration. Mainly I focus on consumer perception of branded & open spice. And also focus on main reason for using branded spice, market share analysis, and consumer trend of using spices. Finally draw conclusion on marketing strategy of Radhuni Powder Spice.

3. Useful Information about Open and Branded Spices it is important to note some reliant information’s on open and branded spices noted below

### Adulterations of Open Market Spices

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Spice</th>
<th>Adulteration</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chili Powder</td>
<td>Brick powder grit, sand, dirt, filth, etc.</td>
<td>Pour the sample in a beaker containing a mixture of chloroform and carbon tetrachloride. Brick powder and grit will settle at the bottom.</td>
</tr>
<tr>
<td>2</td>
<td>Turmeric Powder</td>
<td>Starch of maize, wheat, tapioca, rice powder and color</td>
<td>A microscopic study reveals that only pure turmeric is yellow colored, big in size and has an angular structure. While foreign/added starches are colorless and small in size as compared to pure turmeric starch.</td>
</tr>
<tr>
<td>3</td>
<td>Cumin Powder</td>
<td>Grass seeds colored with charcoal dust</td>
<td>Rub the cumin seeds on palms. If palms turn black adulteration in indicated</td>
</tr>
<tr>
<td>4</td>
<td>Coriander Powder</td>
<td>Powdered bran and saw dust, Dung powder</td>
<td>. Sprinkle on water surface. Powdered bran and sawdust float on the surface. Soak in water. Dung will float and can be easily detected by its foul smell.</td>
</tr>
</tbody>
</table>
The Main Reason for Using Branded Spices

- Quality remains same and Ease of carrying
- Special Taste in Crushed Spices
- Less Wastage and Quality Remains OK
- Dust free and so It's Healthy
- Saves Time & Healthy
- Hassle Free & Time Saving
- Easy to Use
- Facilitate Fast Cooking
- Hygienic

Square Consumer Products Ltd

SQUARE CONSUMER PRODUCTS LTD. have started producing and marketing intrinsic quality of powdered spices (Like chilli, turmeric, cumin and coriander), mixed spices and some ethnic snacks (Like Meat Curry Masala, Fish Curry Masala, Garam Masala, Haleem Mix, Chatpati Mix, Chanachur etc.) in terms of taste, flavor & texture. Beside these, our plan is manufacture and market various food & beverage items very shortly.

3. Objective and Methodology

The broad objective of this study is to analyze consumer perception on basic spices (chili, turmeric, cumin, coriander) with reference to opened and branded ones.

The specific objectives of the study are as follows:

- To know the marketing practices of Radhuni powder spice brand and its basic spices.
- To analyze the consumer perception regarding basic spice.
- To identify the gaps between the customers’ perception and existing market scenario of Basic Spice.
- To suggest policy implications arising out of the study.

Data for the study were collected from secondary and primary sources. Sources of data collected from secondary sources (are given in) the following table.
can understand how the consumer divert from open spice to branded spice, and tradition. The history of spice is almost as old as human civilization. It is a history of getting knowledge about taste really remain ok in branded spice? We get the following response from the consumers. So far, they have taken the position of quality product and communication regards to hygiene issue.

### 1. Introduction

The study on consumer perception on basic spice was undertaken to understand the perception of the consumers regarding the quality of branded spices. The research was conducted to understand the consumer perception regarding the quality of branded spices. The study was conducted in Chittagong, Sylhet, Cox's Bazaar, and other areas. The objective was to maintain competitive and stable price. The objective was to maintain competitive and stable price. The objective was to maintain competitive and stable price.

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Sources</th>
<th>Nature of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Company websites</td>
<td></td>
</tr>
</tbody>
</table>
  - www.squarefoods.com.bd  
  - Square consumer products ltd  
  - SWOT analysis of Radhuni Basic Spice |
| 2 | Related Articles & Journals |  
  - Adulterations of Open Market Spice  
  - The Main Reason for Using Branded Spices |
| 3 | Related book |  
  - Definition of consumer perception |

Primary data we collected on Radhuni Powder Spice brand (chili, turmeric, cumin, coriander) of Square Consumer Products Ltd from Mohakhali as well as Gulshan areas. The reason was that these two areas are adjacent to researcher’s organization which is easily accessible with shortest possible time with minimum cost.

No conventional method of sampling was used because of unknown nature of the population size (N). In such a situation, considering time & fund constraints, a convenient method of sampling was used and only 200 customers who frequently consumed four basic spices under Radhuni brand were finally selected as a sample for the studies.

The instrument for collection of data i.e. questionnaire was prepared with the variables in line with the objectives of the study. The draft questionnaire was pretested to test the suitability in the real life situation & minor modifications were made to make it a final shape. The period of data collection continued between (5th August to 5th November,2013) The collected data were coded and tabulated for analysis. The simple average, graphs, pie charts etc. were used for better interpretation of data.
Limitation

There are some limitations of the study:

- This study is a part of research program and from all over Bangladesh the researcher have selected only two areas i.e. Mohakhali and Gulshan which is too small for a study.
- The researcher took only 200 respondents because of time constraints.
- This research study was made on the basis of consumer perception at Gulshan and Mohakhali areas. In different area consumers may have different response and perception which was not possible to collect because of time and fund constraints.
- The employees of the organization were unable to provide some necessary information for pressure of their work.
- Many respondents were not well in English and needed to translate them in Bengali. So it was a matter of time.
- Finally, the criteria of selection of the respondents did not lead itself to generalization of the result.

Open Spice: The sources of open spice are mainly found in the bazaars, grocery shops, and tendency of using open spices is high in the rural areas.

Branded Spice: Branded spice are basically the packed spiced that are available in our country. Major brands in our country are Radhuni, PRAN, BD, Pure, Arku etc. Branded spices claimed themselves pure and hygienic.

4. Results the following results of our analyses are useful to note.

SWOT Analysis of Radhuni Basic Spices

<table>
<thead>
<tr>
<th>Strengths:</th>
<th>Weakness:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coming from the house of “SQUARE”</td>
<td>Some consumers perceive our products to be of high price</td>
</tr>
<tr>
<td>SQUARE has the reputation in producing hygienic and superior quality products.</td>
<td>Retailers are not happy with the benefits that we offer</td>
</tr>
<tr>
<td>RADHUNI has established itself as a household name</td>
<td>Price gap with the open market is very noticeable.</td>
</tr>
<tr>
<td>Strong brand presence in the mind of the consumers</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities:</th>
<th>Threats:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rise in middle class population</td>
<td>No entry barrier</td>
</tr>
<tr>
<td>Consumers have more disposable income</td>
<td>The consumers are heavily influenced by Indian Culture, if a reputed Indian company partners with a local company, the consumers will shift to the Indian Branded products</td>
</tr>
<tr>
<td>Consumers are saying YES to good life styles.</td>
<td></td>
</tr>
<tr>
<td>People are more brand conscious</td>
<td>Political Instability</td>
</tr>
<tr>
<td>Consumers are now becoming conscious about their well-being.</td>
<td>Natural disasters</td>
</tr>
</tbody>
</table>

Market Share Analysis

<table>
<thead>
<tr>
<th>Competitor</th>
<th>Market share (%)</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radhuni</td>
<td>64%</td>
<td>SQUARE has the reputation in producing hygienic and superior quality products.</td>
<td>Some consumers perceive our products to be of high price</td>
</tr>
<tr>
<td>Pran</td>
<td>15%</td>
<td>Established itself as household brand. Strong distribution network. More than 250 products. Separate sales force</td>
<td>Considered as cheap products, Made headlines for adulteration</td>
</tr>
<tr>
<td>Tiger</td>
<td>7%</td>
<td>Popular in the Sylhet Region Strong distribution in Sylhet</td>
<td>Lack of national availability, Consumer cannot recall the brand, Established itself as a regional brand, No presence in any communication</td>
</tr>
<tr>
<td>RANI</td>
<td>4%</td>
<td>Coming from the house of Partex, which is popular in the Particle Board &amp; Condensed Milk category.</td>
<td>Customers lack awareness and lack of availability</td>
</tr>
<tr>
<td>ACI Pure</td>
<td>3%</td>
<td>ACI Pure Atta, Moida and Suzi is a household name. The brand value of ACI is positive among the consumers</td>
<td>Limited presence in the media, lack of awareness in the mind of consumers</td>
</tr>
<tr>
<td>Others</td>
<td>6%</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Consumer Perception- Concrete Findings:

In this section customer perception on basic spices on the basis of interview of two hundred customers and their results are furnished below

Gender of the respondents

As branded spice consumer was both the male and female, so the researchers decided to conduct survey on both male and female consumers. Therefor it was needed to identify the frequency of male and female of the survey.
To make the report fruitful the researcher need to know what type of spices is used clear.

Income level of Tk. 30000- Tk. 39000, 22% respondents belonged to Tk. 20000-

Income level of the respondents is important to purchase the banded spice. As the sector. Rest 28% respondents came from others sector.

Source: Field Survey(2013)

better interpretation of data. were made to make it a final shape. The period of data collection continued for the studies.

convenient method of sampling was used and only 200 customers who frequently what they think about the branded spice specially Radhuni. can understand how the consumer divert from open spice to branded spice, and religious practices and beliefs. Spices were among the most valuable items of trade 1. Introduction

Hygiene Factor

free. Branded spice is easy to use. 15% respondent agreed that branded spice is possible to collect

c) Others (please specify) ……………….

From the table it was found that among 200 respondents, 78% were male and the rest 22% were female. Graphically represented the information as follows:

Age of the Respondents

As the researcher surveyed 200 consumers for the research findings. the age limit of respondents were grouped into four. The following table shows the frequency of survey findings regarding age of the respondents.

Table 2: Age of the Respondents

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>30</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>30-39</td>
<td>110</td>
<td>55</td>
<td>55</td>
<td>70</td>
</tr>
<tr>
<td>40-49</td>
<td>40</td>
<td>20</td>
<td>20</td>
<td>90</td>
</tr>
<tr>
<td>Above 50</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

source: Field Survey(13)

It was found that 15% respondents belonged to age group 20 to 29; 55% respondents belonged to age group 30 to 39; 20% respondents beloned to age group 40 to 49; rest 10% respondents were above 50 age.

Occupation of the Respondents

Occupation is a very important factor in the survey because some classes of consumers thought about packet spice. Obviously they are educated and have judgmental quality. We surveyed on following sector. Note that others occupation referred to student, educated homemaker and old people.
1. Gender of the respondent on consumer perception on branded spice namely Radhuni. This is an academic taste really remain ok in branded spice? We get the following response from the consumer: How much the hygiene factor is important to the consumer? What the consumer thinks that taste and smell remain same in branded spice. They thought some sort of original smell.

2. Literature review

Perception is the process by which an individual selects, organizes and interprets meaningful picture of the world. (Kotler & Gray) The process, by which an individual makes sense of the world, is known as perception. The process of perception consists of selection, organization and interpretation. These three major components interact and influence each other. Understanding the process of perception is vital to understanding the behavior of a consumer. Consumers who viewed themselves as socially conscious tended to place more importance on social issues. (Gronroos)

In consumer behavior, however, perception refers to much more than just the selection and organization of sensory information. It is a subjective interpretation of the meaning of the stimulus information. (Homburg & Giering)

A problem though with perception and related studies (Schiffman et al, 1991) is that perception is always influenced by the individual’s past experiences, preferences and cultural background. This makes it very difficult to study perception scientifically. Perception is also subject to distortions and bias. (McKee & LoPresti, 1985)

3. Type of Spice Consumed

The report is based on a comparative study between open powder spice and branded spice. It was found that maximum 65% respondent used branded spice and 22% respondent used open spice. These 22% respondent are mainly in Gulshan and Mohakhali areas. In different areas consumers may have different perception toward spices.

We found that 60% respondent strongly agreed that price of branded spice is reasonable. 20% respondent strongly agreed that taste and smell remain same in branded spice. They thought some sort of original smell.

4. Main Reasons for Using Branded Spices

There are good numbers of brands coming with the same proposition of good quality. A number of brands are launching new Campaign and Festival. SCPL need to increase their promotional expenses and it should execute their strategy. Figure 10 shows the consumer perception on branded spice.

5. Benefits from Radhuni Powder Spices

• Save time and healthy
• Special taste in crushed spices
• Easy & fast cooking ensuring delicious aroma & flavor while cooking & cooking
• 100% free from adulteration.
• Create strong emotional bonding with Radhuni branded powder spice
• Create aspiration for using Radhuni branded spice in food preparation
• Postgraduate/Vocational: 17%
• 3–5: 66%
• 5–10: 11%
• 10: 1%
• All

6. Which brand you prefer to purchase packet spices?

It was found that out of 200 respondents, 48% respondents belonged to monthly income level of Tk. 30000- Tk. 39000, 22% respondents belonged to Tk. 20000-Tk. 29000. Almost 20% respondents belonged to above Tk. 40000 income level per month. So it was found that our target customers were mostly high income group who could easily effort branded spice as branded spice is comparatively costly than the open spices. The below graph will make the result more clear.

7. Type of Spice Consumed

To make the report fruitful the researcher need to know what type of spices is used by our target customer. Because customer mainly used branded spices or open.

---

**Table 3: Occupation of the Respondents**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>-service</td>
<td>104</td>
<td>52</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>business</td>
<td>40</td>
<td>20</td>
<td>20</td>
<td>72</td>
</tr>
<tr>
<td>others</td>
<td>56</td>
<td>28</td>
<td>28</td>
<td>100</td>
</tr>
<tr>
<td>total</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Field Survey (2013)*

The following chart shows the graphical picture of the above table. It was found that 52% respondents were various services, 20% respondents from business sector. Rest 28% respondents came from others sector.

**Income Level of the Respondents**

Income level of the respondents is important to purchase the banded spice. As the target customer was high profile people so income level is an important factor. The following results from survey of 200 randomly selected respondents are given below:

**Table 4: Income Level of the Respondents**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10000 - 19000</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>20000 - 29000</td>
<td>44</td>
<td>22</td>
<td>22</td>
<td>32</td>
</tr>
<tr>
<td>30000 - 39000</td>
<td>96</td>
<td>48</td>
<td>48</td>
<td>80</td>
</tr>
<tr>
<td>above 40000</td>
<td>40</td>
<td>20</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>total</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Field Survey (2013)*

It was found out of 200 respondents, 48% respondents belonged to monthly income level of Tk. 30000- Tk. 39000, 22% respondents belonged to Tk. 20000-Tk. 29000. Almost 20% respondents belonged to above Tk. 40000 income level per month. So it was found that our target customers were mostly high income group who could easily effort branded spice as branded spice is comparatively costly than the open spices. The below graph will make the result more clear.
spices. Some people still tend to use spices managed by their own. Among the 200 respondent, the observation is as follows.

### Table 5: Type of Spice Consumed

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Branded Spice</td>
<td>130</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Open Spice</td>
<td>44</td>
<td>22</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>26</td>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Field Survey(2013)*

It was found that, maximum 65% respondent used branded spice and 22% respondent used open spices. 13% consumers still manage spices by their own. They basically collected the raw spices and made the powder through local mill. They believed only in this process they can get the original taste, flavor of spices.

**Preferred Brand for Respondents**

The researcher needed to identify which brand our respondent mostly consumed. we asked this question to identify the market share of Radhuni brand. In question we named four top brand and other options indicates brands such as Tiger, ACI, Rupchada, Fresh etc.

### Table 6: Preferred Brand of the Respondents

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Radhuni</td>
<td>132</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>PRAN</td>
<td>38</td>
<td>19</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>BD</td>
<td>14</td>
<td>7</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Arku</td>
<td>6</td>
<td>3</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>10</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

It was found that 132 respondents used Radhuni branded spice. 38 respondents used PRAN spice. 18 respondents used BD, 6 respondents used Arku, 10 respondents used others spices.

**Does Brand name is important to the Respondents**

I need to know how important the brand name is. What they feel regarding the brand name against the question we get the following result from our 200 respondent.
Table 7: Brand name is important for Respondents

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>28</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Agree</td>
<td>104</td>
<td>52</td>
<td>52</td>
<td>66</td>
</tr>
<tr>
<td>Neutral</td>
<td>14</td>
<td>7</td>
<td>7</td>
<td>73</td>
</tr>
<tr>
<td>Disagree</td>
<td>38</td>
<td>19</td>
<td>19</td>
<td>92</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

We found that 52% respondent thought that brand name is important to them. 19% respondent thought that brand name is not important for them, 14% respondent strongly agreed about brand name. 8% respondent strongly disagreed that brand name is not important at all.

Availability of the products is important for Respondents

Customers want the product available within their reach availability of the Product is important to them. We asked this question to our respondent and get the following response.

Table 8: Product Availability is Important for Respondents

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>156</td>
<td>78</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td>Agree</td>
<td>44</td>
<td>22</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey(2013)

78% respondent thought that the products should be available within their reach. They needed the demanded products right after they felt the need of the products where ever they stay. Whereas only 22% respondent thought they would give extra effort to get their desire product if that is not that available surround them. Because they will not accept any alternative of that products.

Emphasis on Quality of Branded Spice

We need to identify the consumer perception of the branded spice quality. Usually people demanded the quality products for their daily consumption. Response from 200 respondent is as follows.
Among the respondent, 89% not agreed to compromise with the quality of the branded spice. They needed the quality products at any cost. They strongly agreed that quality issue is most important factor where 9% only agreed with them. Rest 2% disagreed with this opinion. They thought branded spice usually quality products. So they really don’t think about quality issue regarding branded spice.

Branded spice is Costly compare than the Quality

What is the perception regarding the price of branded spice? what they thought about cost of branded spice. Does the price is higher compare to quality? We asked the question and get the following response.

**Table 10: Branded spice is costly compare than the quality**

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>120</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Agree</td>
<td>40</td>
<td>20</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Disagree</td>
<td>40</td>
<td>20</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

We found that 60% respondent strongly agreed that price of branded spice is higher as compared to its quality. 20% respondents simply agreed with this. Rest 20% disagreed with this statement.

**Branded spice is Hassle Free & Time Saving**

Does branded spice hassle free to use and time saving? We asked this question to our respondent and got the following response from the respondents:
1. Gender of the respondent

How much the hygiene factor is important to the consumer? What the consumer

of lands discovered, empires built and brought down, wars won and lost, treaties

1. Introduction

which is easily accessible with shortest possible time with minimum cost.

consumers about not to compromise with the quality of daily food of the family as

have to use combination of rational & emotional strategy to communicate with the

Promotional Strategy

The Company will follow the existing distribution strategy and network. Currently

under the name of Radhuni.

Basic spices, mixed spices, Cereal & Pulses to Edible oil are currently available

operation Radhuni Spice achieved the crown of the leader. Products ranging from

Radhuni has been getting a remarkable response from market. A year after its

Key consumer insights to Powder Spices

3. Objective and Methodology

Masala, Garam Masala, Haleem Mix, Chatpati Mix, Chanachur etc.) in terms of

adulterations of Open Market Spices

The report is based on a comparative study between open powder spice and

bored of doing a manual process. They give importance availability of products. In

They want to use of quality of product, in this case urban peoples are quality

want to take proper care of their family. Maidservants are not available like before

customers. Under intensifying competition in the market and changing

• Improve the outlet reach especially in the north and south region.

• Create aspiration for using Radhuni Branded Spice in food preparation

• Easy & fast cooking ensuring delicious aroma & flavor while cooking &

•  Age: 25-40

• Full release of flavor during cooking.

References


tact Hall, United State of America

•   “Spices,” Microsoft® Encarta® Online Encyclopedia 2008. Retrieved from

www.squarefoods.com.bd

•   Retrieved from World Wide Web :

• http://www.celtnet.org.uk/recipes/roman.html?PHPSESSID=26caf3bc35486

78% respondent strongly agreed that using braded spice is time saving and hassle
free. Branded spice is easy to use. 15% respondent agreed that branded spice is
time saving. Only 4% disagreed with this.

Hygiene Factor

How much the hygiene factor is important to the consumer? What the consumer
really think regarding the hygiene on branded spice. We needed to know the
perception regarding the hygiene factor of branded spice.

88% strongly agreed that hygiene is very much important to them. They prioritize
the health issue on consumer products. In addition, they are not agreed to compro-
mise with hygiene issue.

All brands usually claimed that smell and taste remain same in branded packed
spice. However, what the customer’s opinion regarding this issue? Does smell and
taste really remain ok in branded spice? We get the following response from the
respondent.

Table 11: Branded spice is hassle free & time saving

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Strongly Agree</td>
<td>156</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>30</td>
<td>15</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>6</td>
<td>3</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>8</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 12: Hygiene factor is important for respondents

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Strongly Agree</td>
<td>176</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>24</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Table 13: Smell & test remain ok in branded spice

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>24</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Agree</td>
<td>126</td>
<td>63</td>
<td>63</td>
<td>75</td>
</tr>
<tr>
<td>Disagree</td>
<td>36</td>
<td>18</td>
<td>18</td>
<td>93</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>14</td>
<td>7</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

12% respondent strongly agreed that test and smell agreed remained same in branded spice. While 63% respondent agreed with this. 18% respondents do not think that, taste and smell remain same in branded spice. They thought some sort of chemical is mixed with the packed spice which decreases the quality, taste and original smell.

5 Marketing Strategy

Target Customer Profile

Positioning Statement: Assurance of purity

Target Market of Spice: yes

Geographic Location: Urban

Demographic:
- Age: 25-40
- Gender: Female

Education:
- HSC/SSC: 34%
- Graduate: 33%
- Postgraduate/Vocational: 17%
- Degree/Diploma: 14%

Income Level:
- Tk. 20,000 and above: 48%
- Tk. 10,000-20,000: 47%
1. Gender of the respondent

I am a student of the BBA Program of City University. I am conducting a research to understand what the customer's opinion regarding this issue is. Does smell and taste remain the same in branded packed spice?

88% strongly agreed that hygiene is very important to them. They prioritize what they think about the branded spice, especially Radhuni. Bangladeshi cannot think of a meal without using spices; it is our food habit and a key cultural practice.

The broad objective of this study is to analyze consumer perception on basic spices, which are a necessity for the preparation of any meal. Since there are good numbers of brands coming with the same proposition of good quality and deliver desired taste and color, it is important to identify the frequency of male and female respondents.

Female lifestyle scenario changed one decade before. At that time, maximum female was a homemaker, stayed all day at home, gossiped with neighbors, watched TV, supervised maidservant, and took time to collect whole spices from the market and prepare food dishes. These days, unprecedented numbers of women are entering different professions; they are well-educated, concerned about quality and nutritional value of the product. Women also show greater concern about issues that directly affect the family and home life. They left home at morning and returned home at evening yet they want to take proper care of their family. Maidservants are not available like before, so every work accomplished by their own. Therefore, Consumers’ these days are more dependent on powdered ready spice. Since consumers have many options for branded powdered spice, they want the one which assures the purity and delivers an authentic taste and color.

Key consumer insights to Powder Spices

- Easy & fast cooking ensuring delicious aroma & flavor while cooking & eating.
- Want to save time in cooking to give more time for kids, family & enter-
Want to cook with powder spice and expect traditional authentic taste and color.

More concern about the about the food quality and well-being of the family members and intend to take quality product.

Benefits from Radhuni Powder Spices

- Selected from best verities of quality raw materials from grower level
- Strictly maintain international quality standard.
- Assurance of quality, taste, and flavor of home –ground spice.
- Ensures delicious aroma & flavor while cooking & eating of different curries.

Product Strengths:

- Original and authentic taste & fresh aroma.
- Finely pulverized and not musty.
- 100% free from adulteration.
- Full release of flavor during cooking.
- Grinding procedure retain essential volatile oil.
- Grinded from selected crops.
- Produced from modern spice processing plant.
- Strong brand image.

Radhuni Strategy

Product Strategy

Radhuni Powdered Spice ensures purity. In the year 2012 they wanted to maintain this consistency of quality and delivered best quality spice to the consumer to satisfy their need and want. Besides basic spice is a product that have hardly any scope to add extra value to the product. Therefore we will add value through packaging by launching a different SKU in convenient Jar. Also we will add new variant of basic spice in the basic spice product range and that is "Pasted spice".

Pricing strategy

In the year 2013, the objective was to maintain competitive and stable price. The company will not give competitors any scope to gain big price advantage. They will also maintain the price at an acceptable range compared to open spice. Because consumers very easily compared the price with the open spice and tend to switch...
from branded spice to open spice. The company maintained the competitive price by taking following steps.

**Distribution Strategy**

The Company will follow the existing distribution strategy and network. Currently they are using separate distribution channels for retailers, different institution, and bulk buyers like super shop, hospital, canteen etc.

To reach the above organization they have the following distribution system-

![Distribution System 1](image1)

![Distribution System 2](image2)

To reach all over the country, the company have the following distribution system-

To meet the objective of 2014, the company need to take following steps regarding the distribution strategy.

- Improve the outlet reach especially in the north and south region.
- Explore the new organization for sale including outside Dhaka like number of large hotel In Chittagong, Sylhet, Cox's Bazaar and other Divisional cities.

**Promotional Strategy**

Since there are few differentiating factors in the existing brands, the Company have to use combination of rational & emotional strategy to communicate with the consumers. So far, they have taken the position of quality product and communicated with the consumers in the same line. Radhuni already won the credibility of high quality product from the consumers. Up to 2008, they have communicated the authentic taste of Radhuni powdered spice and its pure quality. In 2008 on the communication campaign the company focused on creating awareness among consumers about not to compromise with the quality of daily food of the family as there is family health issue is concern. In 2009 the company have re-enforced & further strengthened ongoing quality issue in spice consumption by launching endorsement campaign by Siddika Kabir in all media including ATL and BTL.
2010 to 2012 the company concentrated promotional campaign on the uncompromising stand regarding finding the best quality food ingredients for family. In the year 2014 the company will concentrate on “Radhuni gives assurance of purity that delivers desired taste and color”.

Promotional objective:

- A safe & quality assured food ingredient that will give you the feel of traditional taste with living a healthy life
- Motivate consumers relay only on Radhuni because Radhuni gives assurance of purity that delivers desired taste and color.
- Motivate target consumers for choosing the pure & quality spice for cooking through rational and emotional appeal.
- Create aspiration for using Radhuni Branded Spice in food preparation and attract new consumer.
- Create strong emotional bonding with Radhuni Branded powder spice and make it an obvious choice for consumer because Radhuni ensure purity and deliver authentic taste.

Followings are the strategic activity to achieve objective.

- About 40% of the total promotional budget will be spent in electronic media to get maximum reach. Insertion frequency will be high during launching new campaign and festival.
- 8% of the total budget will be spent on print media to support launch of new campaign.
- Shera Radhuni competition and celebration of Naridibosh event will be held in 2013 which will promote the brand among TG.
- Consumer Promotion (CP) offer will be given to give consumer extra value for their expenditure. 10% of the total promotional budget will be spent to run CP program.

6. Conclusion and Policy Implication

In 2001, Square Consumer Products Limited introduced Radhuni Basic Spice with a vision to provide quality “ready-to-cook” food ingredients for the housewives. Within a very short span of time, Radhuni Basic Spice drew attention of modern housewives those who had a latent demand for convenience and time-saving cooking. Dedication to quality has given Radhuni Basic Spice unique position in the market.

Radhuni Basic Spice considered as the pioneer in Branded spices. By ensuring taste, quality, attractive packaging & good coverage throughout the country,
Radhuni has been getting a remarkable response from market. A year after its operation Radhuni Spice achieved the crown of the leader. Products ranging from basic spices, mixed spices, cereal & pulses to edible oil are currently available under the name of Radhuni.

Radhuni Basic Spice has been dominating branded spice market since 2003. Currently in branded powdered spice category, Radhuni is the brand leader. Radhuni achieved the crown of brand leader by offering superior quality of powdered spice and authentic taste. So it can be said that Radhuni has created the branded powdered spice market. As consumers are shifting towards branded powdered spice, the market size of branded powdered spice is increasing very fast.

There are good numbers of brands coming with the same proposition of good quality, so SCPL is heading towards an immense competition in near future. In the backdrop of the above findings the following recommendations can be made:

- Majority of the consumer believe that the price of Radhuni is high. Because of its quality. SCPL should consider value based pricing instead of competitive and cost based pricing.

- To increase the efficiency of the dealers, SCPL can offer special trade promotions such as incentive, bonus, foreign tours etc. for the best performers.

- The promotional effort of SCPL is satisfactory and it should be continued. At the same time, they can adopt creative advertising to differentiate their products from others.

- To hold and create new customers of Radhuni Basic Spice, SCPL should consider the following:
  - Conducting frequent customer survey
  - Developing new user group
  - Launching new value adding products
  - Identifying new overseas market for further increase in export

- SCPL need to increase their promotional expenses and it should execute the action plan properly.

- SCPL need to increase the media presence to create new customer base and remain in customer mind

SCPL is holding the maximum market share with Radhuni Basic Spice. It maintains its leadership through well-planned action program, motivated and trained personnel and by projecting a favorable company image among the customers. Under intensifying competition in the market and changing
attitudes towards the branded spice powder, SCPL should consider the above recommendations.

References

- www.theepicentre.com
- Retrieved from World Wide Web: http://www.celtnet.org.uk/recipes/roman.html?PHPSESSID=26caf3bc35486152e548b7b2dc0eb0bd
- www.squarefoods.com.bd (official website of SCPL)
- http://www.google.com
Appendix

- A set of blank questionnaire on which the survey was conducted.

Consumer Perception of Branded Spice

I am a student of the BBA Program of City University. I am conducting a research on consumer perception on Branded Spice Namely Radhuni. This is an academic exercise and no part of this study will be published. I shall appreciate if you kindly help me in answering the following questions. I assure you that your entire personal information will remain secret and confidential.

1. Gender of the respondent
   a) Male
   b) Female

2. Age limit of the respondent
   a) 20 – 29
   b) 30 – 39
   c) 40 – 50
   d) 51 and above

3. Occupation of the respondent
   a) Service
   b) Business
   c) Others

4. Income level of the respondent
   a) Tk.10000 – Tk.19000
   b) Tk.20000 – Tk.29000
   c) Tk.30000 – Tk.39000
   d) Tk.40000 and above

5. What type of spice do you use for daily consumption?
   a) Branded spice
   b) Open spice
   c) Others (please specify)
6. **Which brand you prefer to purchase packet spices?**
   a) Radhuni
   b) PRAN
   c) BD
   d) Arku
   e) Others (please specify) ……………………

7. **Which matter influences you most when purchasing packet spices?**
   a) Renowned & Dependable Brand
   b) Retailer Suggestion
   c) Quality or Uses Experience
   d) Price
   e) Other (please specify) ……………………

8. **Which issue you give most importance for defining quality spices?**
   a) Color
   b) Aroma
   c) Taste
   d) All
   e) Other (please specify) ……………………

### Important factor that affect consumers

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree (1)</th>
<th>Agree (2)</th>
<th>Neutral (3)</th>
<th>Disagree (4)</th>
<th>Strongly Disagree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think Brand name is important to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think availability of the products is important for me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I emphasis on quality of branded spice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think Branded spice is costly compare than the quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think using branded spice is hassle free &amp; time saving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think Hygiene factor is important to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think smell &amp; test remain ok in branded spice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SME Banking in Bangladesh: A Socio Economic Analysis

Mihir Kumar Roy*
Md. Abdus Salam Sarker*
Shahriar Parvez*
ASM Shawnewaz*

Abstract: The objective of the study is to analyze the problem of SMEs loan management at Jamuna bank, Asulia branch. Some hypotheses have been set in the research to test the efficacy of the problems of SMEs financing. The data for the study were collected both from primary and secondary sources. The study tested three hypotheses for the study. The problems that are associated with SME loan management are not preparing proper financial statement which creates problem for the bank, judging financial standings, profitability and credibility. SMEs are not maintaining proper licensing which makes SMEs difficult to trace, create problem for the bank maintaining records, and decreases SMEs credibility to the bankers. JBL considers promotion for the product like Over Draft, Time Loan, and Term Loan to be adequate in SMEs sector. Banks can trace SMEs better, can lower their cost of capital, and can give efficient service if they grant loan cluster wise. As the SMEs in Bangladesh are habituated to operating in a semiformal manner and banks are probably one of the most formalized institutions in our country, a big gap has opened up. The first step for Jamuna Bank Limited would be to minimize this gap by relaxing bank procedures. The bank should develop an official credit-rating system in easier way, even if in a limited manner, as soon as possible so that they can have some idea about the reliability of their SME clients. The objectives of the study are fulfilled despite some limitations. The problems are identified in this paper through detailed analysis of collected data. On the other hand the problems that JBL faced in designing proper financial products for SMEs are also identified. At the end, this study has tried to offer some suggestions to overcome those problems. If the problems can be solved the transaction between SMEs and Jamuna Bank Limited will be increased.

* Department of Business Administration, City University, Dhaka, Bangladesh
1. Introduction

Small and Medium Enterprises (SMEs) all over the world have been playing a crucial role in promoting economic development as well as industrial production. In particular, SMEs provide the necessary foundations for sustained growth and rising income in the less developed and transitional economies. SME financing is a topic of significant research interest to academics and an issue of great importance to the policymakers of Bangladesh and around the world. Economic as well as technical and social arguments warrant the promotion of SMEs as they create large scale, low-cost employment opportunities, use locally available inputs and technologies, mobilize small and scattered private savings, develop entrepreneurship, and correct the regional imbalance in development that exists in developing countries. Despite all these potentials, SMEs are disappearing, abandoning the potential role they could have played in economic development. These studies have identified the major obstacles that include, but not limited to financing, infrastructure facilities, taxes and regulations, and stability in policies. Access to financing continues to be one of the most significant challenges for the growth and survival of SMEs especially innovative ones (S. M. Akterujjaman, 2010). We present below in table ar form essence of various studies, as part of the background to cover the existing gap 7 information with respect to Bangladesh.

With this background & various studies on the subject this paper focuses on the financial constraints that SMEs face in Bangladesh. In Bangladesh, commercial banks are not interested to finance SMEs because of the high risk and high supervision cost associated with this type of financing. (The Daily Star 2006) Absence of sound collateral puts SMEs at a relative disadvantage. However, this study has found that some (Brac Bank, UCBL, SIBL,) of the commercial banks have some “innovative” products or services targeting at SMEs only, while others have “repackaged” some of their existing products as SME products. It is generally recognized that SMEs have a significant role in employment generation, poverty reduction and overall economic growth, especially for a developing economy like Bangladesh. SMEs are typically labor-intensive industries with relatively low capital intensity. As such, for a country like Bangladesh, which is labor abundant and capital scarce, SMEs have a natural comparative advantage (S. M. Akterujjaman, 2010).

Despite the role of SMEs in the economy of Bangladesh, the financial constraints they face in their operations are daunting and this has a negative impact on their development and also limited their potential to drive the national economy as expected. This is worrying for a developing economy without the requisite infrastructure and technology to attract big businesses in large numbers. If these problems can be solved, the economy of Bangladesh will develop.
Table 22: Getting loan within reasonable time period

<table>
<thead>
<tr>
<th>SI</th>
<th>Year</th>
<th>Source</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>2006</td>
<td>The Daily Star</td>
<td>Mentioned that many SME owners are to face difficulties when they require bank loans. In fact, SME financing has recently been identified by experts as one of the major problems faced by SMEs in Bangladesh.</td>
</tr>
<tr>
<td>02</td>
<td>2006</td>
<td>Mahmud, W. Institutional Reform and the Informal Sector (IRIS), Dhaka</td>
<td>The SMEs have very limited bank finance, which is only around 10 percent, while self-finance remains the major source of their finance contributing 76.5 percent of fixed capital and 51.8 percent of working capital.</td>
</tr>
<tr>
<td>03</td>
<td>2005</td>
<td>Berger, A. N. and G. E. Udell. Policy Research Working Paper-4481.</td>
<td>Bangladesh’s SMEs identified lack of finance as the major issue, with 55% SMEs reporting it. Bribe (21%), orders/marketing of product (28%), lack of knowledge (12%), and license for work (8%), along with new technology (8%) were also considered as major issues. Without the much vital capital, they have little chance of growth or even sustenance in this mobile world. This study has tried to pinpoint, through empirical research, the major, problems faced by SMEs and banks in Bangladesh in relation to financing and has provided recommendations based on the findings to improve the situation.</td>
</tr>
<tr>
<td>04</td>
<td>2003</td>
<td>Rosen, H. World Bank Institute.</td>
<td>Mentioned that SMEs make up the largest portion of the employment base in many developing countries and, indeed, are often the foundations of the local private sector. The entrepreneurs behind them could and should play a much larger role in development, but too often are held back by a lack of ready access to financing from local formal sector financial institutions.</td>
</tr>
<tr>
<td>05</td>
<td>2011</td>
<td>S. M. Nasrul quadir and DR. Mohammad Saleh Jahur</td>
<td>They are argued that SMEs of Bangladesh have been vulnerable to frequent policy changes of Government from time to time. Besides, they are facing severe competition in and outside the country. As a result, the profitability of SMEs has got squeezed and many of them have got financially distressed. Besides, Entrepreneurs of SMEs.</td>
</tr>
<tr>
<td>06</td>
<td>2012</td>
<td>Ifikhar Hussain, Zeeshan Farooq and Waheed Akhtar</td>
<td>They are opined that Across the South Asia, the contribution of SMEs to the overall economic growth and the GDP is high. It is estimated that SMEs contribute 50% of Bangladesh’s industrial GDP and provide employment to 82% of the total industrial sector employment. In Nepal, SMEs constitute more than 98% of all establishments and contribute 63% of the value-added segment. In India, SMEs contribution to GDP is 30%.</td>
</tr>
<tr>
<td>07</td>
<td>2008</td>
<td>Dr Khondaker Golam Moazzem</td>
<td>He showed that in the Sixth Five Year Plan (6th FYP) acceleration of GDP growth (from 6.1 percent in FY 2010 to 8.0 per cent in FY2015) has been targeted through excelling the performance of industrial sector, particularly of the manufacturing sector. The growth of the manufacturing sector will have to be attained through improvement of existing enterprises and also by creating new ones. However, an overwhelming number of these enterprises are micro (having less than 10 workers), small (10-49 workers) and medium (50-99 workers) enterprises, usually called MSMEs/SMEs.</td>
</tr>
<tr>
<td>Reference</td>
<td>Year</td>
<td>Author(s)</td>
<td>Summary</td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>08</td>
<td>2007</td>
<td>Dr. Sharif Bhuiyan</td>
<td>He found like many other countries, informal sector in Bangladesh does not exist in a vacuum. There are clear interconnectedness, partnership and continuity with the formal sector – maintaining a two-way flow of labor, goods, finances etc between the two sectors. In Bangladesh rapid transformation of the informal sector may not be possible, feasible and/or sustainable. Policy initiatives to formalize the informal sector should therefore adopt a gradualist approach.</td>
</tr>
<tr>
<td>09</td>
<td>2004</td>
<td>International Finance Corporation, World Bank Group</td>
<td>IFC Annual Review report mentioned that in almost every part of the world limited access to finance is one of the biggest obstacles to private sector growth. This is especially true for smaller firms that have minimum influence on policy reform.</td>
</tr>
<tr>
<td>10</td>
<td>2010</td>
<td>S.M. Akteruzzaman, Journal of Business and Technology (Dhaka) Volume – V, Issue – 02</td>
<td>He came into a conclusion that SMEs are a fundamental part of the economic fabric in developing countries, and they play a crucial role in furthering growth, innovation and prosperity. Unfortunately, they are strongly restricted in accessing the capital that they require to grow and expand, with nearly half of SMEs in developing countries rating access to finance as a major constraint.</td>
</tr>
<tr>
<td>11</td>
<td>2013</td>
<td>Tanbir Ahmed Chowdhury and Kashfia, Districts East West University Center for Research and Training Working Paper No 4</td>
<td>In the process of economic development Small and Medium Enterprises (SMEs) play a pivotal role in poverty alleviation and rapid industrialization of the developing countries like Bangladesh. In this paper we tried to appraise the Problems and Prospects of SMEs in Bangladesh. We observed from the research that non-availability of adequate credit, complex loan granting procedure, inadequate infrastructure facilities.</td>
</tr>
<tr>
<td>12</td>
<td>2010</td>
<td>Lind, Marchal, Wathen, Statistical Techniques in Business and Economics (Fourteenth Edition) Chapter 3, page 86</td>
<td>The mean and the standard deviation calculated from the data grouped into a frequency distribution are usually close to the values calculated from raw data.</td>
</tr>
<tr>
<td>13</td>
<td>2014</td>
<td><a href="http://www.investopedia.com/terms/c/coeficientoivariation.asp">www.investopedia.com/terms/c/coeficientoivariation.asp</a></td>
<td>The coefficient of variation (CV) refers to a statistical measure of the distribution of data points in a data series around the mean. It represents the ratio of the standard deviation to the mean. The coefficient of variation is a helpful statistic in comparing the degree of variation from one data series to the other, although the means are considerably different from each other.</td>
</tr>
</tbody>
</table>

It is realized by studying the past researches of the researchers that the main problem of SME sectors in Bangladesh is that the amount of idle money is increasing day by day and the productive laborers of Bangladesh are not being utilized in proper places.

The present study on problems of SME financing by Jamuna Bank Ltd, Ashulia Branch is a modest attempt to prove empirically the problems of SME loans specially in the context of Bangladesh which could be claimed to be an addition in the existing body of knowledge. Here lays, the justification of the study.
2 Objectives of the Study

General objective of the study is to find out the major problems of SME loan management of Jamuna Bank Ltd, Asulia Branch, Savar, Dhaka. Specific Objective are to identify the problems in designing proper financial products for the SMEs and to recommend ways and means to overcome the problems related to SME loan management, Asulia branch, Savar, Dhaka.

Data for the study were collected both from secondary and primary sources.

Secondary sources in tabular form, are the following.

<table>
<thead>
<tr>
<th>Source</th>
<th>Nature of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Report 2011-13 of Jamuna Bank Ltd.</td>
<td>An overview the JBL</td>
</tr>
<tr>
<td>Visit the JBL website “www.jamunabankbd.com”</td>
<td>Types of SMEs Loan</td>
</tr>
<tr>
<td>Different publications regarding banking functions, operation, and transactions policies.</td>
<td>Account Opening, Loan &amp; Advance, Clearing, Deposits, FDR, MSS</td>
</tr>
<tr>
<td>Official documents</td>
<td>Balance sheet analysis, Types of SMEs loan.</td>
</tr>
<tr>
<td>File study</td>
<td>Jamuna Bank, Asulia branch.</td>
</tr>
</tbody>
</table>

Data collected form primary sources are based in the following ways

Selection of study area: Jamuna Bank Limited, Asulia Branch, Jamgara, savar, Dhaka.

Selection of study sample

\[ N = \text{total population} = 100 \ (90 \text{ Clients} \& 10 \text{ officers}), \ n = \text{sample population} = 25 \ (20 \text{ Clients} \& 5 \text{ officers}) \]

In the study, no conventional systems of sampling procedure have been followed. Rather convenient sampling procedures were used considering time and other logistic facilities available at the disposal of the researcher. According 25 respondents which constituted 25% of the total population was the total sample strength of the study.

≥ Instrument for data Collection: Data for the study were collected by interview from two categories of clients such as Bank Officials & SME clients for which two types of interview schedules were prepared & pretested before finalization.

≥ Data Collection: Data were collected by the researcher himself. It took twelve days to complete the whole data collection process.

≥ Analysis & processing of data: The collected data were then processed and analyzed by simple tabular technique, averages and hypotheses. Researcher used graphical representation, frequency table and raw data table (Appendix-A). It will eventually lead me to the conclusion of his survey.
3. Data Analysis Methods

A five-point Linker type scale statements were used to measure the variables where 1 stands for strongly disagree/very low and 3 stands for strongly agree/very high effect on the statements. Multiple- item measures were developed for each psychological construct. After collection of primary data, hypotheses were formulated and Z-test is used to test the hypotheses with 0.05 level of statistical significance.

Hypothesis Formulation

Research hypothesis is an unproven statement, which helps the researcher to draw the suggestion on his hypothetical assumption whether it is true or false based on some specific statistical tests. For this study, the following hypotheses (at 95% confidence level) are developed, which are also to be tested.

Hypothesis 1

H0: SMEs do not prepare proper financial statement.

H1: SMEs prepare proper financial statement.

Hypothesis 2

H0: Jamuna Bank Limited grants large loan for the SMEs.

H1: Jamuna Bank Limited does not grant large loan for the SMEs.

Hypothesis 3

H0: Cost of operation for the bank will go down if the bank grants SME loan cluster wise.

H1: Cost of operation for the bank will not go down if the bank grants SME loan cluster wise.

4. Discussion

An analysis is generated from the interview schedule to fulfill the objectives of the study. The number of respondents was 5 officers & 20 customer of Jamuna Bank Limited, Asulia Branch. For the convenience of analysis the researcher has calculated the percentage of the responses. For the ease of better understanding, the researcher has presented the information of percentage under five headings (Agree ‘High, Neither Agree or Nor Disagree, Moderate, and Disagree ‘Low). Several judgments are being made from the responses of the employees of Jamuna Bank Ltd. to validate the objectives of the study.
Table 1: The summary of the questionnaire and the calculations

<table>
<thead>
<tr>
<th>Questions</th>
<th>No of Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Agree (SA)</td>
</tr>
<tr>
<td>1. SMEs prepare proper financial statement</td>
<td>2</td>
</tr>
<tr>
<td>2. Jamuna Bank Limited at Asulia Branch grant large loan for the SMEs</td>
<td>8</td>
</tr>
<tr>
<td>3. Responses on granting loan as cluster wise</td>
<td>9</td>
</tr>
<tr>
<td>4. SMEs maintain proper licensing</td>
<td>1</td>
</tr>
<tr>
<td>5. Responses on affects on SMEs ability to repay loans technology for Upgraded.</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: - Field survey (2013)

Explanations of the table for better presentation of the table, some graphical presentation are given below.

Figure-1. SMEs prepare proper financial statement

It is observed in the graphical presentation that 7 respondents have marked tick (✓) on “Neither Agree/ nor Disagree”, 5 respondents have marked tick (✓) on “Strongly Disagree”, and only 2 respondents have marked tick (✓) on “Strongly agree”. The study finds that SMEs are not preparing proper financial statement which creates problem for the bank in judging financial standings, agree, profit-
ability and credibility.

**Figure-2. Jamuna Bank Limited at Asulia Branch grant large loan for the SMEs**

![Graph showing responses on large loan for SMEs]

It is observed in the graphical presentation that 4 respondents have marked tick (√) on “Neither Agree/ nor Disagree”, 8 respondents have marked tick (√) on “Strongly Agree”, and only 1 respondents have marked tick (√) on “Strongly Disagree”. It is clearly evident that Jamuna Bank Limited grant large loan for the SMEs.

**Figure-3. Responses on granting loan as cluster wise**

![Graph showing responses on loan granting]

It is observed in the graphical presentation that 6 respondents have marked tick (√) on “Neither Agree/ nor Disagree”, 9 respondents have marked tick (√) on “Strongly Agree”, and only 1 respondents have marked tick (√) on “Strongly Disagree”. That JBL will get advantages if it grants loan cluster wise.

**Figure-4. SMEs maintain proper licensing**

![Graph showing responses on proper licensing]

It is observed in the graphical presentation that 15 respondents have marked tick (√) on “Disagree”, 5 respondents have marked tick (√) on “Neither Agree/ nor Disagree”, 3 respondents have marked tick (√) on “Strongly Disagree”, and only 1 respondents have marked tick (√) on “Strongly Agree”. It is also observed that
SMEs are not maintaining proper licensing.

**Figure-5. Responses on affects on SMEs ability to repay loans for Upgraded technology**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>7</td>
</tr>
<tr>
<td>Agree</td>
<td>5</td>
</tr>
<tr>
<td>Neither Agree nor Disagree</td>
<td>8</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
</tr>
</tbody>
</table>

It is observed in the graphical presentation that 5 respondents have marked tick (√) on “Neither Agree/ nor Disagree”, 7 respondents have marked tick (√) on “Strongly Agree”, and only 1 respondents have marked tick (√) on “Strongly Disagree”. Bank employees were asked whether lack of upgraded technology affects SMEs ability to repay loans. It is observed that Upgraded technology has high affects on SMEs ability to repay loans.

**Figure-6. Responses on consideration of JBL for promotion of the products**

It is observed in this graphical presentation that 5 respondents marked “Over Draft/cash credit” as high for promotional product. Other 5 respondents marked “Time loan” as high for promotional product and 4 others marked “Term loan” as high for promotional product. It is revealed that JBL highly considers that promotional measures are needed for the products like over draft and time loan.

Bank employees were asked whether they consider informal loan providers as your competitor. It is clearly observed that Here JBL does not consider informal loan providers as its competitor.

<table>
<thead>
<tr>
<th>Items</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>
| Consider informal loan providers as your competitor | Yes | √ No

Respondents were asked that are the main reasons why they are not yet able to design such products (from the perspective of SMEs) for them.
This graphical presentation shows that for “Design appropriate financial product for SME segment”, 2 respondents have marked “Lack of Experience” as low, 4 respondents have marked “Lack of importance” as high, 1 marked “Regulation and Formality” as very low; another 4, “Lack of trust” as high; and other 4, “Lack of Feedback” as very High. It reveals that Bank is not yet able to design appropriate financial products for SME segment due to higher level of lack of importance, lack of trust and very high level of lack of feedback from the SME owners.

Figur-8. Responses on favors that can improve the quality of SME loan offering

This graphical presentation shows that for “improve the quality of SME loan offering”, 5 respondents have marked “Offering shorter-term loans” as very high, 4 respondents have marked “Offering lower interest rates” as high, 5 marked “Interconnection” as very high; another 4, “Greater SME market research” as high; and other 4, “Accurate credit information” as very High. It indicates that shorter-term loans, interconnection between individual and SME loans, accurate credit rating information have very high affect while offering lower interest rates, greater SME market research have high affect that will improve the quality of SME loan offering.

3. Analysis of the study

3.1. Analysis of data
Table-2: Summery of the data Analysis

<table>
<thead>
<tr>
<th>Data</th>
<th>Avg</th>
<th>σ</th>
<th>Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SMEs prepare proper financial statement</td>
<td>2.72</td>
<td>1.24</td>
<td>0.45</td>
</tr>
<tr>
<td>2. Jamuna Bank Asulia Branch Limited grant large loan for the SMEs</td>
<td>3.88</td>
<td>1.35</td>
<td>0.35</td>
</tr>
<tr>
<td>3. Responses on granting loan as cluster wise</td>
<td>3.92</td>
<td>1.16</td>
<td>0.30</td>
</tr>
<tr>
<td>4. SMEs maintain proper licensing</td>
<td>2.28</td>
<td>0.87</td>
<td>0.38</td>
</tr>
<tr>
<td>5. Responses on affects on SMEs ability to repay loans for Upgraded technology</td>
<td>3.56</td>
<td>1.31</td>
<td>0.37</td>
</tr>
</tbody>
</table>

It can be proved here that SMEs do not prepare financial statement and SMEs do not maintain proper licensing. Because the average of these data was below standard 3. It can also be proved that Jamuna Bank Ashulia Branch limited grants large loan for the SMEs. Responds on granting loan as cluster wise, Responds on affects on SMEs ability to repay loans for upgraded technology. Because the average of these data was above standard 3. The detail of this table has been shown in Appendix-A.

Source: - Field survey (2013)

Hypotheses Testing

Data were analyzed with a liker type 5-point scale ranging from strongly disagreed (1) to strongly agreed (5). In this study weighted average value of 5 has been considered as the optimum level for every case. Z test is done to test hypotheses 1-3.

Table-3 : Hypotheses

<table>
<thead>
<tr>
<th>Confidence level</th>
<th>Z value (Table)</th>
<th>Z value (Calculated)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>95%</td>
<td>2.064</td>
<td>0.839</td>
<td>Null hypothesis is accepted</td>
</tr>
</tbody>
</table>

Null hypothesis in hypothesis 1 stated that SMEs do not prepare proper financial statement. However, the null hypothesis is supported as the calculated z value (0.839) is more than the tabulated value (2.064). That is SMEs do not prepare proper financial statement.

Table-4 : Hypotheses

<table>
<thead>
<tr>
<th>Confidence level</th>
<th>Z value (Table)</th>
<th>Z value (Calculated)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>95%</td>
<td>-2.064</td>
<td>-2.889</td>
<td>Null hypothesis is rejected</td>
</tr>
</tbody>
</table>

Hypothesis 2 stated that Jamuna Bank Limited grants large loan for the SMEs. This hypothesis is not significant as the calculated value (-2.889) is more than the tabulated value (-2.064). Thus it appears that Jamuna Bank Limited does not grant large loan for the SMEs.


**Table-5 : Hypotheses**

<table>
<thead>
<tr>
<th>Confidence level</th>
<th>Z value (Table)</th>
<th>Z value (Calculated)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>95%</td>
<td>-2.064</td>
<td>-3.966</td>
<td>Null hypothesis is rejected</td>
</tr>
</tbody>
</table>

*Hypothesis 3 posited that Cost of operation for the bank will go down, if the bank grants SME loan cluster wise. This hypothesis is not also significant as the calculated value (-3.966) is more than the tabulated value (-2.064), suggesting cost of operation for the bank will not go down, if the bank grants SME loan cluster wise.*

**Findings**

There are various problems that are associated with SME loan management. The findings of the analysis and interpretations are as follows:

- SMEs are not preparing proper financial statement which creates problem for the bank judging financial standings, profitability and credibility.
- SMEs are not maintaining proper licensing which makes SMEs difficult to trace, create problem for the bank maintaining records, and decrease SMEs credibility to the bankers.
- Upgraded technology affects SMEs ability to repay loans.
- JBL considers promotion for the product like Over Draft, Time Loan, and Term Loan to be adequate in SMEs sector.
- Payback period suggested by banker is 1-3 years.
- Bank does not consider informal loan providers as its competitors.
- Bank is ready to grant loan to SMEs as a cluster.
- Banks can trace SMEs better, can lower their cost of capital, and can give efficient service if they grant loan cluster wise.
- Bank is not yet able to design appropriate financial products for SME segment due to lack of importance and lack of feedback from SME owners.
- Shorter-term loans and lower interest rates will improve the quality of SME loan offering.
- Bank improves current SME offering through interconnection between individual and SME loans so that higher amounts can be extracted.
- Accurate credit rating information will improve the quality of SME loan offering.
- Non-Availability of finance hinders the growth of SMEs in Jamuna.
Bank. It is reflected that about 40% of the investigate entrepreneurs mention that loan granting procedures are very complex and about entrepreneurs10% mention that their loan applications have been rejected.

≥ One of the main barriers to the development of SMEs in Jamuna Bank is inadequate technologies. Many SMEs have failed to adopt modern technology due to the shortage of adequate fund.

5. Recommendations

As the SMEs in Bangladesh are habituated to operating in a semi-formal manner and banks are probably one of the most formalized institutions in our country, a big gap has opened up. The first step for Jamuna Bank Limited would be to minimize this gap by relaxing bank procedures.

The bank should develop an official credit-rating system in easier way, even if in a limited manner, as soon as possible so that they can have some idea about the reliability of their SME clients.

As mentioned earlier, the banks consider the credit rating system vital to their dealing with the broader SMEs. As bank like JBL already has that structure and other banks have the same clients dealing in other types of loans, the banks can greatly benefit themselves if they cooperate within themselves regarding credit rating and previous history.

The public commercial banks and Bangladesh Bank also have SME funds or separate SME sectors, but, according to the private banks, these are considered highly inefficient and corrupted. In fact, their practice of corruption has actually affected the loan structure of private banks. As such, the private or commercial banks require urgent cooperation with the government and public banks to decide on a uniform structure.

There is some unhealthy competition among the private banks regarding SME loans. Unfortunately, this has not been happening in a perfectly legal manner either. This is happened due to loan structure differences between these banks which are being exploited negatively.

Except for some public banks, most of the commercial banks operating on the SME sector are novices and have little knowledge of the market. As a banker said, they are learning by mistakes. One way they can significantly climb up the learning curve would be through market research. For effective market research, JBL needs to work together with other banks.

Institutional Network: Development should be done on institutional network through public-private support part-nership would be more effective in SMEs financing by pool-ing the unused or surplus funds available around the coun-try.
To make it viable, restructuring of the existing public agencies as well as private support institutions are required

6. Conclusion

The SME sector in many developing countries has usually been neglected and discriminated against in terms of access to government attention, access to finance, management and marketing expertise and technology, as compared with large enterprises. SMEs in Bangladesh contribute significantly to manufacturing growth and employment creation. There are around 27,000 medium sized enterprises and around 150,000 small-scale enterprises in the country. At present, 80 percent of manufacturing establishments are SMEs, accounting for 80 percent of the labor force, 50 percent of the output of the sector and 5 percent of GDP. SMEs provide vital linkages to larger enterprises, particularly in the high-growth export sector, and also form part of the core business activities in both rural and urban areas. The objectives of the study are fulfilled despite some limitations. The problems are identified in this paper through detailed analysis of collected data. On the other hand the problems that JBL faced in designing proper financial products for SMEs are also identified. At the end, this study has tried to offer some suggestions to overcome those problems. If the problems can be solved the transaction between SMEs and Jamuna Bank Limited will be increased.
References


Lind, Marchal, Wathen. 2010, Statistical Techniques in Business and Economics (Fourteenth Edition), Chapter 3, page 86


Quadir S. M. Nasrul and Jahur Mohammad Saleh, 2011, “Determinants of Success and Failure of Entrepreneurs of SMEs in Bangladesh- An Explorative Study”, European Journal of Business and Management, ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)


**APPENDIX-**

**Comments of the Survey**

By considering all issues we can say that the problem of SME Banking

To find out whether the ‘lack of investment and operating funds hinder the growth of SMEs, the following analysis is conducted:

*Table-6: SMEs prepare proper financial statement*

<table>
<thead>
<tr>
<th>Degree of response</th>
<th>x</th>
<th>f</th>
<th>fx</th>
<th>Avg</th>
<th>x-avg</th>
<th>f(x-avg)^2</th>
<th>σ</th>
<th>Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>5</td>
<td>2</td>
<td>10</td>
<td>2.72</td>
<td>2.28</td>
<td>10.39</td>
<td>1.24</td>
<td>0.45</td>
</tr>
<tr>
<td>A</td>
<td>4</td>
<td>5</td>
<td>20</td>
<td></td>
<td>1.28</td>
<td>8.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3</td>
<td>7</td>
<td>21</td>
<td></td>
<td>0.28</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>6</td>
<td>12</td>
<td></td>
<td>-0.72</td>
<td>3.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td></td>
<td>-1.72</td>
<td>14.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>68</td>
<td></td>
<td>1.04</td>
<td>37.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The average is equal to 2.72. Which are smaller than the standard 3. So that conclusion drawn from the above calculation is SMEs does not prepare proper financial statement. And the coefficient if variance is 0.45


*Table-7: Jamuna Bank Asulia Branch Limited grant large loan for the SMEs*

<table>
<thead>
<tr>
<th>Degree of response</th>
<th>x</th>
<th>f</th>
<th>fx</th>
<th>Avg</th>
<th>x-avg</th>
<th>f(x-avg)^2</th>
<th>σ</th>
<th>Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>5</td>
<td>8</td>
<td>40</td>
<td>3.88</td>
<td>1.12</td>
<td>10.035</td>
<td>1.35</td>
<td>.35</td>
</tr>
<tr>
<td>A</td>
<td>4</td>
<td>10</td>
<td>40</td>
<td></td>
<td>0.62</td>
<td>3.844</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3</td>
<td>4</td>
<td>12</td>
<td></td>
<td>-0.88</td>
<td>3.098</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td></td>
<td>-1.88</td>
<td>7.069</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>-2.88</td>
<td>8.294</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>97</td>
<td></td>
<td>-3.9</td>
<td>32.34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The average is equal to 3.88. Which is getter then the standard 3. So we can conclude drawn from the above calculation is that the most of the people agree with their Jamuna Bank Asulia Branch Limited grant large loan for the SMEs. And the coefficient if variance is 0.35

This is happened due to loan structure differences between these banks. There is some unhealthy competition among the private banks regarding SME inefficiency and corruption. In fact, their practice of corruption has actually affected the reliability of their SME clients.

The bank should develop an official credit-rating system in easier way, even if in this gap by relaxing bank procedures.

### 5. Recommendations


- Design appropriate financial products for SMEs.
- Encourage the Upgraded technology in the finance field.
- Over draft and time loan are needed for the products like.

### Table-8: Responses on granting loan as cluster wise

<table>
<thead>
<tr>
<th>Degree of response</th>
<th>f</th>
<th>fx</th>
<th>Avg</th>
<th>x-avg</th>
<th>f(x-avg)2</th>
<th>σ</th>
<th>Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>9</td>
<td>45</td>
<td>3.92</td>
<td>1.08</td>
<td>10.497</td>
<td>1.16</td>
<td>0.30</td>
</tr>
<tr>
<td>A</td>
<td>8</td>
<td>32</td>
<td></td>
<td>0.08</td>
<td>0.051</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>6</td>
<td>18</td>
<td></td>
<td>-0.92</td>
<td>5.074</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>2</td>
<td></td>
<td>-1.92</td>
<td>3.686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1</td>
<td>1</td>
<td></td>
<td>-2.92</td>
<td>8.526</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>98</td>
<td></td>
<td>-4.6</td>
<td>27.834</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The average is equal to 3.92. Which is greater than the standard 3. So the conclusion drawn from the above calculation is that granting loan as cluster wise. And the coefficient if variance is 0.30


### Table-9: SMEs maintain proper licensing

<table>
<thead>
<tr>
<th>Degree of response</th>
<th>f</th>
<th>fx</th>
<th>Avg</th>
<th>x-avg</th>
<th>f(x-avg)2</th>
<th>σ</th>
<th>Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>1</td>
<td>5</td>
<td>2.28</td>
<td>2.72</td>
<td>7.3984</td>
<td>0.87</td>
<td>0.38</td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td>4</td>
<td></td>
<td>1.72</td>
<td>2.9584</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>5</td>
<td>15</td>
<td></td>
<td>0.72</td>
<td>2.592</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>15</td>
<td>30</td>
<td></td>
<td>-0.28</td>
<td>0.1568</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>3</td>
<td>3</td>
<td></td>
<td>-1.28</td>
<td>4.9152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>57</td>
<td></td>
<td>3.6</td>
<td>18.0208</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The average is equal to 2.28. Which is smaller than the standard 3. So the conclusion drawn form the above calculation is SMEs maintain does not proper licensing. And the coefficient if variance is 0.38


### Table-10: Responses on affects on SMEs ability to repay loans for Upgraded technology

<table>
<thead>
<tr>
<th>Degree of response</th>
<th>f</th>
<th>fx</th>
<th>Avg</th>
<th>x-avg</th>
<th>f(x-avg)2</th>
<th>σ</th>
<th>Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>7</td>
<td>35</td>
<td>3.56</td>
<td>1.44</td>
<td>14.152</td>
<td>1.31</td>
<td>0.37</td>
</tr>
<tr>
<td>A</td>
<td>8</td>
<td>32</td>
<td></td>
<td>0.44</td>
<td>1.5488</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>5</td>
<td>15</td>
<td></td>
<td>-0.56</td>
<td>1.568</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>6</td>
<td></td>
<td>-1.56</td>
<td>7.300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>2</td>
<td>2</td>
<td></td>
<td>-2.56</td>
<td>6.554</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>90</td>
<td></td>
<td>-2.8</td>
<td>31.486</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The average is equal to 3.56. Which is greater than the standard 3. So the conclusion drawn from the above calculation is responses on affects on SMEs ability to repay loans for Upgraded technology. And the coefficient if variance is 0.37

financing by pooling the unused or surplus funds available around the country. Institutional Network: Development should be done on institutional network. Except for some public banks, most of the commercial banks operating on the rate SME sectors, but, according to the private banks, these are considered highly greatly benefit themselves if they cooperate within themselves regarding credit rate SME sectors, but, according to the private banks, these are considered highly.

As mentioned earlier, the banks consider the credit rating system vital to their rate SME sectors, but, according to the private banks, these are considered highly.

The bank should develop an official credit-rating system in easier way, even if in rate SME sectors, but, according to the private banks, these are considered highly.

Table-11: How long SMEs need the loan

<table>
<thead>
<tr>
<th>How long SMEs need the loan</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>30%</td>
</tr>
<tr>
<td>2 year</td>
<td>70%</td>
</tr>
<tr>
<td>3-4 year</td>
<td>00%</td>
</tr>
<tr>
<td>More than 4 years</td>
<td>00%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 11. shows that for how many years these SMEs.

Table -12: Why institutional sources fail to provide SME loans

<table>
<thead>
<tr>
<th>Reasons for what institutional sources fail to provide SME loans</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>High interest rate</td>
<td>60%</td>
</tr>
<tr>
<td>Too much paper work</td>
<td>30%</td>
</tr>
<tr>
<td>Lack of proper contact with SME</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 13. shows that most of the institutional sources fail to provide SME loans due to high interest rate, approximately 60% SME loan holders response about that but some also think that too much paper work is also responsible for failure.

Table -13: How do the SME entrepreneurs get loans from banks?

<table>
<thead>
<tr>
<th>How do the SME entrepreneurs get loans from banks?</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit approval against the bank</td>
<td>50%</td>
</tr>
<tr>
<td>Fixed deposit against the loans</td>
<td>20%</td>
</tr>
<tr>
<td>Fulfilling adequate collateral requirements</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 14: Where are the credits used?

<table>
<thead>
<tr>
<th>Where are the credits used?</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting salary &amp; daily expenses</td>
<td>00%</td>
</tr>
<tr>
<td>Purchase of raw materials</td>
<td>60%</td>
</tr>
<tr>
<td>To pay their creditors</td>
<td>20%</td>
</tr>
<tr>
<td>Over draft facilities</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 14: Where are the credits used? shows that 60% entrepreneurs used the credit to purchase raw materials and 20% used it to pay their creditors and the rest are for enjoying overdraft facilities.
ing curve would be through market research. For effective market research, JBL
There is some unhealthy competition among the private banks regarding SME
inefficient and corrupted. In fact, their practice of corruption has actually affected
rate SME sectors, but, according to the private banks, these are considered highly
The public commercial banks and Bangladesh Bank also have SME funds or sepa-
other banks have the same clients dealing in other types of loans, the banks can
reliability of their SME clients.

As the SMEs in Bangladesh are habituated to operating in a semi-formal manner
5. Recommendations

Figure-6. Responses on consideration of JBL for promotion of the products

In the study, no conventional systems of sampling procedure have been followed.
Data collected form primary sources are based in the following ways
Data for the study were collected both from secondary and primary sources.
2 Objectives of the Study

A analysis is generated from the interview schedule to fulfill the objectives of the
study.

Table-22: Getting loan within reasonable time period


Table-15: What are the obstacles faced by the SMEs in getting loans

<table>
<thead>
<tr>
<th>Lack of collateral assets</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>High interest on govt. bonds</td>
<td>20%</td>
</tr>
<tr>
<td>Lack of ability to draw business plan</td>
<td>20%</td>
</tr>
<tr>
<td>High rate of non performance loans in banking sector</td>
<td>10%</td>
</tr>
<tr>
<td>Lack of long term relationship</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

shows that the main obstacles faced by the SMEs in getting loans due to lack of long term relationship with the financial Institutions, almost 20% client think about that and the rest obstacles are lack of collateral asset, High interest on government bonds, Lack of ability to draw business plan, High rate of nonperforming loans in banking sector.

Table-16: Is restructuring of the Credit Information Bu~reau (CIB) with resources a must to help SMEs and financial institutions for SMEs finance and development?

<table>
<thead>
<tr>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Shows that all of the SME entrepreneurs agree to restructure the CIB to get information regarding credit history, bank and firm’s performances etc and to help SMEs and financial institutions for SMEs finance and development.

Table-17: Distribution of respondents by their nature of organization

<table>
<thead>
<tr>
<th>Nature of Organization</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics &amp; Electrical Product</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Light Engineering &amp; Metal working</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Knit ware &amp; Readymade Garments</td>
<td>13</td>
<td>65%</td>
</tr>
<tr>
<td>Health care &amp; Diagnostic</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>Education service</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>

Shows the distribution of respondents he by nature to their organizations. It seems SMEs are diversified in nature. The highest number of SME Knit ware & Readymade Garments in nature. It is also reflected that growth of health care and diagnostics also showing an encouraging picture. So it is observed that SMEs are involved in diversified production and service activities.

Table 18: Distribution of respondents by their reason of self finance

<table>
<thead>
<tr>
<th>Reason of Self Finance</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal reason</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>Complexity of taking loan</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>Rejection of loan application</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Have not taken loan</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

* The total frequency is 20. We tried to investigate the reasons for self financing. About 40% of the respondents mentioned that due to complex loan sanctioning they were reluctant to take loan and 10% mentioned that their loan applications rejected and the remaining 40% were reluctant to take loan for their personal reasons. Hence, financial institution may try to minimize the complexity of loan sanctioning mechanism.


Table 19: Types of SMEs loan

<table>
<thead>
<tr>
<th>Types of SMEs Loan</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamuna Jantrik</td>
<td>10</td>
<td>40.0</td>
</tr>
<tr>
<td>Jamuna Sommriddhi</td>
<td>7</td>
<td>28.0</td>
</tr>
<tr>
<td>Jamuna Swabolombi</td>
<td>8</td>
<td>32.0</td>
</tr>
<tr>
<td>Jamuna Bonik</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td>Jamuna Chalantika</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td>Jamuna Green</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td>Jamuna Nari Uddogh</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td>Jamuna NGO Shohojogi</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td>Jamuna Shachchondo</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

* The total frequency is 20. Among the Jamuna Jantrik 40%, Jamuna Sommriddhi 28%, Jamuna Swabolombi 32%, But other loans item are not uses.


Table 20: Time requirements of getting loan

<table>
<thead>
<tr>
<th>Days/ Months</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 - 15 Days</td>
<td>02</td>
<td>10.0</td>
</tr>
<tr>
<td>15 - 30 Days</td>
<td>05</td>
<td>25.0</td>
</tr>
<tr>
<td>2 - 3 Months</td>
<td>07</td>
<td>35.0</td>
</tr>
<tr>
<td>Above</td>
<td>06</td>
<td>30.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

* The total frequency is 20. Shows the length of time required to approve the loan. It is reflected that 10% of the loanee received loan within 7-15 days, 25% of the loanee received loan within 15-30 days. It is also observed that 35% of the investigated loanees received the loan after 2 months. 20% of the investigated loanes received the loan after 3 months.

One of the main barriers to the development of SMEs in Jamuna Bank Limited would be to minimize this gap by relaxing bank procedures. As the SMEs in Bangladesh are habituated to operating in a semi-formal manner, and due to the shortage of adequate fund, their cost of capital, and can give efficient service if they grant loan cluster wise. As the SMEs in Bangladesh are habituated to operating in a semi-formal manner, they are not preparing proper financial statement which creates problem for the bank judging financial standings, profitability and credibility to the bankers. JBL considers sources. The study tested three hypotheses for the study. The problems that JBL faced in designing proper financial products for SMEs are manufacturing establishments are SMEs, accounting for 80 percent of the labor management and marketing expertise and technology, as compared with large structures and technology to attract big businesses in large numbers. If these problems are solved, the survival of SMEs especially innovative ones (S. M. Akterujjaman, 2010). We should give financial institutions the necessary time and correct the regional imbalance in development that exists in developing countries. Economic as well as social and psychological construct. After collection of primary data, hypotheses were formulated for the study. The data for the study were collected both from primary and secondary sources. Which constituted 25% of the total population was the total sample strength of the study.

**Hypothesis 1**

H0: Cost of operation for the bank will go down if the bank grants SME loan cluster wise.

H1: Cost of operation for the bank will not go down if the bank grants SME loan cluster wise.

**Hypothesis 2**

H0: SMEs prepare proper financial statement.

H1: SMEs prepare proper financial statement.

**Hypothesis 3**

H0: Jamuna Bank Limited grants large loan for the SMEs.

H1: Jamuna Bank Limited grants cluster wise loan to SMEs.

In this study, the survey was done from the employees of Jamuna Bank Limited. As the study tested three hypotheses, it is needed to ensure that financial institutions should expedite the loan sanction procedure.

**Table-21: Procedure of loan application**

<table>
<thead>
<tr>
<th>Loan Application Procedure</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>13</td>
<td>65%</td>
</tr>
<tr>
<td>Tough</td>
<td>07</td>
<td>35%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>

* The total frequency is 20. Table 17 tries to identify the procedure of loan application. Among the respondents 54% mentioned that loan application procedure was easy but 46% mentioned the procedure to be tough.

**Table-22: Getting loan within reasonable time period**

<table>
<thead>
<tr>
<th>Reasonable Time</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>09</td>
<td>45%</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>55%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>

* The total frequency is 20. Table 23 shows the picture of time requirements availing of loan facility. 45% of the respondents mentioned that they received the loan reasonable time. But 55% mentioned that they did not receive the loan in reasonable time. So, it is needed to ensure that financial institutions should expedite the loan sanction procedure.
needs to work together with other banks. This happened due to loan structure differences between these banks. There is some unhealthy competition among the private banks regarding SMEs, and they are inefficient and corrupted. In fact, their practice of corruption has actually affected the SME rating and previous history.

5. Recommendations

It is observed in the graphical presentation that 7 respondents have marked tick (√) for the statement “Lack of awareness about products” as very low; another 4, “Lack of awareness about products” as high; and other 4, “Lack of awareness about products” as moderate.

Respondents were asked that are the main reasons why they are not yet able to use market research have high affect that will improve the quality of SME loan offering.

In the study, no conventional systems of sampling procedure have been followed. Secondary sources in tabulated form, are the following.

Table-22: Getting loan within reasonable time period

<table>
<thead>
<tr>
<th>Source</th>
<th>Field survey (2013).</th>
</tr>
</thead>
</table>

1. Introduction

Entrepreneurs10% mention that their loan applications have been rejected. It is observed in the graphical presentation that 4 respondents have marked tick (√) for the statement “Lack of confidence in the application process” as very low; another 4, “Lack of confidence in the application process” as high; and other 4, “Lack of confidence in the application process” as moderate.

In this gap by relaxing bank procedures.

90% of the respondents believe that entrepreneurs are not able to get loans easily. It is revealed that JBL highly considers that promotional product as high. Other 5 respondents marked it as low.

In this case, there is a huge gap between demand and supply of SME financing. In our country, a big gap has opened up. The first step for Jamuna Bank Limited would be to minimize this gap by relaxing bank procedures.

Hypothesis 1: Cost of operation for the bank will not go down if the bank grants SME loans. Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.

Hypothesis 2: SMEs do not prepare proper financial statement.
Socio-economic Development Through Economic Growth: Myth or Reality

M A Jalil*

Abstract: All the countries, throughout the world, to their utmost abilities are pursuing the policy of accelerating economic development through the attainment of higher economic growth. In almost every Economic and Social Survey, while measuring the performance of any country, hinge on the attainment of higher economic growth, although the ultimate purpose of economic policy is the maximization of satisfaction in life. It is evident from different studies, conducted in different countries, that the relationship between income and happiness is not strong. That is why ultimately, Gross National Happiness is measured in various domains.

The study is primarily a review of literature in nature. Efforts have been made to cite some of the recent studies in this regard, with particular reference to the economy of US and Bangladesh. But human society in all over the world is becoming the abode of more and more inequalities and world peace is threatened, so to say, the more and more information we are gathering: the more agony is created in our minds, because we are a heading far from our expectations.

Keywords: GDP growth, Aristotle, paradox, palliative solution, cardinal number, Schumpeterian growth, exponential growth, HDI, Plutocrats, Rule of Law & OECD.

1. Introduction

In the pursuit of development all the countries of the world are trying to their level best and according to their capacities keeping in minds, in the milieu of their socio-political ideology, to accelerate the economic growth. Today, the performance of any country is judged on the average annual rate of growth achieved by the concerned country. That is why development economics hinge on attaining as much higher economic growth rate as possible by every country. By this, economists tend to mean the growth in the gross domestic product (GDP), or the market value of what a country produces (including services). In theory, rising GDP

* Professor of Economic, Eastern University
creates employment and investment opportunities; and as income grows, both citizens and government increasingly are able to set aside funds for the things that make for a good life. One of the tasks of the government is to establish conditions that encourage this kind of economic development. Its role should thus be actively protecting the rules of law; investing in infrastructure, health and education, because without these no country can prosper and passively permitting markets to operate. Of course, GDP growth in itself does not guarantee on equitable distribution of incomes, but the problems could be offset by government taxes and transfers. Or so the argument would have it. From these examples it is evident that the relationship between income and happiness is not strong.

2. Historical Review of Literature:

Correlation between Income and Happiness:

For one thing, international studies of the correlation between income and happiness have recently uncovered a counterintuitive connection. Until few years ago, the reigning theory about money and happiness was the Easterly paradox, the 1974 finding by Richard Easterly that, beyond a relatively low threshold, more money didn't make you happier. But as better international data became available, economists discovered that the Easterly paradox applies only across generations within a single country—you are probably not happier than your parents were, even though you are probably richer. But across countries, what millions of immigrants have always known to be true really is: the people of rich countries are generally happier than the people of poorer countries.

Today, countries are subdivided in few categories: Developed, Developing, Underdeveloped, and Least Developed. With the advancement of science and technology, particularly of software, teletalk network, I-phone etc. information gathering has become very easy and man to man relationship has been established. Naturally, everyone feels like comparing him-/her-self with metes, friends, relatives, even unknowns living another parts of the world. In that way, we are living in a comparative world, no body is isolated. But the tragedy lies here that as we are progressing in the arena of economics, the distance between the different categories of countries and among the citizens of different countries are widening—we are leading to an unequal society. Even whatever may be ideology of anyone, irrespective of capitalistic, socialistic-capitalistic, one thing is common: income inequality among people is increasing; the society is becoming more and more lop-sided. All developed, newly developed, fast developing, and even emerging countries, one feature is common- the fruits of development are distributed in unequal manner, and in other words, the rich is becoming more rich and the poor poorer.

In recent years, researchers have spent a lot of time investigating what makes people happy. They do it mostly by asking people if they are happy and then corre-
lating answers with other features of their lives. The methods seem films, but it produces surprisingly stable and reliable results. According to David Brooks (2011), the first thing they found is that the relationship between money and happiness is rather complex. Richer countries tend to be happier than poorer people, but relationship is not that strong; it depends on how you define happiness, and it is the subject of fierce debate among the experts. As Carol Graham (2010) writes that Nigerians rate themselves just as happy as the Japanese, even though Japan's GDP per capita is almost twenty-five times higher than theirs. The percentage of Bangladeshis who report themselves satisfied with their lives is twice as high as the percentage of Russians. It may be noted here that nearly 2,500 years ago Aristotle wrote, "The happy man will need external prosperity." But how much do we need to be happy? Fortunately, the answer is no longer just a philosophical debate. Laura Rowley (2005) may be right when she says that possibly those who have less aspiration are happy.

In the introduction of his work, Chrystia Freeland (2012) has mentioned that President Barack Obama had alienated the business community by speaking about the rich". It would be best not to refer income differences at all, the banker said, but if the president couldn’t avoid singling out the country’s top earners, he could call them "affluent". Naming them as rich he told the author, sounded divisive- something the rich don’t want to be. Striking a similar tone, Bill Clinton, in his 2011 book, back to work, faulted Barrack Obama for how he talks about those at the top. I didn't attack them for their success, "President Clinton wrote, attributing to that softer touch his greater success is getting those at the top to accept higher taxes.

From the above talks of two Presidents, we realize the intensity of the issue which is again question-begging in nature, but no solution comes for the human society, some instant palliative solution indication is indicated- redistributive measures through taxes. Yes, every government today is taking some redistributive measures. This is not new. It can be said that what damage the economic growth-based development has resulted, now being repaired. On the prima face it appears that present development efforts has some in-built order that as it goes, whether at a moderate or faster rate creating a more unequal society.

**Popular Macroeconomic Views:**

The people of developed countries as a whole remain more busy and earning more money are haunting them that they forget the life's other needs, form an idea that money will bring everything in life. On the other hand, it is observed that people of least developed and underdeveloped countries remain anxiety free, not so horribly busy and have the minds to enjoy lives. They are contended with less and may be for this reason in many studies people of these countries found happier. So, containment is the root of happiness.

But, even though our common sense guides that we should work hard to achieve
our goals of life. There is no alternative of hard work -hard work not of day labor. But of a technically qualified person; the more sophisticated, more would be earning. However, we, as an ordinary person work for money, because by spending money we meet our necessities, comforts and luxuries. We spend money on different items judging how much utility we are driving from those goods and services. Herein, we try to measure satisfaction with simple numbers cardinal numbers indicating how much number of elements there are in the assemblage. But, satisfaction is a mental estate, it can't be measured numerically. It can be measured in an ordinal way or number designating the places, such as first, second and third and so on. From this view point, teachers teach the indifference curves approach.

Both the Western critics and the Western fans of globalization tend to agree one thing: the emerging markets, particularly their rising middle classes, are among the big winners. As far as GDP goes, that is certainly true. But, just as the West's first gilded age was not perfectly benign for everyone living through it, the developing world's age of creative destruction is bumpy.

**Tracing the Origin of Growth:**

Matt Yglesias (2012), a journalist who tens to make a provocative claims laced with petty insights in an article of ten sentence titled "Nobody Knows Where Economic Growth Comes From". Of course, Yglesias is right, but probably not in the away he intended. Saying that economists in the early twenty-five century do not understand what causes growth is like saying that doctors do not understand cancer, meteorologists do not understand weather, or the evolution is just a theory. While there are limits to our knowledge, let us not confuse humility with ignorance. Unfortunately, economists use this rhetorical device as much as anyone else. Elhanan Helpman, a highly regarded Harvard economist titled his 2004 books the Mystery of Economic Growth. William Easterly's book The Elusive Quest for Growth is another case in point.

However, more nuanced recent researcher shows that investment in capital doesn't lead to growth. Rather it is growth that starts first, and investment follows. (A 1996 econometric study conducted by Mangus Blomstrom, Robert E. Lipsey and Mario Zejan, (in the Quarterly Journal of Economics, vol, iii, p-269-73). If that seems confusing, consider the historical examples of communist Russia and China. Industrial investment was their obsession, yet growth was weak. However, Acemoglu and Robinson (2012) claim that institutions are the foundation for growth. They have cited examples of various countries and proved their claim that is both big and small.

However, innovative growth, which some call technology proper and others simply call "ideas" is the easiest to explain. Build a better plough and farm yields increase. The third type is called Schumpeterian growth, after Schumpeter. Even America's economy overall is growing strongly and they are doing well themes,
they know that they living through a period of what Joseph Schumpeter called "creative destruction.”

According to many economists, for example, Jeffery D. Sachs: "The marketplace does have some elements of basic fairness: hard work can produce a higher income; laziness is punished. A lifetime plan to study hard and get a good education produces economic reward for the individual as well a sense of fulfillment. But the fairness of the marketplace should not be exaggerated. Many people are simply unlucky. Market forces such as foreign competition may turn against them (such as when a technological change wipes out an industry in a gale of "creative destruction", as the economist Joseph Schumpeter called it" (Dan O'Neill, 2013). Others are born poor to parents who lack the education and skills to pay their own. Some live in places hit by earthquakes, tsunamis, draughts, floods, or other hazards and depends on government to survive and recover. Despite the claims of free-market advocates, virtually all the societies throughout history have organized governmental means to ensure support for the poor among them. (The main exceptions in history are when one ethnic, racial, or religious group leaves another to perish. In books on religion, sometimes, such examples are found when people are found beyond correction).

Most Recent Views:

Dan O’Neill and Daniel- Ben-Ami in their study reminded us that "an economist and educator Kenneth Boulding once warned that anybody who believes in a finite world exponential growth can go on forever is either a madman or an economist. It is time for us to put an end of this mad pursuit in wealthy nations.” Besides the fact that economic growth is a recipe for environmental disaster, we have reached a point at which it is no longer improving people’s lives. They have cited example from the British economy saying that although since 1950 has become tripled in size, but survey indicate that people have not become happier. In developing countries, applied economies are different. The findings of developed country (Britain) are not in cases of countries like China and India. It is through persuasion of sustained high growth-based economic development has brought achievement for both the countries- drastically reduced mass poverty, changed life-styles of common people, contributed remarkably in world trade, and now treated as emerging world economic powers. Today in reviewing development literature, one will come across references both these countries profusely.

3. Objective and Methodology

The issue with which we are concerned in this study is not a new one. Development economists, social scientists and psychologists have been trying continuously for a long time to strike a balance between income growth, ensuring social justice through redistribution of income and correlate with happiness. Yet, on most occasions the latter, behaves in an unusual manner; sometime don’t care for more
The study is primarily a review of literature in nature. Only feature is that we tried to cover a good number of most recent studies, and we collected all the facts and figures from secondary sources. Again, this is an opinion-based study. Some empirical evidences related to USA and Bangladesh situation have been included here as case studies. We believe that our efforts will inspire researchers to carry on forward our mission towards cherished goal-building—a happy and prosperous society free from high inequalities.

Study has been organized as follows:

Historical review of literature has been divided in following headings:

1. (i) Correlation Between Income and Happiness
   (ii) Popular Macroeconomic Views on growth
   (iii) Tracing the Origin of Growth
   (iv) Most Recent Views (Madness in Pursuing Exponential Growth)

We look particular for knows where we Stand in Our Efforts for Development and increasing inequalities created in the society far from our expectation.

Additionally, we are concerned to know alternative left for us.

4. Achievement of Our Development Efforts

In present day world those countries treated as developed ones, have followed a prescribed course of actions to become prosperous countries and now in their position. This is true in cases of Western Europe, U.S.A., Japan, Asian Tigers and for all the emerging countries (Jalil, 2014). Here it would be pertinent to cite very recent examples of two most populous countries of the world, namely, China and India both shown amazing development in poverty reduction in short period of time and have drawn attention of the world. In pursuing speedy development, all the developed and fast developing countries stress of attaining higher growth rate—‘either growth at any cost’ many countries including China followed this course, while some countries, for example India preferred the second path of ‘growth with stability’. However, both China and India showed impressive and salutary achievement in reducing poverty in their countries. Attainments of high growth rate were at the root of their attempts. Although both the countries were different ideologically, but in their motto and the path for pursuance of development goals hardly there were any differences. Not to speak of only these countries, all the rich (developed) countries’ path for development, i.e. modernization and diversification especially in reducing mass poverty. To say a bit detail, these include various steps high savings (which require boosting up income), more investment, reliance on FDI and extending appropriate facilities for foreign investment, creation of possession of money.
wide-spread employment opportunities, urbanization, safeguarding property rights, creating incentives for more production, exports promotion, bringing qualitative changes in the lives of the people. Of course, to day no nation can prosper without attaching importance to HDI, scientific development and innovation. It has been observed that ignoring these factors no country can achieve development goals. Taking all these recourses China and India changed their position of countries, which is amazing to the world. Patrick Mendis (2013)in a Figure has shown that in 1978 in China 30 per cent of total population were in poverty. Gradually poverty was alleviated and in 2004 only 3 per cent. Chrystia Freeland aptly mentioned that ‘it should not be forgotten that in the last fifteen or so years, 300 million or more Chinese have been lifted out of poverty’... We as Goldman Sachs-estimate that 2 billion people are going to be brought into the global middle class between now and 2030 as the BRIC and N-11 economies develop... . Similarly, while reviewing two books on poverty alleviation in India, an economist (Partha Dasgupta, 2013) mentioned that ‘The proportion of people whose income is below country’s official poverty line 28 per cent declined from 45 per cent in the early 1980s to 28 per cent in 2005. In the similar vein, Alan Greenspan (2007, 2008) said that India picked up in real GDP growth from 3.5 per cent from 1950 to 1980 and to 9 per cent in 2006 has been truly remarkable. These advances have elevated more than 250 millions of people out of the subsistence poverty incomes of less than $1 per day. In this connection, the daily newspaper-Prothom Alo, on August, 27,2013 mentioned that in 2011-12 percentage of people living below poverty line in India came down to 21.9 per cent. In this connection, the remarks of the Noble laureate economist, J E Stiglitz is worth mentioning here. While submitting the report of the International Commission on the Measurement of Economic Performance and Social Progress (chaired by him in 2014) emphasized that GDP is not a good measure of how well an economy is performing.

Higher growth rate has led not only higher development, but also created more inequality and more and more number of plutocrats in the society. It has been observed that all the developed and fast developing countries, irrespective of their ideological belongingness show that as countries become richer, the inequalities also increase. People of developed countries are enjoying unheard and unimagined abundance; while still millions of people are living in dire poverty. The number of plutocrats is on the increase- the more the country become richer, larger the number of plutocrats in the country. Again, Freeland has pointed out that, “Today most colossal fortunes are new, not inherited –amassed by perceptive businessmen who see they deserving victors in a cutthroat international competition. Bringing together economics and psychology of these new super-rich, Plutocrats, puts us inside a league of very of its own, with its own rules.” Inequality is rampant not only among various countries, but also in the same country; e.g. in United States and it is increasingly taking shape threatening peace and securities. Terrorism in world-wide is spreading under the situation. We have tried to highlight the situa-
tion, briefly, prevailing in two countries in USA (one of the richest country) and Bangladesh (one of the poor country) and show the trends in both the countries.

Joseph E Stiglitz, (2013) Nobel-prize winner economist and well-known for his various works on poverty and inequality (including his doctoral work), pointed out the poverty situation of America saying 'that an increasing large number of Americans can barely meet the necessities of life. The number of fractions of those in poverty was 15% in 2011, up from 12.5% in 2007.

It was clear from the reception of the price of inequality that it had hit a chord. Not just in the United States but around the world as well, there is mounting concern about inequality and about lack of opportunity, how these twin trends are changing our economies, our democratic politics, and our societies. The crisis continues to hurt those in the middle and at the bottom. Raghuram G Rajan(former Chief Economist, now Governor, the Reserve Bank of India), author of famous book, Fault Lines: How Fractures Still Threaten the World Economy (2010), in an article cautioned an impin an imp-ending big crisis five years back. However, he has shown in his book the inequity of income in American economy saying that in 1976 top 1% rich people were in the possession of 8.9% of total income, which rose to 23.5% in 2007. During the period, 1976-2007, whatever real income increased 58% went to the top 1%. Joseph E Stiglitz, a Nobel laureate in economics, recently in an article titled "Democracy in the Twenty-First Century" (Project Syndicate, 2014; Daily Star, September 3, 2014) has expressed his concern while reviewing the book written by Thomas Piketty, Capital in Twenty-First Century, which attests to growing concern about rising inequality. The book lends further weight to concerning the soaring share of income and wealth at the very top. Piketty's work raises a fundamental issues concerning both economic theory and the future of capitalism. The standard theory suggests that, with the increase in wealth/output ratio, a fall in the return of capital and increase in wages. But today the return of capital does not seem to have diminished, though wage have (for example, in the US, wages are down some 7% over the past four decades).

In Bangladesh, development efforts in the country have opened new opportunities and hopes, but high concentration of wealth and property in the hands of few has affected lives of millions of common people (Banikbartha, 2013). Those who possess at least wealth amounting $3 crore, (i.e. tk. 250 crore) their numbers are increasing, shown in Table-1 as follows:

<table>
<thead>
<tr>
<th>Year:</th>
<th>2009</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of person:</td>
<td>50</td>
<td>85</td>
<td>90</td>
</tr>
<tr>
<td>Total wealth ($ Crores):</td>
<td>700</td>
<td>1300</td>
<td>1500</td>
</tr>
</tbody>
</table>

Due to low development but high concentration of wealth in few hands 75% of people are passing lives in deprivation (inadequacy or insufficiency).BIDS (Bangladesh Institute of Development Studies) observes that although our development aims at reducing inequality but in reality inequity between rich and poor is increasing. Because of existence corruption and malpractices, some people are becoming the owners of black money. Suddenly, few persons are becoming pluto-crats, which is one of the causes of social instability. According to Welfare Monitoring Survey conducted by BBS (Bangladesh Bureau of Statistics) only 4.25% of people owns larger portion of wealth, middle-class constitute 20.5% of people. The rest 75% belongs to deprived class. To say in other words, 5 crore 10 lakh 60 thousand people live hand to mouth.

On the eve of tenth Parliamentary Election of Bangladesh, a good number of daily newspaper, tried to focus their views, to assess the performances of the existing parliament members, (as all the members submitted their wealth statements and those of their family members to the Election Commission). The Daily Star has scrutinized the statements of some Awami League contestants and found that all of them have become richer over the last five years, some of them astonishingly. They compared these statements with those submitted by them before the ninth parliament polls (The Daily Star, December 22, 2013). On the following days i.e. December 23&24, The Daily Prothom Alo repeatedly published similar news covering a number of stalwarts of Awami Leage party. Earlier, we saw on December 20 and 21, 2013., the daily Prothom Alo published in their headline news of the assets owned in 2008 and on how some very powerful political personnel of the party in power and members of the parliament have amassed huge property, exploiting their power and became very rich during their regime in last almost five years. On the first day the daily covered 9 such persons. This information has been collected recently and compared those from their declaration submitted before 2008 national election. On the second the daily concentrated on how a particular person of trivial position became in so an eminence and owner of billions of money. For instance, he purchased 70 acres of land mostly near Sundarban areas by 5 crores of taka,3 business establishments in Gazipur by 3 crores of taka, and purchased car by 1 crore taka. The same news came in other dailies including The Daily Star, 22&24 December, 2013 under sub-title- Politics of Fortune. The Daily Prothom Alo in its editorial on December 24 showed that some of them now have multiplied the assts 351 times during last five years. All such incidence clearly shows how the powerful people have grabbed the poor people’s money. Another case of concern is that the size of underground economy which was 7% of GDP in 1973 rose to 63% in 2010 (Star business report, The Daily Star, April 4, 2014).

One can raise the question: what is the purpose of laws and regulations that are to control the functioning of our economy? Why do we need “rule of law”? “Rule of law” is supposed to protect the weak against powerful, but it is seen many coun-
tries those legal frameworks have sometimes done just opposite, and the effect has been a transfer of wealth from bottom to middle to top (S. Naidu, 2010)

Former President of the U.S.A., Bill Clinton (2012) in his recent writing has portrayed the pervading situation of the world as a whole: 'The Case for Optimism, from technology to equality, five ways the world is getting better all the time.' The contents are: "The world is more interdependent than ever. Borders have become more like nets than walls, and while this means that wealth, forces shaping our shared fates. The financial crisis that started in the U.S. and that swept the globe was further proof that- the better and therefore worse- we can't escape one another." He further stated: "There are big challenges with our interdependent world: inequality, instability and unsustainability. The fact that half of the world's people live in less than $2 a day and a billion people on less than $1 a day is stark evidence of inequality, which is increasing in many places. We are finding the effect of instability not only in the global economic slowdown but also in the economic violence, popular disruptions and political conflicts in the Middle East and elsewhere. And way we produce and use energy is unsustainable, changing our climate in the ways that cast a shadow over our children's future." It's a message for present generation of the world. But, by and large the responsibility of building a better world lies with the richer nations. They are the pioneer both for our well and woe. But in broad view, no one can escape—every nation and each individual where ever he/she stays can contribute a lot to the fight for establishing an exploitation-free world society. But, in reality the inequality has been taking a more acute shape in more rich countries. There has always been some gap between rich and poor in any country, but in the last few decades what it means rich has changed dramatically. Alarminglly, the greatest income gap is not between the 1 percent and the 99 percent, but within the wealthiest 1 percent in America (for example)—as the merely wealthy are left behind by the rapidly expanding fortunes of the new global super-rich. According to Robert Reich (Bill Clinton’s Labor Secretary) in 2005 Bill Gate’s wealth was worth $46.5 billion and Warren Buffet $44 billion. That year, the combined wealth of the 120 million people who made up the bottom 40 percent of the U.S. population was around $ 95 billion- barely more than the sum of the fortunes of the two men.

Azizur Rahman Khan (2010) a Bangladeshi economist living in U.S. for a long time, delivered a Public Lecture in BIDS (Bangladesh Institute of Development Studies) on ‘Growth, Inequality and Poverty in Our Times’, a personal reflection and how Bangladesh has overcome from poverty to present living standard during last sixty five years and termed it as dramatic transformation. Although he started with Bangladesh, but he moved to different arenas of development and cited from the situations of U.S. and then discussed development situation of various developing countries, even the contents of text book authors of those days when he was studying. He continued in the pursuit of inequality and how it averse growth.
Khan’s discussion on ‘Historical Evolution of Concern for Equality and Poverty’ (section-iii) is a case study in our context. Given the rate of growth of income, a rise in inequality can have three possible kinds of effect on poverty. However, the actual reduction in poverty must be attributed to the increase in inequality and his conclusion is as follows: “any increase in equality must be considered a cause of increase in poverty- the prevalence of a poverty rate in excess of what it would have been had inequality not increased— unless it can be shown that in the absence of an increase in inequality growth itself would have fallen.” Since 1990s a substantial body of literature has actually argued the opposite: certain redistributive policies for greater equity actually help promote faster growth (Alesina and Rodrick, 1994; Deininger and Squire, 1998; and Persson and Tabellim, 1992). An useful summary can be found in Helpman (2004), Chapter 6.

Very recently we came across some startling news on inequality. On June 1, 2014 in The daily Prothom Alo an article was published by Kamal Ahmed in Bangla on the 'Increase of Income in the World of Inequality'. It portrays how concentration of wealth and property are taking place throughout the world. On May 27, 2014 in London a conference took place on 'Inclusive Capitalism: Building Value and Renewing Trust'. Much discussion was held on the evils of capitalism and efforts were made to give an human-touch coverage on those evils to sustain capitalism. While speaking in the forum, IMF chief Christin Lagan mentioned that the wealth of top 85 persons is equal to those of 380 crores poor people of the world. He said that as inequality increases, capitalism is becoming less participatory. In a publication of the conference it was mentioned that the money value of the 85 persons amounts to $ 1.7 trillion. Christin Lagan, in another speech said that after 2009, 95% of the increased world income went to 1% richest persons and the rest 90% people became poor. That is, only 9% of people got some share of increased income.

It is evident from whatever we have discussed on both the countries safely one can conclude that the trends of concentration of wealth and income in the hands of very few persons, deprivation of large majority of people leading to the creation of a society far from our expectation and for which we will have to pay heavily. We can hardly guess about such penalty (consequences). Similar is the situation prevailing in almost all the countries of the world, in BRICS and EU countries, and all the countries irrespective of the followers of capitalism, socialism and the mixed including the countries follow so-called 'Islamic economics'. Eminent economists, social reformers and peace-lovers are continuously reminding us its dire consequences, but the beneficiaries are not paying proper attention to their warnings. It is unfortunate, no doubt.

5. Ultimate Objectives of Economic Policy & Alternatives Left for Us:
Richard Layard (2005), possibly rightly said, “Economists have had little to say
about the links between what individuals do and what gives rise to happiness or a sense of happiness or a sense of well-being, so they focus on much narrow of consistency”. Research over the last quarter century has shown that individuals do not act consistently- but in a way that are markedly different from those predicted by standard model of rationality. They are, in the sense, predicted rationality. It is easy to lose sight of the ultimate purpose of economic policy: the life satisfaction. That ultimate goal should be unassailable for a country founded precisely to defend the inalienable right to the pursuit of happiness. Yet not only do we miss my myriad opportunities to promote happiness through our collective undertakings, we even miss the opportunities to measure happiness so that we can gauge how we are doing as nation. There have been growing efforts to expand the range of indicators to measure better what’s important for our well-being. The World Values Survey and Gallup International have each pioneered various measures of subjective well-being, which psychologists and economists have found to be stable, slowly evolving for social diagnostics. The Human Development (HDI) is another well-known attempt to combine economic indicators with social indicators (literacy, school enrolment, and life expectancy) to give more rounded picture of well-being.

No country has taken the challenge of measuring and raising, happiness more seriously than the Himalayan Buddhist Kingdom of Bhutan. The Government of the Bhutan established Gross National Happiness Commission to oversee a series of metrics that would quantify and track the changes in the national happiness. GNH is measured in nine domains:

- Psychological well-being
- Time use
- Community vitality
- Culture
- Health
- Education
- Environmental diversity
- Living standard
- Governance

Each of these measured by a series of quantitative indicators. What is not notable is the combination of relatively standard economic measurements such as household and education with measures of cultural integrity (e.g., use of dialects, engagement in traditional sports and community festivals), ecology (Days per month), community well-being (social trust kinship density), time allocation, and
general mental health (e.g., indicators of psychological distress).

The worldwide movement to measure happiness and the quality of life is now expanding very rapidly. In 2005, the Economist Intelligence Unit demonstrated that quality-of-life” across countries is reasonably well explained statistically by a combination of measurable economic, political, health, job security, and the community indicators. Many scholars have confirmed similar results in recent academic studies. Recently the French government convened a commission headed by Joseph Stiglitz and Amartya Sen to propose a new set of indicators, and in 2010 the U.K. government announced that it would directly monitor subjective well-being in annual surveys.

**Table-2: Indicators of National Well-Being (Rankings, with 1= “Best”)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Gallup International Life Satisfaction (178 Countries Ranked)</th>
<th>OECD Child Well-Being Ranking (21 Countries Ranked)</th>
<th>Life Expectancy at Birth (192 Countries Ranked)</th>
<th>OECD PISA Rankings (65 Countries Ranked)</th>
<th>OECD Poverty Rate (16 Countries Ranked)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>14</td>
<td>17</td>
<td>6</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Denmark</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>Finland</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Norway</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Sweden</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>19</td>
<td>2</td>
</tr>
</tbody>
</table>

*Source: Gallup, OECD Statistical Databases, World Health Organization.*

*(Reproduced from: Jeffrey D. Sachs, The Price of Civilization, p- 208)*

Table-2 illustrates the kind of well-being measures that would collected each year in addition to the standard national income accounts. Gallup International, for example, uses opinion surveys to asses the average life satisfaction” in 178 countries by asking, All things considered, how satisfied you with your life as a whole are these days?” The OECD has created an index of child well-being that aggregates over six dimensions: material conditions, housing, education, health, risk behaviors, and quality of school life. Other indicators might include variables such as life expectancy, student test scores, and the poverty rate, all shown in the table. It shows comparative picture of six high-income countries wherein relative on specific indicators reveal.

At end of our discussion we can mention some recent data on income inequality as Andy Serwer(2013) puts in Editor’s Desk .Both liberal and conservative economists agree that income inequality or income disparity in America has increased since the 1970s. The Congressional Budget Office October 2011 report “Trends of the Distribution of Household Income Between 1979 and 2007” shows that during
the last 28-year period overall real wages (after tax) household income grew 62%. But for the top 1% of earners, income grew 275%, and for the bottom 20% of earners, household income grew only 18%. If this trend is not checked in all countries, the there will be serious repercussion in the entire social fabric would be polluted and human civilization would be at stake. It is just like cancer in our social body which needs early solution.

6. Conclusion:

Our study concentrates mostly in the context of developed countries and the availability of data in those countries helped us also. Again, the realization and initiative for redressing those started from their ends. But at the present age of rent-seeking and deterioration of ethical values, in developing countries are not lagging behind. Rather, widespread corruption and absence of rule of laws (in other words the lack of, sometimes inoperative of appropriate economic and political institutions) are no less important. It may be noted here that at the same time the national and international bodies are not less vocal and they are publishing various publications in print and internet media for making people aware. However, vigorous efforts from various fronts are needed and strict laws against all sorts of malpractices must be enacted; measures against corruption and exploitation be taken. Education, especially religious/moral education should be a weapon to upgrade the ethical values of our educated people. The International Economic and Social bodies can extend support in a number of ways: in improving HDI, identifying the causes leading to income inequality and how those can be curved and conducting research in relevant areas.
References

The Distribution of Household Income Between 1979 and 2007 shows that during this period, life expectancy, student test scores, and the poverty rate, all shown in the table, have increased significantly. Gallup International, for instance, reports that the number of people who feel that they are living a healthy life has doubled, while the number of people who feel that they are living a successful life has tripled. In addition to the standard national income accounts, the distribution of wealth and income has also shown significant changes. In the last 28-year period, overall real wages (after tax) household income grew 62%. But for the top 1% of earners, income grew 275%, and for the bottom 20% of earners, it grew only 16%.

The study also found that the multipliers have been substantial. The growth of the economy has resulted in a rise in inequality, which can have three possible kinds of effect on poverty. However, the study concludes that the trends of concentration of wealth and income in the hands of few have serious consequences. The study of the concerned country shows that as inequality increases, capitalism is becoming less participatory. In a public lecture, Yglesias stated that in 1992, while measuring the performance of any country, hinge on the value of what a country produces (including services). In theory, rising GDP does have some elements of basic fairness: hard work can produce a higher value of what a country produces. In practice, however, the there will be serious repercussion in the entire social fabric would be polluted.

In pursuit of the development, all the countries of the world, in BRICS and EU countries, and People's Republic of China during the Last Thirty Five Years, have strived to achieve a better world. They are the pioneer both for our well being and for the a better world. Yet not only do we miss this goal, but we also find that the concentration of wealth and property in the hands of few has increased. The OECD (section-iii) is a case study in our context. Given the rate of growth of income, a method of achieving our goals is to find ways to reduce the concentration of wealth and property in the hands of few.

It is evident from whatever we have discussed on both the countries safely one can conclude that the trends of concentration of wealth and income in the hands of few has increased. Insecurity, economic violence, popular disruptions and political conflicts in the Middle East are the effect of instability not only in the global economic slowdown but also in the political instability. The study also found that the multipliers have been substantial. The growth of the economy has resulted in a rise in inequality, which can have three possible kinds of effect on poverty. However, the study concludes that the trends of concentration of wealth and income in the hands of few have serious consequences. The study of the concerned country shows that as inequality increases, capitalism is becoming less participatory. In a public lecture, Yglesias stated that in 1992, while measuring the performance of any country, hinge on the value of what a country produces (including services). In theory, rising GDP does have some elements of basic fairness: hard work can produce a higher value of what a country produces. In practice, however, the there will be serious repercussion in the entire social fabric would be polluted.
SME: An Instrument for Encouraging Rural Employment Generation and Contributing More to Export Earnings

M. A. Jalil*

Abstract: The main thrust of this study is to expose the present status of SMEs in Bangladesh with emphasis on employment generation in rural Bangladesh and how increasingly can SME products find place export basket. It has been shown that during the period 1980-81 to 2012-13, the structure of the economy has changed substantially—the contribution of industry in GDP has doubled from 17% to 33%, (and as usual the contribution of agriculture is decreasing continuously). As usual, industrialization starts from small-scale industries and then move to medium and large-scale industries and this is true in case of Bangladesh also. Since our agriculture is already over-crowded, and for absorbing the increasing people, our dependence is on industry and more specific on SMEs both for employment generation and local resource mobilization. Government, in its policy formulation and investment programs is allowing investors/entrepreneurs for investment outside cities. An effort has been made here to discuss the prospects and problems faced by SMEs in our country and to suggest appropriate policies and actions at various level for accelerating development. It is felt that vigorous attempts should be made in exploring, wider market for our products, both at home and abroad.

Since we are eager to boost-up both production and see our products in world market, an analysis of structure and growth of exports and imports to identify the scope of diversification is required.

Keywords: SMEs, BSCIC, Quantum Index of Production, Globalization, Thrust Sectors and PPP.

1. Introduction

It is recognized now that the small and medium enterprises (SMEs) are playing increasingly important role as the engines for economic growth and employment in many countries including Bangladesh. Therefore, vigorous attempts should be made in respect of adopting appropriate policies and actions to develop SME and

* Professor of Economics, Eastern University, Dhaka
especially to find out product-markets to new areas, both home & abroad. Such exercise involves a number of steps which may include.

Selecting the SMEs new sectors and new opportunities in the context of current and emerging economic situations; to formulate a long-term strategy for the SME sector development; identify causes and situations creating hindrances in capturing both home and foreign markets in the midst of hard competition both locally and globally; how far SMEs are employment- friendly in a transitional economy of Bangladesh; growth and structure of exports and imports of SME products was felt necessary for searching market for our products.

For the economic development of Bangladesh we should take note of the existence of current high labor intensity and for that matter cheap availability of labor which may not continue for long in Bangladesh already that symptoms are apparent both farm and non-farm sectors. But considering the phases of dependence on indigenous, skills and the technological skills to entrepreneurship development, innovativeness and growth of industrial linkages, the role of SME should be quite dominant in Bangladesh irrespective of its accurate number of all industrial units. Adoption of modern technology by replacing the existing (traditional) ones will take some time. Such steps should be taken pragmatically with the expansion of technology, because SME sector is still predominantly dominated by the poorer and less educated people (with larger participation of women) of the society. Even though, the entrepreneurs of Bangladesh, especially in the SME sector, have shown tremendous success in various sectors and levels amidst innumerable constrains. Their creativity and innovativeness in entrepreneurial initiatives deserve encouragement and admiration; patronization through providing easy-term loans, in finding markets especially in neighboring big countries and all necessary support are needed at different stages.

2. Objectives

The objectives of the paper are to:

i) Determine the prospects of SME sector in Bangladesh in the context of globalization & regional connectivity across Bangladesh

ii) Detailed analysis of various SME products (both old and new ones) now has been made available and how those are capturing the markets both home and abroad constituted the main chunk of discussion which led to

iii) Identifying the thrust sectors/products in SME sectors for considering priority order and also for identifying the major constraints of SME in Bangladesh,

iv) Show how employment generation could accelerate from the traditional low-productivity to modern sector higher productivity.
v) Analyze the structure and growth of exports and imports, specially SME products and show the scope diversification, and

vi) Suggests some policy implication arising out of the study in the form of recommendations and conclusion.

The paper has been prepared mainly based on articles/papers published recently, information collected from web-sites. Some books, articles presented in conference and of journals, findings of private research organizations and government documents like Industrial Policies of GOB have been used for writing the paper. Various daily newspapers often publish news and a good number of those are referred here.

Bangladesh Economic Survey Report 2014 and The Sixth Five Year Plan FY 2011-2015 were also used as sources of required information.

3. SMEs: Past and Present

There is no common and widely acceptable definition of SME that has been applied world-wide. The definition of SME varies from country to country and even within the same country. So there is a definitional ambiguity in cases of SMEs in Bangladesh also. Various organizations define it in the context of their own objectives and conveniences. Even, the Industrial Policy of Govt. of Bangladesh, 2005 and Industrial Policy, 2010 defined SM differently. Since we are concerned with the term enterprise, an working definition Micro and Small Enterprises (private limited companies) in the context of Bangladesh as has been accepted by the Ministry of Industries and also by the Bangladesh is in Table-1 as follows:

Table 1: Micro and Small Enterprise

<table>
<thead>
<tr>
<th>Category</th>
<th>Micro Enterprise</th>
<th>Small Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount of Fixed Asset (Other than Land and Building) In Million Taka</td>
<td>Workforce (Number)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.05-5.0</td>
<td>10 -24</td>
</tr>
<tr>
<td></td>
<td>(or less than 10)</td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>&lt; 0.05</td>
<td>or &lt; 10</td>
</tr>
<tr>
<td>Trading</td>
<td>&lt; 0.05</td>
<td>Or &lt;10</td>
</tr>
</tbody>
</table>

Source: Bangladesh Bank (Circular Issued on 19th June 2011)
Bangladesh Small and Cottage Industries Corporation (BSCIC) was established as a key public sector agency for the development of SME and cottage industry in private sector as well as provide necessary services and facilities to the private entrepreneurs.

In FY 2010-11 the number of small and cottage industrial units established under direct and indirect assistance of BSCIC up to January 2011 stood to 1250 small industries and 2485 cottage industries have invested tk 271,04 crores including their own tk 128,45 crores (being 47.39%).

But it could not expand its promotional activities in these areas due to its weak and inefficient management and administrative inefficiency and other bottlenecks. Although for the last few years different private sector agencies have come forward to participate in the SME sector through the development of MIDAS, BASIC, some NGOs like Grameen Bank, BRAC, ASA, although contributed much, but could not yet perform up to the desired level in the promotion of this sector. It is essential to give serious attention both by the public and private agencies for promoting SMEs, more so for the poverty alleviation of the poorer people thorough employment generation of the vast number of people unemployed in the rural and urban areas of the country.

Cottage industry refers to family based/owned small sized production units with small amount of capital whose production process is based mostly on local raw materials, inherited artistic skills and simple indigenous technology. These units operate in both rural and urban areas of Bangladesh. Cottage industries engage manufacturing and servicing activities mainly run by family members either as full time or part time with or without power-run machinery irrespective of location and these products are available within affordable prices.

Cottage industries provide employment and income opportunities for the poor or middle income section of people though employment and income generation schemes all over the world and especially in low income and technologically under developed countries such as Bangladesh. Traditionally, cottage industries have been rural-based, but in the courses of time and with the technological advancements, they spread to urban areas to avail small scale industrial support and transport and marketing facilities. The areas of cottage industries have now broadened remarkably from simple indigenous technology based and home made products to sophisticated handicrafts of wide varieties.

Cottage instructress which exist in our country from a long time used to be classified in nine broad categories; handloom, black smithy, pottery, bamboo and cane
works, carpentry products, brass products, jute and cotton products, ghani (oil press) and others. The British rules imposed series of repression regulations by which they controlled price and production of textiles and other cottage industry goods. Many indigenous artisans gave up their profession in protest.

Among the cottage industries of this part of the world, cotton is the most important and has a history of at least two thousand years. One of the striking characteristics of Bengal’s handloom cotton textile and silk industry was their exceptional diffusion throughout the country.

Following the partition of Bengal in 1947, the government of Pakistan took some measures to revive and reinvigorate the declining position of cottage sector. But capital investment in cottage industries was negligible and was restricted to simple implements. An estimated 3 million agriculturalists were engaged in cottage industries. Of them approximately 65% were in East Pakistan.

The Dynamic Role of SME in the Present Context

Although the economy of Bangladesh is agrarian in nature, the contribution of the industry sector to the country’s gross domestic product (GDP) is continuously increasing. This is evident from the Table-2

Table-2 Trend of Structural Transformation of Broad Sectoral Shares in GDP and Growth Rate At Constant Prices (Base year: 1995-96)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>33.07</td>
<td>31.15</td>
<td>29.23</td>
<td>25.68</td>
<td>25.03</td>
<td>19.01</td>
<td>18.01</td>
<td>17.38</td>
<td>16.78</td>
<td>16.33</td>
</tr>
<tr>
<td>Service</td>
<td>49.62</td>
<td>49.73</td>
<td>49.73</td>
<td>49.45</td>
<td>48.77</td>
<td>49.14</td>
<td>49.66</td>
<td>49.78</td>
<td>49.45</td>
<td>49.30</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Average growth rate(percentage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>3.31</td>
<td>3.31</td>
<td>2.23</td>
<td>3.10</td>
<td>3.14</td>
<td>4.94</td>
<td>5.24</td>
<td>5.13</td>
<td>3.11</td>
<td>2.17</td>
</tr>
<tr>
<td>Service</td>
<td>3.55</td>
<td>4.10</td>
<td>3.28</td>
<td>3.96</td>
<td>5.53</td>
<td>6.40</td>
<td>6.32</td>
<td>6.47</td>
<td>6.63</td>
<td>5.73</td>
</tr>
<tr>
<td>GDP (at producer prices)</td>
<td>3.74</td>
<td>3.34</td>
<td>3.24</td>
<td>4.47</td>
<td>5.41</td>
<td>7.02</td>
<td>5.90</td>
<td>6.22</td>
<td>6.75</td>
<td>6.06</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, Bangladesh Economic Review, 2014, p-22 (Bangla Version)

According to the GDP data released by BBS, in 2010-11, the contribution of manufacturing sector to GDP is 30.33 per cent, but this share was only 17.31 per cent in 1980-81. It is evident from Table 1 that steadily the structural transformation in GD2 is taking place, the contribution of agriculture is decreasing and that of industry is increasing, virtually it has become double in the last two decades.
Among the fifteen sectors identified for computing national income, the broad industry sector includes five sub-sectors such as mining and quarrying; manufacturing; construction; electricity and gas; and water supply. Among the sub-sectors, the contribution of manufacturing sector is highest. According to the GPD data released by BSS, in FY2010-2011, the contribution of manufacturing sector to GDP is 18.41 per cent (planned), which is .47 per cent higher than last year (17.94 %). The Table 3 shows the size and growth performance of the manufacturing sector (in segregating form such as small & cottage and medium-large) in the country’s GDP from FY 2002-03 to FY 2011.

Table 3 Size and Growth Rate of Manufacturing Sector

(At constant prices of 2005-06) 

<table>
<thead>
<tr>
<th>Industry</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small &amp; Cottage Industry</td>
<td>20039.0 (8.17)</td>
<td>21176.0 (5.67)</td>
<td>22569.1 (6.58)</td>
<td>24557.9 (8.81)</td>
<td>261794 (6.60)</td>
</tr>
<tr>
<td>Medium &amp; Large Industry</td>
<td>79631.4 (6.26)</td>
<td>88475.3 (11.11)</td>
<td>97998.3 (10.76)</td>
<td>108436.2 (10.65)</td>
<td>118364.0 (9.16)</td>
</tr>
<tr>
<td>Total</td>
<td>99670.9 (6.65)</td>
<td>109651.4 (10.01)</td>
<td>120567.4 (9.96)</td>
<td>4113299 (10.53)</td>
<td>144543.8 (8.68)</td>
</tr>
</tbody>
</table>

Source: Same as above Table- 1, p-108 (Figures in the parentheses indicate rate of growth)

As envisaged in Vision 2021, Bangladesh will have, by 2021, a dominant industrial sector where it will account for at least 40 per cent of the gross domestic product (GDP) with a capacity to absorb 25 per cent of the workforce. The goal of development strategies of the government is to keep the contribution of the industrial sector to the GDP on increase gradually. The structure of the industrial sector will be consistent with the comparative advantage of the economy, which will make the sector globally competitive. From Table-2 it appears that in 2004-05 the growth rate was high and it was comparable to that of medium and large industries, but the growth rate is declining. The causes of such a situation deserve careful investigation, because this is adversely affecting the opportunities of large number of rural in their present and prospective employment generation. Viewed from the stand of poverty alleviation, all such attempts of men and women's entrepreneurial efforts should get supports, because any setback will hit them hard.
Again, such a move will contribute to total performance of industries.

Since our interest lies in SMEs, let us try to find out the position and contribution of SMEs in the industry sector. SMEs are now playing an important role in the value addition of the economy and there by helping the economic development of the country. It provides employment of millions of men and women, sources of technological innovations and new products make easy entry as well as exit of SMEs make economics flexible and competitive and also work as sub-contractors of large companies. It also creates value addition to local price and can establishing forward and backward linkages. It should be noted here that we find mobility and occupational transformation of rural economy in Bangladesh such as demographic transition, human capital, and increased mobility from farm to non-farm occupations. During the last two decades tenancy market has expanded. The daily wage contract has changed drastically transplantation and operations are increasingly being done on contract basis. Daily wage rate has also increased substantially. Because of the increase in cost of production, commercial operation ensuring fair prices of products playing dominant role. Agricultural activities are now being done on commercial basis. Many erstwhile agriculturalists have switched over to industrialists. Most of the metropolitan cities and some district-towns are now humming in varieties of industries. Service sector, compared to other sectors has expanded in Bangladesh. However, the more our SMEs come forward, the expansion of medium initially, and ultimately large industries’ dominance’s will be evident in the contribution of GDP. In Table-1 such a trend in seen, where contribution of industries, compared to situation1980-81 has almost become double, so to say. Table-4 shows Quantum Index of Production (QIP) is an important tool for measuring the production performance of manufacturing industries, QIP (2005-06=100), representing medium to large scale industries rose to 127.47 compared to 108.76 in 206-07. In 2013-14 QIP stood to 205.45 (up to December 2013).

Table-4: During 2006-2007 to 2013-14 FY Quantum Index of Production from Medium to Large industries (2005-06=100)

<table>
<thead>
<tr>
<th>Index of large industries from medium industries</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14 *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>108.76</td>
<td>117.50</td>
<td>127.47</td>
<td>135.01</td>
<td>157.89</td>
<td>174.92</td>
<td>195.19</td>
<td>205.45</td>
</tr>
</tbody>
</table>

Source: As earlier tables, * up to December, 2013, p-109

It may noted here that, of late, only recently, both government and the private bodies and the individual entrepreneurs, particularly educated youth, especially women entrepreneurs are coming forward to the realm of enterprise and taking
adequate. SMEs are more suitable for women folk, because its environment is befitting to their requirement, culturally convenient, and acceptable socially. This is the beginning and we will have to go long way, face challenges both home and foreign. Bangladesh Economic Report -2013 (pages 109-10) has recorded a large number of steps that has been takes to boost-up SMEs, but many of these steps deserve speedy implementation.

Small and Medium Enterprises-SMEs are considered as he most promising sector for employment generation and the solution of unemployment. It has been observed that in the present context of Bangladesh among the four agents/factors, the most crucial entrepreneur and by and large because of paucity of adequate of number of entrepreneurs, our industrialization and commercialization of agriculture is progressing slowly. The present education system creates excessive prone to seek employments even for petty jobs, whereas if our educated youths are guided and motivated to opt for entrepreneurial career, if they are encouraged and adequate support are ensured, the growers can be ensured adequate and reasonable prices of their products, many of these products will capture foreign markets, and earn more foreign exchange. In the whole process, female participation will multiply, because SMEs suit them more.

Many agricultural products which were at one time used to meet the local demands are now being exported. These items are vegetables, fruits, fish etc. Research on high-yielding varieties of agricultural products has opened new doors for exporting these to various neighboring countries and many other countries and also countries where there is high concentration of Bangladeshis. The farmers expect better prices for their products. On the other hand, the scope of expansion of SME in agro-based sector is more prospective. We believe that efforts of boosting up exportable agricultural products and that of expansion of SME should be supportive to each other. Unfortunately the lack of data makes it very difficult to understand the role of SMEs, especially small industrial enterprises (Sixth 5 yr. Plan p-106).

An overwhelming majority—98 per cent of establishments—are micro units having less than 10 workers. Only 13 per cent are in manufacturing and remaining 87 per cent are involved in trade and services (as evident from a report of Survey published in 2005). Within manufacturing, 58 per cent of the enterprises are in the category of SMEs (less than 50 workers) employing about 20 per cent of the total manufacturing labor force.

**Performance of SMEs**

The target of achieving double digit growth hinges largely on the performance of the small and micro enterprises. So far SME enterprises have contributed only about 5.2 per cent to the GDP in 2008-9 and this share has not increased much over the last decade (Table-5).
Table-5 Contribution of Large & Medium scale and Small Scale Industries to GDP (%), (base year: 2005-06)

<table>
<thead>
<tr>
<th>Year</th>
<th>Large &amp; Medium Scale Industry (%)</th>
<th>Small Scale Industry (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-2007</td>
<td>13.36</td>
<td>3.29</td>
<td>16.64</td>
</tr>
<tr>
<td>2007-2008</td>
<td>13.55</td>
<td>3.33</td>
<td>16.87</td>
</tr>
<tr>
<td>2008-2009</td>
<td>13.71</td>
<td>3.39</td>
<td>17.10</td>
</tr>
<tr>
<td>2009-1010</td>
<td>13.74</td>
<td>3.46</td>
<td>17.20</td>
</tr>
<tr>
<td>2010-2011</td>
<td>14.32</td>
<td>3.43</td>
<td>17.75</td>
</tr>
<tr>
<td>2011-12</td>
<td>14.86</td>
<td>3.42</td>
<td>18.28</td>
</tr>
<tr>
<td>2012-13</td>
<td>15.49</td>
<td>3.51</td>
<td>19.00</td>
</tr>
<tr>
<td>2013-14 prov.</td>
<td>15.93</td>
<td>3.52</td>
<td>19.45</td>
</tr>
</tbody>
</table>

*Source: Bangladesh Economic Review, Ministry of Finance, GOB, 2014, p-290*

**Sectorsal Performance**

SME now occupy an important position in the national economy of Bangladesh. They account for about 45% of manufacturing value addition, about 80% of industrial employment, about 90% of total industrial units, and about 25% of the labor force. Their total contribution to export earnings varies from 75-80%. The total number of SMEs is estimated at 79754 establishments, of which 93.6% are small and 6.4% are medium. The 2003 Private Sector Survey estimated that about 6 million micro, small, and the medium enterprises defined as enterprises (MSMEs), with fewer than 100 employees, which contributed around 25 percent of GDP. About 60 to 65 percent of SMEs are located outside metropolitan areas of Dhaka and Chittagong. SMEs have a easy access to labor in these non-urban areas, where business environment is better than congested urban centres and business costs are also low.

Although, the contribution of Small Scale Industries (SSIs) to GDP has remained almost static for more in earlier period, and showed a steady upward growth in recent years (Table-4). Lila Rashid (2013) in her study on the review of policies and programs for promoting youth employment and enterprise development in Bangladesh, provided a number of suggestions including ‘best practices’, which deserves our attention.

It is felt now that before taking up any development scheme of any sector, SME
Foundation earlier took a right step for a comprehensive study for six key sectors, covering their various aspects and has prepared by on the basis of a survey carried out in 2006/2007. But the situation is changing, so under the present context, another study is needed for an insight in to the issue which is essential for formulating policies and its implementation. The sectors included in the study were:

1) Agro and Food Processing,
2). Designer goods,
3). Electrical and Electronics,
4) Leather and leather goods,
5) Light engineering,
6) Plastic.

In case of modern sectors like industries which is in competition with many other countries, the relevance of study depends on current situation and its analysis. Some more areas where there is demand may be considered for inclusion in the proposed study.

SMEs annual contributing to the national GDP is remarkable- 20-25% of the total in 2003 and then we find an increasing trend. Although manufacturing enterprises consisted of 18.41% of the number of SMEs, their contribution of SMEs to GDP was highest in the sectoral contribution (Table-2). This fact gives birth to speculation that there is large untapped market in the manufacturing sector which can be exploited and will contribute significantly to the GDP.

5. How is SMEs employment- generation friendly?

Under the present context of Bangladesh, among the various development objectives, more emphasis should be given to expand employment generation opportunities among others. Theories of development economies with surplus labor/manpower and a dual economic structure points out that the process of development involves a transfer of labor from traditional economic activities characterized by lower level of productivity to modern sectors with high productivity. With the aim of existing the surplus labor in the traditional sector in the shortest possible time, what is needed is that the modern sectors need to be reorganized under carefully chosen policies and programs so that it can absorb labor at a highest rates. There lies the importance of the degree of employment intensity growth in modern sectors. In other words, modern sectors need to achieve rapid economic growth in output and employment simultaneously. The question that comes to our mind: how much our economy is ready for that? An well-designed survey is needed to be conducted to opine how traditional low productivity is changing towards higher productivity modern sectors in Bangladesh?
However, in this connection let go back to Table-1 which indicates that during last two decades, the pattern of structural change in the Bangladesh economy continued to similar to what one can observes: a decline in the share of agriculture and an increase in the share of manufacturing. Of course, it may be mentioned here that A R Khan (2007) has shown that average annual rates of growth for the small scale industries had been able to reverse the declining trends in their rates of growth during 2000-06. (as shown in his study in Table—4.1, p-44). If such rates of growth are compared with those of large scale, small-scales did fairly better. Average annual rates of growth, during 1995-2000, large scale industries achieved 5.5% whereas small scale 5.9%, again during 2000-2006 large scale 7.4% whereas small scale 7.8%. It is only after 2006, the average annual rate of growth of large scale manufacturing has exceeded those of small scale manufacturing. But why it happened so? An investigation may give us clue to such a declining trend and the nation can take proper steps to uphold the status of small scale manufacturing. An explanation has been given by Rizwanul (2007), who has characterized this shift as ‘symptomatic of the pattern of growth of industries that has unfolded since the introduction of economic reforms and trade liberalization since the 1980s.’ He also asserted that the small scale sector appears to have been one of the major losers in the process (as evident from Table-5). During mid 1980s Bangladesh has taken a wide ranging economic reform ostensibly to move towards a more open economy and promote economic growth through greater allocative efficiency and reliance on the market. But, if we look into the pattern of distribution of employed labor forces, it is evident that the potentiality of employment generation in small scale industries/SMEs in our country has always been high compared to other sectors. An analysis of Table-6 will clarify it.

**Table -6: Sectoral Distribution of the Employed Labor Force in Bangladesh since 1983-84 (Percentages)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>58.7</td>
<td>51.7</td>
<td>50.7</td>
<td>51.7</td>
<td>48.1</td>
<td>47.3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>8.8</td>
<td>17.0</td>
<td>9.5</td>
<td>9.8</td>
<td>11.0</td>
<td>12.4</td>
</tr>
<tr>
<td>Construction</td>
<td>1.7</td>
<td>1.5</td>
<td>2.8</td>
<td>3.5</td>
<td>3.2</td>
<td>4.8</td>
</tr>
<tr>
<td>Trade, hotels &amp; restaurants</td>
<td>11.6</td>
<td>12.3</td>
<td>15.7</td>
<td>15.1</td>
<td>16.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Transport</td>
<td>3.9</td>
<td>4.6</td>
<td>6.4</td>
<td>6.8</td>
<td>8.4</td>
<td>7.4</td>
</tr>
<tr>
<td>Other services</td>
<td>8.7</td>
<td>6.3</td>
<td>14.1</td>
<td>12.7</td>
<td>12.6</td>
<td>12.4</td>
</tr>
<tr>
<td>Others</td>
<td>6.3</td>
<td>6.6</td>
<td>0.8</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
</tr>
</tbody>
</table>

*Sources: Bangladesh Bureau of Statistics: Reports of Labor Force Survey s for various years.*
The share of agriculture sector in total employment has declined over time, but the share of manufacturing sector has not registered a corresponding increase. In this context, if we closely examine the Table-5 employed labor forces increased in sectors like trade, hotels and restaurants, transport and other forms of services. So, it can be concluded that the employment structure of Bangladesh have moved towards greater informalization.

In Bangladesh, approximately 2 million people join labor force every year. The manufacturing sector is currently capable of absorbing less than 250,000 persons (around 13 percent of the annual addition only, Rizwan, (2011). We require the expansion of manufacturing sector. In its absence the proportion of unpaid family helpers is increasing, indicating that many of the own-account workers may simply have reverted to becoming unpaid family helpers. Shafiquil (2012) has presented in his how employment is withering in Bangladesh drawing our attention to the Monitoring of Employment (Labor Force) Survey (MES) 2009, where it was found that labor force increased from 49.5 million to 53.7 million from 2006 to 2009 implying annual growth rate of 2.7%. Roughly two-thirds of the population are of age 15 years and over and out of them 59.3% are economically active. Again, because of the effects of greater women participation in labor force and also demographic dividend the aged including retired people are remaining economically active. As mentioned earlier the transformation of a peasant agrarian economy to an organized manufacturing and services economy also provides the employment base for absorbing a growing labor force into productive and well paid jobs. By and large, the transfer of the labor force from the low productive agricultural sector to marginally more productive informal service sector- rather than to modern manufacturing and service sector- negates a Lewisian transformation. It means that jobs have to be created in the modern sectors through the persuasion of appropriate policy and technology mix. Transforming Bangladesh’s agrarian economy into a modern manufacturing and service based economy is a long-term challenge. A faster rate of growth of growth in GDP will require commensurate increase in the average labor productivity. Finding more productive and better paying job will require a faster expansion in high productivity, high earning sectors. International experience shows that high paying jobs are best created in manufacturing and formal services.

4. Prospects of SMEs: Present and Emerging Situation

In recent years, increasing interest in the development of SMEs is being observed among the government agencies, NGOs and individual/corporate bodies in their programs and activities. Although high population growth, lower per capita income, meager job opportunities are hindering our progress, but recently with the growth of private/corporate sector, youths are being encouraged to become entrepreneurs. Very recently a number of above organizations have started their works in motivating different sections people to become entrepreneur. The scope and
prospects of SMEs and how to take up business plan and implement them are the themes of such programs. Besides, with the introduction and strengthening of business education stream at the secondary level and at also establishment of large number private universities in Bangladesh, business studies are considered a highly demanded area; large number of graduates, after completion of their studies, are taking interest or forced by circumstances to take interest in establishing themselves as entrepreneurs. Thus, from both the channel of formal education facilities and also motivational educational programs of business houses and entrepreneurial patronizing organizations (such as, SME Foundation, MIDAS, Institute of Enterprises, BSCIC Training Institute, various Women Chambers of Commerce and Industries) and success stories as publicized by the electronic and press medias, youths are being attracted with the packages of varied options covering SMEs of varied nature. It is to be noted here that the SME foundation has started a laudable campaign for popularizing SMEs. Besides, they have published an extensive informative manual for those who are venturing new enterprises or thinking to be the owner/partner of SMEs. The national organization like Bangladesh Mahila Parishad, which possesses a large net-working facilities can take the responsibility of motivational training programs for encouraging women seeking employments.

Technological progress and innovation has paved the path of development through their innovations. For example, with the increasing success in research in agricultural field, particularly in inventing new varieties and high yielding seeds manures, fertilizers and technologies, the farmers are being acquainted with varies types agricultural products and agro-based industries are coming up in our country. Such attempts should consider the introduction of higher productivity technology under modern sectors. Production rate per acre has increased and at the same time expansion of marketing facilities both home and abroad are alluring them to take up enterprises known as SMEs products. Due to such efforts the existing product market is expanding, in some cases expansion is glaring in agro-based industries, what is required is support in various fronts both at policy and implementation levels.

In a labor surplus country like Bangladesh small and medium enterprises can play a substantial role in providing the impetus to the development of modern manufacturing sector and in the job creation outside the agriculture and informal services. Bangladesh is now vigorously putting efforts in finding markets in various countries including new ones and reaps the benefits of globalization and regional connectivity, now offing, has opened a fresh hope of taking advantage of expanding her market in India, especially in North-Eastern Indian States.

Globalization and the recent development in regional connectivity, comprising countries like China, Myanmar, Bangladesh Nepal and India and keeping Bangladesh at the hub, creating a big opportunity to expand her product market both at the regional and global level. But what is essential to achieve so is to develop our com-
petency in producing quality goods at a competitive cost. Again, under the present day context technological advancement (also innovation of appropriate technology even at the regional level) and adequate facilities of financing SME can lead to the expansion of market at desired level. Bangladesh could emerge as a transport hub for the sub-region comprising Bangladesh, Bhutan, Nepal and India. As mentioned above, the inclusion of China and Myanmar in the framework of regional connectivity will lead to reap the highest benefit. Again, that is a narrow market for Bangladeshi products. The country’s product market can be and actually spread to other parts of the world. Recently our exports market in Canada is expanding. Likewise, African countries showing interest in exporting our products.

In a country like Bangladesh, where people are having less ability in processing capital and machineries, SMEs are labor intensive with relatively low capital intensive. For a developing country like ours, SMEs are cost effective way towards reduction of unemployment. Investment cost per person employed in large industrial units work out at 78 to 100 times of those of SMEs (Mintoo 2006). When Bangladesh could not yet show acceptable performance in large scale industries and those are predominantly owned and operated by public bodies, and where total picture is a dismal one, we can solve unemployment problem in encouraging SMEs. The seasonal and disguised unemployment can also be solved to a substantial extent by SMEs. In this way we can move to medium scale industries which fit us more. Side by side we should encourage the adoption modern technology in SMEs so that our products can compete with those of our competitors.

The Poverty Reduction Strategy Paper (PRSP) of 2004 has clearly stated that poor growth is the ultimate target of its development strategies and in activities. The present government assumed power at a time when a deep seated recession was rocking the world, in spite the per capita income of the people of Bangladesh has been increasing and now it is $1180. We want to achieve the target of becoming one of the middle income countries of the world by 2021. Country’s fiscal, financial and structural conditions should be oriented towards achieving our economic goals. For smooth and sustainable development of SMEs all over the country, more emphasis should be given to develop SMEs at District and Upazila levels of the country to check flow of population to cities. Adequate emphasis be given to women entrepreneurship so that our educated girls (whose educational cost are substantially being borne from the govt.) can find employment in their own places or areas. It is to be mentioned here that today education is becoming more concerned about the prospect of availability of jobs i.e. job-oriented and for which technical and vocational education should be given more encouragement, leading to gainful employment.

With the passage of time, more and more Bangladeshi are concentrating as migrants in famous cities of various countries of the world. So, the market of Bangladeshi product in abroad is expanding. New items such as dress, boutique
products, gift items, cottage industry products, including day to day food consumption items are being exported to those countries and more and more foreign exchange (remittance) reserves are on the increase. Through this effort we are trying to popularize our cultural heritage and national identity. On the other hand, because of rapid trade liberalization particularly from 1990s and onward, and globalization, our local market has been flooded with imported goods, our exports, particularly our SMEs are unable to compete on quality or cost with the global market dominated by industrially developed countries. Now, at this geopolitical environment, Government will have to play a vigorous role in creating enabling environment, where SMEs can an entry in the markets of comparatively developing and developed countries. But again, for attaining such a goal we should be diligent, more innovative and committed for better quality products. So, we should take the advantage of qualitative improvement.

While defining development we often express its manifestation in diversification and modernization. The following discussion will bear such testimony.

5. Searching New Markets for Increasing SME Products

We can cite cases of a few products having good prospect of capturing markets and the production trends is encouraging also. The first one is jute bag products. Global consumer demand for eco-friendly products has increased in both developed market (such as Western Europe, United States and Australia) as well as new markets with emerging opportunities (such as Middle East and African countries) mainly because of heightened awareness of the ill effects of environmental pollution and global warming. It may be noted here that large chain stores are also offering alternate bags made of jute and cotton. We find prospects of diversified jute products, such as shopping bags, rugs, wall coverings, apparels, etc. Lives in rural Bangladesh is changing, people are now accustomed in using foot-wear. In various district towns of our country we find shoe –making & other foot wear factories and they require patronization for quality product and marketing facilities. Foot-wear businessmen recently are paying more attention to internal market for selling their products, because export couldn't fetch market abroad. Approximately, 16 crores of pairs of shoes are sold in the market. Middle-income people are using quality shoes. New companies are coming up new brands of quality shoes like Bata, Apex etc (Daily Prothom Alo, September12,2014).In Daily Ittefaq,September20,2014 published a news on the prospect of leather industry of Bangladesh saying that boutiques are upbeat, especially during festivals as consumers are set for a shopping spree. These products are expanding their markets inside but also various big cities of the world. There are a good number of popular boutiques in Bangladesh and they are in competition to capture markets with their artistic and creative products, which also uphold cultural heritage, and our tradition. After independence, boutique houses like Arag, Rupayan, Nipun acted as pioneers in this field. Now it has drawn the attention of many entrepreneurs, both small &medium, and the
consumers are being attracted progressively for boutique products. It is interesting to note that, according to the opinion of a well-informed entrepreneur of a boutique house, Black & White (Shada-Kalo) there are 5000 small, medium & big boutique houses in Bangladesh employing 50 lac people (directly and indirectly & also part time), investing Tk. 5 500-6000 crores, whose annual growth rate is 18-20%. (Prothom Alo, 13 August, 2011). Bangladesh is famous in producing Jamdani & Benarasi sharees and with the development of regional connectivity she can have the benefit of large markets. India can be a big market for these products. Likewise, home textile mill products have a good market. The weavers, designers, craftsmen, sellers, even part-time sellers like students, are getting job opportunities in their respective fields. It is interesting to point out here that Sataranji (mat) of Rangpur district is being exported to 36 countries (Daily Prothom Alo, July 23, 2014). Similarly, in spite of suspension of GSP by USA, plastic industry has been doing well and now 70% of the products are being exported in European Union (Daily Prothom Alo, July 16, 2014). Earlier, Daily Prothom Alo, May 19, 2014 published a news that Bangladesh has the potentiality of exporting leather products to the tune of $1600 crore in ensuing ten years. Because of increase of wages in China and also as EU is imposing anti-dumping levy, Bangladesh can take the advantage of shifting of leather product market deserted by China. In many cases, Bangladesh should be ready to take advantages of capturing various product-markets deserted by both China and India or any other country moving to superior technology.

It may be noted here that, in December 2010 Govt. of Bangladesh has published a new Industrial Policy. In the beginning of the chapter devoted to the promotion of SMEs, it refers policy strategies for development of SME in Industrial Policy 2005 and its salient parts. In the Industrial Policy- 2010 it says that “The Government recognizes SMEs as vehicles of life improvement, economic growth and poverty alleviation of the common people. The primary role of the Government shall firstly, be that of a facilitator removing policy obstacles and neutralizing market failures and, secondly, providing necessary promotional support.” In the policy eleven broad objectives of SME policy have been very carefully described which deserve appreciation. Then SME action plan and the role of SMEs in PRSP M & E (Monitoring and Evaluation) indicators of SME sector have been pointed out. What is lacking is detailed programs- who are interested to know who would /should undertake the program (under what incentives). What are facilities to be provided to the entrepreneurs? Of course, both the objectives and action plan have been drawn taking into consideration the latest situation prevailing in the country, even issues of FDI and ICT, fiscal policy etc. In the objectives part and caution of enabling environment, easing regulatory barriers, easy access to information, providing incentives, quality and standards of SME products, women entrepreneurship, strengthening institutions, capacity building etc have been emphasized. It is high time that we would be taking up appropriate actions on materializing the above goals. Special fiscal and financial facilities including tax exemption, exemp-
tion from dual taxation, tax holidays, tax at a reduced rate or accelerated depreciation may be considered for SMEs.

In January 2010, visit of Bangladesh Prime Minister to India and in September 2011 the visit of Indian Prime Minister to Bangladesh clearly reveals that there is a great benefit in the two countries working very closely together on win - win basis and a number memorandum have been signed to materialize the goals. Both the countries should be greatly concerned that South Asia’s eastern regions have lower level of development than the already low South Asian average development. Till 1947 this part of the undivided India, Bangladesh and India’s northeast region was always an integrated political, economic and cultural space. As a pioneering region in India’s industrialization, this region was the country’s richest and prosperous region. If this region’s enormous resources, both natural and human, are to be unlocked, both India and Bangladesh can be benefited. These will open doors for this region to once again play a leading role in South Asia. Bangladesh’s growth can be accelerated by participating and cooperative within the region. Opportunities of enhance trade, transport and investment will help improve the country’s infrastructure tremendously, which will also create a huge employment in different sectors and benefit the country in the long run. In this connection we can cite the comment of executive director of Centre for Policy Dialogue (CPD) Bangladesh exported goods worth $ 512 million to India in fiscal 2010-11, of which $70-80 million were destined to the northeast states.(The Daily Star, 29 August, 2011). It may be noted here during the year 2010-11 the trade deficit of Bangladesh and India was $ 407 crores 40 lakhs (import from India was $ 458 crores 60 lakhs, whereas export to India was only $ 51 crores 20 lakhs Prothom Alo, 14 November, 2011). Although there are doubts over the benefits of free trade agreement (FTA), Sanjay Kathuria, lead economist of WB, forecasts that it will raise Bangladesh’s export by up to 133 percent to India (Daily Star, August 3, 2012). Frequently, we hear in press and electronic media on the historical importance and prospects of India-Bangladesh trade, but in reality the achievement is meager. Daily Prothom Alo, June 27, 2014 published a news that during ensuing four years, the volume of bilateral trade (which is $660 crore) would be double as expressed by eminent and business leaders of both the countries. Since in FY 2013-14 Bangladesh’s import was $610 crore, whereas her export was only $46 crore 20 lac (i.e. deficit is $550 crore), it has become an imperative duty how to lessen such deficits. We may suggest two approaches- first to scrutinize the import list and try to lessen the volume, which is possible in cases of sugar, food-stuff, fish, salt and cement, for example; and secondly maximize the export volumes of raw-jute, jute products, frozen food, agricultural products, RMG, neat wear, SME products, tea, dress and jamdani saree and many other household utensils.

There have been many analyses on why the industrial sector as a whole in Bangladesh has remained in dormant state. In 1996, the Federation of Bangladesh Cham-
bers of Commerce and Industries (FBCCI) had conducted an empirical study to find out the constraints to industrial sector growth and investment as perceived by industrial entrepreneurs and businessman of different classes. A summary of this findings as constraints to industrial sector growth are mentioned below:

a) Regulatory reforms, b) Collaboration between the government and the private sector, Industrial credit policies, c) Legal framework, d) Customs clearance, e) Work of the promotional agencies, f) Law and order, Labor relations and h) Problems regarding the power sector.

**Major Constraints Faced by SMEs in Bangladesh**

It is important to understand the operational strengths and weaknesses of the SME sector for pragmatic policy making and effective implementation of such policies. Given an excessive heterogeneity and almost a bewildering diversity in the type, composition and characteristics of the members of the SME facilities it is exceedingly difficult to have any precise diagnosis of their operational constraints. Over the years many studies have been carried out to identity the operational bottlenecks encountered by the SME entrepreneurs. One of such studies was done by Sarder, J. (2001) based on a small sample of 19 entrepreneurs, and the second one by the Sixth Five Year Plan FY 2011-2015. A comparison of their findings shows that both of them identified almost similar problems, such as, lack of capital support, lack of modern technology, inability to market product, inability to maintain product quality, lack of skilled technician and workers, high rate of interest on bank loans, inadequate and irregular supply of electricity, unavailability of appropriate infrastructure facility, inadequate policy reforms, law order situation, political instability leading to frequent strikes, illegal imports and non-tariff barriers, etc. Bangladesh Enterprise Institute and National Taskforce on SME Development in their reports came out with a number of recommendations, but as yet many of them couldn’t see light of the day.

**Identification of selected Booster (Thrust) Sectors among SMEs**

SMEs are considered the engines of growth in developing countries, including Bangladesh. The past two decades has witnessed notable commercial expansion and dynamism in this sector. SMEs in Bangladesh are highly cost-effective route to industrial development. The SMEs are responsible for giving birth to 60 percent of the new industrial enterprises during 1980s (Ahmed M.U-1992).

SME sector itself has been identified as one of the 33 thrust sectors in the Industrial Policy 2005. The major categories of business that falls under this category in Bangladesh are textile, frozen foods, leather, electronics, ago-based business, information technology, ceramic items, light engineering etc. Some sectors are more eligible for public intervention than others and thus the National Taskforce on Development identified 11 sectors among SMEs as booster sectors. These
sectors have been selected to provide a boost to their growth rate.

The following 11 booster sectors have been identified by the Government in the ‘Policy Strategies for Development of SMEs’ for promotional support and are scheduled for review every three years.

**Booster Sectors (in Industrial Policy- 2005) and Thrust Sector (in Industrial Policy-2010)**

1. Electronics and electrical
2. Software development
3. Light Engineering and metalworking
4. Agro-based Industry
5. Leather-making and leather goods
6. Knitwear and ready-made goods
7. Plastic and other synthetics
8. Healthcare and diagnostic
9. Education services
10. Pharmaceuticals/cosmetics/toiletries
11. Fashion-rich personal effects, wear and consumption goods.

As many as 32 sectors have been identified in Industrial Policy-2010. Many of them are common in both policies. Recently, Ferdous Ara (2012) in search of new sector new opportunities identified and discussed 5 sectors, namely-Agribusiness, Shipbuilding, Plastic, Furniture and Home Textiles. Although Bangladesh still is an agriculture dependent country, but her agribusiness exports are not very high (352 mn US in FY 2010-11) and exports are growing at a faster rate of 27 % in the last two fiscal years. Bangladesh’s agro- exports are mainly fresh products since main items are fruits, vegetables, flower and tobacco. The sector needs to attract investment in terms of processing units, enabling products to amplify shelf lives and diversify into various secondary outputs from the same primary product. And aside exports aside, the current domestic market size is around 4.5 billion already, and is expected to grow to 8 billion USD by 2020.

6. **Structure and Growth of Exports and Imports of Bangladesh**

In this age of globalization the tendency of more and more economic integration among nations is usual phenomenon. All the countries irrespective the rich countries like USA and developing countries like China and India, all are putting their best efforts to capture markets, both home and abroad for their products. Although Bangladesh is nowhere a match with them, yet in the face of global recession,
especially when depression prevailing in export markets such as USA and Euro-
pean countries, she is maintaining steady economic growth and very recently a
number of big countries like China, Russia, Germany, Canada, North Africa and
many countries showing interest in exporting Bangladeshi products.

China and India, immediately after liberation from foreign subjugation, started to
build their self-reliant economy. But the then United Pakistan period, she could not
afford so, rather persuaded the export-led economy. After the creation of Bangla-
desh, there was no other option left for her. Trade is recognized as an engine of
economic growth and an integral part of development of our country. In various
studies it reveals that in Bangladesh significant potential of exports has remained
untapped in bigger markets. Eventually mainstreaming trade into development
agenda has assumed an important space in the policy and plan documents of the
country over the years. In our efforts to capture markets in various countries, we
shall try to assess the trade pattern and specialization of Bangladesh in terms
seeing whether trade pattern corresponds to the development needs of the country
and changing world economic situation and demand pattern and see whether trade
pattern could capture the evolving global trade opportunities and could bring about
necessary structural change of trade for accelerating development of the country.

Foreign trade is of vital importance to the economic growth of Bangladesh. The
country’s import needs are large and in order to finance those imports, the govern-
ment, since liberation, has been trying to enhance foreign exchange earnings
through planned and increased exports. At present, Bangladeshi major exports
items are ready-made garments, raw jute, jute goods, tea, leather and frozen foods.
The main import items of Bangladesh are machinery and transport equipment,
petroleum and petroleum products, textile yarn fabrics and made up articles and
related products, chemicals, iron and steel and fertilizer.

Viewing the structure and growth of exports, only nine countries constitute stably
75% of exports of Bangladesh during 1991-2010 increased from 38% in 1981-85.
Share of other countries than these nine countries have declined from 62% in
1981-85 to 25% in 2006-10. In the period of 1996-2005, share of other countries
was abysmally lower at 19% only. The country like USA alone account s for 25%
only. Three European countries-UK, Germany and France taken together buy 25%
of our total exports products. Diversification of export needs, with a greater
emphasis on SM industries products both in neighboring and developed markets is
a possible option to pursue. In this respect the most priority countries where we can
explore markets are China, India, Brazil, Russia (BRIC countries), Middle- East,
Africa and Korea and emerging D-8 countries. Expansion of demand of the market
destinations should be product specific as per their unmet demands and low level
of competition from within and outside. Of course, some changes in the countries
interested in buying of our export-items has been noticed and more changes are
offing as we presume. For example, for RMG export market we were dependent on
USA, but recently is observed that our bigger market is now in countries belonging to European Union. For example, in RMG export from Bangladesh in the FY2012-13 our export was $499.66 crores and in FY 2013-14 it increased to $514.14 crores only, whereas such export to EU countries during the period increased from $1256.48 crores to $1474.54 crores, showing an increase of 17.4% (the Daily Star, October 22, 2014). Once we can start implementation of trade agreements with neighboring countries-India, China, Nepal, Bhutan, Myanmar, Sri Lanka and Maldives, it is expected that the demand of our non-traditional items (SME products mostly) will increase which will bring some changes not only in the composition of exports, but will lead to poverty alleviation substantially.

At the end of our discussion, it may be noted that the draft Industrial Policy-2015 has been published on October 22, 2014 in a number of daily newspapers and most noteworthy to mention here is that the contribution of industries in GDP would be elevated to 40% from the present 32% by 2021. Similarly, total labor force employment would be raised from existing 20% to 32% during the same period. It is to be noted here is that SME Foundation has taken the target to build 100 cluster industries in our country and 100 entrepreneurs would be trained for that purpose. Recently, HSBC has awarded five exporters for their leadership in promoting the country and contributing to its sustainable economic growth. The inclusion of Agro Kagri commodities in the small and medium enterprises category deserves our admiration. Agro Kagri (Chittagong based) exports potatoes to countries such as Malaysia, Singapore, Brunei, Sri Lanka, Senegal and China. More and more such categories of enterprises should come out in Bangladesh. It may mentioned here in through micro-credit we are producing a large number of small entrepreneurs and they are contributing to GDP of Bangladesh. One of the top financial institutions, namely City Group (Chittagong-based) has established a City Foundation, which taken a laudable venture in awarding prizes for the small entrepreneurs under five categories, such as, best innovative micro-credit organization, best micro-credit providing institution, best agricultural micro-credit institution, best female micro-credit entrepreneur, and best agricultural entrepreneur. We expect that many other organizations will venture such encouraging attempts for creating impetus in our small entrepreneurs.

7. Conclusions & Recommendations

SMEs are playing a vital role for country’s accelerated industrialization and economic growth, employment generation and reducing poverty. SME can reduce the urban migration in capital and big cities (which have already taken acute shape in metropolitan cities), increase cash flow in rural areas, and thereby enhance the standard of living of the rural people.

Not withstanding its importance, the performance of SMEs in Bangladesh has
been significantly below the performance at the international level. Only recently the realization of the importance of SMEs is marked. The Bangladesh Bank is also putting stress on the development of SMEs. It is interesting to note here that very recently United Commercial Bank (UCB)’s managing director plans to move away high-risk corporate lending and towards small and medium enterprises. ‘They will bring to forefront the sectors that are production-oriented, that generate employment and GDP growth’ (The Daily Star, December 24, 2013). In promoting, developing and making SMEs sustainable, Government should give more focused attention on the following areas:

1. Development of infrastructure both physical (roads, bridges, culverts, i.e. communication, power and internet availability etc.) and social (education, training, motivation, HRD programs, awareness-building and social mobilization) are essential. Motivating the entrepreneurs through training and acquainting them with new technologies related to SME development and making them aware of foreigners’ demand can go long way in solving various problems in finding markets.

2. Uninterrupted supply of raw materials, financial support scheme, reducing the bank interest rates for rural entrepreneurs with affordable collateral amounts should be available for them. In other words, making the entire terms, conditions and loan processing easier for entrepreneurs of SMEs.

3. Through government initiative, NGOs of Bangladesh can play important role in motivating, organizing and financing various enterprises. They will act as social change agent for commercial ventures. They can act as intermediary bodies between borrowers and government and other supporters. Special programs can be taken for women entrepreneurs.

4. Similarly, through Digital Bangladesh programs (wave pages exclusively), for information on various issues related to SMEs should be available for decision makers and materializing programs undertaken.

5. Government needs to take appropriate measures to fix minimum salary/wages of the employees of SME, especially for those who have technology including IT background.

6. The sectoral composition of growth has to change in favor of a much higher share of modern manufacturing and organized services sectors to create a more rapid expansion of good jobs.

7. The employment responsiveness of growth in manufacturing (both in SMEs and large scale) needs to increase to absorb increasing labor.

8. SME Foundation should encourage research i.e. idea generation, availability of data, development of appropriate technology and making use of those findings through ICT throughout the country. For availing such opportunity,
wide spread computer education facilities should be created in the rural areas, especially for women entrepreneurs.

Quality improvement and marketing facilities available (even solving the problems which might crop up) through such research can be of much helpful for them. A sufficiently large sample survey should be carried out to generate a bench-mark national level data base for formulating comprehensive policies for the sector.

9. In the proposed SME development policies, specialized institution can support in 3 areas, namely:

   a) Finance, b) Innovation of appropriate technology and its transfer and c) Skill development (capacity building).

Such organization(s) can uphold and develop our identity, make our products popular in market and help for survival in this era of intense competition, continuous planning and quality improvement.

10. The concept of PPP (Public, Private, Partnership) and joint venture with foreign counterparts can also be introduced here for encouraging our entrepreneurs, overcoming the paucity of invest able and acquiring modern technology to usher a new era of SME development in Bangladesh.
References


Chowdhury, Masuda M. Rashid 2008, “’Business Support and Marketing Communication: Gender Perspective for SME Development in Bangladesh”. 2nd National SME Women Entrepreneurs Conference, p 27-44


Khan, A R, 2007,’Is Bangladesh Poised to be Launch on East-Asian Development Path?’, Quazi Shahbuddin and Rushidan Islam Rahman(eds.) Development Experience and Emerging Challenges BANGLADESH,UPL

Khatun, F. 2010, Development of Small and Medium Enterprises in Bangladesh, A Study on SME Foundation, Osder Publications


There have been many analyses on why the industrial sector as a whole in Bangladesh’s import was $610 crore, whereas her export was only $660 crore in ensuing four years, the volume of bilateral trade (which is $407 crores) would be deficit of Bangladesh and India was $ 407 crores 40 lakhs (import from India was $70-80 million were destined to the northeast states. It may be noted here that the contribution of industries in GDP would be increasing. This is evident from the Table-2.

Although, the contribution of Small Scale Industries (SSIs) to GDP has remained low.

Table 1: Micro and Small Enterprise

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of SSI Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro and Food Processing</td>
<td>60%</td>
</tr>
<tr>
<td>Textile</td>
<td>30%</td>
</tr>
<tr>
<td>Leather</td>
<td>10%</td>
</tr>
</tbody>
</table>

With the passage of time, more and more Bangladeshi are concentrating as products, which also uphold cultural heritage, and our tradition. After independence, Bangladesh is now vigorously putting efforts in finding markets in various countries such as Malaysia, Singapore, Brunei, Sri Lanka, Senegal and China. More and more countries are interested in our products, such as shopping bags, rugs, wall coverings, apparels, etc. Lives in rural parts of the world.

To encourage rural employment generation, appropriate policies and actions at various level for accelerating development and encouraging entrepreneurship.

For the economic development of Bangladesh we should take note of the existence of SMEs. This is evident from the Table-2.

Note: A small business, therefore, includes a one-person business, where the business owner and manager is one and the same.

References

Rizwanul Islam 2007, *What Kind of Economic Growth is Bangladesh Attaining?* Quazi Shahbuddin and Rushidan Islam Rahman (eds.) Development Experience and Emerging Challenges Bangladesh. UPL

----------2011.“How Inclusive Has Economic Growth Been in Bangladesh?” Abdul Bayes (edt.) Bangladesh at 40 Changes and Challenges, A H Development Publishing House.


World Bank and Small Enterprise Development Facilities, December 2003

Bangladesh Development Policy Review, Report No. 26154BD.
Bangladesh is now vigorously putting efforts in finding markets in various coun-
tries where there is high concentration of Bangladeshis. The farmers expect better
prices for their products. This will not only improve the farmers' income but also
earn more foreign exchange. In the whole process, female participation will multi-
ple. Also, the demand of our non-traditional products is increasing rapidly in the
day context technological advancement (also innovation of appropriate technology
for numerous purposes). SMEs, with their innovative and flexible nature, can
play an important role in this field of new market development. As such, the
government is putting special emphasis on SM industries products both in neigh-
boring and developed markets is recognized as a priority. Moreover, according
to WTO rules, it is important to understand the operational strengths and weak-
nesses of the SME sector itself has been identified as one of the 33 thrust sectors in the Industrial
Policy- 2010 it says that “The Government recognizes SMEs as vehicles of life improvement, economic growth and poverty
reduction. In this way we can move to medium scale industries which fit
the benefit of large markets. India can a big market for these products. Likewise,
Bangladesh is now vigorously putting efforts in finding markets in various coun-
tries where there is high concentration of Bangladeshis. The farmers expect better
prices for their products. This will not only improve the farmers' income but also
earn more foreign exchange. In the whole process, female participation will multi-
ple. Also, the demand of our non-traditional products is increasing rapidly in the
day context technological advancement (also innovation of appropriate technology
for numerous purposes). SMEs, with their innovative and flexible nature, can
play an important role in this field of new market development. As such, the
government is putting special emphasis on SM industries products both in neigh-
boring and developed markets is recognized as a priority. Moreover, according
to WTO rules, it is important to understand the operational strengths and weak-
nesses of the SME sector itself has been identified as one of the 33 thrust sectors in the Industrial
Policy- 2010 it says that “The Government recognizes SMEs as vehicles of life improvement, economic growth and poverty
reduction. In this way we can move to medium scale industries which fit
the benefit of large markets. India can a big market for these products. Likewise,
The Potential and Constraints of the Exports of Environmental Goods (EGs): the case of Bangladesh

Md. Rajibul Ahsan*
Son Ngoc Chu*

Abstract: Although the economic importance of environmental goods (EGs) is on a rise with increasing focus on global climate change issues, it is surprising that export growth of environmental goods is witnessing a downward trend in developing countries compared to developed countries. Researchers are divided over explanations for possible reasons: while some argue that lack of technological availability and insufficiency of the technology transfer isolate developing countries from the world market; others contend that country-specific ‘behind the border’ constraints prevent these countries from fully exploiting their export potential. This paper examines the potentials and constraints for Bangladesh EGs exports by applying a stochastic frontier gravity type model. The estimated results show that Bangladesh remained far from reaching its export potential during 2001 and 2007 despite there being an increased level of realization with the East Asian economies. The results also suggest that reducing ‘explicit beyond the border’ constraints by partner countries aided Bangladesh in attaining positive export growth between 2001 and 2007.

Key Words: Environmental goods, Bangladesh, ‘behind the border’ constraints, ‘beyond the border’ constraints, stochastic frontier gravity model.

1. Introduction

The nexus between international trade and the environment has raised concern among policymakers across the globe in recent times. While trade promotes economic growth, trade expansion contributes to a higher level of greenhouse gas emissions, harming the environment through inducing climate change. The effects of climate change are more pervasive to developing countries. Evidence shows that temperature increase by 1 degree Celsius in a developing country leads to a 2.0

* The authors are respectively Upazila Nirbahi Office (UNO), Madaripur, Bangladesh and Research Associate, Crawford School of Public, The Australian National University, Australia
to 5.7 percentage point reduction in economic growth (Jones & Olken 2010, p. 1). Hence, in order to achieve the green growth, countries are now focusing on imposition of environmental regulations on their trading partners on the one hand and higher production and consumption of environmental goods (henceforth, EGs) on the other. Statistics show that exports trading of global EGs has increased from US$ 323 billion in 2001 to US$ 937 billion in 2012 (WITS 2014). One feature of EGs trading is that it is highly concentrated on developed nations. It is reported that 90 per cent of the EGs industry is located in OECD countries (Tamiotti et al 2009, p. 61). Therefore, enhancing exports of EGs is considered an option for developing countries to reduce environmental degradation while maintaining economic growth.

The discussions on EGs at the international level first came forth at the Fourth WTO Ministerial Conference in 2001 where WTO-members were agreed on ‘the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services’ (WTO 2014). The literature on EGs mainly focuses on two issues. One is the definition of EGs surrounding the effectiveness of different lists of EGs placed by WTO-members and international forums like the OECD, APEC and the World Bank. The other is liberalizing trade in EGs. With a number of lists WTO members have failed to reach a consensus on preparing a single list till to date. To avoid the definitional complexities, Yoo and Kim (2011) suggest minimizing the product list and including some agricultural EPPs to bring all members of the WTO to the negotiation table (p. 601). Ballineau and Melo (2013) review the level of tariff reductions in EGs over 1996-2010 and identify that low-income group countries are maintaining the highest protection on EGs trade (p. 22). Khatun (2012) analyses Least Developed Countries (LDCs) to explore whether liberalization on EGs takes place and finds a lower chance of LDCs for opening up their EGs sector (p. 179). Khatun (2012) also reckons that the potential benefit of LDCs may accrue in the long run if FDI and technology transfer take place in the right form through liberalization of trade (p. 179). By conducting an econometric analysis, Schmid (2012) calculates that a 10 per cent increase in the applied MFN tariff rate on EGs follows a 3 percentage point decrease in the likelihood of technology transfer (p. 19).

Research on determining the factors of EGs export is very few. Jha (2008) examines the underlying determinants that explain the trade flow of EGs in the developing countries and finds the economic size of the country (GDP), foreign direct investment (FDI), national environmental performance indicators, tariff and technical assistance project are statistically significant (p. 22). Nguyen and Kalirajan (2013) analyze the data of EGs in India during the period 1996-2010 using the stochastic frontier gravity model and found that ‘behind the border’ constraints and ‘implicit beyond the border’ constraints have dominant negative effects on the

---

2 Doha Ministerial Declaration, paragraph 31(iii)
export of EGs, but ‘explicit beyond the border’ constraints appear insignificant during that period (p. 15).

It is widely recognized that Bangladesh is one of the worst victims of environmental degradation. Climate shocks such as low rainfall, droughts, floods, cyclones, river bank erosion and salinity ingress bring huge external costs to the economy. Due to the negative impacts of climate change Bangladesh is losing US$ 2.2 billion each year (Thomson Reuters Foundation 2014). It is pertinent to note that the GDP of Bangladesh in 2012 was US$ 116.35 billion (WDI 2014). Considering both economic and environmental vulnerability, Bangladesh is committed to mainstream environmental and climatic change issues into all economic processes and decisions (GED 2011, p. 195). Nevertheless, Bangladesh is not performing well on its EGs’ export, which is demonstrated by the decreasing share of EGs in total goods exports from 7 per cent in 1997 to 3 per cent in 2007 (WITS 2014). In this context, there lies an important question: whether Bangladesh has realized its export potentials of EGs fully? If not, what are the reasons and what are the possible ways out? To date, no study has been conducted for Bangladesh to explore its EGs exports. Hence, this paper aims to identify, analysing the data of 2001 and 2007, the determinants of EGs exports, export potential of EGs and underlying constraints on EGs exports of Bangladesh.

This paper proceeds as follows. Section 2 gives definitional aspects and coverage of EGs. Section 3 provides an overview of EGs exports of Bangladesh. Section 4 draws on theoretical framework and literature review. Section 5 projects empirical model and data. Section 6 describes regression results, an analysis of export potential and growth decomposition of EGs export between 2001 and 2007, and section 7, the final section, presents conclusions with policy implications.

2 Definition and Coverage of EGs

To date, no universal definition of EGs has been established. However, some multilateral agencies and experts have come up with some functional definitions for the empirical analysis of the EGs market. The Organisation of Economic Co-operation and Development (OECD) identifies those products as EGs which are used to ‘measure, prevent, limit, minimise or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems’ (OECD 1999, p. 9). According to Yoo and Kim (2011), EGs are a set of manufactured products, technologies and chemicals used in pollution and waste affecting water, soil and air (p. 582). Of late, the inclusion of Environmentally Preferable Products (EPPs) in the negotiation process of WTO has broadened the discussion on EGs. The United Nations Conference on Trade and Development (UNCTAD) categorizes two broad classes of EGs of which Type A incorporates all chemicals and manufactured products that are directly used to pursue environmental services and Type B covers all other products [EPPs] whose production, end-use and/or disposal
have positive impacts on environment, but no direct use for environmental purposes (Hamwey 2005, p. 2).

In contemporary trade negotiations, there is a debate on the coverage of EGs. The debate is centred on: firstly, the issue of whether goods with dual or multiple end-uses should be categorized as EGs; secondly, the way of capturing EGs by the harmonized system (HS); and thirdly, the relativity of the definition of ‘environmental friendliness’ where some goods are considered friendly to some countries and unfriendly to others at the same time (Stilwell 2008, pp. 9-10). In order to address these issues the WTO invited member-countries to suggest approaches in 2008 for finding a universal definition of EGs (WTO 2008). Till 2013, five approaches have been proposed to the WTO. They are the list approach, the request and offer approach, the environmental project approach, the integrated approach and the hybrid approach. The list approach suggests countries identifying lists of EGs for tariff reductions. The request and offer approach allows a country to select its EGs and seek tariff cuts to partner countries. Under the environmental project approach, a project approved by a designated national authority would enjoy trade concessions on the goods and services used in the project. The integrated approach proposes the establishment of public and private entities to carry out environmental activities. All imported goods by these entities would qualify for preferential tariff treatment. Lastly, the Hybrid approach combines all the approaches.

Currently, the discussion on EGs is based on the few proposed lists of which the OECD and the Asia Pacific Economic Cooperation (APEC) lists are considered a beginning stage. The OECD started work on identifying EGs in 1992 and listed a total of 164 goods under three groups at the HS nomenclature. In 1995 the APEC processed to list 109 products in the same nomenclature under 10 categories. Comparing these two lists, the APEC list is narrower, including only established environmental technologies and the OECD list covers both established environmental technologies and cleaner technologies, products and services (Howse & Bork 2006, p. 1). It is important to note that the OECD/APEC lists are not well-recognized by developing countries. Both lists are based on technological solutions to environmental problems and presented a comparative advantage to developed nations in the context of international trade (Lendo 2005, p. 4). In 2007, ‘Friends of EGs’, a group of countries comprising Canada, the European Union, Japan, South Korea, Norway, New Zealand, Taiwan, Penghu, Kinmen and Matsu, Switzerland and the United States of America submitted a joint proposal on EGs to the Committee on Trade and Environment in Special Session (CTESS) of the WTO. This proposal is well-known as the WTO ‘153 list’. With a view to minimizing overlaps within different lists, the WTO also prepared a ‘combined list’ of 411 items at the HS-2002 six-digit level codes in 2011. Out of 411 codes, a group of countries namely Australia, China, Hong Kong, Singapore, Norway and Colom-
bisia made a ‘core list’ consisting of 26 products and proposed a starting point of new WTO negotiations.

With all these lists, this paper focuses on the WTO ‘153 list’ where the EPPs are well-focused. The ‘153 list’ is considered as a much-discussed list in the WTO and has led to debate on EGs negotiations. This list includes 12 categories of products. They are: (i) air pollution control, (ii) management of solid and hazardous waste and recycling systems, (iii) clean up or remediation of soil and water, (iv) renewable energy plant, (v) heat and energy management, (vi) waste water management and potable water treatment, (vii) environmentally preferable products, based on end use or disposal characteristics, (viii) cleaner or more resource efficient technologies and products, (ix) natural risk management, (x) natural resources protection, (xi) noise and vibration abatement and (xii) environmental monitoring, analysis and assessment equipment (WTO 2008).

3 EGs Exports Performance of Bangladesh

Bangladesh has been pursuing an export-led growth strategy since 1990s. Although Bangladesh experimented import substitution strategy just after independence in 1971, now it opts for an open market economy. Trade liberalisation reforms in the form of reduction in tariff rates, duty-free access to imported inputs, introduction of the Export Performance Benefit Scheme (XPB)³ and tax rebates on export earnings have helped Bangladesh’s export industry to grow (Hossain & Alauddin 2005, p. 130). However, evidence shows a small share of EGs in total goods exports. In 2001, total goods exports was US$ 5,736 million while total EGs exports were only US$ 137 million which is 2.39 per cent of total goods exports (Table 1). On the other hand, total goods exports reached to US$ 12,691 million in 2007 and total EGs exports remained at US$ 351 million capturing only 2.77 per cent of goods exports. It is important to note that the exports of EGs in Bangladesh are dominated by jute and jute-products. The jute market is gradually losing its global position due to the emergence of cheap synthetic fibres (Gunter et al 2011, p. 50). This may be the main reason for the lowered share of EGs to total exports.

Table 1: Export trend in Bangladesh, 1997-2007 (million US$)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Goods Export</th>
<th>Total EGs Export</th>
<th>Share of EGs to total Goods Export (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>5736</td>
<td>137</td>
<td>2.39</td>
</tr>
<tr>
<td>2002</td>
<td>5443</td>
<td>216</td>
<td>3.97</td>
</tr>
<tr>
<td>2003</td>
<td>6229</td>
<td>133</td>
<td>2.14</td>
</tr>
<tr>
<td>2004</td>
<td>7586</td>
<td>173</td>
<td>2.28</td>
</tr>
<tr>
<td>2005</td>
<td>8494</td>
<td>242</td>
<td>2.85</td>
</tr>
<tr>
<td>2006</td>
<td>11650</td>
<td>272</td>
<td>2.33</td>
</tr>
<tr>
<td>2007</td>
<td>12691</td>
<td>351</td>
<td>2.77</td>
</tr>
</tbody>
</table>

Source: UN COMTRADE (2014).

³ A scheme of government’s financial assistance for export promotion.
Like other developing countries, the export market of Bangladesh EGs is dominated by the Environmental Preferable Products (EPPs) (Hamwey 2005, p. 26). The EPPs are those industrial and consumer goods which have fewer negative impacts on the environment in the production, end-use or disposal stage (Howse & Bork 2006, p. 2). For example, jute and textile fibres, biodegradable fibres, sisal, natural rubber, and sacks and bags made of natural fibres. In Bangladesh the share of EPPs in the total EGs export was 85 per cent in 2007 and it was even higher in the previous years (Table 1 in Appendix). Among the EPPs jute and jute-based products contribute the lion’s share. It is evident that one single commodity namely Jute and other textile based fibres (Code 530310) earned US$ 190 million in 2007 which was amounted to more than 54 per cent of total EGs exports (Table 2). It was even higher during 1970s and 1980s. Based on the annual data of the Bangladesh Bank4, the contribution of jute to total exports was 73 per cent in 1975-1979 (Gunter et al 2011, p. 50). Other important EGs for Bangladesh are machinery for cleaning or dry bottles, parts for vapour turbines, tamping machines and road rollers, and perforated buckets made of iron or steel.

**Table 2 Bangladesh EGs’ Exports to world in 2007 (highest 10 commodities)**

<table>
<thead>
<tr>
<th>Commodity Code (HS 6-digit)</th>
<th>HS Code Description</th>
<th>Export Value (Million USD)</th>
<th>Share to total EGs Export (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>530310</td>
<td>Jute and other textile based fibres, raw or processed but not spun; tow and waste of these fibres (Category 7)</td>
<td>190.17</td>
<td>54.18</td>
</tr>
<tr>
<td>630510</td>
<td>Sacks and bags, of a kind used for the packing of goods: Of jute or of other textile based fibres of heading 53.03. (Category 7)</td>
<td>82.30</td>
<td>23.45</td>
</tr>
<tr>
<td>560710</td>
<td>Twine, cordage, ropes and cables: Of jute or other textile based fibres of heading 53.03. (Category 7)</td>
<td>25.67</td>
<td>7.31</td>
</tr>
<tr>
<td>560890</td>
<td>Knotted netting of twine, cordage or rope; made up fishing nets and other made up nets, of textile materials (Category 10)</td>
<td>9.38</td>
<td>2.67</td>
</tr>
<tr>
<td>847989</td>
<td>Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter: Other (Category 2)</td>
<td>5.68</td>
<td>1.62</td>
</tr>
<tr>
<td>840999</td>
<td>Parts suitable for use solely or principally with the engines of heading No. 84.07 or 84.08: Other (Category 11)</td>
<td>5.53</td>
<td>1.58</td>
</tr>
<tr>
<td>842290</td>
<td>Machinery for cleaning or drying bottles or other containers: Parts (Category 2)</td>
<td>5.36</td>
<td>1.53</td>
</tr>
<tr>
<td>840690</td>
<td>Parts for steam and other vapour turbines (Category 4)</td>
<td>4.73</td>
<td>1.35</td>
</tr>
<tr>
<td>842940</td>
<td>Tamping machines and road rollers (Category 2)</td>
<td>2.39</td>
<td>0.68</td>
</tr>
<tr>
<td>732690</td>
<td>Other articles of iron or steel: Other (Category 6)</td>
<td>2.22</td>
<td>0.63</td>
</tr>
</tbody>
</table>

*Source: UN COMTRADE (2014)*

The export destination of Bangladesh EGs exhibits a different picture compared with overall exports. The USA, Germany and United Kingdom are the top three partner countries for total exports in 2007. But this is not the case of the EGs. The export of EGs is heavily concentrated on the neighbouring countries. The top three

4 Bangladesh Bank is the Central Bank of Bangladesh.
EGs exporting countries are India, Pakistan and China and they collectively received 58 per cent of total EGs export of Bangladesh in 2007 (Figure- 1).

**Figure 1 Export destination of the EGs of Bangladesh in 2007 (million US$)**

![Graph showing export destination of EGs in Bangladesh in 2007](image)

*Source: UN COMTRADE (2014)*

### 4 Theoretical Framework

The gravity model has long been used empirically in describing bilateral trade patterns. It hypothesizes that trade between two countries largely depends on income and population of the partner countries and the distance they apart. Jan Tinbergen (1903-1994) was the pioneer to apply gravity model in determining international trade flows between a pair of countries. Tinbergen (1962) constructs a trade flow equation where he finds that trade has constant elasticity with GNP of country i, GNP of country j and distance between i and j (p. 264). Linnemann (1966), for the first time, extends the gravity model and opines that the better commodity composition fits with two countries, the larger trade flows exists between them (p. 140). Linder (1961) constructs an alternative hypothesis in international trade flows. He suggests that countries will trade more with similar income levels (p. 17). To find the forces of European trade relationships, Aitken (1973) firstly used regional trading arrangements (EFTA and EEC) as dummy variables and found it statistically significant (p. 886). Anderson (1979) provided a theoretical underpinning on the gravity model by deriving a gravity equation on the basis of constant elasticity of substitution (CES) preferences and differentiation of goods by the country of origin [Armington assumption] (pp. 108-112). It is recognized in trade literature that Anderson first provides a theoretical legitimacy to the gravity model (Armstrong 2007, p. 2).
Bergstrand (1985) presents a microeconomic foundation to the gravity model by showing gravity equation as a ‘reduced form from a partial equilibrium subsystem of a general equilibrium model’ (p. 174). Bergstrand (1985) also develops a ‘generalized gravity equation’ where the incomes of exporter and importer countries are exogenous and country parameters of both countries are identical (p. 477). Furthermore, Deardorff (1998) presents the gravity equation a theoretical foundation by the theory of Heckscher-Ohlin (HO) model of international trade. Explaining both homothetic preference and Armington preference, he finds it difficult to justify a simple gravity equation by the existing trade theories (p. 21). Frankel, Stein and Wei (1997) conducted a study using the standard gravity model. They used regional trading blocs as dummy variables along with five basic explanatory variables, namely size of the economy, per capita income, distance, common language and common border, and find regional trading blocs highly statistically significant in the model (p. 77).

According to Anderson (1979), the gravity equation does not include ‘economic distance’ between the trading countries. The economic distance can be identified as ‘historical and cultural ties between traders, the tying of aid, the setting up of multinational subsidiaries, and preferential treatment of one country’s exports for other reasons- bias trade’ (Roemer 1977, p. 318). The omission of ‘economic distance’ term leads to incorrect estimates. The reason is that ‘economic distance’ affects the error term of the model for which \(E(U)_{i,j} \neq 0\), therefore OLS assumption violates. This leads to heteroskedastic error terms. The estimation methods of the gravity equation with the presence of heteroskedastic error terms will biased and will generate distorted estimates (Silva & Tenreyro 2003, p. 4). Moreover, the standard gravity model does not consider socio-political-institutional factors of the home and partner countries, as argued by Kalirajan (2007).

Many studies have been conducted to improve the application of the basic gravity model. In order to estimate the heterogeneous nature of distance, Egger (2008) suggests using a panel data model which is linear in parameters but non-linear in trade costs (p. 661). A large number of researchers, like Harrigan (2001), have used relative distance instead of absolute distance as the latter creates misspecification in the model (p. 35). An important method of estimating the gravity in bilateral trade flows with the presence of biased estimator problem of the conventional gravity model is the stochastic frontier approach (Drysdale et al. 2000, Kalirajan and Findlay 2005). It is worth noting that stochastic frontier analysis is mainly used in production economics for economic modelling, first introduced by Aigner, Lovell and Schmidt (1977), and Meeuse and Van den Broeck (1977). The main property of the stochastic frontier approach of the gravity model is the assumption of two error terms where one represents non-negative disturbance term (Drysdale et al. 2000, p. 262). Drawing on Kalirajan (2007), the stochastic gravity equation for exports be,
\[
\ln X_{ij} = \ln f (Z_i; \beta) \exp (v_i - u_i)
\]

where,
\(X_{ij}\) is actual exports from country \(i\) to country \(j\)
\(Z_i\) is potential exports of country \(i\) to country \(j\)
\(\beta\) is a vector of unknown parameters
\(u_i\) represents single-sided error term which captures economic distance factor following \(N(\mu, \sigma^2 u)\) and
\(v_i\) represents double-sided error term which captures the influence of other omitted variables following \(N(0, \sigma^2 v)\)

If \(u_i\) is zero, there is no economic distance factor and if \(u_i \leq 1\), the economic distance factor exists and it constrains exports from reaching its potential.

Export potential refers to the level of trade that could be achieved in a state of free and frictionless trade between two countries. It is the maximum level of exports that could be realized with the given level of export determinants. To measure export potential, earlier studies estimated the difference between actual export and predicted export by applying OLS estimation to the gravity equation. The feature of OLS estimation is that it provides estimates which represent the centered values of the data set. But the potential export requires estimates that represent the upper limits of the data. To address this issue, stochastic frontier gravity model bears strong theoretical implications (Kalirajan 2007, p. 95). It is worth noting that the gap between potential and actual export is not only due to core determinants of exports but also various socio-political and institutional factors of both reporter and partner countries. Identifying those factors is useful from the policy perspective in order to minimize or mitigate export constraints. Thus, a country can achieve its full potential in exports through policy reforms and bilateral or multilateral trade negotiations.

Export growth decomposition (Figure 2) helps to identify overall export constraints. Drawing on Khan and Kalirajan (2011), three types of determinants are responsible for changes in exports: natural or core determinants, ‘behind the border’ determinants and ‘beyond the border’ determinants (p. 9). Natural determinants refer to the size and income of the importing economy and also distance between exporting and importing countries. It is assumed that higher population and GDP of partner countries lead to more export for the reporter countries. On the other hand, longer distance reduces exports due to higher transport costs. Besides, ‘behind the border’ determinants imply infrastructural limitations and institutional rigidities of the exporting country. For example, inefficiency of port and customs procedure, restrictions on market access and licensing, foreign equity restrictions and weak protection of intellectual property rights (IPRs). ‘Beyond the border’
determinants refer to the infrastructural constraints and institutional weaknesses of the partner countries. It can be divided into two parts: ‘explicit beyond the border’ determinants and ‘implicit beyond the border’ determinants. Tariff and exchange rate are considered as ‘explicit beyond the border’ determinants which have inverse relationship with exports of the exporting country. On the flipside, ‘implicit beyond the border’ determinants indicate the infrastructural and institutional constraints of the importing countries which negatively affects export of the partner country.

The growth of export can be decomposed in the following way (Khan and Kalirajan 2011),

\[
D = Y_2 - Y_1 = A + B + C \\
= [Y_1^* - Y_1] + [Y_2^* - Y_1^*] + [Y_2^* - Y_2] \\
= [Y_1^* - Y_1] + [Y_2^* - Y_1^*] + [Y_2^* - Y_1^*] - [Y_2^* - Y_2] \\
= \{[Y_1^* - Y_1] - [Y_2^* - Y_2]\} + [Y_2^* - Y_1^*] + [Y_2^* - Y_2] \\
= [EI_1 - EI_2] + CIBBC + GCD
\]

Where, D is export growth, \( Y_1 \) and \( Y_2 \) is actual export in period 1 and period 2 respectively. \( F1 \) is the potential export frontier in period 1 and \( F2 \) is the potential export frontier in period 2 assuming that there is no ‘behind the border’ constraints. \( Y_1^* \) is the potential export in period 1 with given export determinants \( X_1 \) and \( Y_2^* \) is the potential export in period 2 with given export determinants \( X_2 \). \( Y_1^** \) refers to the potential export in period 2 with the export determinant of period 1.

**Figure 2 Decomposition of Export Growth**

![Figure 2 Decomposition of Export Growth](image)

*Source: Khan and Kalirajan (2011)*
Hence, $E_{i1} - E_{i2}$ represents difference of export inefficiency between period 1 and period 2 due to changes in ‘behind the border’ constraints of the exporting country. CIBBC indicates change in export of the exporting country due to changes in ‘implicit beyond the border’ constraints of the importing country. GCD implies change in export due to changes in core determinants and ‘explicit beyond the border’ constraints.

4 Empirical Model

This study uses the stochastic frontier gravity model following Nguyen and Kalirajan (2013). The model is as follows:

$$\ln EX_{ij} = \beta_0 + \beta_1 \ln(GDP_j) + \beta_2 \ln(POP_j) + \beta_3 \ln(DIST_{ij}) + \beta_4 \text{TARIFF}_{j,i} + \beta_5 \ln(EXR_{ij}) + \beta_6 \text{RTA}_{ij} - u_{ij} + v_{ij}$$

(1)

where,

$EX_{ij}$ represents the total value of EGs export from Bangladesh (i) to partner country (j); GDPj is the Gross Domestic Product of country j as proxy for income; POPj is population of country j as proxy for market size; DIST$_{ij}$ indicates distance between the capital city of Bangladesh (i) and partner country (j) in kilometres; TARIFF$_{j,i}$ indicates the average tariff for EGs of the partner country (j); EXR$_{ij}$ describes the cross exchange rate of Bangladesh with its trading partners (j) calculated by dividing Bangladesh’s Official Exchange Rate (OER) in US dollar with the partner country’s OER in US dollar; RTA$_{ij}$ is a dummy variable, which is equal to 1 if the partner country is under the same regional trade agreement with Bangladesh, otherwise 0; $u_{ij}$ is a single-sided error term truncated at 0, it refers to the combined effects of economic distance factor or ‘behind the border constraints’ in Bangladesh for the importing country (j); and $v_{ij}$ is a double-sided error term following a full normal distribution with mean zero and constant variance, it refers to ‘normal’ statistical error which captures the effect of inadvertently omitted variables.

The Maximum Likelihood estimation can be used to estimate the coefficients ($\beta_1,...,\beta_6$) of the model using the joint density functions of $u_{ij}$ and $v_{ij}$. The parameter $\gamma$ refers to the ratio of the variance due to the ‘behind the border constraints’ to the total variance of the export of EGs. While $\gamma$ appears as significant, it depicts that the ‘behind the border constraints’ are an important factor for the export of EGs. FRONTIER 4.1 software (Coelli 1996) is applied to estimate the above model (1) for years 2001 and 2007. Note that initially the model had been estimated with two other explanatory variables. One is FDI stock and the other is technical assistance project. Both variables were found insignificant for both years, thereby, omitted from the model.
5 Data

This study uses cross sectional data of 41 trading partners of Bangladesh on the export of EGs for the period 2001 and 2007. A list of countries is shown in Table 3. Data on EGs exports has been collected from the UN COMTRADE (United Nations Commodity Trade Statistics Database). UN COMTRADE upholds the export data of EGs up to the year of 2007 for Bangladesh. Due to data availability constraint of EGs exports, average of two years (the year mentioned and the previous year) has been considered for the export of 2001 and 2007. It is observed that there was no big change on demand side and supply side during that period. Data on Gross Domestic Product (GDP) as a proxy to income, population as a proxy for market size and Official Exchange Rate (OER) of both Bangladesh and partner countries for calculating cross-exchange rate have been extracted from the database of the World Development Indicators (WDI) of the World Bank. The distance, bilateral distance between Bangladesh and its trading partners in kilometres, data has been derived from the French Research Center in International Economics (the CEPII) which is developed by Mayer and Zignago (2005). Tariff data was collected from the WITS (World Integrated Trade Solution) by HS (Harmonized System) 6-digits. First weighted average tariff for every exporting commodity was extracted and then average of those tariffs has been derived. Data on regional trade agreements (RTAs) was collected from the website of the WTO (World Trade Organisation)

Table 3 Trading partner of Bangladesh EGs exports

<table>
<thead>
<tr>
<th>Africa (4)</th>
<th>Egypt</th>
<th>Jordan</th>
<th>Turkey</th>
<th>Portugal</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morocco</td>
<td>Malaysia</td>
<td>Europe (13)</td>
<td>Spain</td>
<td>Chile</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Pakistan</td>
<td>Denmark</td>
<td>Sweden</td>
<td>Peru</td>
<td></td>
</tr>
<tr>
<td>Tunisia</td>
<td>Philippines</td>
<td>France</td>
<td>Switzerland</td>
<td>Uruguay</td>
<td></td>
</tr>
<tr>
<td>Africa (15)</td>
<td>Republic of Korea</td>
<td>Germany</td>
<td>United Kingdom</td>
<td>Oceania (2)</td>
<td></td>
</tr>
<tr>
<td>Asia (15)</td>
<td>Russian Federation</td>
<td>Greece</td>
<td>North America (3)</td>
<td>Australia</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>Saudi Arabia</td>
<td>Ireland</td>
<td>Canada</td>
<td>New Zealand</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Singapore</td>
<td>Italy</td>
<td>United States</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>Sri Lanka</td>
<td>Netherlands</td>
<td>Mexico</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>Thailand</td>
<td>Poland</td>
<td>South America (4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: UN COMTRADE (2014)

6 Results and Discussion

Stochastic Frontier Gravity Model

The Stochastic Frontier Gravity Model in equation (1) has been estimated using the Frontier 4.1 software. The estimated results of the drivers of Bangladesh’s EGs export are presented in Table 4.
Table 4 Maximum Likelihood Estimates of the Stochastic Frontier Gravity Model (Dependent variable: Bangladesh’s total exports of EGs in logarithm)

<table>
<thead>
<tr>
<th>Category</th>
<th>2001</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>8.7259</td>
<td>11.7829</td>
</tr>
<tr>
<td></td>
<td>(1.3234)</td>
<td>(3.2264)</td>
</tr>
<tr>
<td>Ln GDP\textsubscript{j}</td>
<td>0.3837**</td>
<td>0.2181**</td>
</tr>
<tr>
<td></td>
<td>(0.1770)</td>
<td>(0.1036)</td>
</tr>
<tr>
<td>Ln Population\textsubscript{j}</td>
<td>0.3677**</td>
<td>0.4386***</td>
</tr>
<tr>
<td></td>
<td>(0.1679)</td>
<td>(0.0336)</td>
</tr>
<tr>
<td>Ln Distance\textsubscript{i,j}</td>
<td>-1.1713***</td>
<td>-1.2308***</td>
</tr>
<tr>
<td></td>
<td>(0.3262)</td>
<td>(0.3095)</td>
</tr>
<tr>
<td>Tariff\textsubscript{j}</td>
<td>-0.00086</td>
<td>-0.0901**</td>
</tr>
<tr>
<td></td>
<td>(0.01310)</td>
<td>(0.0412)</td>
</tr>
<tr>
<td>Ln Exchange rate\textsubscript{i,j}</td>
<td>0.1301***</td>
<td>0.2563**</td>
</tr>
<tr>
<td></td>
<td>(0.0512)</td>
<td>(0.1488)</td>
</tr>
<tr>
<td>RTA\textsubscript{i,j} dummy</td>
<td>0.5824***</td>
<td>1.9062***</td>
</tr>
<tr>
<td></td>
<td>(0.1459)</td>
<td>(0.4190)</td>
</tr>
<tr>
<td>(\sigma^2)</td>
<td>3.2899***</td>
<td>4.1451**</td>
</tr>
<tr>
<td></td>
<td>(0.64244)</td>
<td>(2.2515)</td>
</tr>
<tr>
<td>(\gamma)</td>
<td>0.9999***</td>
<td>0.9999***</td>
</tr>
<tr>
<td></td>
<td>(0.3716)</td>
<td>(0.1995)</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-56.93</td>
<td>-56.25</td>
</tr>
<tr>
<td>Number of observations</td>
<td>41</td>
<td>41</td>
</tr>
</tbody>
</table>

Note:

***, ** show the significance level at 1% and 5% respectively.

Figures in parentheses are standard errors of estimates.

The estimated results in the Table 4 conform to the gravity model, and show that the income and size of the partner countries has a statistically positive influence on the exports of Bangladesh’s EGs. Distance is also an important determinant by showing statistical significance and negative value, as expected from the gravity model. Tariff was not a significant variable determining the EGs export in Bangladesh for 2001. But it shows a statistically significant and negative impact in 2007. Both exchange rate and regional trade agreement are significant variables in the model and exhibits positive influences on EGs exports in Bangladesh.

The result also indicates that both sigma-squared (\(\sigma^2\)) which is a measure of mean
total variation and gamma (γ) that is the ratio of variation due to ‘behind the border’ constraints to total variation are statistically significant in period 2001 and 2007. Thus, sigma-squared (σ2) implies that the potential EGs exports of Bangladesh have been changing (not constant) over time. Besides, larger gamma (γ) coefficient which is close to 1 indicates that the influence of ‘behind the border’ constraints are present and these are responsible for a big proportion of mean total variation in the model. This further suggests that ‘behind the border’ constraints prevent Bangladesh from reaching its EGs export potential.

Export Potential

The potential export estimation of EGs based on the stochastic frontier gravity model for all partner countries is presented in Table 2 of Appendix. Export potential has been calculated by multiplying the coefficients with the respective determinants of EGs export. The results show that Bangladesh’s EGs export potential was higher than its actual export with all its trading partners during the estimated period. The highest gap between potential and actual export was obvious for China in 2001 and Singapore in 2007. India, Pakistan, Indonesia, Jordan, Russia and Tunisia were the key partners that offered substantial potential for Bangladesh’s export in EGs. In the South Asian region, the unexplored market for EGs was Sri Lanka. Considering East Asian countries, Bangladesh was far away from reaching its potential. Only 16 per cent of China’s market had been realized in 2007. The situation worsened in 2001 with about 2 per cent realization. The results reveal poor performance, except Indonesia, of Bangladesh’s EGs exports with ASEAN countries during the period. The Singapore market was unrealized with the highest extent amongst all the ASEAN countries. There is significant scope for the EGs of Bangladesh to explore EU markets. To be specific, Denmark, Switzerland, Sweden, the United Kingdom and Italy project higher potential.

Comparing the realisation of EGs export potential of 2007 with 2001, a significant increase is observed for East Asian countries. This matches with establishing the ‘look east’ diplomacy of Bangladesh with the East Asian countries in early 2000s (Firdaus, 2011). However, realising potential export decreases for ASEAN countries. On the other hand, most of the EU countries show higher realisation of EGs export potential in 2007 than that of 2001. A group of countries like Australia, Canada, Brazil, Turkey, United Kingdom, Malaysia and Sri Lanka show lower trend in realizing EGs export potential between period 2001 and 2007.

Growth Decomposition

A key objective of estimating the stochastic frontier gravity model is to measure the influence of ‘behind the border’ constraints on export potential. All other associated constraints can also be found. Hence, Bangladesh’s EGs export growth between 2001 and 2007 has been decomposed for all the major exporting countries (Table 3 in Appendix). The decomposition shows that ‘behind the border’
constraints have negative impacts on the EGs export growth of Bangladesh for a large number of countries. In general, due to ‘behind the border constraints’ Bangladesh fails to reach its potential exports in Sri Lanka, Singapore, Thailand, Malaysia, Switzerland, the United Kingdom and Australia. More importantly, ‘behind the border’ constraints are more evident for the ASEAN and EU market. On the other hand, Bangladesh’s EGs export growth during the period 2001-2007 has been positively influenced in China, Malaysia, Indonesia, the Philippines, Turkey and Tunisia for reducing their ‘implicit beyond the border’ constraints. Interestingly, ‘explicit beyond the border’ constraints have been reduced by most of the countries during the estimated period for which positive export growth took place in Bangladesh.

7 Conclusions

The export of EGs in Bangladesh is dominated by a few products and the export destination is concentrated in neighbouring countries. This analysis, applying the stochastic frontier gravity model, finds that the exports of Bangladesh EGs is positively affected by GDP and population of partner countries, cross exchange rate of Bangladesh currency with respect to the partner country and regional trade agreements. In contrast, geographic distance and tariff project negative influences on Bangladesh EGs exports. An important finding of this paper is that it did not find enough evidence to identify tariff significant in case of EGs exports of Bangladesh. The potential export calculation of this study reveals that East Asian and ASEAN countries are far from realizing the export potential of Bangladesh. However, the ‘look east’ diplomacy of Bangladesh helped increase a higher realization in 2007 compared with 2001. Furthermore, export growth decomposition between 2007 and 2001 identifies that ‘behind the border’ constraints for the case of ASEAN and EU countries were higher than other regions in Bangladesh and caused negative bearing on EGs exports. Reducing ‘implicit beyond the border’ constraints and ‘explicit beyond the border’ constraints by the partner countries has resulted in positive EGs export growth in Bangladesh.

To facilitate the export of EGs, Bangladesh needs to diversify its product basket. Exploring the market of industrialized countries may increase exports. It is evident that ‘behind the border constraints’ deters Bangladesh from reaching its export potential. To reduce ‘behind the border constraints’ Bangladesh needs to update its exporting firms with the latest regulations and requirements in line with other importing countries, create separate zones for the production of EGs, and enhance port and custom facilities. For addressing ‘implicit beyond the border constraints’ and ‘explicit beyond the border constraints’ Bangladesh Mission abroad needs to play a more proactive role.

There are some limitations to this study. First, a lack of extensive data availability for which this study has used the average of two years (estimated year and the
previous year) export data while other variables are for single year. Second, this paper could not identify specific ‘behind the border constraints’ due to lack of uniform data. Third, the effect of price change (terms of trade effect) has not been taken into account in finding the change of ‘implicit beyond the border constraints’, also because of unavailability of adequate data. Therefore, future research can be done by incorporating terms of trade (TOT) effect into the model and separate this effect from ‘implicit beyond the border’ constraints.


Balineau, G & Melo, JD 2013, “Removing barriers to trade on environmental goods: an appraisal”, *World Trade Review*, vol. 12, no. 4, pp. 693-718.


Drysdale, P, Huang, Y & Kalirajan, K 2000, “China’s trade efficiency: measure
behind the border” determinants imply infrastructural limitations and institutional
between exporting and importing countries. It is assumed that higher population
constraints. Drawing on Khan and Kalirajan (2011), three types of determinants
and partner countries. Identifying those factors is useful from the policy perspec-
that could be realized with the given level of export determinants. To measure
distance factor exists and it constrains exports from reaching its potential.
β is a vector of unknown parameters

Global position due to the emergence of cheap synthetic fibres (Gunter et al 2011,
Alauddin 2005, p. 130). However, evidence shows a small share of EGs in total
export earnings have helped Bangladesh’s export industry to grow (Hossain &

Among policymakers across the globe in recent times. While trade promotes
protection, (xi) noise and vibration abatement and (xii) environmental monitoring,
end use or disposal characteristics, (viii) cleaner or more resource efficient
and potable water treatment, (vii) environmentally preferable products, based on
They are: (i) air pollution control, (ii) management of solid and hazardous waste
has led to debate on EGs negotiations. This list includes 12 categories of products.

12. Environmental monitoring, analysis and assessment equipmen
9. Natural risk management
8. Cleaner or more resource efficient technologies and products
7. Environmentally preferable products, based on end use or disposal characteristics

The EPPs are those industrial and consumer goods which have fewer negative
Like other developing countries, the export market of Bangladesh EGs is domi-
national project approach, a project approved by a designated national authority

Estimating Potential Trade Using Gravity

As ARSAC Working Paper, no. 7, GRIPS-FASID Joint Graduate Program, National Graduate Institute for Policy Studies, Tokyo, viewed 21
May 2014,


Lendo, E 2005, “Defining environmental goods and services: a case study of Mexico”, ICTSD Issue Paper, no. 1, International Centre for Trade and
Sustainable Development, Geneva, viewed 20 May 2014,

Linder, SA 1961, An essay on trade and transformation, John Wiley & Sons, New

Linnemann, H 1966, An econometric study of international trade flows, North-
Holland Publishing Company, Amsterdam.

Mayer, T & Zignago, S 2011, Notes on CEPII’s distances measures: the GeoDist
database, CEPII Working Paper, no. 25, French Research Center in Interna-
tional Economics, France, viewed 25 April 2014,


Nguyen, VS & Kalirajan, K 2013, “Export of environmental goods: India’s potential and constrains”, ASARCA Working Paper, no. 15, Crawford School of
Public Policy, The Australian National University, viewed 25 May 2014,

Organisation for Economic Co-operation and Development 1999, The environ-
mental goods and services industry; manual for data collection and analysis,
Organisation for Economic Co-operation and development, viewed 28 May
2014,

Roemer, JE 1977, The effect of sphere of influence and economic distance on the
Schmid, G 2012, Technology transfer in the clean development mechanism: the role of host country characteristics, Working Paper, Department of Economics, university of Geneva, viewed 24 May 2014,

Silva, JMCS & Tenreyro, S 2003, “Gravity-defying trade”, Federal Reserve Bank of Boston, Boston, viewed 30 April 2014,

Stilwell, M 2008, Advancing the WTO environmental goods negotiations: options and opportunities, EcoLoMICS Occasional Paper, no. 8, Geneva, viewed 15 May 2014,
<http://www.ecolomicsinternational.org/eops_08_1_matt_ewell_wto_ctess_environmental_goods_negotiations.pdf>.

Tamiotti, L & Olhoff, A 2009, Trade and climate change, World Trade Organization and United Nations Environmental Programme, Viewed 21 May 2014,

Thomson Reuters Foundation 2014, Bangladesh seeks export privileges to US on climate vulnerability grounds, Thomson Reuters Foundation (online edition), 21 May, viewed 8 June 2014,
<http://mygoldenbengal.wordpress.com/2014/05/21/bangladesh-seeks-export-privileges-to-us-on-climate-vulnerability-grounds>.

Tinbergen, J 1962, Shaping the world economy, Twentieth Century Fund, New York, United States of America.

UN COMTRADE Database, viewed 21 February 2014,

World Development Indicators, viewed 25 February 2014,

WTO, see World Trade Organization

World Trade Organization 2014, Doha WTO ministerial 2001: ministerial declaration, World Trade Organization, viewed 8 June 2014,

——— 2008, Committee on trade and environment in special session, World Trade Organization, viewed 23 May 2014,
<https://docs.wto.org/dol2fe/Pages/FE_Search/.../77194/.../TN/TE/18 pd>.
Appendix

Table 1 Category-wise Bangladesh EGs’ Export to World in USD (2007-1997)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1658917</td>
<td>932013</td>
<td>995415</td>
<td>487399</td>
<td>509987</td>
<td>505118</td>
<td>576707</td>
</tr>
<tr>
<td>2</td>
<td>14190629</td>
<td>9507639</td>
<td>4201528</td>
<td>1429390</td>
<td>1821688</td>
<td>6209473</td>
<td>3494579</td>
</tr>
<tr>
<td>3</td>
<td>544729</td>
<td>668934</td>
<td>209135</td>
<td>536250</td>
<td>16962</td>
<td>-</td>
<td>9873</td>
</tr>
<tr>
<td>4</td>
<td>11856871</td>
<td>3978369</td>
<td>1543480</td>
<td>1294311</td>
<td>1607447</td>
<td>1289466</td>
<td>907211</td>
</tr>
<tr>
<td>5</td>
<td>117460</td>
<td>4637</td>
<td>19630</td>
<td>25405</td>
<td>72488</td>
<td>10761</td>
<td>568</td>
</tr>
<tr>
<td>6</td>
<td>4918196</td>
<td>1945979</td>
<td>6402715</td>
<td>1091996</td>
<td>407593</td>
<td>615354</td>
<td>797970</td>
</tr>
<tr>
<td>7</td>
<td>299698813</td>
<td>253266425</td>
<td>227033489</td>
<td>166106245</td>
<td>127088226</td>
<td>204446008</td>
<td>130089801</td>
</tr>
<tr>
<td>8</td>
<td>34635</td>
<td>1716</td>
<td>199</td>
<td>416</td>
<td>-</td>
<td>7200</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>138432</td>
<td>6496</td>
<td>1208578</td>
<td>645548</td>
<td>508932</td>
<td>553778</td>
<td>50906</td>
</tr>
<tr>
<td>10</td>
<td>9501274</td>
<td>110028</td>
<td>33556</td>
<td>354672</td>
<td>67844</td>
<td>38669</td>
<td>1409</td>
</tr>
<tr>
<td>11</td>
<td>5767346</td>
<td>629528</td>
<td>674746</td>
<td>808964</td>
<td>558759</td>
<td>2428146</td>
<td>1329970</td>
</tr>
<tr>
<td>12</td>
<td>2348733</td>
<td>701161</td>
<td>49591</td>
<td>138696</td>
<td>54061</td>
<td>125660</td>
<td>33532</td>
</tr>
<tr>
<td>Total</td>
<td>350776035</td>
<td>271752925</td>
<td>242372062</td>
<td>172919292</td>
<td>132713987</td>
<td>216229633</td>
<td>137292526</td>
</tr>
</tbody>
</table>

Source: Author’s Calculation

1. Air pollution control
2. Management of solid and hazardous waste and recycling systems
3. Clean up or remediation of soil and water
4. Renewable energy plant
5. Heat and energy management
6. Waste water management and portable water treatment
7. Environmentally preferable products, based on end use or disposal characteristics
8. Cleaner or more resource efficient technologies and products
9. Natural risk management
10. Natural resources protection
11. Noise and vibration abatement
12. Environmental monitoring, analysis and assessment equipment
Table 2: Export Potential of EGs in 2001 and 2007 (Thousand USD)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>India</td>
<td>41240.44</td>
<td>72987.74</td>
<td>52158.62</td>
<td>58002.74</td>
<td>31747.30</td>
<td>5844.12</td>
<td>56.50</td>
<td>89.92</td>
</tr>
<tr>
<td>2</td>
<td>Pakistan</td>
<td>21308.15</td>
<td>21396.00</td>
<td>54935.48</td>
<td>54972.49</td>
<td>87.85</td>
<td>37.00</td>
<td>99.59</td>
<td>99.93</td>
</tr>
<tr>
<td>3</td>
<td>Sri Lanka</td>
<td>541.72</td>
<td>4892.26</td>
<td>411.04</td>
<td>4917.75</td>
<td>4350.54</td>
<td>4506.70</td>
<td>11.07</td>
<td>8.36</td>
</tr>
<tr>
<td>4</td>
<td>China</td>
<td>2250.16</td>
<td>11682.37</td>
<td>44482.21</td>
<td>273254.10</td>
<td>114573.60</td>
<td>228771.89</td>
<td>1.93</td>
<td>16.28</td>
</tr>
<tr>
<td>5</td>
<td>Japan</td>
<td>5143.27</td>
<td>16946.80</td>
<td>8119.34</td>
<td>13457.31</td>
<td>11803.52</td>
<td>5337.96</td>
<td>30.35</td>
<td>60.33</td>
</tr>
<tr>
<td>6</td>
<td>South Korea</td>
<td>820.54</td>
<td>9631.39</td>
<td>2238.78</td>
<td>10192.64</td>
<td>8810.85</td>
<td>7953.86</td>
<td>8.52</td>
<td>21.96</td>
</tr>
<tr>
<td>7</td>
<td>Singapore</td>
<td>7632.53</td>
<td>101419.32</td>
<td>1846.59</td>
<td>265448.89</td>
<td>93786.79</td>
<td>263602.31</td>
<td>7.53</td>
<td>0.70</td>
</tr>
<tr>
<td>8</td>
<td>Thailand</td>
<td>9875.03</td>
<td>27162.59</td>
<td>5842.80</td>
<td>55110.62</td>
<td>17287.56</td>
<td>49267.83</td>
<td>36.36</td>
<td>10.60</td>
</tr>
<tr>
<td>9</td>
<td>Indonesia</td>
<td>8311.00</td>
<td>8317.55</td>
<td>11940.54</td>
<td>12835.34</td>
<td>6.55</td>
<td>894.80</td>
<td>99.92</td>
<td>93.03</td>
</tr>
<tr>
<td>10</td>
<td>Malaysia</td>
<td>1043.12</td>
<td>13074.26</td>
<td>1217.16</td>
<td>38842.68</td>
<td>12031.14</td>
<td>37625.52</td>
<td>7.98</td>
<td>3.13</td>
</tr>
<tr>
<td>11</td>
<td>Philippines</td>
<td>126.32</td>
<td>28541.96</td>
<td>363.40</td>
<td>9934.80</td>
<td>9808.48</td>
<td>28178.56</td>
<td>1.27</td>
<td>1.27</td>
</tr>
<tr>
<td>12</td>
<td>France</td>
<td>467.53</td>
<td>1648.18</td>
<td>689.82</td>
<td>1637.82</td>
<td>1180.65</td>
<td>948.00</td>
<td>28.37</td>
<td>42.12</td>
</tr>
<tr>
<td>13</td>
<td>Germany</td>
<td>1645.72</td>
<td>6156.39</td>
<td>2217.68</td>
<td>5686.63</td>
<td>4510.67</td>
<td>3468.96</td>
<td>26.73</td>
<td>39.00</td>
</tr>
<tr>
<td>14</td>
<td>Greece</td>
<td>613.28</td>
<td>2523.91</td>
<td>1400.14</td>
<td>2653.70</td>
<td>1910.64</td>
<td>1253.57</td>
<td>24.30</td>
<td>52.76</td>
</tr>
<tr>
<td>15</td>
<td>Ireland</td>
<td>78.60</td>
<td>1167.27</td>
<td>220.00</td>
<td>1334.31</td>
<td>1088.68</td>
<td>1114.31</td>
<td>6.73</td>
<td>16.49</td>
</tr>
<tr>
<td>16</td>
<td>Italy</td>
<td>792.37</td>
<td>10288.81</td>
<td>1414.35</td>
<td>7799.32</td>
<td>9496.43</td>
<td>6384.97</td>
<td>7.70</td>
<td>18.13</td>
</tr>
<tr>
<td>17</td>
<td>Netherlands</td>
<td>3655.96</td>
<td>8648.44</td>
<td>5395.52</td>
<td>6838.60</td>
<td>4992.48</td>
<td>1443.08</td>
<td>42.27</td>
<td>78.90</td>
</tr>
<tr>
<td>18</td>
<td>Poland</td>
<td>82.71</td>
<td>2180.77</td>
<td>283.62</td>
<td>2180.77</td>
<td>3686.76</td>
<td>1897.15</td>
<td>2.19</td>
<td>13.01</td>
</tr>
<tr>
<td>19</td>
<td>Portugal</td>
<td>225.66</td>
<td>1587.03</td>
<td>117.51</td>
<td>1455.02</td>
<td>1361.37</td>
<td>1337.50</td>
<td>14.22</td>
<td>8.08</td>
</tr>
<tr>
<td>20</td>
<td>Spain</td>
<td>1947.49</td>
<td>3158.37</td>
<td>1422.82</td>
<td>2681.80</td>
<td>1210.88</td>
<td>1258.98</td>
<td>61.66</td>
<td>53.05</td>
</tr>
<tr>
<td>21</td>
<td>Sweden</td>
<td>39.21</td>
<td>1086.97</td>
<td>169.26</td>
<td>889.68</td>
<td>1047.76</td>
<td>720.42</td>
<td>3.61</td>
<td>19.02</td>
</tr>
<tr>
<td>22</td>
<td>Switzerland</td>
<td>365.51</td>
<td>2220.22</td>
<td>188.95</td>
<td>2242.74</td>
<td>1854.72</td>
<td>2053.79</td>
<td>16.46</td>
<td>8.43</td>
</tr>
<tr>
<td>----</td>
<td>--------------------</td>
<td>--------------------</td>
<td>-----------------------</td>
<td>-----------------</td>
<td>--------------------</td>
<td>-----------------------</td>
<td>-----------------</td>
<td>----------------------------------</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>United Kingdom</td>
<td>3631.22</td>
<td>4657.97</td>
<td>1026.74</td>
<td>1614.52</td>
<td>5760.04</td>
<td>4145.51</td>
<td>77.96</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Denmark</td>
<td>267.93</td>
<td>10122.32</td>
<td>9854.38</td>
<td>52.82</td>
<td>4643.44</td>
<td>4590.62</td>
<td>2.65</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Turkey</td>
<td>5593.86</td>
<td>5606.63</td>
<td>12.77</td>
<td>14041.81</td>
<td>16629.29</td>
<td>2587.48</td>
<td>99.77</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Saudi Arabia</td>
<td>646.46</td>
<td>4807.75</td>
<td>4161.29</td>
<td>907.76</td>
<td>3518.29</td>
<td>2610.52</td>
<td>13.45</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>United States</td>
<td>9691.50</td>
<td>20815.16</td>
<td>11123.66</td>
<td>7695.68</td>
<td>12656.14</td>
<td>4960.46</td>
<td>46.56</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Australia</td>
<td>2914.33</td>
<td>2920.81</td>
<td>6.48</td>
<td>1845.92</td>
<td>3234.75</td>
<td>1388.83</td>
<td>99.78</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Canada</td>
<td>1196.26</td>
<td>3146.37</td>
<td>1950.11</td>
<td>528.65</td>
<td>1831.50</td>
<td>1302.86</td>
<td>38.02</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>New Zealand</td>
<td>250.94</td>
<td>566.37</td>
<td>315.44</td>
<td>303.30</td>
<td>626.60</td>
<td>323.30</td>
<td>44.31</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Brazil</td>
<td>2207.61</td>
<td>6972.99</td>
<td>4765.39</td>
<td>1364.95</td>
<td>13938.46</td>
<td>12573.50</td>
<td>31.66</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Chile</td>
<td>59.43</td>
<td>541.49</td>
<td>482.05</td>
<td>97.11</td>
<td>741.00</td>
<td>643.89</td>
<td>10.98</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Egypt</td>
<td>2035.05</td>
<td>7350.75</td>
<td>5315.70</td>
<td>2124.53</td>
<td>7533.11</td>
<td>5408.58</td>
<td>27.68</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Jordan</td>
<td>867.48</td>
<td>868.88</td>
<td>1.40</td>
<td>499.72</td>
<td>501.67</td>
<td>4422.80</td>
<td>99.84</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Mexico</td>
<td>1130.48</td>
<td>5553.28</td>
<td>4422.80</td>
<td>1347.70</td>
<td>5209.75</td>
<td>3862.05</td>
<td>20.36</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Morocco</td>
<td>253.74</td>
<td>1926.37</td>
<td>1672.63</td>
<td>642.75</td>
<td>4832.71</td>
<td>4189.96</td>
<td>13.17</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Nigeria</td>
<td>1138.84</td>
<td>2509.99</td>
<td>1371.15</td>
<td>885.20</td>
<td>1716.12</td>
<td>830.92</td>
<td>45.37</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Peru</td>
<td>325.58</td>
<td>1120.54</td>
<td>794.96</td>
<td>105.59</td>
<td>868.26</td>
<td>762.66</td>
<td>29.06</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Russian Federation</td>
<td>4311.56</td>
<td>7063.35</td>
<td>2751.80</td>
<td>3318.82</td>
<td>3499.00</td>
<td>180.18</td>
<td>61.04</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Tunisia</td>
<td>315.68</td>
<td>1738.35</td>
<td>1422.67</td>
<td>650.39</td>
<td>723.68</td>
<td>73.29</td>
<td>18.16</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Uruguay</td>
<td>143.47</td>
<td>342.69</td>
<td>199.22</td>
<td>108.74</td>
<td>315.51</td>
<td>206.76</td>
<td>41.87</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Calculation
Table 3 Export Growth Decomposition of Bangladesh EGs Export, 2001-2007

<table>
<thead>
<tr>
<th>No</th>
<th>Country</th>
<th>2001-2007: Export growth due to changes in</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BTBC (%)</td>
<td>IBTBC (%)</td>
<td>CD &amp; EBTBC (%)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>India</td>
<td>198</td>
<td>-1068</td>
<td>970</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Pakistan</td>
<td>0.36</td>
<td>-72</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sri Lanka</td>
<td>-102</td>
<td>44</td>
<td>-42</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>China</td>
<td>71</td>
<td>4</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Japan</td>
<td>151</td>
<td>-121</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>South Korea</td>
<td>94</td>
<td>-15</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Singapore</td>
<td>-168</td>
<td>60</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Thailand</td>
<td>-235</td>
<td>111</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Indonesia</td>
<td>-20</td>
<td>6</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Malaysia</td>
<td>-605</td>
<td>609</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Philippines</td>
<td>0.13</td>
<td>91</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>France</td>
<td>102</td>
<td>-144</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Germany</td>
<td>126</td>
<td>-151</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Greece</td>
<td>94</td>
<td>-49</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Ireland</td>
<td>87</td>
<td>-63</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Italy</td>
<td>148</td>
<td>-101</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Netherlands</td>
<td>160</td>
<td>-137</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Poland</td>
<td>145</td>
<td>-147</td>
<td>102</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Portugal</td>
<td>-87</td>
<td>-52</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Spain</td>
<td>-48</td>
<td>-161</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Sweden</td>
<td>114</td>
<td>-42</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Switzerland</td>
<td>-101</td>
<td>-41</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>United Kingdom</td>
<td>-126</td>
<td>-22</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Denmark</td>
<td>-52</td>
<td>-63</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Turkey</td>
<td>-18</td>
<td>92</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Saudi Arabia</td>
<td>192</td>
<td>-427</td>
<td>335</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>United States</td>
<td>116</td>
<td>-284</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Australia</td>
<td>-122</td>
<td>-127</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Canada</td>
<td>-34</td>
<td>-83</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>New Zealand</td>
<td>47</td>
<td>-267</td>
<td>320</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Brazil</td>
<td>-244</td>
<td>29</td>
<td>115</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Chile</td>
<td>36</td>
<td>-57</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Egypt</td>
<td>43</td>
<td>-1853</td>
<td>1910</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Jordan</td>
<td>-0.41</td>
<td>-252</td>
<td>152</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Mexico</td>
<td>136</td>
<td>-448</td>
<td>412</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Morocco</td>
<td>1</td>
<td>-97</td>
<td>196</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Nigeria</td>
<td>51</td>
<td>-838</td>
<td>687</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Peru</td>
<td>-77</td>
<td>-46</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Russian Federation</td>
<td>168</td>
<td>-331</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Tunisia</td>
<td>221</td>
<td>209</td>
<td>-330</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Uruguay</td>
<td>-70</td>
<td>-33</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Calculation
Investment Climate and Foreign Direct Investment: Comparing Bangladesh with Selected Countries in Asia

Sonjoy Chkaraborty*

Abstract: This paper analyses investment climate and Foreign Direct Investment (FDI) of ten selected economies in Asia - Bangladesh, India, Sri Lanka, Pakistan, China, Malaysia, Thailand, Indonesia, Vietnam and Singapore. Amongst the ten, business operating cost components are the cheapest (specially, the wage rate is the lowest) for Bangladesh, suggesting that the country may have a comparative advantage for attracting FDI vis-à-vis the other nine countries. But unfortunately Bangladesh’ per capita FDI is the lowest except Pakistan and rank of FDI/GDP ratio is 8th (better than only India and Pakistan) among the above mentioned ten countries. Furthermore, this study finds that low wage rate and investment related low cost could not harvest the comparative advantage for attracting inflow of FDI.

Key Words: Foreign Direct Investment, Per capita FDI, DFI-GDP ratio

1. Introduction

Generally Foreign Direct Investment means “Establishing or expanding business operations into a foreign country with transfer of capital”. FDI is defined by UNCAD as “An investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy. The World Bank World Development Indicators defines inward FDI as “the net inflows of investment to acquire a lasting management interest in an enterprise operating in an economy other than that of the investor” (World Bank 2006, p. 319). Inward FDI not only serves the long-term financial interests of foreign investors, it can also play a significant role in the growth dynamics of host countries. FDI can fill the “investment gap” by providing capital for domestic investment in one hand and can also can fill the “foreign exchange gap” by providing foreign currency through initial investments and subsequent export earnings on the other hand finally, FDI can help close the “tax revenue gap” by generating tax revenues through creation

* Sonjoy Chkaraborty, MSS (Economics) Deputy Director (Research and development), BOI, Prime Minister’s Office
of additional economic activities (Smith, 1997). Many empirical studies have revealed that FDI can also help generate domestic investment in matching funds, facilitate transfer of managerial skills and technological knowledge, increase local market competition, create modern job opportunities and increase global market access for export commodities, etc.

At the end of the Cold War in the early 1990s in a new political dynamics, LDCs become heavily dependent on foreign public aid regardless of their political ideological leanings, to find out alternative sources of foreign private capital. Trends in information and communication technologies (ICT) and globalization have also resulted in greater integration of capital markets easing the flow of capitals across the globe. As a result, According to WIR, 1991 and 2014, the annual FDI inflows to LDC’s increased from $0.17 billion in 1988-89 (0.1% of global share) to about $28 billion (1.9% of global share) in 2013 and the FDI inflows to East, South and South-East Asia was only $15.20 billion (8.8% of global share) in 1988-89, which was $3.20 billion (1.9% of global share) in 1988-89 in Africa. But in 2013 the FDI inflows to Asia become $426 billion (29.4% of global share) and $57 billion (3.9% of global share) in Africa.

The reasons are manifold and include: cheaper labour, increasing purchasing power and more liberalised and investor-friendly economic environments in LDC’s countries. In this article industrial climate of ten Asian countries like Bangladesh, India, Sri Lanka, Pakistan, China, Malaysia, Thailand, Indonesia, Vietnam and Singapore have been compared. Due to the low (lowest among the ten concern country) income, it is very tough to increase the investment/GDP ratio of Bangladesh for rapid economic growth and attracting FDI can be the alternative strategy for fill-up the investment gap. In spite of the lowest wage, this is the most important comparative advantage for attracting FDI, but the country fails to attract substantial amount of FDI and still per capita FDI of Bangladesh is the lowest except Pakistan among the concern ten Asian countries. With this in mind, the main objective of this paper is to identify the factors for which Bangladesh’s per capita FDI inflow ratio is the lowest among ten Asian countries.

2. Review of the Previous Work

Numerous literature exist relating to the study trends, impact and determinants of FDI. Most of these studies have identified as the determinants of FDI r, like availability of natural resource, labour quality, inflation of the country, domestic economic environment, market size, quality of infrastructure, labor cost, economic openness, return on capital, political stability, etc. There are many instances of conflicting findings regarding the direction of influence of the determinants of FDI (Chakrabarti 2001). Notwithstanding these differences, the FDI literature has continued to grow and capture the fascination of applied development economists and policy makers.
Kojima (1978) portrayed a comparative picture of FDI in Japanese model versus American model. According to him FDI sources endeavoured to invest in developing countries with the object of obtaining increased imports of primary products which are vitally important for the country. Natural resources like oil, natural gas, iron ore, coal, copper, bauxite and other metals are targets in this type of investment.

Many studies have found that political instability seriously erodes foreign investors’ confidence in the local investment climate. Barro (1991) and Corbo and Schmidt-Hebbel (1991) state that political instability creates an uncertain economic environment detrimental to long-term planning, which reduces economic growth and investment opportunities.

Quazi and Mahmud (2006) used 1995-2000 panel data for five South Asian countries (Bangladesh, India, Nepal, Pakistan and Sri Lanka) and found that the significant determinants of FDI in this region are economic freedom, trade openness, market size, human capital, incremental lagged changes in FDI, and political instability.

Jaspersen et al (2000) and Asiedu (2002) found that the rate of return on investment positively affects FDI, while Wheeler and Mody (1992) and Asiedu (2002) found that availability of infrastructure significantly boosts FDI.

In a study of the impact of economic freedom and investment climate on FDI in Latin America, Quazi (2007) found that FDI inflow is negatively correlated with policy changes that result in diminished economic freedom, and excessive bureaucracy and inefficient financial markets have created locational disadvantages for Mexico vis-à-vis other countries in the region.

Abdul Rehman, Orangzab, Ali Raza (2009) conducted an analysis by using the data collected over the period of 1975-2008 and identified the determinants of FDI and its impact on GDP growth in Pakistan through different statistical tests and found positively significant impact of FDI on GDP growth of Pakistan. Furthermore, these results indicate that market size, trade openness / access to international market and quality of labor are the major determinants that have significant impact on the FDI inflow. The study also found no impact of market potential and communication facility on the attraction of FDI inflow in Pakistan.

A summary conducted by Moosa (2002) provides from many recent studies investigated the determinants of FDI. For example, Cheng and Kwan (2000) found that regional market size, Tuman and Emmert (1999) found market size, economic policies and political instability affected Japanese FDI in Latin America and Lehmann (1999) found political and economic risks to deter FDI; good infrastructure and preferential policy affect FDI location in China.

Quader, Syed Manzur (2009) applied extreme bounds analysis to the data of the
various catalyst variables of FDI inflows in Bangladesh. They found FDI and domestic investment have a positive effect on economic growth.

Mottaleb (2007) studied the determinants of FDI and its effect on economic growth in developing countries. He studied panel data of FDI flows of sixty low-income and lower middle income countries and found that FDI has an important effect on economic growth of third world countries by creating bridge between the gap of domestic savings and investment and introducing familiarizing the up to date technology and management skill from developed countries.

Sadik and Bolbol (2001) investigate the effect of FDI through technology spillovers on overall total factor productivity for India, Pakistan, Bangladesh and Sri Lanka over a 10-year period. They find that FDI has not had any manifest positive spillover on technology and productivity over and above those of other types of capital formation.

3. Objective and Methodology

This paper is designed to accomplish the following specific objectives:

- The broad objective of this paper is to compare investment climate of Bangladesh with ten Selected Countries in Asia.

In this broad objective the following research questions will also be examined:

- What are the indicators that measure the investment climate?
- What is the comparative scenario of investment climate of the ten selected Asian countries?
- What are the main barriers of inflow of DFI in Bangladesh?

The methodology includes simple statistical tools such as mean, standard deviation, and percentage. This paper is primarily based on secondary information. Internet resources from various websites had been facilitating in locating and gathering data. The relevant secondary data are collected from Statistics Department and Research Department of Bangladesh Bank (Central Bank of Bangladesh), Board of Investment (BOI), Bangladesh, Economic Trend, Bangladesh Economic Review, World Investment Report 2014 published by UNCTAD, various survey, websites, journals, Working Papers, books and newspapers etc. These data has been analyzed to assess the investment climate as well as foreign direct investment of Bangladesh, India, Sri Lanka, Pakistan, China, Malaysia, Thailand, Indonesia, Vietnam and Singapore. Lastly, the paper tries to identify the real hindrance of inflow of FDI in Bangladesh.
4. Evaluation of Investment climate in Bangladesh and Comparing with Selected Countries in Asia

4.1. Investment Climate and Economic Development

An idea of Investment climate is easy to perceive but difficult to define precisely. According to the World Development Report 2005, investment climate is the set of location-specific factors shaping the opportunities and incentives for firms to invest productively, create jobs, and expand. Clearly, this definition is wider, which encompasses government policies, institutions and behavioral environment that have significant influence on costs, risks and barriers to business. It has emphasized on a good investment climate is the one that serves the society as a whole on the one hand (through its impact on job creation, lower prices, and broadening the tax base) and serves all firms, including both large and small, on the other. A sound investment climate not only encourages more investment but also promotes higher productivity because of increased competition.

For Bangladesh to make significant impact on the existing poverty incidence, annual GDP growth of 7-8 percent is needed (Razzak, A. and Raihan, S., 2007). Considering the experience of the past 30 years or so, it can be inferred that a growth rate of 7 percent would require an investment-GDP ratio of more than 30 percent as against of the current level of 26.896 percent (www.economywatch.com). When investment is based on domestic saving alone, we have to sacrifice current consumption for future prosperity. At a low level of income it is very difficult option and for this reason investment from foreign sources (such as foreign direct investment or FDI) can greatly help a country achieve higher growth without constraining the current consumption too much.

One important factor in determining the prospect of higher investment is the socio-economic condition that influences returns from investment by private enterprises. As the profitability of investment is hampered by such factors as macroeconomic instability, poor infrastructural facilities, deteriorating law and order situation, poverty, crime, workforce, national security, political instability, regime uncertainty, taxes, rule of law, property rights, government regulations, government transparency and government accountability etc. potential investors tend to be discouraged from putting their resources into investment. Given this backdrop, lot of emphasis has been given to the importance of creating a sound investment climate in Bangladesh.

In recent times discussion of investment climate becomes an important issue in the Business arena. There are a number of cross-country comparisons in different reports often seem to be conflicting, giving rise to controversies and misunderstandings. These make it difficult for the policymakers to derive necessary inputs from the analyses that are made available. The underlying methodologies and their implications for investment, business activities and overall economic growth are
often not clear to most of the stakeholders while they pay maximum attention to the ranking of the countries that a number of studies provide. There has not been any serious attempt to provide a simple presentation of these analyses evaluating the usefulness of the cross-country comparisons. As such, this article has been given attention of ten Asian countries and compared their investment climate to Bangladesh and then to explore the real problem for attracting FDI.

4.2 Investment Climate Assessment

There are a number of surveys and analyses evaluating the investment climate of countries around the world. The results from these surveys are regularly used to provide inter-country comparison in terms of investment and business environment in different countries. Some of these indicators are concretely defined and thus can be measured precisely, while others are based on the complete perception of the respondents. These indicators vary widely; from the number of days required to start a business to business executives’ perception about the level of corruption in the countries. Often, country-specific broad indices are constructed on the basis of some predetermined formula requiring weights to be assigned to different indicators on which information is collected. These broad indices then make it feasible to make cross-country aggregate investment climate comparison feasible. In this section, I highlight a few investment climate assessments.

Investment Assessment by the World Bank

The World Bank’s evaluation of individual country specific investment climate environment has been based on two major indicators, i.e., (a) Doing Business Project and (b) Investment Climate Assessment (ICA) survey.

(a) Doing Business Project

The doing business project as relative ranking of the countries is presented considering the 10 indicators. According to the Doing Business Report 2013, Bangladesh ranks 130th among a total of 189 countries considered in terms of the overall ‘ease of doing business’ indicators. It provides better protection to the investors (22nd), and Starting a business (74th) are relatively easier. Getting credit in Bangladesh and dealing with construction permit are also better than many countries (ranks 86th and 93rd respectively). However, the country performs very poor in terms of getting electricity (lowest in the world, 189th), enforcing contract (185th), registering property (177th), trading across border (130rd) resolving insolvency (119rd) and paying tax (100rd).
Figure 1: Rank of Bangladesh Economy (among 189 countries)

Table 1 provides us investment climate indicator named the Ease of Doing Business prepared by World Bank of the ten Asian countries, which also gives us a comparison with Bangladesh.

Table 1: Comparative Rank of Ten Selected Economy of Asia (among 189 countries)

<table>
<thead>
<tr>
<th>Country</th>
<th>Bangladesh</th>
<th>India</th>
<th>Sri Lanka</th>
<th>Pakistan</th>
<th>China</th>
<th>Malaysia</th>
<th>Thailand</th>
<th>Indonesia</th>
<th>Vietnam</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of Doing Business</td>
<td>130</td>
<td>134</td>
<td>85</td>
<td>110</td>
<td>96</td>
<td>06</td>
<td>18</td>
<td>120</td>
<td>99</td>
<td>01</td>
</tr>
<tr>
<td>Starting a business</td>
<td>74</td>
<td>179</td>
<td>54</td>
<td>105</td>
<td>158</td>
<td>16</td>
<td>91</td>
<td>175</td>
<td>109</td>
<td>03</td>
</tr>
<tr>
<td>Dealing with construction permit</td>
<td>93</td>
<td>182</td>
<td>108</td>
<td>109</td>
<td>185</td>
<td>43</td>
<td>19</td>
<td>188</td>
<td>29</td>
<td>03</td>
</tr>
<tr>
<td>Getting electricity</td>
<td>189</td>
<td>111</td>
<td>91</td>
<td>175</td>
<td>119</td>
<td>21</td>
<td>12</td>
<td>121</td>
<td>156</td>
<td>06</td>
</tr>
<tr>
<td>Registering property</td>
<td>177</td>
<td>92</td>
<td>145</td>
<td>125</td>
<td>48</td>
<td>35</td>
<td>29</td>
<td>101</td>
<td>51</td>
<td>28</td>
</tr>
<tr>
<td>Getting credit</td>
<td>86</td>
<td>28</td>
<td>73</td>
<td>73</td>
<td>01</td>
<td>73</td>
<td>86</td>
<td>42</td>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td>Protection to the investors</td>
<td>22</td>
<td>34</td>
<td>52</td>
<td>34</td>
<td>98</td>
<td>04</td>
<td>12</td>
<td>52</td>
<td>157</td>
<td>02</td>
</tr>
<tr>
<td>Paying tax</td>
<td>100</td>
<td>158</td>
<td>171</td>
<td>166</td>
<td>120</td>
<td>36</td>
<td>70</td>
<td>137</td>
<td>149</td>
<td>05</td>
</tr>
<tr>
<td>Trading across border</td>
<td>130</td>
<td>132</td>
<td>51</td>
<td>91</td>
<td>74</td>
<td>05</td>
<td>24</td>
<td>54</td>
<td>65</td>
<td>01</td>
</tr>
<tr>
<td>Enforcing contract</td>
<td>185</td>
<td>186</td>
<td>135</td>
<td>158</td>
<td>19</td>
<td>30</td>
<td>22</td>
<td>147</td>
<td>46</td>
<td>12</td>
</tr>
<tr>
<td>Resolving insolvency</td>
<td>119</td>
<td>121</td>
<td>59</td>
<td>71</td>
<td>78</td>
<td>42</td>
<td>58</td>
<td>144</td>
<td>149</td>
<td>04</td>
</tr>
</tbody>
</table>

Note: Smaller values represents better doing business situations. 6

It is found that, among the 10 Asian countries, position of Singapore is first (also first in the world ranking) and the position of India is last (134th in the world ranking). Malaysia and Thailand is also in the very good position considering the world ranking (respectively 6th and 18th). Excluding Singapore, Malaysia and Thailand rest of the 7 countries position are existing within the 99th to 134th where the
position of Bangladesh is just above the last one, that is, India. Among the 10 indicators, getting electricity is the top most problematic for the Ease of Doing Business in the world.

It is interesting to learn from the aforementioned report that overall doing business is easier in Bangladesh compared to India only. A number of other findings may appear to be quite interesting (Table 1). For example, launching a business in Bangladesh is less difficult than in such countries as India, Thailand, Pakistan, China, Indonesia and Vietnam. Protection to the investors is easier to all considered countries except Singapore, Thailand and Malaysia. Getting credit is difficult except Indonesia. What is perhaps most striking is that Bangladesh performs better than India in all the ‘doing business’ indicators except Getting electricity, registering property and getting credit.

Index of Economic Freedom (Ref. http://www.heritage.org/index/) is another popular indicator which is also considered as the economy is either FDI friendly or not.

**Figure 2:** Comparison between Ease of Doing Business indicator (considering 189 countries) and Index of economic freedom (considering 177 countries)

<table>
<thead>
<tr>
<th></th>
<th>Index of economic freedom</th>
<th>Ease of Doing Business indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>147</td>
<td>71</td>
</tr>
<tr>
<td>Vietnam</td>
<td>99</td>
<td>67</td>
</tr>
<tr>
<td>Indonesia</td>
<td>81</td>
<td>120</td>
</tr>
<tr>
<td>Thailand</td>
<td>72</td>
<td>120</td>
</tr>
<tr>
<td>Malaysia</td>
<td>37</td>
<td>126</td>
</tr>
<tr>
<td>China</td>
<td>96</td>
<td>137</td>
</tr>
<tr>
<td>Pakistan</td>
<td>110</td>
<td>137</td>
</tr>
<tr>
<td>Srilanka</td>
<td>60</td>
<td>120</td>
</tr>
<tr>
<td>India</td>
<td>85</td>
<td>134</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>130</td>
<td>130</td>
</tr>
</tbody>
</table>


In economically free societies, governments allow labor, capital and goods to move freely, and refrain from coercion or constraint of liberty beyond the extent necessary to protect and maintain liberty itself. Index of economic freedom based on 10 quantitative and qualitative factors, grouped into four broad categories, or
pillars, of economic freedom and they are Rule of Law (property rights, freedom from corruption), Limited Government (fiscal freedom, government spending), Regulatory Efficiency (business freedom, labor freedom, monetary freedom) and Open Markets (trade freedom, investment freedom, financial freedom).

Each of the ten economic freedoms within these categories is graded on a scale of 0 to 100. A country’s overall score is derived by averaging these ten economic freedoms, with equal weight being given to each. The ideals of economic freedom are strongly associated with healthier societies, cleaner environments, greater per capita wealth, human development, democracy, and poverty elimination.

China, Thailand, Indonesia, Vietnam have the large difference of the two (Index of Economic Freedom and Ease of Doing Business) indicators. Though the Ranking with Sri-lanka and India is in opposite direction to Bangladesh but the absolute values are closer to Bangladesh. Ranking of Bangladesh between the two indicators is around the same.

(b) Investment Climate Assessment (ICA) surveys

The objective of ICA are to evaluate the state of the private sector, identify the key constraints to increasing firm productivity, evaluate how competitive firms in a particular country are with respect to those of in our neighboring countries or in other regions of the world, and identify policies that will alleviate obstacles and improve firm productivity and export competitiveness. ICA surveys cover representative sample of firms from which information is gathered on a large number of issues based on regulations, governance, access to finance, infrastructure service, firm productivity, investment and employment decisions. On the other hand, under the doing business project data are gathered on ten business environment-related indicators viz. starting a business, dealing with licenses, employing workers, registering property, getting credit, protecting business, paying taxes, trading across borders, enforcing contracts and closing a information e.g. the number of procedures, time required, costs, etc. and they depict formal regulatory requirements as assessed by local experts for both firms and transactions.

The ICA survey conducted in Bangladesh covered 1,442 firms were interviewed from April 2013 through September 2013 from 09 business sector – food, garments, leather products, chemical and chemical products, furniture, other manufacturing, retail, other services, motor vehicle and transport. The main conclusions from the study are: (1) Bangladeshi manufacturing firms report very high levels of capacity utilization, (2) Bangladeshi firms are also exporting at higher rates compared to businesses in other countries, (3) Female inclusion in economic activity lags behind most countries, (4) The Bangladeshi private sector considers political instability as the biggest business environment obstacle, (5) Electricity outages are numerous and of short duration, and (6) Firms in Bangladesh experience a high level of corruption when obtaining licenses and utility connections.
Business owners and top managers in 1,442 firms were asked to choose the top ten business environment obstacles. According to their opinion political instability is the most severe problem, with about more than one-third (36.7%) of the surveyed firms considered it as a major constraint. It was followed electricity (27.8%), access to finance (13.8%), corruption (7.9%), indicated educated workforce (4.0%), access to land (2.9%), tax rate (1.4%), custom and trade regulation (1.4%), practice of the informal sector (1.2%), crime theft and disorder (1.2%).

Figure 3: Firms’ Perception about Major Constraints to Business Operation in Bangladesh


4.3 World Economic Forum (WEF) Indices

The World Economic Forum (WEF) is a Swiss nonprofit foundation, based in Cologny, Geneva. The World Economic Forum (WEF) has been publishing the Global Competitiveness Report (GCR) since 2004. It attempts to provide what is known as the competitiveness rankings of countries. The two competitiveness index provided by GCR are (1) the Global Competitiveness Index (GCI) and (2) the Business Competitiveness Index (BCI). In 2004, the number of countries in GCR sample was 104, which increased to 117 in 2005-06 and further increased to 148 in the year of 2013-14.

a. Global Competitiveness Index (GCI)

More than three decades, the World Economic Forum’s annual Global Competitiveness Reports have studied and benchmarked the many factors underpinning national competitiveness. From the onset, the goal has been to provide insight and stimulate discussion among all stakeholders about the best strategies and policies to help countries to overcome the obstacles to improved competitiveness. The GCI
index examines the potentials of countries across the world to achieve growth that is sustainable in the medium and long term. The three components of this index are: macroeconomic environment, quality of public institutions, and technology, Figure 4 provides the GCI rankings for some selected countries in 2012-13 and 2013-14, in terms of the individual GCI Components, Bangladesh Ranked 113th in the Basic requirements index, 108th in the Efficiency enhancers index, and 124rd in the Innovation and sophistication factors index in 2013-14. On the whole, the country ranked at 110th among the 148 countries. In the ranking exercise of 2012-13 Bangladesh is ranked at 107th out of a total of 144 countries. Bangladesh is assessed to have the worst Innovation and sophistication factors (ranked at 124th), while its relative positions in basic requirements and efficiency enhancers are worked out to be 113th and 108th respectively. Among the considered ten Asian countries, except Pakistan, all other countries perform better than Bangladesh.

**Figure 4: Global Competitiveness Index Ranking for some selected countries**

<table>
<thead>
<tr>
<th>Country</th>
<th>GCI 2012-13 Rank</th>
<th>GCI 2013-14 Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>11907</td>
<td>11907</td>
</tr>
<tr>
<td>India</td>
<td>6060</td>
<td>6060</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>6566</td>
<td>6566</td>
</tr>
<tr>
<td>Pakistan</td>
<td>13330</td>
<td>13330</td>
</tr>
<tr>
<td>China</td>
<td>2929</td>
<td>2929</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2424</td>
<td>2424</td>
</tr>
<tr>
<td>Thailand</td>
<td>3737</td>
<td>3737</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3838</td>
<td>3838</td>
</tr>
<tr>
<td>Vietnam</td>
<td>7070</td>
<td>7070</td>
</tr>
<tr>
<td>Singapore</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Global Competitiveness Report of WEF (various issues)

**b. Business Competitiveness Index (BCI)**

Competitiveness is a central concern of both advanced and developing countries in an increasingly open and integrated world economy. While many discussions of competitiveness remain focused on the macroeconomic, political, legal, and social circumstances that strengthen a successful economy, progress in these areas is necessary but not sufficient. A sound and stable circumstance improves the opportunity to create wealth, but does not create wealth. Wealth is actually created by the productivity with which a nation can utilize its human resource, capital, and natural resources to produce goods and services. Productivity ultimately depends
on the microeconomic capability of the economy, rooted in the sophistication of companies (both local and subsidiaries of multinationals), the quality of the national business environment, and the externalities arising from the presence of clusters of related and supporting industries. Unless microeconomic capabilities improve, sustainable improvements in prosperity will not occur. The Business Competitiveness Index (BCI) is based on this conceptual framework (Porter, M. E., Ketels, C., and Delgad, M., (2007). BCI is a weighted average of the ‘index for sophistication and company operation and strategy’ and the ‘index for quality of national business environment’ with the weights assigned to them are 0.2 and 0.8, respectively. Due to a much higher weight given to the quality of national business environment (QNBE), the BCI is often very close to the QNBE index (see figure 5).

**Figure 5:** The Business Competitiveness Index (BCI) Ranking and the Quality of the National Business Environment (QNBE) Ranking

![Business Competitiveness Index (BCI) Ranking and the Quality of the National Business Environment (QNBE) Ranking](image)

**Source:** WEF (2013 and 2014)

The BCI ranking for Bangladesh was 87th in 2004-05, which became 100th in 2013-14. Bangladesh’s relative position in QNBE also deteriorated from 86 to 101. The country has consistently performed worse relative to all other concern Asian Countries. This reveals that the basic elements that constitute the business environment have performed quite poorly in Bangladesh. The factors included quality of physical and administrative infrastructures, quality of human resources and technology infrastructure, development of capital markets, sophistication, local suppliers’ quality, efficiency in corporate bodies, intellectual property protection, intensity of local competition, effectiveness of antitrust policy, and prevalence of trade barriers (Bhattacharya et al., 2006).
4.4 Investment-Related Cost Comparison

The 23rd Survey of Investment Related Costs in Asia and Oceania Japan External Trade Organization (JETRO) conducted a comparative survey of investment-related costs in 41 major cities and regions throughout Asia and Oceania in the period between December 2012 and January 2013. The survey revealed that Japanese companies are mainly concerned about wages.

Table 2: The Investment-Related Cost Comparison of Survey of the Concern 10 Countries’ Main City

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>City (Country)</th>
<th>Wage of General Workers (per Month) (US dollar)</th>
<th>Industrial Estate Land Rent (per sq.m.)</th>
<th>Electricity Rate for Business Use (per kWh)</th>
<th>Water Rate for Business Use (per cu.m)</th>
<th>Gas Rate for Business Use (per kg)</th>
<th>Diesel oil Price (liliter)</th>
<th>Corporate Income tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Dhaka (Bangladesh)</td>
<td>74</td>
<td>0.19</td>
<td>0.11</td>
<td>0.34</td>
<td>0.12</td>
<td>0.85</td>
<td>37.50%</td>
</tr>
<tr>
<td>02</td>
<td>New Delhi (India)</td>
<td>276</td>
<td>3.93</td>
<td>0.15</td>
<td>1.82</td>
<td>1.28</td>
<td>0.86</td>
<td>30%</td>
</tr>
<tr>
<td>03</td>
<td>Colombo (Sri Lanka)</td>
<td>118</td>
<td>1.05</td>
<td>0.10</td>
<td>0.59</td>
<td>1.51</td>
<td>0.90</td>
<td>28%</td>
</tr>
<tr>
<td>04</td>
<td>Karachi (Pakistan)</td>
<td>173</td>
<td>0.29</td>
<td>0.13</td>
<td>0.39</td>
<td>4.73</td>
<td>1.13</td>
<td>25%</td>
</tr>
<tr>
<td>05</td>
<td>Beijing (China)</td>
<td>466</td>
<td>7.16</td>
<td>0.13</td>
<td>0.99</td>
<td>0.45</td>
<td>1.20</td>
<td>25%</td>
</tr>
<tr>
<td>06</td>
<td>Kuala Lumpur (Malaysia)</td>
<td>344</td>
<td>n.a</td>
<td>0.10</td>
<td>0.75</td>
<td>6.25</td>
<td>0.59</td>
<td>25%</td>
</tr>
<tr>
<td>07</td>
<td>Bangkok (Thailand)</td>
<td>345</td>
<td>7.22</td>
<td>0.15</td>
<td>0.53</td>
<td>0.99</td>
<td>0.99</td>
<td>35%</td>
</tr>
<tr>
<td>08</td>
<td>Jakarta (Indonesia)</td>
<td>239</td>
<td>6</td>
<td>0.07</td>
<td>1.29</td>
<td>8.45</td>
<td>1.06</td>
<td>25%</td>
</tr>
<tr>
<td>09</td>
<td>Hanoi (Vietnam)</td>
<td>145</td>
<td>0.17</td>
<td>0.11</td>
<td>0.58</td>
<td>1.75</td>
<td>1.05</td>
<td>25%</td>
</tr>
<tr>
<td>10</td>
<td>Singapore (Singapore)</td>
<td>230</td>
<td>6.51</td>
<td>0.13</td>
<td>1.81</td>
<td>0.19</td>
<td>1.32</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: The 23rd Survey of Investment Related Costs in Asia and Oceania, May 2013, Overseas Research Department Japan External Trade Organization (JETRO)

The Japan External Trade Organization (JETRO) has conducted a survey in 41 major Asian cities on investment-related costs in 2013 for the fiscal year of 2012. Amongst the set of mainly 06 cost components a. Wages, b. Land price, office rents, etc. c. Public utility rate d. Transportation e. Tax f. School fee and these broad cost components are sub-divided into 35 cost-components. Most of the cases of cost components, Dhaka have the cheapest cost. In table 2, 10 countries seven important cost component are presented. Except Corporate income tax rates all other i.e. 6 other cost component are the lowest in Dhaka city. The report highlighted a few number of disadvantages for Dhaka such as (1) container transportation costs, (2) rate of corporate income tax (3) Regular gasoline price and (4) Corporate income tax rate.

To understand the current business activities of Japanese-affiliated companies operating in Asia and Oceania and to disseminate those findings widely the Japan External Trade Organization (JETRO) has conducted a survey from October 8 to November 15, 2013. Of a total of 9,371 surveys sent out, JETRO received valid
responses from 4,561 firms (48.7%) and there were 11 manufacturing Industries and 6 non-manufacturing Industries. From the detail survey very important gist areas are depicted in the following table.

From the this indicators we can see that, the rate of wage increase for Bangladesh is 13 percent which is second highest of the concern 10 countries but it is not the problem of the Bangladesh because absolute wage of Bangladesh is the lowest. Estimating operating profit in 2013 is not also encouraging for attracting FDI. On the other hand, procurements of raw materials and parts from local markets is only 29.1% is the second lowest among the concern ten countries.

**Table 3: Some Indicators’ value of the JETRO Survey Conducted from October 8 to November 15**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>45.8(n=34)</td>
<td>79.9(n=34)</td>
<td>29.1(n=14)</td>
<td>13.0(n=13)</td>
<td>86(n=12)</td>
<td>29.4(n=54)</td>
</tr>
<tr>
<td>India</td>
<td>68.9(n=334)</td>
<td>78.3(n=341)</td>
<td>43.4(n=123)</td>
<td>10.9(n=7)</td>
<td>217(n=91)</td>
<td>27.7(n=335)</td>
</tr>
<tr>
<td>Srilanka</td>
<td>38.7(n=31)</td>
<td>51.5(n=33)</td>
<td>17.9(n=13)</td>
<td>8.9(n=22)</td>
<td>130(n=12)</td>
<td>15.8(n=32)</td>
</tr>
<tr>
<td>Pakistan</td>
<td>74.1(n=27)</td>
<td>81.5(n=27)</td>
<td>34.1(n=13)</td>
<td>12.8(n=23)</td>
<td>154(n=14)</td>
<td>44.5(n=27)</td>
</tr>
<tr>
<td>China</td>
<td>60.7(n=929)</td>
<td>54.2(n=931)</td>
<td>64.2(n=530)</td>
<td>6.6(n=677)</td>
<td>375(n=477)</td>
<td>15.5(n=930)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>63.8(n=276)</td>
<td>51.6(n=277)</td>
<td>42.8(n=161)</td>
<td>4.6(n=194)</td>
<td>429(n=168)</td>
<td>13.1(n=75)</td>
</tr>
<tr>
<td>Thailand</td>
<td>72.4(n=820)</td>
<td>66.2(n=822)</td>
<td>52.7(n=444)</td>
<td>5.0(n=64)</td>
<td>366(n=328)</td>
<td>15.4(n=822)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>64.8(n=273)</td>
<td>66.4(n=227)</td>
<td>40.8(n=165)</td>
<td>17.0(n=193)</td>
<td>234(n=155)</td>
<td>14.2(n=217)</td>
</tr>
<tr>
<td>Vietnam</td>
<td>59.9(n=434)</td>
<td>69.9(n=435)</td>
<td>32.2(n=208)</td>
<td>10.8(n=327)</td>
<td>162(n=234)</td>
<td>22.4(n=428)</td>
</tr>
<tr>
<td>Singapore</td>
<td>68.9(n=286)</td>
<td>52.8(n=286)</td>
<td>40.4(n=47)</td>
<td>3.7(n=231)</td>
<td>1433(n=44)</td>
<td>10.1(n=286)</td>
</tr>
</tbody>
</table>

Source: Japan External Trade Organization (JETRO) Survey, 2013
Note: In parenthesis n is the number of firm surveyed
*DI is an abbreviation for Diffusion Index, the proportion of firms expecting improvement minus the proportion of firms expecting worsening. This figure reflects changes in business confidence.

According to the survey report, the most five problems for the Bangladesh are difficulty in local procurement of raw materials and parts, power shortage or blackout, quality of employees, lack of employee performance/employee awareness among local staff and wage increase. All other country’s most problematic issue is the increase rate of wage except Singapore and Pakistan But absolute wage of Singapore is substantially high. The top most problem of Pakistan and Singapore is respectfully Power shortage or blackout and difficulty in recruiting general workers.

**4.5 Governance Indicators**

flows. There are many indicators in this regard, but here we consider six developed by Kaufmann et al. (1999, 2002), reflecting different aspects of governance. These governance measures combine information (mostly subjective) for up to 60 indicators from a number of sources. The voice and accountability indicator measures citizens’ abilities to take part in the selection of government; political stability measures the probability that the government would be destabilized by some unconstitutional means; government effectiveness reflects the quality of ‘inputs’ like public service and bureaucracy that are required to implement policies effectively; regulatory quality measures the quality of government policies; rule of law reflects the extent to which people have faith on the rules and to the extent they comply with the rules; control of corruption indicates the level of corruption. The values of governance indicators range from -2.5 to 2.5 and the higher the value the better the governance outcomes. In Table 4, depending on the point estimates, the countries are ranked in as ascending order. A lower rank means worse governance and vice versa.

Table 4: Aggregate Governance Indicators for Selected Countries: 2009 and 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Voice and Accountability</th>
<th>Political Stability</th>
<th>Government Effectiveness</th>
<th>Regulatory Quality</th>
<th>Rule of Law</th>
<th>Control of corruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>39</td>
<td>34</td>
<td>09</td>
<td>09</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>India</td>
<td>60</td>
<td>58</td>
<td>11</td>
<td>12</td>
<td>56</td>
<td>47</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>32</td>
<td>30</td>
<td>10</td>
<td>23</td>
<td>51</td>
<td>46</td>
</tr>
<tr>
<td>Pakistan</td>
<td>22</td>
<td>24</td>
<td>01</td>
<td>01</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>China</td>
<td>05</td>
<td>05</td>
<td>31</td>
<td>28</td>
<td>85</td>
<td>87</td>
</tr>
<tr>
<td>Malaysia</td>
<td>32</td>
<td>38</td>
<td>42</td>
<td>45</td>
<td>79</td>
<td>80</td>
</tr>
<tr>
<td>Thailand</td>
<td>33</td>
<td>37</td>
<td>10</td>
<td>13</td>
<td>63</td>
<td>61</td>
</tr>
<tr>
<td>Indonesia</td>
<td>47</td>
<td>51</td>
<td>21</td>
<td>27</td>
<td>47</td>
<td>44</td>
</tr>
<tr>
<td>Vietnam</td>
<td>08</td>
<td>09</td>
<td>52</td>
<td>56</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>Singapore</td>
<td>41</td>
<td>54</td>
<td>90</td>
<td>97</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Lower values represent poorer government performance.
Source: http://info.worldbank.org/governance/wgi/index.aspx#reports

It appears from Table 4 that, except Control of corruption in all other indicators Bangladesh performed poorly in 2012 compared to 2009. In terms of political stability Bangladesh performed extremely poor among the concern 10 countries in each of these indicators. The country’s best relative position was found to be in voice and accountability (39 in 1009 and 34 in 2012) which is also poor than India and Indonesia. Bangladesh’s political stability ranking remains same in 1009 and 2012. When compared to other concern 09 Asian countries, Bangladesh performed extremely poor (except only Pakistan) in all indicators excluding Regulatory Quality. In all other areas Bangladesh was the worst performer among the ten Asian countries except Pakistan though in the case of regulatory quality indicator, Paki-
stan did better than Bangladesh.

4.6 Transparency International’s Corruption Perception Index

The Corruption Perceptions Index ranks countries/territories based on how corrupt their public sector is or perceived to be. A country/territory’s score indicates the perceived level of public sector corruption on a scale of 0 - 100, where 0 means that a country is perceived as highly corrupt and 100 means that a country is perceived as very clean. A country’s rank indicates its position relative to the other countries/territories included in the index.

In the recent years, the index that has been the most talked mostly about in Bangladesh, is the Transparency International’s Corruption Perception Index (CPI). The CPI ranks countries in terms of the extent to which corruption is perceived to exist among public officials and politicians.

Table 5: Transparency International’s Corruption Perception Index of ten Asian Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank</td>
<td>Score</td>
<td>Rank</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>120</td>
<td>27</td>
<td>144</td>
</tr>
<tr>
<td>India</td>
<td>95</td>
<td>31</td>
<td>94</td>
</tr>
<tr>
<td>Srilanka</td>
<td>86</td>
<td>33</td>
<td>89</td>
</tr>
<tr>
<td>Pakistan</td>
<td>124</td>
<td>25</td>
<td>139</td>
</tr>
<tr>
<td>China</td>
<td>75</td>
<td>36</td>
<td>80</td>
</tr>
<tr>
<td>Malaysia</td>
<td>60</td>
<td>43</td>
<td>54</td>
</tr>
<tr>
<td>Thailand</td>
<td>80</td>
<td>34</td>
<td>88</td>
</tr>
<tr>
<td>Indonesia</td>
<td>100</td>
<td>30</td>
<td>118</td>
</tr>
<tr>
<td>Vietnam</td>
<td>112</td>
<td>29</td>
<td>123</td>
</tr>
<tr>
<td>Singapore</td>
<td>05</td>
<td>92</td>
<td>05</td>
</tr>
</tbody>
</table>

Source: Transparency International’s Corruption Perception Index (various issues)

It is a composite index, drawing on corruption-related data gathered from the perception of selected groups of people. It reflects the views of business people and other observers who are supposed to be knowledgeable about the business environment and practices in the countries under evaluation.

Bangladesh has been ranked last in this index for 5 consecutive years. In the latest available reports, its relative position improved very marginally. As reflected in Table 5, India and Malaysia is shown to have registered marginally improvement in 2013, where all other countries situation deteriorates during the same period. Bangladesh is the most corrupt country among the concern 10 South Again countries in 2013 and at the same time the relative position of Bangladesh also deteriorated from 2011 to 2013.
5. Over-all Evaluation of the Status of FDI in Bangladesh: Comparing with ten Asian Countries

Table 6 shows that per capita FDI of Bangladesh is the lowest among the 10 concern countries except Pakistan. If we examine the above analysis we can observe that most of the cases, indicator of Bangladesh was lowest except Pakistan. These indicators were CPI, Governance Indicators such as Voice and Accountability, Political Stability, Government Effectiveness, Rule of Law, Control of corruption except Regulatory Quality, Global Competitiveness Index etc. GDP growth rate is highest in Bangladesh except China, and Sri Lanka (Srilanka is very marginally better than Bangladesh). The growth performance of GDP is very much related with investment (% of GDP). Very important factor of FDI inflow is market openness which is the worst position (74th) for Bangladesh of the concern 10 countries. Marginal propensity of savings depends on the level of income.

Table 6: FDI, GDP, Population, FDI-Population ratio, FDI-GDP ratio, GDP Growth, Investment (% of GDP), Per capita GDP, and Market Openness Index Ranking of the ten countries

<table>
<thead>
<tr>
<th>Country</th>
<th>FDI (Million US dollar)</th>
<th>GDP (Million US dollar)</th>
<th>Population (Million)</th>
<th>GDP Growth</th>
<th>Investment (% of GDP)</th>
<th>Per capita GDP (US dollar)</th>
<th>Market Openness Index Ranking*</th>
<th>FDI Population % (FDI/GDP)* 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>1599.1</td>
<td>135143</td>
<td>151.639</td>
<td>6.006</td>
<td>26.896</td>
<td>891.21</td>
<td>73</td>
<td>10.54</td>
</tr>
<tr>
<td>India</td>
<td>18199.4</td>
<td>1972840</td>
<td>1239.26</td>
<td>5.676</td>
<td>35.145</td>
<td>1591.95</td>
<td>64</td>
<td>14.68</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0915.6</td>
<td>65266</td>
<td>20.824</td>
<td>6.250</td>
<td>31.878</td>
<td>3134.84</td>
<td>65</td>
<td>43.96</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1307.0</td>
<td>238935</td>
<td>182.584</td>
<td>3.500</td>
<td>12.945</td>
<td>1308.63</td>
<td>59</td>
<td>7.15</td>
</tr>
<tr>
<td>China</td>
<td>122931.0</td>
<td>9020310</td>
<td>1360.70</td>
<td>8.038</td>
<td>47.692</td>
<td>6628.86</td>
<td>57</td>
<td>91.06</td>
</tr>
<tr>
<td>Malaysia</td>
<td>12385.7</td>
<td>327910</td>
<td>29.957</td>
<td>8.160</td>
<td>26.4</td>
<td>10945.89</td>
<td>30</td>
<td>410.27</td>
</tr>
<tr>
<td>Thailand</td>
<td>12945.6</td>
<td>424980</td>
<td>64.667</td>
<td>5.886</td>
<td>29.846</td>
<td>6571.91</td>
<td>49</td>
<td>200.18</td>
</tr>
<tr>
<td>Indonesia</td>
<td>18444.0</td>
<td>946391</td>
<td>247.95</td>
<td>6.013</td>
<td>35.569</td>
<td>3816.80</td>
<td>53</td>
<td>74.38</td>
</tr>
<tr>
<td>Vietnam</td>
<td>8900.00</td>
<td>155952</td>
<td>91.47</td>
<td>5.231</td>
<td>22.779</td>
<td>1704.89</td>
<td>46</td>
<td>97.29</td>
</tr>
<tr>
<td>Singapore</td>
<td>63772.3</td>
<td>286930</td>
<td>5.499</td>
<td>2.016</td>
<td>27.699</td>
<td>52174.87</td>
<td>02</td>
<td>11597.07</td>
</tr>
</tbody>
</table>

Source: Column 1 is collected from WIR, 2013. Column 3 to 5 are collected from the website of www.economywatch.com, Market Openness Index Ranking is collected from the website of www.iccwbo.org and Column 8 and 9 are computed by the author.

Note: All data are for the year of 2013

*The Open Markets Index (OMI) is prepared by International Chamber of Commerce comprising four key components and these four components are observed openness to trade, trade policy, foreign direct investment (FDI) openness, and infrastructure for trade.

As per capita GDP is the lowest in of Bangladesh, so the country should not be very much optimistic for increasing local investment. FDI can play a vital role for increasing Investment (% of GDP) but for that reason stable political situation is essential. Political condition of Bangladesh is not still supportive for foreign direct investment of the country. Foreign investors are fully convinced regarding their return on investment due to weak socio-economic framework of Bangladesh. Corruption and religious consideration also encourage them to divert their invest-

Including the lowest wage rate, investment related most of the costs are low in Bangladesh compare to the ten Asian countries concern. On the other hand, government is providing a lot of incentives for the foreign investors such as corporate tax holiday, reduced tariff on import of raw materials and capital machinery, bonded warehousing facility, export subsidy, fund for export promotion, export credit guarantee scheme and many others. In spite of all these comparative advantages, per capita FDI is the second lowest and FDI/GDP ratio is the third lowest among the ten Asian countries. But, fortunately FDI growth rate of Bangladesh was significantly high (24%) in 2013. For continuing this FDI growth or above, Bangladesh have to be more concern about governance indicators such as, Voice and Accountability, Political Stability, Government Effectiveness, Rule of Law, Control of corruption, Regulatory Quality, Competitiveness, etc. In the Global Competitiveness Report 2007-2008 © 2007 World Economic Forum mentions that Competitiveness depends not on costs, but on productivity. Low wages can be a sign of low competitiveness, not a competitive advantage. High wages in a country, if they are justified by high productivity, can be an excellent value. It is not absolutely correct that wage comparative advantage can play a vital role for attracting FDI.

6. Conclusion

For attracting more FDI, Bangladesh will have to ensure healthy investment climate conducive to the both traditional and non-traditional export sector. According to the Ease of Doing Business indicator, among the concern ten Asian countries the position of Bangladesh is (134th) just above the last one, that is, India and among the 10 indicators of Ease of Doing Business, getting electricity is the top most problematic in the world (189th). On the other hand, JETRO survey reveals, Bangladesh is the most cost comparative advantageous country for operating business. Despite this advantageous situation per capita FDI is the second lowest among the concern ten Asian countries.

This article reviewed a number of inter-country surveys and some indicators to understand investment climate in Bangladesh so that useful lessons can be derived. Due to the different methodology and various limitations, the ranking of the survey result were contradictory though the objectives of the surveys were the same. Despite the problems mentioned above, policy makers and relevant stakeholders need to learn from success stories of other countries, especially from the countries with comparables of development. Policy makers should also recognize the fact that the best evaluation of investment climate is the country-specific assessment. Bangladesh should develop its own indicators of business environment and investment climate especially in the arena of governance indicator. Keeping aside the inter-country ranking, Bangladesh needs to develop a pragmatic way of studying
investment climate issues and taking the necessary corrective measures. Comprehensive multi-level corrective measures such as policy level, institutional level, and enterprise level can be formulated. At first the policy makers with stakeholders may devise accurate and priority basis short-, medium-, and long-term strategies to overcome the difficulties of the investment climate and have to implement through the institutions. It is also true that for harvesting better success, enterprise will have to be dynamic, innovative and they also have to maintain regular well-informed interaction amongst other enterprise, institutions and policy makers to identify the problem and have to take remedial measures. Finally, in the present situation policy maker should be more concerned for the improvement of the governance indicator rather than financial and other special incentives for attracting more inflow of FDI in Bangladesh.
References


Japan External Trade Organization (JETRO) Survey, 2013


York: Palgrave.


The Heritage Foundation, in partnership with Wills Street Journal, Retrieved from http://www.heritage.org/index/ranking

The 23rd Survey of Investment Related Costs in Asia and Oceania, May 2013,
In recent times, discussion of investment climate becomes an important issue in the whole on the one hand (through its impact on job creation, lower prices, and broad-stan. These indicators were CPI, Governance Indicators such as Voice and

The Japan External Trade Organization (JETRO) has conducted a survey in 41 countries dealing with construction permit are also better than many countries (ranks 86 th)

In this broad objective the following research questions will also be examined:

Overseas Research Department Japan External Trade Organization (JETRO)


http://info.worldbank.org/governance/wgi/index

http://www.transparency.org

http://www.transparency.org/cpi2013/results

http://www.heritage.org/index/?utm_source=heritagefoundation&utm_medium=homepage&utm_campaign=headline140114

http://www.enterprisesurveys.org/~media/GIAWB/EnterpriseSurveys/Documents/CountryHighlights/Bang

http://www.heritage.org/index/
Political economy of the concept of Export Processing Zones and its contribution to the national economy

Kazal Asgar*
Mousumi Saha *

Abstract: Bangladesh, with its rising wave of imports and exports, has experienced a series of industrial policies. The country is on its track to bring structural change by pursuing export-led growth strategy for attracting investment specially from abroad.

Bangladesh has eight export processing zones. This paper is an attempt to explore the background of introducing EPZs in a newly independent, war ruined country. It also has attempted to shed light on the political economy of trade liberalization and its impacts on foreign investment and technology transfer to enhance employment and productivity.

The success story of EPZ might be a milestone for the newer concepts such as specialized economic zones (SEZs) or other similar concepts. The establishment of more new specialized zones may enhance the ability to eradicate poverty and inequality in society through enhancing productivity and efficiency in the overall economy.

1. Introduction

‘Export Processing Zones (EPZ)’ or ‘Special Economic Zones (SEZ)’ are contained geographic regions within a country i.e. a demarcated area of land used to encourage industrial enterprises, service and manufacturing with a view to export mainly, characterized by liberal customs and taxation policies along with different incentives (Shah, 2008).

There are many terminologies conveying somewhat similar concept to define EPZs, but challenging at the same time. In different academic papers it is found many different terms for roughly similar establishments and arrangements as used in different countries. Out of them, the names commonly used are Export

* Deputy Manager, Bangladesh Export Processing Zones Authority and MS student, Department of Agricultural Economics (Production Economics) Bangladesh Agricultural University respectively
Processing Zone, Special Economic Zone, Free Trade Zones, Foreign Trade Zone, Free zones, etc. The term ‘Export Processing Zone’ is by far the most common one and has been projected to become a standard term which today seems to be the case, given its dominant use in literature and reports of the International Labour Organization (ILO).

For better understanding the ILO has defined EPZs as "industrial zones with special incentives to attract foreign investors, in which imported materials undergo some degree of processing before being (re) exported again". In a study the ILO and the United Nations Centre on Transnational Corporations (UNCTC) refers EPZ as “a clearly delineated industrial estate which constitutes a free trade enclave in the customs and trade regime of a country and where foreign manufacturing firms producing mainly for export benefit from a certain number of fiscal and financial incentives.” The World Bank, in a different tone, identified EPZs as “an industrial estate, usually a fenced-in area of 10 to 300 hectares that specializes in manufacturing for export.” It then goes on to list some common incentives, the zones usually offer to the investors therein.

In 1934, the United States issued ‘Foreign Trade Zones Act’ to allow the establishment of specialized area designated ‘Foreign Trade Zone’ (US Foreign Trade Zone Board, 2012). The objectives of the zones were to support and promote international trade, both exports and imports. The first specialized zone has been founded in 1937 in New York.

With the improvement of the EPZ concept different countries have tried to add more and more incentives to attract footloose investors to their enclave. To this end, various incentives such as well-developed industrial plots or standard factory buildings, the supply of gas or energy, telecommunications and building infrastructure along with cheap labor are being offered.

By following this trend the Specialized Zone in Ireland was created in 1959, although the concept of "areas with special privileges" has existed at least since the 16th century (Guangwen, 2003). In 1975, there were only 79 specialized zones (EPZs) worldwide (ILO, 2007). In Asia, countries like Taiwan, Singapore, Malaysia and the British colony of Hong Kong grasped the concept that economic growth must be upheld through export promotion rather than import substitution. Therefore the establishment of exclusive privileged areas with liberal tax and labor management could attract investors from home and abroad. After China’s economic reforms in the 1980s, the concept has gained international popularity and there were about 500 EPZs in the world in 1995 (Moberg, 2013). In 2003, the number of these areas has increased to over 3,000 in 116 countries.

India, the first country in Asia, realized the importance of Export Processing Zones (EPZs) for development of the economy. The first EPZ was established in Kandla (Gujarat) in 1965, followed by the EPZ Santacruz (Maharashtra) in 1973. Then,
another eighty-five areas came into light designated as Noida SEZ in Uttar Pradesh, Falta SEZ in West Bengal, Cochin special economic zone in Kerala, Chennai SEZ in Tamil Nadu and Visakhapatnam SEZ in Andhra Pradesh. They have experiences of success and failure, India has developed the idea of special economic zones (SEZs) officially by the formal adoption of the "Special Economic Zones Policy 2000" and "Special Economic Zones Act 2005" (Aggarwal, 2010). The SEZ is a specifically delineated duty free enclave and shall be considered as foreign territory for the purpose of trade operations, duties and tariffs. Following this policy, all existing EPZs have all converted into SEZs.

Keeping the global foreign direct investment (FDI) inflow in mind, the Chinese government has created the concept of SEZs in the eighties. It has begun in the 1980s, when market-oriented reforms in selected areas of SEZs have been introduced. Shenzhen, the fishing village in China, became the first special economic zone there. Then more and more investment by foreigners in Shenzhen shows capitalist reforms in China. From 1979, China has gradually created SEZs in its municipalities with property rights protection, tax breaks and a preferential land policy specifically for foreign investors. This SEZ experiment has transformed China into one of the largest FDI recipients, exporters and foreign exchange reserve holders in the world (Prasad & Wei, 2006).

The success of special economic zones (SEZs) in China has encouraged other developing countries to integrate SEZs in their growth plans. From Indonesia to the Middle East, countries at different stages of development have led to special economic zones to attract foreign investment, boost exports, create jobs, boost the industry, improve existing infrastructure, and many other benefits (Shah, 2008).

Developing countries, with a view to capitalist rise up have decided to transform their economy from import substitution to export promotion strategy. Keeping the strategy in mind, different countries have made their policy of attracting local and foreign investment. To enhance their employment, transfer of modern technology and to uphold the export by promoting investments in industrialization, several specialized incentives fiscal and non-fiscal, are being offered in the EPZs and special economic zones. Apart from these, some backward and forward linkage industries and some informal organizations also developing around this specialized areas. EPZs can stimulate economic growth through different mechanisms. Both of them have attracted foreign direct investment (FDI) and have helped domestic enterprises to develop, as they move to areas with more liberal policies across the country (Moberg, 2013). Many developing countries have taken this concept since 1960 to promote industrialization (Amirahmadi, & Wu, 1995). But because of its positive impacts on economic and employment generation supported by empirical findings has made the concept of EPZs an attractive economic policy for developing countries (Eusuf et al, 2007).

2. METHODOLOGY

The study has employed a mix of both quantitative and qualitative information to make the convincing case based on secondary information published in different academic papers, journals, annual reports or related websites. The time series data have been used to carry out trend analysis which has been presented in the forms of tables and graphs. Data and information has been collected from reports and websites of Bangladesh Export Processing Zones Authority (BEPZA), Board of Investment (BOI) and by observing the websites of Export Promotion Bureau (EPB), Bangladesh Small and Cottage Industries Corporations (BSCIC), Hi Tech Park Authority, Private EPZ Authority.

It has been tried to represent political economic judgment in Bangladesh period i.e. the role of EPZs as a specialized industrial enclave in the national economy through trade liberalization, attract investment, technology transfer and enhance employment compared with other investment promotion initiatives.

3. Indepth study of the Export Processing Zone of Bangladesh to see its contribution to the economic and employment situation.

Generally, specialized zones designed to improve the prosperity of the country. There are several forms of specialized zones depending on the establishing objectives, the country's infrastructure, politics, and geography. The specialized zones can be divided into 06 (six) categories (Pakdeenuritet. al, 2014) such as:

a. Free Trade Zone (FTZ)

Free trade zone in other name foreign trade zone is one of the most prominent forms of specialized zones. It is a duty free zone that provides essential services for trade, transport, and import and export business. For business operated in this area, rules and regulations on tariffs, labor and the environment might be exempted or reduced or less controlled.

b. Export Processing Zone (EPZ)

EPZ is like FTZ in terms of estate encompassment. However, the tax benefit and other regulations are different. EPZ is established as a general commercial area, integrated with a special export process. The physical installation or area of the FTZ or EPZ could be completely separated or integrated.

c. Enterprise Zone

In general, the enterprise zone or manufacturing zone is established by the government in several communities. The implementation of such specialized zone intends to provide a better quality of life for people in the community and to enhance competitiveness of the community or even the country. A privilege for such type of zone is financial assistance for local development.
d. Single Factory

Individual plants can be called in various names such as Industrial estate, Industrial Park and IT Park, etc. The purpose of developing such specialized zone is to increase specialization in a selected industry to raise the ability to compete with rest of the world in the same sector. This type of specialized zone can be set anywhere, regardless of location.

e. Free ports

Free port or harbor or port economic zone is one of the most expansive types of specialized zone. Free port economic zone is typical in promoting the activities related to trade. The activities are travel, tourism and retail sales. The businesses within such zone get exemption from tariff but excise tax or duty may apply.

f. Special Economic Zone

Special Economic Zone has been established for a specific purpose. The well known examples are of Specialized Technology Park, petrochemical zone, logistics and warehousing park, airport-based economy, tourism-based zone, multiple product special economic zone, etc.

3.1 Evolution of Industrial Policies in Bangladesh.

Bangladesh has declared several industrial policies having different objectives with the mandate of the different regime of political parties in power, since independence in 1971. These are:

1. Industrial Investment Policy 1973
2. New Industrial Investment Policy 1974
3. Revised Investment Policy December 1975
4. New Industrial Policy 1982
5. Revised Industrial Policy 1986
6. Industrial policy 1991
7. Industrial policy 1999

**Industrial investment policy 1973**

Through this policy, it was announced in the newly born Bangladesh restricting role of the private sector by limited permissible investment to Tk.2.5 million. Foreign private investment was allowed only in partnership with the public sector with minority equity participation. In a war
ruined country the then all abandoned medium and large enterprises were brought under strict state control. Small and cottage industries, as well as foreign companies were allowed to remain outside the framework of governance. A total of 725 industrial units with 92% of the total industrial fixed assets in the modern manufacturing sector were placed under 10 public sector corporations (Bhattacharya 1992; Zohir, 1995).

**New industrial investment policy 1974** This policy has been aimed to mend the problem of the first policy towards stimulating private sector activity. A series of measures have been taken by the government and most of the time, to attract private investors, the investment ceiling was strengthened and made arrangements for monetary incentives from Tk 2.5 million to Tk 30 million (later Tk 100 million) to allow more corridor for the development of a suspension for the nationalization upto 15 years.

In the **revised investment policy, December 1975** remarkable changes have been taken place such as amendment of the constitution to allow denationalization, elimination of ceiling on private investment on oil, relaxation of investment sanctioning procedures, shifting from 1970s fixed rate system to the floating exchange rate system, reviving the stock market, introduction of a number of export promotion measures, etc. In the name of denationalization and privatization, companies have been sold out at knockdown prices to those who have very little entrepreneurial experience. The effective level of support as enjoyed by import substitution and export promotion of industries in the period tend to bear out the fact that Bangladesh has proceeded a very little to expose their industries to the outside world.

In 1982, through the **new industrial policy**, many nationalized jute and cotton textile factories were transferred to the local owners. The revised Industrial Policy of 1986 simply followed the earlier moves towards the deregulation of ongoing structural adjustment program providing more incentive instruments available to the exporters. In terms of depth some obvious differences could be noticed in the policy 1991. The whole Industrial Policy was premised on the philosophy of a competitive market-based economy. Some of the most brilliant political initiatives are committed to attract the investors, i.e. the elimination of concessionary interest rates and special credit facilities, removal of all conditions of the authorization for the creation of new industries, the abolition of restrictions to foreign participation. **Industrial policy in 1999** was perhaps the most comprehensive policy to strengthen the role of the private sector. It was the first policy that had a real vision of industrial development and the targets set in the policy statement was a clear sense of direction. The main objectives and strategies of **industrial policy 2005** was more or less similar to those of the 1999 policy by keeping the dominant role of the private sector in industrial development.

Investing in EPZs has significant effect on FDI as well economic development
regards to employment generation (Industrial policy 2005). The major objective of industrial policy in 2009 was to provide the policy and institutional framework that created a momentum of accelerated economic growth. The policy aimed at creating a positive, proactive and supportive environment in which private investors can operate without unnecessary bottlenecks, delays and interferences. National industrial policy 2010 aimed at achieving the Millennium Development Goals (MDGs) through adoption of short, medium and long term programs.

4. THE INDUSTRIAL EXPERIENCES IN BANGLADESH

Bangladesh Small and Cottage Industries Corporation (BSCIC)

To care about industrialization through the creation of small entrepreneurial society, Bangladesh Small and Cottage Industries Corporation (BSCIC) was established in 1957 with the vision of accelerating industrial growth through the promotion of small industries and handicrafts in Bangladesh. In fiscal year 2012-2013 the contribution of Small and Cottage Industry (SCI) was about 5.27 percent of GDP. SCI is to fight poverty through its capacity under the guidance of the Ministry of Industry in order to increase industrial production and productivity and job creation (Table-2).

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Category</th>
<th>Number (upto June 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of industrial estates implemented</td>
<td>74</td>
</tr>
<tr>
<td>2</td>
<td>Number of industrial plots</td>
<td>10,338</td>
</tr>
<tr>
<td>3</td>
<td>Number of plots allotted</td>
<td>9,779</td>
</tr>
<tr>
<td>4</td>
<td>Total investment in the industrial units (BDT in crore)</td>
<td>18,897.14</td>
</tr>
<tr>
<td>5</td>
<td>Employment in the units (person)</td>
<td>5,26,141</td>
</tr>
<tr>
<td>6</td>
<td>Contribution to the national export from the estates (%)</td>
<td>9.69</td>
</tr>
</tbody>
</table>


Export Processing Zone (EPZ)

After independence, several natural disasters and unstable political environment branded the country an unattractive destination for foreign investors. The World Bank then declared Bangladesh as the least developed countries in Asia. It took three decades to transform from an agriculture based economy to an industry based one. The newly independent Bangladesh aspired to boost its economy through industrialization. In view of the growing need of attracting foreign and local investment, the concept of Export Processing Zones (EPZs) established to enhance investment, employment, export, to transfer technology and to earn foreign exchanges. The first EPZ was established in 1983 in the port city of Chittagong and due to its great success the secondone came into light in 1993 near the capital city Dhaka, playing a pioneering role in attracting foreign direct investment. The economic development of Bangladesh can be divided into three phases; these are 1972-1978, 1979-1990 and 1991 to date (Hossain and Cheng, 2005). Bangladesh
has opened up its economy with related trade liberalization (the fifth five-year plan, 1997-2002 GOB) which has geared up the economic parameters like exports, employment, investment, etc., and boomed the private sector for economic development.

After all, the Government of Bangladesh (GOB) has decided to allow capital investment in the export processing zones (EPZs) in the name of industrial development. It was the challenge for Bangladesh to invite investors by offering good management practices, political stability compared with other countries which attract FDI (Harigopal 2001). After that many questions arise for looking after the matter related to foreign investors, administration, land acquisition, operation and so on. After several discussions and open consultations GOB created the Export Processing Zone Authority of Bangladesh (BEPZA) as an autonomous body (BEPZA Act 1980) under the direct supervision of the Prime Minister’s Office (PMO). Government of Bangladesh has adopted an "open door policy" to attract investment from home and abroad through industrialization. By this way Bangladesh has established 08 (eight) EPZs (Table-3) under the regulation of BEPZA as mentioned in the table below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of EPZ</th>
<th>Year of establishment</th>
<th>Location</th>
<th>Size/Area (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chittagong EPZ</td>
<td>1983</td>
<td>Halishohor, Chittagong</td>
<td>453.00</td>
</tr>
<tr>
<td>2</td>
<td>Dhaka EPZ</td>
<td>1993</td>
<td>Ashulia, Dhaka</td>
<td>356.22</td>
</tr>
<tr>
<td>3</td>
<td>Comilla EPZ</td>
<td>2000</td>
<td>Comilla Town</td>
<td>267.46</td>
</tr>
<tr>
<td>4</td>
<td>Ishwardi EPZ</td>
<td>2001</td>
<td>Pabna</td>
<td>309.00</td>
</tr>
<tr>
<td>5</td>
<td>Uttara EPZ</td>
<td>2001</td>
<td>Nilphamari</td>
<td>212.00</td>
</tr>
<tr>
<td>6</td>
<td>Mongla EPZ</td>
<td>1999</td>
<td>Mongla, Bagerhat</td>
<td>255.41</td>
</tr>
<tr>
<td>7</td>
<td>Adamjee EPZ</td>
<td>2006</td>
<td>Siddirgonj, Narayangonj</td>
<td>245.12</td>
</tr>
<tr>
<td>8</td>
<td>Karnaphuli EPZ</td>
<td>2006</td>
<td>Potenga, Chittagong</td>
<td>209.06</td>
</tr>
</tbody>
</table>


**Industries under Board of Investment (BOI)**

With enactment of ‘the Investment Board Act 1989’ Board of Investment (BOI) was established under the control of Prime Minister’s Office, Bangladesh with its headquarter in Dhaka and other five divisional offices. BOI encourages private investment and provide necessary assistance to industries to be set up in all over the land except BSCIC, Textile industries, EPZ and Economic Zones having approval of the Board (BOI) and registered in the prescribed manner (The Investment Board Act 1989).

**Investment** The projects registered under BOI are dominated by the local (‘C’ type) investors, about 72% during FY 2006-07 to FY 2014-2015. On the other hand remaining 28% are foreign plus joint venture (‘A’ & ‘B’ type) investment. Below is a table which shows the investment and employment opportunity created
from FY 2006-2007 to FY 2014-2015 (Table-4). Total investment and employment registered have increased over the period.

**Table-4**

Private Investment Proposals Registered with BOI from FY 2006-07 to FY 2014-15(up to December)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>‘C’ type Investment Proposals Registered</th>
<th>‘A’ &amp; ‘B’ type Investment Proposals Registered</th>
<th>Total Investment Proposals Registered</th>
<th>Total Employment opportunity created (Person)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Projects</td>
<td>Project Value (Million Taka)</td>
<td>Number of Projects</td>
<td>Project Value (Million Taka)</td>
</tr>
<tr>
<td>2006-07</td>
<td>1,930</td>
<td>196,580.902</td>
<td>191</td>
<td>119,251.081</td>
</tr>
<tr>
<td>2007-08</td>
<td>1,615</td>
<td>193,530.073</td>
<td>143</td>
<td>54,328.849</td>
</tr>
<tr>
<td>2008-09</td>
<td>1,336</td>
<td>171,174.916</td>
<td>132</td>
<td>147,496.092</td>
</tr>
<tr>
<td>2009-10</td>
<td>1,470</td>
<td>274,136.882</td>
<td>160</td>
<td>62,607.587</td>
</tr>
<tr>
<td>2010-11</td>
<td>1,746</td>
<td>553,690.466</td>
<td>196</td>
<td>365,242.771</td>
</tr>
<tr>
<td>2011-12</td>
<td>1,735</td>
<td>534,769.057</td>
<td>221</td>
<td>344,168.157</td>
</tr>
<tr>
<td>2012-13</td>
<td>1457</td>
<td>446148.388</td>
<td>219</td>
<td>220721.295</td>
</tr>
<tr>
<td>2013-14</td>
<td>1308</td>
<td>497593.245</td>
<td>124</td>
<td>185318.034</td>
</tr>
<tr>
<td>2014-15</td>
<td>609</td>
<td>349431.535</td>
<td>57</td>
<td>56666.29</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>13,206</strong></td>
<td><strong>3,217,055.464</strong></td>
<td><strong>1443</strong></td>
<td><strong>1,555,800.156</strong></td>
</tr>
</tbody>
</table>

*Source: Policy and Planning wing, Board of Investment*

**Actual FDI inflow trends in Bangladesh** The Foreign Direct Investment (FDI) comes to Bangladesh in the form of equity, borrowings and reinvested earnings of the existing projects. Through the half yearly enterprise survey, Bangladesh Bank collects and compiles the time series data of FDI inflow into the economy. Since 2006 FDI inflow has gradually increased from US$ 792 million in 2006 to US$ 1527 million in 2014. The following diagram shows the trends in actual FDI inflow in Bangladesh.

**Figure-1**

![FDI Inflow Trend in Bangladesh](image_url)

5. NEW CONCEPT FOR INVESTMENT

Private Export Processing Zone

With enactment of ‘the Bangladesh Private EPZ Act-1996’ two companies got license for establishing industrial parks or private EPZ. But the Rangunia Export Processing Zone, owned by Chittagong Industrial Park Ltd., did not see the light of the day. Only Korean EPZ by 2,500 acres of land in Chittagong, operated by Youn'one Corporation, the largest investor in CEPZ and DEPZ, came into light in limited capacity within two decades. Youn'one Corporation operating in 12 countries today, incorporated in 1974 in Korea is a manufacturer of clothing, sportswear, backpacks, fabrics, dyeing and finishing of synthetic fabrics, sports shoes. But their inability to run the Korean EPZ in Bangladesh disappointed the GoB.

Bangladesh Hi-Tech Park Authority (BHTPA)

In 2010, the government of Bangladesh has enacted ‘the Bangladesh Hi-tech Park authority act" with a view to implementing its political agenda 'Vision 2021' using information and communication technology (ICT) and Development of favorable business environment for innovative companies. BHTPA is the official body of the Government of Bangladesh for creation, management, operation and development of Hi-Tech Parks in the country. Kaliakoir Hi-Tech Park, Jessore Software Technology (IT) Park, Sylhet Hi-Tech Park, Mohakhali IT Village, Janata Tower Software Technology Park are important and priority projects of the authority which would be the milestone for development of IT sector as well as industrialization of Bangladesh. Kailakoir Hi-Tech Park, near to city of Dhaka, is the first state level Hi-Tech parking Bangladesh. The project is now under feasibility study.

Economic Zone (EZ)

Getting inspired from the success story of the concept of EPZ, the GoB has established ‘Bangladesh Economic Zones Authority (BEZA)"officially instituted with the power provided by the Bangladesh Economic Zones Act, 2010. As the more liberal concept for investment economic zone will be composed of several divisions, such as:

- Export Process Area: Specified for export oriented industries;
- Domestic Processing area: Specified for industries to meet the demand of the domestic market;
- Commercial Area: Specified for business organizations, banks, warehouses, offices or others;
- Non-Processing Area: Specified for residence, health, education, amusements, etc;

---

BEZA aims to establish 100 Economic Zones on 30,000 hectares of land in the next 15 years with an employment generation for 10 million people. BEZA Governing Board decided in 2012 to establish five state run economic zones in the following proposed locations:

- Maulovibazar EZ, Sylhet.
- Mirsarai EZ, Chittagong.
- Mongla EZ, Bagerhat.
- Sirajgonj EZ, Sirajgong.
- Anowara EZ, Chittagong.

So far the authority or board permitted to establish the below mentioned 10 (ten) private Economic Zones (Table-5) as follows:

<table>
<thead>
<tr>
<th>S/N</th>
<th>Name</th>
<th>Upazila</th>
<th>District</th>
<th>Land Area (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A K Khan Private Economic Zone</td>
<td>Polash</td>
<td>Narshindi</td>
<td>200</td>
</tr>
<tr>
<td>2</td>
<td>Megna Industrial Private EZ</td>
<td>Sonargaon</td>
<td>Narayangonj</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>MegnaPrivateEZ</td>
<td>Sonargaon</td>
<td>Narayangonj</td>
<td>68</td>
</tr>
<tr>
<td>4</td>
<td>Aman Private EZ</td>
<td>Sonargaon</td>
<td>Narayangonj</td>
<td>150</td>
</tr>
<tr>
<td>5</td>
<td>Abdul Monem Private EZ,</td>
<td>Gojaria</td>
<td>Munsigonnj</td>
<td>197</td>
</tr>
<tr>
<td>6</td>
<td>Bay Private EZ</td>
<td>Gazipur</td>
<td>Gazipur</td>
<td>65</td>
</tr>
<tr>
<td>7</td>
<td>United City IT Park Ltd.PrivateEZ</td>
<td>Badda and Vatara</td>
<td>Dhaka</td>
<td>2.43</td>
</tr>
<tr>
<td>8</td>
<td>Arisha Private EZ</td>
<td>Keranigonj, Savar</td>
<td>Dhaka</td>
<td>84.95</td>
</tr>
<tr>
<td>9</td>
<td>East-West Special Private EZ</td>
<td>Keranigonj</td>
<td>Dahaka</td>
<td>54</td>
</tr>
<tr>
<td>10</td>
<td>Bosundhora Special Private EZ</td>
<td>Keranigonj</td>
<td>Dahaka</td>
<td>56</td>
</tr>
</tbody>
</table>

(Source: http://www.beza.gov.bd/all-zones/acessed on 05 August, 2016)

6. EXPORT PERFORMANCE OF BANGLADESH

In 1980s and 1990s, Bangladesh has commenced significant changes in trade as well as economic policies. It has faced structural adjustment reforms and trade liberalization through considerable reduction of tariff and non-tariff barriers, and incentives to export. During 1970s the export figure from the country has increased at 7.8% per annum. The subsequent changes in economic policies have led to reasonably improvement in export performance making the figure to increase at an annual 9.1% in 1980s. In this sequence it has grown up in the following years. The export-GDP ratio has also increased over time from 5.6% in 1990 to 19.4% in 2008.6

Challenges of Export Potential of Bangladesh

There are many impediments in Bangladesh which have detrimental impact on

---

6 World Development Indicators; www.worldbank.org.
export performance. Domestic ‘behind the border’ constraints like infrastructure, communications, ports, implementing capacity, functioning of related institutions, etc coupled with ‘beyond the border’ constraints, such as inadequate market access, environmental conditions, compliance, etc have contributed to the highly concentrated export basket (Hossain and Kabir, 2011). There will be growing competition in the coming years and Bangladesh will gradually lose its current comfort in the international market due to cost of doing business, tariff rationalization in energy and other utilities and medium income country status (N. Khundker, 2002). Bangladesh needs to address the above-mentioned constraints to realize the significant potential which already exists, and gradually secure a good standing amongst its competitors in the long run (Kabir, 2012).

PROSPECTS AND PROBLEMS OF INDUSTRIAL INVESTMENT IN BANGLADESH OTHER THAN EPZ AREA

BSCIC is prospective to employ the root level people with a very small investment but it is still weak and contribution is low. Though BOI is dealing with the largest area of the country, it has some systematic shortfalls, inadequate manpower to deal with. It has low control over the different branches of the government to serve their investors. Private EPZ started with the vision of investing in a large scale without bureaucratic procedure but it is crawling over the decades and couldn’t come into the light. Hi-Tech Park and Economic Zones are very new concepts with vast prospects in the current and future world but it are under the purview of basic feasibility study stage.

7. RATIONALE OF SETTING UP EPZ: BANGLADESH PERSPECTIVE-BACKGROUND

Since independence in 1971, Bangladesh has offered a series of industrial policies having specific objectives and priorities. In a war bust country, the then all abandoned medium and large enterprises were placed under the strict control of the State in the Industrial Policy of 1973. In the second policy, measures were taken up mostly to attract private investors. Industrial investment policy was revised in 1975 and the significant political changes that simplified the approval of the disbursement procedures of investment and lending were introduced. The enterprises were sold at affordable prices to the very little entrepreneurial experienced parties, in the name of denationalization and privatization. In the Industrial Policy 1991, the overall industrial policy was premised on the philosophy of a competitive market-based economy. "The Bangladesh Export processing zones Authority Act-1980" came into light with a view to import substitution and export promotion strategy. To expedite the notion some special features were defined in the Act:

1. The objects of the Authority shall be to foster and generate economic development of Bangladesh by promoting foreign investments, by diversifying the sources of foreign exchange earnings, by increasing
export, by strengthening the economic base of Bangladesh, to generate productive employment opportunity and to upgrade labour and management skills through acquisition of advanced technology.

2. There shall be a Board of Governors of the Authority which shall consist of the Hon’ble Prime Minister as Chairman; concerned Minister-in-charge of the Ministries or Divisions dealing with industries, commerce, finance, planning, foreign affairs, energy and ports and shipping as member along with Governor, Bangladesh Bank, Chairman, National Board of Revenue and the Secretaries of the said ministries

3. The policies formulated, orders given and instruction issued by the Board of Governors shall be deemed to be issued by the Government; and they shall not require any formal approval of any Ministry or Division dealing with the matters for their implementation.

4. It shall have an Executive Board appointed by the government which works along with a dedicated managerial body with autonomous power to serve the investors promptly within one roof.

5. The Act has empowered the zones to exempt from operation of certain laws only for simplification.

### 7.1 ECONOMIC RATIONALE OF EPZS: STATIC BENEFITS

The major functions (Eusufet al, 2007) of BEPZA are related to infrastructure, basic utility services and customer-related support, assistance in investors performing, promotional activities and working with investors to readjust the services as necessary. However, establishment of EPZ in Bangladesh contributes the economy in terms of employment, export, investment, etc. (Islam & Mukhter, 2011).

**Investment**

Since inception, it has been able to attract cumulative investment of US$ 3,188.07 Million in the industrial enterprises of EPZs under BEPZA within FY 2013-2014 (Table-6). Almost 37 countries including Bangladesh, India, China, Japan, South Korea, Malaysia, U.A.E., Turkey, Ukraine, Rumania, United Kingdom, Italy, Netherlands, Spain, Germany, Sweden, Switzerland, Belgium, Canada, U.S.A and Australia have invested in the EPZ’s of Bangladesh. Out of them about 28% is from Bangladeshi investors while joint venture investment is 15% and rest is full foreign investment (Source: Investment Promotion department of BEPZA).
Table-6 Year wise actual investment for a decade from EPZs under BEPZA.

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Actual investment (Million US$)</th>
<th>Financial Year</th>
<th>Actual investment (Million US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2005</td>
<td>118.52</td>
<td>2009-2010</td>
<td>221.99</td>
</tr>
<tr>
<td>2005-2006</td>
<td>112.89</td>
<td>2010-2011</td>
<td>313.23</td>
</tr>
<tr>
<td>2007-2008</td>
<td>302.19</td>
<td>2012-2013</td>
<td>328.53</td>
</tr>
<tr>
<td>2008-2009</td>
<td>148.03</td>
<td>2013-2014</td>
<td>402.58</td>
</tr>
</tbody>
</table>

Source: BEPZA Annual Report 2013-2014;

The annual actual investment trend is uprising for the decade of FY 2004-2005 to FY 2013-2014 (Table-5 & Figure-2) with exception of FY 2008-2009 and FY2009-2010 only due to impact for absence of elected government and democracy during 2007 to 2008 period in the country.

Figure-2 Year wise actual investment for a decade from EPZs under BEPZA.

Source: BEPZA Annual Report 2013-2014;

The political stability, investment friendly economic policy and the good services provided by the EPZ authority attracted remarkable investment in the years after 2010. The annual growth rate of the investment was positive in this period but jumped in FY 2007-2008, FY2010-2011 and in FY 2013-2014.

Export

The trend of exports in the decade of 2004-2005 to fiscal year 2013-2014 has increased in recent years (Table 7). The export of 2004-2005 was $ 1,548,000 which was gradually increased almost four times the US $ 5,525 for 2013-2014.
The export volume is increasing over the years but the annual growth rate of export performance possess quite ups and down nature.

**Figure-3 Annual growth rate of Export performance**

The annual growth rate of export performance during the decade is positive and quiet upward except FY 2008-2009 and FY 2009-2010(Figure-3). After two years of non-elected government regime the economic impact in every aspect fell slow then. But after that regime with the prudence of elected democratic government the economic parameters got overcome as in FY 2010-2011.

**Employment**

Upto FY 2013-2014 a total of 3,89,017 Bangladeshi people have been directly employed in the EPZ enterprises. Moreover a large number of foreign people also work there having Bangladeshi work permit with limited time. In FY 2004-2005 the employment in EPZs was 15,802 Bangladeshis which had been increased over the years but increasing rate had fallenin FY2007-2008 and FY 2008-2009 and after few years again in FY 2013-2014. It is the matter of optimism that the very important motto of the government for establishing EPZ is to promote employment creating industrialization. BEPZA is playing a crucial role to make true that motto of the country.
Figure-4 Cumulative employment in the EPZs of Bangladesh:

![Cumulative Employment Graph](source)

Source: BEPZA Annual Report 2013-2014;

The employment trend was quite stagnant during first half of the decade and it was sharply increased after FY 2009-2010 because the minimum wage rate for the EPZ workers is revised once in 2010 and again in 2013.

**Indirect Investment and Employment**

The ultimate impact of the establishment of EPZs is creating indirect investment and employment in rest of the economy by generating economic activities those are linked with both backward and forward steps of the production processes. By estimating the indirect impacts of industrialization it can be found out that some backward linkage industries established around the EPZ areas like accessories industries for the garments, while dyeing, label, packaging, etc as forward linkages. It is not so easy to calculate the indirect investment. Transportation business for conveying the employees to their workplaces, food supplier industries, wastage and garbage management parties, even some low-priced household materials alongwith ornaments, cosmetics businesses have grown up around the EPZ areas in response to huge demand by the workers. All these parties invest in different sectors considering the EPZ as center point of the whole arrangement. In such manner indirect employment has also been generated in such areas as transport staffs, hotel staffs, hawkers, garbage cleaners, etc. It also helps to improve infrastructural base, residential facilities nearby areas, urbanization development, and migration for searching job, etc.

**7.2 ECONOMIC RATIONALE OF EPZS AS INDUSTRIALIZATION: DYNAMIC BENEFITS**

**Structural shift in the economy**

Investors from home and abroad established their projects safely with different incentives in an area covered with some supportive policies within an umbrella. It creates economies of scale in production capacity in this area or zone because of the incentives and infrastructure facilities.
According to the industrial policies implemented so far in Bangladesh alongwith-different government’s industrial friendly decisions, it is shifted from an agriculture-based economy to an industry based one. The structural transformation of GDP i.e. share of industry has moved from 17.31% in 1980-81 to 29.61% in 2013-14 (Table-9). This proportion was increased by reducing the share of agriculture and the paradigm shift has begun with the steps in the EPZs of Bangladesh.

### Table-9

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>33.07</td>
<td>29.23</td>
<td>25.03</td>
<td>18.01</td>
<td>16.33</td>
</tr>
<tr>
<td>Industry</td>
<td>17.31</td>
<td>21.04</td>
<td>26.20</td>
<td>27.38</td>
<td>29.61</td>
</tr>
<tr>
<td>Service</td>
<td>49.62</td>
<td>49.73</td>
<td>48.77</td>
<td>54.61</td>
<td>54.05</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>


### Shifting of production activity

Investors are indifferent to invest in any EPZ of Bangladesh due to availing the facilities in all EPZs scattered in different location of the country. Socio-economic development stood place even in the northern backward area like that in the city area. In EPZ the investors get an environment to be structured. Thus their production activities shifted from an unorganized sector to organized one. Raw materials and equipments should be imported through a structured banking channel either from same country or abroad.

### Export diversification

Various types of products are exported from the EPZ enterprises. Alongwith the RMG products, Garments Accessories, Textile, Tent, Tent Accessories and Leather products and Footwear, are being exported from the EPZs. Apart from these other diversified items like Electrical equipment, LED lamp, Furniture, Bi-cycle, Cosmetic and Hollywood mask, Optical goods, Automobile Parts, Engineering products, Battery, Camera & lens, Cell phone parts, Gold and diamond jewelry, Bag, Luggage, Sleeping Bag, Camping Furniture, Electronic products, Golf shaft, Wig and fashion hair, Jute products, Metal products, Toys, Eye-glass and Frame, Carpet, Chopsticks, Bamboo made Coffin, etc are also produced in EPZs of Bangladesh for export to rest of the world.

### Environmental dynamism

Industries usually emit effluent through its procedure, but the measures to treat this effluent are required in a good industrial area which will save the environment from degrading due to industrialization. Industrial enterprises of EPZs maintain Effluent Treatment Plant to discharge their effluents of chemical or dye even in the individual plant or Central ETP operated by BEPZA. To monitor the effluent management BEPZA has deployed some young and dedicated officials as environment-
tal counselors. At the same time this institution also works by establishing few Water Treatment Plants in EPZs to supply fresh water to the enterprises.

**Role of EPZs in digitalization**

To become the active partner of “Digital Bangladesh”, the ICT campaign of the GoB, BEPZA has streamlined its activities by reducing reliance on paper documentation. BEPZA is now performing almost all the day to day services to investors through automation. In October 2009, Chittagong EPZ became the first EPZ to become automated. With this facility a BEPZA official can provide his service to the client sitting any part of the world.

**Infrastructural Dynamism**

BEPZA has executed the Power Supply Agreements with 06(six) private companies for producing and supplying of 290 (Two hundred and ninety) Megawatts electricity to the enterprises in 06 EPZs. As per the agreements, the companies are allowed to supply and sale their extra power to the national power grid after meeting their own demand. Thus, the power plants in the EPZs are contributing to the national economy by meeting up the demand of electricity outside the EPZ areas. A Bangladeshi power producing company is operating to provide electricity to the enterprises of Chittagong EPZ and Dhaka EPZ.

**Poverty alleviation through increasing per capita income**

From the very beginning EPZs are such a concept which helps in industrialization, creating employment opportunity. Centering an EPZ a business cluster established in nearby area. Some formal and many informal entrepreneurs have grown up depending on EPZs in Bangladesh. The people in Nilphamari, a backward northern area in Bangladesh is now working at enterprises in Uttara EPZ. A transport business along with petrol pump stations has emerged there to carry the workers and goods. Many grocery shops, hotel and restaurant business rises in nearby area of EPZ. Some luxurious hotel and restaurants established for foreign investors there.

Almost 0.4 million people are working directly in EPZ enterprises. With their family members (suppose 4 in a family) the beneficiary is almost 1.6 million. Creating informal business sector around the EPZ area it generates more employment and more income. In this way by creating industrial localization, the per capita income of people increases. In this way many poor people, especially women are getting now solvent. They send their children to school. They eat better, put on better and dream better.

**Role of EPZs in Women Empowerment**

Employment in the EPZ has definitely provided men and women with employment in good working condition. It has also empowered women, increased their mobil-
ity and expanded their individual choice. Women’s access to income-earning opportunities had many implications for their position in intrahousehold relationships. Empowerment has been measured in terms of access to the labour market, decision-making role, mobility, domestic conflicts, and consciousness about health. A study conducted at the workers in Dhaka and Chittagong EPZ (Zohir, S. C., 2001).

Figure-5 Male-Female ratio in the EPZs workers in Pi-Chart:

A large number of female workers about 64% are working in the EPZs, especially in the garments sector (Source: BEPZA Annual Report, 2013-2014). Every year an increasing number of young girls and women are joining in the productive workforce of EPZs. BEPZA operates a project named Northern Area Poverty Reduction Initiatives (NARI) funded by the World Bank. This project is being implemented to train up the fresher women from backward areas of the country in order to improve their lifestyle and to make them as worker of EPZ enterprises.

7.3 RATIONALE BEHIND THE SUCCESS OF EPZS

The specialized facilities in Export Processing Zones like systematic and scientific labour management, compliances in building and fire safety, fiscal and non-fiscal incentives offered by the government and above all the hardworking & integrity of the whole team working in the Bangladesh EPZ Authority have made the concept successful.

7.3.1 Labour management system

Based on the ILO conventions ratified by Bangladesh government and interest of the EPZ investors a separate act is functioning for the Freedom of Association and Collective Bargaining facilities of EPZ workers named as “The EPZ Workers Welfare Association and Industrial Relations Act, 2010”. EPZ workers are eligible to provide their mandate in favour of attaining Workers Welfare Association through a rule guided referendum process and then elect their Collective Bargaining Agent through secret ballots and spontaneous participation. A separate and complete labour law named the “Bangladesh EPZ Labour Act” is going to be enacted very soon.
Minimum wage structure for the EPZ workers has been increased in different level from 34% to 93% in 2010; then again it has been increased upto 46% in 2013. In terms of social compliance parameters, the EPZ enterprises become almost 93% compliant.

A good number of young ‘Social Counselor Cum Inspectors’ are monitoring the inspection system, labour disputes and compliance issues regularly. To avail legal support in labour right issues there hasa separate ‘Conciliator’ in each zone and a panel of ‘Arbitrators’ are functioning to resolve the disputes alternatively. Apart from that the GoB has designated 08 Labour Courts as EPZ Labour Tribunals for eight EPZs and 01 (One) Labour Appellate Tribunal as EPZ Labour Appellate Tribunal for settling labour-related disputes in EPZs. After the establishment of EPZ labour tribunals in 2011 a total of 160 cases were filed of which 70 were settled (Source: AR on C-87 of ILO, Bangladesh 2015). For providing educational, social, environment awareness training program, skill development alongwith other welfare measures for the EPZ workers a Workers’ Welfare Fund is working in EPZ enterprises.

7.3.2 Building and Fire Safety

The enterprises operating within EPZs have to attain ‘Building Safety Certificate’ issued by different engineering and technological universities of Bangladesh. Besides, the enterprises have to obtain Fire License from the fire service and civil defense authority. Moreover, BEPZA has strong Fire Fighting Team led by an experienced official who arranges regular fire-fighting drill as well as training to the workers and staffs in the EPZ enterprises to build awareness.

7.3.3 Incentives offered in EPZs of Bangladesh

To attract the investors in the EPZs, GoB is to offersome fiscal and non-fiscal incentives. The EPZ authority has a marketing policy based on the following incentives:

- Tax holiday facility for corporate tax is now for 05 (five) to 07 (seven) years (for the industries set up after January 01, 2012) which were for 10 years to each zone since inception (Source: SRO No. 219-Law/Income Tax/2012).

- Duty free importation of three vehicles for A & B type (foreign and joint venture) industries subject to certain conditions, duty free commissariat facility for the foreign nationals and exemption from the income tax for the foreign expatriates for first three years.

- Duty free imports and exports are allowed in EPZs. No ceiling of foreign investment in EPZ.

- BEPZA is committed to its investors to serve them within one window
in every aspect. These are like expatriate issues i.e. recommendation for visa, issuance of work permit, security clearance, etc, custom procedures, security matters, utility services, alongwith day to day services.

- Import from anywhere and sub-contracting with export oriented industries are allowed.
- Full repatriation of profit, capital and establishment is open since BEPZA is the signatory of Overseas Private Investment Corporation (OPIC) and member of Multilateral Investment Guarantee Agency (MIGA).
- EPZ enterprises require no utilization declaration (UD), import registration certificate (IRC), export registration certificate (ERC) and renewal of bond registration.
- All required business support services like bank, courier, shipping agent, etc. and facilities like restaurant, investors club are available within the zone area.

8.0 CONTRIBUTION OF EPZ WITHIN THE INDUSTRIAL SYSTEM IN BANGLADESH

Focusing an EPZ, the economy sets up backward and forward linkages and supportive service industries which create overall industrial localization by making indirect investment and employment opportunity especially for women. So far under BEPZA there are total 560 industrial enterprises of which only 437 are in operation. The cumulative investment in these is US$ 3.401 billion and almost 4,05,166 Bangladeshi people are employed in these enterprises. The cumulative export from the EPZs is US$ 42.93 Billion since its inception.

Contribution of EPZs to the net FDI Inflow in Bangladesh

Using a comprehensive dataset on Chinese municipalities it is found three impacts of SEZs on FDI and other economic issues. First finding is the policy package, tax break increases per capita municipal FDI by 58% in the form of foreign invested and export oriented industrial enterprises, second is the SEZ experiment increased municipal foreign owned capital stock and did not crowed out domestic capital and investment and third finding is SEZ experiment increased municipality total factor productivity growth by 0.6% (Jin Wang, 2009). Although Bangladesh has experienced ups and downs in its industrial atmosphere over the decades due to political turmoil, eventually it has managed to collect FDI successfully. During 2011 to 2015 net FDI inflow in Bangladesh has increased from US$1,136.3 million to US$ 2,235.3 million. Out of the pie, EPZ’s share has also increased from around 18% to 26% within this period.
Table-10

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Net FDI inflow in Bangladesh (million US$)</th>
<th>FDI to EPZ</th>
<th>BEPZA’s Contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1136.3</td>
<td>228.03</td>
<td>20.06%</td>
</tr>
<tr>
<td>2012</td>
<td>1292.5</td>
<td>251.47</td>
<td>19.45%</td>
</tr>
<tr>
<td>2013</td>
<td>1599.1</td>
<td>352.07</td>
<td>22.01%</td>
</tr>
<tr>
<td>2014</td>
<td>1551.2</td>
<td>406.41</td>
<td>26.19%</td>
</tr>
<tr>
<td>2015</td>
<td>2235.3</td>
<td>406.66</td>
<td>18.19%</td>
</tr>
</tbody>
</table>

Source: Foreign Investment & External Debt (FIED) Division, Statistics Department, Bangladesh Bank.

Contribution of EPZ in National Export

Inline with the improved performance of the overall economy the export has also been booming over the years for Bangladesh. However, the contribution of the EPZs into the national export is also increasing every year. The national export has been increased from US$ 8,656 million to US$ 30,176 million over the last decade where the contribution from eight EPZs with their 2,307 acres of land only is around 17% to 19%. EPZs are contributing significantly the national export in the subsequent years as well.

Table-11

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Export of Bangladesh (US$)</th>
<th>Total Export of EPZs (US$)</th>
<th>BEPZA’s Contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2005</td>
<td>8655</td>
<td>1549</td>
<td>17.90</td>
</tr>
<tr>
<td>2005-2006</td>
<td>10526</td>
<td>1836</td>
<td>17.44</td>
</tr>
<tr>
<td>2006-2007</td>
<td>12178</td>
<td>2064</td>
<td>17.00</td>
</tr>
<tr>
<td>2007-2008</td>
<td>14111</td>
<td>2429</td>
<td>17.22</td>
</tr>
<tr>
<td>2008-2009</td>
<td>15560</td>
<td>2582</td>
<td>16.60</td>
</tr>
<tr>
<td>2009-2010</td>
<td>16250</td>
<td>2822</td>
<td>17.36</td>
</tr>
<tr>
<td>2010-2011</td>
<td>22924</td>
<td>3698</td>
<td>16.13</td>
</tr>
<tr>
<td>2011-2012</td>
<td>24410</td>
<td>4210</td>
<td>17.24</td>
</tr>
<tr>
<td>2012-2013</td>
<td>27018</td>
<td>4856</td>
<td>17.97</td>
</tr>
<tr>
<td>2013-2014</td>
<td>30176</td>
<td>5525</td>
<td>18.30</td>
</tr>
</tbody>
</table>

Source: BEPZA Annual Report 2013-2014;

Contribution to compliances

BEPZA having its autonomous facility can operate the services related to overall activities of total operation very promptly. The implementation capacity in terms of labour rights issues, workplace safety, building and fire safety, inspection, compensation and other social security’s in the EPZs is very high due to its management system. The minimum wage to the EPZ worker is BDT 5,600/- plus transport and food allowance where that for the non-EPZ worker is only BDT 5,300/- including all benefits.\(^7\)

\(^7\) Minimum wage circular of BEPZA-2013 and SRO no. 369-Law/2013.
Relative contribution of EPZs.

In developing industrialization, promotion of investment, employment and export different approaches are working in Bangladesh. Among them BOI, BSCIC and BEPZA are in the leading position. By analyzing the data used in this paper through different tables and words, it can be prepared a relative scenario of their performances.

Table-12

<table>
<thead>
<tr>
<th>Player</th>
<th>Cumulative Investment (upto 2014)</th>
<th>Total Employment</th>
<th>Contribution to National export</th>
<th>Land area</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOI</td>
<td>US$ 59.6 Billion (proposal registered)</td>
<td>30,96,511</td>
<td></td>
<td>Remaining industrial plots of the land</td>
</tr>
<tr>
<td>BSCIC</td>
<td>US$ 2.4 Billion</td>
<td>5,26,141</td>
<td>9.69%</td>
<td>10,338 plots</td>
</tr>
<tr>
<td>BEPZA</td>
<td>US$ 3.1 Billion</td>
<td>3,89,017</td>
<td>18.3%</td>
<td>2,336 Plots</td>
</tr>
</tbody>
</table>

Source: Data analyzed and modified from the tables used in this paper;

BSCIC with its 10,338 industrial plots achieved US$ 2.4 Billion Cumulative Investment, while BEPZA achieved US$ 3.1 Billion with its only 2,336 industrial plots. But BOI with the whole country except BEPZA and BSCIC area contributed US$ 59.6 Billion which is very low in terms of land proportion. This is proposal registered; actual figure may be lower than that. Similarly in terms of employment, export share and other parameters real contribution of BEPZA is highest. That’s why the Chittagong Export Processing Zone achieved the fourth position in the ‘Best Economic Potential’ category in global ranking according to the survey by The Financial Times, a London based fDiMagazine.

10. CONNOTATION

Zones are more important for indirect benefits which relate to transfer of advanced technology, managerial know-how, skill up-gradation, and export diversification. Differentiating the policy and facility offered, more than one concept or variety of zone can simultaneously be operated in a country. China, Korea, Indonesia, Vietnam, Brazil and some other countries are doing well parallel (Table-09), having Export Processing Zone, Free Trade Zone, Special Economic Zone, etc at a time offering different policies for different concept over the decades (Aggarwal, 2010). Investors now-a-day’s make demand for moving to the South East Asian countries like Bangladesh for low cost production base.

For the potential investors EPZs in Bangladesh are very lucrative area to invest due to proper policy support provided by the Government of Bangladesh. Because of limited land area in EPZs the potential investors then revert and set up their industry in Cambodia, Myanmar and other neighboring countries. As a result, Bangladesh is losing FDI in different sectors. Promoting Economic Zone all over the

---

country has been prioritized agenda of GoBas a new variety of zone. But it should carry the successful variety of EPZ with it. Even experience of EPZ can be a milestone for the Economic Zone since it has a strong success history.

The framework EPZs can be applied to other development policies to understand the underlying causes of establishing different varieties of zones. Further research on specialized zones (EPZ or SEZ or Others) should be carried out to reveal deficiencies of this paper including case studies applying the vigorous political economy framework.
References


Book- Development of Special Economic Zones in India-Impact and Implications (Vol-2), edited by- M. Soundarapandian, Published in Delhi, 2012.


Foreign Direct Investment in Bangladesh (1971-2010), Board of Investment, Bangladesh.


partnership with the public sector with minority equity participation. In a war of independence in 1971. These are: Bangladesh has declared several industrial policies having different objectives regardless of location.

The purpose of developing such specialized zones is to:

- **Park** and **IT Park**, etc.
- **Single Factory**
- **Export Processing Zone (EZ)**
- **Hi-Tech Parks**
- **Economic Zones**


New Industrial Investment Policy, 1974, Ministry of Industries, GoB.

New Industrial Policy (NIP), June 1982, Ministry of Industries, GoB.

N. Khundker: “Garment industry in Bangladesh” in G. Joshi (ed.) Garment industry in South Asia: Rags or riches? Competitiveness, productivity and job quality in the post-MFA environment (New Delhi, ILO, 2002).

Revised Industrial Policy (RIP), July 1986, Ministry of Industries, GoB.
Revised Investment Policy, December 1975, Ministry of Industries, GoB.
Theses on Labour Conditions in Export Processing Zones and the Role of the ILO: Focus on Freedom of Association, Faculty of Law, University of Oslo, and Supervisor: Stein Evju (Professor), September 2013.
The Annual Report 2014, Board of Investment, Bangladesh (page-26).
A Study on Participation of Commercial Banks in Microfinance Programs – Perspective Bangladesh

Md.Waheduzzaman Sarder*

Abstract: A good number of studies revealed that microfinance has turned into an effective tool to combat poverty in Bangladesh. Traditionally Microfinance Institutions (MFIs) provide microfinance among low income poor people in Bangladesh with a view to alleviating poverty and empowering the poor. In addition to MFIs, commercial banks in Bangladesh are also engaged to offer micro financial services. Given country wide branch network and availability of adequate fund, commercial banks have enormous scope to provide microfinance among the poor. Microfinance programs have also created scope for commercial banks for diversification of deployment of funds as well as further involvement in the financial inclusion process of the country. The paper will analyze advantages and problems of microfinance programs operated by commercial banks in Bangladesh. The paper also provides some policy options for smooth operation of microfinance programs of commercial banks in Bangladesh.

Keywords: Microfinance, poverty, commercial banks, Bangladesh.

1. Introduction

A good number of studies revealed that microfinance has turned into as an effective tool to combat poverty in Bangladesh like many other developing countries of the world. Traditionally Microfinance Institutions (MFIs) provide microfinance among low income poor people in Bangladesh with a view to alleviating poverty and empowering the poor. In addition to MFIs, commercial banks in Bangladesh are also engaged to offer micro financial services. Given country wide branch network and availability of adequate fund, commercial banks have enormous scope to provide microfinance among the poor. Microfinance programs have also created scope for commercial banks for diversification of deployment of funds as well as further involvement in the financial inclusion process of the country. In

* Joint Director, Monetary Policy Department, Bangladesh Bank, Head Office, Dhaka. The author is grateful to Mr. Md. Golzare Nabi, Deputy General Manager, Research Department, Bangladesh Bank, Head Office, Dhaka for his valuable suggestions.
Bangladesh, some commercial banks have already started microfinance programs with twin objectives of poverty alleviation as well as achieving commercial viability. The outstanding of microfinance by commercial banks stood at BDT498.25 billion as on December 2013 in Bangladesh.

Though a few years ago, microfinance was the exclusive domain of NGOs and cooperative societies, in 1998 commercial banks have emerged as “new actors in the microfinance world” (Baydas, Graham and Valenzuela, 1998). The commercial opportunity in microfinance is catching the interest of mainstream banking. Now many commercial banks have involved in microfinance programs in many parts of the world. Commercial banks in Bangladesh are also offering micro financial services. The cumulative credit disbursement of four state-owned commercial and two specialised banks stood at Tk. 249.19 billion. On the other hand, Cumulative credit disbursement of five private commercial and Ansar-VDP Development banks stood at Tk.164.46 billion and Islamic private commercial banks have disbursed Tk. 84.6 billion respectively up to December 2013.

2. Literature Review

The engagement of commercial banks in the microfinance field has drawn attention to policy makers as well as regulator. A number of studies have already been done by researchers and academicians to investigate whether commercial bank can provide microfinance in a sustainable way with profitability.

Mayada M. Baydas et al (1997) analyzed the involvement of commercial banks of developing countries in the microfinance market. The paper also reported that banks in some countries have already provided large amount of loans to micro entrepreneurs than NGOs. The paper mentioned the challenges of microfinance for commercial banks under the existing regulatory framework. The paper examined why bankers have not offered microfinance programs under the existing policy environment and key obstacles faced by the banks. The paper mentioned that two institutional challenges remain in the continuing evolution in microfinance programs by commercial banks. The first is the most cost-effective organizational form for large banking institutions to incorporate microfinance. The second is the most appropriate governance structure for former NGOs evolving into banks. The paper also reported that many micro lending NGOs have turned into banks or bank-equivalent institution, consumer lending or housing finance companies following success of microfinance market in many countries across the world. Financial products, innovative credit methodologies, sources of fund, modalities, human capital formation and donor-supported technical assistance have also discussed in the paper.

Jennifer Isern and David Porteous (2005) highlighted that commercial banks played an important role in micro financial programs in many financial markets across the globe. The paper mentioned that some commercial banks have entered
the microfinance market because of sustainable profit and growth opportunities. Some commercial banks realized that the poor can create a new market and asset class. They reported that according to a recent CGAP study, there are up to 3 billion potential clients in the microfinance market, out of them a significant number of potential clients remain unserved.

Greg Chen and Stuart Rutherford (2013) made a diagnosis of microfinance markets in Bangladesh and pointed out five trends: (i) the core microcredit product is holding steady and evolving incrementally (ii) Lending to small enterprise will remain a significant market segment (iii) Client demand for savings services is increasing; but is inadequately met (iv) There is growing momentum to create a special category of deposit-taking MFIs (v) Mobile phone payments services are developing rapidly.

A recent study by Rim Bounouala and Cherif Rihane (2014) examined the advantages and problems of commercial banks in operating microfinance programs. They discussed that commercial banks have entered into the new microfinance market motivated either by the growing competition in the banking sector or pressure of some governments directly or building partnership with MFIs. Risk management procedures and internal factors of success of commercial banks have also been analyzed in the paper

3. Objectives and Methodology

The objectives of the paper are two-fold: first, to review the present status of microfinance programs operated by commercial banks in Bangladesh and second, to put forward policy options for smooth operations of microfinance programs of commercial banks in Bangladesh. The general objectives would include: (i) To analyze present status of microfinance programs operated by commercial banks in Bangladesh (ii) To identify the advantages and problems of commercial banks operating in microfinance programs (iii) To provides policy options for smooth operation of microfinance programs by commercial banks in Bangladesh.

To meet the objectives of the paper, the information/data collected from the secondary source would be employed in the paper. The secondary source will analyze scholarly articles, Bangladesh Economic Survey, Annual Reports of the BB and MRA, various commercial banks and MFIs.

The paper will focuses on the following questions: why commercial banks turned to microfinance sector? What are the advantages and problems of commercial banks operating in microfinance sector? How commercial banks overcome the problems?

4. Comparative Advantages of Commercial Banks in Micro-finance

At first glance, a commercial bank appears well positioned to offer financial services to ever-increasing numbers of micro-finance clients and to earn a profit.
Banks have several advantages over non-bank, micro-lending NGOs:

- Commercial banks are regulated institutions fulfilling the conditions of ownership, financial disclosure, and capital adequacy that help ensure prudent management.
- Commercial banks have their own sources of deposits and equity capital; they do not have to depend on scarce and volatile donor resources like NGOs (MFIs).
- Many have physical infrastructure, including a large network of branches, from which to expand and reach out to a substantial number of micro-finance clients covering all major cities in a country.
- They have well-established internal controls and administrative and accounting systems to keep track of a large number of transactions.
- Their ownership structures of private capital tend to encourage sound governance structures, cost-effectiveness and profitability, all of which lead to sustainability.
- They offer loans, deposits, and other financial products that are, in principle, attractive to a micro-finance clientele.

All of these advantages could give banks a special edge over micro-lending NGOs in providing micro-finance services.

5. Problems of commercial banks in delivering of microfinance

Commercial banks have also some challenges in microfinance operation. The major challenges include: (i) lack of motivated manpower for microfinance, and (ii) narrow mindset of top executive towards microfinance programs. In this regard, Glenn D. Westley\(^1\) opines that, commercial banks often don’t really understand microfinance and its mode of operations. He also noted that commercial banks lack sufficient commitment to microfinance programs. According to Mayada M. Baydas\(^2\) et al (2007), the following problems associated with microfinance programs are analyzed below:

(i) **Too Risky:** Bankers perceive small businesses and microenterprises as bad credit risks. Many insolvent state-owned agricultural banks seemed to prove that small farmer clients could not or would not repay their loans. The perception is that small clients do not have stable, viable businesses for which to borrow and from which to generate repayment. Moreover, these potential clients lack traditional collateral to guarantee their loans. Finally, banks no doubt also recognize they do not have appropriate lending methodologies to serve these clienteles (that is, correct screening mechanisms to separate good from bad credit risks).

---

\(^1\) Glenn D. Westley (March 1997)

\(^2\) Mayada M. Baydas et al (2007)
(ii) **Too Expensive:** Bankers also believe that because microloans are small and have short terms, bank operations will be inefficient and costly. It takes the same amount of time and effort (if not more) to make a US$1,000 loan as a US$100,000 loan, but the return on the larger loan is much greater. So why make a small loan?

(iii) **Socio-economic and Cultural Barriers:** According to bankers, micro and small enterprise clients have difficulty approaching a bank because they lack education and do not possess business records to demonstrate cash flow. In many developing countries, social, cultural, and language barriers do not allow for an easy relationship with a modern banking institution. It is hoped, however, that with a more widespread diffusion of innovations in financial methodologies, reducing the risks and costs of microlending, more banks will begin to incorporate microentrepreneurs into their portfolios.

(iv) **The Policy Environment:** The policy arena is of strategic importance for commercial banks. Non-bank microlending NGOs can operate in a repressed financial market environment because they are not subject to the regulatory interest rate ceilings, high reserve requirements, and selective — that is, targeted — credit policies characteristic of these markets. Commercial banks, however, cannot escape these regulations, which, in the end, reduce their profit margins.

### 6. Means of participation in microcredit/microfinance by banks

(a) **Provide services**

    i) An internal microfinance unit: Commercial bank can operate microfinance program through an internal unit under the same bank. The internal unit model is seen throughout the world, including the Akiba Commercial Bank, Tanzania; Bank Rakyat, Indonesia; Banque du Caire, Egypt; Banco Solidario, Ecuador; Cooperative Bank, Kenya and Banco do Nordeste, Brazil. (Jennifer Isern and David Porteous3, 2005)

    ii) A specialized financial institution: Many microenterprises lending NGOs have begun offering micro deposit facilities as well as microloan by transforming themselves into regulated banks or specialized financial institution across the globe. The specialized financial institution maintains separate corporate identity, governance, management, staff, and systems from those of the parent bank.

    iii) A microfinance service company: Usually the commercial bank forms the separate service company to provide micro financial services among low income poor people who are registered on the book of the parent bank.

(b) **Linkage program**

---

3 Jennifer Isern and David Porteous (2005)
i) Outsourcing retail operations: In this model, the bank contracts with a MFI to provide microfinance products that are registered on the bank’s book. The microfinance services may be branded by the bank or the MFI or a joint brand.

ii) Providing commercial loans to MFIs: Many commercial banks across the globe provide commercial loans to MFIs. Commercial banks can provide a term loan or line of credit to an MFI for working capital. Commercial banks provide loans for special purpose to promote specific sector with a view to generate income and employment particularly the poorest section of the society.

iii) Providing infrastructure and systems: In this system, the bank provides access to its branch or network to a microfinance institution or its clients. In return, MFIs or their client gives fees or commissions to bank, depending on the terms of the contractual arrangement with them.

Direct and indirect ways by which commercial banks can operate in microfinance is depicted by flow chart below:

![Flow Chart](image)

**Fig. 1. Reasons and strategies of commercial banks entry into microfinance**

---

4 Mayada M. Baydas et al (2007)
Table 1. Largest Four MFIs and the Microfinance Market (2012)\(^5\)

<table>
<thead>
<tr>
<th></th>
<th>ASA</th>
<th>BRAC (^a)</th>
<th>BURO</th>
<th>GRAMEEN</th>
<th>4 MFIs as % of All MFIs (^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Portfolio (US$ Million)</td>
<td>636</td>
<td>750</td>
<td>110</td>
<td>997</td>
<td>65</td>
</tr>
<tr>
<td>Saving Deposits (US$ Million)</td>
<td>262</td>
<td>311</td>
<td>42</td>
<td>1,628</td>
<td>86</td>
</tr>
<tr>
<td>Branches</td>
<td>3,025</td>
<td>2,120</td>
<td>625</td>
<td>2,567</td>
<td>49</td>
</tr>
<tr>
<td>Active Borrowers (Millions)</td>
<td>4.2</td>
<td>4.4</td>
<td>1.0</td>
<td>6.7</td>
<td>72</td>
</tr>
<tr>
<td>Microfinance Staff</td>
<td>20,969</td>
<td>17,700</td>
<td>5,447</td>
<td>22,621</td>
<td>53</td>
</tr>
<tr>
<td>Year of Launch of Microcredit</td>
<td>1991</td>
<td>1974</td>
<td>1991</td>
<td>1976</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: A Microcredit Crisis Averted: The Case of Bangladesh (Greg Chen and Stuart Rutherford, July 2013)

a. BRAC’s figures include only full-time microfinance staff, though shared services staff (e.g., accounting and finance) would increase the full-time equivalent head count.

b. Percentages based on large four MFI figures for 2011 as a proportion of industry totals from Bangladesh Microfinance Statistics, 2011, Credit and Development Forum & Institute of Microfinance

7. Present status of Microfinance Operated by Commercial Banks in Bangladesh

At present state-owned four commercial and two specialised banks are offering microcredit among poor people regularly. The cumulative credit disbursement and recovery stood at Tk. 249.19 billion and Tk.245.36 billion respectively since operation in microfinance sector up to December 2013. In addition to this, private commercial banks have also come forward to delivery microcredit. The recovery rate is very high than any other sector operated by commercial banks. Now the recovery rate against the disbursed credit stood at 98.0 percent. During FY 2013-14 (up to Dec 13) total 2,59,029 beneficiaries have been offered for credit facilities but on cumulative basis the number of beneficiaries stood at 11,007,242.

Table 2.1: Performance of 4 state-owned commercial banks*, BKB & RAKUB

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disbursement</td>
<td>105.47</td>
<td>9.35</td>
<td>9.91</td>
<td>14.34</td>
<td>16.01</td>
<td>20.15</td>
<td>15.35</td>
<td>23.98</td>
<td>23.33</td>
<td>16.90</td>
<td>249.19</td>
</tr>
<tr>
<td>Recovery</td>
<td>119.64</td>
<td>8.80</td>
<td>12.72</td>
<td>16.44</td>
<td>15.69</td>
<td>15.91</td>
<td>14.85</td>
<td>23.74</td>
<td>19.31</td>
<td>18.19</td>
<td>245.36</td>
</tr>
<tr>
<td>Rate of recovery</td>
<td>169</td>
<td>78</td>
<td>99</td>
<td>85</td>
<td>73</td>
<td>60</td>
<td>94</td>
<td>101</td>
<td>102</td>
<td>108</td>
<td>98</td>
</tr>
<tr>
<td>No of beneficiaries</td>
<td>5584740</td>
<td>491848</td>
<td>415736</td>
<td>486875</td>
<td>542087</td>
<td>596250</td>
<td>315510</td>
<td>414967</td>
<td>409638</td>
<td>259029</td>
<td>11007242</td>
</tr>
</tbody>
</table>


*= Sonali Bank Ltd., Agrani Bank Ltd., Janata Bank Ltd., Rupali Bank Ltd.

\(^5\) Greg Chen and Stuart Rutherford (2013)
It is evident from the table 2.1 and Annex1 (A) that Sonali Bank Ltd disbursed Tk. 119.03 billion up to December’13 which is the highest among the 4 state-owned commercial banks and 2 specialised commercial banks. Janata Bank Ltd disbursed Tk.55.95 billion which was followed by Agrani Bank Ltd (Tk.52.37 billion), Bangladesh Krishi Bank (Tk.15.85 billion), Rajshahi Krishi Unnayan Bank (Tk.4.12 billion) and Rupali Bank Ltd (Tk.1.87 billion) respectively up to December 2013. In terms of number of beneficiaries, Sonali Bank Ltd also secured the top position and the number stood at 6605734 persons. The number of beneficiaries of Bangladesh Krishi Bank, Janata Bank Ltd, Rajshahi Krishi Unnayan Bank, Agrani Bank Ltd and Rupali Bank Ltd stood at 1932721, 1782897, 384660,195186 and 106044 respectively. The comparative position of state-owned banks in terms of microcredit disbursement is depicted in pie-chart:

3.1 Microcredit Disbursement & beneficiaries of 4 State-Owned Commercial Banks, BKB & RAKUB

<table>
<thead>
<tr>
<th>Bank</th>
<th>Sonali Bank</th>
<th>Janata Bank Ltd</th>
<th>Agrani Bank Ltd</th>
<th>Bangladesh Krishi Bank</th>
<th>Rajshahi Krishi Unnayan Bank</th>
<th>Rupali Bank Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disbursement (in billion taka)</td>
<td>119.03</td>
<td>55.95</td>
<td>52.37</td>
<td>15.85</td>
<td>4.12</td>
<td>1.87</td>
</tr>
<tr>
<td>No of beneficiary</td>
<td>6605734</td>
<td>1782897</td>
<td>195186</td>
<td>1932721</td>
<td>384660</td>
<td>106044</td>
</tr>
</tbody>
</table>

Following microfinance programs of state-owned commercial banks, some private commercial banks including Islamic banks and specialised commercial bank are also conducting microfinance programs with a view to alleviate poverty and create self-employment opportunities for the low income poor people in Bangladesh. Cumulative credit disbursement of private commercial banks stood at Tk.164.46 billion. The number of beneficiaries stood at 15,15,125 persons of which 9,85,907 persons were female (65.07%) up to December 2013.
Create scope for commercial banks for diversification of deployment of funds as scope to provide microfinance among the poor. Microfinance programs have also

1. Introduction

The paper will analyze advantages and betterment of their living condition and the number of beneficiaries by introducing and implementing Rural Development Scheme (RDS). IBBL alone regulates the microfinance sector? How commercial banks overcome the substantial governance structure for former NGOs evolving into banks. The paper mentioned that two commercial banks have entered into the new microfinance business based on large amounts of loans to microcredit among poor people regularly. The cumulative credit disbursement and recovery in the country stood at Tk.164.46 billion and Tk.249.19 billion and Tk.245.36 billion respectively since December 13. Comparative position of disbursement process of the country. The paper mentioned that some commercial banks have entered into the new microfinance sector? How commercial banks overcome the substantial governance structure for former NGOs evolving into banks. The paper mentioned that two

Table 2.2: Performance of private commercial banks* & specialised bank

<table>
<thead>
<tr>
<th>Period</th>
<th>Ansar-VDP Development Bank</th>
<th>National Bank Ltd</th>
<th>The Trust Bank Ltd</th>
<th>BASIC Bank Ltd</th>
<th>Uttara Bank Ltd</th>
<th>Pubali Bank Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative upto</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disbursement</td>
<td>15.01</td>
<td>73.78</td>
<td>2.94</td>
<td>3.68</td>
<td>61.39</td>
<td>7.66</td>
</tr>
<tr>
<td>Rate of recovery</td>
<td>97.54</td>
<td>94.82</td>
<td>93.06</td>
<td>96.15</td>
<td>69.50</td>
<td>100</td>
</tr>
<tr>
<td>No of beneficiaries</td>
<td>886906</td>
<td>29391</td>
<td>20095</td>
<td>354685</td>
<td>132355</td>
<td>91693</td>
</tr>
</tbody>
</table>

**Ansar-VDP Development Bank

3.2 Microcredit disbursement & beneficiaries of Private Commercial & specialised Banks.

Islamic Private commercial banks have also been playing significant roles in microfinance sector, Islami Bank Bangladesh Limited (IBBL) in particular. IBBL has been playing a praiseworthy contribution in microfinance sector in Bangladesh by introducing and implementing Rural Development Scheme (RDS). IBBL alone disbursed Tk. 81.92 billion among low income poor people for income generating activities and betterment of their living condition and the number of beneficiaries stood at 854263 persons up to December 2013. Following the activities of RDS of IBBL, Social Islami Bank Ltd disbursed Tk.2.68 billion and the number of beneficiaries stood at 769 persons up to December 13. Comparative position of disbursements

6 Bangladesh Economic Survey (2014)
ment and number of beneficiaries of IBBL and SIBL are depicted in Table and pie-chart:

Table 2.3: Performance of Islami Bank Bangladesh Ltd & Social Islami Bank Ltd\(^7\).

<table>
<thead>
<tr>
<th>Period</th>
<th>Islami Bank Bangladesh Ltd</th>
<th>Social Islami Bank Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative up to December 13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disbursement</td>
<td>81.92</td>
<td>2.68</td>
</tr>
<tr>
<td>Rate of recovery</td>
<td>99.61</td>
<td>98.0</td>
</tr>
<tr>
<td>No of beneficiaries</td>
<td>854263</td>
<td>769</td>
</tr>
</tbody>
</table>


3.3 Microcredit disbursement & beneficiaries of Islami Bank Bangladesh Ltd & Social Islami Bank Ltd.


8. Future policy options

Commercial banks need to diversify funds as well as meet social obligations. Following actions may be undertaken by commercial banks to enter into microfinance market successfully:

- **Commitment**: Commercial banks must have strong commitment to deploy a portion of funds in microfinance program.

- **Organizational structure**: Microfinance programs need to be inserted into the larger bank structure in such a way that they have relative independence and, at the same time, have the scale to handle thousands of small transactions efficiently.

- **Financial methodology**: Banks need to acquire an appropriate financial methodology to service the microenterprise sector—financial innovations that permit a cost-effective analysis of creditworthiness, the monitoring of a large

\(^7\) Bangladesh Economic Survey (2014)
number of relatively poor clients, and the adoption of effective collateral substitutes.

• **Human resources:** Commercial banks need a good number of dedicated skill manpower for microfinance programs who can accelerate the microfinance programs taken by banks efficiently. Given that microfinance programs differ so radically from traditional banking, banks must recruit and retain specialized staff to manage these programs because microfinance operation are labour-intensive and require special people skills. So recruitment, training, motivation of staffs and performance-related incentives require special consideration for smooth operation of microfinance programs of commercial banks.

• **Cost-effectiveness:** Microfinance programs are costly because of the small size of their loans and because banks cannot operate them with their traditional mechanisms and overhead structures. Strategies must be found to minimize processing costs, increase staff productivity, and rapidly expand the scale of their microenterprise portfolios — that is, increase the number of loans. Here group approach rather than individual may be more effective to reduce the cost for loan. Banks must cover the costs of microfinance operations and specialized training through scale economies.

• **Regulation and supervision:** Commercial banks must communicate with banking authorities to ensure that reporting and regulatory requirements take into account the specialized nature of microfinance programs. Three things have to take into account for the regulator for those commercial banks want to take part in microfinance program are legal reserve requirements, reporting requirements and loan classification and provisioning.

9. **Conclusion**

Results of many studies reveal that microcredit has become an effective tool to reduce poverty by increasing income, consumption, and assets of the poor borrowers. In addition to operations of MFIs, commercial banks in Bangladesh are also offering micro financial services in a small scale. They have further scope to expand the programs to achieve the twin objectives of profitability and social mission of poverty alleviation. In this regard, they need to have firm commitment towards microfinance programs, recruit proper staff and design proper area based programs.


Consultative Group to Assist the poorest (CGAP) Various report.


MRA (2010), NGO-MFIs in Bangladesh, Vol. 7, Microcredit Regulatory Authority, Dhaka, Bangladesh.


NGOs-MFIs in Bangladesh: Vol-1, December 2004, Microfinance Research and Reference Unit, Bangladesh Bank, Dhaka.


**Present Scenario of banks engaged in microcredit/microfinance programs:**

<table>
<thead>
<tr>
<th>Bank</th>
<th>Disbursement</th>
<th>Recovery</th>
<th>Percentage of recovery</th>
<th>No of beneficiary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sonali Bank</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003-04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td>6163</td>
<td>8004</td>
<td>260</td>
<td>0</td>
</tr>
<tr>
<td>2006-07</td>
<td>453</td>
<td>486</td>
<td>107</td>
<td>201841</td>
</tr>
<tr>
<td>2007-08</td>
<td>419</td>
<td>677</td>
<td>165</td>
<td>199190</td>
</tr>
<tr>
<td>2008-09</td>
<td>557</td>
<td>921</td>
<td>34</td>
<td>179188</td>
</tr>
<tr>
<td>2009-10</td>
<td>637</td>
<td>744</td>
<td>30</td>
<td>208478</td>
</tr>
<tr>
<td>2010-11</td>
<td>576</td>
<td>678</td>
<td>30</td>
<td>251836</td>
</tr>
<tr>
<td>2011-12</td>
<td>676</td>
<td>812</td>
<td>35</td>
<td>164906</td>
</tr>
<tr>
<td>2012-13</td>
<td>724</td>
<td>851</td>
<td>39</td>
<td>159045</td>
</tr>
<tr>
<td>2013-14 (up to Dec 13)</td>
<td>669</td>
<td>470</td>
<td>30</td>
<td>137206</td>
</tr>
<tr>
<td><strong>Agrani Bank</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative 2003-2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td>284</td>
<td>616</td>
<td>44</td>
<td>115383</td>
</tr>
<tr>
<td>2006-07</td>
<td>190</td>
<td>800</td>
<td>29</td>
<td>139903</td>
</tr>
<tr>
<td>2007-08</td>
<td>295</td>
<td>1126</td>
<td>82</td>
<td>158978</td>
</tr>
<tr>
<td>2008-09</td>
<td>345</td>
<td>1080</td>
<td>63</td>
<td>5944</td>
</tr>
<tr>
<td>2009-10</td>
<td>295</td>
<td>1090</td>
<td>71</td>
<td>5672</td>
</tr>
<tr>
<td>2010-11</td>
<td>311</td>
<td>1000</td>
<td>76</td>
<td>7520</td>
</tr>
<tr>
<td>2011-12</td>
<td>327</td>
<td>1000</td>
<td>71</td>
<td>9134</td>
</tr>
<tr>
<td>2012-13</td>
<td>373</td>
<td>1000</td>
<td>105</td>
<td>15554</td>
</tr>
<tr>
<td>2013-14 (up to Dec 13)</td>
<td>366</td>
<td>1000</td>
<td>77</td>
<td>14850</td>
</tr>
<tr>
<td><strong>Janata Bank</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative 2003-2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td>284</td>
<td>616</td>
<td>44</td>
<td>115383</td>
</tr>
<tr>
<td>2006-07</td>
<td>190</td>
<td>800</td>
<td>29</td>
<td>139903</td>
</tr>
<tr>
<td>2007-08</td>
<td>295</td>
<td>1126</td>
<td>82</td>
<td>158978</td>
</tr>
<tr>
<td>2008-09</td>
<td>345</td>
<td>1080</td>
<td>63</td>
<td>5944</td>
</tr>
<tr>
<td>2009-10</td>
<td>295</td>
<td>1090</td>
<td>71</td>
<td>5672</td>
</tr>
<tr>
<td>2010-11</td>
<td>311</td>
<td>1000</td>
<td>76</td>
<td>7520</td>
</tr>
<tr>
<td>2011-12</td>
<td>327</td>
<td>1000</td>
<td>71</td>
<td>9134</td>
</tr>
<tr>
<td>2012-13</td>
<td>373</td>
<td>1000</td>
<td>105</td>
<td>15554</td>
</tr>
<tr>
<td>2013-14 (up to Dec 13)</td>
<td>366</td>
<td>1000</td>
<td>77</td>
<td>14850</td>
</tr>
<tr>
<td><strong>Rupali Bank</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative 2003-2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td>284</td>
<td>616</td>
<td>44</td>
<td>115383</td>
</tr>
<tr>
<td>2006-07</td>
<td>190</td>
<td>800</td>
<td>29</td>
<td>139903</td>
</tr>
<tr>
<td>2007-08</td>
<td>295</td>
<td>1126</td>
<td>82</td>
<td>158978</td>
</tr>
<tr>
<td>2008-09</td>
<td>345</td>
<td>1080</td>
<td>63</td>
<td>5944</td>
</tr>
<tr>
<td>2009-10</td>
<td>295</td>
<td>1090</td>
<td>71</td>
<td>5672</td>
</tr>
<tr>
<td>2010-11</td>
<td>311</td>
<td>1000</td>
<td>76</td>
<td>7520</td>
</tr>
<tr>
<td>2011-12</td>
<td>327</td>
<td>1000</td>
<td>71</td>
<td>9134</td>
</tr>
<tr>
<td>2012-13</td>
<td>373</td>
<td>1000</td>
<td>105</td>
<td>15554</td>
</tr>
<tr>
<td>2013-14 (up to Dec 13)</td>
<td>366</td>
<td>1000</td>
<td>77</td>
<td>14850</td>
</tr>
<tr>
<td><strong>Bangladesh Krishi Bank</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative 2003-2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td>284</td>
<td>616</td>
<td>44</td>
<td>115383</td>
</tr>
<tr>
<td>2006-07</td>
<td>190</td>
<td>800</td>
<td>29</td>
<td>139903</td>
</tr>
<tr>
<td>2007-08</td>
<td>295</td>
<td>1126</td>
<td>82</td>
<td>158978</td>
</tr>
<tr>
<td>2008-09</td>
<td>345</td>
<td>1080</td>
<td>63</td>
<td>5944</td>
</tr>
<tr>
<td>2009-10</td>
<td>295</td>
<td>1090</td>
<td>71</td>
<td>5672</td>
</tr>
<tr>
<td>2010-11</td>
<td>311</td>
<td>1000</td>
<td>76</td>
<td>7520</td>
</tr>
<tr>
<td>2011-12</td>
<td>327</td>
<td>1000</td>
<td>71</td>
<td>9134</td>
</tr>
<tr>
<td>2012-13</td>
<td>373</td>
<td>1000</td>
<td>105</td>
<td>15554</td>
</tr>
<tr>
<td>2013-14 (up to Dec 13)</td>
<td>366</td>
<td>1000</td>
<td>77</td>
<td>14850</td>
</tr>
<tr>
<td><strong>Rajshahi Krishi Unnayan Bank</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative 2003-2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td>284</td>
<td>616</td>
<td>44</td>
<td>115383</td>
</tr>
<tr>
<td>2006-07</td>
<td>190</td>
<td>800</td>
<td>29</td>
<td>139903</td>
</tr>
<tr>
<td>2007-08</td>
<td>295</td>
<td>1126</td>
<td>82</td>
<td>158978</td>
</tr>
<tr>
<td>2008-09</td>
<td>345</td>
<td>1080</td>
<td>63</td>
<td>5944</td>
</tr>
<tr>
<td>2009-10</td>
<td>295</td>
<td>1090</td>
<td>71</td>
<td>5672</td>
</tr>
<tr>
<td>2010-11</td>
<td>311</td>
<td>1000</td>
<td>76</td>
<td>7520</td>
</tr>
<tr>
<td>2011-12</td>
<td>327</td>
<td>1000</td>
<td>71</td>
<td>9134</td>
</tr>
<tr>
<td>2012-13</td>
<td>373</td>
<td>1000</td>
<td>105</td>
<td>15554</td>
</tr>
<tr>
<td>2013-14 (up to Dec 13)</td>
<td>366</td>
<td>1000</td>
<td>77</td>
<td>14850</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative 2003-2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td>284</td>
<td>616</td>
<td>44</td>
<td>115383</td>
</tr>
<tr>
<td>2006-07</td>
<td>190</td>
<td>800</td>
<td>29</td>
<td>139903</td>
</tr>
<tr>
<td>2007-08</td>
<td>295</td>
<td>1126</td>
<td>82</td>
<td>158978</td>
</tr>
<tr>
<td>2008-09</td>
<td>345</td>
<td>1080</td>
<td>63</td>
<td>5944</td>
</tr>
<tr>
<td>2009-10</td>
<td>295</td>
<td>1090</td>
<td>71</td>
<td>5672</td>
</tr>
<tr>
<td>2010-11</td>
<td>311</td>
<td>1000</td>
<td>76</td>
<td>7520</td>
</tr>
<tr>
<td>2011-12</td>
<td>327</td>
<td>1000</td>
<td>71</td>
<td>9134</td>
</tr>
<tr>
<td>2012-13</td>
<td>373</td>
<td>1000</td>
<td>105</td>
<td>15554</td>
</tr>
<tr>
<td>2013-14 (up to Dec 13)</td>
<td>366</td>
<td>1000</td>
<td>77</td>
<td>14850</td>
</tr>
</tbody>
</table>

Fund Composition of NGO-MFIs in Bangladesh

<table>
<thead>
<tr>
<th>Source of Fund</th>
<th>June 2008 (Million)</th>
<th>June 2009 (Million)</th>
<th>June 2010 (Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clients' Savings</td>
<td>36397.32</td>
<td>40526.91</td>
<td>47436.35</td>
</tr>
<tr>
<td></td>
<td>29.66%</td>
<td>29.73%</td>
<td>31.15%</td>
</tr>
<tr>
<td>Loan from PKSF</td>
<td>22708.58</td>
<td>22666.20</td>
<td>24484.12</td>
</tr>
<tr>
<td></td>
<td>18.50%</td>
<td>16.63%</td>
<td>16.08%</td>
</tr>
<tr>
<td>Loan from Commercial</td>
<td>23487.03</td>
<td>23896.37</td>
<td>23006.41</td>
</tr>
<tr>
<td>Banks</td>
<td>19.13%</td>
<td>17.53%</td>
<td>15.11%</td>
</tr>
<tr>
<td>Donors' Fund</td>
<td>4549.07</td>
<td>4110.29</td>
<td>4109.29</td>
</tr>
<tr>
<td></td>
<td>3.71%</td>
<td>3.02%</td>
<td>2.70%</td>
</tr>
<tr>
<td>Cumulative Surplus</td>
<td>31170.02</td>
<td>36261.74</td>
<td>42339.27</td>
</tr>
<tr>
<td></td>
<td>25.39%</td>
<td>26.60%</td>
<td>27.80%</td>
</tr>
<tr>
<td>Other Funds</td>
<td>4435.49</td>
<td>8847.97</td>
<td>10907.40</td>
</tr>
<tr>
<td></td>
<td>3.61%</td>
<td>6.49%</td>
<td>7.16%</td>
</tr>
<tr>
<td>Total</td>
<td>12747.51</td>
<td>136309.48</td>
<td>152282.84</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Source: MRA (2010)
Exchange Rates and Economic Growth in Bangladesh: An Econometric Analysis

Tauhidul Islam*
Md. Tanjil Hossain*

Abstract: Exchange rate and exports play an important role in an economy. This study examines the impact of exchange rate and export to GDP in Bangladesh using the time series data from 1981-2013. Ordinary Least Square (OLS) method is used to estimate the model. The results show that there is a positive relationship between exchange rate, export and GDP. The value of $R^2$ is 98.8%. This indicates that about 98.8% of the total variation in the GDP is explained by the exchange rate and export in Bangladesh. The results are statistically significant at 5% level of significance. This study suggests to increase exchange rate and export to increase economic growth in Bangladesh.

Key words: Economic Growth, Exchange Rate, and Export.

1. Introduction

In the era of globalization and financial liberalization, exchange rate plays an important role in international trade and finance for a small open economy like Bangladesh. This is because movements in exchange rates affect the profitability of multinationals and increase exchange exposure to enterprises and financial institutions. A stable exchange rate may help enterprise and financial institutions in evaluating the performance of investments, financing and hedging and thus reducing their operational risks. Fluctuations in the exchange rate may have a significant impact on the macroeconomic fundamentals such as interest rates, prices, wages, unemployment, and the level of output. This may ultimately results in a macroeconomic disequilibrium that would lead to real exchange rate devaluation to correct for external imbalances.

In different countries study shows that there is theoretical relationship between

* MSS Student, Department of Economics, Jatiya Kabi Kazi Nazrul Islam University, Trisal, Mymensingh and Assistant Professor, Department of Economics, Jatiya Kabi Kazi Nazrul Islam University, Mymensingh respectively.
exchange rate fluctuations and various macroeconomic indicators such as interest rate, inflation rate, current account and gross domestic product (GDP). Changes in interest rate, inflation rate, current account and gross domestic product affects exchange rate fluctuation. The findings of the research suggest that effects of gross domestic product over exchange rate is high in nature, the currency is devalue in exchange due to deficit GDP, and its impact is high on exchange rate followed by other variables such as inflation rate which effects is also not negotiable, followed by interest rate and current account balances.

Besides the exchange rate export is an important of economic growth in Bangladesh. In the last four years Bangladesh were achieved on an average export growth of 14.6 percent. Hence, in 2013 the contribution of export to GDP is 23.7%. (Source: BBS). Mainly Bangladesh exports two types of goods namely primary goods and industrial goods. Therefore, frozen food, tea, raw jute, agricultural products are included in primary goods and woven garments, knitwear, leather, jute goods, fertilizer and chemical products, footwear, ceramic products, petroleum products, handicrafts, etc are included in industrial exportable goods. Analysis of Bangladesh’s country-wise export shows that USA is the main destination of export. The other countries where Bangladesh exports are Germany, UK, France, Belgium, Italy, Netherlands, Canada, Japan.

2. Review of literature

There are numerous studies that have assessed the relationship among export, exchange rate movements and economic growth. The main findings of these studies are represented below.

Begum and Abul (1998), based on a two sector growth model and by using annual data for the period 1961-92 found that export growth has significantly increased economic growth through its positive impacts on total factor productivity in the country. Ahmed and Uddin (2009) found that export growth is often considered to be a principal determinant of production and employment growth in an economy and they argued that foreign currency made available through export earnings facilitates import of capital goods, which in turn increases production potential of an economy. Edwards (1986) and Rhodd (1993) found negative short-run effects but in the long-run the output response to devaluation appeared to be positive. Rizzo (1998) found that the higher the exchange rate, the poorer will be the condition of the importing country and vice versa. In such a case, there is no doubt to say that exchange rate has a direct impact on the economic growth of any country. Kendal (2004) reported that depreciation of the currency leads to increase in real output. Rosengren, Eric (1992) reported that there has been a significant correlation between inward foreign direct investment in the United States and the US real exchange rates since 1970. Two alternative reasons were responsible for that. Real exchange rate affect relative cost of production and relative exchange rates affect
the relative wealth significantly across countries. He also found that relative wealth significantly affects foreign direct investment in the united state and the effects of real wages have little impact on FDI. Arizonan (1992) have concluded that nominal shocks in flexible exchange rate regimes have adverse implications on investment behavior and a fixed exchange rate encourage FDI. Agenor (1991), and Montiel (1997) study on exchange rate found that exchange rate fluctuations have significant implications for economic performance in Bangladesh. This is because fluctuation in exchange rate brings about changes in trade balance by influencing the country's export and import. Exchange rates may cause the price level to change and, as a consequence, it may change the income distribution of the economy. Eichengreen (2008) argued that developing countries may not have the capacity of maintaining a depreciated exchange rate. This policy choice is likely to cause tension with other countries and would invite costly and financially disruptive inflation. Kamal; et al (2004); by using quarterly data from 1974 to 1999, finds the evidence of export-led growth for Bangladesh in both the long run and short run. Zakir; et al (2006) by using a dynamic panel data analysis, that existence of co-integration, that is, stable long-run relationship between trade balance of Bangladesh and its determinants.

These studies indicate that there is an important relationship among exchange rate, export and GDP. In this backdrop, the currency of Bangladesh has been devalued and depreciated since independence against some of the foreign currencies to whom it was pegged with, especially against USD.

In the above literature review it is seen that the previous study on impact of exchange rate and export on economic growth were used backdated data and method. However; in recent years, the impact of growing balance of payment have pressured on exchange rate of Bangladesh. In this context, the study is an attempt to evaluate the impact of exchange rate change and rise in export volume on output growth of Bangladesh economy by using up-to-date data and econometric method.

3. Data and methodology

This study is primarily based on secondary data. To conduct this study annual data of exchange rate, export and GDP growth from 1981-2013 are collected from Bangladesh Economic Review and Bangladesh Bank Monthly Economic Trend. In this work, simple linear regression analysis has been used. Regression analysis studies the causal relationship between one economic variable to be explained (the dependent variable) and one or more independent variables. It helps us to see the trend and make predictions outside or within a given data. Due to the linear relationship between GDP growth rate; and exchange rate and export our model specification is stated of the form:

\[ GDP = \beta_0 + \beta_1 \text{EXR} + \beta_2 \text{EXP} + U_i \]

In this equation GDP (Gross Domestic Product) is the dependent variable. EXR
and EXP are the independent variable and denote exchange rate and export respectively. Also β₀ is the intercept and β₁, and β₂, are the slope of the GDP growth equation. Ui denotes the error term which is normally distributed with a zero mean and a constant variance.

The values of β₀, β₁, β₂ and β₃ will be obtained by using the ordinary least squares estimation technique by the help of SPSS (Statistical Package for the Social Sciences). The value of the F statistic is used to ascertain the overall significance of the GDP growth rate equation. We compare the value of the F statistic with the value of the critical value of F at a given significance level usually 5%. If the value of the F statistic is greater than the value of the F critical, then the overall GDP growth rate equation is statistically significant or otherwise.

The statistical significance of the parameters will be established. In testing for the statistical significance of the parameters, we use the rule of thumb and the t-test. The rule of thumb states that for a parameter to be statistically significant, the absolute value of the t-statistic should be greater than or equal to two. Using the t-test, the t-critical value is compared with the t-statistic at a given significance level (5%). If the t-statistic is greater than the t-critical value, then, the parameter in question is statistically significant. If otherwise, then, the parameter is not statistically significant. The t-critical value is given by (n = number of observations, and k is the number of parameters); where n-k is the degree of freedom and α is the level of significance. The critical value of t is obtained from the t distribution table.

There are three major problems which affect regression results. These problems are heteroscedasticity, autocorrelation and multicollinearity. In this study to test these problems Spearman’s Rank correlation; Durbin-Watson d test and VIF (Variance Inflation Factor) have been used.

4. Objectives of the study

The objectives of this study are referring as follows:

- To investigate the exchange rate policy of the government of Bangladesh and to analyze its impact on growth of the economy i.e. GDP.

- To give some possible solutions and recommendation based on the empirical result of this study.

5. Result Analysis

An estimated regression result of econometric model is shown in the following tabular form:
**Table-1; Model: GDP = β₀ + β₁EXR + β₂EXP + Uᵢ**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>T statistics</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>12305.536</td>
<td>4.268</td>
<td></td>
</tr>
<tr>
<td>EXR</td>
<td>.844</td>
<td>17.465</td>
<td>5.681</td>
</tr>
<tr>
<td>EXP</td>
<td>.163</td>
<td>3.369</td>
<td>5.681</td>
</tr>
<tr>
<td>R square</td>
<td>.988</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DW test</td>
<td>1.149</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predictors</td>
<td>EXP, EXR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent Variable</td>
<td>GDP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To test for heteroscedasticity, using spearman’s rank correlation, we obtained the correlation coefficients between considering independent variable and residual for three model are shown in the following tabular form -

<table>
<thead>
<tr>
<th>Variable</th>
<th>Spearman’s Rank Correlation between residual and independent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXR</td>
<td>0.015</td>
</tr>
<tr>
<td>EXP</td>
<td>0.028</td>
</tr>
</tbody>
</table>

In this table all the values of spearman’s rank correlation (r) are less than .05. That means very low rank correlation. This indicates the absence of heteroscedasticity in the estimated model.

Using the Durbin –Watson test formula, we obtain d= 1.149. Based on the decision rule (n =32 and k = 3, from the Durbin-Watson table, dL = 1.24 and dU= 1.65; n=32 k=2, from the Durbin-Watson table, dL = 1.31 and dU= 1.57) we accept H₀ and reject H₁ because d=1.149 lies within the acceptance range which means that there is no autocorrelation.

It is seen that in table-1 the value of VIF for both exchange rate and import is 5.681 which is less than 10; that indicates estimated result of econometric model is free from multicollinearity.

As shown from the above tests, the results shown from the ordinary least square (OLS) for econometric model is a sensible one and has no problem of heteroscedasticity; autocorrelation multicollinearity. We therefore accept the results of the above estimated econometric model.
In table-1 the R² given from the regression analysis is 0.988; which is approximately 98.8%. Statistically, econometric model is a very good fit. Economically, it means that about 98.8% of the total variation in the GDP growth rate is attributed to or explained by the exchange rate and export in Bangladesh. R² value is statistically significant since F ratio (1.202E3) > F critical (2.9340). The unexplained variation is 1.2%. From the regression results in table -1, if exchange rate (EXR) and export are zero, then the GDP of Bangladesh is increased by 12305.536%. The value of the constant term is statistically significant since its t statistic is greater than 2. Based on the t-test, β0 is also statistically significant at 5% level of significance.

Based on economic theory and experience, it is expected that there will be a positive relationship among GDP growth rate, exchange rate and export in Bangladesh. In the estimated model the slope of exchange rate variable is 0.844 and the slope of the export variable is 0.163. This means that a 1% increase in exchange rate and export volume will cause GDP is increase by 0.844% and 0.163% respectively. Using the rule of thumb which states that if the absolute value of t-statistic is greater than 2; then, the parameter in question is statistically significant. From the regression results, in table-1 the t-statistic of exchange rate variable is 17.465 and export variable is 3.369; which are greater than 2. This implies that β₁ and β₂ are statistically significant in the estimated model. This means that exchange rate and export are key determinant of GDP growth rate in Bangladesh.

Here too, we can conclude that there is a positive relationship among GDP growth rate and exchange rate and export in Bangladesh. As seen from the literature, this can only happen in the short–run.

The analysis and discussion of the results in section 5 all confirm the conclusion that gross domestic product in Bangladesh is influenced significantly by the exchange rate and export volume. However, this is true in the short–run.

6. Conclusion and Recommendation

This study attempted to examine the relationship among GDP growth rate and exchange rate and export in Bangladesh for the period 1981 to 2013. The paper estimates the simple linear regression using OLS. Further tests were performed to ascertain the presence of autocorrelation, heteroscedasticity and multicollinearity. Autocorrelation and heteroscedasticity and multicollinearity were found to be absent but. The regression results was also found to be very sensible since the DW > R2. Also, the regression results showed that there is a positive relationship among GDP growth rate and exchange rate and export in Bangladesh and the regression results are statistically significant since t-value (6.594 > 1.70). Therefore, we strongly concluded that there is a positive relationship among GDP growth rate and the rate of exchange and export in Bangladesh. This implies that as exchange rate and export increases, GDP growth rate also increases. This
results, confirm the theory that high exchange rate stimulates economic growth in the short run. Therefore, policy makers should stabilise monetary and fiscal policies in the long run. Policy makers should also continue to embark on productive activities that will increase Bangladesh’s exports more than her imports.

In the long run, the authorities of Bangladesh should emphasis stable monetary and fiscal policies. They should intervene in the foreign exchange market as needed to prevent excessive volatility in the nominal and hence, the real exchange rate. However, they should not attempt to influence its level. Policy makers should also ensure that resources are put to maximum use under the correct and right avenues such as technical education, better incentive and motivation for effective and efficient performance. This will allow massive output expansion to meet the demands of Bangladeshis and then export the surpluses to other countries to obtain foreign exchange, instead of importing goods and services from other countries.
References


prices, wages, unemployment, and the level of output. This may ultimately results in a significant impact on the macroeconomic fundamentals such as interest rates, inflation, and output. This is because movements in exchange rates affect the profitability of foreign trade, the cost of imports, and the competitiveness of domestic products.

1. Introduction


Begum and Abul (1998), based on a two sector growth model and by using annual data of exchange rate, export and GDP growth from 1981-2013 are collected from Bangladesh Economic Review and Bangladesh Bank Monthly Economic Trend. This study is primarily based on secondary data. To conduct this study annual data were backdated data and all the necessary assumptions are represented below.

2. Review of literature

Based on economic theory and experience, it is expected that there will be a positive and significant relationship between GDP growth rate; and exchange rate and export in Bangladesh. The analysis and discussion of the results in section 5 all confirm the conclusion that nominal shocks in flexible exchange rate regimes have adverse implications for output and the price level to change and, as a consequence, it may change the income distribution.

Eichengreen (2008) argued that developing countries may not be able to control inflationary pressures in the domestic economy. For this reason they may have to accept higher inflation in the domestic economy. In this equation GDP (Gross Domestic Product) is the dependent variable. EXR and EXP are the independent variable and denote exchange rate and export respectively. Using the rule of thumb which states that if the absolute value of t-statistic is greater than 2, the null hypothesis can be rejected. This study attempted to examine the relationship among GDP growth rate and exchange rate and export volume. However, this is true in the short–run. The analysis and discussion of the results in section 5 all confirm the conclusion that exchange rate and export have a significant and positive impact on economic growth of Bangladesh economy by using up-to-date data and econometric method. According to the regression results, in table-1 the t-statistic of exchange rate variable is 17.465 which is greater than 2. Based on the t-test, β0 is also statistically significant at 5% level of significance.

The analysis and discussion of the results in section 5 all confirm the conclusion that exchange rate and export have a significant and positive impact on economic growth of Bangladesh economy by using up-to-date data and econometric method. According to the regression results, in table-1 the t-statistic of exchange rate variable is 17.465 which is greater than 2. Based on the t-test, β0 is also statistically significant at 5% level of significance.

The other countries where Bangladesh exports are Germany, UK, France, Italy, Japan, China, South Korea and India. The major products are included in primary goods and woven garments, knitwear, leather, jute goods and industrial goods. Therefore, frozen food, tea, raw jute, agricultural products are included in primary goods and woven garments, knitwear, leather, jute goods and industrial goods. Therefore, frozen food, tea, raw jute, agricultural products. Bangladesh exports are pegged with, especially against USD. This study suggests to increase exchange rate and export to increase domestic product over exchange rate is high in nature, the currency is devalue in Bangladesh. However, this is true in the short–run. Zakir; et,al (2006) by using a dynamic panel data analysis, that exchange rate and export have a significant and positive impact on economic growth of Bangladesh economy by using up-to-date data and econometric method. According to the regression results, in table-1 the t-statistic of exchange rate variable is 17.465 which is greater than 2. Based on the t-test, β0 is also statistically significant at 5% level of significance.

The other countries where Bangladesh exports are Germany, UK, France, Italy, Japan, China, South Korea and India. The major products are included in primary goods and woven garments, knitwear, leather, jute goods and industrial goods. Therefore, frozen food, tea, raw jute, agricultural products. Bangladesh exports are pegged with, especially against USD. This study suggests to increase exchange rate and export to increase domestic product over exchange rate is high in nature, the currency is devalue in Bangladesh. However, this is true in the short–run. Zakir; et,al (2006) by using a dynamic panel data analysis, that exchange rate and export have a significant and positive impact on economic growth of Bangladesh economy by using up-to-date data and econometric method. According to the regression results, in table-1 the t-statistic of exchange rate variable is 17.465 which is greater than 2. Based on the t-test, β0 is also statistically significant at 5% level of significance.

This study attempted to examine the relationship among GDP growth rate and exchange rate and export volume. However, this is true in the short–run. Zakir; et,al (2006) by using a dynamic panel data analysis, that exchange rate and export have a significant and positive impact on economic growth of Bangladesh economy by using up-to-date data and econometric method. According to the regression results, in table-1 the t-statistic of exchange rate variable is 17.465 which is greater than 2. Based on the t-test, β0 is also statistically significant at 5% level of significance.

The analysis and discussion of the results in section 5 all confirm the conclusion that exchange rate and export have a significant and positive impact on economic growth of Bangladesh economy by using up-to-date data and econometric method. According to the regression results, in table-1 the t-statistic of exchange rate variable is 17.465 which is greater than 2. Based on the t-test, β0 is also statistically significant at 5% level of significance.

The other countries where Bangladesh exports are Germany, UK, France, Italy, Japan, China, South Korea and India. The major products are included in primary goods and woven garments, knitwear, leather, jute goods and industrial goods. Therefore, frozen food, tea, raw jute, agricultural products are included in primary goods and woven garments, knitwear, leather, jute goods and industrial goods. Therefore, frozen food, tea, raw jute, agricultural products. Bangladesh exports are pegged with, especially against USD. This study suggests to increase exchange rate and export to increase domestic product over exchange rate is high in nature, the currency is devalue in Bangladesh. However, this is true in the short–run. Zakir; et,al (2006) by using a dynamic panel data analysis, that exchange rate and export have a significant and positive impact on economic growth of Bangladesh economy by using up-to-date data and econometric method. According to the regression results, in table-1 the t-statistic of exchange rate variable is 17.465 which is greater than 2. Based on the t-test, β0 is also statistically significant at 5% level of significance.

This study attempted to examine the relationship among GDP growth rate and exchange rate and export volume. However, this is true in the short–run. Zakir; et,al (2006) by using a dynamic panel data analysis, that exchange rate and export have a significant and positive impact on economic growth of Bangladesh economy by using up-to-date data and econometric method. According to the regression results, in table-1 the t-statistic of exchange rate variable is 17.465 which is greater than 2. Based on the t-test, β0 is also statistically significant at 5% level of significance.
Appendix

<table>
<thead>
<tr>
<th>Fiscal Years</th>
<th>GDP (in million US$)</th>
<th>GDP growth rate (in %)</th>
<th>Nominal exchange rate (with US$)</th>
<th>Export (in million US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-82</td>
<td>18028.2</td>
<td>3.80</td>
<td>20.07</td>
<td>626</td>
</tr>
<tr>
<td>1982-83</td>
<td>17159.3</td>
<td>2.38</td>
<td>23.80</td>
<td>687</td>
</tr>
<tr>
<td>1983-84</td>
<td>19635.8</td>
<td>4.02</td>
<td>24.94</td>
<td>811</td>
</tr>
<tr>
<td>1984-85</td>
<td>21643.5</td>
<td>5.18</td>
<td>25.96</td>
<td>936</td>
</tr>
<tr>
<td>1985-86</td>
<td>21170.0</td>
<td>3.22</td>
<td>29.89</td>
<td>819</td>
</tr>
<tr>
<td>1986-87</td>
<td>23758.5</td>
<td>4.25</td>
<td>30.63</td>
<td>1074</td>
</tr>
<tr>
<td>1987-88</td>
<td>25604.2</td>
<td>3.73</td>
<td>31.24</td>
<td>1231</td>
</tr>
<tr>
<td>1988-89</td>
<td>27710.1</td>
<td>2.16</td>
<td>32.14</td>
<td>1292</td>
</tr>
<tr>
<td>1989-90</td>
<td>30475.3</td>
<td>2.61</td>
<td>32.92</td>
<td>1524</td>
</tr>
<tr>
<td>1990-91</td>
<td>30978.9</td>
<td>5.94</td>
<td>35.68</td>
<td>1718</td>
</tr>
<tr>
<td>1991-92</td>
<td>31338.6</td>
<td>3.34</td>
<td>38.15</td>
<td>1994</td>
</tr>
<tr>
<td>1992-93</td>
<td>32031.3</td>
<td>5.04</td>
<td>39.14</td>
<td>2383</td>
</tr>
<tr>
<td>1993-94</td>
<td>33852.2</td>
<td>4.57</td>
<td>40.00</td>
<td>2534</td>
</tr>
<tr>
<td>1994-95</td>
<td>38088.6</td>
<td>4.08</td>
<td>40.20</td>
<td>3473</td>
</tr>
<tr>
<td>1995-96</td>
<td>40729.2</td>
<td>4.92</td>
<td>40.84</td>
<td>3884</td>
</tr>
<tr>
<td>1996-97</td>
<td>42317.9</td>
<td>4.62</td>
<td>42.70</td>
<td>4427</td>
</tr>
<tr>
<td>1997-98</td>
<td>44025.4</td>
<td>5.23</td>
<td>45.46</td>
<td>5172</td>
</tr>
<tr>
<td>1998-99</td>
<td>45708.9</td>
<td>4.87</td>
<td>48.06</td>
<td>5324</td>
</tr>
<tr>
<td>1999-00</td>
<td>47123.9</td>
<td>5.94</td>
<td>50.31</td>
<td>5752</td>
</tr>
<tr>
<td>2000-01</td>
<td>46988.5</td>
<td>5.27</td>
<td>53.96</td>
<td>6467</td>
</tr>
<tr>
<td>2001-02</td>
<td>47567.2</td>
<td>4.42</td>
<td>57.43</td>
<td>5986</td>
</tr>
<tr>
<td>2002-03</td>
<td>51913.6</td>
<td>5.26</td>
<td>57.90</td>
<td>6548</td>
</tr>
<tr>
<td>2003-04</td>
<td>56498.1</td>
<td>6.27</td>
<td>58.94</td>
<td>7603</td>
</tr>
<tr>
<td>2004-05</td>
<td>60381.7</td>
<td>5.96</td>
<td>61.39</td>
<td>8655</td>
</tr>
<tr>
<td>2005-06</td>
<td>61975.2</td>
<td>6.63</td>
<td>67.08</td>
<td>10526</td>
</tr>
<tr>
<td>2006-07</td>
<td>68443.4</td>
<td>6.43</td>
<td>69.03</td>
<td>12178</td>
</tr>
<tr>
<td>2007-08</td>
<td>79565.6</td>
<td>6.19</td>
<td>68.60</td>
<td>14111</td>
</tr>
<tr>
<td>2008-09</td>
<td>89360.5</td>
<td>5.74</td>
<td>68.80</td>
<td>15565</td>
</tr>
<tr>
<td>2009-10</td>
<td>100364.3</td>
<td>6.07</td>
<td>69.18</td>
<td>16205</td>
</tr>
<tr>
<td>2010-11</td>
<td>111943.2</td>
<td>6.71</td>
<td>71.17</td>
<td>22928</td>
</tr>
<tr>
<td>2011-12</td>
<td>116088.0</td>
<td>6.23</td>
<td>79.09</td>
<td>24302</td>
</tr>
<tr>
<td>2012-13</td>
<td>129863.6</td>
<td>6.00</td>
<td>79.93</td>
<td>27027</td>
</tr>
</tbody>
</table>

Source: Bangladesh Bureau of Statistics; Statistics Department, Bangladesh Bank; Export Promotion Bureau.
Adoption of Energy Drinks: 
A Cause for Concern and Social Awareness

S. M. Saief Uddin Ahmed*

Abstract: This study attempts to explore the adoption of energy drink by consumers and to find out the reasons behind adoption. We have selected students as the sample of this study for which we have conducted probability stratified sampling technique. Each semester has been considered as one stratum and ten different semester students have been chosen to construct stratum. The total 313 respondents have been drawn probabilistically from ten different semesters. Factor analysis then has been used to analyze the data and to draw the findings. From the factor analysis, it has been found that three factors namely promotional factor, distribution factor and health factor are the major influencers. These three factors have combined variance of 39.49% of the decision regarding the preference of energy drink by consumer.

Key words: Energy drink, Consumer, Factor analysis.

1. Introduction

Socio-culturally, this country does not favor wine or whisky as a drink either. After the soft drinks boom, the market is now overloaded with various brands of energy drinks. Interestingly, though developing countries like us enjoy these drinks at present, most developed countries have already banned most energy drink brands after gaining awareness about its harmful effects. In summer, people take these drinks to mitigate their thirst and they think it would fulfill their demand of water in body. Many people choose an energy drink to power their body up. Some prefer energy drinks to water/soft drinks in order to quench their thirst. Energy drinks may temporarily boost energy levels, but they often cause a crash and ultimately can lead to drowsiness [1].

In spite of having much more negative consequences drinking these beverages, some marketers are making good profit out of it. Through this study will try to find out what kinds of forces are influencing consumers to take energy drink? The

* Assistant Professor, Department of Business Administration, Sylhet International University.
findings will help the policy makers of Bangladesh Government and Bangladeshi energy drink manufacturers to adjust their approach to produce such drink.

2. Literature review

Dr. Hossain R. (2011) reported that three researchers from the University of Texas Health Science Centre and the University of Queensland in Australia examined the contents of energy drink, which are sold alongside soft drinks. Their review of all the studies published recently in the Mayo Clinic Proceedings revealed that high level of caffeine, one of the major ingredients in energy drinks puts certain susceptible people at risk of dangerous, even life-threatening consequences and adversely affects on blood pressure, heart rate and brain function [2].

Dr. Hossain R. (2011) wrote that some of these energy drink products sold in Bangladesh do not list the ingredients with their amounts including caffeine. Therefore, it is hard to determine exactly how much caffeine you are consuming [2].

Islam T. (2012) wrote that people are being influenced by the attractive advertisements of several types of drinks. Most of these advertisements are posturized on their favorite stars, who act as if these drinks give them unimaginable power. The language used in these advertisements is also extremely objectionable to attract people. There is no doubt that influenced by such advertisements and while succumbing to peer pressure, people of all ages, especially the youth, are drinking energy drinks [3].

Islam T. (2012) also noted that although energy drink temporarily refreshes you and changes your mood, it has many harmful effects on your health. High amounts of caffeine are used in energy drinks which can lead to epilepsy [3].

Neil R. (2013) commented that people newly acquiring wealth in Bangladesh are always in search of enjoyment. They view that their drinking habit will help overcome their class difference. Such pull and push within society however exert an extra pressure on the young generation to emulate their elders. But limited affordability compels them to lay their hands on cheaper varieties of drinks. Quite a few companies and business houses have taken a round-about path to cash in on the young people's gullibility. They are marketing a number of what is called energy drink [4].

Islam T. (2012) also noted that many parents still buy these drinks for their children as they have no idea about its harmful effects. Many children buy and drink these drinks like juice or soft drinks. These children, along with their parents, need to be informed about these drinks [3].

Neil R. (2013) also identified that alluring ads on some of these drinks draw attention of the uninitiated and soon they become addicted not only to these but also to stronger drinks. Some food and drink experts fear that these drinks directly
contribute to rising crimes in society. Their apprehension cannot be ruled out [4].

Star health (2011) reported that Energy drinks have Caffeine and its intoxication generally causes nervousness, anxiety, restlessness, insomnia, gastrointestinal upset and tremor. Furthermore, many ingredients present in these drinks are not scientifically researched. Other than caffeine, ingredients of energy drinks include high level of sugar, taurine, glucuronolactone, vitamins B, E, inositol, guarana etc [2].

Islam T. (2012) mentioned that 400mg caffeine is enough for an adult male person and 300mg caffeine is enough for female in a day. But a can of energy drinks contains 360mg caffeine. So we should understand what could be the effect on our health when we regularly drink several cans of energy drinks. Unfortunately one of the bad effects of caffeine is it increases the tendency of urine and reduces the amount of water in body. Also, by consuming high amounts of caffeine regularly, there is a possibility of being affected by many diseases like nervousness, anxiety, headache, insomnia, blood pressure, asthma etc. Energy drinks also affect the kidneys and heart. It reduces the amount of oxygen in human body. Phosphoric acid which is used in energy drinks, demolishes the calcium of bones and teeth. It increases weight because of high calorie content. Moreover, there is another harmful effect called sterility. Male or female, who are used to energy drinks, have decreased fertility. In their cases, the rate of abortion is increased. Some energy drinks have 4 per cent alcohol, making it unlawful for the practicing members of many faiths [3].

**Energy drinks Considered**

Globe soft drinks Ltd: The market leader

This is the pioneer company is producing energy drinks in our country. They have captured a huge market share around 70% & obtain handsome profit. The sale of Tiger is also increasing. Energy drinks brand from Globe soft drinks Ltd. is “Royal Tiger”.

Akij Food and Beverage Ltd. (AFBL): The market challenger

The second largest market owner of energy drink is AFBL. They have captured almost 25% market & their sales volume is also increasing. Brand from AFBL is “Speed”.

PRAN Foods Ltd.

The market follower PRAN came in the energy drink market as the follower. PRAN commercially launched its product in 2008. Its market share is approximately 1%. Brand from PRAN Foods Ltd is “Pran Power”.

Osotspa Co. Ltd.

This company is working in Thailand and its product is imported here by Eurydice
and Eleftheria Ltd. Its brand name is “Shark”. It performs niche marketing and gained 4% market share.

**Brand names & their meanings:**

<table>
<thead>
<tr>
<th>Brand name</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Tiger</td>
<td>The brand name is synonymous to Royal Bengal Tiger, which is the symbol of power and strength.</td>
</tr>
<tr>
<td>Speed</td>
<td>Speed means motion/force. It brings motion in our life. Makes our life dynamic.</td>
</tr>
<tr>
<td>Shark</td>
<td>Shark is a fast moving &amp; energetic animals in the sea. This drink enables us move fast &amp; be stronger like shark.</td>
</tr>
<tr>
<td>PRAN Power</td>
<td>This drink generates power for us to work more powerfully &amp; smartly.</td>
</tr>
</tbody>
</table>

*Source: www.assignmentpoint.com, retrieved at 27/04/1014*

**Market Share of each producer’s brand:**

<table>
<thead>
<tr>
<th>Producer &amp; Brand Name</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Globe Soft Drinks Ltd.</td>
<td>70</td>
</tr>
<tr>
<td>Royal Tiger</td>
<td></td>
</tr>
<tr>
<td>Akij Food &amp; Beverage Ltd.</td>
<td>25</td>
</tr>
<tr>
<td>Speed</td>
<td></td>
</tr>
<tr>
<td>PRAN Foods Ltd.</td>
<td>01</td>
</tr>
<tr>
<td>Pran Power</td>
<td></td>
</tr>
<tr>
<td>Osotspa Co. Ltd.</td>
<td>04</td>
</tr>
<tr>
<td>Shark</td>
<td></td>
</tr>
</tbody>
</table>

*Source: www.assignmentpoint.com, retrieved at 27/04/1014*

**Respondents' gender**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Male</td>
<td>264</td>
<td>84.3</td>
<td>84.3</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>49</td>
<td>15.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>313</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
3. Objective and Methodology

Objective

To find out what factor or factors influence consumers to adopt energy drink.

- To see the role of marketers in influencing consumers to adopt energy drink.
- To see health and condition drink,
- To provide suggestions for better policy making regarding energy drink.

Methodology

Research design

<table>
<thead>
<tr>
<th>Research type</th>
<th>Descriptive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of data</td>
<td>Primary</td>
</tr>
</tbody>
</table>

| Sampling design process | Questionnaire with two parts:  
Part A, consists of demographic information of students such as age, gender and semester.  
Part B (Energy drink adoption criteria), consists of sixteen variables, and were designed in a Likert scale format which is given five point rating scale ranges from not important at all to very important. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Target population</td>
<td>The students of Sylhet International University, a Private University in Sylhet Division, Bangladesh.</td>
</tr>
</tbody>
</table>
| Sampling technique     | Stratified Sampling,  
We have considered each semester as one stratum and also chosen 10 strata; ten semester students have been chosen for sampling purpose.  
The selection of stratum has been based on the secondary data. We have then selected samples from each stratum by using simple random sampling procedure. We picked 31 samples from each stratum. |
| Sample Size            | 313         |
| Sampling frame         | Students’ semester number is the identification number of sampling unit and it is used as sampling frame. |
4. Analysis and Findings

By conducting factor analysis, we have tried to identify the factors behind preferring energy drink, the first step in this analysis has been to measure the appropriateness of factor analysis and the following results here have been produced to make the decision.

Hypothesis testing

\[ H_0: R^2_{\text{pop}} = 0 \] the variables are uncorrelated in the population

\[ H_1: R^2_{\text{pop}} \neq 0 \] the variables are correlated in the population

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Hypothesis can be tested through Bartlett's Test of Sphericity. So the above significant value of Bartlett’s Test of Sphericity rejects the null hypothesis. A high value of chi square leads a .000 significant value which ultimately rejects null hypothesis. As a result it can be said that factor analysis is an appropriate technique where all the variables are correlated in the population. Kaiser-Meyer-Olkin Measure of Sampling Adequacy is another important method to determine the appropriateness of factor analysis. A value greater than 0.5 indicates that correlation between pairs of variables can be explained. Here the result is .685 which is positive and is a sign of the appropriateness of factor analysis.

Descriptive statistics

<table>
<thead>
<tr>
<th>Table 2: Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
</tr>
<tr>
<td>Product’s quality</td>
</tr>
<tr>
<td>Refreshment</td>
</tr>
<tr>
<td>Brand image of the product</td>
</tr>
<tr>
<td>Product’s price</td>
</tr>
</tbody>
</table>
went across each row, and highlighted the factor that each variable loaded most

Looking at the table 5 below, we can see the factor loadings for each variable. We
Rotated Component (Factor) Matrix

out what kinds of forces are influencing consumers to take energy drink? The
some marketers are making good profit out of it. Through this study will try to find

drinks to mitigate their thirst and they think it would fulfill their demand of water
after gaining awareness about its harmful effects. In summer, people take these

the soft drinks boom, the market is now overloaded with various brands of energy

1. Introduction

Scree plot gives an about the number of factors to be extracted. The

variance of 39.49% of the decision regarding the preference of energy drink

that three factors namely promotional factor, distribution factor and health

stratum and ten different semester students have been chosen to construct

This study attempts to explore the adoption of energy drink by

Respondents' age

by consumer.

ety as a whole has to take initiatives to raise the awareness program about positive

impacts of energy drinks are greater than the positive impacts. Energy drinks can

provide the exact picture of the quality and ingredients of the products.

to increase promotional activities to gain market share; they have to careful about

Although energy drinks has been taken for releasing thirsty and get refreshment;

young people's gullibility. They are marketing a number of what is called energy

extra pressure on the young generation to emulate their elders. But limited afford-

come their class difference. Such pull and push within society however exert an

Neil R. (2013) commented that people newly acquiring wealth in Bangladesh are

and negative impacts of having energy drinks.

ety as a whole has to take initiatives to raise the awareness program about positive

demolishes the calcium of bones and teeth, increases weight and reduces the

impacts of energy drinks are greater than the positive impacts. Energy drinks can

high amounts of caffeine increases the tendency of urine and reduces the

health when we regularly drink several cans of energy drinks. Unfortunately one of

upset and tremor. Moreover, many ingredients present in these drinks are not scien-

Globe soft drinks Ltd: The market leader

Hypothesis testing

produced to make the decision.

Hypothesis can be tested through Bartlett’s Test of Sphericity. So the above signifi-


and changes your mood, it has many harmful effects on your health. High amounts

of variables can be explained. Here the result is .685 which is positive and is a sign

http://www.assignmentpoint.com/business/marketing-


2. http://www.assignmentpoint.com/business/marketing-

3. http://www.assignmentpoint.com/business/marketing-

Source: Field survey, 2013

From the table 2, looking at the mean, we can conclude that product’s quality is
the most important variable that influence customers to take energy drink. It has
the highest mean of 4.134.

<table>
<thead>
<tr>
<th>Table 3: Communalities</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>1.000</td>
<td>.590</td>
</tr>
<tr>
<td>Stamina</td>
<td>1.000</td>
<td>.662</td>
</tr>
<tr>
<td>Refreshment</td>
<td>1.000</td>
<td>.368</td>
</tr>
<tr>
<td>Reduction of thirsty</td>
<td>1.000</td>
<td>.193</td>
</tr>
<tr>
<td>Ingredients of the product</td>
<td>1.000</td>
<td>.235</td>
</tr>
<tr>
<td>Product’s quality</td>
<td>1.000</td>
<td>.350</td>
</tr>
<tr>
<td>Product’s quantity</td>
<td>1.000</td>
<td>.358</td>
</tr>
<tr>
<td>Product’s price</td>
<td>1.000</td>
<td>.326</td>
</tr>
<tr>
<td>Availability of the product</td>
<td>1.000</td>
<td>.419</td>
</tr>
<tr>
<td>Brand image of the product</td>
<td>1.000</td>
<td>.302</td>
</tr>
<tr>
<td>TV and radio commercials of the product</td>
<td>1.000</td>
<td>.460</td>
</tr>
<tr>
<td>Model/s used in the commercials</td>
<td>1.000</td>
<td>.615</td>
</tr>
<tr>
<td>Prestige attached with the product</td>
<td>1.000</td>
<td>.371</td>
</tr>
<tr>
<td>Product’s popularity</td>
<td>1.000</td>
<td>.392</td>
</tr>
<tr>
<td>Experience with the product</td>
<td>1.000</td>
<td>.349</td>
</tr>
<tr>
<td>Size and shape of the bottle</td>
<td>1.000</td>
<td>.328</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Table 4: Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative</td>
</tr>
<tr>
<td>1</td>
<td>2.972</td>
<td>18.575</td>
<td>18.575</td>
</tr>
<tr>
<td>4</td>
<td>1.287</td>
<td>8.047</td>
<td>47.534</td>
</tr>
<tr>
<td>5</td>
<td>1.102</td>
<td>6.891</td>
<td>54.425</td>
</tr>
<tr>
<td>6</td>
<td>1.010</td>
<td>6.311</td>
<td>60.736</td>
</tr>
<tr>
<td>7</td>
<td>.953</td>
<td>5.955</td>
<td>66.691</td>
</tr>
<tr>
<td>8</td>
<td>.839</td>
<td>5.246</td>
<td>71.937</td>
</tr>
<tr>
<td>9</td>
<td>.718</td>
<td>4.489</td>
<td>76.426</td>
</tr>
<tr>
<td>10</td>
<td>.677</td>
<td>4.229</td>
<td>80.654</td>
</tr>
<tr>
<td>11</td>
<td>.653</td>
<td>4.081</td>
<td>84.735</td>
</tr>
<tr>
<td>12</td>
<td>.614</td>
<td>3.839</td>
<td>88.574</td>
</tr>
<tr>
<td>13</td>
<td>.550</td>
<td>3.436</td>
<td>92.010</td>
</tr>
<tr>
<td>14</td>
<td>.476</td>
<td>2.977</td>
<td>94.987</td>
</tr>
<tr>
<td>15</td>
<td>.419</td>
<td>2.617</td>
<td>97.605</td>
</tr>
<tr>
<td>16</td>
<td>.383</td>
<td>2.395</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Source: Field survey, 2013

From the output of table 4 shows extraction sums of squared loadings show those variables that are retained. Here 3 components are retained which have total 39.49% of the total variance. We noticed that the first factor accounts for 18.575 percent of the variance, the second 12.30 percent and the third 8.613 percent.

**Determination of the number of the factors**

Here in this study, we are extracting 3 factors and our decision is based on the following grounds:

- We are extracting those factors whose eigenvalue is more than 1 and 6 factors have that score but we take top 3 factors.
The cumulative variance of 3 factors is 39.49% which is satisfactory and that’s why we are extracting six factors.

Scree plot gives an about the number of factors to be extracted. The following scree plot also shows the number of factors to be extracted.

Rotated Component (Factor) Matrix

Looking at the table 5 below, we can see the factor loadings for each variable. We went across each row, and highlighted the factor that each variable loaded most strongly on (by suppress small coefficient below 0.60).

<table>
<thead>
<tr>
<th>Table 5: Rotated Component Matrix</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Model/s used in the commercials</td>
<td>.770</td>
</tr>
<tr>
<td>TV and radio commercials of the product</td>
<td>.673</td>
</tr>
<tr>
<td>Product’s popularity</td>
<td></td>
</tr>
<tr>
<td>Product’s quantity</td>
<td></td>
</tr>
<tr>
<td>Prestige attached with the product</td>
<td></td>
</tr>
<tr>
<td>Product’s price</td>
<td></td>
</tr>
<tr>
<td>Reduction of thirsty</td>
<td></td>
</tr>
<tr>
<td>Availability of the product</td>
<td>.631</td>
</tr>
<tr>
<td>Product’s quality</td>
<td></td>
</tr>
<tr>
<td>Experience with the product</td>
<td></td>
</tr>
<tr>
<td>Size and shape of the bottle</td>
<td></td>
</tr>
<tr>
<td>Brand image of the product</td>
<td></td>
</tr>
<tr>
<td>Ingredients of the product</td>
<td></td>
</tr>
<tr>
<td>Stamina</td>
<td>.795</td>
</tr>
<tr>
<td>Calories</td>
<td>.722</td>
</tr>
<tr>
<td>Refreshment</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Based on these factors loadings, we think the factors represent:

- **✓** Variables such as Model/s used in the commercials and TV and radio commercials of the product loaded very strongly on factor 1 as such promotional factor.
- **✓** One variable such as availability of the product loaded strongly on factor 2 like as distribution factor.
- **✓** Stamina and Calories are loaded strongly on factor 3 as such health factor.

<table>
<thead>
<tr>
<th>Table 6: Factor labeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>F1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>F2</td>
</tr>
<tr>
<td>F3</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

5. Concluding Remarks

Although energy drinks have been taken for releasing thirsty and get refreshment; marketers need to concentrate on reducing high level of caffeine from energy drink as well as include risk free nutritional ingredients for health. Also Marketers need to increase promotional activities to gain market share; they have to careful about the language used in these advertisements so that there is no objectionable elements to attract people. Marketers need to step back highlighting white lie and keeping the health hazardous ingredients of energy drink hidden. They have to provide the exact picture of the quality and ingredients of the products.

Consumers have to be aware about the addiction of energy drink as the negative impacts of energy drinks are greater than the positive impacts. Energy drinks can leads to nervousness, anxiety, headache, insomnia, blood pressure, asthma. It demolishes the calcium of bones and teeth, increases weight and reduces the amount of oxygen in human body. It also decreases fertility for both male and female. Consumer Association of Bangladesh (CAB) can put pressure on government institution such as Bangladesh Standards and Testing Institute (BSTI) to make solid policy for quality assurance of energy drink. Besides Consumers, Society as a whole has to take initiatives to raise the awareness program about positive and negative impacts of having energy drinks.
References


went across each row, and highlighted the factor that each variable loaded most. 

Looking at the table below, we can see the factor loadings for each variable. We rotated the component (factor) matrix, and we found that the factor loadings are high for each variable. 

Rotated Component (Factor) Matrix

The cumulative variance of 3 factors is 39.49% which is satisfactory and indicates that the factors have a significant impact on the variables. 

Energy drinks are becoming increasingly popular among consumers, and this trend is expected to continue. However, there is a lack of research on the effects of energy drinks on health. 

In spite of having much more negative consequences drinking these beverages, consumers still consume them. 

Energy drinks can lead to drowsiness [1]. Energy drinks are often consumed to mitigate their thirst and they think it would fulfill their demand of water. 

• To see health and condition drink,

The cumulative variance of 3 factors is 39.49% which is satisfactory and indicates that the factors have a significant impact on the variables. 

Energy drink, Consumer, Factor analysis.

Key words:

factor are the major influencers. These three factors have combined to explain the highest variance in model/s used in the commercials is accounted for. 

2. Literature review

By conducting factor analysis, we have tried to identify the factors behind consumer's preference for energy drink, the first step in this analysis has been to measure the respondents' gender.

Therefore, it is hard to determine exactly how much caffeine you are consuming daily. Although energy drinks have been taken for releasing thirsty and get refreshment; due to high amounts of caffeine they can affect blood pressure, heart rate and brain function [2]. 

Energy drink manufacturers to adjust their approach to produce such drink. 


Islam T. (2012) mentioned that 400mg caffeine is enough for an adult male person to maintain alertness, whereas 300mg caffeine is enough for female in a day. But a can of energy drinks contains almost 25mg caffeine which is equivalent to 11 cups of coffee. 


The acid which is used in energy drinks, demolishes the calcium of bones and teeth, increases weight and reduces the level of calcium in the blood. It affects on blood pressure, heart rate and brain function [2].

The cumulative variance of 3 factors is 39.49% which is satisfactory and indicates that the factors have a significant impact on the variables. 

Energy drink manufacturers to adjust their approach to produce such drink.


Islam T. (2012) mentioned that 400mg caffeine is enough for an adult male person to maintain alertness, whereas 300mg caffeine is enough for female in a day. But a can of energy drinks contains almost 25mg caffeine which is equivalent to 11 cups of coffee.


Islam T. (2012) mentioned that 400mg caffeine is enough for an adult male person to maintain alertness, whereas 300mg caffeine is enough for female in a day. But a can of energy drinks contains almost 25mg caffeine which is equivalent to 11 cups of coffee.
Long Run Relationship between Export and Import of Bangladesh: Growth Trend, Cointegration and Causality Analysis

Dr. Md. Moniruzzaman*

Abstract: Agriculture plays crucial role in the economy of Bangladesh in terms of food security, employment generation, poverty reduction and supplying raw materials for key manufacturing units. As agriculture is still one of the top priority sectors in Bangladesh economy, formal financial institutions have been providing huge amount of credit for sustainable development of the sector. The specialized banks, state-owned commercial banks and private commercial banks played key roles in providing of agriculture credit in Bangladesh. In the recent times, agricultural credit has been increased several times. Given this background, the paper reviews the recent trends of agricultural credit provided by the banking industry in Bangladesh. The paper would also provide suggestions for ensuring adequate supply of agricultural credit so as to address problems of agricultural output and maintaining food security, employment generation and poverty reduction in Bangladesh.

Key Word: Agricultural credit

1. Introduction

The main objective of pursuing a liberal trade policy instead of import substitution strategy since late 1980s is to achieve a competitive trade balance. The foreign exchange gap (Export minus Import) is also another concern of Bangladesh economy for development efforts. The import capacity also depends on export receipts. Though Bangladesh has been experiencing negative foreign exchange gap since independence but the gap has been fluctuating over the years. Therefore it is important to examine the long run relationship between export and import for designing appropriate policy option in the external sector. Husted(2001) explored the long run relationship between exports and imports of the USA using Engle-
Granger methodology. Bahmani-Oskooee (1994) studied the long run relationship between export and import of Australia. Dipendra Singha (1999) explored the long run relationship between export and import of Pakistan with the annual data by applying Cointegration methodology. Naqvi and Morimune (2005) studied the long run convergence of export and import for Pakistan using Johanson method of Cointegration. C.C. Keong et al. (2004) investigated the long run relationship between export and import of Malaysia by applying multivariate cointegration technique. The main findings of most these studies reveal that trade gap is a short run phenomenon and it is convergent in the long run.

Trade liberalization is emerged as one of the major macroeconomic policy concerns in many developing countries including Bangladesh for economic growth and development in the recent years. Trade is considered as the ‘Engine of Growth’ because of its role that facilitates a country to specialize in the production of goods and services following the theory of comparative advantage or revealed comparative advantage. On the other hand a country can import of goods and services at affordable and lower cost from abroad as compared the cost of producing the same in home country. Foreign trade, mainly meant by export and import, has significantly contributed to the process of industrialization in many developing countries.

Liberalization removes restrictions and barriers to trade and increases the openness in terms of mobility of goods and services, capital and technological knowledge. Therefore, a country can utilise the opportunity of specialization for the goods and services in which it has comparative advantages. Economic theory suggests that free and liberalized trade regime can perform better than the restricted trade. It is assumed that trade liberalization has positive impacts on trade performance of developing countries. It is also argued that trade liberalization augments the export led growth strategy and the productive capacity based on competitive and comparative advantage. The failure of Import Substitution Strategy (ISS) for industrialisation in many countries is an important reason for switching over to Export-led Growth Strategy (EGS). The commitment to WTO for maintaining liberal and open trade regime is also another important reason for the member countries to undertake liberalization measures.

Trade Liberalisation has been one of the major policy reforms in Bangladesh. Bangladesh, as one of the founding member countries of WTO, started a wide range of trade liberalization programs in the early 1990s. The components of SAP such as Structural Adjustment Facility (SAF) and Enhanced Structural Adjustment Facility (ESAF) facilitated the country to undertake various policy reforms which include trade policy, industrial policy, fiscal and monetary policy, exchange rate policy etc. A substantial change has been occurred in the trade regime of Bangladesh during the last three decades. The early 1990s is marked as the break point in the structural change through a shift from inward looking policy to outward look-
ing policy with higher integration in the global economy. The liberalization programs include various measures such removal of major non-tariff barriers, reduction of tariffs at both major Harmonised System (HS) group and sub-HS group, rationalization of tariff structure, tariff escalation etc., incentives for exports, duty drawback system, simplification of custom procedures etc.

Since 1992, Bangladesh has continued to liberalize its trade regime, by, inter alia, greatly reducing tariffs and eliminating some quantitative restrictions on imports. It has also considerably increased the transparency of its trade regime. Nonetheless, the regime is still characterized by a certain lack of transparency as regards the application of certain trade and trade-related measures such as customs administration, tariff concessions, advance income taxes on imports and exports, import surcharges, subsidies and other assistance, competition policy, and the regulatory framework. This provides considerable scope for administrative discretion, and even corruption, which in turn increases the uncertainty and costs of trading with and doing business in Bangladesh. At the same time, lack of transparency distorts market signals that are necessary to ensure an efficient allocation of resources, preventing Bangladesh from reaping the full benefits from trade liberalization and what would appear to be one of the most liberal FDI regimes in South Asia.

Foreign trade plays very important and crucial role in economic development of a country. Economic theories suggest that it reduces the dependence of foreign aid, augments the base of industrialization, increases foreign exchange earnings, creates employment opportunities, helps in transformation of the economic structure etc. Empirical evidences support that there exist positive correlation and strong causality between foreign trade and economic growth and development of many countries. Since independence Bangladesh has been facing with chronic deficit in the balance of trade. The main reasons have been identified as increasingly large dependence on import of capital goods and machineries, industrial raw materials, fuel, food grain and a wide variety of consumer items on import side and low volume of few traditional export items, low valued products, high concentration on traditional markets, and low level of product diversification on the export front.

Therefore, it is important to examine the dynamics of export, import and their long run relationship in the context Trade Liberalization in Bangladesh. The organization of this paper is as follows; Section I is the introduction, section II deals with the objectives and methodology, section IV deals with Cointegration test and Engale-Granger Causality relationship and explains the VAR relationship and section V is the conclusion of the study.

2. Review of Literature

The existing literatures, related to this study, are briefly reviewed in this section.

Reza analyses the chronic trade deficit of Bangladesh arguing that the export base and export earnings are persistently very low over a long span of time. He finds out
the performance of export sub-sector is very poor because of heavy concentration on few traditional items like raw jute, jute goods, tea, fish, leathers etc. Analyzing the trade figures from 1950 to 1978 he tries to show the problems and prospect of this sub-sector. He also focuses the employment potential and income distribution implications of export oriented strategy of development. He also suggests for export-led growth strategy instead of import substitution growth strategy as a policy option.

A. R. Bhuyan examines the prospect of non-traditional exports focusing on the imports of machinery and industrial raw materials. He shows that the demands for non-traditional items have been growing and there remains scope for modernization and expansion of this sub-sector. He does not give details about the transformation and diversification of non-traditional exports. The policy reforms for improvement of exports have not been focused in this study.

Kabir, in his study, tries to estimate the aggregate import and export demand functions of Bangladesh using time series data for a sample period from 1973 to 1983. In his study he chooses domestic price, foreign price, foreign exchange reserve, exchange rate as explanatory variables. He estimates the price elasticity and income elasticity of our exports and imports but he does not analyse the growth of export and imports. The trade policy or reforms and its impact on the export performance have been ignored in this study.

Mahmood explains the possibilities of the export led growth in Bangladesh. He argues that a country like Bangladesh can achieve high standards of living only through industrialization and expansion of trade in manufacturing. Citing examples of South Korea, Taiwan, Singapore, Hong Kong he mentions that Bangladesh should avoid import substitution industries and move to manufactured export because the demand for manufactured exports are more stable compared to traditional products. He argues that traditional exports suffer from supply inelasticity in the world market. His study does not include the trade reforms and its impact on trade performance.

Talukdar analyses the diversification of export with reference to Ready Made Garments(RMG). He points out that Bangladesh has comparative advantage in RMG because of cheap labour. He opines that export earnings could be enhanced through promotion of RMG. This study places more weights only one export items. But other developing countries have been enjoying comparative advantage in RMG. So, in order to face global challenges Bangladesh should diversify export base.

Roy analyses the determinants of export performance of Bangladesh using an econometric analysis. He examines the causal relationship of the determining factors and export performance for Bangladesh. His study finds that the export performance of Bangladesh is associated with greater commodity diversification...
of exports. He shows that commodity exports have been diversified more over the years. Liberalization of trade and industrial policies has important consequences for the composition of exports as well as growth and stability. But this study does not specifically cover the relationship between impact of trade liberalization and trade performance.

Raihan (2007) analyzed the dynamics of trade liberalization in Bangladesh in the context of policies and practices by using modern tools of economic analysis. He reviewed theoretical evidences between Trade Liberalisation and economic growth, Trade Liberalisation policies and programmes in Bangladesh. He conducted a time-series evaluation of Bangladesh's Trade Liberalisation in a changing perspective and in a global prospective, a dynamic panel econometric study on Bangladesh manufacturing industries, Short-run vs. Long-run Macro impacts of Trade Liberalisation: an inter-temporal computable general equilibrium(CGE) model of Bangladesh.

Ahmed analyzes the trends and impact of trade liberalization in Bangladesh. He examines the impact of trade liberalization on import demand, export supply, industrial growth of Bangladesh using modern time series method of co-integration and error correction modeling. In analyzing Bangladesh experience with trade liberalization he addresses a number of key issues such as nature and policy instruments of trade liberalization, the degree of trade liberalization, impact of trade liberalization on import demand, export supply, industrial growth and government revenue, and external constraints faced by Bangladesh. He finds that both at aggregate and commodity level the import is generally less sensitive to import price changes whereas export both at aggregate and commodity level are sensitive to real exchange rate and relative prices. Bangladesh export supply is found as price inelastic at both levels. Using ECM he finds that trade liberalization it has significant role in improving the trade performance of Bangladesh.

Santos-Paulino and Thirlwall have used panel data and times series/cross section analysis to estimate the effect of trade liberalization on export growth, import growth, the balance of trade and the balance of payments for a sample of 22 developing countries that have adopted trade liberalization policies since the mid-1970s. They found that liberalization stimulated export growth but raised import growth by more, leading to a worsening of the balance of trade and payments.

3. **Objective and Methodology**

3.1 **Objective**

The broad objective of the study is set to empirically analyze the long run relationship between export and import of Bangladesh. The specific objectives of the study are as follows:

i. To examine the growth trend of export and import of Bangladesh;
iii. To find out causal relationship between trade liberalization and export, import;
iv. To estimate the export-import model of Bangladesh.

3.2 Methodology
The study follows time series econometric techniques and tools for testing different models and hypotheses to conform the long run relationship between export and import of Bangladesh. The approach and methodology used in the present study are different to some extent from those adopted in the works cited in the literature review.

Data Sources and Methods of Data Collection:
Annual Time Series Data for the period from 1972-73 to 2008-2009 for the relevant variables is collected from the various publications of the government of Bangladesh, World Tables of World Bank, International Financial Statistics of IMF etc. The collected data from secondary sources are processed in an orderly manner so that it could be used for econometric modeling.

Trend Growth Functions and Compound Growth Rates
Compound Growth Rate (CGR) is computed by taking the form of mathematical equation as \( X_t = X_0(1+r)^t \), where \( X \) is the concerned variable, \( t \) represents time periods. The procedure is as follows:

1. Taking natural logarithm on both sides of the equation \( X_t = X_0(1+r)^t \)
2. \( \ln X_t = \ln X_0 + T \ln (1+r) \), let \( \beta_0 = \ln X_0 \) and \( \beta_1 = \ln (1+r) \) the original equation can be written as \( \ln X_t = \beta_0 + \beta_1 T \)
3. Adding disturbance error term the econometric specification takes the form as \( \ln X_t = \beta_0 + \beta_1 T + u_t \)
4. The model specified above takes the form of a linear regression model in the sense that coefficients \( \beta_0 \) and \( \beta_1 \) are in linear form. The model becomes a semilog or log-lin form. Here \( X_0 \) is the regressand and \( t \) is repressor. \( \beta_1 \) gives instantaneous growth rate( at a point in time).
5. Using OLS method of linear regression we get the estimate of \( \beta_1 \) which are the coefficients of time variable. Once \( \beta_1 \) are estimated then we take anti-log of \( \beta_1 \). Then 1 is subtracted from the anti-log of \( \beta_1 \) and the results are multiplied by 100 to get the compound growth rate.
6. The formula for Trend Growth Rate (TGR) takes the following form:
\[
\text{CGR} = \frac{\text{[Anti-log of estimated } \beta_1 - 1]\times 100}{100}.
\]
A. The Export Trend Function:

\[ \log X = \beta_0 + \beta_1 T + \epsilon_t \]

[Log X = Exports in logarithm, T = Year, \( \epsilon_t \) = Error Term, \( \beta_1 \) = Coefficient]

B. The Import Trend Function:

\[ \log M = \beta_0 + \beta_1 T + \epsilon_t \]

[Log M = Imports in logarithm, T = Year, \( \epsilon_t \) = Error Term, \( \beta_1 \) = Coefficient]

**Compound Annual Growth Rate (CAGR)**

The compound annual growth rate is calculated by taking the nth root of the total percentage growth rate, where n is the number of years in the period being considered. This can be written as follows:

\[
\text{CAGR} = \left[ \frac{V_t}{V_0} \right]^{1/N} - 1
\]

Where \( V_t \) = Ending Value, \( V_0 \) = Beginning Value, \( N \) = Years

CAGR essentially smooths out the progress of exports and imports over a period of time, providing a clearer picture of change.

**Structural Breakpoint Test**

The structural changes in trade pattern before liberalization and after liberalization is tested by using ‘Chow Breakpoint Test’. It is very important for long-run time series to identify parameter stability over the period of investigation. Two types of diagnostic test are generally used for structural breakpoint – Chow Test is used when the possible break point in the data series can be identified a ‘priori’ and CUSUM test is used when the breakpoint in the data is not known as a ‘priori’. In this study the study period is broken by two sub-periods such as pre-liberalization from 19972-1973 to 1989-1090 and post-liberalization from 1990-91 to 2009-2010. Therefore Chow Test is applied to test the parameter stability. The structural change can be measured by the two intercepts or two slopes of the models in pre-liberalization and post-liberalization periods. The procedure for Chow test is as follows:

1. Estimate the model by OLS using the whole or unbroken series to generate the Residual Sum of Squares (RSS).
2. Estimate the model by OLS for sub-period n1 observations to generate RSS1 for the period before the break.
3. Estimate the model by OLS for sub-period n2 observations to generate RSS2 for the period after the break.
4. Variance of the error term of the models should be remained unchanged, when variance is not constant then Chow is applied.
5. If RSS of the entire period is equal to the sum of RSS1 and RSS2 then there is no structural break. F test is used to find out the structural change. The Chow Test is simply the F-test which can be formulated by the following formula:

\[
F = \frac{(R S S - (R S S + R S S)/k)}{(R S S + R S S)/(n + n - 2k)}
\]

Where,

\[
RSS = \text{RSS of the combined regression model of } n_1 \text{ and } n_2 \text{ observations with } (n_1 + n_2 - k) \text{ degree of freedom(df)}
\]

\[
RSS_1 = \text{RSS of the trend regression model of } n_1 \text{ observations with df } = (n_1 - k)
\]

\[
RSS_2 = \text{RSS of the trend regression model of } n_2 \text{ observations with df } = (n_2 - k)
\]

\[
n_1 = \text{observations of the periods before trade liberalization}
\]

\[
n_2 = \text{Observations of the periods after trade liberalization}
\]

\[
k = \text{number of parameter to be estimated}
\]

**Hypotheses**

\[
H_0 : b_1 = a_1; b_2 = a_2
\]

\[
H_1 : H_0 \text{ is not true.}
\]

\[
H_0 : \text{There is no change of trade between pre and post liberalization}
\]

\[
H_1 : \text{There is significant change of trade between pre and post liberalization}
\]

**Decision Rule:** if the value of computed F statistic is greater than the critical F value then we reject the null hypothesis of structural stability.

**Instability Index**

The pattern of stability of exports and imports during both pre-liberalized and post-liberalized periods as well as overall study period is measured by the Coppock’s Instability Index. The instability index is measured by the following steps:

1. Taking the logarithmic of the values of exports and imports
2. Subtracting the logarithm value in year t1 from the same of year to in order to get the first difference of the logarithmic values.
3. Taking the arithmetic mean of logarithm first differences
4. Subtracting the mean of logarithm first differences from each logarithm first differences in order to obtain the logarithm differences between the actual and the average logarithmic differences.
5. The logarithmic differences are squared and summed up and divided by N-1 years to get the log variance of the concerned series.

6. Taking the square root of the log variance and obtaining antilog of the square root value. The antilog of square root value is subtracted from 1 and multiplying by 100, the Instability Index is constructed.

**Instability Index formula:** \[ II = [\text{antilog} (\sqrt{\text{Log } V} - 1)] \times 100. \]

**Econometric Modeling:**

The study applies time series econometric techniques such as Cointegration and Engle-Granger Casualty modeling strategy. These techniques are chosen because they provide a formal framework for investigating the existence of both long-run and short-run relationship among variables, each of which may individually be non-stationary. The economic interpretation is that even though the variables contain stochastic trend meaning non-stationary they are linked to form a long run equilibrium. This framework helps identify the long-run relationship as well as the short-run dynamics between external sector variables and other macroeconomic variables for trade policy modeling. Time series properties of all concerned variables in the models used in this study have been identified by Augmented Dickey-Fuller (ADF 1981) and Philips-Perron (PP 1988) tests respectively. In unit root test if the variables are found to be on-stationary at their respective levels then we proceed to Cointegration tests developed by Engle and Granger(1987). The Co-integration test is performed by either Johansen (1988) or Johansen and Juselius (1990) multivariate Cointegration approach.

**1 Unit Root Testing:**

In most cases, the macroeconomic time series are found non-stationary, rather stationary with a determinisitic trend. This creates a problem because the non-stationary of data breaks down the normal properties of test statistics (t, F, DW etc) and R² and running a regression with such data produces questionable, invalid or spurious results. So it is important to check stationary of data before proceeding with estimates (Gujrati, D. N., 1995). Hence a stationary variable is integrated of order (I(0)), a variable which must be differentiated once to become stationary is to be I(1) co-integrated of order one. In applied work co-integration possess a formal framework for activating long run equilibrium relationships. When a set of I (1) variables are co-integrated then regressing one on the others should produce residuals that are I (0).

The Augmented-Dicky Fuller test (ADF) is superior than Dickey Fuller (DF) test as it can remove the serial autocorrelation successfully. So, in this study Augmented Dickey Fuller (ADF) statistics will be used to trace out whether the time series has a unit root or not. Philips-Perron Unit root test (PP test) is another technique to identify whether there is a unit or not. To test for stationarity, both
ADF and PP test can be conducted. If there arise any contradiction, ADF results are preferred over Phillips-Perron test (Campbell and Perron 1991)

**Co-integration Analysis**

The concept of co-integration was developed by Engle and Granger in 1987. As we have mentioned earlier that stationarity in time series data is necessary to have a valid t statistics and F statistics. But it has been identified that two or more time series data can be cointegrated although each of which is individually non-stationary or random walk. Cointegration tells us about the presence of long run relation among two or more variables. When we go for running cointegration analysis, we assume that all variables are non-stationary. Secondly they are all integrated of the same order. Even, if the variables are not integrated in the same order, we still can continue with cointegration analysis. We call this situation ‘Multicointegration’ There are indeed two tools to identify whether there exists a long run relation among variables. They are:

1. Engel-Granger’s Residual based test

Since Engel-Granger’s Test suffers from some shortcomings, Johansen-Juselius (JJ) test is preferred for cointegration analysis. While doing Johansen-Juselius Test, if there comes up a different result between trace statistic and maximum eigenvalue test, maximum eigenvalue result is preferred (Banerjee et al 1993).

**Pairwise Granger Causality Tests.**

Pairwise Granger causality tests are conducted to examine whether an endogenous variable can be treated as exogenous. For each equation in the VAR, the output displays (Wald) statistics for the joint significance of each of the other lagged endogenous variables in that equation. The statistic in the last row is the statistic for joint significance of all other lagged endogenous variables in the equation. When we estimate a VEC, the lagged variables that are tested for exclusion are only those that are first differenced. The lagged level terms in the cointegrating equations (the error correction terms) are not tested.

The following econometric models are specified to examine the long run relationship between export and import using annual time series data.

Model 1: $M_t = \alpha + \beta X_t + u_t$ ; log specification: $LM_t = \alpha + \beta L X_t + u_t$

Model 2: $X_t = \alpha + \beta M_t + u_t$ ; log specification: $L X_t = \alpha + \beta L M_t + u_t$

where $M_t$ represents import at time $t$, $X_t$ stands for export at time $t$, $\alpha$ stands for intercept, $\beta$ for slope coefficient and $u_t$ is the error term at time $t$. $LM_t$ represents import in log form at time $t$, $X_t$ stands for export in log at time $t$. 

Instability Index formula: $II = \exp(\sqrt{\log V - 1}) \times 100$. 

Instability is measured separately by using Coppock's Instability Index (CII)
4.0 Findings of the Study

4.1 Growth Trend of Exports

The compound growth rate and compound annual growth rate of exports are estimated separately for the pre-liberalized and post-liberalized regimes as well for the entire study period from 1972-1973 to 2009-2010. It is observed that the compound growth rate of exports in the pre-liberalized regime i.e. 1972-1973 to 1989-1990 is 8.81 per cent while the same is 11.90 per cent in the post-liberalized period i.e. 1990-1991 to 2009-2010. The CAGR for the whole study period i.e. 1972-1973 to 2009-2010 is estimated as 11.56 per cent. It indicates that the growth rates of exports are higher in the post-liberalization period. On the other hand it is observed that the compound annual growth rate of exports in the pre-liberalized regime i.e. 1972-1973 to 1989-1990 is 8.54 while the same is 11.88% in the post-liberalized period i.e. 1990-1991 to 2009-2010. The CAGR for the whole study period i.e. 1972-1973 to 2009-2010 is estimated as 10.63%. It can be concluded that trade reforms or trade liberalization in Bangladesh has positive impact on exports in Bangladesh.

Table 8 Compound Growth Rates and Compound Annual Growth Rates for Exports

<table>
<thead>
<tr>
<th>Period</th>
<th>Estimated Trend Regression</th>
<th>CGR(^1) (%)</th>
<th>CAGR(^2)(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-liberalised</td>
<td>LogX= 5.71 + 0.084T</td>
<td>8.81</td>
<td>8.54</td>
</tr>
<tr>
<td>Post-liberalized</td>
<td>LogX= 5.45 + 0.112T</td>
<td>11.90</td>
<td>11.88</td>
</tr>
<tr>
<td>1990-1991 to 2009-2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>LogX= 5.50 + 0.109T</td>
<td>11.56</td>
<td>10.63</td>
</tr>
<tr>
<td>1972-73 to 2009-2010</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
1. CGR = [Anti-log of estimated b – 1] X 100, log means natural logarithm
2. CAGR = [Ending Value/Beginning Value]\(^{UN} – 1\)

Source: Author’s own calculation.

4.1.1 Test of Hypothesis:

Using t-test the following hypothesis is tested whether trade liberalization has positive impact on export growth in Bangladesh.

\[ H_0 : \text{There is no change in export growth between pre and post trade liberalization regime.} \]

\[ H_1 : \text{There is significant positive change in export growth between pre and post trade liberalization regime.} \]

The t-test is performed on the basis of trend regression of the pre-liberalization and
post-liberalization periods.

\[ t_{37\text{df}} = \frac{(b_1 - b_2)/\sqrt{(se_{b_1})^2 + (se_{b_2})^2}}{0.037 - 0.049}/\sqrt{(0.002)^2 + (0.002)^2} = -4.26 \]

Decision: The table value of t-statistic at 37 degree of freedom is 1.65 and the absolute value of calculated t-statistic is 4.26. Since the calculated value is higher than the critical t-value so the null hypothesis H0 is rejected and the alternative hypothesis H1 is accepted at 5 per cent significance level implying that the export is significantly increased in the post-liberalization regime.

### 4.1.2 Chow Breakpoint Test

The structural change in export of Bangladesh to the liberalization of trade is tested by Chow Test using the F-test which can be formulated as:

\[ F = \frac{(RSS + R SS)/k}{(RSS + R SS)/(n + n - 2k)} \]

Chow Breakpoint Test: 1989

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>14.85506</th>
<th>Prob. F(2,34)</th>
<th>0.000023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log likelihood ratio</td>
<td>23.86335</td>
<td>Prob. Chi-Square(2)</td>
<td>0.000007</td>
</tr>
</tbody>
</table>

Chow Breakpoint test is conducted based on 1989-90 and it is found that F-statistic is greater than F critical value at 2, 34 degree of freedom and the p-value 0.0000 indicates that the null hypothesis $H_0$ of structural stability is rejected.

### 4.1.3 Instability of Exports

The instability is measured separately by using Coppock’s Instability Index(CII) for pre-liberalized period and post-liberalized period. The CII is also measured for
the overall study period. The estimate results are shown in the following table and the detail procedure for calculating the index is analyzed in methodology chapter. It is evident from the value of CII that the exports of Bangladesh in pre-liberalized period is more instable as compared to post-liberalized period as expected. The CII is computed as 11.56% for the pre-liberalized period and 7.76% for the post-liberalized period. The overall CII is 10.00% for the study period.

Table 9: Instability of Exports

<table>
<thead>
<tr>
<th>Period</th>
<th>Coppock Instability Index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-liberalised 1972-1973 to 1989-1990</td>
<td>11.56</td>
</tr>
<tr>
<td>Post-liberalized 1990-1991 to 2009-2010</td>
<td>7.76</td>
</tr>
<tr>
<td>Overall 1972-73 to 2009-10</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Note: CII = [Anti-log \sqrt{\log \text{variance} - 1}] \times 100.
Source: Author’s own calculation.

4.2 Growth Trend of Bangladesh’s Import

4.2.1 Compound Growth Rates of Imports

The compound growth rates of imports are estimated for the entire study period from 1972-1973 to 2009-2010 as well as for the two sub-periods i.e. pre-liberalized period from 1972-1973 to 1989-90 and post-liberalized period from 1990-1991 to 2009-2010. The results are shown below:

Table 10: Compound Growth Rates (CGR) for Imports

<table>
<thead>
<tr>
<th>Period</th>
<th>Estimated Trend Equation</th>
<th>CGR (%)</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-liberalised 1972-1973 to 1989-1990</td>
<td>logM = 6.69 + 0.087T</td>
<td>9.08</td>
<td>0.000</td>
</tr>
<tr>
<td>Post-liberalized 1990-1991 to 2009-2010</td>
<td>logM = 6.25 + 0.099T</td>
<td>10.41</td>
<td>0.000</td>
</tr>
<tr>
<td>Overall 1972-1973 to 2009-2010</td>
<td>logM = 6.68 + 0.086T</td>
<td>8.98</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note:
1. CGR = [Anti-log of estimated b – 1] \times 100
2. log means natural logarithm
3. M stands for Imports
Source: Author’s own calculation.

It is observed from the above table that the compound growth rate of imports in the pre-liberalized regime i.e. 1972-1973 to 1989-1990 is estimated as 9.08 per cent while the same is 10.41 per cent in the post liberalized regime i.e. 1990-1991 to 2009-2010 and 8.98 per cent in the overall study period i.e. 1972-1973 to 2009-2010. It indicates that the growth rates of imports are fluctuating and it becomes...
higher in the post liberalized regime. The overall compound growth rate of imports for the period 1972-1973 to 2009-2010 is estimated as 8.98 per cent whereas the compound growth rate of export for the same period is found as 11.56 per cent. It indicates that our export sector has performed well compared to that of import sector during the study period.

4.2.2 Structural Change in the Aggregate Imports

To measure the structural change in the aggregate imports of Bangladesh Chow test is conducted. The test result confirms that there exists no structural breakpoint in 1989 in the series of imports from Bangladesh during the study period. Since the F-statistic is 2.529 which is lower than the F-critical value and it is also confirmed by the p-value equals to 0.094 which is higher than any level of significance (α). The Chow test result is shown below in table 11.

Table: 11 Structural Breakpoint Test

<table>
<thead>
<tr>
<th>Chow Breakpoint Test: 1989</th>
<th>F-statistic</th>
<th>2.529</th>
<th>Prob. F(2,34)</th>
<th>0.094</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log likelihood ratio</td>
<td>5.270</td>
<td>Prob. Chi-Square(2)</td>
<td>0.071</td>
<td></td>
</tr>
</tbody>
</table>

Source: Source: Author’s own calculation.

4.2.2 Instability of Imports of Bangladesh

The instability of import trade of Bangladesh is checked by using Coppock Instability Index. Details procedures of the Coppock Instability Index is mentioned in Methodology chapter.

Table 12 : Instability of Imports

<table>
<thead>
<tr>
<th>Period</th>
<th>Coppock Instability Index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-liberalised</td>
<td>14.56</td>
</tr>
<tr>
<td>Post-liberalized</td>
<td>9.25</td>
</tr>
<tr>
<td>1990-1991 to 2009-2010</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>12.30</td>
</tr>
<tr>
<td>1972-73 to 2009-10</td>
<td></td>
</tr>
</tbody>
</table>

Note: CII = [Anti-log \sqrt{log variance} – 1] X 100.

Source: Author’s own calculation.

The higher value of the Coppock Instability Index indicates the higher degree of instability. It is observed that the CII is 14.56 percent during the pre-liberalized regime and 9.25 percent during the post-liberalized regime. So it is a clear indication that the instability in import is higher during pre-liberalised period than post-liberalized period. Even the CII of post-liberalization period is lower that that of during the overall study period (12.30 percent).
4.2.3 Test of Stationarity of the Variables of Export-Import Model

The coingregation method implies that if two or more series are linked to form equilibrium relationship over long run even though they are nonstationary and the first difference of the series is stationary. The first step is to test the order of integration of the variables. To check the Stationarity of the variables, expect the liberalization dummy, standard Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests have been conducted both at levels and at the first difference of each variable.

The test results are summarized below:

**Table 13: Augmented Dickey-Fuller Unit Root Test**

*Null Hypothesis: H0 ; The concerned variable has a unit root*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Level / First Difference</th>
<th>Intercept</th>
<th>Intercept and Trend</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>LM</td>
<td>Level</td>
<td>-0.81</td>
<td>-4.06</td>
<td>I(1) and I(0) Inconclusive</td>
</tr>
<tr>
<td></td>
<td>First Difference</td>
<td>-6.87</td>
<td>-6.76</td>
<td>I(0) Stationary</td>
</tr>
<tr>
<td>LX</td>
<td>Level</td>
<td>-0.49</td>
<td>-0.25</td>
<td>I(1) Nonstationary</td>
</tr>
<tr>
<td></td>
<td>First Difference</td>
<td>-5.60</td>
<td>-5.59</td>
<td>I(0) Stationary</td>
</tr>
</tbody>
</table>

Note:

a) ADF test Critical Values for model with intercept: -3.62 for 1% level of significance, -2.94 for 5% level of significance and -2.61 for 10% level of significance.

b) ADF test Critical Values for model with intercept and trend: -4.23 for 1% level of significance, -3.54 for 5% level of significance and -3.20 for 10% level of significance.

c) Unit Root Tests are performed by E-Views 5.0.

It is observed from the above ADF test that most of the variables are nonstationary at the level for model with intercept and intercept and trend. But it is interesting to note that all the variables are I(0) i.e. stationary at the first difference for model with intercept and intercept and trend. The similar test result is found in case of Phillips-Perron test.
In most cases, the macroeconomic time series are found non-stationary, rather respec-tively. In unit root test if the variables are found to be stationary at their respec-tively. Instability Index formula: \[ II = \text{antilog} \left( \sqrt{\text{Log} V - 1} \right) \times 100. \]

Therefore gap since independence but the gap has been fluctuating over the years. Therefore 1. Introduction 3.1 Objective

The specific objectives of the order (I(0)), a variable which must be differentiated once to become stationary is Dependent Variable: LOG(EXPORT)

4.2.6 Estimation of Export-Import Models *Significant at 1% level **MacKinnon-Haug-Michelis (1999) p-values

It is observed that the compound growth rate of imports in the pre-liberalized period i.e. 1990-1991 to 2009-2010. The CGR for the whole study period i.e. 1972-1973 pre-liberalized regime i.e. 1972-1973 to 1989-1990 is estimated as 9.08 per cent

4.1 Growth Trend of Exports

Trend Growth Functions and Compound Growth Rates

It is observed that the compound growth rate of imports in the pre-liberalized period i.e. 1990-1991 to 2009-2010. The CGR for the whole study period i.e. 1972-1973 pre-liberalized regime i.e. 1972-1973 to 1989-1990 is estimated as 9.08 per cent

4.2.4 Co-integration Test

Co-integration test is conducted to examine whether there are any long run relationship among the variables of the model. Johansen and Juselius co-integration test is applied here. Two tests i.e. the trace test and the maximal eigenvalue test are used to determine the number of cointegrating vectors. The cointegration test results are shown in the following table:

**Table 15: Johansen Co-integration Test Based on Eigenvalue Test**

*Trend assumption: Linear deterministic trend*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Max-Eigen Statistics</th>
<th>0.05% Critical Value</th>
<th>p-value**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null</td>
<td>Alternative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>r* = 0</td>
<td>r = 1</td>
<td>15.57</td>
<td>14.07</td>
</tr>
<tr>
<td>r ≤ 1</td>
<td>r = 2</td>
<td>0.139</td>
<td>3.76</td>
</tr>
</tbody>
</table>

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
*(**) denotes rejection of the hypothesis at the 5%(1%) level
**MacKinnon-Haug-Michelis (1999) p-values

Note:

a) PP test Critical Values for model with intercept: -3.62 for 1% level of significance, -2.94 for 5% level of significance and -2.61 for 10% level of significance.

b) P test Critical Values for model with intercept and trend: -4.23 for 1% level of significance, -3.54 for 5% level of significance and -3.20 for 10% level of significance.

c) Unit Root Tests are performed by E-Views 5.0.

It is observed from the above PP unit root test that most of the variables are non-stationary at the level for model with intercept and intercept and trend. But it is interesting to note that all the variables are I(0) i.e. stationary at the first difference for model with intercept and intercept and trend.

**Table 14: Phillips-Perron Unit Root Test**

*Null Hypothesis: H0 ; The concerned variable has a unit root*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Level / First Difference</th>
<th>Intercept</th>
<th>Intercept and Trend</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>LM</td>
<td>Level</td>
<td>-0.81</td>
<td>-4.06 (0.015)</td>
<td>I(1) and I(0) Inconclusive</td>
</tr>
<tr>
<td></td>
<td>First Difference</td>
<td>-6.87</td>
<td>-6.76 (0.000)</td>
<td>I(0) Stationary</td>
</tr>
<tr>
<td>LX</td>
<td>Level</td>
<td>-0.49</td>
<td>-0.25 (0.292)</td>
<td>I(1) Nonstationary</td>
</tr>
<tr>
<td></td>
<td>First Difference</td>
<td>-5.60</td>
<td>-5.59 (0.000)</td>
<td>I(0) Stationary</td>
</tr>
</tbody>
</table>

Source: Author's own calculation.
Table 16: Johansen Co-integration Test Based on Trace Test

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Trace Statistics</th>
<th>0.05% Critical Value</th>
<th>p-value**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null</td>
<td>Alternative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>r* = 0</td>
<td>r = 1</td>
<td>15.71</td>
<td>15.41</td>
</tr>
<tr>
<td>r ≤ 1</td>
<td>r = 2</td>
<td>0.139</td>
<td>3.76</td>
</tr>
</tbody>
</table>

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* *(**) denotes rejection of the hypothesis at the 5%(1%) level
**MacKinnon-Haug-Michelis (1999) p-values

Johansen and Juselius co-integration test shows that at laet one cointegrating vector in both the trace test and the maximal eigenvalue test.

Table 15: Normalized Cointegrating Coefficients

<table>
<thead>
<tr>
<th>LM</th>
<th>LX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td>-0.76</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
</tr>
</tbody>
</table>

4.2.5 Pair wise Granger Causality Test

Table 16: Pair wise Granger Causality Test based on Model-1

<table>
<thead>
<tr>
<th>Null Hypothesis: H₀</th>
<th>F-Statistic</th>
<th>Probability</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(EXPORT) does not Granger Cause LOG(IMPORT)</td>
<td>9.62*</td>
<td>0.000</td>
<td>H₀ is rejected meaning Export granger cause to import</td>
</tr>
<tr>
<td>LOG(IMPORT) does not Granger Cause LOG(EXPORT)</td>
<td>1.49</td>
<td>0.241</td>
<td>H₀ is not rejected meaning import has no granger cause to export</td>
</tr>
</tbody>
</table>

*Significant at 1% level

Table 17: Pair wise Granger Causality Test based on Model-2

<table>
<thead>
<tr>
<th>Null Hypothesis: H₀</th>
<th>F-Statistic</th>
<th>Probability</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(IMPORT) does not Granger Cause LOG(EXPORT)</td>
<td>1.48996</td>
<td>0.24108</td>
<td>H₀ is not rejected meaning import has no granger cause to export</td>
</tr>
<tr>
<td>LOG(EXPORT) does not Granger Cause LOG(IMPORT)</td>
<td>10.1616</td>
<td>0.00040</td>
<td>H₀ is rejected meaning export has granger cause to import</td>
</tr>
</tbody>
</table>

*Significant at 1% level

4.2.6 Estimation of Export-Import Models

5.2.6.1 Estimation of Export-Import Model-1

Dependent Variable: LOG(EXPORT)
Instability Index formula: \(II = \left[\text{antilog} \left(\sqrt{\text{Log V}} - 1\right)\right] \times 100\).

Sensitive to real exchange rate and relative prices. Bangladesh export supply is of trade liberalization on import demand, export supply, industrial growth and examines the impact of trade liberalization on import demand, export supply, reviewed theoretical evidences between Trade Liberalisation and economic.

Not specifically cover the relationship between impact of trade liberalization and.

Dependent Variable: \(\text{LOG(EXPORT)}\)

Source: Author’s own calculation.

Note: \(\text{CII} = \left[\text{Anti-log} \sqrt{\text{log variance}} - 1\right] \times 100\).

The overall CII is 10.00% for the study period. The estimate results are shown in the following table and

<table>
<thead>
<tr>
<th>Note:</th>
<th>3. M stands for Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR = \left[\text{Anti-log of estimated } \beta - 1\right] \times 100</td>
<td></td>
</tr>
</tbody>
</table>

The compound growth rate of imports in the pre-liberalized regime i.e. 1972-1973 to 1989-1990 is 8.54 while the same is 11.88% in the post-liberalized period. The overall compound growth rate of imports in the pre-liberalized regime i.e. 1972-1973 to 2009-2010. It indicates that the growth rates of exports are higher in the post-liberalization period.

\[
\text{CGR} = \left[\text{Anti-log of estimated } \beta - 1\right] \times 100
\]

4. Subtracting the mean of logarithm first differences from each logarithm

5. Policy Recommendations and Conclusion:

We can conclude that trade reforms or trade liberalization in Bangladesh has positive impact on exports in Bangladesh. The compound growth rate of exports in the pre-liberalized regime i.e. 1972-1973 to 1989-1990 is 8.81 per cent while the same is 11.90 per cent in the post-liberalized period i.e. 1990-1991 to 2009-2010. The CGR for the whole study period i.e. 1972-1973 to 2009-2010 is estimated as 11.56 per cent. It indicates that the growth rates of exports are higher in the post-liberalization period.
It is observed that the compound growth rate of imports in the pre-liberalized regime i.e. 1972-1973 to 1989-1990 is estimated as 9.08 per cent while the same is 10.41 per cent in the post liberalized regime i.e. 1990-1991 to 2009-2010 and 8.98 per cent in the overall study period i.e. 1972-1973 to 2009-2010. It indicates that the growth rates of imports are fluctuating and it becomes higher in the post liberalized regime. The overall compound growth rate of imports for the period 1972-1973 to 2009-2010 is estimated as 8.98 per cent whereas the compound growth rate of export for the same period is found as 11.56 per cent. It indicates that our export sector has performed well compared to that of import sector during the study period.

There is a clear indication that the instability in import is higher during pre-liberalised period than post-liberalized period. Even the CII of post-liberalization period is lower than that of during the overall study period (12.30 percent). It is observed from unit root test that most of the variables are non-stationary at the level for model with intercept and intercept and trend. But it is interesting to note that all the variables are I(0) i.e. stationary at the first difference for model with intercept and intercept and trend. The null hypothesis H0 is rejected meaning export has granger cause to import. Therefore, the policy makers should pay more attention to the promotion of export in formulating an appropriate foreign trade policy of Bangladesh.
Bibliography


An Analysis of Recent Trends of Agricultural Credit in Bangladesh

Md. Golzare Nabi*
Md. Mostafizur Rahman Sarder*
Md. Syedul Islam*

Abstract: Agriculture plays crucial role in the economy of Bangladesh in terms of food security, employment generation, poverty reduction and supplying raw materials for key manufacturing units. As agriculture is still one of the top priority sectors in Bangladesh economy, formal financial institutions have been providing huge amount of credit for sustainable development of the sector. The specialized banks, state-owned commercial banks and private commercial banks played key roles in providing of agriculture credit in Bangladesh. In the recent times, agricultural credit has been increased several times. Given this background, the paper reviews the recent trends of agricultural credit provided by the banking industry in Bangladesh. The paper would also provide suggestions for ensuring adequate supply of agricultural credit so as to address problems of agricultural output and maintaining food security, employment generation and poverty reduction in Bangladesh.

Key Word: Agricultural credit

1. Introduction

Agriculture plays crucial role in the economy of Bangladesh in terms of food security, employment generation, supplying raw materials for key manufacturing units and a key contributor to exports receipts. Bangladesh attained near about food sufficiency by dint of tired-less labour of our peasant class. The agriculture sector grew above 4 percent on an average during the last few years and contributed near 20 percent of total GDP due to continued policy supports from the Government including subsidy in input prices, adequate and timely distribution of fertilizer, uninterrupted supply of power for irrigation, increased credit flows and fair procurement prices of output. In Bangladesh, about 47.5 percent of labor force is

* Md. Golzare Nabi and Md. Mostafizur Rahman Sarder are Deputy General Managers, and Md. Syedul Islam is a Joint Director in Research Department, Bangladesh Bank.
involved in agricultural activities. Agriculture accounts for 4.53 percent of exports. While the share of agriculture in GDP has been declining to about 20 percent, the absolute size of agricultural sector GDP in terms of both value and volume has been increasing at a reasonably high pace. Despite the declining share of agriculture in GDP growth, the importance of the sector is very crucial in view of its role in food security, employment generation and poverty reduction. The agricultural credit from the formal financial sector has been contributing a lot for the development of agricultural sector. Two specialized banks, Bangladesh Krisha Bank (BKB) and Rajshahi Krishi Unnayan Bank (RAKUB) and four state-owned commercial banks namely Sonali, Agrani, Janata and Rupali played key role in disbursement of agriculture credit. Moreover, the contribution of private commercial banks in respect of agricultural credit disbursement is also increasing in recent times.

As the priority sector of the economy, Bangladesh Bank continued all-out efforts to ensure adequate fund for sustaining the agricultural production under annual agricultural/rural credit policy and programme. As a result, agricultural credit has increased many times in the last few years; it has gone up more than three folds in FY2014 as compared to those of FY05. The amount of agriculture credit stood at Taka 16037.00 crore in FY14 which was Tk. 4956.78 crore in FY05. Given this background, the paper would review the recent trends of agricultural credit provided by the banking industry in Bangladesh. The paper would also provide suggestions for ensuring effective supply of agricultural credit so as to have positive impact on agricultural output, maintaining food security, employment generation and poverty reduction in Bangladesh.

The remaining portion of the paper is arranged as follows: Chapter 2 and Chapter 3 contain objectives and methodology of the paper. Literature review has been made in Chapter 4. Recent Trends of agricultural loan in Bangladesh are analyzed in Chapter 5. Chapter 6 contains findings, policy options and conclusions.

2. Literature Review

There are dearth of quality papers/studies relating to farm credit in Bangladesh. However, recently concluded two studies namely (i) ‘The Role of Credit in Food Production and Food Security in Bangladesh’ (2013) conducted by Kandhaker, Bazlul Hoque, Dr. and Bidisha Haque Sayema, Dr. under Bureau of Economic Research, University of Dhaka (2013) and (ii) ‘An Empirical Analysis of the Impact of Agricultural Credit from Banks and Micro Finance Institutes (MFIs) in GDP Growth: Bangladesh Perspective’ conducted by Bayes, A. and Patwary, F. K. (2012) may be mentioned to analyzed various issues on agricultural credit.

The core objectives of the first study containing an in-depth analysis of a number of major agricultural credit programs (1996-2011) were to review major agricultural credit programs in Bangladesh, to investigate the relationship between credit
and food security, to understand the link between credit and dietary diversity and to analyze the relation between credit and food production. To understand the relationships between credit and food security/dietary diversity/agricultural production, both quantitative as well as qualitative methods have been applied. A multi-stage stratified sampling methodology has been used for collecting the primary data, under which 64 administrative districts have been classified into 3 strata – low credit recipient districts, medium credit recipient districts and high credit recipient districts.

The major findings of the study included (i) due to inadequacy of credit from a single source, recipients sometimes simultaneously opt for credit from other sources. In addition, credit swapping is also a common phenomenon - credit obtained for farm purposes are often used for non-farm purposes and vice-versa; (ii) Most of the households avail credit for a wide variety of purposes e.g. for agricultural production, for doing business, purchase of food, to meet educational and health expenditure, for expenses like marriage, for safeguarding themselves in case of income shocks; (iii) Econometric analysis suggests that credit has positive contribution towards food security of individuals (iv) Estimates suggest that, availing credit have significant positive effect on total household crop production, in comparison to an otherwise similar household without receiving credit, households with credit have more crop worth 3246 taka.

Given a positive association between institutional credit and agriculture production, it is therefore recommended in the study to expand the agricultural credit disbursement particularly to the small farmers. Steps should be taken so that MFIs can arrange appropriate agricultural (crop) credit scheme for the marginal farmers and landless sharecroppers.

The second study is devoted to determine impacts of the agricultural loan on lives of sharecroppers in Bangladesh. The sharecroppers could not avail farm credit before December 2009. Given this, Bangladesh Bank (BB) has decided to support sharecroppers and stipulated a special fund of TK.5000 million to provide agricultural loans (called crop loans) to the sharecroppers only. BRAC, the largest NGO in the world, has been assigned with the task of distributing the credit under its group-based lending policies. The study is based on sample surveys done on target households –receiving this credit – and the control households without such loan. The total effective sample size is 400 distributed across 7 Divisions. The major findings of the study included:

- The average amount of loan received amounts to Tk.14,000 with a range of 8,000-30,000. About 95% of the participants have repaid the loan timely. Again, accessing loan from Brac involved no ‘extra money’ whereas a survey shows that, even to access loans from NGOs, 1% of the loan money had to be paid by borrowers as ‘extra’.
Four-fifths (80%) of the borrowers now cultivate modern paddy (MV) as the available credit, to a great extent, eased the working capital constraint. In consequence, and for example, gains from increased yield almost doubled – from 8-10 maunds/bigha for TV to 15-20 maunds/bigha for MV.

Ninety per cent (90%) of the respondents reigned on the importance of loan for their economic uplift; three-fourths (around 75%) of the participants revealed that, in the absence of this particular loan, they would have to borrow from village moneylenders at an interest rate of 10% per month.

It seems that, in the improvement of economic condition, membership of NGOs does matter. For example, among those who reported improved economic condition over the year, three-fourths (75%) of them are NGO members. This contrasts with 38% of non-members reporting positive change. Specially, roughly four-fifths (80%) target respondents reported a positive change, while in the case of control respondents, the share was just one-fourth (25%).

3. Objectives and Methodology

The objectives of the paper are: (a) to review the recent trend of agricultural credit disbursement; (b) to assess the contribution of public and private banks disbursement of farm credit; (c) to derive some observations relating to agro credit and (d) to provide suggestions for ensuring adequate supply of agricultural credit so as to have positive impact on output, productivity and employment generation in Bangladesh.

To fulfil the objectives of the paper, the required information/data have been explored from secondary sources. The source would contain different reports of Bangladesh Bank, various ministries of Government of Bangladesh, study reports/papers of national and international organizations. Necessary table/charts have been drawn from collected data and descriptive analytical tools have been used to complete the paper.

4. Recent Trend of agricultural Loan in Bangladesh

Following adoption of all-out efforts by Bangladesh Bank, agricultural credit has increased many times in recent years; it has gone up more than three folds in FY2014 as compared to those of FY05.

Year-wise Targets, disbursement and Recovery of Agricultural Credit in Bangladesh

Bangladesh Bank formulates and implements annual Agricultural and Rural Credit programs and Policy. Under this policy, every bank Banks disburse agricultural
credit and conduct other activities relating to farm credit. It is evident from the Table 1 that agricultural credit has increased significantly in recent years particularly since FY 2009-10.

<table>
<thead>
<tr>
<th>FY</th>
<th>Target</th>
<th>Disbursement</th>
<th>Recovery</th>
<th>Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2005</td>
<td>5537.91</td>
<td>4956.78</td>
<td>3171.15</td>
<td>14039.84</td>
</tr>
<tr>
<td>2005-2006</td>
<td>5892.91</td>
<td>5496.21</td>
<td>4164.35</td>
<td>15376.79</td>
</tr>
<tr>
<td>2006-2007</td>
<td>6351.30</td>
<td>5292.51</td>
<td>4676</td>
<td>14582.56</td>
</tr>
<tr>
<td>2007-2008</td>
<td>8308.55</td>
<td>8580.66</td>
<td>6003.7</td>
<td>17822.5</td>
</tr>
<tr>
<td>2008-2009</td>
<td>9379.23</td>
<td>9284.46</td>
<td>8377.62</td>
<td>19598.15</td>
</tr>
<tr>
<td>2009-2010</td>
<td>11512.30</td>
<td>11116.9</td>
<td>10112.8</td>
<td>22588.58</td>
</tr>
<tr>
<td>2010-2011</td>
<td>12617.40</td>
<td>12184.3</td>
<td>12148.6</td>
<td>25492.13</td>
</tr>
<tr>
<td>2011-2012</td>
<td>13800.00</td>
<td>13132.2</td>
<td>12359</td>
<td>25974.97</td>
</tr>
<tr>
<td>2012-2013</td>
<td>14130.00</td>
<td>14667.5</td>
<td>14362.3</td>
<td>31057.69</td>
</tr>
<tr>
<td>2013-2014</td>
<td>14595.00</td>
<td>16037.00</td>
<td>17046.00</td>
<td>34633.00</td>
</tr>
</tbody>
</table>

*Source: Scheduled Banks Statistics, Bangladesh Bank*

**Bank-wise Disbursement and Recovery of Agricultural Credit**

Though different categories of Banks are providing farm credit, state owned specialized banks (SBs) have still maintained leading position (42.75%) followed by private commercial banks (PBs) (38.00%), nationalized commercial banks (NCBs) (15.54%) and foreign commercial banks (FCBs) (2.72%). The bankwise disbursement trend of farm credit is shown in Table-2.

State owned specialized banks (SBs) and nationalized commercial banks (NCBs) operate farm credit programs through their own branches while private commercial banks (PBs) conduct farm credit programs through either their own branches or the aid of NGOs. Foreign commercial banks (FCBs) operate farm credit programs through NGOs. The contribution of private commercial banks (PBs) is increasing gradually due to some bold steps undertaken by Bangladesh Bank which includes (i) all private and foreign banks must fix their own disbursement target at least 2 percent of their total loan and advances as agricultural loan and have to achieve this target. At the end of the financial year the undisbursed amount must be deposited in BB at bank rate for one year (ii) fixing branch opening policy at the ratio of 1: 1 (1 in rural area against 1 in urban area).

In recent years there is also increasing trend in recovery of farm credit following different measures which included ensuring the availability of inputs at the fair price, simplification of the disbursement procedures of agricultural credit, and better market price. The recovery picture is also shown in Table-2.
Introduction

Different measures which included ensuring the availability of inputs at the fair prices of output. In Bangladesh, about 47.5 percent of labor force is engaged in agriculture to produce food for the nation's population.

The contribution of private commercial banks (PBs) is 38.00%, nationalized commercial banks (NCBs) 23.00%, and state-owned specialized banks (SBs) 9.00%.

Although the share of agriculture in GDP has declined below one-fifth, it continues to hold a significant place in the national economy. The large share of agriculture in GDP and the labor force indicates its importance in national income/employment generation, and also as a source of protein.

The total amount of agricultural credit was Tk. 16037.00 crore in FY14, which was Tk. 4956.78 crore in FY05. Given this growth in agricultural credit, the percentage of overdue loan as percent of outstanding credit decreased from 35.68 percent to 20% of agricultural credit.

Table 2: Bank-wise Disbursement and Recovery of Agricultural Credit

<table>
<thead>
<tr>
<th></th>
<th>NCBs</th>
<th>SBs</th>
<th>PCBs</th>
<th>FCBs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disbursement</td>
<td>Recovery</td>
<td>Disbursement</td>
<td>Recovery</td>
<td>Disbursement</td>
</tr>
<tr>
<td>2004-2005</td>
<td>1142.14</td>
<td>877.58</td>
<td>3814.64</td>
<td>2293.57</td>
</tr>
<tr>
<td>2005-2006</td>
<td>1192.43</td>
<td>1151.00</td>
<td>4303.78</td>
<td>3013.33</td>
</tr>
<tr>
<td>2006-2007</td>
<td>1027.80</td>
<td>1245.00</td>
<td>4264.71</td>
<td>3431.04</td>
</tr>
<tr>
<td>2007-2008</td>
<td>1365.50</td>
<td>1509.30</td>
<td>4801.48</td>
<td>2865.30</td>
</tr>
<tr>
<td>2008-2009</td>
<td>1588.89</td>
<td>1479.30</td>
<td>5402.68</td>
<td>5162.14</td>
</tr>
<tr>
<td>2009-2010</td>
<td>1981.56</td>
<td>1531.20</td>
<td>6297.53</td>
<td>6120.09</td>
</tr>
<tr>
<td>2010-2011</td>
<td>2213.73</td>
<td>2011.10</td>
<td>6243.91</td>
<td>6209.40</td>
</tr>
<tr>
<td>2011-2012</td>
<td>2433.47</td>
<td>2171.30</td>
<td>5883.81</td>
<td>6387.60</td>
</tr>
<tr>
<td>2012-2013</td>
<td>2399.19</td>
<td>2161.80</td>
<td>5919.61</td>
<td>8114.80</td>
</tr>
<tr>
<td>2013-2014</td>
<td>2492.00</td>
<td>2381.00</td>
<td>6857.00</td>
<td>8261.00</td>
</tr>
<tr>
<td>(15.34)</td>
<td>(13.97)</td>
<td>(42.75)</td>
<td>(48.46)</td>
<td>(38.00)</td>
</tr>
</tbody>
</table>

Source: Scheduled Banks Statistics, Bangladesh Bank

Trend of Overdue Loan

The percentage of overdue with outstanding agricultural loan is gradually decreasing which went down from 35.12 percent at end June 2008 to 21.98 percent at end June 2014 (Table 3).

Table 3: Trend of Overdue Loan

<table>
<thead>
<tr>
<th>FY</th>
<th>Target (Taka in crores)</th>
<th>Disbursement</th>
<th>Recovery</th>
<th>Outstanding (Taka in crores)</th>
<th>Overdue (Taka in crores)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>7360.52</td>
<td>7590</td>
<td>4361.61</td>
<td>14074.12</td>
<td>5040.98</td>
<td>35.12</td>
</tr>
<tr>
<td>2008-09</td>
<td>7950.59</td>
<td>8662.3</td>
<td>4882.79</td>
<td>15494.87</td>
<td>5140.71</td>
<td>33.18</td>
</tr>
<tr>
<td>2009-10</td>
<td>10662.31</td>
<td>10413</td>
<td>9339.81</td>
<td>21341.75</td>
<td>5257.83</td>
<td>24.64</td>
</tr>
<tr>
<td>2010-11</td>
<td>12617.4</td>
<td>11432</td>
<td>11450</td>
<td>24366.56</td>
<td>5650.54</td>
<td>23.19</td>
</tr>
<tr>
<td>2011-12</td>
<td>13800</td>
<td>13132</td>
<td>12359</td>
<td>25974.97</td>
<td>6052.12</td>
<td>23.3</td>
</tr>
<tr>
<td>2012-13</td>
<td>14130</td>
<td>14667</td>
<td>14362.3</td>
<td>34633</td>
<td>7612.00</td>
<td>16.77</td>
</tr>
<tr>
<td>2013-14</td>
<td>14595.00</td>
<td>16037.00</td>
<td>17046.00</td>
<td>346.33</td>
<td>8066.41</td>
<td>21.98</td>
</tr>
</tbody>
</table>

Source: Agricultural Credit and Financial Inclusion Department, Bangladesh Bank

The overdue farm loan as percent of outstanding loan of different categories of banks is shown in Table 4. It is evident from the table 4 that RAKUB has the highest overdue loan as percent of outstanding which is 35.68 percent. This was followed by SCBs (32.11%), BKB (20.98%) and PCBs (4.34%).
uninterrupted supply of power for irrigation, increased credit flows and fair and a key contributor to exports receipts. Bangladesh attained near about food

1. Introduction

5. Observations and Policy Options

must be deposited in BB at bank rate for one year (ii) fixing branch opening policy target at least 2 percent of their total loan and advances as agricultural loan and which includes (i) all private and foreign banks must fix their own disbursement programs through NGOs. The contribution of private commercial banks (PBs) is or the aid of NGOs. Foreign commercial banks (FCBs) operate farm credit and conduct other activities relating to farm credit. It is evident from the credit model may be a panacea to recover overdue loan. SBs these should

Key Word:

Agricultural credit

agricultural output and maintaining food security, employment generation the recent trends of agricultural credit provided by the banking industry in

Rahman, M. (1990) ―Agricultural Credit in Bangladesh: Some Issues and

Hossain, M. (1977) ―Bangladesh Agricultural Credit Review, Joint Review by

GDP growth: Bangladesh Perspective, Bangladesh Bank.

References

findings of the study included:

• Rationally, crop sub-sector dominates in farm credit disbursement; 44

However, there are further spaces to enhance the amount of farm credit, especially Bank has undertaken efforts to increase the flow of farm credit in recent years. To maintain higher growth in agriculture and bring about its modernization and disbursement of agriculture credit. Moreover, the contribution of private commer-

Trend in Refinance of Agricultural loan

BKB, RAKUB, BSBL, BRDB and BRAC enjoy refinance facilities from Bangladesh Bank. BKB and RAKUB are the main customers in getting refinance facilities. Since FY10, BRAC avail refinance facilities to finance Sharecroppers. An amount of Taka 17.07 billion (including interests) was recovered against refinance loan due from different banks and institutions leaving an outstanding balance of Taka 48.71 billion (including interests) as on end June 2014. Details of Bangladesh Bank’s refinance to different institutions are shown in Table 5.

Table 5: Trend of Refinance

<table>
<thead>
<tr>
<th>Name of Banks</th>
<th>FY13</th>
<th>FY14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Refinance</td>
<td>Repayment</td>
</tr>
<tr>
<td>BKB</td>
<td>0.18</td>
<td>1.76</td>
</tr>
<tr>
<td>RAKUB</td>
<td>4.49</td>
<td>2.46</td>
</tr>
<tr>
<td>BRAC</td>
<td>2.22</td>
<td>33.42</td>
</tr>
<tr>
<td>BSBL</td>
<td>0.18</td>
<td>0.04</td>
</tr>
<tr>
<td>BRDB</td>
<td>-</td>
<td>0.12</td>
</tr>
<tr>
<td>Total</td>
<td>9.67</td>
<td>6.58</td>
</tr>
</tbody>
</table>

Source: Agricultural Credit and Financial Inclusion Department, Bangladesh Bank
Trend of Agricultural Credit as a Share of Total Bank Credit

Following continued efforts in financing agricultural sector, farm credit is increasing in every year. However, share of agricultural credit as percentage of total bank credit is falling (Table 6).

<table>
<thead>
<tr>
<th>FY</th>
<th>Outstanding of Total Bank Credit</th>
<th>Total Outstanding of Agricultural Credit</th>
<th>Share of Agricultural Credit among Total Bank Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-06-05</td>
<td>112016</td>
<td>14040</td>
<td>12.53</td>
</tr>
<tr>
<td>30-06-06</td>
<td>132318</td>
<td>15376</td>
<td>11.62</td>
</tr>
<tr>
<td>30-06-07</td>
<td>152177</td>
<td>14582</td>
<td>9.58</td>
</tr>
<tr>
<td>30-06-08</td>
<td>190136</td>
<td>17822</td>
<td>9.37</td>
</tr>
<tr>
<td>30-06-09</td>
<td>217928</td>
<td>19598</td>
<td>8.99</td>
</tr>
<tr>
<td>30-06-10</td>
<td>270761</td>
<td>22544</td>
<td>8.33</td>
</tr>
<tr>
<td>30-06-11</td>
<td>340713</td>
<td>25492</td>
<td>7.48</td>
</tr>
<tr>
<td>30-06-12</td>
<td>407902</td>
<td>25975</td>
<td>6.37</td>
</tr>
<tr>
<td>30-06-13</td>
<td>452157</td>
<td>31058</td>
<td>6.87</td>
</tr>
<tr>
<td>30-06-14</td>
<td>507639</td>
<td>34633</td>
<td>6.82</td>
</tr>
</tbody>
</table>

Source: Economic Trends, Bangladesh Bank

Sector wise Disbursement of Farm Credit

Crops accounted for highest share of total farm credit which was Tk. 7131.00 crores (44%) in FY14. Next highest amount of Tk.1996 crore (12%) was disbursed for livestock, which was followed by poverty alleviation programme (12%), fisheries (9%), other agricultural activities (20%), Equipments (2%) and marketing of agricultural goods (1%).
5. Observations and Policy Options

Observations:

- In the last few years, the disbursement of farm credit is rising significantly; it increased to Tk. 16037 crore in FY14 from Tk. 4956.78 crore in FY05.
- Rationally, crop sub-sector dominates in farm credit disbursement; 44 percent of farm credit goes to crop sub-sector. Maintaining this momentum of farm credit towards crop sub-sector for ensuring food security, there are scopes for further expansion of farm credit to finance livestock (now 12%) and fishery sub-sectors (now 9%) as they have great potentials to flourish as tools of poverty alleviation through income/employment generation, and also sources of protein.
- The share of private commercial banks in farm credit is increasing due to policy pressure from Bangladesh Bank. However, PCBs invest only below 2 percent of total loan portfolios implying that there are further spaces for them to expand farm credit.
- Since FY2010, sharecroppers have access to farm credit through BRAC against refinancing facilities from Bangladesh Bank.
- Though share of overdue loan is falling in recent years, it is still 20% of total outstanding loan. SCBs, BKB and RAKUB have 32%, 20% and 37% of overdue loan.
- Agriculture sector contributes 19% of GDP but it gets only 6.82 % of total bank credits.

Policy Options

All banks particularly PCBs need to undertake enhanced programs for channeling more funds into agricultural sector, fishery and livestock subsectors in particular. For this, PCBs would require to formulate proper programs and recruit necessary manpower having knowledge, motivation and commitment in rural finance and agriculture. This would help PCBs diversify loan portfolios and lessen the pressure of excess liquidity. The NCBs and SBs need proper steps to recover overdue loan bringing it down to tolerable limit. To attain this goal, they should undertake immediate steps to recruit rationale number of field staffs. NGO style supervised credit model may be a panacea to recover overdue loan. SBs these should strengthen efforts to mobilize savings in order to cut dependency on refinance facilities from Bangladesh Bank. BB may provide enhanced refinance against farm credit disbursed in economically backward regions of the country, southern and northern regions in particular.

* Source: Scheduled Banks Statistics, Bangladesh Bank
6. Conclusion

Although the share of agriculture in GDP has declined below one-fifth, it continues to be an important sector in Bangladesh as it ensures food security, employs 47.5 per cent of the workforce and works as a key stabilizer in price level. In order to maintain higher growth in agriculture and bring about its modernization and commercialization, agro credit is considered as key input. Given this, Bangladesh Bank has undertaken efforts to increase the flow of farm credit in recent years. However, there are further spaces to enhance the amount of farm credit, especially in livestock and fisheries subsectors. If livestock and fisheries subsectors get enhanced credit support, the two subsectors may emerge as key tools in employment generation and poverty alleviation.

References

Annual Reports (FY01 to FY13)-Bangladesh Bank, Dhaka.

Bangladesh Economic Survey (2014), Ministry of Finance, Government of Bangladesh


Kandhaker, Bazlul Hoque, Dr. and Bidisha Haque Sayema, Dr. (2013) - The Role of Credit in Food Production and Food Security in Bangladesh, Bureau of Economic Research, University of Dhaka.


 Bengali Journal of Political Economy

© 2016 Bangladesh Journal of Political Economy
Vol. 31, No. 4, June 2016, pp. 485-512
Bangladesh Economic Association (ISSN 2227-3182)

ভোগ তদ্রে উপর অভিজ্ঞতাব্যক্ত অর্থমিক বিশ্লেষণ

মো: জাহিরুল ইসলাম সিকাদার *

সারকথা: সামাজিক অধ্যাতনের একটি গুরুত্বপূর্ণ আলোচনা অধ্যায় হচ্ছে ভোগ সম্পর্কিত তত্সমূহ।
এরপরে ভোগ বায়ে সম্পর্কিত তত্ত্বমূলক মূল বস্তু প্রক্ষিত গবেষণাযোগ্য বাস্তব অভিজ্ঞতাব্যক্ত
অর্থমিক বিশ্লেষনের দ্বারায় অভিজ্ঞতাকরণ করা হয়েছে। মূলতঃ এখানে ভোগ তদ্রেই যদিও ও নির্দিষ্টেরি
ভোগ বায়ের মধ্যে সম্বন্ধ সাধনা করে। তত্ত্বমূলক চিহ্ন অন্ধকারপূর্বক মূল্যায়ন করা হয়েছে। তত্ত্বমূলকের উপরের গবেষণা প্রক্ষিত সুপারিশ রয়েছে।

১. ভূমিকা

অধ্যাতন বিষয়ের শিক্ষার্থীদের জন্য সামাজিক অধ্যাতনের অধীনে ভোগ তত্ত্ব অধ্যায় পাঠ্য তালিকায়
গুরুত্বপূর্ণ দিক। ভোগ সম্পর্কিত মৌলিক বিষয়ে সবাইরাই ধারণা থাকার প্রয়োজন আছে। এ বিষয়ে
প্রশ্নের উত্তরে অভিজ্ঞতাকরণ ব্যাপারে প্রথম আলোচনা সৃষ্টি করেন জন মেনার্ড কেইনস। কেইনসকে অসংখ্য
অধ্যাতনিকের সমালোচনা করে। তার বক্তব্য উঠিয়ে দেয়ার চেষ্টা করে প্রথম স্বাভাবিক ব্যাখ্যা হয়।
জেমস ড্রুনেনবেরি একটি ফিন দৃষ্টি দিয়ে অপরিণত অর্থ উপস্থাপনা নামে ভোগ প্রদান করে মেশ আলোচিত হয়।
তার গবেষণাতেও অনেক ক্ষেত্রে বিভিন্ন গবেষণার মাধ্যমে অনেকের জন্যে আসে। এরপর যদিও নির্দিষ্টেরি
ভোগ বায়ের মাধ্যমে শ্রেষ্ঠ সম্বন্ধ সাধনার জন্য এনিমে আলোচনা মিলন ক্রিজম্যান। ক্রিজম্যান তার
হ্রাসি আর উপস্থাপনা স্বর্ণ ও নির্দিষ্টেরি ভোগ বায়ের মধ্যে কটুকু সমন্বয় সাধন করে পেয়েছে তার
উপর গবেষণামূলক অনেক বক্তব্য উপস্থাপনের পর অনেকটা কৃত্রিমের দাবিদার হয়। ইহার পর শ্রেষ্ঠ ও
নির্দিষ্টেরি ভোগ বায়ের মধ্যে সমন্বয় সাধনের জন্য অতীত চমৎকারভাবে বক্তব্য প্রবর্তন করেন ক্রিজ
মিলন ক্রিজম্যান। তিনি এই ধারণাটি সফল হয়েছে। বিভিন্ন গবেষণার কর্তৃক অন্ধকারার প্রশ্ন তৃলিঙ্গ হয়েছে।
বাক্তব অভিজ্ঞতা ও নির্দিষ্টেরি কালিন সাইরে প্রক্ষিতে ইকনোমেট্রিক বিশ্লেষনের মাধ্যমে দেখাতে সক্ষম
হয়েছে যে আর ভোগ বায়ের মধ্যে সময় মেয়াদে একটি সুন্দর কার্যকর সম্পর্ক (causal relationship)
রয়েছে। এমন মিলনিকায় তার জীবনকালে উপস্থাপন ও গবেষণা কাজের জন্য ১৯৮৫ সালে অধ্যাতনীর বিষয়ে নোবেল পুরস্কার ভূষিত হয়।

পদ্ধতিগত দিক ও তাছাড়া বিশ্লেষণ

সামাজিক অধ্যাতনের অধীনে ভোগ সম্পর্কিত তত্ত্বমূলের অলোচনা ও মৌলিক বিশ্লেষণ উপস্থাপন করা

* প্রতিষ্ঠান অধ্যাক, ঢাকার সিটি ইন্টারন্যাশনাল কলেজ

© 2016 Bangladesh Journal of Political Economy
Vol. 31, No. 4, June 2016, pp. 485-512
Bangladesh Economic Association (ISSN 2227-3182)

The text is about economic theories and critical evaluation of Keynes' income hypothesis.

### 2.1 Keynesian Income Hypothesis

**Absolute Income Hypothesis of Keynes**

1936 সালের কেইনস তার "General Theory of Employment, Interest and Money" পূর্বকে আয় ও ভোগ ব্যায়ের মধ্যে যে সম্পর্ক ব্যাখ্যা করেন তাই কেইনস-এর পরমে আয় উপস্থিত নামে পরিচিত। ভোগের অর্থের ভিত্তিতে সিদ্ধান্ত নেয় চালিত আয়ের কত অংশ সে ভোগের দ্বারা ব্যায় করবে। পরম আয় ও ভোগ ব্যায়ের মধ্যকার সম্পর্ক কেইনস-এর মনস্তাতিক বিবর্তন উপর ভিত্তি করে গড়ে উঠেছে। ভোগ ব্যায় পরম আয়ের উপর নির্ভরশীলতার সম্পর্ককে কেইনস পরম অর্থে ভোগ অপেক্ষাকর বলে। এ অপেক্ষাকে বলা যায় যে, পরম আয় অর্থের চালিত ব্যবহার আয় বাড়লে ভোগ ব্যায় বাড়তে ভোগ বৃদ্ধির পরিমাণ আয় বৃদ্ধির পরিমাণ থেকে কম হয় এবং গড় ভোগ প্রবণতা (C/Y) ক্রমপাদ পায়। গড় ভোগ প্রবণতার পরিবর্তন হেতু এই ভোগ অপেক্ষকে অসামান্য পদকল্পনা বলে চিহ্নিত করা যায়।

কেইনস তার তত্ত্ব ব্যাখ্যা করতে কতকগুলো বিষয়ের কথা উল্লেখ করেন। এসব বিষয়গুলোকে কেইনস-এর ভোগ অপেক্ষা সম্পর্কিত মনস্তাতিক বিবর্তন হিসেবে অবিভক্ত করা হয়।

1. ভোগ ব্যায় চালিত ব্যবহার আয় নির্ভরশীল। অর্থাৎ ভোগ ব্যায় আয় সমন্বিত অপেক্ষক।

2. আয় বাড়লে ভোগ ব্যায় বাড়ে। তবে আয় যে হারে বাড়ে ভোগ বাড়ার চেয়ে কম হারে বাড়ে।

২.১. কেইনস এর পরম আয় উপস্থিত (Absolute Income Hypothesis of Keynes)
৩. কেইনস মনে করেন যে, APC > MPC হয়। এখানে আমার বৃদ্ধির সাথে সাথে APC ও
MPC উভয়ই হাস পাবে তবে APC > MPC হয় এবং APS বৃদ্ধি পায়।

৪. কেইনস-এর মতে, আমার বৃদ্ধির সাথে প্রাক্তন ভোগ প্রবণতা হাস পাবে। এজন্য ভোগ রেখে ডান
দিকে ধীরে ধীরে উর্ধ্বগামী হয়। কিন্তু APS ও MPS বৃদ্ধি পায়। অবশ্য এ ব্যাপারে কেইনস নিশ্চিত
করে কিছু বলেন নি।

৫. সবশেষে কেইনস তাঁর আলোচনায় আমাকে ভোগ বায়ের প্রধান নির্দিষ্টক হিসেবে বিবেচনা করেন।
তবে সম্পদের মূল পরিবর্তনের মাধ্যমে সুদের হার ভোগ বায়ের প্রভাবিত করতে পারে, তা তিনি
বীরের করেন।

পরম আয় উপসিদ্ধাং তথ্যভিত্তিক মূল্যায়ন
অধ্যাপক কেইনস সম্মানে ভোগ এবং আয়ের মধ্যে সম্পর্ক ব্যাখ্যা করেন। তার এ প্রদত্ত সম্পর্কগুলো
বাস্তবের কিনা এ নিয়ে বিভিন্ন অনুদিতভিত্তি সময় ভিত্তিক পরীক্ষা-নিরীক্ষা করেন : যেমন, (১)
পারিবারিক বাজেট ভিত্তিক গবেষণা বা cross section data based evaluation এবং (২) সময়
ভিত্তিক পর্যালোচনা বা time series analysis।

ক। পারিবারিক বাজেট (এর সেকশন তথ্যভিত্তিক মূল্যায়ন) : ১৯৩৫ সালে Alley এবং Bowlen,
১৯৩৮ সালে Gilboy, ১৯৪৭ সালে Bradly এবং রিফার্মান, ১৯৫৭ সালে Houthaker পারিবারিক
বাজেটের ভিত্তিতে কেইনস-এর পরম আয় উপসিদ্ধাংয় বিভিন্ন দিক পর্যালোচনা করেন। তাছাড়া ১৯৫০
সালে যুক্তরাষ্ট্রের শহর এলাকার ১২,৫০০টি পরিবারের বাজেটের ভিত্তিতে "Wharton School of
Finance and Commerce" যে গবেষণা করে তা উদ্লেখযোগ্য। Wharton School এবং অন্যান্য
অনুদিতভিত্তির পর্যালোচনা থেকে দেখা যায় পারিবারিক আয় ও ভোগ বায়ের মধ্যে সম্পর্ক আছে তা
যায় কেইনসের কার্য সম্পর্কের মত। আয় বৃদ্ধির সাথে গড় ভোগ প্রবণতা হাস পায। প্রাক্তন ভোগ
প্রবণতাও একের চেয়ে কম (০.৬ থেকে ০.৮ এর মধ্যে)।

পারিবারিক বাজেট কৌশল নির্দিষ্ট সময়ের তথ্য প্রকাশ করে। এজন্য অনেক অনুদিতভিত্তি সময় ভিত্তিক
tথরের আলোকে কেইননসীয় উপসিদ্ধাং পরীক্ষা নিরীক্ষা করেন। এ ব্যাপারে অন্যান্য তথ্যবিশিষ্ট পালন করেন
Paridiso, Bennion, Woytinsky, Smithies এবং Mosak; তাদের গবেষণা কেইনস-এর বৈতর্নি
কী করে। যুক্তরাষ্ট্রে ১৯২৪-১৯৪০ সময়ের তথ্য নিয়ে গড় দৃশ্য যে ভোগ আপেক্ষিক বের করেন তা
ছিল নিয়ন্ত্রক ধরনের:

$$C = C_0 + C_1 Y_d$$
$$dC = C_1 Y_d$$

যেখানে:
$$C = C_0 + C_1 Y_d$$
$$dC = C_1 Y_d$$
$$C_0$$
$$C_1$$
$$Y_d$$
$$Y_d$$
$$C_0$$
$$C_1$$
$$Y_d$$
$$C_0$$

যুক্তরাষ্ট্রের ১৯২৩-১৯৪০ সময়ের তথ্যের ভিত্তিতে Smithies যে ভোগ আপেক্ষিক পরিমাপ করেন, তাও
কেইনস-এর উপসিদ্ধাং সমূহ করে। তবে তিনি ভোগ আপেক্ষিক পরিমাপের সময় মাথাপিছু ভোগ
বায়ের সাথে মাথাপিছু বায়াতাল আয়ের সম্পর্ক দেখান। তিনি এক্ষেত্রে মাথাপিছু আয় ছাড়া সময়ের
একটি চলক হিসেবে বিবেচনা করেন।

পরম আয় উপসিদ্ধাংয় কেইননসীয় বৈতর্নি পরীক্ষার জন্য যুক্তরাষ্ট্রে বিভিন্ন সময়ে বাজেট স্টাডি করা হয়।
এসব স্টাডিতে পরম ব্যয়বস্থা আয় বৃদ্ধি পেলে গড় ভোগ প্রবণতা, ইব্রাহিম পায় কিনা তা মূলত পরীক্ষা করা হয়। ভোজনের ব্যায় সম্পর্কিত ১৯৭২-১৯৭৩ সময়ের একটি সার্বে ১৯৭৭ সালে প্রকাশিত থেকে আয় এবং ভোগ ব্যায়ের মধ্যে অ-অনুপাতিক সম্পর্ক পাওয়া যায়।

আবার যুক্তরাষ্ট্রের শ্রম বিভাগ ১৯৬০-১৯৬১ সালের জনস্বাভাবিক বিভিন্ন আয় প্রশিক্ষিত ভাব করে গড় ব্যয়বস্থা আয় এবং ভোগ ব্যায়ের ভিত্তিতে গড় ভোগ প্রবণতা পরিমাপ করে। এরপুরুষ তথ্য নিচে উল্লেখ করা হলো।

টেবিল-১: ব্যক্তিময় টাইম সিরিজ তথ্য

<table>
<thead>
<tr>
<th>আয় শ্রেণি</th>
<th>বায়িত্ব আয়</th>
<th>ভোগ ব্যায়</th>
<th>গড় ভোগ প্রবণতা</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1000</td>
<td>535</td>
<td>1,276</td>
<td>2.38</td>
</tr>
<tr>
<td>1000-1999</td>
<td>1,521</td>
<td>1,781</td>
<td>1.17</td>
</tr>
<tr>
<td>2000-2999</td>
<td>2,507</td>
<td>2,670</td>
<td>1.05</td>
</tr>
<tr>
<td>3000-3999</td>
<td>3,515</td>
<td>3,636</td>
<td>1.03</td>
</tr>
<tr>
<td>4000-4999</td>
<td>4,504</td>
<td>4,428</td>
<td>0.98</td>
</tr>
<tr>
<td>5000-5999</td>
<td>5,491</td>
<td>5,172</td>
<td>0.94</td>
</tr>
<tr>
<td>6000-6999</td>
<td>6,707</td>
<td>6,125</td>
<td>0.91</td>
</tr>
<tr>
<td>7500-9999</td>
<td>8,554</td>
<td>7,416</td>
<td>0.87</td>
</tr>
<tr>
<td>10000-14999</td>
<td>11,723</td>
<td>9,521</td>
<td>0.81</td>
</tr>
<tr>
<td>15000 এবং তাপূর্ব</td>
<td>21,926</td>
<td>14,208</td>
<td>0.65</td>
</tr>
<tr>
<td>গড়</td>
<td>5,557</td>
<td>5,047</td>
<td>0.908</td>
</tr>
</tbody>
</table>


অন্য সেকশন থেকে দেখা যায় যুক্তরাষ্ট্রের ১৯৬০-৬১ সালে সমস্ত পরিবারের গড় ভোগ প্রবণতা হয়। কিন্তু এ অনুপাত আয়-প্রশিক্ষে বিভিন্ন পরিবারের ক্ষেত্রে বিভিন্ন পরিলক্ষিত হয়। অর্থাৎ আয় বৃদ্ধি পেলে ভোগ বায় বৃদ্ধি পেয়েছে কিন্তু আয়ের অপেক্ষা কম অনুপাতে। এরপুরুষ তথ্য তাই ব্যয়বস্থা আয় এবং ভোগ ব্যায়ের মধ্যে অ-অনুপাতিক সম্পর্ক প্রকাশ করে। আবার যুক্তরাষ্ট্রের আয় ৪০০০ টাকার নিচে তাদের বেদান্ত অপেক্ষা এক অপেক্ষা বেশি পরিলক্ষিত হয়। এ থেকে কেইনস-এর বক্তব্য যদি আয় তবে APC>1 হতে পারে তা প্রমাণিত হয়।

ব্যক্তিময় টাইম সিরিজ তথ্য: ১৯২২-৩৩ সময়ে অর্থনৈতিক মনোনিবেশ আছে আর হ্যায় পূর্ববর্তী সময়ে অর্থনৈতিক পুনরুদ্ধারে মৃত্যুত অগ্রগতির সাথে পূর্ববর্তী সময়ের অর্থনৈতিক পুনরুদ্ধারে মৃত্যুত অগ্রগতির সাথে পূর্ববর্তী সময়ের অর্থনৈতিক পুনরুদ্ধারে মৃত্যুত অগ্রগতির সাথে পূর্ববর্তী সময়ের অর্থনৈতিক পুনরুদ্ধারে মৃত্যুত অগ্রগতির সাথে পূর্ববর্তী সময়ের
টেবিল-২: যুক্তরাষ্ট্রের ভোগ এবং ব্যায়ীত্ব আয় সম্পর্কিত তথ্য : ১৯২৯-১৯৪১

(১৯৫৮ এর বিলিয়ন ডলার অর্থে)

<table>
<thead>
<tr>
<th>বছর</th>
<th>ভোগ বায়</th>
<th>ব্যায়ীত্ব আয়</th>
<th>গড় ভোগ প্রবণতা</th>
</tr>
</thead>
<tbody>
<tr>
<td>১৯২৯</td>
<td>১৩৯.৬</td>
<td>১৫০.৬</td>
<td>০.৯২৬</td>
</tr>
<tr>
<td>১৯৩০</td>
<td>১৩০.৪</td>
<td>১৩৯.০</td>
<td>০.৯৩৮</td>
</tr>
<tr>
<td>১৯৩১</td>
<td>১২৬.১</td>
<td>১৩৩.৭</td>
<td>০.৯৪৩</td>
</tr>
<tr>
<td>১৯৩২</td>
<td>১১৪.৮</td>
<td>১১৫.১</td>
<td>০.৯৭৭</td>
</tr>
<tr>
<td>১৯৩৩</td>
<td>১১২.৮</td>
<td>১১২.২</td>
<td>০.৭০৫</td>
</tr>
<tr>
<td>১৯৩৪</td>
<td>১১৮.১</td>
<td>১২০.৪</td>
<td>০.৮১১</td>
</tr>
<tr>
<td>১৯৩৫</td>
<td>১২৫.৫</td>
<td>১৩১.৮</td>
<td>০.৯৫১</td>
</tr>
<tr>
<td>১৯৩৬</td>
<td>১৩৮.৪</td>
<td>১৪৮.৪</td>
<td>০.৯৩৩</td>
</tr>
<tr>
<td>১৯৩৭</td>
<td>১৪৩.১</td>
<td>১৫৩.১</td>
<td>০.৯৩৫</td>
</tr>
<tr>
<td>১৯৩৮</td>
<td>১৪০.২</td>
<td>১৪৩.৬</td>
<td>০.৯৭৬</td>
</tr>
<tr>
<td>১৯৩৯</td>
<td>১৪৮.২</td>
<td>১৫৫.৯</td>
<td>০.৯৫১</td>
</tr>
<tr>
<td>১৯৪০</td>
<td>১৫৫.৭</td>
<td>১৬৬.৩</td>
<td>০.৯৩৬</td>
</tr>
<tr>
<td>১৯৪১</td>
<td>১৬৫.৪</td>
<td>১৯০.৩</td>
<td>০.৮৭০</td>
</tr>
</tbody>
</table>

কিছু বক্তব্য সমাপ্ত করে। আবার কিছু বক্তব্য নাকি করে। ১৯৪৬ সালে Simon Kuznets যুক্তরাষ্ট্রের ১৮৬৯-১৯৩৮ সময়ের দশকে ভিত্তিতে নীতি জাতীয় উপাদান এবং ভোগ ব্যয়ের তথ্য প্রকাশ করেন।

tাহাত্তার ভোগ মোটামুটিতে আছে একটি স্থিতিশীল ফাংশন। Kuznets এর তথ্য থেকে কেইনস-এর উপস্থাপনের প্রথম বক্তব্যের সমাপ্তি মিলে। তাতার তথ্যসূত্রে উপাদান সময় সীমার মধ্যে যুক্তরাষ্ট্রের

APC এর মান ০.৮৪ থেকে ০.৯৯ এর মধ্যে ছিল। আবার যুক্তরাষ্ট্রের প্রেসিডেন্টের অর্থনৈতিক নিয়ন্ত্রণ (সোনালি ১৯৩৩ থেকে ১৯৪৭ সাল) পর্যন্ত বায়িতির আয়, ভোগ ব্যয়, সম্পদ, APC, APS, MPC, MPS সম্পর্কে বর্তমান ভিত্তিতে তথ্যাধি সংরক্ষিতি থেকে দেখা যায় গড় ভোগ প্রবণতা ০.৭৪ থেকে

০.৯৯ ছিল। তবে সমুদ্র ভিত্তিক তথ্য পর্যালোচনা করলে দেখা যায় APC মোটামুটি স্থিতিশীল থাকে।

সুতরাং বলা যায় নীরবের ভোগ আয়ের স্থিতিশীল ফাংশন। পক্ষান্তরে পিসিসিএম < APC তার এই বক্তব্য ১৯২৩-১৯৪৩ এবং ১৯২৯-১৯৪০ সময়ের মধ্যে দ্বারা সমাপ্তি হলেও Kuznets এর তথ্য থেকে এর সম্পন্নতা ২। ১৯৫২ এবং ১৯৭৪ সাল ছাড়া যুক্তরাষ্ট্রের অন্যান্য বছরে MPCI < APC ছিল।

পক্ষান্তরে ১৯৫৫ সালে প্রকাশিত Goldsmith এর গবেষণা থেকে দেখা যায় APC এবং MPCI সমান হতে পারে। আবার L. R. Klein এবং R. F. Kodbud তাদের এক গবেষণা নিয়ে দেখান নীরবের APC কিছুটা বৃদ্ধি পেতে পারে। তাদের মতে এর বায়িতিক বৃদ্ধির হার শতকরা ০.১২৯ ভাব।

সুতরাং আয় বৃদ্ধি পেলে APC হ্রাস পায়। কেইনস-এর এই বক্তব্য বায়িতি থেকে এবং গবেষণা সম্পন্নতা করে না। তবে ০ < MPCI < ১ কেইনস-এর এ বক্তব্য নীরবের গবেষণা দ্বারা সমাপ্তি হয়।

অধ্যাপক Simon Kuznets যুক্তরাষ্ট্রের ৬০ বৎসরের জাতীয় আয় এবং ভোগ ব্যয় সম্পর্কে তথ্য

সংক্ষেপে করে গড় ভোগ প্রবণতা পরিমাপ করেন। তার তথ্য থেকে দেখা যায় তাঁর মহামার্গ পূর্বে যুক্তরাষ্ট্রে ভোগ ব্যয় এবং জাতীয় আয়ের অনুপাত অর্থাৎ APC এর মান ০.৮৪ থেকে ০.৯৯ এর মধ্যে উত্থাপন করে।

এপর্যন্ত বিভিন্ন উদ্যোক্তরের যুগে এর মান বৃদ্ধি পেয়ে ০.৯৯ পর্যন্ত উন্নতি হয়। এর ব্যাপারে হিসেবে তিনি যুক্তি দেন তৎকালীন সময়ের অর্থনৈতিক কর্মকান্ড মেরাকুকাউড়ে সংকুচিত হওয়া উদ্যোক্ত

যুক্তরাষ্ট্রে গড় ভোগ প্রবণতার উপর ধন্যক প্রতিরোধী সৃষ্টি হয়।

আবার ১৯২৯-১৯৭৪ এর সময়ে বিবেচনা করলে দেখা যায় গড় ভোগ প্রবণতা বৎসরের পর বৎসর

পরিপর্যন্ত হয়েছে। কিন্তু সমালোচক অর্থে গড়ের এর মান মোটামুটি স্থিতিশীল ছিল। নিচের তথ্য থেকে এর

গ্রাম্য মিলিত।

<table>
<thead>
<tr>
<th>সাল</th>
<th>গড় ভোগ প্রবণতা</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947-1956</td>
<td>০.৯২১</td>
</tr>
<tr>
<td>1952-1961</td>
<td>০.৯২১</td>
</tr>
<tr>
<td>1957-1966</td>
<td>০.৯২৪</td>
</tr>
<tr>
<td>1962-1971</td>
<td>০.৯১০</td>
</tr>
<tr>
<td>1967-1974</td>
<td>০.৯০৫</td>
</tr>
</tbody>
</table>

টেবিল থেকে দেখা যায় দ্বিতীয় বিশ্বযুদ্ধের পরবর্তী সময়ে গড় ভোগ প্রবণতা : ১৯৪৭-১৯৭৪
চিত্র ১. ব্যায়তত্ত্বের আয়, ভোগ বয় এবং গড়ে ভোগ প্রবণতার ব্যক্তি ও দীর্ঘমেয়াদি উদাহরণার প্রকৃতি নিচের চিত্র দ্বারা দেখা যায়,

চিত্র \( t_1 \) সময়ের পর অর্থনীতিতে অবনতি আরসে হয় এবং \( t_2 \) সময়ে তা পূর্ণতা লাভ করে মন্দা দেখা দেয়। কারণ এ সময়ে \( Y_d \) এবং \( C \) উভয়ই হ্রাস পেতে থাকে। অন্যদিকে \( t_2 \) সময়ের পর অর্থনীতিতে পুনরুদ্ধার তত্ত্ব আবর্ত হয় এবং \( t_3 \) সময়ে তা পূর্ণতা লাভ করে এবং অর্থনীতি সম্পূর্ণতা উপনীত হয়।

চিত্র ১. ব্যায়তত্ত্বের আয়, ভোগ বয় এবং গড়ে ভোগ প্রবন্ধকের ব্যক্তি ও দীর্ঘমেয়াদি উদাহরণার প্রকৃতি নিচের চিত্র দ্বারা দেখা যায়,
২.২ দীর্ঘকালীন ভোগ অপেক্ষক সম্পর্কে বিভিন্ন অর্থনীতিবিদ তার্কিক ও অর্থমিতিক গবেষণা
(Different Theoretical Econometrical Research on Longrun Consumption Function)

(ক) সাইমন-কুজনেট-এর গবেষণা: ভোগ অপেক্ষক সম্পর্কে একটি বিতর্কিত প্রশ্ন উঠিতে পারে যা
হলো ভোগ ও আয়ের সম্পর্ক সমান্তরাল (proportional) হবে বা অসমান্তরাল (non-
proportional) হবে কিনা। এ বিষয়ে ১৯৩৬ সালে কেইনস-এর আলোচনা থেকে শুরু করে ১৯৬৩
সালে মানুষহীনীর জীবনচক্র উপসাধিকর্তর গবেষণা পর্যন্ত বিভিন্ন অর্থনীতিবিদ তার্কিক বিভিন্ন
তত্ত্বাত্মক আলোচনা রয়েছে। তাছাড়া পূর্ব থেকেও বিভিন্ন অর্থনীতিবিদ কেইনসীয় তত্ত্ব অনুসারে দেখা গেছে যে,
আয় বাড়তে থাকলে ভোগ ও আয়ের মধ্যে অনুপাত অর্থাং ভোগের পড় প্রবণতা সমান থাকতে পারে
না। অতএব উক্ত অনুপাত সমান থাকা সম্ভব নয়।

কিছু আমাদের অধ্যাপক সাইমন কুজনেটস (Simon Kuznets) প্রদর্শিত আয় ও ভোগ বাংলার
দীর্ঘকালীন সম্পর্কের বিষয় লক্ষ করি, তাহলে দেখবে যে উভয়ের এ সম্পর্ক সমান্তরাল। অধ্যাপক
কুজনেটস আমেরিকার অর্থনীতির পরিপ্রেক্ষিতে ১৮৬৯ তে ১৯৩৮ সাল পর্যন্ত সমাজের আয় ও ভোগের
সংগৃহীত হিসেবের ওপর ভিত্তি করে ভোগ ও আয়ের সমান্তরাল সম্পর্ককে প্রতিষ্ঠিত করেছেন। এ স্থলে
ভোগ অপেক্ষকের একার সমীকরণ লক্ষ্য করা যায়:

এ স্থানে \[ C = \frac{b}{Y} = APC \] (ভোগের গড় প্রবণতা)। 'b' একটি স্থির অনুপাত। দীর্ঘকালীন ভোগ রেখাকে
চিত্রের সাহায্যে দেখতে পারি।

চিত্র-২: অধ্যাপক সাইমন কুজনেট-এর প্রদর্শিত আয় ও ভোগ বাংলার সমান্তরাল সম্পর্ক

চিত্রে ভোগ রেখা \( OC \) কে \( OX \) ও \( OY \) অক্ষের সংযোগ বিন্দু হতে টানা হয়েছে। \( OC \) ভোগের রেখার ঢাল (slope) এখানে 'b' এবং 'b' এই ভোগের গড় প্রবণতা। আবার এটি ভোগের
প্রাক্তিক কারণ এখানে গড় ও প্রাক্তিক ভোগ প্রবণতা পরস্পর সমান। এক্ষেত্রে গড় ভোগ প্রবণতা হলো
\( KY \)। আবার \( KY \) হলো \( OC \) রেখার ঢাল। অতএব \( O \) বিন্দু হতে অক্ষ \( OC \), রেখার ঢালকে এককতে
ভোগের গড় প্রবণতা বলা যায়। এখন, ভোগের প্রাক্তিক প্রবণতা বলতে বুঝায় আর কতটা বাড়ুনে, ভোগ
কতটুকু বাড়তে, অর্থাৎ, মোট আয় বৃদ্ধির (\( \Delta Y \) মোট ভোগ বৃদ্ধি (C) দ্বারা ভোগ করে, ভোগের
প্রাক্তিক প্রবণতা পাওয়া যায়, অর্থাৎ \( \frac{\Delta C}{\Delta Y} = \frac{dC}{dY} \)। চিত্রানুসারী দেখা যায়, আয় (\( OY \) ) হতে \( OY \)-এ
বাড়লে, ভোগ \( OC \) হতে \( OC \) এ বেড়েছে। এখানে আয় বৃদ্ধি হলো \( YY = KL \) পরিমাণ এবং ভোগ
বৃদ্ধি হলো \( CC = ML \) পরিমাণ। অতএব ভোগের প্রাক্তিক প্রবণতা বা \( MPC = \frac{dC}{dY} = \frac{ML}{KL} \)। লক্ষ্যের
বিষয় হলো যে \( OC \) অনুপাতকে \( OC \) রেখার ঢাল সূচিত করেছে। সুতরাং এককতে \( OC \), রেখার ঢালকে
ভোগের প্রাক্তিক প্রবণতা বলা যায়, কারণ রেখাটির কোনো বিন্দুতে এর ঢাল দেখায় যে আয় কতটা
বাড়তে ভোগ কতটা বাড়িয়ে; এবং যে কোনো ভোগ রেখায় যে কোনো বিন্দু হতে \( O \) তে একটি সরল
রেখা টানলে উক্ত রেখাটির ঢাল ভোগ রেখার নির্দিষ্ট বিন্দুতে ভোগের গড় প্রবণতা দেখায়। অতএব এর
Sectional

The hypothesis that the corelation coefficient is different from 0 is tested, and the test statistic is calculated as:

\[ \sum_{i=1}^{n} (y_i - \bar{y})^2 = \sum_{i=1}^{n} x_i^2 \]

where \( y_i \) is the observed value at time \( t_i \), \( \bar{y} \) is the mean of the observed values, and \( x_i \) is the value of the independent variable at time \( t_i \).

The test statistic is then compared to the critical value from the t-distribution with \( n-2 \) degrees of freedom. If the calculated test statistic is greater than the critical value, the null hypothesis is rejected, indicating a significant corelation between the two variables.

**References:**


2.3 James Duesenberry’s Relative Income Hypothesis (Relative Income Hypothesis of James Duesenberry)

The Relative Income Hypothesis is based on the idea that consumers adjust their consumption based on their perceived income relative to others. Duesenberry argued that consumers tend to consume in a way that enhances their relative status within their social group. This hypothesis suggests that when consumers perceive their income as below average, they may increase their consumption to keep up with their perceived social standing. Conversely, when they perceive their income as above average, they may decrease their consumption to avoid feeling overly conspicuous. This hypothesis places importance on social comparison and relative status in shaping consumption behavior.
2. **Demonstration Effect**: This concept is explored in detail in the text. It involves the behavior of individuals based on the actions of others, often leading to a ripple effect in consumer behavior. The demonstration effect is crucial in understanding how changes in one individual's behavior can influence others, leading to collective shifts in economic activities.

The text delves into the implications of the demonstration effect on economic models and policies, highlighting its role in shaping consumer decisions and market trends. It also discusses the empirical evidence supporting the demonstration effect and its integration into macroeconomic analysis.

The demonstration effect is further illustrated through various examples, such as the adoption of new technologies or changes in consumer preferences based on social influences. The text emphasizes the importance of considering the demonstration effect in policy-making and economic forecasting to better predict and manage economic outcomes.

In conclusion, the demonstration effect is a critical concept in understanding consumer behavior and economic responses. Its consideration in macroeconomic analysis can lead to more accurate predictions and effective policy implementations.
অধ্যাপক কুসেনবরী গবেষণা: অধ্যাপক জেমস কুসেনবরী তোগ অপেক্ষক সম্পর্কে বলেছেন, আয় ও তোগের সম্পর্ক মূলত সমানুপাতিক। তিনি বিভিন্ন ব্যাখ্যার ন্যায় অসমানুপাতিক বিষয়ের ব্যাখ্যা দেখে অনুশীলন করেন। তোসেনবরীর মতে, যদি আয় যোগ সমন্বয় হতে ব্যবহার করা হয় তবে তথায় তোগও ব্যবহার হবে চলে। কিন্তু বাণিজ্যবিশ্বের বিভিন্ন পর্যায়ে আয়ের বিশেষ উদাহরনগুলির ক্ষেত্রে তোগ ও আয়ের মধ্যে সমানুপাতিক সম্পর্ক থাকতে পারে না, সেখানে উভয়ের সম্পর্ক বাংলাবিভাগের অসমানুপাতিক হয়ে থাকে।

জেমস কুসেনবরী ১৯৪১ সালে তোগ অপেক্ষকের যে তত্ত্বের অবলম্বন করেন সেখানে আপেক্ষিক আই জনিত ব্যাখ্যার দৃষ্টিকোণ দেখে বিশেষভাবে লক্ষ্য হয় যে আপেক্ষিকতাতে প্রসঙ্গিত তোগ অপেক্ষক আলোচনার ক্ষেত্রে তোসেনবরীর স্বত্বক্ষতা রঙ্কা করছে।

তোসেনবরীর আপেক্ষিক আইন ব্যাখ্যার ক্ষেত্রে দেখা যে, তোগকারী মোট জনসংখ্যার অন্য সকল তোগকারীর তোগ আচরণের সাথে তার নির্দিষ্ট তোগ আচরণের তুলনা করে তার তোগ ও তত্ত্বিক উপযোগিতা নির্ধারণ করে।

\[ U = U(C_0, \ldots, C_t) \]

নিম্নোক্ত উপযোগিতা-অপেক্ষক হতে তোসেনবরীর নির্দিষ্ট উপযোগিতা অপেক্ষক সম্পূর্ণ সততাঃ

\[ U = U \left( \frac{C_0}{R_0}, \ldots, \frac{C_t}{R_t}, \ldots, \frac{C_T}{R_T} \right) \]

যেখানে \( R_0, R_t, R_T \) অর্থে 0, t, ও T সময়কালে মোট জনসংখ্যার অন্য সকল তোগকারীর তোগের এক প্রকার নির্ভরযোগ্য গড় হিসাব। এখানে বুঝা যায় যে, ব্যক্তি বিশেষ তোগকারী তত্ত্বের অধীন হয়ে যে তার উপযোগিতা বাড়ছে, যখন অন্য সকল তোগকারীর গড় তোগের তুলনায় তার নির্দিষ্ট তোগের স্তর বেশি বৃদ্ধি পায়। অতএব, বলা যায় যে, ব্যক্তি বিশেষ তোগকারীর তোগ আয় অনুপাত (C/Y) যে বিষয়টি দিয়ে প্রতিফলিত হয় তা হলো আয়ের বন্দ্যনে ঐ ব্যক্তি বিশেষের স্বাধীন আপেক্ষিক অর্থে কিরূপ। যদি
Life cycle hypothesis

Life cycle hypothesis was formulated by economist Simon in 1956. According to Simon, the consumption of goods follows an inverted-U pattern over the life cycle. Initially, young individuals have lower incomes and spend proportionally more on goods than the elderly, who have higher incomes and spend proportionally less. The pattern is inverted-U because it is the reverse of the U-shaped pattern observed in cross-sectional data.

The life cycle hypothesis can be expressed as:

\[ APC > MPC \]

where APC is the average propensity to consume and MPC is the marginal propensity to consume. Simon argued that the life cycle hypothesis could explain the observed inverted-U pattern in cross-sectional data.

The life cycle hypothesis was later extended by Ando and Modigliani in 1963, who proposed the permanent income hypothesis. This hypothesis states that individuals plan their consumption based on their expected permanent income, rather than their current income. The permanent income hypothesis can be expressed as:

\[ CS = APC \]

where CS is the consumption smoothing ratio, which is the ratio of current consumption to permanent income. The permanent income hypothesis suggests that individuals smooth their consumption over time, leading to the observed inverted-U pattern in cross-sectional data.

The life cycle hypothesis has been influential in macroeconomics and has been used to explain various phenomena, such as saving, investment, and aggregate demand. However, it has also been criticized for its assumptions about individual rationality and the stability of permanent income.
চিত্র-৪ : অধাপক ডুসেনবারীর ‘রাচেট-প্রভাব’

আদিকালগুলি আয় উপসংহার এবং অর্থনৈতিক বাতাশ অভিজ্ঞতালঘু ফলাফল

ডুসেনবারীর আদিকালগুলি আয় উপসংহার অনেকগুলি বাতাশ অভিজ্ঞতালঘু তথ্য দ্বারা গ্রামায়ণ হয়েছে।

1. ডুসেনবারীর বিভিন্ন গবেষণা ও জরিপের মাধ্যমে তার আদিকালগুলি আয় উপসংহারের পক্ষে দৌহিত্রিক তথ্যে তুলে ধরেন। যুক্তরাজ্যের ১৯৩৫-৩৬ সালের তথ্য নিয়ে তিনি দেখানে একই আয়ের অর্থনৈতিক স্তরের পরিবর্তে তুলনায় নিম্নরূপ পরিবর্তে দৌহিত্রিক তথ্যে সংযোজন করে। এ অবস্থা প্রদর্শন প্রতিক্রিয়ার ফল বলা যায়। আবার তিনি দেখানো যুক্তরাজ্যের ১৯১৭ সালে মেসব লোকের গড় আয় ৮০০ ডলার ছিল তাদের কেনা সংখ্যা ছিল না। অর্থোচন্দ্রপ্রদর্শন প্রতিক্রিয়ার ফল বলা যায়। স্থল আয়ের উপর ভোট নির্ভরশীল হলে শূন্য সংখ্যা স্তরের আয় এই দুই সময়ে একই রকম হয়। কিন্তু ভোট স্থল আয়ের উপর নির্ভরশীল নয়। অন্যান্য বিষয়ের সাথে সম্পর্কিত হওয়ায় উভয় আয়ের সংখ্যা শূন্য হয়।

2. ডুসেনবারীর দাবি করেন এ শতাব্দীর বিশ দশকের অর্থনৈতিক অগ্রগতির সময় যুক্তরাজ্যের জনগণের আর্থিক আয় বৃদ্ধি পাওয়ায় তাদের জীবনযাত্রার মান বৃদ্ধি পায়। পরিস্থিতি ত্রিশ দশকের মধ্যে মোট অনেকগুলি আয়ের উপর ভোট নির্ভরশীল হলে শূন্য সংখ্যা স্তরের আয় এই দুই সময়ে একই রকম হয়। কিন্তু ভোট স্থল আয়ের উপর নির্ভরশীল নয়। অন্যান্য বিষয়ের সাথে সম্পর্কিত হওয়ায় উভয় আয়ের সংখ্যা শূন্য হয়।

3. যুক্তরাজ্যের ১৯৩৫ সালের তুলনায় ১৯৪১ সালে ভোটকের বাজেটে ঘটিত কম পরিসরিতি হয়।
মূল কারণ ছিল উক্ত সময়ের মধ্যে যুক্তরাষ্ট্রে সেকারা ৮০ লক্ষ থেকে ৩০ লক্ষে আসে। ফলে এ সময়ে গড় ভোগ প্রবণতা বাড়ে। এভাবে বিভিন্ন সময়ের তথ্য দ্বারা ডুসেনবেরী তার উপসিদ্ধাত প্রমাণের চেষ্টা করেন।

4. যুক্তরাষ্ট্রের ১৯৩৫-৩৬ সালের এক সমীক্ষা হতে দেখা যায় যে সমাজ শ্রেণিভুক্ত শহরের লোকদের অপেক্ষা গ্রামের লোকেরা বেশি সম্পদ করে। অ্যাপলি র. ফ্রিডমন এবং ইংল্যান্ডের সমাজ প্রদর্শন প্রতিক্ষণা কর থাকায় উক্ত সময়ে শহরের লোকদের তুলনায় গ্রামের লোকদের ভোগ প্রবণতা কম ছিল।

5. যুক্তরাষ্ট্রের Bureau of Labour Statistics এর এক রিপোর্ট থেকে নিম্নাংশ তথ্য পাওয়া যায়:

টেবিল-৪ : বায়িত্ব আয় এবং ভোগ ব্যায় : ১৯৬০-১৯৬১ (লক্ষাংকে)

<table>
<thead>
<tr>
<th>গ্রুপ/শ্রেনি</th>
<th>বায়িত্ব আয় (Yd)</th>
<th>ভোগ ব্যায় (C)</th>
<th>গড় ভোগ প্রবণত (APC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>১. সম্মিলন কৃষি পরিবার (Rural Farm Families)</td>
<td>4,424</td>
<td>3,595</td>
<td>0.81</td>
</tr>
<tr>
<td>২. সমন্ত কলা পরিবার বর্গ (All Black Families)</td>
<td>3,584</td>
<td>3,465</td>
<td>0.97</td>
</tr>
<tr>
<td>৩. সমন্ত পরিবার বর্গ : যেসব পরিবারের কর্তা আট বছর অধিক তার কম সময়ের শিক্ষা রয়েছে (All families with heads having eight years or less education)</td>
<td>3,956</td>
<td>3,657</td>
<td>0.92</td>
</tr>
</tbody>
</table>

উপরের টেবিল থেকে দেখা যায়, (ক) কাছাকাছি আয় থাকা সত্ত্বেও অ-কৃষি পরিবারসমূহের অনেকগুলি কৃষি পরিবারসমূহ কম আয় ভোগের জন্য ব্যয় করে। কেননা সব পরিবারের বিবেচনা করলে গড়ে APC = 0.92 পাওয়া যায়। অথচ কৃষি পরিবারসমূহের গড়ে APC = 0.81 পরিলিখিত হয়। তাছাড়া কলা পরিবারের গড়ে ভোগ প্রবণতা 0.97 পরিলিখিত হয়। এসব পরিবারের গড়ে বায়িত্ব আয় 3,584 লক্ষ এবং গড়ে ভোগ ব্যায় 3,465 দেখা যায়।

(খ) আবার যুক্তরাষ্ট্রের Bureau of Labour Statistics কর্তৃক প্রকাশিত Consumer Expenditures and Income, Total United States, Urban and Rural, 1960-61 পুস্তিকা থেকে দেখা যায় ঐ সময়ে আমার পরিধি 3000-3999 ডলার ছিল এমন সব পরিবারের গড়ে ভোগ প্রবণতা 1.03 পরিলিখিত হয়। এ তথ্যের সাথে উপরের টেবিলের তথ্য তুলনা করলে বলা যায় যে-কলা পরিবারের চেয়ে কলা পরিবারসমূহ কম আয় ভোগের ক্ষেত্রে ব্যয় করে। কারণ প্রথমবারের APC যেখানে 1.03 সেখানে দ্বিতীয় শ্রেণির পরিবারের APC = 0.97 ছিল। এ থেকেও ডুসেনবেরীর উপসন্ধাত্রের সমাহার মিলে। ডুসেনবেরীর উপসন্ধাত্রের অনুযায়ী কলা এবং অ-কলা পরিবারের অচই পৃথক হওয়ার মূল কারণ হচ্ছে তাদের গড়ে আয়ের পার্থক্য।

(গ) যুক্তরাষ্ট্রের ১৯৬০-৬১ সালের উপরিকূল রিপোর্ট থেকে দেখা যায় যে ঐ সময়ে কলা পরিবারের গড়ে আয় যেখানে ডলার 3,584 ছিল, সেখানে একই সময়ে অ-কলা পরিবারের গড়ে আয় ডলার 5,772 ছিল। আণুগতিক আয় পার্থক্য এবং ভিড় অনেক সমাজিক পরিবেশকে এ দুই শ্রেণির APC এর পার্থক্যের মূল কারণ হিসেবে চিহ্নিত করা যায়। উপরিত্ব বিভিন্ন সমীক্ষা/পরিসংখ্যান সমীক্ষা/রিপোর্ট
The process of Duesenberry's later work is described by Ross Friedman and Brady in their demonstration effect. The effect is characterized by a shift in consumer behavior towards higher income levels and more luxury goods. This phenomenon is known as the 'Duesenberry effect' and is observed in high-income households who tend to spend a larger proportion of their income on luxury goods. The effect is often attributed to the desire for status and prestige among high-income earners.

In the context of this demonstration, it is important to note the role of social comparison. The Duesenberry effect highlights the impact of social comparison on consumer behavior. High-income earners tend to compare themselves with others in their social circle and adjust their consumption patterns to match their perceived social status. This leads to higher consumption of luxury goods and services, which in turn affects the overall demand for such products in the market.

The demonstration effect is a significant factor in the analysis of consumer behavior and plays a crucial role in understanding the dynamics of luxury goods in the market. It is important to consider this phenomenon when evaluating the economic implications of luxury goods and their impact on consumer spending patterns. The Duesenberry effect serves as a reminder of the importance of social factors in shaping consumer behavior and consumption patterns.
(k) Parimapakriti Ayay: Saarhi Ayay o Astraaya Ayayer Samastiti Parimapakrit Ayay. Artha Parimapakrit Ayay
\[ Y = Y'_p + Y'_t \]
yekhane, \[ Y'_p = \text{Saarhi Ayay}, \]
\[ Y'_t = \text{Astraaya Ayay} \]

Saarhi Ayay: Nirdhi Samyone saathe samarpikta nityamitabare arjita Ayayke saarhi Ayay balo. Meemon-
koneo sarokari karmkartaing marisik betana attar saarhi Ayay, sampriti theke prag Ayay saarhi Ayay hishebe
ibirbo. Tabe e dharoner Ayayne saathe samarpikta koneo bhdrati Ayay, thakale taakho saarhi hisare pany
karte hobe.

Astraaya Ayay: Anirmitam Samyone aprotayashita de koneo dharoner Ayayke astraaya Ayay balo. Meemon:
lataarir stikket er payowa purshakar, praitoet padonaer Janay prag Ayay, Over time, Per time job
theke pragu Ayay ityadi.

(kh) Parimapakriti Bopak: Saarhi o Astraaya Bopore samasthti huchh Parimapakrit Bopak. Artha Parimapakrit
\[ B = C + C'_t \]
yekhane, \[ C'_p = \text{Saarhi Bopak}, \]
\[ C'_t = \text{Astraaya Bopak} \]

Saarhi Bopak: Saarhi Ayayne saathe samarpikta nityamit Bopore saarhi Bopak balo. Meemon-prag Ayayne
mabhame Bopak, sampriti theke prag Bopak ityadi. Tabe e dharoner Boporen Janay nityamit bhdrati Bopay
hane taakho saarhi Bopak hisare pany karte hobe.

Astraaya Bopak: Aprotayashita de koneo dharoner Boporke astraaya Bopak balo. Meemon, saarhi chakari theke
aprotayashita koneo apayyan o koneo dharonor suyog suvirdha, praitoet padooi prag samadini theke
Bopak ityadi.

Saarhi Ayay Upasindhaut byaxa korte pignye milton fridomyan prahime Parimapakrit Ayay o Parimapakrit
Bopak byore saethe samprak dekhan, shrkamayaide ithaie byaxoj. Paribortiye deiromayade saarhi Ayay o
saarhi Bopak byore saethe samprak dekhan.

Parimapakrit Ayay o Parimapakrit Bopak byore saethe samprak
Milton fridomyaner mabet saarhi Bopak saarhi Ayaynu upar nirdhdesh. Kintu e saarhi upadan sarasri dekha
yay na. Ejeny Bopak akhoner byaxayar Janay eunor saathe Parimapakrit Bopak o Parimapakrit Ayayner
bopasukta saapone prahojon. shrkamayaider korete ta byaxya koray yay:

Gaantikabare, Parimapakrit Ayay, \[ Y = Y'_p + Y'_t \]

\[ B = C + C'_t \]
yekhane, \[ Y = \text{Parimapakrit Ayay}, Y'_p = \text{Saarhi Ayay}, \]
\[ C'_p = \text{Saarhi Bopak}, C'_t = \text{Astraaya Bopak}, \]
\[ C = \text{Parimapakrit Bopak}, Y'_t = \text{Astraaya Ayay} \]

Fridomyaner mabet prakrit Bopak apenaksak saarhi Ayay o saarhi Bopak byore saathe samprak prakor kore.
Ejeny eunor sahamsamprak astraaya Ayay o astraaya Bopak byore sah samprak apenaka beishi hobe.

Parimapakrit Ayay o Parimapakrit Bopak byore saethe samprak chiter saahayoy byaxya koray holo:

Chiter \[ C_s \] o \[ C_L \] rekha yathakrame bhakt o deiyomeyadina Bopak byay rekha. Dhori samajer goshthikulas lokoner
চিত্র-৫: পরিমাপকৃত আয় ও পরিমাপকৃত ভোগ বায়ের মধ্যে সম্পর্ক

এর বিশেষ প্রশ্নের অস্থায়ী আয় $Y_1 < 0$ হলে অর্থাৎ আয় $Y_2 > 0$ হলে ভোগ বায় $C'_1$ বিদ্যুতে হবে।

চিত্র-৬: স্বায়ি আয় ও স্বায়ি ভোগ বায়ের মধ্যে সম্পর্ক

চিত্রে $C_p = .88Yp$ রেখা দ্বারা ফ্রিডম্যান কর্তৃক গবেষণা ফলাফলের ভিত্তিতে Estimated মান দ্বারা

$C_p = .88Yp$ দীর্ঘকালীন ভোগ বায়ের রেখা পরিমাপ করেন।

ফ্রিডম্যান সমাজের গোষ্ঠীভুক্ত প্রশ্নের কথা উল্লেখ করেন এবং সমাজে ভোক্তাদের বিশেষ প্রশ্ন ও সাধারণ প্রশ্নের দ্বিভাবন। 

চিত্রে $C_p = .88Yp$ রেখা দ্বারা ফ্রিডম্যান কর্তৃক গবেষণা ফলাফলের ভিত্তিতে Estimated মান দ্বারা

$C_p = .88Yp$ দীর্ঘকালীন ভোগ বায়ের রেখা পরিমাপ করেন।
Amp MPC.

\[ C = 31.4 + 0.73Y_d \]

\[ P = \text{Sign of Corelation} \]

\[ PY_p Y_t = PC_p C_t = 0 \]

\[ APC = MPC \]

\[ Y = b = APC \]

\[ \beta = 0.165 \]

\[ a = 0.165 \]

\[ T \]

\[ G \]

\[ F. \]

1. MPC

2. Houthakker

3. Taubman, J.

4. Friend and Kravis
5. Fridman's goods' share of consumption. 

6. A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

7. A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

8. A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.

A theoretical and critical evaluation of the theories and critical evaluations of the theories on long-run consumption.
C = 0.917 Yd

The data is presented in the form of equations and text. The equations are:

\[ C = 0.917 \text{ Yd} \]

The text is presented in a narrative format and includes references to various sources. The content is focused on economic models and concepts, including the Modigliani model and the Life Cycle Hypothesis.

2.5.1 Modigliani's Life Cycle Hypothesis (Life Cycle Hypothesis of Ando Modigliani)

The reference to Modigliani's work and his model is made in the context of economic analysis. The text discusses the implications of his model for understanding consumer behavior and economic policies.

The equation presented is:

\[ Y = b = \text{APC} \]

\[ C = 31.4 + 0.73Y_d \]

\[ Y_t > 0 \]

\[ T = 0 \]

\[ T_2 = \text{APC} > \text{MPC} \]

The text also references other works and authors such as Taubman, J., M. Holms, P. S. Laumas, and S. Fischer, among others.
চিত্রে ভূমি ও লম্ব অংশকে যথাক্রমে সময় (1) এবং C η Y নির্দেশ করে। C ও Y রেখা দ্বারা যথাক্রমে ভোগ ও আয় নির্দেশ করে। চিত্রে PC রেখা দ্বারা ভোগ রেখা এবং জন্ম হচ্ছে আয় রেখা।

প্রথম জীবন: ভোক্তার প্রথম জীবনের 15 সাল থেকে ৩০ সাল পর্যন্ত যে ভোগ এর আয় হচ্ছে তা নির্দেশ করে।

মধ্য জীবন: এসময় ভোক্তা আয়, ভোগ ও সংস্করণ করে। চিত্রে "A" Shadow এলাকা সংস্করণ এলাকা যা থেকে 1 ম জীবনের ভোগ পরিশোধ ও শেষ জীবনের ভোগ কভার করতে পারে।

শেষ জীবন: এসময়কে অবসর সময় বলে। এসময় CRY ভোক্তার ভোগী এলাকা নির্দেশ করে। শেষ জীবনের ভোগ ও জীবনের সংস্করণ থেকে পরিশোধিত হয়। এভাবে 1 ম ও শেষ জীবনের ভোগ মধ্যে জীবনের সংস্করণ দ্বারা নি:শেষ হয়ে যায়। ইহাই ভোগ ও দীর্ঘমেয়াদি ভোগ ব্যয়ের মধ্যে সমর্থ সাধন নির্দেশ করে।

Ando-Modigliani সম্ভব ও দীর্ঘকালীন ভোগ ব্যয়ের মধ্যে সমর্থ সাধন করতে প্রথমে নিম্নোক্ত গাণিতিক এবং পরে চিত্রের সাহায্যে ব্যাখ্যা করেন।

**ভোগ অপেক্ষা**  
\[ Ct = \alpha Vt \]  

(1)

যেখানে, \( t = 0 \) এ সময়ে \( V_t \) কে সম্পদের বর্তমান মূল্য হিসেবে চিহ্নিত করেন। ইহা নিট সম্পদ \( At \) এবং সম্পত্তি নয় এমন আওর বর্তমান মূল্যের সমষ্টি।

\[ V_t = At + Y_t^L + S \frac{T}{t=1} \frac{Y_t^L}{(1+i)^t} \]  

(2)

গড়পড়তা প্রবংশিত উপার্জিত আয়,

\[ Y_t^e = \frac{T}{S} \frac{Y_t^L}{(1+i)^t} \]  

(3)

বা, \((T-1)Y_t^e = \frac{S}{1} \frac{Y_t^L}{(1+i)^t}\)
যেখানে $Y_t^e = \text{চলিত সময়ে অসম্পত্তি হতে প্রত্যাশিত গুণ্ড আয়,}$

$$Y_t^L = \text{অসম্পত্তি হতে গুণ্ড আয় যা ব্যক্তিবর্গ} \ t = 0 \text{ সময় হতে } t \text{ বছর পর্যন্ত প্রত্যাশা করে,}$$

$$T = \text{জীবনের বাকী বছর, } i = \text{স্থির হার}.$$

Modigliani এর $Y_t^e$ পরিমাপের জন্য দুটো বিকল্প পদ্ধতি উল্লেখ করেন।

(i) প্রত্যাশিত গুণ্ডপত্তা অসম্পত্তি উঠার আয় গুণ্ড একটি 'Scale Factor' ব্যতীত চলিত আয়ের সমান।

(ii) চলিত অসম্পত্তি হতে গুণ্ড আয় একটি 'Scale Factor'-এর মাধ্যমে পূরণ করা হলে তা প্রত্যাশিত অসম্পত্তি জনিত আয়ের সমান হবে।

$$Y_t^e = \beta Y_t^L \quad \text{(a)}$$

$$Y_t^e = \beta_1 \left( \frac{Y_t^L}{E} \right) \quad \text{(b)}$$

$$\text{Modigliani প্রথম সমীকরণের প্রক্ষিতে নিম্নলিখিতভাবে ভোগ সমীকরণ ব্যাখ্যা করেন।}$$

$$V_t = A_t + Y_t^L + (T-1) Y_t^e$$

$$= A_t + Y_t^L + (T-1) \beta Y_t^L$$

$$\therefore V_t = A_t + \{1 + \beta (T-1)\} Y_t^L \quad \text{........................................ (5)}$$

(5) নং সমীকরণের মান (1) নং সমীকরণে বসিয়ে পাইঃ

$$C_t = \alpha V_t$$

$$\therefore C_t = \alpha A_t + \alpha \{1 + \beta (T-1)\} Y_t^L \quad \text{........................................ (6)}$$

$$C_{t+1} = \alpha A_{t+1} + \alpha \{1 + \beta (T-1)\} Y_{t+1}^L \quad \text{........................................ (7)}$$

$$\text{MPC} = \frac{dC_t}{dY_t} = \alpha \{1 + \beta (T-1)\}$$

$$\text{APC} = \frac{\alpha A_t}{Y_t^L} + \alpha \{1 + \beta (T-1)\}$$

অর্থাৎ $\text{APC} > \text{MPC}$; এই সম্পর্ক দ্বারা ব্যবসায়ীদের ভোগ অপেক্ষাকর সাথে সমন্বিত বিষয় প্রকাশ করে। এই সম্পর্কে কেইনসিয়া ভোগ অপেক্ষাকর সাথে মিল রয়েছে।

Ando-Modigliani প্রথম নিয়মের যোগ ও দীর্ঘমেয়াদি ভোগ অপেক্ষাকর মধ্যে সমন্বয় সাধন করেন। প্রথমে তারা দেখান Cross Sectional" তথ্য হতে যাদের আয় সর্বোচ্চ তাদের মধ্যে বেশির ভোগ মধ্য বয়সী লোক হবে। এ বয়সের লোকেরা পূর্বের ভোগজনিত ঋণ পরিশোধ এবং শেষ বয়সের সাথে চলিত ভোগ কম করবে। ফলে তাদের অট্টই কম হবে। আবার, যেসব লোকের গড় আয় কম তাদের মধ্যে বালক, কৃষক
এবং বৃদ্ধ বয়সের লোকের বেশি থাকবে। ফলে আমাদের অনুপাতে তাদের ভোগের বেশি থাকায় APC বৃদ্ধি হবে। এভাবে সম্মিলনাদি ভোগ অপেক্ষক দ্বারা APC-এর আচরণ ভোক্তাদের জীবন সময়ের সাথে সম্পর্কযুক্ত দেখানো যায়।

Ando এবং Modigliani কিভাবে স্থল ও দীর্ঘমায়াস্টি ভোগ অপেক্ষকের মধ্যে সময়ের সাদন করেন তা চিত্রের সাহায্যে ব্যাখ্যা করা হলো:

চিত্র-৮ : Ando-Modigliani স্থল ও দীর্ঘমায়াস্টি ভোগ অপেক্ষকের মধ্যে সময়ের সাদন

মনে করি, কোনো সময়ের সম্পদের পরিমাণ নিদিষ্ট। এদের স্থলমায়াদি ভোগ অপেক্ষক হবে $C_t$ রেখা।

এর ছেদক $\alpha A_t$। এখানে $Y_t$ তাতে বৃদ্ধি পাবে APC তত্ত্বগুঁতে পাবে। অতঃপর $(6)$ নং সমীকরণ অনুযায়ী $MPC = \alpha \{ (1 + \beta) \frac{(T-1)}{T} \}$ স্থির থাকবে। দীর্ঘমায়াদিয়ে অবশ্য সম্পদের পরিমাণ বৃদ্ধি পাবে।

ফলে ভোগ অপেক্ষক $C_t$ স্থল মধ্যে উদ্ভিদুষ্টী হবে (যা $C_{t+1}$ রেখা নির্দেশ করে)।

দীর্ঘমায়াদিয়ে $C_t$ রেখা তখন সমমাজের ভোগ আচরণ নিদিষ্ট করবে। Modigliani এর মতে স্থলমায়াদিয়ে সম্পদ শ্রমজনিত আয়ের পাশেখারি কিছু বৃদ্ধি পাবে। কিন্তু মানুষ সম্পদের এ বৃদ্ধি অস্থায়ী মনে করবে।

ফলে তারা ইহা বিবেচনা করবে না। ফলস্বরূপ তাদের $MPC$ কম থাকবে এবং $MPC < APC$ হবে।

(ক) মডিগ্লিয়ানীর গবেষণার সময়কালীন ফলাফল : মডিগ্লিয়ানী $6$ নং সমীকরণের প্রক্ষিতে স্থল ও দীর্ঘমায়াদিয়ে ভোগ বায়ের মধ্যে সময়ের সাদন করতে বিভিন্ন সময়ের বিশেষ করে $1954$ সাল থেকে $1963$ সাল পর্যন্ত যে গবেষণা করেন এর প্রক্ষিতে ভোগ সমীকরণটি ছিল—

$$C_t = 0.06 A_t + 0.7 Y_t^L \hspace{2cm} \text{(8)}$$

এখানে, $\alpha = 0.06$ এবং $\alpha \{ 1 + \beta (T-1) \} = 0.7$

দীর্ঘমায়াদি $APC$ আচরণ ব্যাখ্যার জন্য মডিগ্লিয়ানী এর গবেষণার ফলাফল ছিল—

$$\frac{C_t}{Y_t} = 0.06 Y_t^L + 0.06 A_t \hspace{2cm} \text{(9)}$$

মডিগ্লিয়ানী যুক্তরাষ্ট্রের অর্থনীতির প্রক্ষিতে $\frac{Y_t^L}{Y_t} = 0.76$ এবং $\frac{A_t}{Y_t} = 2.8$ পরিমাপ করেন।

এই মান (10) নং সমীকরণে বসিয়ে

$$\frac{C_t}{Y_t} = APC = 0.7 (0.76) + 0.06 (2.8) = 0.70 \hspace{2cm} \text{(10)}$$
অর্থাৎ APC = 0.70 ছিল। এটা যদি নির্ধারিত হয় তবে ভোগ অপেক্ষাক মূলধার্মিক মূলধার্মিক মূলধার্মিক মূলধার্মিক মূলধার্মিক মূলধার্মিক মূলধার্মিক মূলধার্মিক 0.92 পর্যন্ত লক্ষ করা গিয়েছে। এই ভোগ অপেক্ষাক শ্রম আয় ও সম্পত্তি আয় এর সাথে সম্পর্কিত। Ando এবং Modigliani এর এই মান ছিল Simon Kuznet এর গবেষণা 1870-1919 সময়ে যুক্তরাষ্ট্রের প্রেক্ষাতে APC মানের কাছাকাছি। এজন্য Modigliani-এর গবেষণা ভোগ বাণিজ্য অপেক্ষাক মানে সমন্বয়ের বিষয়টি অনেকটা বাণিজ্যিক হিসেবে গণ্য হয়। যদি মডিলিয়ানীর জীবন চক্র উপস্থিতত্ব APC > MPC হওয়ার জন্য কেইনসের সাথে সংগঠিত বলে মনে হয়, তবে মডিলিয়ানীর তত্ত্ব ভোগ সম্পর্কিত তত্ত্ব থেকে অনেকটা উন্নত ও বাণিজ্যিক তত্ত্ব হিসেবে অভিহিত করা যায়।

(খ) এভায় মডিলিয়ানীর গবেষণা ফলাফলের চিত্রপত্র: ফ্রাঙ্কো মডিলিয়ানী ও আলবার্ট এভায় (Franco Modigliani and Albert Ando) ভোগ ও আয়ের সম্পর্কের ক্ষেত্রে জীবন চক্র (Life cycle Hypothesis) তত্ত্বটি উপস্থাপন করেন, তা এক্ষেত্রে বিশেষতা উল্লেখ্য। আমরা এক ধরনের ভোগ অপেক্ষাকর ক্ষেত্রে লক্ষ করেছি যে, একটি বিশেষ সময়ের ভোগ সেই সময়ের ওপর নির্ভরশীল, কিন্তু এভায় মডিলিয়ানীর তত্ত্বে দেখা যায়,

চিত্র-৯: এভায় মডিলিয়ানীর জীবন চক্রের চিত্রপত্র বিভিন্ন ফলাফলের চিত্রপত্র

ভোগকারী একটি সুদীর্ঘ সময়ের জন্য তার ভোগ ও সঞ্চয়ের পরিকল্পনা করে থাকে এবং এক্ষেত্রে তার মূল উদ্দেশ্য হলো ঐ ব্যক্তি বিশেষের সমগ্র জীবনকালের মধ্যে সর্বোচ্চ উপায়ে তার ভোগের প্রতিধারকে ছড়িয়ে দেয়। এ জীবন চক্র সম্পর্কিত ভোগ তত্ত্ব (Life cycle hypothesis) সঞ্চয়ের বিষয়টিকে যেভাবে বিচার করে তা হলো-এটি এমনই একটি বিষয় যা নির্ভর করে ব্যক্তি তার বৃদ্ধি বয়সে কোটা পরিমাণ ভোগ অর্জনে ইয়ুক্ত এ কিন্তু অনুরূপী সেরূপ ব্যবস্থা রাখতে আগ্রহী।

এক্ষেত্রে লক্ষ্যীয় যে, নেমনার ব্যক্তিটির ক্ষেত্রে তার জীবনকালব্যাপী আয়ের প্রতিধারার পাওয়া যায় সেই প্রতিধারার জীবনকালের পৌরুষ দিকে এবং শেষের দিকে খুবই নির্মাত্রা থাকে যখন ঐ ব্যক্তি উৎপাদিকা শক্তি খুব কম থাকে ও ভাবাতিকভাবেই তার কর্মজীবনের মধ্যকার বেলায় এটা বেশ উচ্চ পর্যায়ে বর্তমান থাকতে দেখা যায়। নিচের চিত্রে এ জীবন কালব্যাপী আয়ের প্রতিধারার নেমার নেমার চিহ্নিত হয়েছে।
3. The effect of government redistribution policies on the economy

Government policies affect the economy through various channels. One such channel is through changes in the distribution of income. Redistribution policies can be designed to either increase or decrease inequality, which in turn can affect economic growth and welfare. In general, policies that redistribute income from the rich to the poor tend to have a positive impact on the economy, as they can reduce poverty and inequality, leading to increased consumption and savings. However, the effectiveness of these policies can vary depending on the specific circumstances of the economy and the policies themselves.

1. The government can redistribute income through taxes and transfers. Taxes are used to levy a share of income from the rich and transfer it to the poor. Transfers are payments made by the government to individuals or households, such as social security benefits or means-tested benefits. The government can design these policies to target specific groups, such as the elderly or the unemployed, or to be universal.

2. The government can also redistribute income through changes in the tax system. For example, changes in the income tax rate or the introduction of a new tax can redistribute income. The government can also change the tax base, such as by increasing the value-added tax or introducing a new tax on luxury goods.

3. The government can also redistribute income through changes in public expenditure. This can include changes in the level of government spending on education, health care, or infrastructure. Changes in public expenditure can affect the distribution of income by improving the quality of life for some groups, such as the elderly or the unemployed, or by creating new jobs and opportunities for others.

4. The government can also redistribute income through changes in the labor market. This can include changes in labor market policies, such as the minimum wage or employment protection laws. Changes in the labor market can affect the distribution of income by changing the wages and working conditions of different groups.

5. The government can also redistribute income through changes in the welfare state. This can include changes in the provision of welfare services, such as education or health care. Changes in the welfare state can affect the distribution of income by improving the quality of life for some groups, such as the elderly or the unemployed, or by creating new jobs and opportunities for others.

6. The government can also redistribute income through changes in the financial system. This can include changes in the regulation of the financial sector, such as changes in the tax on financial transactions or the introduction of a new tax on financial institutions. Changes in the financial system can affect the distribution of income by changing the ability of different groups to access credit or invest.

In conclusion, government redistribution policies have a significant impact on the economy. The effectiveness of these policies depends on the specific circumstances of the economy and the policies themselves. The government should design its policies to maximize the benefits of redistribution and minimize the costs, taking into account the trade-offs between different groups.

L. R. Klein
বায়ের সহসম্পর্ক (Co relation) দেই বলে যে ভবন্ধ রাখা হয়, পরিবর্তন ভিত্তিতে তার যথার্থতা প্রমাণিত হয় নি। জীবনচক্র উপস্থিতে অনবশ্যকভাবে শ্রম আয়ের উপর অতিরিক্ত প্রাধান্য দেয়া হয়েছে। তবে জীবনের পর্যায় ভিত্তিক বিশ্লেষণের প্রথমে ভোগ প্রকৃতি নির্ধারণের পদ্ধতি অথবা বাণিজ্য সম্পত্তির বাণিজ্যর সাধনাযীকৃত। সব উপস্থিতের উদ্দেশ্য ছিল বন্ধ ও দীর্ঘমেয়াদী ভোগ বায়ের মধ্যে সম্পর্ক সাধন করা। কেইনস এ বিষয়ে ব্যবস্থা হয়েছে। ভোগনিয়নরী, স্বতন্ত্র কিছুটা সম্পর্ক ব্যাখ্যা করতে সক্ষম হয়েছে। মধ্যবর্তী এ বিষয়ে সাফল্য হয়েছে। এজন্য তিনি ১৯৮৫ সালে এ তত্ত্বের উপর নেবল পুস্তকের লেখা করেছেন। শেষাংশের ভবন্ধ হচ্ছে বিশ্লেষণ পদ্ধতির দিক থেকে জীবনচক্র উপস্থিত অথবা বাণিজ্য সম্পত্তি ও উন্নত।

4. উপসঞ্চার

ভোগ তত্ত্বের উপর অতিজ্ঞতালাভ বিশ্লেষণে দেখা যায় যে, তেজমহল এবং তত্ত্ব প্রমেয়গণকে পর্যায়ক্রমিকভাবে সমৃদ্ধ ও প্রশান্তিত হয়েছে। আলোচনা ও সময় মেয়াদে অর্থমিতিক বিশ্লেষণ দ্বারা তত্ত্বের বিষয়বস্তু প্রাপ্তি লাভ করেছে। উপসঞ্চারের বলা যায়, কেইনসের পরম আয় উপস্থিতের ব্যবস্থা থেকে ভোগনিয়নরী অর্থমিতিক আয় উপস্থিতাত্ম যেমন উন্নত মানের ব্যাখ্যা হয়েছে, তেমনই তা থেকে মিলিন্টন ফ্রিডম্যানের স্ফুরিত আয় উপস্থিতাত্ম আরও এক ধারণা উন্নত হয়েছে। তা স্বর্ণ ও দীর্ঘমেয়াদী ভোগ বায়ের মধ্যে সমন্বয় সাধন করতে সমর্থ হয়েছে। স্ফুরিত আয় ও স্ফুরিত ভোগ ব্যায় দীর্ঘকালে একটি অর্থমিতিক সম্পর্ক আছে যা দেখাতে সমস্ত হয়েছে। এ করণ পূর্বের অর্থমিতিক আয় তত্ত্বের টিউনে মিলিন্টন ফ্রিডম্যান এর স্ফুরিত আয় উপস্থিতাত্ম একটি বেশি কৃতীত্বের দাবিদার। সবচেয়ে উন্নত মানের ব্যবস্থা দিতে সমর্থক হয়েছে এতে মধ্যবর্তী। তিনি জীবনচক্র উপস্থিতে ব্যক্তির সারাজীবনের আয় ও ভোগ বায়ের মধ্যে সম্পর্ক দেখাতে সমর্থ হয়েছে। এর কারণে ভোগনিয়নরী তত্ত্বের মাধ্যমে মানের উন্নতি করা হয়েছে। এ থেকে মধ্যবর্তী আরও বেশি বিশ্লেষণের কাছে তার ভোগ তত্ত্ব বিশ্লেষণ সমাধ্যুত হয়েছে। অর্থমিতিক বিশ্লেষণে দেখা যায় যে, তত্ত্ব ও দীর্ঘমেয়াদী কালানি সারের প্রথমে ভোগ ও আয়ের মধ্যে কার্যকর সম্পর্ক (causal relationship) রয়েছে।
Acknowledgments

Ackley, Gardner, Macroeconomic Theory, 1961, Chapter X.


Evans, Michael K., Macroeconomic Activity, 1969, Chapter 2.


Ghosh, Sujit Kumar; Macroeconomic Theory, West Bangle State Book Board India, 1997.


Keiser, Norman F., Macroeconomics, 1971, Chapters 6 and 7.


References

Keynes, J. M., The General Theory of Employment, Interest and Money, 1936, 6. Aa¨vcK ev¯ÍeZv cix¶vi Rb¨ hZ M‡elYv Kiv n‡q‡Q Zvi †ewki fvM ZË¡wUi AbyK’‡j Ges hZ
Financial Sector Development: 
Fraud Risk Management in Banks

Mohammad Ali*

Abstract: The overall objective of this study is to acquire the practical knowledge about how banks and financial institutions are exposed to fraud and manages fraud risk in their institutions. The perpetrators are typically university educated and most fraudsters are aged between 36 and 55. As part of bank’s governance structure, a fraud risk management program should be in place, including written policy for guidance of the Board of Directors and senior management regarding managing fraud risk. Fraud risk exposure should be assessed periodically by the bank to identify specific potential schemes and events that the bank needs to mitigate. It entails planning, identifying and evaluating fraud risk factors. Prevention techniques to avoid potential key fraud risk events should be established, where feasible, to mitigate possible impacts on the bank. Prevention techniques be related to sound ethical culture, fraud risk training and awareness, periodic fraud risk assessment, sound internal control system, reporting mechanisms and whistle blowing and pre-employment screening.

1. Introduction
The term ‘fraud’ commonly includes activities such as theft, corruption, conspiracy, embezzlement, money laundering, bribery and extortion. The legal definition varies from country to country. Fraud essentially involves using deception to dishonestly make a personal gain for oneself and/or create a loss for another.

Types of Fraud

- crimes by individuals against consumers, clients or other business people, e.g. misrepresentation of the quality of goods
- employee fraud against employers, e.g. payroll fraud; falsifying expense claims; thefts of cash, assets or intellectual property (IP); false accounting
The impact of Fraud

• Reduced operational efficiency
• Loss of funds
• Bad press publicity
• Loss of trust
• Staff anxiety
• Investigation costs
• Confidentiality compromised
2. Common Fraud & Forgeries

**General Banking Portfolio:**

- Misappropriation of Branch cash from the Vault/Counter.
- Misappropriation of cash by keeping less number of notes in the bundle.
- Misappropriation of money by changing Cash position through cutting/overwriting etc.
- Misappropriation of money by receiving cash from the depositors without depositing the same in the clients’ account as well as Cash Received Book.
- By transferring Cash in other accounts by cutting/overwriting in the Branch’s Books & Records.
- Sometimes it is being done by showing false transfer of cash from one branch/bank to other Branch/Bank. Misappropriation of cash has been done directly by drawing cash from Feeding Branch. It is also being done by Receiving Cash from feeding branch & non-responding related IBDA for few days.
- Misappropriation also done by not depositing the cash in clients A/c which has been received earlier and issuing false statement thereagainst.
- By making false debit/credit voucher of Inter Branch/Other Banks transaction.
- By making Payment of money against false issued PO/Security Receipt/TT/DD etc. without receiving cash thereagainst.
- By duplicating clients signature/issuing duplicate cheque fraudulently & withdrawal of money from clients A/c- Instead of using the cheque requisition slip in the issued Cheque Book, Receiving Cheque Book against other application/form & withdrawal money from the client fraudulently.
- Taking away cash from vault/safe using duplicate keys.
- Unauthorized withdrawal of cash from the A/c by changing AOF & SS card.
Fraud Assessment Procedure

Diagram of Fraud Risk Program:

The term ‘fraud’ commonly includes activities such as theft, corruption, and other.

4. Fraud Detection – Indicators

- Business risk
  - Holding cash security held against L/C which has been released for
  - Allowing clearance of the goods under MPI through the client/client’s C
  - Remittance of Foreign Currency through false/fake document.

- Management issues
  - Allow ing investment showing inflated rate of purchased goods etc.
  - Allowing investment by the branch incumbent without any collateral

- Cultural issues
  - Ethical statements need not be lengthy to be effective.

- Strained relationships within the organization between manage -

- The Board Audit Committee
  - Disciplinary controls can also be used as a monitoring activity to
  - A thorough investigation

- Objectives
  - Periodic fraud risk assessment (already covered in detail)

- Responsibilities
  - Board audit committee

- Process issues
  - Ineffective controls, e.g. phishing; spamming; copyright crimes; hacking; social engineering

- Complex transactions.

4. Prioritize identified fraud risks

- Complex transactions.

- Risk Treatment

  - a. Risk retention
  - b. Risk avoidance

- Link fraud schemes to mitigating controls. Assess whether each mapped

- √ Process issues
  - Maintenance of books of accounts, registers etc. properly and regularly

- √ Investment Portfolio
  - Defalcation of cash by allowing fictitious investment.
  - Defalcation of cash by allowing investment against fake collaterals.
  - Defalcation of cash by allowing investment against fake share certificates as collateral security.

- Risk management – Programme

- √ Investment Portfolio
  - Allowing investment against fake Delivery Orders
  - Allowing investment/extending investment in the name of fictitious persons/firms
1. Introduction

2. Identify and evaluate fraud risk factors

- When a major fraud occurs, people who were close to it are shocked that

- A mission statement that refers to quality or, more unusually, to ethics

- Reporting mechanisms and whistle blowing

√ Remittance of Foreign Currency through fraudulent means (issuance of Remittance of Foreign Currency through false/fake document.

√ Making advance payment against import.

√ Encashment of fake Instrument DD/TT/TC/MT etc.

√ Illegal disposal of custom bonded imported goods

√ Wilful creation of stock lot to sell the goods at discount rate

√ Strained relationships within the organization between manage -

- Lack of financial management expertise and professionalism in key accounting principles, review of judgments made in management

The overall objective of this study is to acquire the practical techniques be related to sound ethical culture, fraud risk training and risk exposure should be assessed periodically by the bank to identify specific of a fraud prevention program and can have a positive impact on fraud in high risk areas.

3. The impact of Fraud

The response procedure should include:

- Loss of funds
- Sensitive data being stolen leaked or lost.
- Strategic plans jeopardized
- Disciplining of the individuals responsible (internal, civil and/or

4. Evaluate mitigating controls

- Conducting of periodical and surprise inspection
- Close supervision, monitoring and evaluation
- Preservation of evidence/ Physical evidence/ Electronic evidence

5. Foreign Exchange Portfolio

√ Allowing L/C facilities to fictitious importer.
√ Payment of F/C against fake export L/C by opening Back to Back L/C.
√ Remittance of Foreign Currency through over invoicing.
√ Remittance of Foreign Currency through false/fake document.
√ Remittance of Foreign Currency through fraudulent means (issuance of Cash/FC/TC to the false tourist/students/patients).
√ Release of Import documents without recovery of full payment.
√ Misappropriation done by debiting Head Office, International Banking Wing at enhanced rate of exchange & showing credit to other account.
√ Opening of L/C by violating discretionary power/exceeding Head Office/Zonal Office limit
√ Opening L/C without realising cash security, L/C opening commission, L/C amendment commission etc.
√ Endorsement of copy documents without receiving payment there against.
√ Delivering documents without receiving payment/creation of MPI for clearance of the consignment by the client without securing the bank.
√ Allowing clearance of the goods under MPI through the client/client’s C & F agent instead of banks approved C & F agent.
√ Holding cash security held against L/C which has been released for adjustment of the client’s other liability.
√ Adjusting the cost of F/C (Value of the IBDA’s) by debiting the WES Fund Purchase A/c. Instead of realising the Bank’s dues against the bills from the client either in cash or by creating investment.

√ Creation of MPI for payment of custom duties only keeping the other related liabilities under Mura WES L/C & Mura WES Bills A/c.

√ Making advance payment against import.

√ Effecting export making under invoicing.

√ Settling Payment by local currency or by goods without remitting equivalent. F.C. to the country.

√ Depositing/paying of F. C. without having adequate coverage from Nostro A/c.

√ Encashment of fake Instrument DD/TT/TC/MT etc.

√ Issuance/Endorsement of Cash F.C., DD, TC beyond celing or violating guidelines of B.B./F.E. circulars.

√ Endorsement of F.C. (Cash/TC) to fake personnel or in fake passports.

√ Encashment of F.C. instrument through misdeclaration:

√ Indenting commission received in personal name declaring normal remittance to escape from relevant Tax payment

√ FC paid through advance realisation of proceeds without effecting export.

√ Export documents negotiated & purchased keeping major discrepancies/obtaining fake document.

√ Donation, subscription against organisations/firms realised in personal name.

√ Illegal disposal of custom bonded imported goods

√ Pre-shipment financed against fake export order or without having raw materials

√ Wilful creation of stock lot to sell the goods at discount rate (predetermined)

**IT Portfolio**

√ Non checking/cross-checking of daily corrected and reversed transaction list by the Manager/2nd Officer/Authorized Officer;

√ Non checking of daily transaction lists with vouchers/cheques/instruments by authorized officials of the Branch;
General Banking, Investment, Foreign exchange & Remittance related transaction lists and account opening data at the end of the day’s transactions are not checked & preserved by the responsible official(s) other than the operator properly as instructed by ICTD;

Running day end process without proper checking of the daily transaction list which results the mistakes made by the users/operators to be carried forward or to be retained undetected;

Symbolical user names are used instead of the actual user names, privacy of user name & password is not maintained;

Withdrawal limit of operators are not set by the supervisors;

Effective Rate of Return is not inserted and re-fixed/changed from time to time as instructed by different circulars from time to time which may cause leakage of investment profit.

The following precautionary measures may be taken to avoid the above stated frauds and forgeries:

- Strict adherence to the rules, regulations, guidelines and instructions issued from time to time by the competent authority
- Close supervision, monitoring and evaluation
- Maintenance of books of accounts, registers etc. properly and regularly
- Counter checking of books/registers
- Conducting of periodical and surprise inspection
- Rotation of officials through transfer/posting at regular intervals
- Initiation of administrative and disciplinary actions against the delinquent staffs and officials
- Awarding punishment to the officials involved with irregularities, malpractices and corruptions
- Developing the knowledge & skill of the employees by training, regular study circular

3. Why Fraud is committed?

There is relationship among following factors for committing frauds:
Opportunity:

Fraud is more likely in banks where there is a weak internal control system, little likelihood of detection, or unclear policies.

Motivation:

Greed continues to be the main cause of fraud, other causes included problems from debts and gambling.

Rationalization:

- necessary – when done for the business
- harmless – because the victim is large enough
- justified – because ‘the victim deserved it’

**Who commits Fraud?**

In 2010, KPMG carried out research on the Profile of a Fraudster (KPMG survey), using details of fraud cases in Europe, India, the Middle East and South Africa.

- perpetrators are typically university educated
- most fraudsters are aged between 36 and 55
- the majority of frauds are committed by men
- median losses caused by men are twice as great as those caused by women
- a high percentage of frauds are committed by senior management (including owners and executives)
- losses caused by managers are generally more than double those caused by employees
- average losses caused by owners and executives are nearly 12 times
those of employees
• longer term employees tend to commit much larger frauds
• fraudsters most often work in the finance or operations

4. Fraud Detection – Indicators
• Business risk
• Cultural issues
• Management issues
• Employee issues
• Process issues
• Transaction issues
• Financial Risk
• Environment Risk
• IT & Data Risk
• Fraud alerts

Fraud Detection - Business risk
• Cultural issues
  • Absence of an anti-fraud policy and culture.
  • Failure of management to implement a sound system of internal control and/or to demonstrate commitment to it at all times.
• Management issues
  • Lack of financial management expertise and professionalism in key accounting principles, review of judgments made in management reports and the review of significant cost estimates.
  • A history of legal or regulatory violations within the organization and/or claims alleging such violations.
  • Strained relationships within the organization between management and internal or external auditors.
  • Lack of management supervision of staff.
  • Lack of management control of responsibility, authorities, delegation
  • Bonus schemes linked to ambitious targets or directly to financial
results.

- **Employee issues**
  - Inadequate recruitment processes and absence of screening.
  - Unusually close relationships – internal and external.
  - Potential or actual labor force reductions or redundancies.
  - Dissatisfied employees who have access to desirable assets.
  - Unusual staff behavior patterns.
  - Personal financial pressures on key staff.
  - Low salary levels of key staff.
  - Poor dissemination of internal controls.
  - Employees working unsocial hours unsupervised.
  - Employees not taking annual leave requirements.
  - Unwillingness to share duties.

- **Process issues**
  - Lack of job segregation and independent checking of key transactions.
  - Lack of identification of the asset.
  - Poor management accountability and reporting systems.
  - Poor physical security of assets.
  - Poor access controls to physical assets and IT security systems.
  - Lack of and/or inadequacy of internal controls.
  - Poor documentation of internal controls.

- **Transaction issues**
  - Poor documentary support for specific transactions
  - Large cash transactions.
  - Susceptibility of assets to misappropriation.

**Fraud Detection – Financial risk**

- Management compensation highly dependent on meeting aggressive performance targets.
- Significant pressures on management to obtain additional finance.
• Complex transactions.
• Use of complex financial products.
• Complex legal ownership and/or organizational structures.
• Rapid changes in profitability.

Fraud Detection – Environment risk

• The introduction of new accounting or other regulatory requirements, including health and safety or environmental legislation, which could significantly alter reported results.
• Highly competitive market conditions and decreasing profitability levels within the organization.
• The organization operating in a declining business sector and/or facing prospects of business failure.
• Rapid technological changes which may increase potential for product obsolescence.
• Significant changes in customer demand.

Fraud Detection – IT & Data risk

• Unauthorized access to systems by employees or external attackers.
• The wealth of malicious codes and tools available to attackers.
• Rapid changes in information technology.
• Users not adopting good computer security practices, e.g. sharing or displaying passwords.
• Unauthorized electronic transfer of funds or other assets.
• Manipulation of programs or computer records to disguise the details of a transaction.
• Compromised business information.
• Breaches in data security and privacy.
• Sensitive data being stolen leaked or lost.

Fraud Detection – Fraud alerts

• Anonymous emails/letters/telephone calls.
• Emails sent at unusual times, with unnecessary attachments, or to unusual destinations.
• Discrepancy between earnings and lifestyle.
• Unusual, irrational, or inconsistent behavior.
• Alteration of documents and records.
• Extensive use of correction fluid and unusual erasures.
• Photocopies of documents in place of originals.
• Rubber Stamp signatures instead of originals.
• Signature or handwriting discrepancies.
• Missing approvals or authorization signatures.
• Transactions initiated without the appropriate authority.
• Subsidiary ledgers, which do not reconcile with control accounts.
• Extensive use of ‘suspend’ accounts.
• Inappropriate or unusual journal entries.
• Confirmation letters not returned.
• Supplies purchased in excess of need.
• Higher than average number of failed login attempts.
• Systems being accessed outside of normal work hours or from outside the normal work area.
• Controls or audit logs being switched off.

**Fraud Risk Management – Programme**

• As part of bank’s governance structure, a fraud risk management program should be in place, including a written policy (or policies) to convey the expectations of the board of directors and senior management regarding managing fraud risk.

• Roles & Responsibilities:
  • Board of Director’s
  • Board audit committee
  • Management
  • Staff

• The following persons of bank or organisations should be involved in the Anti-fraud steering group:
  • CEO/ MD
  • Chief Risk Officer
• CFO
• Head of IT
• Head of Legal affairs Division
• Head of HR
• Heads of Branches Control Division

• The followings should be overseeing the Anti-fraud steering group:
  • Internal audit
  • The Board Audit Committee
  • The Board

Diagram of Fraud Risk Program:

Fraud Assessment Procedure
Fraud risk exposure should be assessed periodically by the bank to identify specific potential schemes and events that the bank needs to mitigate.

1. Planning
2. Identify and evaluate fraud risk factors
3. Identify possible fraud
4. Prioritize identified fraud risks
5. Evaluate mitigating controls
6. Risk treatment

1. Planning
Management should plan by taking responsibility which will be implemented through the Anti-Fraud Steering Group and should:

≥ Focus on high-risk areas and wide in scope
≥ Develop skill set through training or appoint specialists
≥ Ensure all relevant parts/people of the bank are involved
≥ Be systematic & recurring

2. Identify & evaluate fraud risk factors
Identify fraud risk factors at the entity level, significant locations, significant accounts and business process level. Use the Fraud Triangle to initiate thinking and take into account scope for management override of controls

3. Identify possible fraud

≥ For each identified fraud risk factor, identify the account balances and potential errors that may be affected and assess the fraud risks.
≥ Identify possible fraud risks and schemes.
≥ For each fraud scheme, identify internal and external parties who could be involved with reference to incentives / pressure, opportunities, attitudes & rationalizations.
≥ Identify fraud risks and determine if the fraud risks are pervasive or specific. Brainstorm specific fraud schemes that could result from the specific risks identified.

4. Prioritise identified fraud risk
Prioritize Identified Fraud Risks
a. Likelihood
b. Significance
Consider Inherent Risk Rating (IRR) based on likelihood & significance as follows:

5. **Evaluate mitigating controls**

- Link fraud schemes to mitigating controls. Assess whether each mapped or linked control activity is preventative or detective in nature.
  - Preventative controls are designed to mitigate specific fraud risks and can deter frauds from occurring.
  - Detective control activities are designed to identify fraud if it occurs. Detective controls can also be used as a monitoring activity to assess the effectiveness of antifraud controls and may provide additional evidence of the effectiveness of antifraud programs and controls.

- Evaluate the effectiveness of controls to determine if they sufficiently mitigate the risk of the identified fraud schemes (control gap analysis).

- Special consideration should be given to the risk of override of controls by management.

- Evaluate controls to determine if they sufficiently mitigate the identified fraud risks and schemes or if additional emphasis should be placed on existing controls or new controls are required.
Consider both the design and the implementation of the control in mitigating the fraud risk.

CONTROL RISK RATING as:

- **High**
- **Medium**
- **Low**

A “High” rating would indicate immediate action is required and that item should be included in a fraud risk action plan.

A “Medium” rating would indicate that attention is required to the fraud risk and control and that item may be included in a fraud risk action plan, depending on the control effectiveness rating.

A “Low” rating would indicate that the item should be factored into ongoing monitoring plans.

6. Risk Treatment

Once the risks have been identified and assessed, strategies to deal with each risk identified can be developed by line management, with guidance from the anti-fraud steering committee. Strategies:

a. risk retention
b. risk avoidance
c. risk reduction
d. risk transfer

Before strategies are developed, it is necessary to establish the risk appetite of the bank. Risk appetite is the level of risk that the bank is prepared to accept and this should be determined by the board.

The appetite for risk will influence the strategies to be developed for managing risk. It is worth noting that a board’s risk appetite may vary for different types of risk and over time.

**Fraud Prevention**

Prevention techniques to avoid potential key fraud risk events should be established, where feasible, to mitigate possible impacts on the bank.

- Developing a sound ethical culture
- Fraud risk training and awareness
- Periodic fraud risk assessment (already covered in detail)
• Sound internal control system (part of overall risk management strategy)
• Reporting mechanisms and whistle blowing
• Pre-employment screening

**Fraud Prevention – Culture**

• Attitudes within a bank often lay the foundation for a high or low fraud risk environment. Where minor unethical practices may be overlooked (e.g. petty theft, expenses frauds), larger frauds committed by higher levels of management may also be treated in a similar lenient fashion. In this environment there may be a risk of total collapse of the bank either through a single catastrophic fraud or through the combined weight of many smaller frauds.

• The definition of good ethical practice is not simple. Ideas differ across cultural and national boundaries and change over time. But corporate ethics statements need not be lengthy to be effective.

• A mission statement that refers to quality or, more unusually, to ethics and defines how the bank wants to be regarded externally

• Clear policy statements on business ethics and anti-fraud, with explanations about acceptable behavior in risk prone circumstances

**Fraud Prevention – Training**

• When a major fraud occurs people who were close to it are shocked that they were unaware of what was happening.

• Therefore, it is important to raise awareness through a formal education and training program as part of the overall risk management strategy.

• Particular attention should be paid to those managers and staff operating in high risk areas.

**Fraud Prevention – Whistle blowing**

• Establishing effective reporting mechanisms is one of the key elements of a fraud prevention program and can have a positive impact on fraud detection.

• Many frauds are known or suspected by people who are not involved. The challenge for management is to encourage these ‘innocent’ people to speak out.

• In this area there are many conflicting emotions influencing the potential ‘whistleblower’:
- working group/family loyalties
- disinterest/sneaking admiration
- fear of consequences
- suspicion rather than proof
- A confidential 24/7 hotline is said to be one of the best methods for reporting fraud.

**Fraud Prevention – Staff Screening**

- Pre-employment screening is the process of verifying the qualifications, suitability and experience of a potential candidate for employment.
- Techniques used include confirmation of educational and professional qualifications, verification of employment background, criminal history searches, and credit checks.
- Screening applicants should reduce the likelihood of people with a history of dishonest or fraudulent behavior being given a role within the bank, and is therefore an important fraud prevention procedure.
- Research has also shown that employers who conduct pre-employment screening experience fewer cases of fraud.

**Response to the detected fraud**

Reasonable steps for responding to detected or suspected instances of fraud include:

- clear reporting mechanisms
- a thorough investigation
- disciplining of the individuals responsible (internal, civil and/or criminal)
- recovery of stolen funds or property
- modification of the anti-fraud strategy
- The fraud response plan is a formal means of setting down clearly the arrangements which are in place for dealing with detected or suspected cases of fraud.

**The response procedure should include:**

- Reporting suspicions
- Establish an investigation team
  - Objectives
• reporting procedures
• Responsibilities
• Powers
• control
• Formulate a response
  • in accordance with bank policy
  • The investigation
• Preservation of evidence/ Physical evidence/ Electronic evidence
• Interviews (general)/ Statements from witnesses/ Statements from suspects

Administration of Fraud Risk Management Policy
The Internal Control Committee (under Internal Control & Compliance Risk) may ensure the effectiveness of the Policy. Revisions to this policy will be submitted to the Risk Management Committee of the Board for review and approval. The policy will be reviewed annually and revised as needed.
References


Footnoting and writing style of the
Bangladesh Journal of Political Economy

1. The Bangladesh Journal of Political Economy is published in June and December each year.
2. Manuscripts of research articles, research notes and reviews written in English or Bangla should be sent in triplicate to the Editor, The Bangladesh Journal of Political Economy, Bangladesh Economic Association, 4/c Eskaton Garden Road, Dhaka-1000, Bangladesh.
3. An article should have an abstract preferably within 150 words.
4. Manuscript typed in double space on one side of each page should be submitted to the Editor. Submission of electronic version is encouraged.
5. All articles should be organized generally into the following sections: a) Introduction: stating the background and problem; b) Objectives and hypotheses; c) Methodological issues involved; d) Findings; e) Policy implications; f) Limitations, if any; and g) Conclusion (s).
6. The author should not mention his/her name and address on the manuscript. A separate page bearing his/her full name, mailing address and telephone number, if any, and mentioning the title of the paper should be sent to the Editor.
7. If the article is accepted for publication elsewhere, it must be communicated immediately. Otherwise, the onus for any problem that may arise will lie on the author.
8. The title of the article should be short. Brief subheadings may be used at suitable points throughout the text. The Editorial Board reserves the right to alter the title of the article.
9. Tables, graphs and maps may be used in the article. Title and source(s) of such tables should be mentioned.
10. If the Editorial Board is of the opinion that an article provisionally accepted for publication needs to be shortened or particular expressions deleted or rephrased, such proposed changes will be sent to the author of the article for clearance prior to its publication. The author may be requested to recast any article in response to the review thereof by any reviewer.
11. The numbering of notes should be consecutive and placed at the end of the article.
12. Reference in the text and in the Reference list at the end of article should follow it as below:
   i. **Book (one or more authors)**
      - Start your full reference with the last name of the author(s) so it connects with the citation; then give initials or first name(s) of the author(s).
      - Year of publication comes next.
• Next, give the title of book: in italics or underlined (but be consistent throughout your list of references).
• Finally give the place of publication and name of publisher.

Example

In-text citation:
(Wilmore 2000)
(Just cite the last name (s) of writer(s) and the year the book was published).

Full reference:

ii. Chapter from an edited book
• Start with the full reference entry with the last name of the chapter’s author, followed by initials, then state year of publication.
• Then give name (s) of editor(s). The last name of an editor precedes his or her initials, to distinguish editor(s) from the name of the writer of the chapter. Indicate single editor by an abbreviation: (Ed.), or editors: (Eds.).
• State full title of book - in italics or underlined. It is helpful to then give a chapter number.
• Finally, give place of publication and name of publisher.

Example

Citation:
(Nicholls 2002)
(Cite the name of the writer of the chapter or section in the edited book).

Full reference:

iii. Referencing journal articles
• Start with the last name of the author of the article and initials of author.
• Year of publication.
• Title of article (this can go in inverted commas, if wished).
• Name of the journal or magazine (in italics or underlined).
• Volume number and part number (if applicable) and page numbers.

References to journal articles do not include the name of the publisher or place of publication unless there is more than one journal with the same title, e.g. *International Affairs (Moscow)* and *International Affairs (London)*.

**Example**

**Citation:**

(Bosworth and Yang 2000).

**Reference:**


The abbreviations, ‘vol.’ (for volume), ‘no.’ (for number) and ‘pp’ (for page numbers) can be omitted. However, for clarity and to avoid confusing the reader with a mass of consecutive numbers, they can be included, but be consistent. Note how, in the example above, the initials of the first author follow his last name (Bosworth, D.), but precede the second named (D. Yang). This is the practice illustrated by British Standard in their guidelines with Harvard and both numerical-referencing styles, although you may find the guidelines at your institution may differ on this point.

iv. **Example of referencing an electronic source**

**Example**

**Citation:**

(Dixons Group 2004)

**Reference:**


13. Reference mentioned in the text should be arranged in alphabetical order and provided at the end of the article.

14. The Bangladesh Economic Association shall not be responsible for the views expressed in the article, notes, etc. The responsibility of statements, whether of fact or opinion, shall lie entirely with the author. The author shall also be fully responsible for the accuracy of the data used in his/her manuscript.

15. Articles, not accepted for publication, are not returned to the authors.
