July - September 2023

CA BANGLADESH

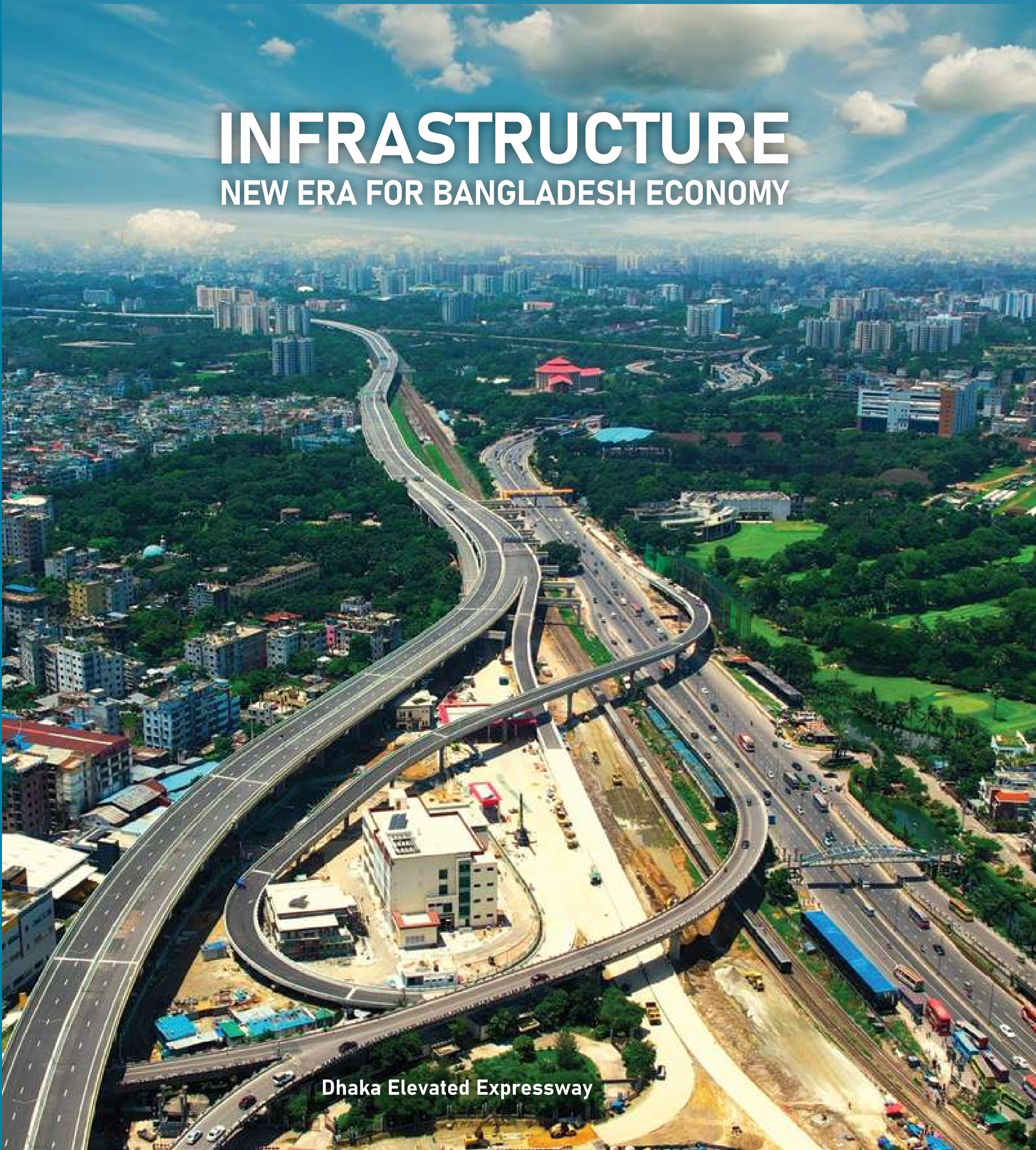
THE INSTITUTE OF CHARTERED ACCOUNTANTS OF BANGLADESH

THE BANGLADESH ACCOUNTANT

QUARTERLY JOURNAL OF THE INSTITUTE OF CHARTERED ACCOUNTANTS OF BANGLADESH

INFRASTRUCTURE

NEW ERA FOR BANGLADESH ECONOMY



Dhaka Elevated Expressway

CONTACT US

CA Bhaban
100 Kazi Nazrul Islam Avenue
Dhaka 1215, Bangladesh
880 2 9115340, 9612612100
9117521, 9137847 (Off.)
880 2 9125266
ceo@icab.org.bd
facebook.com/ca.bangladesh
icab.org.bd

CA BANGLADESH

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF BANGLADESH

ISSN 1993-3649

Published by the
Editorial Board of the Council

The Institute of Chartered Accountants of Bangladesh (ICAB)

DISCLAIMER

"The opinions expressed in this publication are those of the respective authors themselves and do not necessarily reflect the views of the Editorial Board of the Institute of Chartered Accountants of Bangladesh (ICAB) or ICAB itself."

Design & Print
Dominant Printing & Packaging
M 01794 550916
E alamgir.dominant@gmail.com

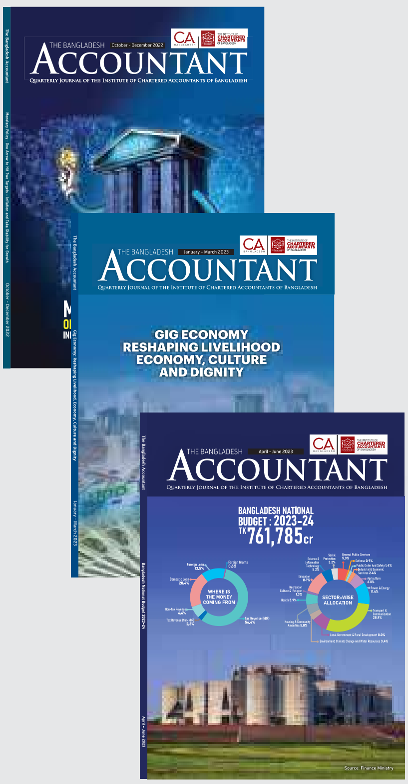
ICAB PUBLICATIONS

ICAB publications include, inter alia, a quarterly journal titled 'The Bangladesh Accountant', half yearly Journal 'Bangladesh Economia' and ICAB's mouthpiece ICAB Monthly News Bulletin.

In the quarterly journal, articles of ICAB Members, Members from other Accountancy bodies, Academics and Business Leaders from home and abroad are published.

In half yearly journal, articles focus on macro-economy of the country are published.

The monthly news bulletin publishes different ICAB events of the month. This bulletin acts as an information hub for the Members to keep up-to-date about ICAB and its activities in addition to these publications, ICAB also publishes books, monographs, booklets and Students' Study Manuals regularly.

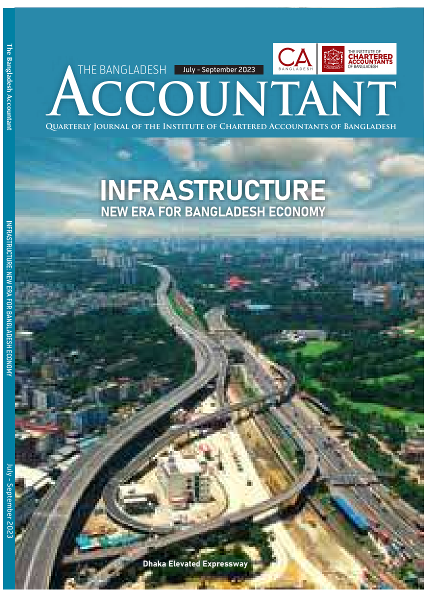


for more details, please visit
www.icab.org.bd

P6

Contents

July - September 2023



Digital Highlights
www.icab.org.bd

News & Events

Circular & Notice

News Bulletin

Journals

Editorial

> "Cloud-based accounting platforms are allowing modern audit practices to be more agile than ever before. With the cloud-based automations, auditors are better able to conduct the audit more effectively, identify the future issues, spot potential bottlenecks, and help their clients make more informed business decisions. It's the time for accountants to lead the process."

The July-September issue of The Bangladesh Accountant has covered a wide array of contemporary topics. We very much welcome the writers for their intellectual pursuits of the exercise of knowledge and wisdom.

Professional chartered accountants are no longer just conventional accountants or auditors. Today their roles are very diverse. Apart from contributing to the business decision-making process at strategic level, they also handle important responsibilities such as internal governance of the organizations and compliance with the regulatory issues.

In professional practice, there is still misconception regarding the role of Chartered Accountants as auditors and the role of management. Management prepares financial statements and auditors audit and report on its fairness. Auditors work following International Standards on Auditing (ISA) and Audit Practices They measure the risk of the organization through sampling. As sampling is done, 100% may not be possible to notice the frauds by the auditor. Let's continuously promote this awareness and common understanding among the stakeholders.

The auditing profession is bracing itself with IT for rendering the services to the clients. Auditors must understand, if a business wants to be agile, it must be able to pivot quickly to adapt and change.

In turn, it needs technology that supports that agility. Cloud-based accounting platforms are allowing modern audit practices to be more agile than ever before. With the cloud-based automations, auditors are better able to conduct the audit more effectively, identify the future issues, spot potential bottlenecks, and help their clients make more informed business decisions. It's the time for accountants to lead the process.

This publication may have errors and omissions, we urge the readers to put forward their opinions and suggestions without any hesitation. If we have to grow, we have to grow with knowledge and wisdom. To achieve the objectives of this publication, we need your continuous cooperation and attachment with this journal.

Best regards,

Md. Shahadat Hossain FCA
Chairman - Editorial Board and
Council Member - ICAB

President's Desk

> "Amid the economic setbacks erupted by the Covid pandemic, Russia- Ukraine war, and the war between Israel and Palestine, our members are tracing their agility to grip the changing scenario with the radar of their acumen, expertise and knowledge."

Md. Moniruzzaman FCA
President-ICAB

With the becoming of time more complex at this moment, the role of the Chartered Accountants is also getting diversified and critical, not only limited to audit service but also tax service, VAT service and forensic service. Their services are highly required for running the business and steering the economy in the right direction. Amid the economic setbacks erupted by the Covid pandemic, Russia- Ukraine war, and the war between Israel and Palestine, our members are tracing their agility to grip the changing scenario with the radar of their acumen, expertise and knowledge. They are now well equipped with digital transitions shifted from the traditional accounting system, to forecast the possible business apocalypse. ICAB is frequently organizing rigorous training and workshops as continuing professional development programs (CPDs) specially for its members in order to up-skill and update their professional services.

The precariousness of our economy demands the presence of capable and efficient leaders who would have the flexibility and adaptability to grasp how the financial sector could improve or help the wider business operations.

I think a Chartered Accountant is not a mere job profile, instead, it is a great responsibility to ensure transparency, accountability, integrity and good governance effectiveness for a particular company as well as for the nation as a whole. Usually, a qualified Chartered Accountant not only takes care of the accounts reflecting the true and fair view of the state of affairs of a particular business or an

organization, but also performs significant indirect jobs in reshaping the economy to a digital economy and a smart economy, which is the vision of the government. Their professional suggestions matter a lot to a business entity. CAs' roles in accounts, internal audit, external audit, credit risk department, planning division, company secretarial services are very commendable. Not only operational jobs they are performing, but nowadays they are playing their roles as leaders of the organisations, heightening their positions to levels of managing directors and chief executive officers.

I hope this issue of the journal has dealt with more theoretical and analytical data & updates of current professional and economic developments.

I would like to extend my heartfelt thanks to the Chairman, the Co-chairman, Editorial Board and everyone associated with this publication.

Revisiting the Efficiency of Private Commercial Banks in Bangladesh
An Empirical Evidence of Two-Stages DEA Analysis

Md. Abdul Mannan[1] | Dr. Mohammad Sahabuddin[2] | Md. Rafiqul Islam[3]

The Authors are:

[1]Associate Professor
Department of Accounting & Information Systems
Jagannath University

[2]Assistant Professor
Department of Business Administration
University of Science and Technology Chattogram

[3]Research Assistant
Department of Accounting & Information Systems
Jagannath University

Abstract

The objective of this study is to assess bank efficiency using the Data Envelopment Analysis (DEA) approach, which consists of two stages. The technical, pure, and scale efficacy of the factors are further explored in this study. Data covering the years 2017 through 2020 have been gathered from 25 private commercial banks in Bangladesh. The results show that bank productivity fluctuates with time. The findings show that the AB Bank Ltd, United Commercial Bank Limited, National Bank Limited, Mercantile Bank Limited, Dhaka Bank Limited were 100% efficient operational institutions in 2017. The findings also demonstrate that Trust Bank Limited, National Bank Limited, NCC Bank Limited, BRAC Bank Limited, BASIC Bank Limited, and Premier Bank Limited were all fully operational institutions in 2018. The results outlined the complete operational efficiency of Dhaka Bank Limited, Eastern Bank Limited, Pubali Bank Limited, and Southeast Bank Limited during 2019. The results also outlined that the Dutch-Bangla Bank Ltd, Bank Asia Limited, Premier Bank Limited, BRAC Bank Limited, Uttara Bank Limited were fully efficient operational institutions in 2020. For the studied period, average efficiency was 50.7%–52.9% under constant return to scale, while for the variable return to scale period, it was 59.1–66.1%. As a result of searching how large banks are managed, smaller banks are more effective than larger banks. It was discovered that technical efficiency, as opposed to pure technical efficiency, was a bigger contributor to the tested banks' inefficiency.

Keywords

DEA analysis, Efficiency, private commercial bank, Bangladesh.

Introduction

Banking is one of the most important factors that influence the economic growth of Bangladesh. The fundamental components to achieving better commercial success in the banking division are seen to be efficient and effective operations (Haralayya & Aithal, 2021). However, due to continuous changing nature of the environment of banking industry, examining and assessing the efficiency and performance of the banking sector has been a recurrent problem for scholars throughout the years. Moreover, they do not account for other elements like the size of the banks or hazards that can have an impact on efficiency, and their analysis also does not take into consideration the association between independent variables(Sufian 2009). Berger et al., (1993) argue that the most successful financial organizations should have a higher level of safety and soundness in their banking operations with efficiency. On the other hand, inefficient operation of a business refers to

the inability of the firm to produce a practicable level of production with the resources used (Reyes et al., 2021). Efficiency for financial institutions entails more profitability, more money flowing in, better pricing and services for customers, and higher safety due to an improved capital buffer for assimilating risk (Berger et al., 1993). Additionally, effective regulations and strategies may undoubtedly help banks expand their operations and services by giving financial assistance or extending loans to the less fortunate. As a consequence, the government and decision-makers could get trustworthy information and advice, enabling them to formulate policies and plans that would be successful in assisting the country in achieving both financial and social efficiency (Hussain et al., 2022). On the other hand, in recent years, banking sector of Bangladesh has struggled with capital shortfalls, subpar assets, loan defaults, a lack of transparency, non-performing loan (NPL), an absence of accountability and effective governance, a failure to adhere to the central bank's standards for loan distribution, a lack of customer education, and other issues (Mahmood, 2019). These are just some of the problems that have plagued Bangladesh's banking sector. However, it is important to remember that banks are the primary intermediaries that help facilitate the movement of money from financial institutions to the industrial sector (Hossain, 2019). Moreover, effective banks regulate and sustain economic shocks and gaps in addition to increasing production (Athanasoglou et al., 2008).

The main challenge in the banking sector is managing and evaluating performance, which can be characterized in terms of effectiveness, productivity, profitability, competition, etc. Bank productivity has traditionally been measured using cost-to-income ratio and return on equity (ROE) methods. These outdated methods do not consistently produce correct results because of the complex environment of the financial sector. Using DEA models (DMUs), it may be possible to determine the relative performance and efficacy of a set of decision-making units.

The purpose of this research is to use DEA techniques to investigate the efficiency assessment of the Bangladeshi banking sector's input and output while considering 25 commercial banks in Bangladesh from 2017 to 2020. It would be crucial to investigate banking efficiency in order to finding the sources of efficiency that are either detrimental to or beneficial for the performance of the banking sectors as well as to offer an indicator or signals regarding the state of the banking system of Bangladesh. The study to evaluate the effectiveness of commercial banks utilizing DEA was inspired by prior researchers' research.

The study is set up as follows. There is a literature review in Section 2. The applied methodology was explained in Section 3. The results and discussions are covered in Section 4, and finally, section 5 concludes the paper.

Literature Review

Theoretical Underpinnings

One of the most common approaches that is used to evaluate how effective commercial banks are is called data envelopment analysis (Bahadji & Saous, 2023). For the purpose of determining relative efficacy, Charnes, Cooper, and Rhodes (1978) were the pioneers who initially developed the method, which is predicated on the idea of Pareto efficiency. The opening of previously closed societies and economies as well as the gradual advancement of information technology have made it possible for globalization to have a positive impact on the world economy through trade and capital flows (Ezike, 2009; Kuder, 2015; Skare & Prziklas Druzeta, 2016; Yazdi & Dariani, 2019; Baneliene & Melnikas, 2020; Lee et al., 2020; Mushtaq et al., 2020). Previous studies claimed that the ability of an organization to optimize the output of its goods and services while employing the fewest resources feasible is what constitutes efficiency in that organization (Kipesha, 2013; Grmanova & Pukala, 2018; Hintosova et al., 2020; MarksBielska et al., 2020). The method employs information regarding the outputs and inputs of a number of different decision-making units in order to perform an efficiency assessment (DMUs). Data Envelopment Analysis, often known as DEA, is a method of mathematical programming that is non-parametric and is used for frontier estimates (Lozić, 2022). This method is frequently utilized for production technologies that have numerous outputs and multiple inputs.

The efficiency of the Decision-Making Unit (DMU) can be described as follows:

$$\text{Efficiency of DMU}_j = \frac{u_1 y_{1j} + u_2 y_{2j} + \dots\dots\dots}{v_1 x_{1j} + v_2 x_{2j} + \dots\dots\dots}$$

Where, u_1 = the weight given to output 1

x_{1j} = amount of input 1 to DMU_j

v_1 = weight given to input 1

y_{1j} = amount of output 1 from DMU_j and so on.

The DEA approach is a method for mathematical programming that estimates the relative efficiency score, also known as a unit of assessment, based on the number of inputs that are used to generate a certain number of outputs (Bahadji & Saous, 2023). This method was developed by David E. Anderson. In 1978, Charnes, Cooper, and Rhodes (CCR) developed the DEA assuming constant returns to scale (CRS) in order to evaluate the effectiveness of technical solutions by solving a linear programming (LP) equation. In 1984, Banker, Charnes, and Cooper (BCC) extended the capabilities of the original DEA model by including variable returns to scale (VRS) (Zarrin & Brunner, 2023) . This was done with the intention of quantifying pure technological efficiency.

Orientations of DEA Approach

There are two orientations involved in DEA: input orientation and output orientation. These two methods of efficiency measurement address two different problems.Technical efficiency measures that are input-focused focus on how much input can be reduced while maintaining the current level of output, whereas output-focused measures focus to quantify the output that can be increased while maintaining the level of current input.

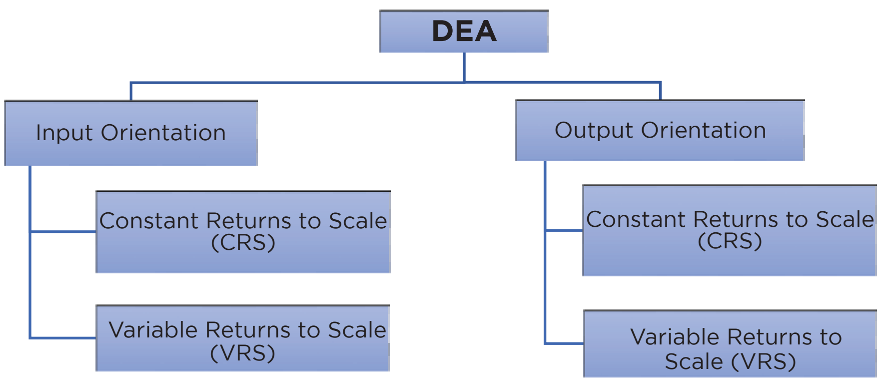
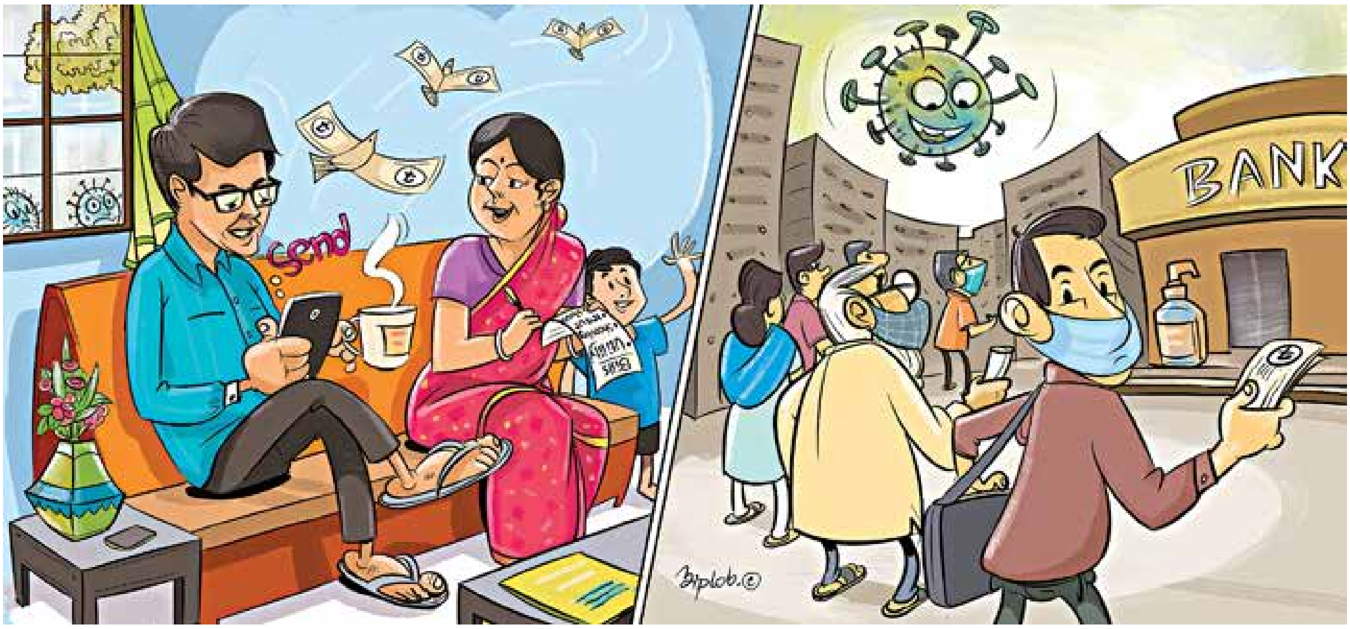


Figure-1: Orientations and Frontiers of DEA



Efficiency Measurement Applying DEA Approach

Pereira & Marques (2021) applied the technical and scale efficiency measurement in two-stage DEA of the water and sanitation services of Brazilian municipalities. Technical Efficiency describes the conversion of tangible inputs into tangible outputs but technical efficiency also can be explained as the Pure Technical Efficiency that gauges the amount that a business may cut back on inputs while still operating only within the VRS frontier. Technical efficiency, therefore, gauges how well the DMU uses its inputs on the whole. On the other hand Scale Efficiency shows the maximum amount by which a company extrapolated to the VRS efficiency frontier may still stay inside the persistent return to scale frontier by further reducing its inputs in fixed proportions (Olesen et al., 2022). Scale efficiency, then, gauges how much a company may save costs by relocating to a region of the frontier with favourable returns to scale. An organization can reach PTE by moving toward the frontier of variable return to scale (VRS) generated by the BBC model. A company's return to scale is either rising (IRS), steady (CRS), or falling (DRS) on this frontier (DRS). A company can increase its efficiency levels by using CRS if it is already using IRS or DRS. A company is functioning with CRS and therefore is scale-efficient if PTE=TE, or if SE=1. SE = CRS/VRS, where CRS and VRS are efficiency ratings under CRS and VRS, respectively, can also be used to calculate scale efficiency.

Empirical Literature

Numerous studies have been investigated to determine the technical, purely technical, and scale efficiency of the banking sector in Bangladesh. Bhuia et al. (2012) used DEA to measure and evaluate the relative efficacy of Bangladesh's 20 commercial banks from the perod 2001 to 2007. The findings indicate that during the study period, the most effective banks were AL-Arafah Islami Bank Limited, Shahajalal Islami Bank Limited, and Eastern Bank Limited, while the least effective banks were Uttara Bank Limited, Janata Bank Limited, United Commercial Bank Limited, AB Bank Limited, and Pubali Bank Limited. It was discovered that scale efficiency along with the technical efficiency were the origin of efficiency for the

tested banks. In addition, Hoque and Rayhan (2013) applied DEA to assess the effectiveness of 24 banks in the Bangladesh banking sector during 2010. Southeast Bank Limited (DMU 12), which has 20 peer counts in CRS DEA efficiency, is the most effective bank. The spectrum of the efficiency ratings for CRS-three DEA's efficient banks is excessively wide, whereas the range for VRS-twelve DEA's efficient banks is less than that for CRS-DEA.

Alam et al. (2014) determined the performance of private and public banks in Bangladesh using DEA and compared using the comprehensive concept of bilateral comparison in DEA. Depending on the model characteristics, the total technical efficiency of Bangladesh's banks ranges from 76.6% to 91.3%. According to the findings of the bilateral comparison, private sector banks (PCBs) surpass state banks (SCBs). Ali (2015) showed that all Islamic banks had exceptionally high levels of technical efficiency, with averages of 98%, 96%, 98%, and 96% from 2010 to 2013 correspondingly.

Islam et al. (2017) used non-parametric (DEA) approaches and parametric statistical tools to analyze data from 31 out of 59 commercial banks operating in Bangladesh between 2009 and 2015. The objective was to evaluate operational effectiveness and efficiency. The study showed that the average technical effectiveness of input-oriented CRS and VRS methodologies was 94% and 97%, respectively, throughout the study duration. Furthermore, the investigation revealed that the scale efficiency exhibited a mean value of 94% throughout the duration of the study. The recent study of Jahan (2019) showed that, on average, Islamic banks had a higher cumulative average TFP changes index over the past five years than conventional banks. Islamic banks also displayed less variability in their TFP change index than conventional banks did. The productivity change index of Islamic banks reveals that it is difficult for them to maintain the advancement made in previous years, in contrast to conventional banks that recorded decline over some years with a continuous trend. Assessment of productivity analysis shows that rather than technological advancement, TFP advancements were mostly linked to a rise in efficiency change. The analysis of the efficiency change index showed that the scale effect was mostly responsible for the increase.

Methodology

One of the most successful and widely used techniques for evaluating the effectiveness of the banking industry is Data Envelopment Analysis (Bahadji & Saous, 2023). The DEA Banker-Charnes-Cooper (BCC) model and the DEA Charnes-Cooper-Rhodes (CCR) model with a continuous return-to-scale assumption are the two basic models that make up DEA. A good number of researchers used the CCR and BCC models as well as further iterations of the DEA (Mongid & Tahir, 2010). This study employed both the input-oriented CCR and BCC models, which used a two-stage

DEA model for the efficiency evaluation of DMUs. The CCR model, also referred to as overall efficiency, provides technical efficiency, whereas the BCC model index represents pure technical efficiency. By dividing the total efficiency (TE) by the total efficiency (PTE), it is possible to determine the scale efficiency of the DMU under investigation. The greatest attainable efficiency score is 1, with lower numbers denoting worse efficiency. All DEA efficiency scores are computed using Tim Coelli's DEAP software (1996).

Selection of Variables

The DEAP 2.1 program was used to calculate the relative effectiveness of banks for this study. As the study is focused on the input orientation of DEA, researchers had to choose a few input and output variables. An intermediation strategy was used for the investigation after evaluating some earlier work that concentrated on bank efficiency. The bank is primarily considered to be a mediator among surplus substances and deficit agents, according to the Sealey and Lindley (1977) proposal known as the "intermediation approach," which contends that banks' primary role is to collect money and use physical capital and labour to turn it into debts and other profitable assets. Resources consumed by the DMU were classified as inputs in this study, whereas assets were classified as outputs. Based on data accessibility and considerations from prior work, the variables used as inputs and outputs were chosen. Three inputs were selected such as Total Deposit, Total Fixed Assets, and Total Operating Expenses. Whereas two outputs were selected as total loans and advances.

Table 1 shows the list of Inputs and outputs considered in this study:

Table 1 : List of Variables

Input	Output
Total Deposits	Total Loans and Advances
Total Fixed Assets	
Operating Expense	

Data

In Bangladesh, there are now 54 active Private Commercial Banks (PCBs) out of them 25 PCBs excluding Islamic shariah banks because of the difference of their nature of srvices (Appendix-01) were selected as the sample banks for the study. Every bank is considered a single DMU (DMU). The chosen banks' annual reports were the source of the information used in this study, which covered the years 2017 to 2020. Study gathered the most recent information available from the annual reports for 2017 to 2020. This study used the DEAP 2.1 program to calculate the relative efficiency of banks, and then analyzed the data for each year by determining which DMUs were effective and which were not.

Results and Discussions

Table 3 displays the major DMU results for the four years under consideration. As may be seen in Table 2, each bank was given a number. Because of this, DMU1 stands for Uttara Bank Ltd., followed by DMU1 through DMU25. A list of the returns for each bank's scale may be found in the RTS (return to scale)

Table 2: Results for DMUs 1 to 25

	2020				2019			
DMUs	**TE**	**PTE**	**SE**	**RTS**	**TE**	**PTE**	**SE**	**RTS**
1	0.388	0.411	0.944	DRS	0.372	0.421	0.884	IRS
2	0.358	0.365	0.981	IRS	0.299	0.351	0.853	IRS
3	1.000	1.000	1.000	CRS	0.583	0.652	0.894	IRS
4	0.165	0.193	0.855	IRS	1.000	1.000	1.000	CRS
5	0.335	0.403	0.831	IRS	0.456	0.597	0.763	IRS
6	0.753	1.000	0.753	IRS	0.207	0.281	0.738	IRS
7	0.499	0.687	0.726	DRS	0.713	1.000	0.713	DRS
8	0.273	0.329	0.830	IRS	0.620	0.926	0.670	IRS
9	0.823	1.000	0.823	DRS	0.691	1.000	0.691	DRS
10	0.283	0.313	0.904	IRS	0.540	0.655	0.824	IRS
11	0.828	1.000	0.828	DRS	1.000	1.000	1.000	CRS
12	0.426	0.443	0.962	IRS	0.597	0.744	0.801	IRS
13	1.000	1.000	1.000	CRS	0.549	0.679	0.808	IRS
14	0.881	1.000	0.881	IRS	0.559	0.746	0.749	IRS
15	0.288	0.442	0.652	IRS	0.253	0.417	0.607	IRS
16	0.052	0.349	0.149	IRS	0.045	0.346	0.130	IRS
17	0.368	0.629	0.585	IRS	0.278	0.508	0.548	IRS
18	0.225	0.316	0.712	IRS	1.000	1.000	1.000	CRS
19	1.000	1.000	1.000	CRS	0.392	0.592	0.662	IRS
20	0.600	0.695	0.863	DRS	1.000	1.000	1.000	CRS
21	0.055	0.391	0.141	IRS	0.138	1.000	0.138	IRS
22	0.105	0.733	0.143	IRS	0.056	0.506	0.110	IRS
23	1.000	1.000	1.000	CRS	0.553	0.615	0.899	IRS
24	0.512	0.825	0.621	IRS	0.264	0.492	0.535	IRS
25	1.000	1.000	1.000	CRS	0.396	0.865	0.458	IRS
Minimum	0.052	0.193	0.141	-	0.045	0.281	0.110	-
Maximum	1.000	1.000	1.000	-	1.000	1.000	1.000	-
Average	0.529	0.661	0.768	-	0.502	0.696	0.699	-
	2018				2017			
DMUs	**TE**	**PTE**	**SE**	**RTS**	**TE**	**PTE**	**SE**	**RTS**
1	0.728	0.775	0.939	DRS	1.000	1.000	1.000	CRS
2	0.442	0.490	0.902	IRS	0.324	0.348	0.931	DRS
3	0.485	0.561	0.864	IRS	0.925	0.926	0.999	IRS
4	0.351	0.382	0.919	IRS	0.585	0.850	0.688	DRS
5	0.464	0.609	0.761	IRS	0.262	0.273	0.960	DRS
6	0.244	0.301	0.810	IRS	0.369	0.395	0.934	DRS
7	0.596	0.602	0.990	IRS	1.000	1.000	1.000	CR S
8	0.200	0.290	0.689	IRS	0.238	0.284	0.838	IRS
9	1.000	1.000	1.000	CRS	1.000	1.000	1.000	CRS
10	0.266	0.285	0.935	IRS	1.000	1.000	1.000	CRS
11	0.539	0.908	0.593	DRS	0.306	0.358	0.855	DRS
12	0.224	0.292	0.767	IRS	0.380	0.436	0.872	DRS
13	0.985	1.000	0.985	IRS	0.430	0.605	0.711	DRS
14	1.000	1.000	1.000	CRS	0.468	0.480	0.975	IRS
15	1.000	1.000	1.000	CRS	0.280	0.321	0.872	IRS
16	0.036	0.268	0.133	IRS	0.042	0.329	0.128	IRS
17	0.281	0.550	0.511	IRS	0.698	0.853	0.818	IRS
18	0.248	0.348	0.712	IRS	1.000	1.000	1.000	CRS
19	1.000	1.000	1.000	CRS	0.779	0.917	0.850	IRS
20	0.731	0.743	0.984	IRS	0.531	0.629	0.844	DRS
21	0.159	1.000	0.159	IRS	0.043	0.257	0. 167	IRS
22	0.043	0.322	0.133	IRS	0.056	0.334	0.168	IRS
23	1.000	1.000	1.000	CRS	0.385	0.413	0.932	DRS
24	1.000	1.000	1.000	CRS	0.343	0.400	0.858	IRS
25	0.180	0.400	0.451	IRS	0.235	0.362	0.649	IRS
Minimum	0.036	0.268	0.133	-	0.042	0.257	0.128	-
Maximum	1.000	1.000	1.000	-	1.000	1.000	1.000	-
Average	0.528	0.645	0.769	-	0.507	0.591	0.802	-

The efficiency ratings for the sample's n=25 banks are displayed in the table above. Using Tim Coelli's DEAP program, all of the DEA efficiency scores are calculated (1996).

column. The returns to scale (DRS) are declining when the bank must reduce activity to increase efficiency. Although larger banks may have greater market sway, they also take on more risk, which drives up interest rates. By making borrowers focus more on hazardous projects, the likelihood of non-performing loans, default risk, and poor bank performance increases (Boyd & De Nicolo, 2005). Efficiency scores for the examined institutions were obtained by using input-oriented DEA models underneath the VRS and CRS assumptions (see Table 3).

The Year-by-Year Analysis of Selected Banks (2017–2018)

In 2017, the found that five DMUs—DMU1 (AB Bank Ltd.), DMU7 (United Commercial Bank Limited), DMU9 (National Bank Limited), DMU10 (Mercantile Bank Limited), DMU18 (Dhaka Bank Limited)—were entirely efficient in accordance with the CCR model. The model's average efficiency was 0.507, with DMU16 (NRB Bank Limited) having the lowest value at 0.042. The average efficiency with 5 effective DMUs using the BCC model was 0.591. It also discovered that five DMUs, including DMU1, MMU7, DMU9, DMU10 and DMU18 were entirely efficient in accordance with the BCC model. DMU21 (MEGHNA Bank limited) displayed the minimal value of 0.257. It is noticeable that DMU21 performed the worst in terms of PTE and TE also, and that its efficiency score was worse when SE was taken into account, showing that the root of its inefficiency lies entirely with its management and administrative skills. Banks ought to have concentrated more on increasing their managerial and administrative effectiveness given that the average SE was greater than the average PTE. While still operating at the highest scale levels, improvements could be made. It also shows that banks had greater trouble operating at the optimal scale than they did at the best administrative and technical levels during that year. When taking SE into account, DMU1, DMU7, DMU9, DMU10 & DMU18 were all completely functional. The average efficiency was 0.802, with DMU16 (NRB Bank Limited) having the lowest figure at 0.128. Analyzing the RTS of the banks is crucial from this perspective. Declining returns to scale were shown for DMU2, DMU4, DMU5, DMU6, DMU11, DMU12, DMU13, DMU20 & DMU23 in 2017. In 2017, consistent returns were offered for DMU1, DMU7, DMU9, DMU10, & DMU18. All of the other banks showed rising returns to scale, which suggested that expanding their operational scales was necessary for these banks to boost their efficiency ratios.

Besides, six DMUs were found to be completely efficient according to the CCR model in 2018. These six DMUs are DMU9, DMU14, DMU15, DMU19, DMU23, and DMU24. The model's average efficiency was 0.528, with DMU16 (NRB Bank Limited) having the lowest value at 0.036. By using the BCC model, the average efficiency with 8 effective DMUs was 0.645. Eight DMUs were found to be completely efficient in accordance with the BCC model including DMU9, DMU13, DMU14, DMU15, DMU19, DMU21, DMU23 and DMU24. Again, DMU16 showed the minimal value of 0.268. On the other hand, DMU9, DMU14, DMU15, DMU19, DMU23 and DMU24 were all fully operational when SE was taken into account. The lowest efficiency was 0.133 in DMU16 (NRB Bank Limited) and DMU22, while the average efficiency was 0.769. (Midland Bank). From this angle, it is vital to analyze the banks' RTS. Only DMU1 (AB Bank Limited) and DMU11 (Southeast Bank Limited) displayed declining returns to scale in 2018. DMU9, DMU14, DMU15, DMU19, DMU23 and DMU24 all offered constant returns in 2018. All of the other banks showed increasing returns to scale, which indicated that these banks would need to increase their operational scales in order to improve their efficiency ratios.

The Year-by-Year Analysis of Selected Banks (2019–2020)

The four totally efficient DMUs in 2019—the year with four efficient DMUs based on the CCR model—were DMU4 (Eastern Bank Limited), DMU11 (Southeast Bank Limited), DMU18 (Dhaka Bank Limited), and DMU20 (Pubali Bank Limited). The median efficiency was 0.502, with DMU16 contributing the lowest figure of 0.045. Seven DMUs, including DMU4, DMU7, DMU9, DMU11, DMU18, DMU20 and DMU21 were effective in terms of the BCC model. The model's average efficiency was 0.696, with DMU6 (Prime Bank Limited) having the lowest rating at 0.281. When taking SE into account, four effective DMUs—DMU4 for Eastern Bank Ltd., DMU11 for Southeast Bank Ltd., DMU18 for Dhaka Bank Ltd., and DMU20 for Pubali Bank Ltd.—were entirely effective. The average efficiency was 0.699, with DMU22 having the lowest figure at 0.110. (Midland Bank Limited). The average SE and PTE values for this year followed the same pattern as last year. The fact that the average SE was slightly higher than the average PTE in 2018 and 2019 suggests that the inefficiency of the selected banks was more closely related to the technical and administrative facets of their operations. In 2019 the findings showed the falling returns to scale for DMU7, DMU9, DMU,whereas Constant returns were offered for DMU4 (Eastern Bank Limited), DMU11 (Southeast Bank Limited), DMU18 (Dhaka Bank Limited), and DMU20 (Pubali Bank Limited). All the other banks showed rising returns to scale, which suggested that expanding their operational scales was necessary for these banks to boost their efficiency ratios.

In addition to, Five DMUs were found to be 100 percent efficient according to the CCR model in 2020: DMU3 (Dutch-Bangla Bank Ltd.), DMU13 (Bank Asia Limited), DMU19 (Premier Bank Limited), DMU23 (BRAC Bank Limited), and DMU25 (Uttara Bank Limited). The model's average efficiency was 0.529, with DMU16 (NRB Bank Limited) having the lowest value at 0.052. Using the BCC model, the average efficiency with 5 effective DMUs was 0.661. Five DMUs were found to be completely efficient according to the BCC model, including DMU3, DMU6, DMU9, DMU11, DMU13, DMU14, DMU19, DMU23 and DMU25. Eastern Bank Limited's DMU4 indicated 0.193 as the lowest value. It is clear that DMU21 (MEGHNA Bank Limited) did the worst in terms of PTE and TE as well, and that when SE was taken into consideration, its efficiency score was worse.

In 2020 five DMUs were fully operational when SE was taken into account they are DMU3, DMU13, DMU19, DMU23 and DMU25. The lowest efficiency score, 0.141, was recorded by DMU21 (MEGHNA Bank Limited), while the average efficiency was 0.768. From this angle, it is vital to analyze the banks' RTS. DMU1 (AB Bank Limited), DMU7 (United Commercial Bank Limited), DMU9 (National Bank Limited), DM11 (Southeast Bank Limited), and DMU20 (Pubali Bank Limited) all showed declining returns to scale in 2020. For DMU3 (Dutch-Bangla Bank Limited), DMU13 (Bank Asia Limited), DMU19 (Premier Bank Limited), DMU23 (BRAC Bank Limited), and DMU25 (Uttara Bank Limited), consistent returns were offered in 2020. All the other banks displayed increasing returns to scale, which indicated that these banks would need to increase their operational scales in order to improve their efficiency ratios.

Comparative Analysis of the Banks

Based on this sample, the top 10 commercial banks in Bangladesh are the Dutch Bangla Bank, the BRAC Bank, the Eastern Bank, the Mutual Trust Bank, the AB Bank, the City Bank, the Prime Bank, the Standard Bank, the Bank Asia, and the IFIC Bank. A new study by Kamarudin et al. (2017) shows that the size and output of Islamic banks are linked in a good way. This result fits with the idea of economies of scale, which says that the Islamic bank can use economies of scale to run more efficiently while paying less. The results show that neither the TE nor the PTE of the biggest banks was better than that of the smaller ones. The results showed that small banks did better than big ones. The best small banks got the top possible rating in both the CCR and BCC models. Since the average efficiency for 2017, 2018, 2019, and 2020 is going down, the results revealed that the efficiency of Bangladesh's commercial banks has been deteriorating down over time.

Conclusion & Recommendation

This study aimed to assess the commercial bank's performance in the Bangladeshi banking industry, using the DEA approach for a sample of 25 banks operating in Bangladesh during 2017 and 2020. The study used the variables Total Operating Expenses, Total Deposits, and Total Fixed Assets as key indicators for banks and which represent the major activity of banks (1996). The following DMUs earned 100% efficiency in 2018 according to the CCR and BCC models: DMU9 (National Bank Limited), DMU14 (Trust Bank Limited), DMU15 (NCC Bank Limited), DMU19 (Premier Bank Limited), DMU23 (BRAC Bank Limited), and DMU24 (BASIC Bank Limited). According to the CCR and BCC models, DMU4 (Eastern Bank Limited), DMU11 (Southeast Bank Limited), DMU18 (Dhaka Bank Limited), and DMU20 (Pubali Bank Limited) all achieved 100% efficiency in 2019. The study found that smaller banks were more effective than giant banks, and this could be because of how large banks are managed. The study also found that Bangladesh's commercial banks' efficiency has been declining over time, with the average efficiency of 2019 being marginally worse than that of 2018. Technically, the majority of the Bank is inefficient because their efficiency ratings are below one, even though they ought to be able to boost production without increasing inputs.

Despite the fact that there are other methods for measuring efficiency, this paper solely sought to assess the effectiveness of commercial banks using the DEA technique. Future scholars who conduct research in this area may find this study to be helpful. To undertake their own research in this field, they can make use of the Cob Douglas model, the Malmquist Productivity Index model, and regularly utilized financial ratio analysis. While DEA provides insight into which areas need improvements, Avkiran (1999) noted that it lacks information on how to actually make those improvements. More research is needed to determine how each bank might increase operation profit by approaching the more efficient frontier.

Appendix-01

Table 3: List of Selected Banks

No.	Bank Name	Year of Establishment
DMU_1	AB Bank Limited	1981
DMU_2	City Bank Limited	1983
DMU_3	Dutch-Bangla Bank Limited	1995
DMU_4	Eastern Bank Limited	1992
DMU_5	ONE Bank Limited	1999
DMU_6	Prime Bank Limited	1995
DMU_7	United Commercial Bank Limited	1983
DMU_8	Mutual Trust Bank Limited	1999
DMU_9	National Bank Limited	1983
DMU_{10}	Mercantile Bank Limited	1999
DMU_{11}	Southeast Bank Limited	1995
DMU_{12}	IFIC Bank Limited	1976
DMU_{13}	Bank Asia Limited	1999
DMU_{14}	Trust Bank Limited	1999
DMU_{15}	NCC Bank Limited	1985
DMU_{16}	NRB Bank Limited	2013
DMU_{17}	Standard Bank Limited	1999
DMU_{18}	DHAKA Bank Limited	1995
DMU_{19}	Premier Bank Limited	1999
DMU_{20}	Pubali Bank Limited	1972
DMU_{21}	MEGHNA Bank Limited	2013
DMU_{22}	Midland Bank Limited	2013
DMU_{23}	BRAC Bank Limited	2001
DMU_{24}	BASIC Bank Limited	1988
DMU_{25}	Uttara Bank Limited	1965

References

Alam, M.A., Islam S.N., and Uddin, M.N. (2014). Efficiency Estimation of the Banking Industry in , Bangladesh: A Non-Parametric Data Driven Approach. Jagannath University Journal of Business Studies, Vol. 4, No. 1 & 2, 171-190.

Ali, I. (2015). Measuring Efficiency of Islamic Banks in Bangladesh: An Application of Data Envelopment Analysis. International Journal of Business and Management Research. 1(1).

Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. Journal of International financial Markets, Institutions and Money, 18(2), 121-136.

Avkiran, N. K. (1999). An application reference for data envelopment analysis in branch banking: helping the novice researcher. International journal of bank marketing, 17(5), 206-220.

Bahadji, K., & Saous, C. (2023). Evaluating the Financial Efficiency in the Banking Sector by Adopting Multistage Data Envelopment Analysis (Doctoral dissertation, Ahmed DRAIA University-Adrar).

Baneliene, R., & Melnikas, B. (2020). Economic Growth and Investment in R&D: Contemporary Challenges for the European Union. Contemporary Economics 14 (1), 38–58. https://doi.org/10.5709/ce.1897-9254.331

Banker, R.D., Charnes A., and Cooper, W.W. (1984). Some models for estimating technical and scale inefficiencies in Data Envelopment Analysis. Management Science. 30(9): 1078– 1092.

Berger, A. N., Hunter, W. C., & Timme, S. G. (1993). The efficiency of financial institutions: A review and preview of research past, present and future. Journal of Banking & Finance, 17(2-3), 221-249.

Bhuia, M.R., Baten A., Kamil A. A., Deb N. (2012). Evaluation of Online Bank Efficiency in Bangladesh: A Data Envelopment Analysis (DEA) Approach. Journal of Internet

Banking and Commerce, August 2012, vol. 17, no.2.

Boyd, J. H., & De Nicolo, G. (2005). The theory of bank's risk-taking and competition revisited. Journal of Finance, 60(3), 1329–1343. https://doi.org/10.1111/j.1540-6261.2005.00763.x

Charnes A., Cooper W.W. and Rhodes E. (1978). Measuring the Inefficiency of Decision Making Units. European Journal of Operational Research, 2(6), 429-444.

Ezike, E. (2009). International Business Finance and Management. Lagos: Concept Publications Limited. Ezzat, A. M., & Fayed, M. E. 2020. "Central Bank Independence and Democracy: Does Transparency Matter?" Contemporary Economics 14(2), 90–112. https://doi.org/10.5709/ce.1897-9254.334

Grmanova, E., & Pukala, R. (2018). Efficiency of insurance companies in the Czech Republic and Poland. Oeconomia Copernicana, 9(1), 71–85. https://doi.org/10.24136/oc.2018.004

Haralayya, B., & Aithal, P. S. (2021). Factors Determining The Efficiency In Indian Banking Sector: A Tobit Regression Analysis. International Journal of Science & Engineering Development Research (www. ijsdr. org), 6(6), 1-6.

Hintosova, A. B., Bobenic, T., Hajduova, Z., & Szajt, M. (2020). The influence of firm-specific factors on firms' performance. Polish Journal of Management Studies 21(2), 115–128. https://doi.org/10.17512/pjms.2020.21.2.09

Hoque, M.R. and Rayhan, M.I. (2013). Data Envelopment Analysis of Banking Sector in Bangladesh. Russian Journal of Agricultural and Socio-Economic Sciences, No. 5 (5) / 2012.

Hossain, B. (2019). Deadweight Loss in the Interest-based and the Interest-Free (Islamic) Microfinance Programs: A Comparative Analysis. Uluslararası İslam Ekonomisi ve Finansı Araştırmaları Dergisi, 5(2), 49-71.

Hussain, H. I., Kamarudin, F., Anwar, N. A. M., Sufian, F., Ali, A., & Saudi, M. H. (2022). Social Globalisation and Efficiency of Microfinance Institutions Nexus: Empirical Evidence on Financial and Social Efficiency. Engineering Economics, 33(1), 27-46.

Islam M.N., Sabur M.A. and Khan A.G. (2017). Efficient and Effective Operations of Commercial Banks in Bangladesh: An Evaluation. Journal of Science and Technology, 7(1 & 2): 93-108.

Jahan, N. (2019). Productivity Analysis of Commercial Banks of Bangladesh: A Malmquist Productivity Index Approach. International Journal of Economics and Financial Issues, 2019, 9(1), 108-115.

Kamarudin, F., Zack, H. C., Sufian, F., & Anwar, N. A. M. (2017). Does productivity of Islamic banks endure progress or regress? Empirical evidence using Data Envelopment Analysis based Malmquist Productivity Index. Humanomics, 33(1), 84–118. https://doi.org/10.1108/H-08-2016-0059

Kipesha, E. (2013). Production and Intermediation Efficiency of Microfinance Institutions in Tanzania. Research Journal of Finance and Accounting, 4(1), 149–160.

Kuder, D. (2015). Impact of institutional factors on economic growth in the United States in the years 1979?2007. Oeconomia Copernicana, 6(1), 137–159. https://doi.org/10.12775/OeC.2015.008

Lee, C. C., Lee, C. C., & Lien, D. (2020). Income inequality, globalization, and country risk: a cross-country analysis. Technological and Economic Development of Economy, 26(2), 379–404. https://doi.org/10.3846/tede.2019.11414

Lozić, J. (2022). Application of Data Envelopment Analysis (DEA) in information and communication technologies. Tehnički glasnik, 16(1), 129-134.

Mahmood, M. (2019). The current state of the banking industry in Bangladesh. Retrieved from https://thefinancialexpress.com.bd/views/views/the-current-state-of-the-banking-industry-inbangladesh1556380055#:~:text=Bangladesh%27s%20banking%20system%20is%20now%20faced%20with%20a,anything%20but%20getting%20any%20better%20largely%20due%20

Marks-Bielska, R., Lizinska, W., Wojarska, M., & Babuchowska, K. (2020). Institutional efficiency versus stability of local governments in basic areas of activity: the case of Poland. Equilibrium. Quarterly Journal of Economics and Economic Policy, 15(3), 463–487. https://doi.org/10.24136/eq.2020.021

Mongid, A., & Tahir, I. M. (2010). Technical and scale efficiency of Indonesian rural banks. Banks and Bank Systems, 5(3).

Mushtaq, A., Chen, Z., Din, N. U., Ahmad, B., & Zhang, X. (2020). Income inequality, innovation and carbon emission: Perspectives on sustainable growth. Economic Research-Ekonomska Istrazivanja, 33(1), 769–787. https://doi.org/10.1080/1331677X.2020.1734855

Olesen, O. B., Petersen, N. C., & Podinovski, V. V. (2022). Scale characteristics of variable returns-to-scale production technologies with ratio inputs and outputs. Annals of Operations Research, 318(1), 383-423.

Pereira, M. A., & Marques, R. C. (2021). Technical and scale efficiency of the Brazilian municipalities' water and sanitation services: A two-stage data envelopment analysis. Sustainability, 14(1), 199.

Sealey Jr, C. W., & Lindley, J. T. (1977). Inputs, outputs, and a theory of production and cost at depository financial institutions. The journal of finance, 32(4), 1251-1266.

Skare, M. & Prziklas Druzeta, R. (2016). Poverty and Economic Growth: A Review. Technological and Economic Development of Economy, 22(1), 156–175. https://doi.org/10.3846/20294913.2015.1125965

Sufian, F. (2009). Determinants of bank efficiency during unstable macroeconomic environment: Empirical evidence from Malaysia. Research in International Business and Finance, 23(1), 54–77. doi:10.1016/j.ribaf.2008.07.002

Yazdi. S. K., & Dariani, A. G. (2019). CO2 emissions, urbanisation and economic growth: evidence from Asian countries. Economic Research-Ekonomska Istrazivanja, 32(1), 510–530. https://doi.org/10.1080/1331677X.2018.1556107.

Zarrin, M., & Brunner, J. O. (2023). Analyzing the accuracy of variable returns to scale data envelopment analysis models. European Journal of Operational Research, 308(3), 1286-1301.

Reyes, D. R., van Heeren, H., Guha, S., Herbertson, L., Tzannis, A. P., Ducrée, J., and Becker, H. (2021). Accelerating innovation and commercialization through standardization of microfluidic-based medical devices. Lab on a Chip, 21(1), 9-21.

Importance of Accounting for Start-ups in Establishing Financial Control and Reporting Accuracy:
A Comprehensive Guide with a Case Study on Shohoz

Nusrat Maria[1] | Nabila Binte Noman[2]

The Authors are:

[1]Deputy Director
ACNABIN
Chartered Accountants

[2]Deputy Manager
Summit Towers Limited

Introduction

Accounting is a critical component of every business's success, especially for start-ups. It gives entrepreneurs a comprehensive view of their company's financial health and helps them make educated decisions (Smith, 2019). Start-ups in Bangladesh have particular obstacles, making accounting even more important. Regulatory barriers, restricted access to venture funding, quickly changing market conditions, and a complicated taxation structure are among the problems (Rahman & Ahmed, 2020). There is also a scarcity of experienced financial experts (Khan, 2018). According to LightCastle Partners' Bangladesh Startup Investment Report 2022 (2023), the number of start-ups in Bangladesh has been significantly increasing, with many new firms entering the market. As a result of this expansion, the need for accounting services has expanded, and numerous top accounting startups and firms have formed to satisfy this demand (F6S, n.d.). This essay delves into the difficulties of accounting for start-ups in Bangladesh, outlining the financial problems they confront and offering solutions for success.

Part I: The State of Start-ups in Bangladesh

A startup is a newly established business enterprise that is typically characterized by its innovative ideas, small team, and limited initial capital. Startups are often founded by entrepreneurs with the aim of bringing a unique product, service, or technology to the market.

A. Economic Context

Statistical overview:

As of 2023, Bangladesh has approximately 2,500 start-ups functioning in a range of areas such as fintech, e-commerce, healthcare, education, and logistics. This is a huge increase from the 1,500 start-ups that existed in Bangladesh in 2021. A variety of causes are driving the expansion of Bangladesh's start-up ecosystem, including:

- A growing middle class with disposable income: The Bangladeshi middle class is quickly expanding, generating a big market for new businesses. According to a recent World Bank report, the Bangladeshi middle class is anticipated to grow to 35 million individuals by 2030. This will open up a vast market for products and services aimed at the middle class.

- A young and tech-savvy population: Bangladesh's populace is youthful and technologically sophisticated. Bangladesh's median age is 28 years old, and more than 60% of the population is under the age of 35. This implies that there

is a vast pool of potential clients who are knowledgeable with and at ease with technology.

- A favorable government policy environment: Bangladesh's government has been encouraging of the start-up ecosystem. The government started the Startup Bangladesh program in 2016, which supports start-ups with financial and technical help. In addition, the government has established a variety of accelerators and incubators to assist start-ups.

It is estimated that the start-up sector contributes around $1 billion to Bangladesh's GDP. This is a substantial contribution that is projected to increase in the future years. The number of start-ups in Bangladesh is increasing at 20% annual growth year on year and the industry is predicted to provide more than 1 million employments by 2030. The Bangladesh start-up ecosystem is still in its infancy, but it has the potential to make a big contribution to the Bangladeshi economy. An increasing middle class, a youthful and tech-savvy populace, and a favorable government policy climate all contribute to the sector's success. With ongoing assistance, Bangladesh's start-up economy is positioned to develop and prosper.

Investment trends:

Venture capital investment in Bangladeshi start-ups is also increasing significantly, with more than $400 million invested by 2022. This is a considerable increase above the $200 million invested in 2021. Local venture capital firms are the most active investors in the Bangladeshi start-up ecosystem, followed by foreign venture capital firms and angel investors. The expanding number of start-ups, the favorable government policy environment, and the increased potential for start-ups to earn profits are driving the growth in investment.

B. Regulatory Environment

Start-ups in Bangladesh are subject to a number of regulatory requirements, including:

- Registration with the Registrar of Joint Stock Companies and Firms (RJSC): This is the initial step toward establishing a business in Bangladesh. The RJSC is in charge of registering businesses and ensuring that they follow all applicable legislation.

- Obtaining a trade license from the local government: This is essential for any business with a physical location. After evaluating the business premises and confirming that it satisfies the applicable safety and health requirements, the local government will issue a trade license.

- Registering with the National Board of Revenue (NBR) for tax purposes: This is essential for any business in Bangladesh that earns revenue. The NBR will provide the firm a tax identification number (TIN) and collect taxes on its earnings.

The regulatory environment for start-ups in Bangladesh is still evolving, and there are a number of challenges that start-ups face, such as:

- The regulatory requirements' complexity: The regulatory requirements for start-ups in Bangladesh are complicated and difficult to grasp. This might make it difficult for new businesses to comply with the rules and avoid penalties.

- A lack of regulatory clarity and consistency: Regulations for new businesses in Bangladesh are not always clear and uniform. This makes it difficult for start-ups to understand what is expected of them and can lead to disagreements with authorities.

- The high cost of conformity: Compliance with rules for new businesses in Bangladesh is costly. This can make it difficult for new businesses to afford to comply with rules, putting them at a competitive disadvantage.

Part II: Accounting Challenges Faced by Start-ups

A. Limited Resources

Because start-ups frequently have limited resources, it can be difficult to keep correct accounting records and comply with regulatory standards. This is especially true in nations such as Bangladesh, where the cost of conducting business is high and financial resources are few.

Accounting capabilities might be hampered by a lack of resources in a variety of ways. Start-ups, for example, may not have the funds to engage a full-time accountant, or they may lack the time to keep up with the paperwork necessary to preserve proper records. This might result in accounting mistakes, which can have major ramifications for the firm.

B. Inadequate Knowledge

Another issue that new businesses encounter is a lack of accounting competence. Many startup owners lack an accounting experience and may be unaware of the need of maintaining correct financial records. This might lead to accounting errors, which can have major ramifications for the organization.

There are several reasons why start-ups frequently lack accounting skills. To begin with, many startup owners are technical professionals who are more concerned with developing their goods or services than with managing their funds. Second, because start-ups sometimes have little resources, they may be unable to afford to engage a trained accountant. Third, start-up accounting rules can be complicated, making it difficult for founders to grasp them.

According to a research conducted by the Institute of Chartered Accountants of Bangladesh, just 10% of start-ups in Bangladesh have a full-time accountant. According to the report, 60% of new businesses do not keep reliable financial records.

C. Compliance and Regulatory Challenges

Startups must also deal with a variety of compliance and regulatory issues. These difficulties can be complex and time-consuming to mitigate, adding to the financial burden of incorporating and running start-up businesses.

Given below are the specific compliance requirements for Bangladeshi start-ups:

- registering with the Registrar of Joint Stock Companies and Firms (RJSC)
- obtaining a local government trade license
- registering with the National Board of Revenue (NBR) for tax reasons
- adhering to labor laws
- adhering to environmental standards

Also shared below are the scenario of costs incurred for conformity and those that arise from non-compliance. Compliance costs may be a considerable burden for start-ups, especially those that are just getting started. For example, registering with the RJSC costs 10,000 taka, and acquiring a trading license costs 5,000 taka. Furthermore, start-ups may be required to pay income taxes, which can be a major hardship.

Noncompliance with the law can have major ramifications for new businesses. Startups that do not register with the RJSC, for example, may face fines or even closure. Employees may take legal action against startups that do not follow labor regulations. This is also applicable for start-ups that do not adhere to environmental rules.

Part III: Overcoming the Challenges

A. Leveraging Technology

For start-ups facing accounting issues, technology is a valuable tool. Accounting software can be used to automate numerous accounting operations, including data input, invoicing, and reporting. This may save new businesses time and money while also ensuring that their financial records are correct.

Accounting software programs are numerous, and the optimal one for a new business will rely on its unique demands and budget. QuickBooks, Xero, and Wave are some popular accounting software applications for new businesses to integrate in their operations

- Case studies of Bangladeshi start-ups Pathao successfully using technology for accounting:

- **Pathao:**

  Pathao is a Bangladeshi ride-hailing startup that manages its money via accounting software. Pathao has used the to keep track of its costs and income, as well as to guarantee that it is in compliance with the law. Pathao struggled to keep track of its finances before implementing accounting software. The company's financial records were chaotic and inaccurate, making it impossible to maintain compliance with law. Pathao was able to enhance its financial management after installing accounting software. The program assisted the firm in properly tracking its costs and income, as well as in remaining compliant with law. Pathao's firm has grown thanks to improved financial management.

- **KriptoKhela:**

  KriptoKhela is a Bangladeshi cryptocurrency exchange that tracks its customers' transactions using accounting software. KriptoKhela was able to comply with legislation and avoid fraud thanks to the software. Before using accounting software, KriptoKhela struggled to keep track of its clients' transactions. The firm was concerned that it was not complying with bitcoin exchange laws, and it was also concerned about dangers of fraud. KriptoKhela was able to increase its regulatory compliance after introducing accounting software. The software assisted the organization in precisely tracking its clients' transactions and in identifying possible incidents of fraud. KriptoKhela has gained more clients as a result of enhanced regulatory compliance. The firm has also been successful in preventing fraud.

- **ShopUp:**

  ShopUp is a Bangladeshi e-commerce platform that manages its inventory and fund with accounting software. ShopUp has improved their inventory management and made better financial decisions thanks to the software. ShopUp struggled to keep track of their inventory before using accounting software. Because it overstocked certain commodities and understocked others, the corporation was losing money. ShopUp was able to enhance their inventory management after introducing accounting software. Software assisted the organization in more accurately tracking inventory levels and identifying inventory that were not selling well. ShopUp has saved money thanks to better inventory management.

- **Foodpanda:**

  Foodpanda is a Bangladeshi meal delivery business that tracks orders and payments with accounting software. Foodpanda has improved customer service and reduced fraud with implementation of the software. Foodpanda struggled to keep track of its orders and payments prior to implementing accounting software. Customers were complaining about faulty purchases and untraced money. Foodpanda was able to increase their customer service after adding accounting software. The software to precisely track orders and payments, as well as identifying incidences of fraud. Foodpanda's better customer service has aided in client retention. The organization has also been able to eliminate fraud, which has resulted in cost savings.

- **Mechanic Hub:**

  Mechanic Hub is a Bangladeshi online vehicle repair marketplace. Accounting software is used by the organization for tracking bookings and payments. The software has assisted Mechanic Hub in increasing operating efficiency and lowering expenses. The firm was losing money because it was unable to effectively manage its costs. Mechanic Hub was able to increase their operating efficiency by introducing accounting software. The program assisted the organization in more precisely tracking bookings and payments, as well as identifying cost-cutting opportunities. The increased operational efficiency has aided Mechanic Hub's company growth.

Part IV: Overcoming the Challenges

- Brief profile: Shohoz is a transportation and logistics firm based in Bangladesh that offers a variety of services such as ride-hailing, bus booking, and parcel delivery. Maliha M. Quadir founded the firm in 2013. Shohoz is based in Dhaka, Bangladesh, and employs approximately 1,000 people.

- Accounting challenges faced: In its early days, Shohoz experienced a variety of accounting and financial management issues. These difficulties included:

i. Lack of financial expertise: Because the company's founders had no accounting training, they were unfamiliar with the best methods for handling their funds.

ii. Limited resources: Shohoz was a small start-up with limited resources, thus it could not afford to engage a full-time accountant.

iii. Complex regulations: Shohoz had to comply with a multitude of accounting and taxation requirements in Bangladesh, which has a

complicated regulatory environment for enterprises.

iv. Cash flow challenges: Shohoz was fast expanding and struggled to control its cash flow.

v. Fraud: Shohoz was concerned about the possibility of fraud because it was dealing with big sums of money.

- Solutions implemented: Shohoz used a variety of strategies to address its accounting issues. Among these solutions were:

i. Hiring an accountant: Shohoz engaged an accountant to assist with financial reporting and compliance. The accountant assisted the firm in developing financial controls and processes as well as establishing a good accounting system.

ii. Using accounting software: Shohoz adopted accounting software to assist the firm better manage its finances. The software assisted the organization in automating a variety of operations, including data input and billing.

iii. Obtaining government aid: Shohoz benefited from government initiatives that provided accounting and financial management training and assistance to start-ups. The firm attended accounting and taxation training and seminars, as well as one-on-one meetings with government professionals.

iv. Investment in training: Shohoz invested in training for its employees on accounting and financial management. The company also created a culture of financial accountability, and it encouraged employees to ask questions about financial matters.

v. Implementing fraud prevention measures: Shohoz implemented a number of fraud prevention measures, such as requiring employees to take vacations and rotating responsibilities. The company also used a fraud detection software to monitor its transactions.

- Results: Shohoz's solutions have assisted the organization in overcoming its accounting issues. The firm can now preserve accurate and legally acceptable financial records. Shohoz has also been able to make better financial decisions, allowing the firm to thrive.

- Financial metrics: Shohoz's financial indicators have improved significantly since applying remedies to its accounting difficulties. For example, the company's sales has grown by 200%, and its profit margin has grown by 15%. Investors have also contributed $10 million to the company's success.

- Compliance metrics: Shohoz has also enhanced its regulatory compliance. The government has not imposed any fines or penalties on the corporation for noncompliance.

Shohoz's success demonstrates that start-ups can overcome accounting and financial management hurdles. Start-ups may enhance their financial reporting, compliance, and decision-making by implementing applicable solutions. They can also boost both consumer and staff satisfaction.

Part V: Overcoming the Challenges

Accounting services outsourced to a third-party supplier might be a suitable alternative for start-ups that lack in-house experience or resources to handle their finances. Outsourcing may free up time and resources for start-ups, allowing them to focus on their primary business operations. There are several accounting outsourcing companies to choose from, and the ideal one for a startup will be determined by its individual demands and budget.

Advantages and Disadvantages of outsourcing accounting functions are given below:

Advantages	Disadvantages
Save time and money	Expensive
Access to specialized expertise	Loss of control over financial data
Compliance with regulations	Difficult to manage

Part VI: Government Initiatives and Grants

The government of Bangladesh offers a variety of initiatives and subsidies to assist new businesses with their accounting. These efforts can give financial aid, training, and tools to help start-ups solve accounting issues.

Overview of governmental support for start-ups:

- Financing Options: Bangladesh Bank's Role

  Financing is a vital component of start-up success. Recognizing this, the Bangladesh Bank has devised a number of loan and grant programs. The Startup Bangladesh Loan Scheme and the Startup Bangladesh Grant Scheme are notable examples.

i. Startup Bangladesh Loan Scheme

   This financing program is intended to give financial assistance to start-ups at various phases of their lifecycle, from conception through scaling. This program seeks to close the financial gap that frequently stifles the growth of start-ups in Bangladesh.

i. Startup Bangladesh Grant Scheme

   While loans must be repaid, grants are non-repayable.

Bangladesh Bank's award program is focused towards extremely early-stage start-ups with strong potential but less demonstrated track records.

- Skill Development: Ministry of Industry Initiatives

Skills and knowledge, in addition to financial backing, are critical for start-up success. The Ministry of Industry tackles this through its Startup Bangladesh Training Program, which offers thorough training in company development, market research, and other essential skills. The goal is to strengthen the capacities of aspiring entrepreneurs so that they may more successfully traverse the tough business world.

- Resources and Support: Bangladesh Investment Development Authority (BIDA)

The provision of resources is the third pillar of the government's start-up support method. Through its Startup Bangladesh website and hotline, the Bangladesh Investment Development Authority (BIDA) provides a wealth of information for start-ups. These services give start-ups with the knowledge, coaching, and problem solutions they require.

Synthesizing Insights for Future Directions

Navigating the start-up ecosystem in Bangladesh brings a unique set of problems and possibilities. The economic setting, as reflected in statistics data and investment patterns, depicts an atmosphere conducive to innovation and new endeavors (Startup Bangladesh, 2022). However, this promise is tempered by a difficult regulatory environment that puts complicated restrictions on startups (Rahman & Ahmed, 2021). Accounting, as we have discussed extensively, is one of the most severe challenges that these businesses confront, with concerns relating to limited resources, insufficient experience, compliance, and regulatory constraints (Hossain, 2020).

One immediate cause of worry is a lack of resources (Ahmed & Rahman, 2021). Financial constraints may mandate a thrifty approach to operations, altering resource allocation for accounting duties. This problem is aggravated by the overall lack of understanding of accounting processes (Kabir, 2019). Due to a lack of experience, even simple financial activities, much alone sophisticated compliance difficulties, are difficult to manage. Poor grasp of accounting processes, according to Hassan and Islam (2020), is a primary cause of financial mismanagement in Bangladeshi start-ups.

Part III of the study turned its emphasis to identifying practical answers to these difficulties. Technology looks to represent a ray of hope (Islam, Chowdhury, & Ahmed, 2022). Case studies of Bangladeshi start-ups such as Pathao, KriptoKhela, ShopUp, Foodpanda, and Mechanic Hub presented interesting insights into how technology may assist in overcoming some of the accounting constraints (TechCrunch, 2021). Pathao, a ride-sharing business, used cloud-based accounting software to effectively handle transactions and monitor cash flow.

Shohoz, on the other hand, is a complete case study on negotiating accounting stumbling blocks. They outsourced a portion of their accounting work to professional businesses, demonstrating that expert counseling and outsourcing may be a feasible option for start-ups struggling with in-house accounting (Shohoz, 2022).

However, without recognizing the importance of governmental endeavors, these policies would be inadequate (Government of Bangladesh, 2022). Grants, subsidies, and customized programs can provide a safety net for struggling enterprises. However, more has to be done to communicate information about such possibilities, allowing start-ups to fully capitalize on them.

As we seek to distill the essence of this conversation, it is critical to emphasize concrete insights for Bangladeshi start-ups. A regular accounting routine can serve as the first line of defense against financial mismanagement by fostering a culture of financial discipline (Smith, 2020). Accurate record-keeping may aid in the prevention of problems, while reconciling accounts can offer an extra degree of certainty. Encrypting and backing up financial data are non-negotiable actions that must be included into accounting operations to defend against unauthorized access and data loss (Cybersecurity Guidelines, 2021).

These comments return us to our original concerns, presenting a road map replete with options ranging from technical interventions and outsourcing to government assistance. Finally, it is evident that solving accounting issues necessitates a multi-pronged strategy. By implementing these advice, Bangladeshi start-ups can not only enhance their accounting and financial management processes, but also strengthen the financial and operational basis required for long-term success.

References

- ACE Advisory. (n.d.). ACE Advisory - BPO, Accounting, Payroll & Tax Firm in Bangladesh. Retrieved from [ACE Advisory]
- Ahmed, S., & Rahman, A. (2021). Start-ups in Bangladesh: An overview of financial constraints. Journal of Business Research, 33(2), 123-137.
- Chowdhury, A., Islam, N., & Ahmed, R. (2022). Leveraging Technology for Business Efficiency: A Bangladesh Perspective. Journal of Technology Management, 20(3), 214-230.
- Cybersecurity Guidelines. (2021). National Cyber Security Policy, 2(1), 45-52.
- F6S. (n.d.). 10 Top Accounting Startups and Companies in Bangladesh. Retrieved from [F6S]
- Government of Bangladesh. (2022). Support Initiatives for Start-ups. Bangladesh Small and Medium Enterprise Development, 11-17.
- Hassan, M., & Islam, S. (2020). Accounting in Small Businesses: A Bangladesh Perspective. Journal of Business Ethics, 12(4), 342-356.
- Hossain, M., & Akter, S. (2021). Accounting for Start-ups in Bangladesh: Challenges and Strategies. Journal of Business and Economics, 12(3), 45-60.

- Hossain, M., & Akter, S. (2023). The state of start-ups in Bangladesh: A review of the literature. International Journal of Entrepreneurship and Small Business, 36(1), 1-18. doi:10.1108/IJEISB-08-2022-0489
- Hossain, T. (2020). Challenges in Start-up Financing in Bangladesh. Journal of Asian Business, 24(1), 21-35.
- Kabir, A. (2019). Regulatory Environment for Start-ups in Bangladesh. Journal of Business Law, 19(2), 33-48.
- Khan, M. (2018). The financial landscape in Bangladesh: Challenges and opportunities. South Asian Journal of Business and Management Cases, 7(1), 23-30.
- Khan, M. (2018). The role of accounting in the success of Bangladeshi start-ups. Journal of Entrepreneurship and Innovation in Emerging Economies, 4(2), 120-135.
- Khan, M., & Islam, M. R. (2022). The regulatory environment for start-ups in Bangladesh: Challenges and opportunities. Journal of Business and Entrepreneurship, 34(1), 1-12. doi:10.1108/JBE-09-2021-0188
- LightCastle Partners. (2023). Bangladesh Startup Investment Report 2022. Retrieved from [LightCastle Partners]
- Pathao Annual Report. (2021). Pathao Financial Statements and Operational Insights, 14-20.
- Rahman, A., & Ahmed, F. (2020). Start-up challenges in Bangladesh: A regulatory perspective. Bangladesh Journal of Business Studies, 21(2), 88-101.
- Rahman, M., & Ahmed, S. (2020). Financial management challenges for start-ups in Bangladesh. South Asian Journal of Business Studies, 9(1), 25-40.
- Shohoz. (2022). Shohoz Annual Report. Shohoz Corporate Documentation, 32-37.
- Smith, J. (2019). The importance of accounting for start-ups. Entrepreneurship Theory and Practice, 43(6), 1055-1073.
- Smith, J. (2020). Accounting best practices for Start-ups. Financial Management Review, 18(2), 97-104.
- Startup Bangladesh. (2022). Bangladesh Start-up Ecosystem Report, 7-15.
- TechCrunch. (2021). Bangladesh's Booming Start-up Ecosystem. TechCrunch Special Report, 16-23.
- World Bank. (2023). Doing business 2023: Measuring regulations for businesses. Washington, DC: World Bank.

Bridging the Gap
A Comparative Study of Reinsurance Practices in Bangladesh & Global Markets

Abdul Hamid FCA

The Author is a Fellow Member of the Institute of Chartered Accountants of Bangladesh (ICAB)

Re-Insurance is a process by which an insurer transfers some of its big risk to another insurance company in exchange for a premium. In other words, Reinsurance is the insurance of the risk assumed by the insurer.

Key Aspects of Reinsurance Activities

- Risk Transfer: Reinsurance involves the transfer of risk from primary insurers to reinsurance companies. Primary insurers cede (transfer) a portion of their risks to reinsurers in exchange for a premium.

- Reinsurance Contracts: Reinsurance activities are governed by contractual agreements between the primary insurer and the reinsurer. These contracts outline the terms, conditions, and scope of the reinsurance coverage, including the type of risks covered, policy limits, and premium calculations.

- Treaty and Facultative Reinsurance: Treaty reinsurance is an agreement where the reinsurer automatically accepts risks from the primary insurer based on predetermined terms and conditions. Facultative reinsurance, on the other hand, is transaction-specific and covers individual risks that fall outside the scope of treaty arrangements.

- Risk Assessment and Underwriting: Reinsurers conduct risk assessment and underwriting processes to evaluate the risks being ceded by primary insurers. They analyze factors such as policy terms, claims history, geographic location, and exposure to determine the appropriate reinsurance coverage and pricing.

- Catastrophe Risk Management: Reinsurance plays a critical role in managing catastrophe risks. Reinsurers provide coverage for large-scale and catastrophic events such as natural disasters, allowing primary insurers to mitigate their exposure to significant losses.

- Claims Settlement: Reinsurance companies participate in the claims settlement process. When a claim occurs, primary insurers may seek reimbursement or indemnification from the reinsurer based on the terms of the reinsurance contract.

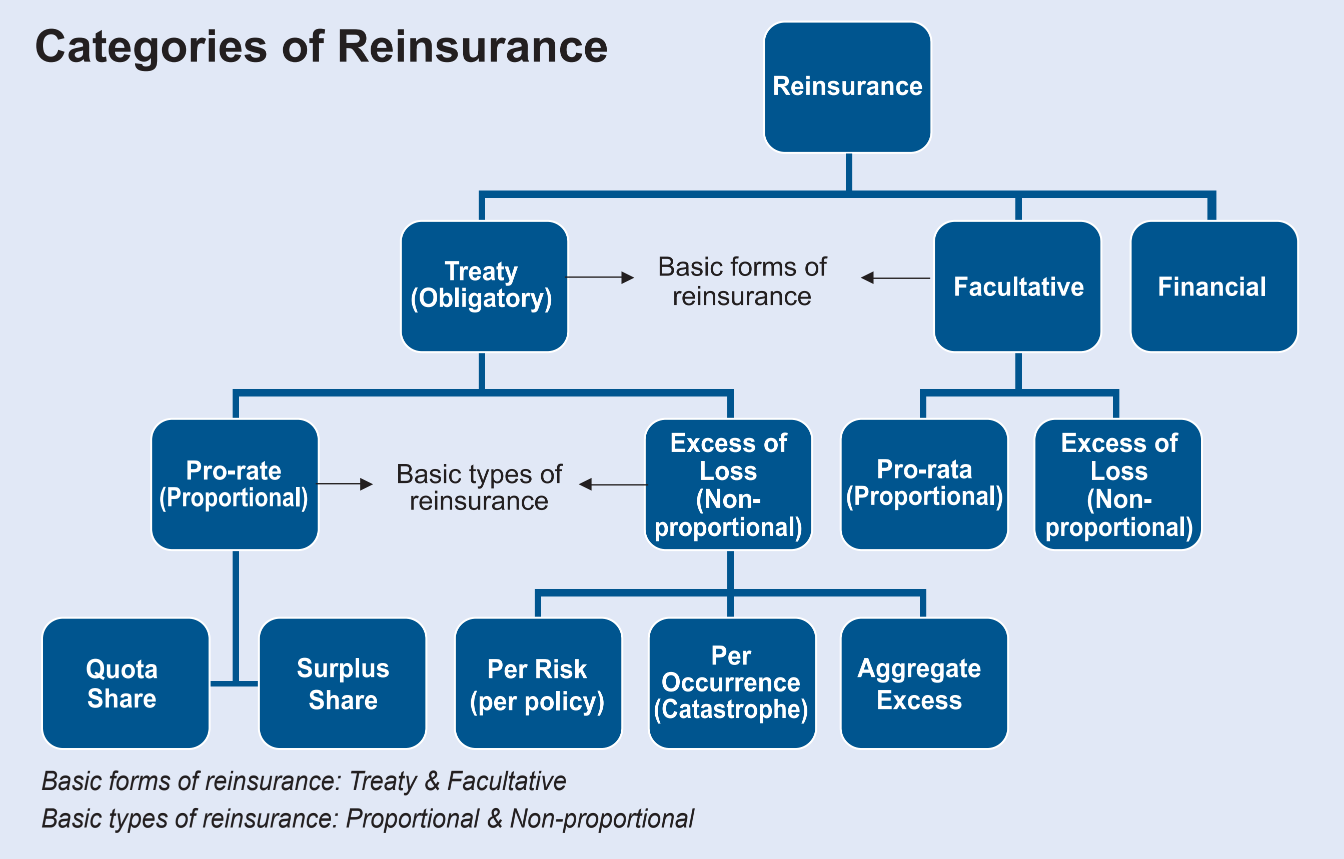
- Solvency and Capital Requirements: Reinsurers are subject to solvency regulations and capital requirements set by regulatory authorities. These requirements ensure that reinsurers maintain sufficient financial resources to honor their obligations to primary insurers and policyholders.

- Risk Modeling and Analysis: Reinsurers employ sophisticated risk modeling and analysis techniques to assess and manage risks effectively. They utilize historical data, statistical models, and catastrophe modeling tools to evaluate potential losses and determine appropriate reinsurance structures.

- Global Reinsurance Market: Reinsurance activities are conducted globally, with major markets located in regions such as Europe, North America, South America, Africa and Asia. Reinsurers operate across borders, providing coverage and risk management services on an international scale.

Agreement which may be considered as reinsurance treaties developed along with insurance contracts in the 14th centuries in England & France. Re-Insurance was explicitly authorized in a law passed Antwerp, Belgium in 1609 & specific legislation related to reinsurance was also passed in Venice, Italy in 1705, Hamburg, Germany in 1731, Bilbao, Spain in 1738, Russia & Germany in 1794. The cologne Reinsurance Company is the oldest professional reinsurance company was founded in 1846. SWISS Reinsurance company was started business in 1863. The Munich Reinsurance company was founded in 1880. Lloyd's Re, Hannover Rueck SE, Canada Re, China Reinsurance are the largest reinsurance companies in the world.

Different Forms of Re-Insurance:



Treaty Reinsurance

Treaty reinsurance is a type of reinsurance arrangement where the primary insurer (ceding company) transfers a defined portion of its risks and premiums to a reinsurer (assuming company) through a contractual agreement called a treaty. The treaty specifies the terms and conditions under which the reinsurer will assume the risks. Treaty reinsurance is a long-term arrangement that often covers multiple policies or a specific line of business. The terms and conditions of the treaty, including the premium sharing and claims handling procedures, are negotiated between the ceding company and the reinsurer. In treaty reinsurance, the ceding company transfers a portfolio of risks to the reinsurer, typically on an ongoing basis. The reinsurer agrees to accept these risks and provide reimbursement to the ceding company for claims that exceed certain predetermined thresholds or limits. This arrangement helps the ceding company reduce its exposure to large losses and stabilize its underwriting results. Simultaneously a reinsurer may transfers risks it has reinsured to another reinsurer through retrocession. Basic types of treaty (obligatory) reinsurance as follows:

Pro-rata (Proportional)

Pro-rata or proportional reinsurance is a type of reinsurance that involves sharing a percentage of the original premium and losses between the primary insurer and the reinsurer. It is also known as pro rata reinsurance or proportional reinsurance. The percentage of premium and losses that the reinsurer takes on is determined by the reinsurance contract, which can be either a quota share or a surplus share agreement.

Quota Share Treaty

It is a proportional treaty more suitable in the formative stage of the Company to provide maximum reinsurance protection giving strength and stability amidst rapid growth. Quota share reinsurance allows an insurer to retain some risk and premium while sharing the rest with an insurer up to a predetermined maximum coverage.

Surplus Treaty

It is a proportional treaty which is obligatory in nature. The ceding Company retains on the basis of its financial strength a line of limit on Sum Insured or PML basis. Surplus reinsurance is a reinsurance treaty or automatic reinsurance that allows the insurance company to transfer or cede certain amounts of every risk that exceeds the retention limit to the insurer without needing the latter's approval for every policy underwritten and reinsured.

Excess of Loss (Non-Proportional)

Excess of loss or non-proportional reinsurance is a type of reinsurance where the reinsurer pays the ceding company for losses that exceed a specified limit, up to a maximum limit. The reinsurance premium is calculated independently of the premium charged to the insured, and the reinsurance is frequently placed in layers. The ceding insurer agrees to accept all losses up to a predetermined level, and the reinsurer agrees to reimburse the ceding insurer for losses above the predetermined level and up to the reimbursement limit provided for in the contract. Excess of loss or non-proportional reinsurance allows the ceding insurer to protect itself from large or catastrophic losses.

Facultative Reinsurance

Facultative means 'optional'. In this method of reinsurance 'option' to accept or reject a risk is open to reinsurers. Similarly option to make reinsurance cessions or not to make, is open to the reinsured. Facultative reinsurance is for single current risk to be reinsured after exhausting net account and treaty account.

When reinsurance was needed for amounts of sum insured beyond net retained amounts on some more hazardous risks, facultative method was suitable. But the need for reinsurance becomes frequently and on many risks for higher sums insured. It was not only a need for protection-it was more a need for creation of capacity. Therefore, reinsurance treaty method replaced facultative reinsurance method.

Even after a popularity of reinsurance treaty method, facultative is not obsolete. It is very much in use internationally on peaks of risks with huge liability after exhausting automatic capacity of reinsurance treaties especially in engineering risks and industrial risk, facultative reinsurance is required at top of a treaty programmer.

Reinsurance Scenario Worldwide

The reinsurance business is important in a country for several reasons. First, reinsurance helps insurance companies manage their risks effectively & efficiently. Insurance companies transfer a portion of their risks to reinsurers, who bear the financial burden in the event of large or catastrophic losses. This enables insurance companies to underwrite policies with higher coverage limits and offer a wider range of products to their customers, knowing that they have the financial support of reinsurers.

Reinsurance Brokers

Reinsurance brokers play a vital role in facilitating the reinsurance process. They act as intermediaries between insurance companies and reinsurers, providing expert advice and guidance. One advantage of reinsurance brokers is market access. They have extensive knowledge of the reinsurance market and maintain relationships with multiple reinsurers. Brokers can help insurance company's access reinsurance capacity that may be otherwise unavailable or difficult to obtain. They connect insurers with reinsurers that specialize in specific risks or have expertise in certain geographical areas, ensuring that insurers can find the most suitable reinsurance coverage for their needs. Brokers leverage this expertise to negotiate favorable reinsurance contracts on behalf of insurance companies.

Worldwide Reinsurance Market Analysis Report 2023-2027

The reinsurance market is estimated to grow at a CAGR of 10.26% between 2023 and 2027. The market size is forecasted to increase by USD 358.03 billion. The growth of the market depends on several factors, including the increasing awareness of insurance products in emerging markets, the increase in demand for various insurance plans, and the increasing geriatric population.

This reinsurance market report extensively covers market segmentation by product (non-life reinsurance and life reinsurance), type (facultative reinsurance and treaty reinsurance), and geography (Europe, APAC, North America, Middle East and Africa, and South America). It also includes an in-depth analysis of drivers, trends, and challenges. Furthermore, the report includes historic market data from 2017 to 2022.

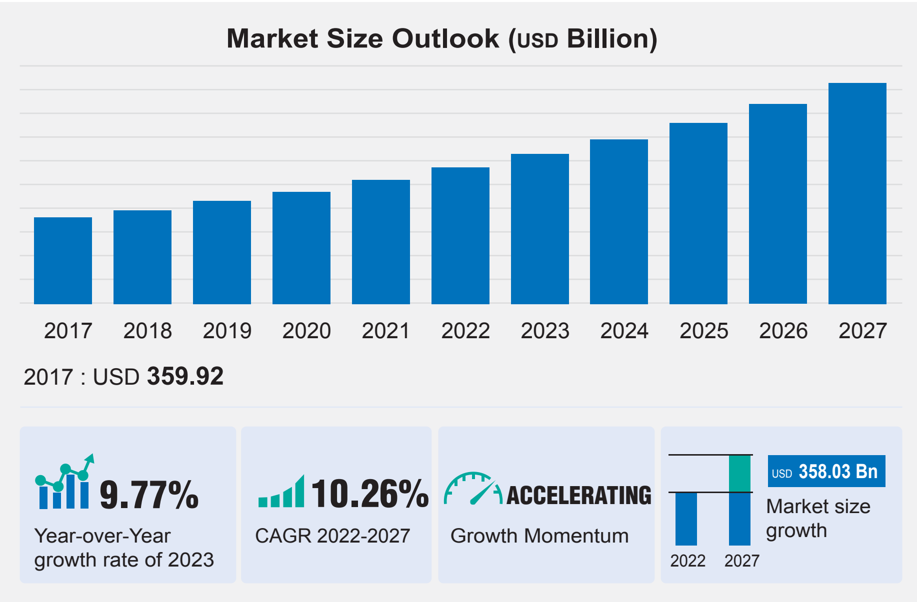
Awareness about the importance of insurance has increased in recent years. For instance, countries such as Brazil, Argentina, India, and Nauru (is an island of Australia) are developing at a fast pace, and people there are becoming aware of the importance of keeping their lives and properties insured. This is increasing the sale of insurance in such places. Thus, the growing insurance market in these regions is driving the reinsurance market during the forecast period.

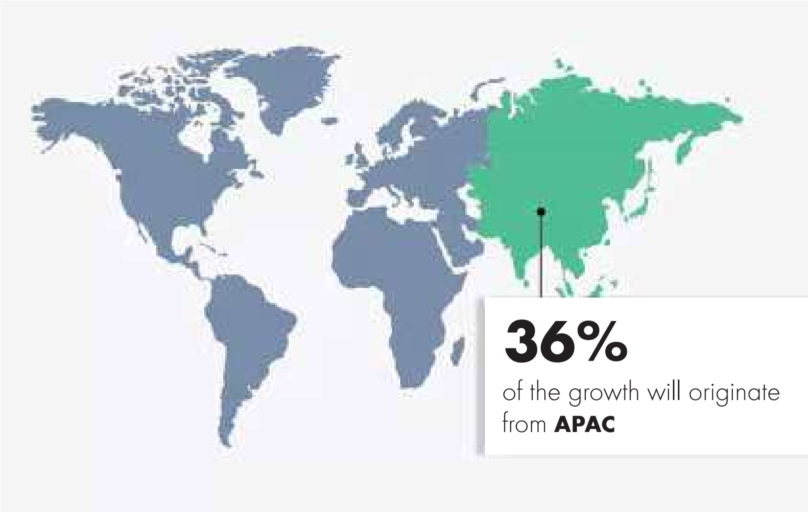
The number of reinsurance brokers and reinsurance companies varies significantly from country to country. India, Singapore, China, UAE, UK, Germany, and America have the most reinsurance brokers and reinsurance companies, while others have comparatively lesser. Bangladesh has only a state owned insurance & reinsurance company along with three liaison office of foreign reinsurance brokers.

Key Regions for the Reinsurance Market

APAC (Asia-Pacific) is estimated to contribute 36% to the growth of the global market during the forecast period. Technavio's analysts have elaborately explained the regional trends and drivers that shape the market during the forecast period.

Europe is another key region that contributes significantly to the global market. The reinsurance market in Europe is expected to grow gradually during the forecast period. Several leading players have made profits over the last decade despite various challenges. The growth of the life reinsurance segment, increasing awareness of reinsurance in emerging





economies, and changing socio-demographic trends across the region is driving the growth of the market in the region. Other factors contributing to the growth of the regional market include the presence of key vendors and the high revenues generated by these vendors.

- **India:** India has a well-established reinsurance market. The Insurance Regulatory and Development Authority of India (IRDAI) regulate the sector. There are reinsurance companies operating in India, including the state-owned General Insurance Corporation (GIC Re) and private players like ICICI Lombard, HDFC ERGO, and others. The number of reinsurance brokers in India is also significant, with both local and international players.

- **Singapore:** Singapore is a regional hub for insurance and reinsurance activities. It has a developed reinsurance market and hosts numerous global reinsurance companies, including Swiss Re, Munich Re, SCOR, and others. There are also reinsurance brokers operating in Singapore, facilitating the placement of reinsurance business. 127 licensed insurers and reinsurers in Singapore.

- **China:** China has a rapidly growing insurance and reinsurance market. The China Reinsurance Group is the dominant state-owned reinsurer in China, and there are also several privately-owned reinsurance companies. The number of reinsurance brokers in China may vary.

- **UAE:** The United Arab Emirates has a relatively smaller reinsurance market compared to some other countries. Dubai International Financial Centre (DIFC) is a prominent financial hub hosting reinsurance companies. Reinsurance brokers also operate within the UAE, facilitating the placement of reinsurance business.

- **UK:** The United Kingdom is one of the leading global reinsurance markets. Lloyd's of London, a renowned insurance and reinsurance marketplace, operates in the UK. Other reinsurance companies and brokers are also based in the UK.

- **Nepal:** Currently has only two domestic reinsurance companies, Nepal Reinsurance Company and Himalayan Reinsurance Company. Nepal is becoming a hotspot of climate- 6 related hazards with the rapidly changing climate. The resultant Nat CAT claims are becoming a major concern for the country's (re)insurance market.

- **Germany:** The reinsurance market in Germany is the second largest in Europe, with premiums of over $50 billion. The market is expected to grow at a slower pace than other markets, but it is still expected to grow by 3% in 2023.

- **America:** The reinsurance market in America is the largest in the world, with premiums of over $200 billion. The market is expected to grow at a slower pace than other markets, but it is still expected to grow by 4% in 2023.

- **Africa:** The reinsurance market in Africa is still relatively small, but it is growing rapidly. Premiums are expected to reach $10 billion by 2025. This growth is being driven by Africa's growing economy and its increasing demand for insurance.

Future Expansion of Reinsurance Market

The global reinsurance market is anticipated to expand between 2020 and 2027 at a compound yearly growth rate of 3.4%, according to Market Research Future's most recent study. The market size, which is predicted to rise from $215.5 billion in 2018 to $262 billion by 2027, is also highlighted in the report. The rising number of natural disasters, including floods, hurricanes, earthquakes, and wildfires, which are causing larger losses for insurers, is to blame for the expansion of this sector.

The leading companies in the reinsurance market include General Re, Munich Re, Swiss Re, Hannover Re, Score, and Berkshire Hathaway's Swiss Re. When it comes to gross premiums written, Munich Re is the biggest reinsurer in the world. The business has a comprehensive business portfolio that encompassing life and health, property and casualty, aviation, and space, and it operates in every region globally. The second-largest reinsurer, Swiss Re, has operations in over 25 nations and serves clients globally in the insurance industry, corporate world, and governmental sector.

Reinsurance losses have increased in recent years, mostly as a result of an uptick in natural disasters. According to a report by the Swiss Re Institute, insured losses from natural and man-made disasters totaled $82 billion in 2020, which is the fourth-highest amount on record. With insured losses of $47 billion, the survey indicated that Asia was the region most frequently affected by natural disasters. European insurers faced losses of $2 billion, whereas the total insured losses in the Americas were $31 billion.

Re-Insurance Practice in Bangladesh

SBC (Sadharan Bima Corporation) is the only state owned insurance & reinsurance company in Bangladesh, accepting reinsurance against policies of private sector insurance. Branch office of the 3 reinsurance brokers are operating their activities in our country only.

Since the economy of Bangladesh is growing fast & non-life insurance sector is now receiving large policies; the claim of which cannot be paid by any local insurance alone. As a result, companies are being interested to reinsurance with foreign insurer. A trend of which has been increasing for the past few years.

As per provisions of section 17(2) of Insurance Corporation Act-2019

i. Every insurer registered & carrying on insurance business in Bangladesh shall reinsurance on generally acceptable terms & conditions the additional portion of his insurance after retaining its own portion.

ii. In case of non-life insurance business, 50% (fifty percent) of re-insurable portion shall have to be ceded to SBC & the rest 50% (fifty percent) can be ceded to the SBC or any other insurer situated inside or outside of Bangladesh.

Following non-life insurance companies in Bangladesh have the reinsurance treaty in overseas market.

1. Sadharan Bima Corporation
2. Green Delta Insurance Company Limited
3. Reliance Insurance Company Limited
4. Pragati Insurance Company Limited
5. United Insurance Company Limited
6. Eastland Insurance Company Limited
7. Phoenix Insurance Company Limited
8. Bangladesh General Insurance Company Limited
9. Pioneer Insurance Company Limited
10. Prime Insurance Company Limited
11. Takaful Insurance Company Limited

A specimen copy of the surplus reinsurance treaty is given below:

Expired Treaty Terms 2022/2023 (SBC)	Existing Treaty Terms 2023/2024 (Overseas)
Fire Surplus Treaty	**Fire Surplus Treaty**
Retention: Tk. 2,50,00,000.00 Line Limit: 40 Lines Limit : Tk. 100,00,00,000.00	Retention: Tk. 2,50,00,000.00 Line Limit: 40 Lines Limit: Tk. 100,00,00,000.00
RI Commission	RI Commission
Section A & B : 27.50% (Provisional) Profit Commission: 15.00% Cash Loss: Tk. 1,25,00,000 Claim Co -operation Clause Applicable above Tk.5,00,000.00 Loss Participation Clause Sliding Scale applicable from 20% to 35% for loss ratio 20% and 50%	Section A & B : 40.00% Profit Commission: 22.50% Cash Loss: Tk. 1,25,00,000 Claim Co -operation Clause Applicable Exceeding Tk.1.25 Cr Loss Participation clause not applicable No Sliding Scale applicable
Fire Risk Cum Catastrophe X/L cover	**Fire Risk Cum Catastrophe X/L cover**
Maximum Amount protected by the reinsurers under Treaty: 1st Layer Tk. 20,000,000 excess of Tk. 5,000,000 2nd Layer Tk. 25,000,000 excess of Tk.25,000,000	Maximum Amount protected by the reinsurers under Treaty: 1st Layer Tk. 20,000,000 excess of Tk. 5,000,000 2nd Layer 25,000,000 excess of 25,000,000
Marine Cargo Surplus Treaty	Marin e Cargo Surplus Treaty
Maximum Amount protected by the reinsurers under Treaty per bottom/location: Marine Cargo Surplus Treaty: 1. Retention: Tk. 10,000,000 2. Surplus Treaty: Line Limit 40 Lines 3. Limit: Tk. 400,000,000	Maximum Amount protected by the reinsurers under Treaty per bottom/location: Marine Cargo Surplus Treaty: 1. Retention: Tk. 10,000,000 2. Surplus Treaty: Line Limi t 40 Lines 3. Limit: Tk. 400,000,000
RI Commission: 32.50% Profit Commission: 15.00% Claim Co -operation clause applicable for above Tk.5,00,000.00	RI Commission: 42.50% Profit Commission: 22.50% Claim Co -operation clause applicable for above Tk.1,00,00,000.00
Marine Cargo Cat Excess of Loss Treaty	Marine Cargo Cat Excess of Loss Treaty
Maximum Amount protected by the reinsurers under Treaty: 1st Layer Tk.7,500,000 excess of Tk.2,500,000	Maximum Amount protected by the reinsurers under Treaty: 1st Layer Tk.7,500,000 excess of Tk. 2,500,000

Reinsurance treaty terms refer to the specific conditions and clauses outlined in a reinsurance contract between an insurer (also known as the ceding Company) and a reinsurer. These terms dictate the scope, obligations, and limitations of the reinsurance arrangement. Some common reinsurance treaty terms giving below:

i. Treaty Period: This specifies the duration for which the reinsurance agreement is in effect, typically expressed in years. In Bangladesh treaty period 1st April to 30th March.

ii. Capacity: It determines the maximum liability the reinsurer is willing to assume under the treaty.

iii. Premium: The amount of money the ceding company pays to the reinsurer for assuming the risk. It can be a fixed amount or a percentage of the ceding company's total premiums.

iv. Coverage: It defines the types and extent of risks that are covered under the reinsurance treaty. This may include various lines of business, such as property, casualty, health, or life insurance.

v. Retention: The portion of risk that the ceding company retains for its own account before transferring the remainder to the reinsurer.

vi. Limit: The maximum amount the reinsurer is obligated to pay for a claim or a series of claims under the treaty.

vii. Loss Sharing: Specifies how the ceding company and reinsurer will share losses. It can be a fixed percentage or a sliding scale based on predefined terms.

viii. Claims Settlement: Outlines the procedures and timelines for reporting and settling claims between the ceding company and reinsurer.

ix. Reinstatement: Provides conditions for reinstating the coverage if the treaty limit has been exhausted by claims during the treaty period.

x. Termination: Describes the circumstances under which either party can terminate the reinsurance treaty, including notice periods and any penalties or obligations upon termination.

xi. These are just some of the common terms found in reinsurance treaties, and the actual terms may vary based on the minimum last 5(Five) years statistics of the ceding company. If the accumulated result is good, treaty terms will be better otherwise treaty terms will be adverse.

In case of poor or negative result, reinsurer may impose various conditions, such as:

i. Sliding scale of commission on reinsurance: A sliding scale of commission is a ceding commission that varies inversely with the loss/claim ratio under the reinsurance agreement.

ii. Loss participation clause: The essence of this clause is to minimize the loses for the reinsurer & to bring more underwriting discipline to the insurance company due to this claim ,the insurance company may prefer to underwrite risk with lower hazard coverage.

iii. Reduction of Reinsurance Commission

iv. Reinsurer may be offered Quota Share Treaty to Insurer.

Facultative Reinsurance Practice in Bangladesh

Exceeding treaty capacity insurers have to obtain the facultative cover from SBC or Overseas market but as per Insurance Act 2010, an insurance company cannot obtain facultative cover 100% from the overseas market. We have to place 50% of 100% with SBC mandatorily or we may obtain cover 100% from SBC or rest 50% of 100% may obtain from overseas secured market. As per Circular IDRA # Gen-22/2022 dated 13.04.2011, the rate/terms or place the facultative cover to the overseas market, Minimum B+ by AM Best or S & P credit rating is required.

Any insurance company may obtain the special rate/terms from the overseas market if the sum insured exceeded our country limit. For placement of facultative business in foreign market we may go to European Market, Singapore Market, Lloyd's Market, Indian Market, African market. Our Country limit of different class of business are given below:

Class	Country Limit
Fire	TK. 400 crore
Marine Cargo	Tk. 100 crore
Marine Hull	Tk. 30 crore
Engineering:	Tk. 200 crore
CAR/EAR	Tk. 200 crore
MBD	Tk. 20 crore
DOS/EEI	Tk. 10 crore
Miscellaneous	Tk. 20 crore

Sadharan Bima Corporation (SBC), the lone state-owned non-life insurer and also a reinsurer, is limited in its capacity to reinsure properties worth only Tk400 crore. As a result, local insurance companies are forced to seek reinsurance for KPIs, mega-projects, and factories worth more than Tk400 crore, from foreign companies. To keep the reinsurance in place, they must send premiums to overseas reinsurers on a regular basis.

According to market insiders, companies placed reinsurance abroad worth Tk1, 500 crore (around $150 million) in 2022.

Bordereaux: A proportional reinsurance treaty gets automatic reinsurance cessions from a number of risks simultaneously with the inception of risks. Cessions of premium and losses are made to the treaty from these risks. Bordereaux are records of each and every risk's underwriting information about retention and cession. Giving below the Premium Bordereaux & Losses Bordereaux. Then quarterly reinsurance treaty account is prepared and rendered to the reinsurers.

Accounting System of Re-Insurance Transactions:

Reinsurance Treaties mentioned accounting systems presently as follows:

Clean-Cut System of accounting is used for fire/miscellaneous accident business with short-tail elements. According to this system the liability of treaty reinsurers is cut clean at the end of accounting year of the treaty. Unexpired risk liability & outflow loss liability are cut clean by portfolio premium withdrawal from current year and entry of portfolio premium to the next year.

Underwriting year-wise accounting system is used where the long term policies issued during the treaty period run off the liability to their natural expiry. Premium is fully accounted by the end of second year following the underwriting year. Thereafter only outstanding loss liability remains.

Accounts: Treaty slips of proportional treaties have a slip term of accounts which can be on quarterly or yearly basis but in Bangladesh quarterly basis.

In non-proportional treaty slips the term "Accounts" relates to quarterly, half yearly or annual basis of settlements of Minimum and Deposit Premiums (MDP) or Minimum Deposits (mindeps). When actual GNPI is available the premium adjustment accounts are to be prepared.

The International Financial Reporting Standards (IFRS) provide guidelines for the recognition and presentation of reinsurance transactions for both insurers and reinsurers. Here are some key aspects related to reinsurance under IFRS:

1. **Recognition of Reinsurance Contracts:** IFRS 17 Insurance Contracts sets out principles for recognizing reinsurance contracts. It requires

Premium Bordereaux:

Date	Cession No.	Policy No.	Risk covered	Period	TSI	Total Premium	Net Retention	Surplus Sum Insured	Surplus Premium	Fac Sum Insured	Remarks

Losses Bordereaux:

Date	Cession No.	Policy No.	Risk covered	Period	TSI	Total Premium	Net Retention	Surplus Sum Insured	Surplus Premium	Fac Sum Insured	Remarks

insurers to assess whether reinsurance contracts should be accounted for as insurance contracts or as financial instruments, depending on their terms and conditions.

2. **Accounting for Ceded Reinsurance:** Under IFRS, insurers (ceding insurers) recognize reinsurance premiums paid or payable as an expense or a reduction of insurance liabilities, based on the transfer of risk to the reinsurer. The ceding insurer accounts for the reinsurance contract as a separate transaction from the underlying insured event.

3. **Accounting for Assumed Reinsurance:** Reinsurers (assuming insurers) recognize premiums received or receivable for assumed reinsurance contracts as revenue, reflecting the transfer of risk from the ceding insurer. They account for these contracts as separate transactions from the underlying insured event.

4. **Loss Recovery:** IFRS 17 allows insurers to recognize recoveries of losses from reinsurers as a separate component of the insurance contract liability. Insurers recognize the recovery as revenue when they have a reasonable assurance of its receipt.

5. **Discounting and Risk Adjustment:** IFRS 17 requires insurers to apply the principles of discounting and risk adjustment when measuring insurance liabilities, including reinsurance liabilities. These principles reflect the time value of money and the uncertainties associated with insurance contracts.

6. **Disclosures:** IFRS 17 includes extensive disclosure requirements for insurers and reinsurers, aiming to provide users of financial statements with information about insurance and reinsurance activities, including significant judgments and assumptions made in the measurement of insurance liabilities.

It's important to note that IFRS is a comprehensive framework, and the application of its requirements to reinsurance transactions can be complex. Insurance companies and reinsurers typically seek guidance from accounting professionals and consider specific interpretations and industry practices when applying IFRS to their reinsurance accounting and reporting.

STATEMENT OF FIRE SURPLUS RE-INSURANCE TREATY (Sec-A & B) ACCOUNTS

FOR THE QUARTER ENDED ....30TH June 2023 (1ST QTR. '2023)

RE-INSURANCE : SHARE :

		Sub-Total	Debit	Credit
Portfolio Premium : Withdrawal	35%			
Portfolio Losses : Withdrawal	90%			
Original Premium : Consideration Board		-		
	Alteration Bordx:	-		
		-		-
Original Commission @			-	
Original Profit Commission :	on Tk.			
Additional Commission Receivable as Sliding Scale as per (U/W-2022)				
Losses Paid.............				
Balance Payable to Reinsurer				-
Total			**-**	**-**

To sum up, the global reinsurance market is a crucial part of the insurance sector because it enables insurers to transfer some of the financial risk related to catastrophic catastrophes to reinsurers. With more natural disasters occurring frequently and more insurers entering the market, it is anticipated that the industry will grow in size over the next few years. Companies are looking into novel ways to control risks and provide cutting-edge products in response to the rising losses in the reinsurance sector. The application of artificial intelligence and data analytics is one prominent recent breakthrough. Insurance companies may estimate risks by analyzing data from a variety of sources, such as the internet of things (IoT) and social media, using advanced algorithms and machine learning. With this strategy, insurers may provide clients with individualized risk management solutions.

The reinsurance industry is also important to the insurance industry in Bangladesh. Reinsurance companies help to spread the risk of insurance and they also provide financial support to insurance companies in the event of large losses.

It provides jobs and generates revenue for the government. SBC is the only state owned insurance & reinsurance company in Bangladesh (Non-Life). Since our GDP size is increasing day by day & now Bangladesh is currently ranked 35th largest economy in the world. Hence at least one reinsurance company is essential under private sector. As opinioned by the insurance expert in our country foreign reinsurance companies or their Branch Office may be allowed to play their experienced & innovative role in our country to increase the insurance penetration as our desired level as well as to grow our economy faster.

Anti-money Laundering

Responsibilities of Accountant, Penalty for Non-compliance and Role of ICAB

Shah Md Jubaer FCA

The Author is a Fellow Member of the Institute of Chartered Accountants of Bangladesh (ICAB)

Introduction

Now-a-days, money laundering is a burning issue in our society. Many people in our society think that money laundering is only illegally transfer of funds to abroad and banks are only responsible organization to provide Suspicious Transaction Report (STR)/ Suspicious Activity Report (SAR) to Financial Intelligence Unit (FIU). Is it really?? The answer is "No". Because, money laundering has various dimensions; and in addition to Banks/ Financial Institutions, there are some organizations that are called Designated Non-Financial Businesses and Professions (DNFBPs i.e. Casinos, Real Estate agents, Dealers in precious metals and dealers in precious stones, Lawyers, notaries, other independent legal professionals and Accountants, Trust and company service providers) that are also responsible to provide STR/SAR to FIU in case of providing certain services to their clients.

In this article, I will discuss, what is Money Laundering and reporting requirement of Accountants for providing certain services as per local and international laws and practices. And finally, I will inform you the penalty (fine and/or cancellation of license) for non-performing certain activities and non-reporting as per existing local law.

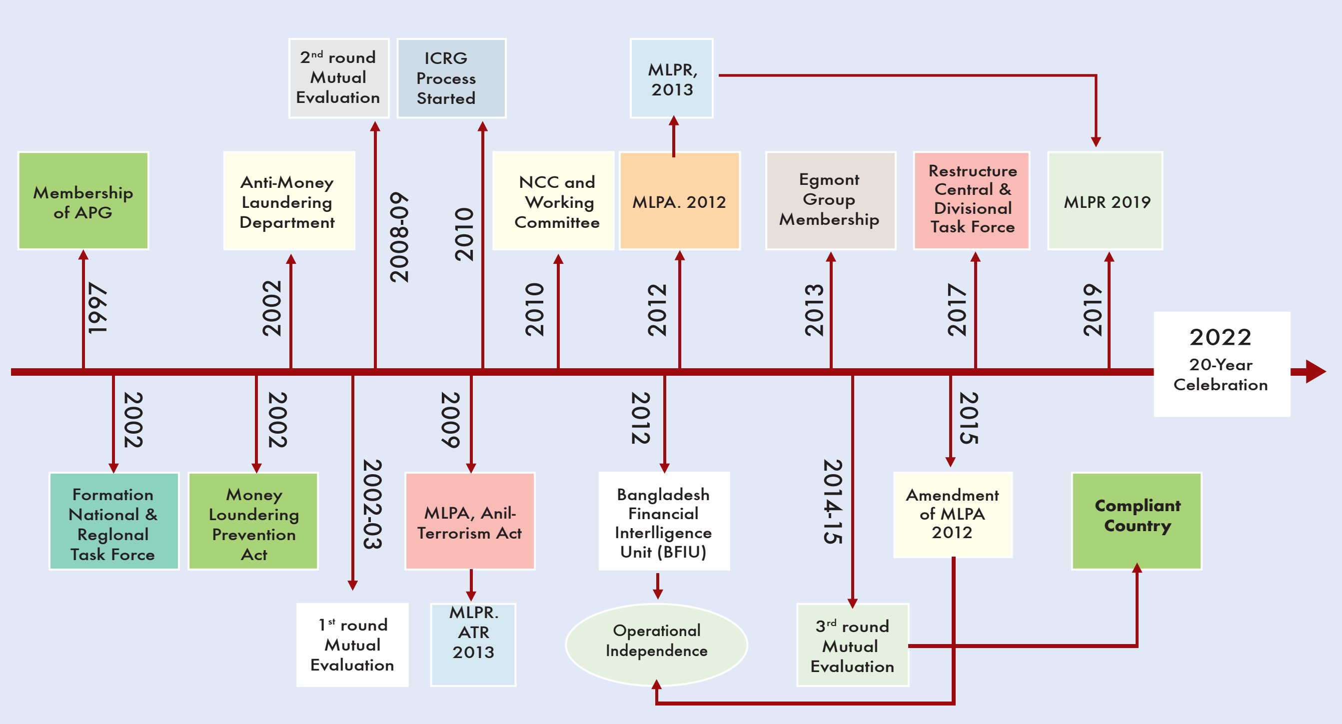
Overview on Global & Local Standards/Laws of Anti-money Laundering

The pace of international activity in the anti-money laundering (AML) field accelerated in 1989 when the Group of seven richest industrialist countries (Canada, France, West Germany, Italy, Japan, the United Kingdom and the United States) launched the Financial Action Task Force (FATF) at its 15th annual economic summit in Paris.

Today, FATF serves as the vanguard in promulgating AML guidance to governmental bodies around the world. FATF brought not only significant changes to the ways that banks and businesses conduct their affairs but also changes in laws and in governmental operations around the world. FATF's 40 recommendations are seen globally as the World Standard in anti-money laundering.

For combating against money laundering, Bangladesh Government passed Money Laundering Prevention Act (MLPA), 2002 in line with the global standards and guidelines. After several amendments, a new Money Laundering Prevention Act, 2012 has been passed and subsequently amended in 2015. The Government has also enacted Anti Terrorism Act (ATA) in 2009 aiming to combat terrorism and terrorism financing and this Act was also amended in 2012 and 2013. Subsequently, Government also passed Money laundering Prevention Rules 2019.

AML & CFT Journey of Bangladesh



Definition of Money Laundering

Money laundering involves taking illegal proceeds and disguising their illegal sources to use the funds in legal or illegal activities. Simply, money laundering is the process of making dirty money look clean.

Money laundering has been addressed in the UN Vienna 1988 Convention Article 3.1 describing Money Laundering as:

"The conversion or transfer of property, knowing that such property is derived from any offense(s), for the purpose of concealing or disguising the illicit origin of the property or of assisting any person who is involved in such offense(s) to evade the legal consequences of his actions".

Money Laundering Prevention Act, 2012 defines Money laundering as follows:

i. knowingly moving, converting, or transferring proceeds of crime or property involved in an offence for the following purposes:

a. concealing or disguising the illicit nature, source, location, ownership or control of the proceeds of crime; or

b. assisting any person involved in the commission of the predicate offence to evade the legal consequences of such offence;

i. smuggling money or property earned through legal or illegal means to a foreign country;

iii. knowingly transferring or remitting the proceeds of crime to a foreign country or remitting or bringing them into Bangladesh from a foreign country with the intention of hiding or disguising its illegal source; or;

iv. concluding or attempting to conclude financial transactions in such a manner so as to reporting requirement under this Act may be avoided;

v. converting or moving or transferring property with the intention to instigate or assist for committing a predicate offence;

vi. acquiring, possessing or using any property, knowing that such property is the proceeds of a predicate offence*;

vii. performing such activities so as to the illegal source of the proceeds of crime may be concealed or disguised;

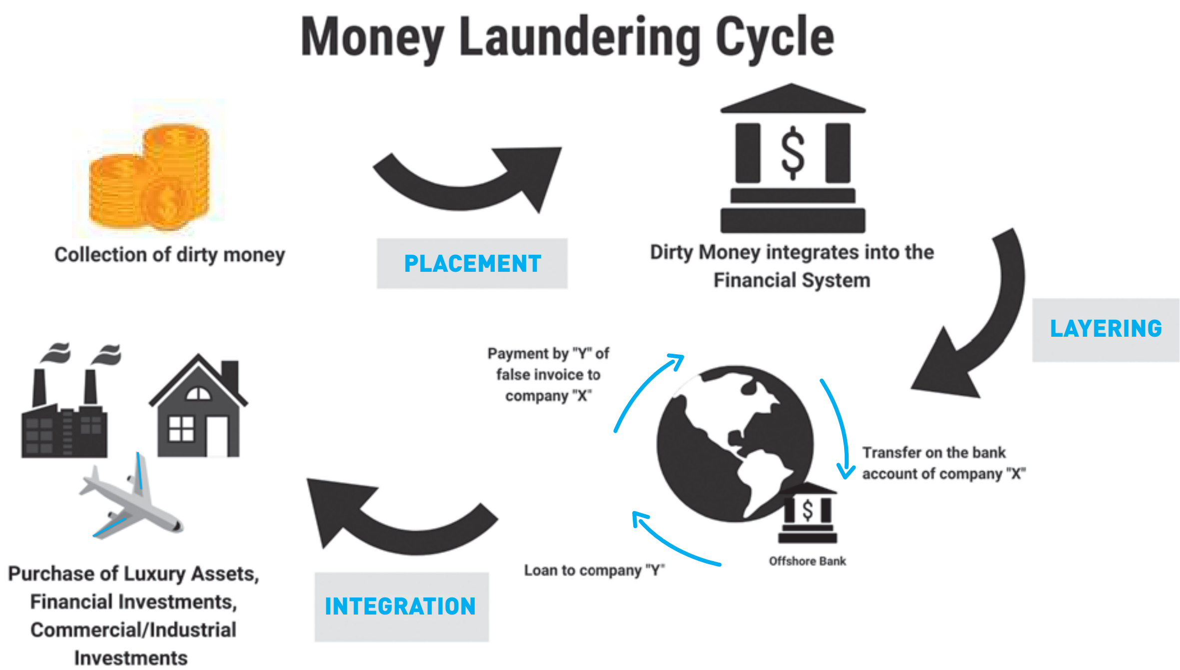
viii. participating in, associating with, conspiring, attempting, abetting, instigate or counsel to commit any offences mentioned above.

After the events of 9/11, FATF expanded its directive to cover the financing of terrorism in October 2001. Generally, terrorists and money launderers use the same methods to move their money in ways to avoid detection. Money launderer wants to hide the sources of fund; on the other hand terrorist wants to hide the utilization of funds rather than sources.

Stages in the Money Laundering Cycle

Money laundering is a process which typically follows three stages to finally release laundered funds into the legal financial system. Office on Drug and Crimes, The United Nations defines Stages of Money Laundering as follows:

i. Placement (i.e. moving the



* Predicate offence means the offences by committing which within or outside the country, the money or property derived from is laundered or attempt to be laundered. There are 27 specific and 1 miscellaneous Predicate Offences as per Money Laundering Prevention Act, 2012. List of Predicate offences as per law are listed in Annexure-A.

funds from direct association with the crime)

ii. Layering (i.e. disguising the trail to foil pursuit)

iii. Integration (i.e. making the money available to the criminal from what seem to be legitimate sources)

Reporting & Others Responsibilities of Accountants

As per Recommendation 22 of FATF, Designated Non-Financial Businesses and Professions (DNFBPs i.e. Casinos, Real Estate agents, Dealers in precious metals and dealers in precious stones, Lawyers, notaries, other independent legal professionals and Accountants, Trust and company service providers) have to perform certain responsibilities in case of providing specific services to their clients.

Customer due diligence (CDD) and record-keeping requirements, additional measures for Politically Exposed Person (PEP), identification and assessment of money laundering and terrorist financing risk that may arise in relation to development of new services, new business practice and use of new technology for existing and new services and reliance on third parties for performing CDD (recommendation set out in Recommendations 10, 11, 12, 15, and 17)are applicable for:

- **Accountants –** when they prepare for or carry out transactions for their client concerning the following activities:

  i. buying and selling of real estate;

  ii. managing of client money, securities or other assets;

  iii. management of bank, savings or securities accounts;

  iv. organization of contributions for the creation, operation or

management of companies;

v. creation, operation or management of legal persons or arrangements, and

vi. buying and selling of business entities.

- **Trust and Company Service Providers (TCSP) –** when they prepare for or carry out transactions for a client concerning the following activities:

  i. acting as a formation agent of legal persons;

  ii. acting as (or arranging for another person to act as) a director or secretary of a company, a partner of a partnership, or a similar position in relation to other legal persons;

  iii. providing a registered office, business address or accommodation, correspondence or administrative address for a company, a partnership or any other legal person or arrangement;

  iv. acting as (or arranging for another person to act as) a trustee of an express trust or performing the equivalent function for another form of legal arrangement;

  v. acting as (or arranging for another person to act as) a nominee shareholder for another person.

Recommendation 23 of FATF requires Accountants and TCSP to report suspicious transactions to the Financial Intelligence Unit (FIU) when they suspects or has reasonable grounds to suspect that funds are the proceeds of a criminal activity, or are related to terrorist financing at the time of performing above mentioned services.

FATF strongly encouraged extending the reporting requirement to the rest of the professional activities of accountants, including auditing.

As per Money Laundering Prevention Act (MLPA), 2012 of Bangladesh, Accountants and Trust and Company Service Providers (TCSP) are also Reporting Organizations (RO) like Bank and Financial Institutions as per Section 2(w).

"Guidelines on Prevention of Money laundering & Combating Financing of Terrorism for

Name of Reporting Organization	Year of inclusion
▪ Bank ▪ Financial Institution	2002
▪ Insurer ▪ Money Changer ▪ Any company or institution which remits or transfers money or money value ▪ Any other institution carrying out its business with the approval of Bangladesh Bank	2008
▪ Stock Dealer and Stock Broker ▪ Portfolio Manager and Merchant Banker ▪ Securities Custodian ▪ Asset Manager ▪ Non-Profit Organization Non Government Organization	2010
▪ Cooperative Society ▪ Real Estate Developer ▪ Dealer in Precious Metals or Stones ▪ Trust and Company Service Provider ▪ Lawyer, Notary, Other Legal Professional and Accountant	2012

Designated Non- Financial Businesses and Professions-2013 (BFIU Circular No. 08/2013, dated 29.10.2013)" echo the Recommendation 22 of FATF regarding the activities of DNFBPs to be considered under AML/CFT regulations.

Section 25 (1) of MLPA 2012 requires maintenance of complete and correct information by ROs regarding identity of customers and transactions during operation and preservation of information at least 5 years from the date of closure and to provide such information to BFIU on demand. ROs should submit Suspicious Transaction Report (STR) to BFIU immediately on its own accord.

FATF Recommendation 21 and Section 6of MLPA 2012 and prohibits reporting organization, their directors, officers and employees from disclosing ("tipping-off") the fact that an STR or related information is being reported to FIU.

Reporting Suspicious Transaction

All reports of suspicious transaction should be filed as per the circulars issued by BFIU from time to time. All reports to be sent to the address below:

The Director

Bangladesh Financial Intelligence Unit (11th Floor)

Bangladesh Bank

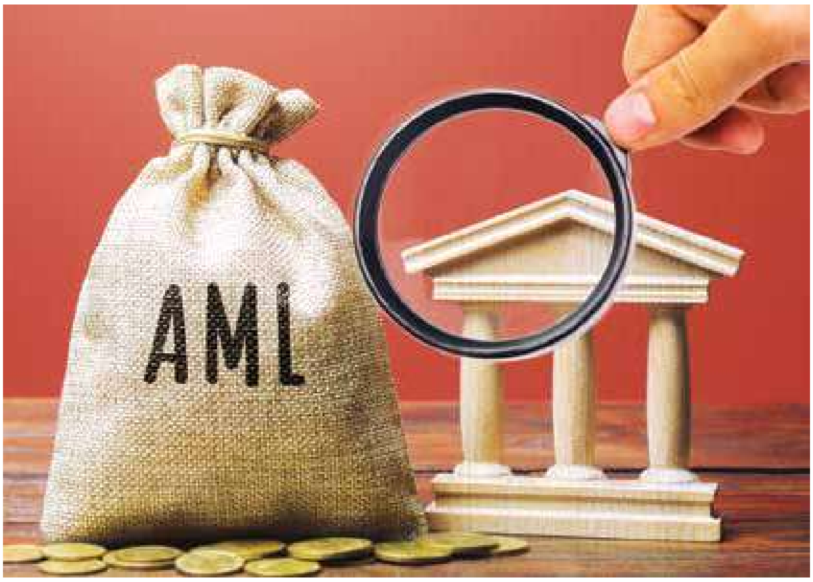
Head Office, Motijheel

Dhaka-1000

Penalty for Non-keeping of Records and Non-reporting of STR/SAR

A. Fine

As per Section 25 (2) of MLPA 2012, if any Reporting Organization fails to maintain complete and correct information regarding identity of its customers and transactions during operation and preserve information at least 5 years from the date of closure and to provide such information to BFIU on demand and fails report STR/SAR, a fine of at least taka 50,000 (Fifty Thousand) but not exceeding taka 25,00,000 (Twenty Five lacs) can be imposed on the reporting organization.



B. Cancellation of License

In addition to the fine, BFIU may cancel the license or the authorization for carrying out commercial activities of the said organization or any of its branches, service centers, booths or agents, or as the cause may be, shall inform the registration or licensing authority about the fact so as to be relevant authority may take appropriate measures against the organization.

Note that reporting obligation of STR and others will be only applicable when the DNFBPs are engaged in the specified transaction or activities as mentioned in Guidelines on Prevention of Money laundering & Combating Financing of Terrorism for Designated Non-Financial Businesses and Professions-2013.

Role & Responsibilities of the Institute of Chartered Accountants of Bangladesh (ICAB)

As per BFIU Circular No 08/2013, dated 29/10/2013, Accountant (DNFBP) may submit carbon copy of STR to the Institute of Chartered Accountants of Bangladesh (ICAB), the Self Regulatory Organizations for accounting professionals. In that case, ICAB needs to maintain strict confidentiality as per requirement of MLPA, 2012.

The Institute may organize adequate number of training programs for its practicing members to understand the requirement of the Money Laundering Prevention Act and Anti Terrorism Act in order to prevent the Money Laundering and Terrorist Financing.

The Circular requires that the ICAB should instruct its members to incorporate a separate observation on AML/CFT issues while they conduct audit into a Bank, Insurance, Leasing Securities companies etc.

Conclusion

Accountant and legal professional provides a wide range of services, including bookkeeping, accounting services, audit services, tax planning and preparation, consulting services, company formation and administration, trust, property transactions and introduction to banks, etc. These activities are a very attractive gateway which criminals/terrorists would want to use for laundering crime proceeds/financing terrorism. Given the likelihood of being used for money laundering/terrorist financing purposes, professional accountants must be vigilant at all times and report anything suspicious to BFIU to prevent money laundering and terrorist financing.

For the sake of the profession, the ICAB as well as the members of the ICAB should discharge their responsibilities for combating against money laundering and terrorist financing.

Annexure-A

Predicate Offences as Per Money Laundering Prevention Act, 2012 Amended in 2015

1. corruption and bribery;
2. counterfeiting currency;
3. counterfeiting deeds and documents;
4. extortion;
5. fraud;
6. forgery;
7. illegal trade of firearms;
8. illegal trade in narcotic drugs, psychotropic substances and substances causing intoxication;
9. illegal trade in stolen and other goods;
10. kidnapping, illegal restrain and hostage taking;
11. murder, grievous physical injury;
12. trafficking of women and children;
13. black marketing;
14. smuggling of domestic and foreign currency;
15. theft or robbery or dacoity or piracy or hijacking of aircraft;
16. Human trafficking or obtaining or intending to obtain any money or valuables by falsely promising a person regarding foreign employment;
17. dowry;
18. smuggling and offences related to customs and excise duties;
19. tax related offences;
20. infringement of intellectual property rights;
21. terrorism or financing in terrorist activities;
22. adulteration or the manufacture of goods through infringement of title;
23. offences relating to the environment;
24. sexual exploitation;
25. insider trading and market manipulation using price sensitive information relating to the capital market in share transactions before it is published for general information to take advantage of the market and attempting to manipulate the market for personal or institutional gain;
26. organized crime, and participation in organized criminal groups;
27. racketeering; and
28. any other offence declared as predicate offence by Bangladesh Financial Intelligence Unit, with the approval of the Government, by notification in the official Gazette, for the purpose of Money Laundering Prevention Act, 2012.

References

- International Standard on Combating Money Laundering and Financing of Terrorism & Proliferation: The FATF Recommendations (www.fatf-gafi.org/recommendations.html)
- The United Nations, Office on Drugs and Crime (https://www.unodc.org/unodc/en/money-laundering/overview.html)
- Money Laundering Prevention Act, 2012& 2015.
- BFIU Circular No. 08/2013, dated 29.10.2013 on “Guidelines on Prevention of Money laundering & Combating Financing of Terrorism for Designated Non- Financial Businesses and Professions”, Issued By Bangladesh Financial Intelligence Unit, Bangladesh Bank (https://www.bfiu.org.bd//pdf/circular/aml/oct292013bfiu08.pdf)
- Guidance on Reporting Suspicious Transaction Report for the Reporting Organization-2019. Issued By Bangladesh Financial Intelligence Unit, Bangladesh Bank (https://www.bfiu.org.bd//pdf/regulationguideline/aml/guidance_str.pdf)
- Reporting Organization (https://www.bfiu.org.bd/index.php/stackholder/reor)
- Study Guide, 6th Edition, CAMS Certification Exam, a publication of Association of Certified Anti-Money Laundering Specialists (ACAMS).
- Annual Report 2021-22 of Bangladesh Financial Intelligence Unit

Resolving Balance of Payment (BoP) Crisis in Bangladesh

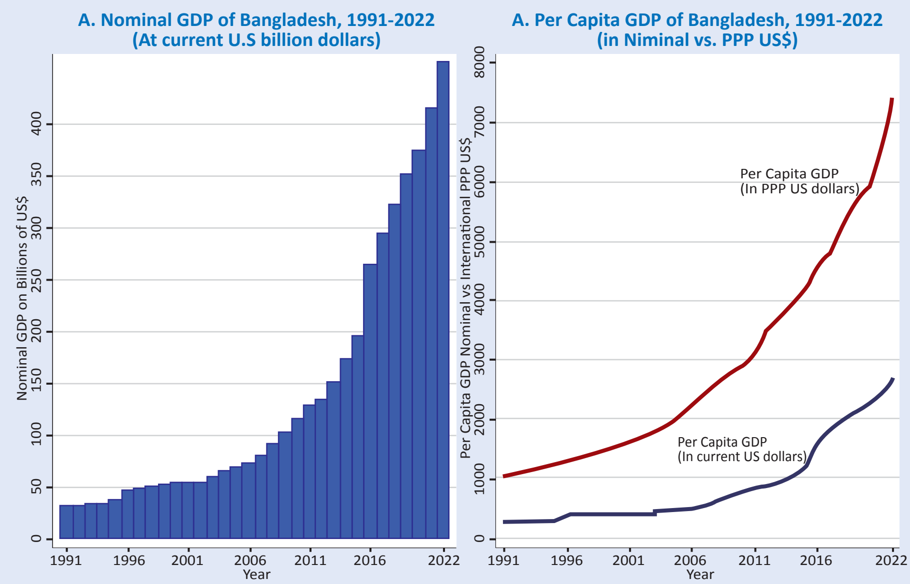
Dr. Mizanur Rahman

The Author is a Commissioner of Bangladesh Securities and Exchange Commission and a Member of Financial Reporting Council Bangladesh

Introduction

Bangladesh has been one of the fastest growing economies in the world until 2022. The economy at current U.S. dollars grew from $31 billion in 1991 to $91.6 billion in 2008 and then further accelerating to $460 billion in 2022. The five-year average economic growth rate accelerated from 4.15% in 1991-95 to 7.13 percent in 2016-2020. As population growth rate persistently declined, the per capita GDP growth rate accelerated even faster than the economic growth rate. The per capita GDP increased from US$ 283 in 1991 to US$ 630 in 2009 and then further to US$ 2,688 in 2022 (Figure-1). Experts identify two key drivers for Bangladesh's remarkable growth and development. One is the rising export production of manufactured goods. The other is the surging flow of inward remittances. Bangladesh has in fact received an aggregate capital flow of $233 billion in the form of inward remittances over the period of 2009-2023, an era of remarkable growth and development under Prime Minister Sheikh Hasina.

Figure-1: Bangladesh economic growth, 1991-2022

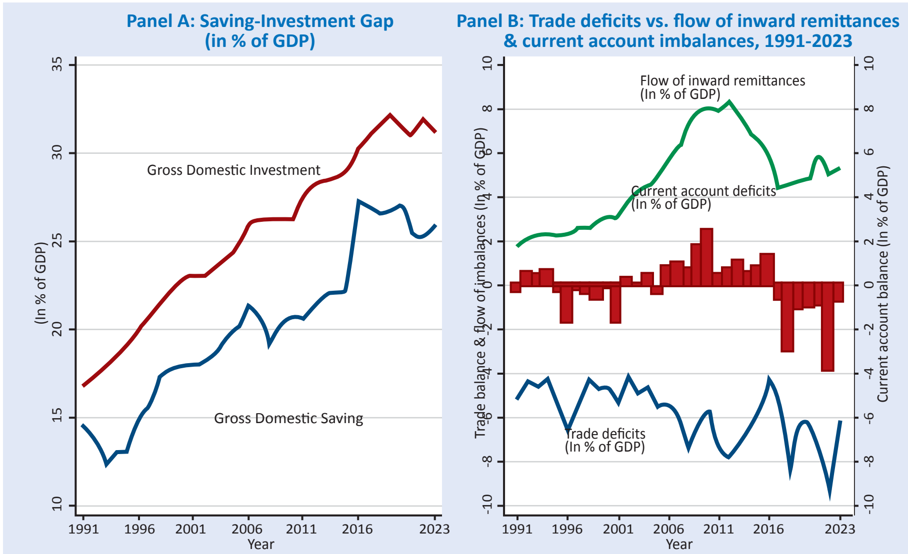


Panel-A shows size of Bangladesh economy (at current USS) over the 1991-2023 period.
Panel-B shows per capita GDP of the country in current nominal US$ and international PPP dollars
Sources: World Bank (2023) & Bangladesh Bureau of Statistics (various years).

Gross domestic savings and investments (in % of GDP) observed a sustained rise in this period. While gross domestic savings (in % of GDP) increased from less than 20% in 2008 to 26% in 2022, gross domestic investment (in % of GDP) surged from 26% to 32% over the same period. A saving-investment gap of 6% though persisted in this time; Bangladesh faced no unsustainable current account deficits until FY2021. A persistent excess of investment over saving, and so trade deficits, was financed by the surging flow of inward remittances from non-resident Bangladeshi (NRB) citizens (Figure-2). Bangladesh had overall balance of payment (BOP) stability accumulating an unprecedented volume of foreign exchange reserves of $48 billion U.S. dollars at the end of August 2021. In fact, the current account deficits had averaged to be only $0.32 billion per year over the 12-year period beginning from 2009 to 2021. It is noteworthy that Prime Minister Sheikh Hasina began her second term with a meager $5.7 dollars of reserves in 2009. The period of prolonged balance of payment stability, and the record accumulation of FX reserves, has however discontinued after the economy reopened in January 2022 following the global coronavirus pandemic.

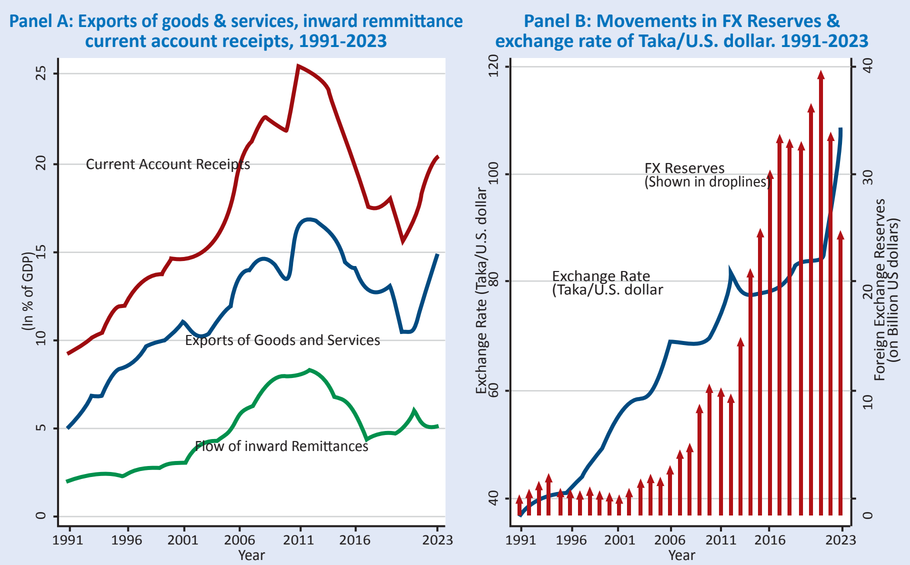
Bangladesh observed a prohibitive current account deficit of $18.7 billion in FY2022. The current account imbalance significantly improved since then and was reported to be $3.3 billion in the latest fiscal year, that is, FY2023. The overall balance of payment deficit, however, worsened to be $8.2 billion last year, mostly because of a significant deficit in the flow of financial account. The ballooning balance of payment deficit of recent times is causing a fast depletion of foreign exchange reserves, a liquidity crisis in the financial sector, and a crisis in the foreign exchange market in Bangladesh. For over twelve months from July 2021 to June 2022, Bangladesh Bank, the central bank of the country, resorted to selling foreign exchange reserves in order to support an overvalued Taka, the home currency, against the U.S. dollar. The policy was untenable and it caused fast depletion of foreign exchange reserves. The volume of FX reserves plummeted to 33 billion U.S. dollars by the end of June 2022. The central bank has therefore resolved to quit its decade-long policy to peg Taka to the U.S. dollar in the range of 80-85. Taka has kept depreciating since then. The new peg is now at 110.0/$ and possibly further downward at the end of December 2023. The FX reserves stood at 24 billion U.S. dollars at the end of August 2023. The U.S. dollar is reportedly trading at more than Taka 110 per unit in the kerb market (Figure-3). The widening gap between the official exchange rate and the market rate is gripping both policy makers and businesses with mounting uncertainty and exchange risk.

Figure-2: Saving-investment gap, flow of inward remittances and external account imbalances, 1991-2023



Panel A shows gross domestic saving & gross domestic investments in % of GDP. Panel B shows the pattern current account balances (or imbalances) and the offsetting flow of inward remittances (in % of GDP) in the
Sources: BBS (various years) ADB (2010, 2023), and Bangladesh Bank (2023).

Figure-3: External account imbalances and flow of inward remittances



Panel A shows merchandise exports, flow of inward remittances and current account receipts (in % of GDP).
Panes B shows movements in forex exchange reserve and exchange rate of Taka per U.S. dollar.
Source: BBS (2023) and Bangladesh Bank (2023)

Factors Causing Balance of Payment Crisis

The policy makers after enjoying a decade of stability in exchange rate and external accounts are suddenly embroiled into a crisis scenario. Their challenge is to reset monetary and exchange rate policies so that the widening current account and other balance of payment deficits do not evolve into a full-blown currency crisis. In order to do so, we need to look into the underlying drivers, both domestic and international, of ballooning current account and overall balance of payment (BOP) deficits. The role of an overvalued nominal exchange rate will be explained as a causal reference to this unwanted outcome. This essay will also shed light on the issue of debt sustainability for Bangladesh.

Firstly, world prices of coal, oil, gas & other primary commodities particularly including food grains more than doubled in 2022 and this resulted into an unprecedented rise in the c.i.f. (cost, insurance and freight) value of those imports. The reopening of the global economy after the coronavirus pandemic, breakdown of global supply chains, rising trade costs, and the Russian invasion of Ukraine (and so the resultant war in Ukraine) were to blame for surging commodity and energy prices across the globe. A big part of prohibitive current account deficits of $18.7 billion in FY2022 was an outcome of this unfavourable international development.

Secondly, Bangladesh economy, after the long 18-months of lockdowns with a significantly reduced activity, reopened by the middle of 2021. It implies that households, government and firms returned to normal way of consumption and investments. That is, aggregate demand, which was decimated by the coronavirus pandemic since January 2020, rapidly expanded and the demand curve shifted to the right. The massive fiscal and monetary stimulus, which the government of Prime Minister Sheikh Hasina rolled out since March 2020, surely contributed to further acceleration of the aggregate demand. In fact, private sector credit growth accelerated from 10 percent in 2020-21 to 14 percent in 2021-22. For countries like Bangladesh, this implies further escalation in the demand for imports of raw materials, intermediate inputs and final goods.

Thirdly, the role of government spending for large infrastructure projects and an overvalued exchange rate of Taka until the end of 2021 is a critical factor for growing current account deficits. It deserves a careful explanation. The Government of Bangladesh surely embarked upon many mega projects in areas of energy, road connectivity, ports & telecommunication infrastructures. The government spending therefore accelerated

and a large part of it was leading to growth in imports of capital goods over time. But the same is also believed to be stimulating national economic growth and employment in the long term. The issue of time and cost overruns is a perennial issue in the developing world. Bangladesh is no exception; rather it observed persistent improvement in project management. The successful completion of Padma Multipurpose Bridge, Dhaka-Chittagong highways and the like bear testimony of this claim. A long term capacity building of the government is also evident in this area. But it is undeniable that a rising government spending for building large infrastructures is driving government and public sector dissaving of recent times.

Public Policies to Resolving Balance of Payment Crisis

The prohibitive current account deficit of $18.7 billion in 2021-22, and the growing balance of payment deficit of $8.2 in 2022-23, is an outcome of all these factors. At the heart of this imbalance lies widening dissaving by both the government and the private sector. While public dissaving is the excess of government spending over its revenue, the dissaving of the private sector is the excess of private sector investments over gross domestic savings. The policy maker's job is to bring about sustained improvements on both the fronts. I will offer a mix of public policies to achieve this end.

Firstly, government spending must decrease in the short-to-medium term. As a national election is imminent, any political government will find it difficult to limit public spending in the very short-term. Ultimately, every element of government spending shall require a critical review. Government spending for unproductive activities is better eliminated or substantially curtailed. Government spending for new or early-stage large infrastructures is better deferred for an indefinite period until the economy navigates into sustainability. Government spending for social safety nets shall also need to be revisited and made more efficient. Prime Minister Sheikh Hasina and her government are in fact in the process of eliminating, or minimizing, government spending of lesser importance. A substantial improvement in current account deficit for FY2023 was in fact more via administrative guidance.

Secondly, Bangladesh lived with an overvalued exchange rate for years mostly because Taka had been pegged to the U.S. dollar within the narrow band of 82-84 for an extended period until the end of 2021. In an environment where a developing country experiences persistent inflation differentials with respect to the rest of the world and more so against the cohort of low-inflationary advanced economies, a de facto fixed exchange rate will result into a persistent real appreciation. The extent of real appreciation for

Bangladesh was large but varying across countries. The central bank shall need to orchestrate a gradual devaluation of the home currency. A 30 percent nominal devaluation has already happened for Taka against the U.S. dollar since 1 January 2022. The exchange premium in the kerb market is however an indication of a continued disequilibrium in the foreign exchange market. The central bank will likely consider a further Taka devaluation to eliminate the disequilibrium. A currency depreciation will cause private sector dissaving to improve over time. However, it may be coupled with some fiscal policy reforms. For example, a reduced corporate tax rate will stimulate foreign capital inflow and encourage more capital expenditures by local corporations. Bangladesh Bank may also consider offering new incentives in the form of exchange premium and/or an increased interest rate for attracting an increasing flow of remittances from non-resident Bangladeshis.

Thirdly, tax authorities may revise tariffs and non-tariff regulations discouraging imports of cars and luxury consumer goods. A currency devaluation itself will prove discouraging for this kind of imports. A new tariff in addition and some non-tariff barriers will further diminish their demand. On the other hand, a reduction in tariffs for food and energy imports will mitigate cost-pushed inflationary pressures to some extent. But the litmus test for the central bank will be to guide exporters to repatriate their foreign exchange in real time. In times of large currency devaluation, exporters and domestic residents will form an expectation of further devaluation of home currency and choose dollarization of their financial assets. This downward expectation revision is an unmitigated sin and it can bind policy makers in a spiral of currency devaluation without significant improvement in external account imbalance. Bangladesh Bank must focus on managing this speculative behavior of economic agents.

Fourthly, a monetary tightening, and so raising interest rate further, is now imperative in order to depress components of aggregate demand and bring down inflation. Household demand for consumption, corporate demand for investments and also government spending shall diminish as interest rates keep rising. In an environment of soaring inflation, a slowdown of aggregate demand should rightly be the policy objective. Bangladesh Bank may move faster in this direction. A relative economic contraction is now desirable for reducing inflation and improving the external account imbalances.

A very unfavourable monetary development has happens across advanced economies since January 2022. It is that advanced economies have invariably pursued monetary tightening and so raising interest rates after a decade of low inflation and (near) zero interest rate policies. It is causing a reversal of global capital flow putting many developing and emerging market (EM) economies on the cliff. This reversal is causing fast depletion of their foreign exchange (FX) reserves, liquidity crises in the financial system, rising interest rates, & currency crises across the developing world. A global capital reversal will cause financial market shocks. Bangladesh too is now embroiled in this unfavorable global development. Many developing countries which were hitherto resilient are now hugely constrained by dwindling foreign exchange reserves and rapidly depreciating home currency.

Finally, critics of the government are drawing improper equivalence between Bangladesh and other South Asian neighbors such as Sri Lanka and Pakistan with respect to the issue of debt sustainability. The external debt stock of the country was reported to be $95.7 billion U.S. dollars, which is 23.5% of GDP, as of March 2023. Of this, the external indebtedness of the public sector was $73.5 billion. It is about 17 percent of GDP and 81.4 percent of it was of long-term in nature. Note that the external indebtedness of the government declined from 42 percent of GDP in 1991 to less than 18.5 percent in 2023. The total debt servicing is about 6 percent of current account receipts (including exports of goods and services and primary income) and 0.82 percent of GNI. An unfavorable development has however happened in area of external indebtedness by the private sector. This volume rapidly increased from $9.2 billion in 30 June 2016 to $25 billion in June 2022. It was reported to be $22.2 billion at the end of March 2023. This is an area which will require critical supervision and control of the central bank as 68 percent of this private sector indebtedness is of short-term credit. A disproportionate share of this private sector external debt is mostly suppliers' credit, unhedged, subject to variable interest rates, and considered to be opaque. Bangladesh Bank may put in place more stringent capital controls so that private sector companies do not access to any sort of foreign-currency denominated debt without hedging against exchange risks.

Digital Bank and it's Benefit for Customers

Ashraf Uddin ACA

The Author is a Fellow Member of the Institute of Chartered Accountants of Bangladesh (ICAB)

Abstract

A digital bank is a bank that operates online and provides services to its customers that were previously available only at a bank branch. It provides users with greater security than cash transactions due to its encrypted platforms, if properly deployed. Digital Banking is availing of banking services like opening bank account, bill payment, cheque management, balance inquiry, funds transfer, etc. via smart devices over the internet like smartphones, laptop, desktop etc.

Keywords

- Benefits of Digital Banking
- Digital Banking Services
- Digital Banking Payment
- Establishment of Digital Bank

Introduction

Digital Banking is the automation of traditional banking services. The Digital Banking is banking done through the digital platform, doing away with all the paperwork like cheques, pay-in slips, Demand Drafts, and so on. It means availability of all banking activities online. All transactions, from opening an account to transferring money, paying bills, and more are done online or in the mobile app. It lets customers perform banking transactions and access banking services remotely, without having to visit a physical branch.

Methods of Digital Banking payments

Following are the different methods of digital payments which do not require to be made in the form of cash or through cheque:

- Banking cards (Debit & Credit): Banking cards can be used for a variety of digital transactions like POS terminals, online transactions, as a payment medium in mobile apps, which provide any kind of service like grocery, healthcare, rental cab booking, flight tickets, etc. The most popular cards are issued by service providers like VISA, MASTERCARD etc.

- USSD (Unstructured Supplementary Service Data): USSD can be used for carrying out cashless transactions using mobile, without the need for installing any banking app. The good thing about USSD is that it works without the requirement of mobile data. The USSD can be used for the following types of activities: a. Initiating fund transfers b. Making balance enquiries c. Getting the bank statements

- UPI (Unified Payment Interface): UPI is the latest digital payment standards where the user having a bank account can transfer money to any other bank account using UPI based

app. UPI enabled payments occur throughout the day and all 365 days in a year.

- Mobile Wallets: The users can add money to their virtual wallet using debit or credit cards and use the money added in the wallet to perform digital transactions.

- Point of Sale Terminals: POS terminals are installed in shops or stores where payments for purchases can be done through debit and credit cards.

- Mobile Banking: Mobile Banking allows customers to access their bank accounts and perform various banking tasks, such as transferring money, checking account balances, and paying bills by using a mobile device such as a smartphone or tablet.

- Internet Banking: Internet banking allows customers to access their bank account and transfer fund via facilities like BEFTN, NPSB, NEFT, RTGS etc. Customer can view account balance, past transactions, pay their utility bills and recharge mobile remotely at any time.

Benefits of Digital Bank

Following are some of the most important benefits of using digital banking payments:

- Transactions performed through digital payments systems are faster, easier and more convenient than traditional banking transactions performed physically by visiting the branch.

- Digital transactions are cheaper than the traditional payment system.

- The convenience of banking from the comforts of home.

- 24*7 availability of access to banking functions.

- Paperless banking.

- Enables set up of automatic payments for regular utility bills.

- Facilitates online payments for online shopping etc.

- Extends banking services to remote areas.

- Reduces the risk of counterfeit currency with digital fund transfers.

- Strengthens privacy and security for customers.

- Allows misplaced credit cards to be reported and blocked instantly.

- Restricts the circulation of black money.

- Lowers the minting demands of currency.

Digital Banking Services

The following services could be taken by a customer to use digital banking:

- Obtaining bank statements

- Cash withdrawals

- Transfer money

- Checking/savings account management

- Opening a digital bank account

- Loan management

- Bill payments

- Transaction records monitoring

Digital Banking vs Online Banking

- Digital Banking is an umbrella term that includes all banking activities performed through technological means. On the other hand, Online Banking is a part of Digital Banking, refers to the daily banking practices conducted through internet-enabled devices.

- The functions of Digital Banking are extensive, whereas Online Banking is for more ordinary activities.

- Digital Banking poses relatively more security concerns when compared to Online Banking.

- Online banking is a subset of the master set of digital banking.

Is Digital Banking Safe?

Traditional banks are just as vulnerable to cyber-attacks as any digital bank. After all, where there is money, there will always be a crime. In fact, all traditional banks have moved online with their own in-house mobile banking apps and internet banking websites.

Every day, banking websites are hit by hacking attacks. While this may be unsettling to hear, it also means that digital banks continually improve their security to effectively protect against such attacks. But that doesn't mean that account holders can be complacent. Consumers must also be responsible for staying alert to make sure their accounts are protected.

When top of the class bank security is met with alert consumers, digital banking can be incredibly convenient and safe.

Why Digital Banking is Safe?

- Strong data encryption: Digital banks encrypt data in such a way that only you and the bank can understand it while it is being transmitted across the internet. The encryption is so complicated and robust that hackers won't be able to crack it easily.

- Two-factor authentication and OTP: Two-factor authentication requires two distinct forms of authentication to log in to your account, such as a PIN code and a one-time password (OTP) sent to your smartphone, authenticator app, or biometrics.

- Automatic time-out: As a security measure, you'll automatically be logged out of your digital banking session if you've been inactive for a few minutes.

- Antivirus and antimalware protection: Digital banks use top-tier programs to detect and prevent viruses and malicious software.

- Firewalls: Firewalls screen all data entering and exiting networks, block unauthorized access and stop traffic from unsafe internet sources.

- Cookies: Digital banks can authenticate your mobile or

computer device by placing a cookie. If you use a new device to log in to your account, you will be required to re- enter additional information.

- Credential confidentiality: Banks never share your personal information, including usernames and passwords with anyone, and you shouldn't too.

- Account monitoring: Online account activity is monitored for potentially fraudulent activity. If anything suspicious is detected, you're notified immediately.

Bangladesh Bank takes Initiative for Establishment of Digital Bank

The Bangladesh Bank has invited applications from entrepreneurs who are interested to establishing digital banks by BRPD Circular No. 08 dated 15 June, 2023 and also published a guideline on how to establish a Digital Bank.

Ten consortium conventional banks in Bangladesh have come together to create the first digital bank in the country, named 'Digi10 Bank PLC'. This unique initiative will offer branchless financial services with a sovereign entity, marking a significant step in Bangladesh's banking sector.

The terms and conditions for establishment of Digital Bank include (but not limited to):

1. Must be a public limited company licensed under section 31 of the Bank Company Act, 1991.

2. Initial minimum Paid-up capital BDT 125.00 (One hundred twenty-five) crores shall be provided by the sponsors.

3. The minimum shareholding stake of each sponsor shall be BDT 50.00(Fifty) Lac.

4. Sponsors' contribution to the share capital of the proposed digital bank will be required to be out of net

worth declared to the Tax authorities. Sponsors' contribution out of borrowings from bank or financial institutions or from anywhere else, even from family members, shall not be acceptable.

5. The sponsors/directors must qualify the Fit and Proper Test (FPT) criteria applicable for the proposed directors of Digital Bank.

6. The amount of BDT 5.00 (Five) Lacs should be paid as a non-refundable application processing fee.

Conclusions

Digital banking has become increasingly popular in recent years due to its convenience and utility. The benefits of digital banking will be more significant and wide-ranging than online banking or traditional banking. With digital banking, customer can enjoy the convenience of managing their finances from anywhere, the security of robust encryption and multi-factor authentication and the potential for savings on fees, interest rates. Digital Banking can increase customer loyalty and eliminate human error. Digital Banking will help customers by making cashless transactions more convenient.

References

1. https://www.bb.org.bd/mediaroom/notice/advertisement_digitalbank.pdf
2. https://www.bb.org.bd/mediaroom/circulars/brpd/jun152023brpd08e.pdf
3. https://tavaga.com/blog/digital-banking-and-its-foray-into-the-banking-sector/
4. https://byjus.com/commerce/types-of-digital-payments/
5. https://www.nelito.com/blog/what-is-digital-banking-its-benefits-and-future.html
6. https://sdk.finance/what-is-digital-banking/
7. https://bdnews24.com/business/6iyj93r49g
8. https://bigpayme.com/blog/is-digital-banking-safe/

Digital to Smart Country
A Proposed Pathway for Bangladesh

Md. Tabibur Rahman

**The Author is a
Director (Deputy Secretary)
Bangladesh Hi-Tech Park Authority
Information and Communication
Technology Division, Agargoan**

Introduction

The dream of the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman, was to have a country that is free of poverty, where economic and social justice prevails, and where there is shared prosperity. The Bangladesh government has been adapting and implementing periodical strategies to realize the dream of Bangabandhu as well as improving the quality of people's life. The ambitious socio-economic plan laid out by Bangladesh in the 2021-41 perspective plan implies that Bangladesh will need to make the journey from "Digital" to "Smart". Continuing from the Digital Bangladesh Vision 2021, the Vision 2041 is aimed specifically in eliminating extreme poverty and reach Upper Middle-Income Country (UMIC) status by 2031 and High-Income Country (HIC) status by 2041.

But becoming 'Smart' essentially means becoming focused on data centric design and human centric experience rather than automation & digitization. ICT will play a key role in achieving the Smart Bangladesh Vision and will straddle in 4 key pillars, which are:

1. **Smart Citizen**
2. **Smart Government**
3. **Smart Society**
4. **Smart Economy**

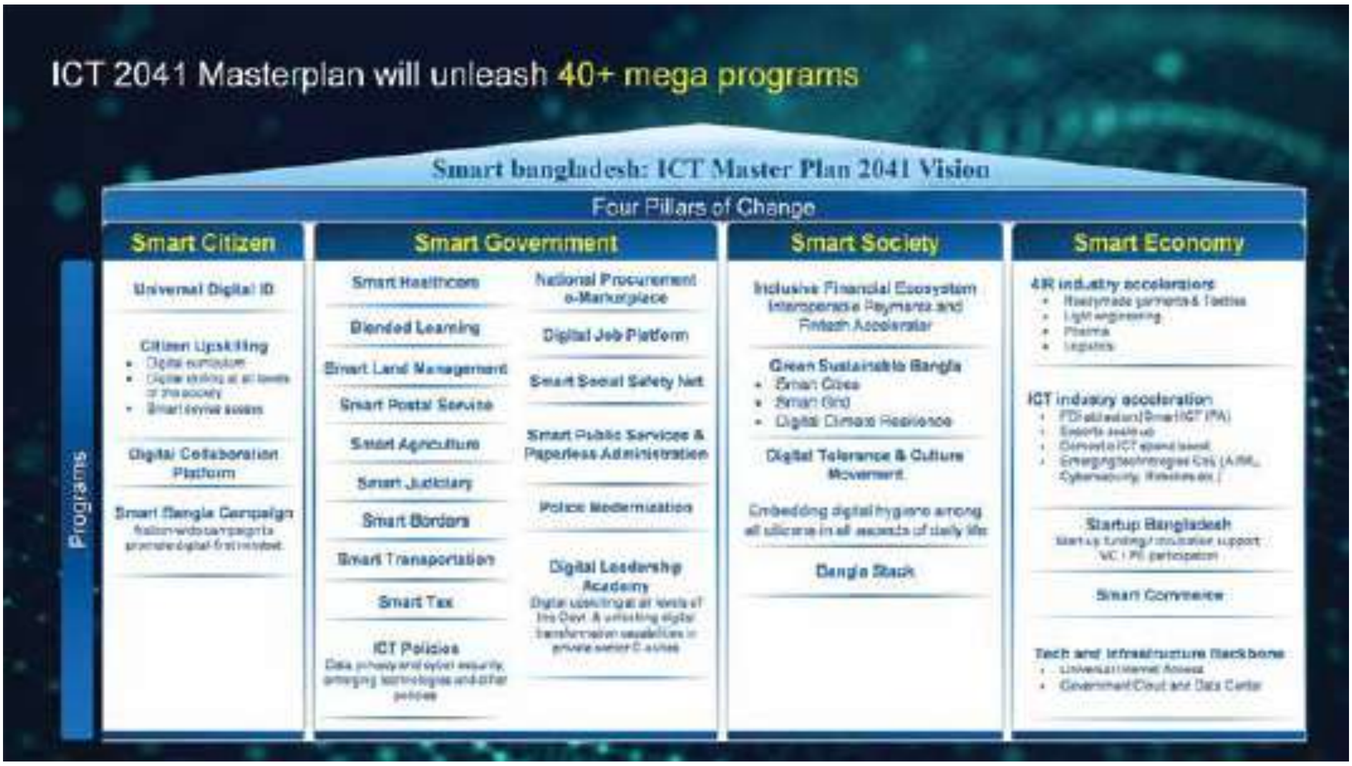


Figure: Programs for achieving Smart Bangladesh ICT 2041 Vision

Action across these 4 pillars will ensure that Bangladesh collectively achieve the objective of creating an innovation economy through fostering ICT and scientific research. The details of these four programs are described below:

1. Smart Citizen

The Smart Citizen Pillar aims at empowering the citizens of Bangladesh with a digital first mind-set through driving campaigns and implementing widespread digital literacy programs. Smart citizens of 2041 will not only have digital embedded in their way of life but will also collaborate with the govt. and industry for co-creation of services and policy making. This Pillar consists of 4 key programs around Universal Digital ID, Citizen up-skilling, Digital Collaboration Platforms and Smart Bangladesh Campaign.

1.1. Universal Digital ID

A universal digital ID will enable powerful use-cases across multiple aspects of a Bangladeshi's life. As per benchmarks, Bangladesh can aspire to target economic value impact of up to 6% of GDP by 2030 through implementation of a universal digital ID. Unique digital ID will be fundamental to important strategic objectives like social safety net, financial inclusiveness, revenue collection etc.

1.2. Citizen Upskilling

This program is divided into 3 parts. These are:

1. Digital Skilling – Digital Skilling Across All Levels of the Society
2. Digital Curriculum
3. Smart Device Access

1.2.1. Digital Skilling

The Prospective Plan 2021-2041 outlines a 3-pronged strategy to shape Bangladesh into an innovative economy:

1. Software innovation & service digitization
2. Fusion of labor advantage with high-tech innovation
3. Leveraging 4IR for competitiveness and low carbon economy.

The execution of these strategies will be driven by digitally ready citizens. Digital skills are a critical enabler to shape digitally ready citizens. A nation-wide coordinated digital skilling program is imperative to embed digital skills at all levels of society.

1.2.2. Digital Curriculum

Digital literacy underpins all key elements of Bangladesh's Vision 2041, from becoming a digital society to driving tech-led industrialization to developing an innovation economy based on 21st century human resources.

A broad portfolio of digital literacy, skills, and competencies must hence be developed starting from an early age across sectors and levels of society – from ensuring all citizens are equipped with the basic skills required to use smart devices and computers, to developing a subset of digital innovators.

1.2.3. Smart Device Access

Widespread access to smart devices such as smart phones, laptops, and tablets will be fundamental to achieving Bangladesh's Digital Vision 2041. Usage of smart devices is expected to grow rapidly over the coming years. However, levels are low today and smart device mix is weighted towards lower tech devices. Adoption of more advanced and versatile devices such as laptops and tablets are lower still.

1.3. Digital Collaboration Platforms

Building citizen-citizen and government-citizen connections are part of Bangladesh's Vision 2041, to stimulate innovation and improve governance, with ambitions including:

- Connecting citizens in the ways most meaningful to them
- Citizen-centric civil administration
- Democratization and decentralization

As internet and smart device access increases, digital technology can be applied to achieve these goals through digital collaboration platforms.

1.4. Smart Bangladesh Campaign

Digital Bangladesh movement has laid strong foundations for Vision 2041. One of the key pillars of Digital Bangladesh has

been 'Connecting Citizens', where Bangladesh has made strong progress in providing access to digital technologies through national projects like info-Sarker, Union Digital Centers, etc. However, to realize Vision 2041, Bangladesh needs to create digitally-ready citizens who are empowered with more than just digital access and digital skills. They are driven by digital-first mindset to use digital technologies to benefit their lives and contribute to the society. Bangladesh needs a decade-long national campaign to sow digital-first mindset among all citizens in all aspects of day-to-day life.

2. Smart Government

Smart Government of 2041 should be able to bring to life the concept of "invisible governance" through implementation of 100% paperless offices and hyper personalized service platforms across priority areas like healthcare, education, agriculture, revenue management, public security etc. It will engage in proactive and collaborative policymaking to catalyse Bangladesh's evolution on frontier technologies. Smart Government will consist of multiple initiatives across different Ministries and Divisions and also national platform initiatives like national e-procurement marketplace, digital job platform, etc.

2.1. Smart Healthcare

Bangladesh has ambitious health targets for 2041 which are around increasing life expectancy by 8 years, reducing maternal mortality and infant mortality rates significantly, increasing health insurance coverage to cover at least 75% of the population etc. To make this possible, Bangladesh will require key step changes in accessibility, coverage, affordability, and quality of healthcare. Digitalization is going to be a key enabling factor towards all these dimensions and Bangladesh must look at creation of an ecosystem which puts Digital System at the heart of the healthcare ecosystem of the future.

2.2. Blended Learning

World class, universal education is a key ambition for Bangladesh, both as an end in itself, and as a means of harnessing the demographic dividend.

Digital technologies and tech-enabled methods can play an important role in addressing the challenges faced by Bangladesh in driving world-class, inclusive education, through a Blended Learning education model.

2.3. Smart Land Management

A fully digitized land records system in Bangladesh will ensure transparency and fairness for citizens, while incentivizing investment, through smart technologies such as:

- Establishment of Combined Land Management System
- Registration of land via an online self-service platform
- Transfer of land paid for and traced digitally.
- Digital Surveying, Mapping and Record Management
- Surveying regularly to be updated, optimized by management software.
- Land records organized in a single centralized database.
- Land zoning and mapping conducted via Satellite imagery
- Establishment of Cadastral Database

2.4. Smart Postal Services

Smart postal services in Bangladesh will ensure efficiency, security, and inclusivity by leveraging frontier digital technologies including:

- Purchasing of postage via app-based order and pay
- Collection/ drop-off of parcels automated through an IoT-based system.

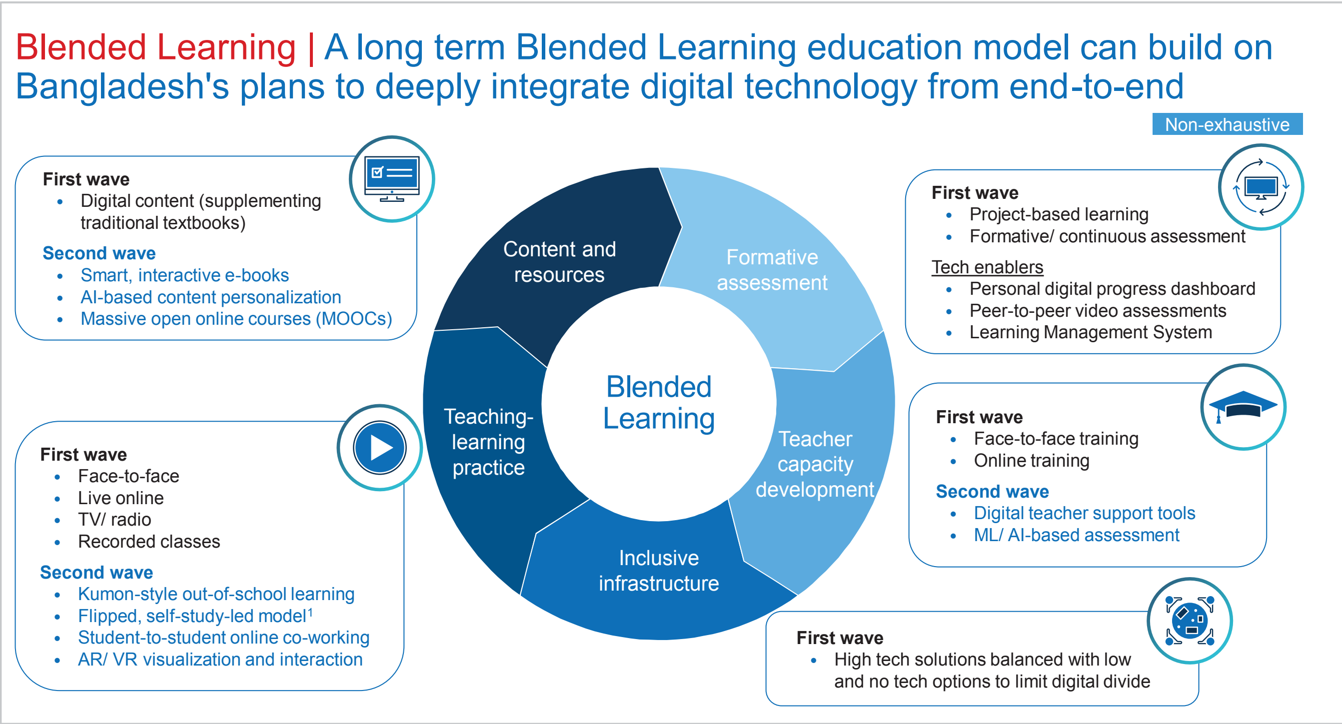


Figure: Blended Learning framework

- Sorting of parcels using robotics and augmented reality wearables
- Cross-country logistics facilitated by route optimization software.
- Last mile delivery using drones and facial recognition ID verification.
- Fintech Services

2.5. Smart Agriculture

Digital technologies will revolutionize agriculture in Bangladesh, increasing yields, reducing wastage, and stimulating economic growth, including:

- Input sourcing based on smart requirement forecasting.
- Tilling of farmlands via mechanized precision methods
- Planting guided by weather forecasting data and soil sensing analytics.
- Irrigation & spraying using drone-based geo imaging and smart irrigation systems.
- Harvesting of crops optimized by IoT crop readiness sensing.
- Trading of produce via digital marketplaces with market-timing analytics
- Processing & packaging using robotics and blockchain tracing technology.
- Logistics with greater visibility through IoT load and vehicle tracking

2.6. Smart Judiciary

The judiciary of the future in Bangladesh will be effective, efficient, and fair, leveraging advanced digital technologies across the judicial process, including:

- Case analysis using digital case files with real-time updates.
- Trail conducted via an e-Courtroom system.
- Enforcement of trial outcome via a digital custody management system
- Appeal/ dispute resolution leveraging artificial intelligence tools.
- Legal proceedings optimized using a real-time case management system

2.7. Smart Borders

Bangladesh's borders of the future will enable secure and seamless movement of people and goods by leveraging digital technologies including:

- Traveler authentication via digital passports, accelerated with optimization software.
- Border security using facial recognition and live monitoring via geo-imagery.
- Customs checks using blockchain load verification and AI compliance software.
- Payment of customs dues through digital pre-payment and cashless methods
- Warehousing of goods using robotics and track and trace technologies

2.8. Smart Transportation

2.8.1. Smart Roadways

Smart Roadways of Bangladesh will be powered by multiple digital technology interventions across the road value chain, some of which are as follows:

- Smart development and planning enabled by geospatial network planning, traffic analysis and simulation, etc.
- Smart design and engineering enabled by remote sensing topographic surveys/maps, radar based sub-surface utility mapping, auto traffic counter classifier, digital cadastral mapping, 3D modelling, etc.
- Smart construction enabled by advanced construction technologies, SCADA, etc.
- Smart road operations enabled by
    a. Mobility solutions like smart highways and bridges
    b. Maintenance solutions like digital twins
    c. Tolling solutions like electronic toll collection, express tolling solutions
    d. Safety solutions like smart loop detectors, smart traffic management and lane control system, geo-analytics for blackspots, weigh-in-motion systems

2.8.2. Smart Railways

Smart Railways of 2041 in Bangladesh will be powered by multiple digital technology applications across rail infrastructure, rolling stock, and rail transportation. Some of the most relevant technologies that will shape smart railways include Industrial IoT, Big data and AI, Augmented and virtual reality, Location based services and Geographical Information System (GIS), Cloud and digital platforms, and Mobile high-performance networks. These technologies can potentially power use-cases across all 3 segments of the railway sector, some of which are outlined below:

- Use-cases in rail transportation include digital platform covering customer journeys, personalized communication offerings, embedded payment processes, digital train station, digital platform for planning and management of freight transport, intermodal freight transport through automated and digitally interlinked traffic hubs, distributed ledgers, etc.
- Use-cases in rolling stock include VR based optimization of rail vehicle design, connected machines in vehicle manufacturing, AI based prediction of mobility behavior of passengers and goods, real time location, intelligent freight trains, predictive maintenance of rolling stock, robotic train maintenance, etc.
- Use-cases in rail infrastructure include digital twins, automated timetable development and dispatching, digital interlockings, fiber optic sensors for object detection, AI based image analysis for predictive fault detection, etc.

2.9. Smart Tax

A digitized tax system in Bangladesh will drive efficiency and transparency, while minimizing taxpayer effort and lost revenue, enabled by digital technologies such as:

- Registration for taxes via an online self-service platform using digital ID verification.
- Declaration of earnings supported by AI assistant.
- Validation of taxes conducted with machine learning to detect evasion.
- Reports generation automatically and stored in a single centralized database.
- Payment completed digitally with automated calculation of refunds due.

2.10. National Procurement e-Marketplace

Public procurement is a key responsibility of government, with considerable impact on levels of budget efficiency, government effectiveness, and corruption in a country. Digital technology can be adopted in the form of a national procurement e-marketplace - a centralized, unified procurement platform through which government agencies can relate to vendors, to facilitate and optimize category-based transactions.

2.11. Digital Job Platform

Job creation is central to Bangladesh's Vision 2041 - in terms of harnessing the demographic dividend and driving a zero poverty, innovation economy – and a broad, well-functioning digital job platform can play an important role in driving employment and inclusion.

2.12. Smart Social Safety Net

A smart social safety net in Bangladesh will ensure rapid, effective, and inclusive response to crises for the country's vulnerable citizens, enabled by digital technologies such as:

- Cash transfers via mobile money and digital biometric ID verification
- Public works job creation with digital personal skills profiles and low skill gig platforms
- Emergency food and clothing using remote drone delivery.
- Emergency enterprise loans based on mobile money-led MSME credit ratings.
- Education, health, and housing incentives integrated with health/ education data.
- Natural disaster response coordination using AI prediction and management software.

2.13. Smart Public Services and Paperless Administration

Digital tech can play a vital role in building world class government in Bangladesh, by replacing paper-based processes and transforming services.

Bangladesh has ambitious goals for efficient, accountable, user-centric public administration and service provision, but faces several challenges that are holding the country back from realizing this vision:

2.14. Police Modernization

The police force of the future in Bangladesh will be responsive and proactive, leveraging

advanced digital technologies across operations and administration, including:

Prevention of crime using predictive analytics to model future risks.

- Detection of crime via smart video surveillance systems and AI
- Crime identification & prevention via smart digital solution through community engagement
- Crime response organized with resource deployment optimization software and capacity building for fastest response to cyber threats.
- Investigation aided by digital casefiles and biometrics.
- Administration of police via digital criminal records database and collaboration tools
- Intelligence collection and analysis through smart AI based monitoring system and big data analytics
- Capacity building with Security Operation Center (SOC), Cyber Command Center etc. for effective cyber monitoring and to ensure cyber security.

2.15. ICT Policies

ICT policies are essential to promoting the multipurpose use of ICT and to ensure transparency and accountability of citizens, government, and businesses to achieve national development goals.

Series of following recent trends have implied that Bangladesh needs to think about polices in Cybersecurity, Emerging Technology (particularly AI) and ease of doing ICT business.

- Cybersecurity and Data Protection policies – Increase in number of data breaches and data privacy infringements along with increase in use of free & open software as a platform
- Emerging Technology policies – On-going “technologization” of society through emerging technologies (e.g., AI, IoT, Blockchain etc.) along with an impending data explosion through use cases from smart city enabling technology (e.g., AI, connected devices etc.)
- Ease of doing ICT business policies - ICT is increasingly a key driver of economic development for emerging and developed markets. There is also high level of interdependence between economic activity and ICT infrastructure development.

2.16. Digital Leadership Academy

Digital Leadership Academy (DLA) will be a government-led program with 2 key objectives:

- Digital upskilling and re-skilling at all levels of the Government, from Local Government Representatives to MPs.
- Unlocking digital transformation capabilities in private sector leadership by extending offerings to select C-suite executives across focus sectors

2.17. Smart Planning

Government future plan will be sustainable, effective and timebound, leveraging cutting-edge digital technologies throughout the socio-economic development plan including.

- Preparation, processing & appraisal of development project using digital technologies.
- Digital formulation of annual development program.
- Preparing national plan leveraging artificial intelligence tool.
- Digitization of social science research.
- Digitization of Monitoring & Evaluation System.

3. Smart Society

Smart Society will essentially be characterized by inclusive communities and sustainable living. Digital tolerance, ethics, and values will be embedded among citizens. High degree of inclusivity will be enabled through interoperable cashless payment ecosystem, easy access to credit etc. and life will be sustainable & resilient in smart cities, energized by smart grids and boosted by an integrated technology platform.

3.1. Inclusive Financial Ecosystem

The National Financial Inclusion Strategy of Bangladesh aims to achieve 100% financial inclusion by 2025, by providing at least one regulated financial service account to all adults by that year. It has identified digitalization and innovation as key thrusts in the journey to sustainable and impactful financial inclusion.

There are 5 key requirements to inclusive financial ecosystem in Bangladesh.

a. Innovative digital financial services that respond to market's needs with good product-user fit
b. High volume of digital financial transactions enabled by interoperability of payment systems
c. A financial regulatory framework that empowers innovation to bank the unbanked
d. Widespread access to telecom networks / internet and mobile devices
e. Adequate financial literacy among users

This program focuses on the first two requirements, as digital technologies play a central role in achieving them. The fourth requirement will be an outcome of 2 other programs in the Master Plan – Universal Internet Access and Smart Device Access.

The ICT sector should strengthen current efforts towards financial inclusion through 2 following programs:

3.1.1. Interoperable Payments Ecosystem

A common platform for interoperable payments among people, business, and government to scale up digital transactions driven by convenience and lower transaction costs.

3.1.2 FinTech Accelerator

A unified platform to support FinTech players with an ecosystem of innovation, banking partnerships, funding, and regulatory testbeds, with potential to accelerate growth of FinTech ecosystem in Bangladesh. FinTech startups need more than just regulatory support to achieve scale.

3.2. Green Sustainable Smart Bangladesh

3.2.1. Smart Cities

Smart Cities (SC) will help Bangladesh make its citizens, economy, and society more socially, economically, and ecologically sustainable and be more responsive to the needs and desires of its residents and hence, helps improve overall quality of life.

3.2.2. Smart Grid

Smart Grid incorporates digital technology into a power grid, to allow two-way flows of information and power. Implementing a Smart Grid project for Bangladesh would help them draw benefits including remote monitoring and control of the power grid, better integration of renewable energy sources, and improved interactions with citizens.

Bangladesh can expect 5 key priority outcomes from the implementation of Smart Grid initiative -

- Reliable and resilient supply
- Automated system monitoring & control
- Integrated renewable energy

- Effective customer engagement
- Grid as a platform

3.2.3. Digital Climate Resilience

Climate resilience is a critical element for Bangladesh to solve the environmental, socio-economic & demographic stresses it will cause. Green growth based on climate-resilience, reduced pollution, and data-driven climate management is a key ambition for Bangladesh. Bangladesh should look to leverage various digital technologies to help them become more resilient as well to adapt to the impact that will be created through climate change.

3.3. Digital Tolerance and Culture Movement

A nation-wide movement will be steered to embed digital hygiene among all citizens in all aspects of daily life. The primary objective will be achieved through 3 sub-objectives:

a. Building citizen awareness on cyber wellness to empower effective evaluation of digital content;

b. Educating citizens on basic cybersecurity to drive safe use of digital solutions; &

c. Embedding digital ethics to drive responsible use of digital solutions.

3.4. Smart Bangladesh Stack

Smart Bangladesh Stack will be the Government's technology ecosystem supporting the design, building and delivery of unified digital services in Smart Bangladesh. The ecosystem will be powered by 3 key elements:

- Digital identities that empower the existing identity systems in Bangladesh.
- Digital assets comprising data ecosystems, digital money, etc.
- Digital transactions, for example, digital payments, open exchange of data, etc.

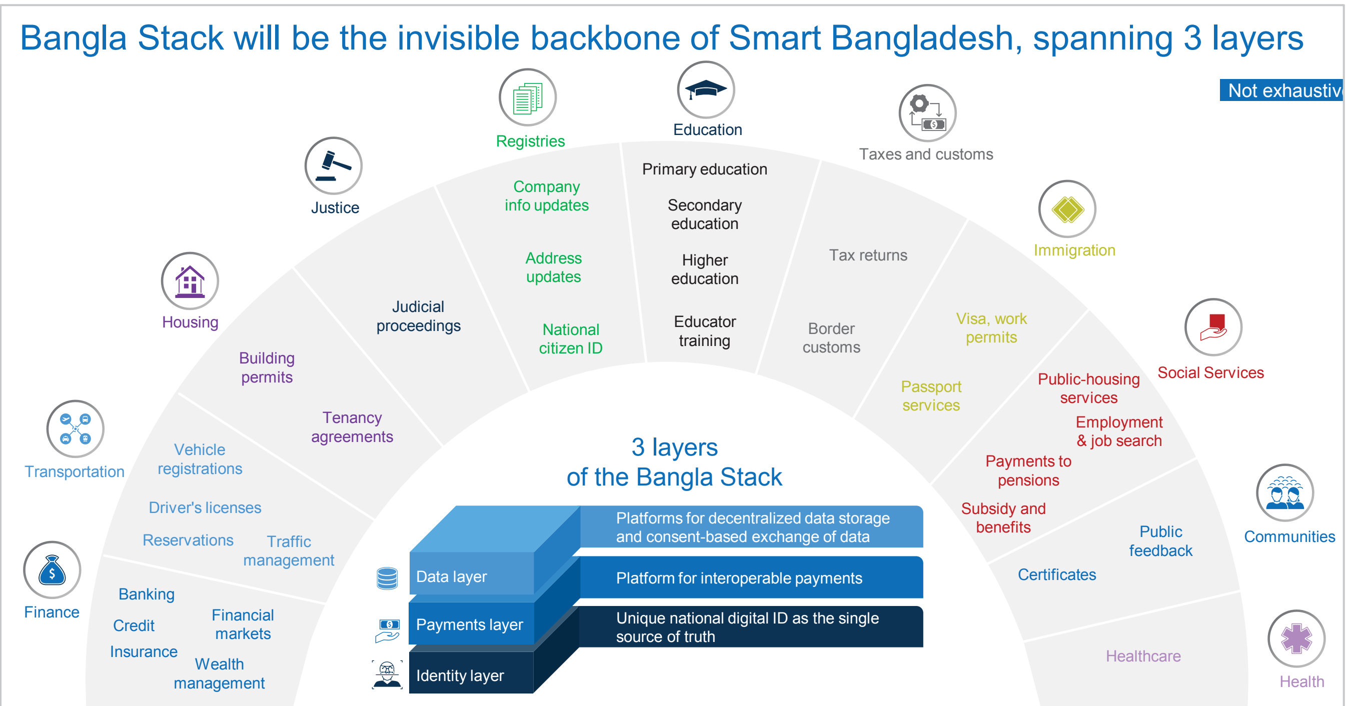


Figure: Layers of the Smart Bangladesh stack

Layers of Smart Bangladesh Stack: Smart Bangladesh stack will be the invisible backbone of Smart Bangladesh, spanning 3 layers.

4. Smart Economy

Smart Economy will be about creating an innovation economy to enable Bangladesh to be on the fore-front of ever evolving industrial technology revolution, especially across priority segments like Readymade Garment (RMG) & Textiles, Light Engineering, Agriculture etc. This will go hand in hand with creating a $50 Bn ICT industry, creating a robust startup ecosystem. Combinedly these will position Bangladesh to build on its current industrial strengths & become technology forerunners in the same.

4.1. Fourth Industrial Revolution (4IR) Industry Accelerators

Production is already being transformed across the world by 4IR technologies such as advanced robotics, additive manufacturing, and augmented reality. While this represents an existential threat for some professions and sectors in Bangladesh, it is also a major opportunity for the nation to increase productivity, stimulate innovation, and to carve out a new role in global value chains. Bangladesh would like to be in a position in the 4IR technology domain where she can achieve 3 objectives:

- Digitally native industry operations e.g., digitalized intelligent supply chain.
- Product innovation e.g., nanotechnology enabled fabric.
- Industry specific 4IR tech as a revenue generator e.g., Industry specific technology solutions like 3D printing-based collaborative design of sweater can be exported.

4.2. ICT Industry Acceleration

Realizing a $50 Bn ICT GDP by 2041, would mean elevating the sector's national GDP contribution from less than 1% to 2-3% by 2041. Government of Bangladesh has triggered actions across financing, talent development, policy enablement, and infrastructure development to build foundations for the ICT sector. A recent steer towards national adoption of emerging technologies is evident from national strategies by ICT Division on Artificial Intelligence, Robotics, Internet of Things, Block chain, Cyber security, and Microprocessor Design.

ICT Industry Acceleration Program will pivot around 4 key components:

- Smart ICT Investment Promotion Agency (IPA):
- Systemic ICT Export Promotion
- Nation-wide Stimulation of High-value IT/IT-ES Projects
- Holistic capability build for the ICT sector

4.3. Startup Bangladesh

Growing the Startup Ecosystem will help Bangladesh to achieve several key objectives of Vision 2041 such as 'Industrialization and Trade' through creation of more jobs and lowering of unemployment, 'Urban Transition' through the reallocation of wealth raised by entrepreneurs to fund their ventures, 'Innovation Economy' as Startups indirectly help in subsidizing R&D costs of a country and 'Human development' as Startups help younger employees become versatile in many skills.

4.4. Smart Commerce

The e-commerce sector in Bangladesh is projected to be ~$8 Bn (in revenues) in 2022 and is projected to grow at 22-23% Compound Annual Growth Rate (CAGR) during 2022-2025. The sector has seen emergence of multiple e-commerce startups viz. Chaldal, ClickBD, Daraz, NEO Bazaar, etc. The Government of Bangladesh has taken considerable steps to drive growth of domestic and cross-border e-commerce. Ministry of Commerce, Bangladesh, launched the National Digital Commerce Policy, 2018. Pursuant to the policy, the Ministry of Commerce formulated Digital Commerce Operation Guidelines in 2021 with the aim to inject accountability, liability, and transparency into e-commerce businesses. The guidelines have defined the contours of delivery timelines, consumer rights, prohibitions and requirements on products and services, marketplace registration, and records & payment processing.

4.5. Technology and Infrastructure Backbone

4.5.1. Universal Internet Access – Internet Infrastructure

Improving internet access is a key enabler to achieve several key elements of Bangladesh's Vision 2041 – it helps in providing macroeconomic stability by contributing to GDP growth as well as supporting innovation by driving enhanced learning outcomes as well as supporting development of Startups and SMEs.

4.5.2. Government Cloud and Data Centers

With the impending data explosion in Bangladesh due to several factors such as increase in internet penetration, expanding Govt e-Services, smart city initiatives etc., it is becoming increasingly important for Bangladesh to create its own scalable and flexible cloud infrastructure.

It is expected that the ICT Master Plan 2041 prepared by the Government of Bangladesh will contribute to achieving Smart Bangladesh 2041 Vision through milestones identified for each program across 2025, 2031 and 2041.

Implementation and Program Governance Roadmap

Each of the 40+ mega programs proposed in the Master Plan will go through 4 phases of evolution, leading to the goals of 2041 and the stages are Launch, Stabilize, Scale, and Excel. Each program is important, and their sequence of launch has been designed on 3 key factors – Impact, Readiness and Control.

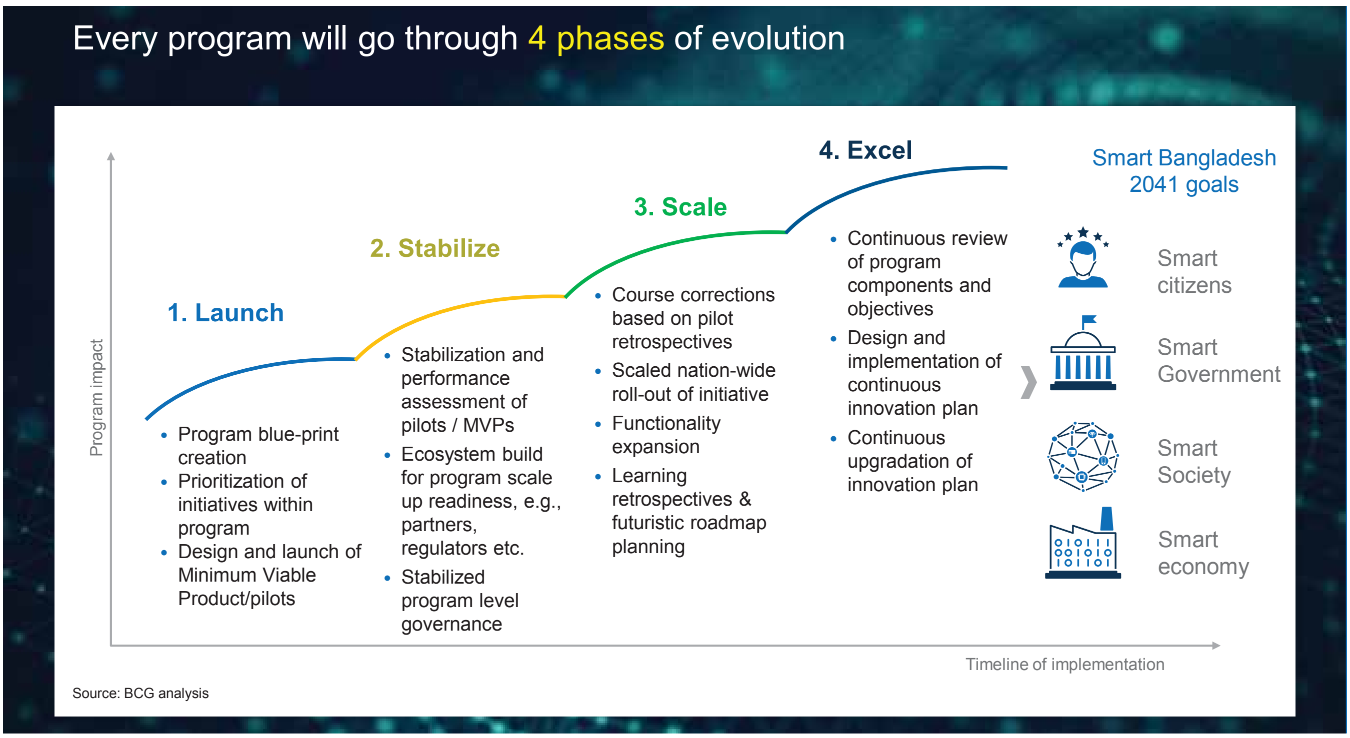


Figure: Implementation Strategy

Conclusion

Bangladesh has seen good investment and job growth recently, as evident from the investments done by large players like Hyundai, Samsung, Nokia, Vivo, Walton, Oppo, Symphony etc. with 21000+ employment being created in Bangladesh Hi-Tech Park Authority facilities. Fintech startups have also seen rapid growth in Bangladesh; for instance, bKash has been a spectacular success, and multiple other players have come up with innovative offerings in the digital payments space, including Nagad and Upay. There have been notable moves in the last decade around setting up of Aspire to Innovate (a2i) and Startup Bangladesh, re-drafting of the National ICT Policy in 2018 and the e-Government Master Plan for Digital Bangladesh formulated in 2019.

All these and many more initiatives have created a solid foundation for Bangladesh to build on and there are multiple indicators, which emphasize the need to attain further levels of maturity in digital and technology to be able to move from a Digital Bangladesh to a Smart Bangladesh.

But Bangladesh needs to establish itself as a leading center for frontier technologies, attracting large ICT players to invest. The country's digital adoption is high, but untapped potential remains. Accelerating smart technology research and re-skilling workforce is crucial for achieving vision 2041.

Reference

1. Smart Bangladesh: ICT Master plan 2041 (Draft)
2. e-Government Master plan for Digital Bangladesh 2019
3. National ICT Policy 2018
4. National Perspective plan 2041
5. Digital Security Act-2018
6. Bangladesh National Digital Architecture Guideline-2019
7. ICT Act-2006
8. Various Secondary Sources like Newspapers, Journals, Publications etc.

BRICS in Global Economy
The "AVENGERS"?

Antara Rahman ACA[1] | **Md. Tahmidur Rahman Khan**[2]

The Authors are:

[1]Associate Member of the Institute of Chartered Accountants of Bangladesh (ICAB)

Associate Manager, Internal Audit BRAC Bank Limited

The acronym that was once coined in 2001 by Goldman Sachs economist. In the current perspective BRICS has become an elite nomenclature of world economies' groups. BRICS now comprises the growing economies of Brazil, Russia, India, China, and South Africa. These are foreseen to be dominant global economies by 2050. Collectively these countries make up about 26.7% of the world's geographical surface, 25% of the world's GDP and 41.5% of the global population. Together with all these factors, low labor cost and the abundance of natural resources BRICS is becoming wider and more powerful as time passes on. As such the success of BRICS could mean a historic paradigm shift in global development dynamics. In all likelihood it would potentially be threatening the dominance of other economic cartels like the USA and EU.

Russia initiated the creation of BRICS and on September 20, 2006. It had held the first BRIC Ministerial summit. The summit was attended by the foreign ministers of Brazil, China, and Russia as well as India's defense minister out of the countries' thrust to increase the multilateral collaboration amongst them. At the initiative of Russia, on May 16, 2008, they hosted a meeting of BRICS Foreign Ministers at Yekaterinburg, Russia. Subsequently the first BRIC Summit was held on June 16, 2009, at Yekaterinburg. With South Africa joining, it became BRICS, as we know it now.

Current Scenario

When the term BRICS was first popularized, the countries that made up the group were all growing fast and developing economies. Most economists foresaw that this group would balance the of the global economy by now. Of course, they are collectively still very powerful taking China, not only from a purely economic point of view but also simply because of the resources, manpower, and technology in possessions including nuclear weaponry. But most of the countries have by now slowed down the progress significantly. One reason the BRICS group has not done much is because China & India having rift. Another reason is that Russia's growth has been unsustainable for over a decade before. In the post days of latest round of sanctions, and after its invasion of Ukraine, a further squeeze in already pngoing. Brazil also has lost close to half of its economic output in the last 10 years, and its recovery from COVID is slower in the backdrop of ongoing political onslaughts. South Africa has been much the same depicting no real economic growth in the past decade. Even China, whose economy previously seemed unstoppable, is confronting more difficulties as it develops. The outlook is not as optimistic as it was anticipated. Even while the world as a whole has grown significantly, these countries are going to have trouble pulling the

strings of the global economy. Unless they can manage on their own, its' much talked about group dynamics is not going to help them either. All the BRICS nations and the potential BRICS members are to travel further together to be more closer allies.

Achievements so Far

One of the biggest projects rolled out since the group's formation was the establishment of the New Development Bank, most commonly known as the BRICS Bank, which is similar to the International Monetary Fund .Its mission is to invest in developing economies and improve their participation in global trade. However, in its history, the BRICS have only authorized projects totaling $33 billion. Alongside this, the World Bank promised $104 billion in just its 2022 budget year. BRICS countries launched vaccine and R&D centers on March 2022 and have donated over 1 billion doses of COVID-19 vaccines. Furthermore, BRICS plans to have its own Olympics, their own cable, their own kind of IMF, and their own reserve currency for the rest of the world. To enhance cultural exchanges among BRICS countries, cultural festivals in 2017 were successfully held.

Urgency for a New Currency

USD accounts for 88% of all international transactions and the demonstration of Russia being cut off from global payments networks showed a lot of countries that their reserves could be rendered useless if they did something that one country did not like.

Recently BRICS has announced plans to introduce a new currency with hearsay that could even be backed by gold .Such matters are being talked about this since 2009, but no progress has so far achieved. Even if they did manage to introduce this new currency, it would probably only add inflexibilities and complications to just trading in their existing currencies because it would require macroeconomic convergence, banking unionization, and fiscal unionization which are all onerous requirements for a common currency.

A More Expanded BRICS

The recent BRICS summit in August 2023 welcomed six new members: Iran, Saudi Arabia, Egypt, Argentina, the UAE, and Ethiopia, to officially join the group in January 2024. The six members were chosen after reaching an agreement among all the existing BRICS nations on the basis of criteria and procedures of the BRICS expansion process. The six newest members also come from a variety of economic backgrounds. For example, Ethiopia is a low-income country while Argentina is amidst major economic difficulties. Saudi Arabia, the UAE, and Iran on the other hand are oil rich nations. Iran, for instance, is one of the nations that would profit from a trading system other than one dominated by the dollar when the participants would start conducting transactions in their own currencies. These countries wish to be shielded from

economic sanctions and other sanction measures that the West might employ against them.

While the BRICS group presents itself as an enormous alliance, it is important to recognize that it primarily revolves around China. China's economic output surpasses all other BRICS countries combined, making it the central economic force of the group. While the combined strength is impressive, individual BRICS countries would face challenges, from economic crises to political turmoil. This may hinder the concept of BRICS for being a growing economic powerhouse.

Bangladesh's bid for membership in BRICS deferred.

Bangladesh had eagerly expressed its desire to join the BRICS group and formally applied for membership. However, Bangladesh was not granted membership this time and it was deferred.

BRICS had already been in the process of enjoining of new members for a considerable period. This marked the first phase of BRICS expansion, and despite initial differences among its members, the expansion went ahead. Bangladesh had adopted a cautious "go-slow" strategy, which may, in hindsight, prove to be a blessing in disguise. In the midst of an unpredictable global economy, coming together under the flag of BRICS its members together do have the ability to define a brighter and more prosperous future for both the alliance and the globe as a whole.

Henceforth, if Bangladesh is given chance to join BRICS, it might potentially increase trade and investment by securing loans with cheaper interest rates and fortifying ties with other member nations. Additionally, if BRICS ever creates a different type of currency or trading system there will be more trade between Bangladesh, China, and India. This will create a win-win situation for all the member countries in general. The world is looking forward to this revolutionary voyage, in which BRICS and Bangladesh will ascend further heights for shared economic success and would exploit much more privileged future prospects.

Conclusion

In conclusion, BRICS is an intriguing case study in the dynamics for global economic cooperation. While their potential economic might is significant, the group's internal challenges and divergent interests may undermine their long-term success. As seen in the past economic collaboration has been a powerful tool for promoting global peace and success. Now will the BRICS coalition can really bond and reform the global economy or will it remain a loose grouping with limited power, will be unveiled in passage of time & a new vista opens from an expanded BRICS !

Reference

- The Economist: What is the future of the BRICS?
- https://www.economist.com/the-economist-explains/2023/08/09/what-is-the-future-of-the-brics
- Reuters: The BRICS are better off disbanding than expanding
- https://www.reuters.com/breakingviews/brics-are-better-off-disbanding-than-expanding-2023-07-31/
- The Daily Star: How Bangladesh can benefit by joining BRICS
- https://www.thedailystar.net/opinion/views/the-overton-window/news/how-bangladesh-can-benefit-joining-brics-3359311
- Cryptopolitan: BRICS common currency will be a major threat to USD
- https://www.cryptopolitan.com/brics-common-currency-major-threat-to-usd/
- Dhaka Tribune: BRICS expansion: Why Bangladesh could not make it this time
- https://www.dhakatribune.com/bangladesh/323425/brics-expansion-why-bangladesh-could-not-make-it?fbclid=IwAR2lxcqYlmDLqmUMi9QNzc0YtAPplK-YMNJq_8XT2J2O_MW5hmEfuUr-450

Recent Changes of Labour Law and its Implication

Barrister S M Abu Nayem Ahmed

The Author is an Advocate Supreme Court of Bangladesh

Introduction

Bangladesh labour force has significant contribution to the growth of its economy. About 58.2% of people are engaged in different sectors of economy. Bangladesh has youth population between the ages of 15-24 and gets at least 2 million youth to its workforce every year. Bangladesh continues its efforts to resolve the complaints raised under Article 26 of the ILO Constitution and the EU in bringing qualitative changes in the labour sector. The recent changes in Bangladesh of women entering the workforce in larger numbers than ever before have been reflected by the provisions of recent changes in labour rules in September 2022. Amended law will be also applied to all industrial zones in the country. Despite changes, there are certainly area of concern.

Background

The Act was updated through its amendments in 2013, and 2018. Labour law compliance increased extensively since the introduction of Labour Act (BLA) 2006 and the Bangladesh Labour Rules (BLR) 2015. Bangladesh has earned its reputation in the international market as one of the top labour intensive countries in the world. With its domestic readymade garment (RMG) industry and internationally recognized labour export sector, there were more demand of the Labour law compliance, which was mitigated through the introduction of Labour Act 2006 and the Labour Rules 2015. Nevertheless, our labour laws had been under severe scrutiny from different international organizations.

After the Labour Law Act in 2006 and Labour Rules in 2015, it was further amended in 2013 and 2018 aiming to ensure the productivity, the wellbeing of working class as well as to respond appropriately to the compliance of human rights pressure groups. The government of Bangladesh (GoB), in compliance with the assurance given to the International Labour Law (ILO) introduced amendments to Labour Rules in 2015 in the area like trade unions, rights of employees under third-party contractors, classification of permanent work, incorporation of digital labour registrar, timelines of misconduct investigation procedures and the representation of an accused employee.

Definition of Workers and its Expansion

As far as the classification of workers under the BLA 2006 were concerned, an individual worker, after completion of his or her probationary period or extended period of three months, shall be deemed to be a permanent worker. The permanence of employment of each individual would be conditional upon the satisfactory completion of his or her probationary period. However, if clerical nature, then

six months. For other workers, an initial period of three months, then further extension of three months if need be for ascertaining his or her quality, and in this way not exceeding a total of 180 days.

However, a new insertion to the BLR 2015 by the 2022 Amendment provides that to determine the classification of workers, any work will be considered as the primary work or permanent work which has been continuing in the establishment without interruption for a period of 180 days.

This gives rise to confusion as to whether the classification of an individual worker is dependent on how many days he or she has worked or whether the very work or role for which such a person is assigned has been continuing exceeds a period of 180 days. This amendment will be critical for businesses due to litigation exposure for businesses that could be potentially brought by outsourced workers. There may now be attempts on the part of outsourced workers to rely upon these amended provisions and argue that employers can no longer engage outsourced workers in a designation or post which is included in the permanent manpower structure or organogram of the employer company that exceeds 180 days of work.

Employees of Third Party Contractors

The rights of employees employed under third-party contractors used to create legal controversies between employers and employees. One of the notable amendments to the Bangladesh Labour Act, 2006, during its 2013 amendment was workers supplied by a contracting agency were to be treated as the workers of the contractor concerned. They were deprived of the same rights as direct employees, having equal pay and other financial benefits. Even if these employees are employed by third-party contractors, more often than not, they would end up suing direct companies, causing them unexpected inconvenience and costs. The newly amended rules 4 and 5 state that third-party contractors must pay the employees they employ the same amount that is earned by direct company employees. In addition to that, employers that do not already have a running gratuity scheme must now form a 'Workers' Social Security Fund' which would provide third-party employees with the same facilities like gratuity.

The 2022 Amendment of Bangladesh Labour Rules (BLR) 2015 now provides that the wages of a worker supplied by a contracting agency will not be less than the wages of a permanent worker or employee of a similar rank. The basic salary of the same also cannot be less than fifty percent (50%) of the determined salary. This attracts both financial impacts as well as practical challenges with its implementation.

Hiring drivers, security guards, cleaners etc. through specialised third-party contractors, would enable third parties with professional services at competitive costs. If employees of such contracting agencies are now mandatorily required to be paid wages equivalent to that of permanent workers of a similar rank within the corporation, it will incur more costs. This may increase

costs burden before contracting agencies can make a margin for themselves. Moreover, it gives rise to a complicacies as it is unclear how the contracting agency and the engaging corporation would know the particular wages of each other.

It may be impracticable for a contracting agency to ensure that its wages in different posts match that of its various clients, who have different pay structures. These may bring confusion between the parties.

Nature of work and its expansion

Another important rule in the amended Act is for the permanent work; the changed rule states that depending on the sort of work it is, any work that is conducted in a workplace that continues beyond six months is to be considered permanent work. This amendment is expected to meaningfully change the nature of what is currently known as 'contractual work'. Previously employers could go on for more than six months even if the nature of the work seemed permanent. However, now, contractual work can only be offered for tasks that are of temporary nature or project-based.

The Act now covers more workers, including those are employed in inland water, so they can enjoy the rights and protection provided by it too. Other categories of workers such as those in the tea industry where, they not only get monetary benefits but can now also retain other benefits like their existing leisure facilities.

Yearly Increment

The BLR 2015, as amended, now imposes a requirement for the mandatory yearly increment of wages that cannot be less than 5% of the basic wages. Interestingly, the 2022 Amendment makes no reference to any proviso or exception that an employer may avail to impose preconditions, such as meeting KPIs or having a minimum profitability threshold, while achieving wages increment. In the premises, corporations will have to face the pressure of increasing employee costs irrespective of practicalities, notwithstanding the overall slowdown of growth during these times of global economic crisis.

Moreover, the primary legislation BLA 2006, as amended, does not contain any statutory provision stipulating such mandatory yearly increments of wages. This gives rise to a question as to whether such an act in the absence of an express statutory provision sanctioning the same thereby lacks lawful authority.

Disciplinary Action Procedure

To maintain discipline of workforce, allowing participative committees to choose representatives for employees facing charges of misconduct, if the employee is unable to do so within the time allotted for the investigation, would now be for 60 days. This would be counted from the time a show-cause notice is served, to the time judgement is passed. However, to try to minimise the delay, harassment may take place.

BLA 2006 and BLR 2015 also provide for the disciplinary inquiry procedure to be completed within 60 days. It did not, however, explicitly mention

the time from which these 60 days period would start resulting which may cause inconsistent judicial approaches and interpretations. The 2022 Amendment has sought to offer clarity and address this confusion and provides that the date on which the show-cause notice was issued till the day on which the complaint has been disposed of shall be considered for the purpose of counting these 60 days.

The consideration that the 60 days period starts to run from the issuance of the show-cause notice, causes the actual time which the disciplinary inquiry committee gets become less as the accused employee is mandatorily required to be given 7 days' time to reply to the show-cause notice. In case of an unsatisfactory response, the disciplinary inquiry committee requires a nomination from the accused employee as well as the employer. The inquiry committee then is supposed to thoroughly investigate each of the allegations and provide opportunity for the accused to explain his or her position. On that, the inquiry committee is required to prepare and submit a report. Completing all these processes within 60 days from the issuance of the show-cause notice is difficult to materialize.

Maternity leaves for Female Employees

The amendments that guarantee to make workplaces better for women workers, i.e. Rule number 16, which fixes the maternity benefit calculation and calculates the wage rate divided by 26, which increases their benefits. Now a woman can avail of maternity leave for at least 8 weeks after the birth of her child, even if she has not disclosed her pregnancy before delivery. The previous Act was largely unclear about what should happen in such a case but this amendment has clarity that the woman worker can now enjoy 8 weeks of paid leave in addition to her other benefits. The rule is not valid for the woman suffering a miscarriage but even then, she would be allowed sick leaves as it requires. According to the provision, in case of miscarriage, a woman worker will be entitled for a four-week leave with wages for her sickness.

Abusive behavior towards Female Employees

Another much needed amendment is the one concerning the behaviour encountered by women workers in the workplace i.e., rule 88 which redefines sexual harassment in the context of the workplace. The case laws regarding this matter in the form of judicial precedent have been given due weightage. With women engaged in all spheres, be it in corporations or multinationals, or behind the RMG sector, this particular rule was earnestly sought. A provision relating to conducts towards women has been included in the rules that prohibits indecent and abusive behaviour towards women employees in any establishment. The amendment has made the formation of a five-member sexual harassment prevention committee led by a woman is mandatory in each workplace.

Better workspace

Men and women in larger industries work in poor conditions and deserve a better work environment. To that effect, the amended Act now

issues that medium-sized employers, employing a minimum of 25 people must also provide adequately spacious lunchrooms to employees. This was previously only a requirement for establishments with 50 or more workers.

Looking after Worker's Families

Workers' families also has been looked after in the new provision, in the instance of the worker's death while in employment. Previously, compensation would be given by the employer to the labour court. Now, for the death of a worker, or in the instance that a worker is missing, the employer must directly pay the nominee or legal heir of the said worker.

In case this is not possible, the benefit would then go to a labour welfare organisation where it is to stay for a total of 10 years or until such time as a claimant arrives. In case there is no claimant within a decade, the money would be used for the needs of the other members of the organisation. This law makes it possible for the benefit to go directly to the workers' families instead of them having to go through the hassle of getting it from the labour court, or at least for it to be used for the benefit of other workers than simply lying in labour court.

Compensation for Work in Holidays and Wages of Workers

The fact that workers can now be called into work on any major holiday, with only 1 (one) physical substitute day by way of compensation and 2 (two) days in cash benefits. Previously, 3 compensation days would have to be given by the employer. Even if this amendment helps mostly the employers, it does not leave employees in the lurch either.

Under the newly amended BLR 2015, the basic wages of workers cannot be less than 50% of the total wages in cases where the Government has not fixed a separate minimum wage.

Compensation

This amendment alone can impact the entire compensation structure of the entire workforce of a company in a number of ways. Many businesses have an existing pay structure under which the sum total of other benefits and allowances surpasses the basic wages payable. That can no longer be the case under the new rules since basic wages payable to workers shall be a minimum of fifty percent (50%) of the total wages. Companies with different compensation structures may now be required to change the status quo and implement this new requirement.

This may turn out to be less straightforward than it appears since entities that are currently giving higher benefits and allowances in comparison to basic wages may now be compelled to increase the basic wages rather than simply altering and adjusting the heads. This is because a reduction of payments under such benefits and allowances may only aim so as to achieve the 50:50 ratio.

Trade Union

Other amendments for the benefit of employees include making it easier for workers to join trade unions and making the process less expensive, thus

helping to safeguard the rights and interests of workers.

Concluding Remarks

Bangladesh is a growing economy and there is much more to be done to ensure that the large number of workers employed in different sectors give back to the economy. Keeping them in good spirits and keeping them motivated is a welcome gesture which these amendments in labour law have provided. While these amendments have not completely wiped out out all the bends, it is an encouraging step towards the kind of work environment that these employees deserve.

While the 2022 Amendments of BLR 2015 have been a much-awaited legal update for the legal fraternity and entities doing business in Bangladesh, various provisions thereof may be susceptible to legal challenge in courts of law on the grounds of various provisions being ultra vires, without lawful authority. The Government shall engage more closely with key stakeholders to cater for the needs of businesses in the coming days, including attaining further clarity of law and promoting investment.

Bibliography

1. Labour Law Amendments: Towards a Better Future? Author: Munira Fidal; Labour Laws; Published in Business Times on May 16, 2023; link https://ibtbd.net/labour-law-amendments-towards-a-better-future/

2. Bangladesh: Recent amendments in Labour Act considered a step toward better labour law Bangladesh Labour Rules:

1. 2022 Amendments 'Key concerns and implications for businesses' Suhan Khan, FCIArb; Managing Partner; Accord Chamber; Link https://accordchambers.com/insights/bangladesh-labour-rules-2022-amendments/

2. Towards a better labour law – Recent amendments to Bangladesh Labour Act 2006; Md. Sameer Satter; Link https://www.thedailystar.net/law-our-rights/news/towards-better-labour-law-recent-amendments-bangladesh-labour-act-2006-1675000

3. Bangladesh Gazette on Amendment of Labour Rules 2015 published on 1 September 2022

4. Bangladesh Labour Act 2006; by Md. Mohinuddin; On February 13, 2022; https://www.sweducarebd.com/2022/02/bangladesh-labour-act-essay.html.

5. Consulted Opinion of various expert Law Practitioners and HR Professionals.

Redefining Destiny

The Odyssey of Exchange Rates and Balance of Trade in Bangladesh – A Revolution in Global Economics

Shahriar Ahmmed ACA[1] | **S M Ashfaqur Rahman** FCA[2] | **Md. Anwar Ibrahim**[3]

The Authors are:

[1]Associate Member of the Institute of Chartered Accountants of Bangladesh (ICAB)

[2]Fellow Member of the Institute of Chartered Accountants of Bangladesh (ICAB)

[3]???

Introduction to Floating Exchange Rates

In the complex world of global economics, the mechanisms governing exchange rates and balance of trade are of great importance, shaping the financial landscape of nations. These topics are particularly relevant for Bangladesh, a country that has seen significant shifts in its exchange rate policies and has grappled with negative balance of trade issues. This article digs into the historical evolution of exchange rate mechanisms, explores the intricacies of negative balance of trade, examines the current economic situation in Bangladesh, and sheds light on the multifaceted relationship between balance of trade and exchange rates. From a detailed analysis of Bangladesh's unique context to a comparative study of other countries' approaches, this comprehensive write up seeks to provide an in-depth understanding of the potential challenges, outcomes, and mitigation strategies associated with implementing floating exchange rates in a nation striving for stability and growth.

Historical Overview of Exchange Rate Mechanisms Globally

Exchange Rate Mechanisms (ERMs) determine how foreign currencies are valued against one another. Understanding the history of these systems can give important insights into global economic growth. Here's a high-level summary of the key phases in the evolution of ERM globally.

A. The Gold Standard (19th Century - 1930s)

Currency was directly linked to a certain amount of gold under the Gold Standard. Because currencies were fundamentally valued in terms of gold, exchange rates remained steady. However, the system's rigidity led to financial inflexibility, which was viewed as a contributing reason to the Great Depression.

B. The Bretton Woods System (1944 - 1971)

The Bretton Woods System, which was established in 1944, established fixed but flexible exchange rates in which currencies were tied to the US dollar, which was convertible to gold. Its goal was to prevent competitive devaluations and encourage international economic cooperation. When President Nixon halted the US dollar's convertibility into gold in 1971, the system imploded.

C. Floating Exchange Rates (1971 - Present)

Following the collapse of Bretton Woods, currencies transitioned to a floating exchange rate system. Currency values in this system are determined by supply and demand on the foreign exchange market. The method provides increased flexibility, but it may also cause instability and huge variations in currency prices.

D. European Exchange Rate Mechanism (ERM I & II)

To preserve monetary stability among European countries, a particular mechanism was devised inside Europe.

- **ERM I:** ERM I was established in 1979 with the goal of reducing exchange rate volatility and achieving monetary stability. It imploded in 1992-1993 because of large economic disparities among member countries and speculative pressures.
- **ERM II:** ERM II was introduced in 1999 with the goal of stabilizing exchange rates between the Euro and non-Eurozone EU currencies. It is a step of preparation for nations preparing to adopt the Euro.

E. Rise of Cryptocurrencies

The introduction of decentralized cryptocurrencies such as Bitcoin in the twenty-first century added a new dimension to the notion of money exchange. Though these digital assets are not part of traditional ERM, their acceptance and fluctuating values are becoming an increasingly essential aspect of the global financial environment.

Understanding Negative Balance of Trade

A trade deficit occurs when a country's imports surpass its exports, indicating more is being bought from abroad than sold.

Causes:

- Consumer Preferences: A penchant for foreign goods can spike imports.
- Exchange Rates: A strong domestic currency can make foreign goods cheaper, thereby increasing imports while reducing exports.
- Local Production Costs: High labor or material costs make local goods less globally competitive.
- Economic Policy: Taxes, subsidies, and trade agreements can also tilt the balance towards imports.

Implications:

- Debt Accumulation: Persistent deficits may lead to borrowing, increasing foreign debt.
- Currency Value: Ongoing imbalances can depreciate the national currency.
- Domestic Industries: Inability to compete with imports may lead to job losses.
- Economic Growth: Sometimes, a deficit signals strong local demand, especially when importing capital goods for future productivity.
- Economic Vulnerability: Reliance on foreign goods can expose a country to external shocks.

Understanding both causes and implications is crucial for policymakers to manage trade effectively.

The Current Economic Situation in Bangladesh

Bangladesh's economy presents a paradox. On the upside, it has seen consistent growth, averaging a 6% annual increase in GDP over the past decade, fueled by robust exports, remittances, and stable macroeconomic factors. This has made it one of the world's fastest-growing economies.

Conversely, the nation grapples with challenges:

- Rapid population growth burdens resources and infrastructure.
- Persistent poverty affects a large populace.
- Growing inequality.
- Climate change impacts, already manifesting in economic disruptions.

These issues could stymie future economic growth. However, Bangladesh has shown resilience in overcoming challenges and appears well-poised for future growth.

Forecasts for 2023 include:

- A deceleration of GDP growth to 5.3% due to global economic slowdowns, higher commodity prices, and a current account deficit.
- A high inflation rate at 8.7%, attributed to rising food and fuel prices.
- An increased current account deficit to 1.6% of GDP, largely due to ballooning import costs and stunted export growth.
- Remittances expected to rise by 5%, thanks to the expanding Bangladeshi diaspora in the Middle East.
- Foreign direct investment predicted to grow by 3%, indicating continued international interest.

Key Challenges:

- Population: With over 160 million people, resource and infrastructure strain is significant.
- Poverty: Over 12% live below the poverty line, a significant governance challenge.
- Inequality: The top 10% holds more than 40% of the country's wealth.
- Climate Change: Increasingly frequent floods, cyclones, and droughts pose serious risks.

The economic landscape is thus a blend of promise and peril, requiring adept policy maneuvers for sustainable growth.

Balance of Trade in Bangladesh: An Overview

The difference between a country's exports and imports of goods and services is known as the balance of trade (BoT). A positive BoT indicates that the country exports more than it imports, whereas a negative BoT indicates that the country imports more than it export.

Bangladesh has had a trade imbalance for many years. The BoT deficit in 2022-2023 was $17.155 billion. This indicates that Bangladesh purchased $17.155 billion more in goods and services than it exported.

One cause is the country's reliance on raw materials and intermediate products imports. Because Bangladesh lacks a robust manufacturing sector, it must import many of the components required to make items for export.

The high cost of imports is another element contributing to Bangladesh's trade imbalance. The taka, Bangladesh's currency, is tied to the US dollar. This implies that the value of the taka has increased in recent years, making imports more expensive.

Bangladesh's administration is working to reduce the country's trade imbalance. Promoting economic diversity is one step. The government promotes the growth of new businesses such as medicines and electronics. This will help Bangladesh minimize its dependency on raw materials and intermediate products imports.

Another move taken by the administration is to boost exports. The government is encouraging firms to export their goods and services by extending tax benefits and subsidies.

The government's efforts are beginning to bear fruit . Bangladesh's exports have grown faster than its imports in recent years. This has contributed to the reduction of the BoT deficit. However, the BoT deficit remains significant, and it is likely to continue to be a concern for the government in the coming years.

Bangladesh's top export partners are the United States, the European Union, and India on the other hand Bangladesh's top import partners are China, India, and Saudi Arabia.

The BoT deficit is currently a key concern for Bangladesh's economy. It depletes the country's foreign exchange reserves and may lead to inflation. The government is making efforts to fix the BoT deficit, but these things take time.

Historical Context: Exchange Rate Policies in Bangladesh

Bangladesh's currency rate policy may be separated into three major periods:

- **The fixed exchange rate period (1972-1991):** The Bangladeshi taka was tied to the US dollar at a set rate throughout this time period. This program was implemented to help stabilize the economy and increase exports. However, it also caused a variety of issues, including a trade imbalance and a lack of foreign cash.
- **The managed float phase (1991-2003):** Bangladesh implemented a managed float currency rate system in 1991. This approach enabled the taka to fluctuate within a limited band versus the US dollar. This policy was more flexible than the fixed exchange rate regime, but it nevertheless attempted to keep the currency stable.
- **The freely floating exchange rate period (2003-present):** In 2003, Bangladesh adopted a freely floating exchange rate regime. This system allows the taka to fluctuate freely against the US dollar. This policy is more market-based than the previous systems, but it also poses more risks.

Bangladesh's currency rate system has altered dramatically throughout time, influencing the country's economy in a variety of ways. Initially utilizing the pound as its intervention currency, Bangladesh eventually accepted the US dollar for cross-border commerce in the early 1990s. Until 1993, when the current account was declared convertible, the Central Bank monopolized foreign exchange transactions. By 2003, the taka had essentially become a floating currency, with rates decided by interbank demand and macroeconomic statistics. However, government measures to manage liquidity and prohibit unethical behavior have continued.

Regardless of the regime—controlled, managed float, or free float—the taka remained undervalued in relation to the “kerb” market. In recent years, the Central Bank has been influenced by IMF terms for a $4.7 billion lending facility to embrace a full free-float system. The Bangladesh Foreign Exchange Dealers Association has been determining the exchange rate in conjunction with member banks since September 2022.

The selection of an exchange rate system has varied results. A fixed system initially steadied the economy but caused issues, whereas a controlled float stopped the taka from fully appreciating. A free-floating system lowered the trade deficit but increased volatility, making corporate planning more difficult. The best approach is still being debated, with some arguing for greater control to prevent volatility and others wanting a free float to represent the taka's genuine market value. This difficult choice will need the government considering a number of considerations, including the effects on inflation, trade, and foreign investment.

The Shift to Floating Exchange Rates: Pros and Cons

The transition to floating exchange rates, which enable currencies to fluctuate in value in response to market forces, constitutes a fundamental shift in international monetary policy. Here is an examination of the system's benefits and weaknesses:

Pros

- **Flexibility:** Floating exchange rates provide for more adaptability to changes in the global economy. This can improve the effectiveness of domestic monetary policy.
- **Automatic Adjustment:** A floating exchange rate system may fix trade imbalances automatically. A trade imbalance can cause currency depreciation, which makes exports more competitive and imports more expensive, restoring the balance.
- **External Shock Independence:** Countries with floating exchange rates may be less exposed to external economic shocks since the currency may adapt without requiring drastic policy interventions.
- **No Need for Foreign Exchange Reserves:** Without a peg to protect, governments may not require huge reserves of foreign currency, freeing up resources for other objectives.

Cons

- **Volatility:** Floating currency rates may be extremely volatile, creating uncertainty for international traders and investors.
- **Speculative Attacks:** The likelihood of big swings in currency rates may attract speculative capital flows, causing economic instability.
- **Misalignment Risk:** Market dynamics may not always align currency rates with economic fundamentals, resulting in overvaluation or undervaluation, which may distort trade and investment choices.
- **Difficulties for Developing Countries:** Because of capital flow volatility and a limited ability to conduct independent monetary policy, emerging countries may find floating exchange rates difficult to regulate.

The Mechanism of Floating Exchange Rates: An Explanation

The floating exchange rate mechanism allows a currency's value to fluctuate based on market forces of supply and demand. Unlike fixed systems, governments do not actively control the value in this approach.

A. Supply and Demand

Currency prices are shaped by supply and demand in the Forex market. Demand is influenced by factors like foreign investment, interest rates, and trade balances, while supply factors include inflation, political stability, and monetary policy.

B. Trade Balance

A trade surplus increases currency demand as foreign buyers need the country's currency, whereas a trade deficit often leads to currency devaluation as the country requires more foreign currency.

C. Interest Rates

Central bank rates can attract or repel foreign investment. Higher rates boost currency demand by offering better returns, while lower rates may lead to capital outflows.

D. Investor Behavior

Speculation can exacerbate exchange rate volatility as investors buy and sell based on future value predictions.

E. Central Bank Intervention

In a managed float system, central banks may occasionally intervene to prevent excessive volatility.

F. Global Events

World events like economic or political crises can rapidly alter investor behavior, causing swift changes in exchange rates.

In summary, floating exchange rates are shaped by various factors such as market supply and demand, trade balances, interest rates, and global events. Some countries also employ a managed float to control extreme fluctuations.

Interplay of Balance of Trade and Exchange Rate

The interaction between the trade balance and the exchange rate is a fundamental part of international economics. Both notions are intertwined, and changes in one can have far-reaching consequences for the other. Here's a look at how they interact:

A. Exchange Rate Influenced by Trade Balance

- Trade Surplus: When a country exports more than it imports, overseas purchasers use the local currency to pay for the products. This increased demand may cause the local currency to appreciate.
- Trade Deficit: If a country imports more than it sells, there will be a greater need for foreign currency to cover the purchases. This might cause the indigenous currency to depreciate.

B. Exchange Rate Impacting Balance of Trade

- Currency Appreciation: When a country's currency rises, its exports become more expensive to international buyers, thereby limiting export demand. Simultaneously, imports become less expensive for domestic consumers, perhaps leading to more imports. This situation might lead to a trade deficit or a reduction in a trade surplus.
- Currency Depreciation: When the native currency falls in value, the reverse happens. Exports become less expensive and perhaps more competitive in international markets, while imports increase in price. This might result in a trade surplus or a reduction in a trade deficit.

C. Monetary Policy's Role

To control trade balances, central banks may alter interest rates or use other monetary policy tools to impact exchange rates. Higher interest rates may entice foreign money, resulting in currency appreciation, whilst lower interest rates may have the reverse impact.

D. Exchange Rate Management

Some nations use a controlled float system, in which the central bank intervenes to prevent severe currency swings. This action might be used to achieve certain trade balance goals.

E. The J-Curve Effect and Elasticities

The responsiveness of export and import volumes to exchange rate movements (known as elasticities) is critical. Due to inelastic demand, a devaluation may not improve the trade balance at first, but as consumers and producers adjust, the trade balance may improve over time. The J-curve effect describes this phenomenon.

F. Global Economic Situation

Trade balances and exchange rates can be influenced by global economic variables such as growth rates in key trading partners and global commodity prices. Changes in these settings can have complicated and interconnected consequences.

The Decision to Implement Floating Exchange Rate in a Negative Balance of Trade Scenario

The choice to introduce a floating exchange rate in a circumstance where a country has a negative trade balance (trade deficit) might be complicated. Several variables might influence this decision, each with its own set of consequences.

A. Trade Imbalance Correction

- **Automatic Adjustment:** A floating exchange rate allows the value of the currency to fluctuate in response to market factors. A trade deficit may cause currency depreciation, making exports cheaper and imports more costly, perhaps rectifying the trade imbalance over time.

- **Flexibility:** A floating rate allows for greater flexibility in responding to external shocks and can serve as an automated economic adjustment mechanism.

B. Monetary Policy Independence

- **Interest Rate autonomy:** A country with a floating exchange rate has more autonomy over its monetary policy, including interest rates. This autonomy can be crucial in regulating domestic economic situations such as inflation and unemployment.

- **Potential Conflicts with Other Goals:** Although it offers flexibility, a floating exchange rate may lead to conflicts between the goals of exchange rate stability and other macroeconomic objectives.

C. Capital Flows and Investment

- **Attracting Foreign Investment:** If a floating exchange rate is perceived as part of a larger commitment to market-oriented policies, it may be more appealing to foreign investors.

- **Potential Volatility:** Because floating rates are more unpredictable, they may discourage certain investors or lead to speculative attacks.

D. Addressing Structural concerns

- **Symptom vs. Root Cause:** If a trade imbalance is symptomatic of deeper structural concerns, such as deteriorating competitiveness or productivity, a switch to a floating rate system may not be sufficient to address these underlying issues.

- **The Need for Complementary Policies:** A transition to a floating exchange rate may necessitate other structural changes to address the underlying causes of the trade imbalance.

E. Political and Social Factors

- **Public Opinion and Political Will:** The choice to float the currency can have important political and social repercussions, and public opinion on the subject may be mixed.

- **International commitments:** International agreements and commitments may also be considered in the decision-making process.

Potential Outcomes of Implementing Floating Exchange Rates in Bangladesh

The probable consequences of introducing floating currency rates in Bangladesh in 2023 are a complicated and unknown matter. There are a variety of possible advantages and hazards involved with this policy shift, and the exact outcomes will rely on several circumstances, including Bangladesh's economic situation and government policies.

A. Potential Benefits of Implementing Floating Exchange Rates in Bangladesh in 2023:

- **Reduced trade deficit:** Floating exchange rates can assist in lowering the trade deficit by making exports cheaper and imports more costly. This can make Bangladeshi goods more competitive in the global market while also helping to lower demand for imports. Bangladesh's trade deficit in 2022, according to the Bangladesh Bank, will be $38.7 billion. If flexible exchange rates were established, this may assist in lowering the trade imbalance by making exports cheaper and imports more costly.

- **Increased foreign investment:** Floating currency rates can also assist to attract international investment by making Bangladesh a more appealing business destination. This is due to the fact that floating exchange rates make it easier for companies to transfer profits and repatriate money. According to the United Nations Conference on Trade and Development (UNCTAD), Bangladesh would receive $3.6 billion in foreign direct investment (FDI) in 2022. If flexible exchange rates were introduced, this may assist Bangladesh attract more FDI.

- **Increased economic growth:** Floating currency rates can also aid economic growth by making Bangladesh more competitive. Because floating exchange rates make it easier for firms to export and import goods and services, they are popular. According to the World Bank, Bangladesh's GDP growth rate in 2022 will be 7.2%. If floating exchange rates were established, Bangladesh's GDP growth rate may be increased.

B. Potential Risks of Implementing Floating Exchange Rates in Bangladesh in 2023:

- **Increased volatility:** Floating currency rates can be erratic, making company planning challenging. This is due to the taka's volatile value, which makes forecasting future expenses and profits difficult. The Bangladesh Bank forecasts a 4.5% depreciation of the taka versus the US dollar in 2022. If floating exchange rates are established, this volatility may rise, making corporate planning even more difficult.

- **Increased speculation:** Floating exchange rates can also lead to speculation, increasing the taka's volatility. This might make business planning even more complex and result in losses. According to the Financial Times, there will be $10 billion in Bangladeshi taka speculation in 2022. If floating exchange rates are established, this speculation may expand, increasing the taka's volatility.

- **Reduced government control:** With floating exchange rates, the government has less influence over the taka's value. This may make managing inflation and the balance of payments more challenging for the government. According to the Bangladesh Bank, the country's inflation rate in 2022 would be 6.8%. If flexible exchange rates are established, the government may find it more difficult to manage inflation.

Finally, the choice to establish floating exchange rates in Bangladesh in 2023 is a complicated one that should be taken case by case. There is no "one-size-fits-all solution" and the optimal strategy will depend on Bangladesh's individual circumstances.

How Floating Exchange Rates Can Address Negative Balance of Trade

A. Automatic Adjustment of Trade Imbalances

Floating exchange rates can cause systematic modifications in currency value. If Bangladesh has a trade imbalance, demand for the Bangladeshi Taka may fall, causing the currency to depreciate. This devaluation may cause Bangladeshi exports to become cheaper and imports to become more costly, thus lowering the trade imbalance over time.

B. Enhancing Competitiveness of Export Sectors

Bangladesh may improve the competitiveness of important export industries such as textiles and agriculture by allowing the currency to float. A weaker currency may raise worldwide demand for Bangladeshi goods, resulting to a rise in exports.

C. Monetary Policy Independence

The Bangladesh Bank gains greater influence over domestic monetary policy by floating the currency rate. This control can be used to boost economic

development, assist export-oriented companies, or manage inflation, all of which may indirectly address the underlying causes of a negative trade balance.

D. Potential Risks and Considerations

While a floating exchange rate provides instruments for dealing with a negative trade balance, it is not without hazards. Increased volatility, potential inflationary pressures from devaluation, and the impact on foreign debt are all factors that must be addressed carefully.

Mitigation Strategies for Possible Risks and Challenges

To manage the challenges of implementing floating exchange rates in Bangladesh in 2023, various mitigation strategies are essential.

- **Volatility:** The government can establish a foreign exchange reserve to stabilize the taka and can intervene in the foreign exchange market when needed. Forward contracts can help businesses hedge against currency risk.
- **Speculation:** Government-led education can make businesses and individuals aware of speculation risks. Monitoring the foreign exchange market and imposing speculative taxes can further control speculation.
- **Reduced Government Control:** Continued monitoring of the exchange market and collaboration with the central bank can help manage the exchange rate. Building trust through policy transparency is crucial.
- Impact on Exports and Imports: Subsidies for exporters and tariffs on imports can offset the cost variations due to floating rates. Trade diversification can reduce reliance on key exports.
- **Foreign Investment:** Providing incentives like tax breaks can attract foreign investors. Ensuring political and economic stability and protecting investors' rights are also critical.

These strategies offer a comprehensive approach to mitigate potential risks associated with the transition to a floating exchange rate system.

Role of Bangladesh Government and Central Bank in Implementing the Policy

The introduction of floating exchange rates in Bangladesh would be a difficult process requiring agreement between the government and the Bangladesh Bank, the country's central bank. Both parties have a significant role to play.

A. Bangladesh Government:

The Bangladesh government must take the lead in introducing floating exchange rates. It will need to create measures to regulate the currency rate and reduce the risks associated with floating exchange rates. The government will also need to collaborate with the central bank to guarantee the seamless and orderly introduction of floating exchange rates.

B. Bangladesh Central Bank:

The central bank of Bangladesh will be pivotal in introducing floating exchange rates, requiring close collaboration with the government. Key tasks include:

- Policy Framework: Developing a robust policy framework is crucial. This should outline the objectives, tools, and conditions for government intervention in the foreign currency market.
- Foreign Exchange Reserves: The central bank needs to build up foreign exchange reserves to stabilize the taka, using these reserves to buy or sell taka as needed.
- Education: Both the government and the central bank must educate businesses and individuals about the nuances of floating exchange rates, helping them make informed decisions.
- Market Monitoring: Constant surveillance of the foreign exchange market is essential to identify potential issues and act accordingly.
- Intervention: Be prepared to operate in the foreign exchange market to either stabilize the taka or curb extreme volatility.

Coordinated planning and effective communication with stakeholders are vital. The government and central bank must also be agile, ready to adapt their policies to ensure that the floating exchange rates benefit the economy.

Conclusion

In the maze of global finance, the decision by Bangladesh to navigate the complex and often turbulent waters of floating exchange rates stands as a bold testament to economic innovation and adaptability. The journey from historical exchange mechanisms to current strategies, intertwined with the challenges of negative balance of trade, is more than a technical transformation; it's a reflection of a nation's aspiration to align with global economic paradigms while preserving its unique identity. The implications stretch far beyond numbers and charts, touching the lives of millions, influencing trade, and shaping the future. Bangladesh's choice to adopt floating currency rates is a unique story of bravery, since it includes the bravery to manage financial uncertainty; intellect, as seen by rigorous planning and policy-making; and vision, targeted towards global economic alignment. This transition is significant not just as a domestic milestone, but also as an inspiring example that may inspire other countries to reconsider their financial systems and seek new routes for economic development and stability.

References

- Aizenman, J., & Marion, N. (2003). The High Demand for International Reserves in the Far East: What's Going On? Journal of the Japanese and International Economies, 17(3), 370-400.
- Asian Development Bank. (n.d.). Bangladesh economy to grow moderately amid global economic slowdown. Retrieved from https://www.adb.org/news/bangladesh-economy-grow-moderately-amid-global-economic-slowdown
- Asian Development Bank. (n.d.). Economy: Bangladesh. Retrieved from https://www.adb.org/countries/bangladesh/economy
- Asian Development Bank. (2023). Bangladesh: Asian Development Outlook (ADO) April 2023. Retrieved from https://www.adb.org/sites/default/files/publication/863591/ban-ado-april-2023.pdf
- Bahmani-Oskooee, M. (1985). Devaluation and the J-curve: Some evidence from LDCs. The Review of Economics and Statistics, 67(3), 500-504.
- Bangladesh Bank. (n.d.). Foreign Exchange Guidelines Vol. 1. Retrieved from https://www.bb.org.bd/aboutus/regulationguideline/foreignexchange/fegv1cont.php

- Bangladesh Bank. (2021, September 23). [Circular FE Circular No. 30]. Retrieved from https://bb.org.bd/mediaroom/circulars/fepd/sep232021fepd30e.pdf
- Branson, W. H., & Buiter, W. H. (1983). Monetary and Fiscal Policy with Flexible Exchange Rates. Economic Policy in Theory and Practice, 79-124.
- Calvo, G. A., & Reinhart, C. M. (2002). Fear of Floating. The Quarterly Journal of Economics, 117(2), 379-408.
- CEIC Data. (n.d.). Bangladesh Exchange Rate against USD. Retrieved from https://www.ceicdata.com/en/indicator/bangladesh/exchange-rate-against-usd
- CEIC Data. (n.d.). Bangladesh Foreign Exchange Rates Annual. Retrieved from https://www.ceicdata.com/en/bangladesh/foreign-exchange-rates-annual
- Dornbusch, R. (1974). Tariffs and Nontraded Goods. Journal of International Economics, 4(2), 177-185.
- Eichengreen, B. (1996). Globalizing Capital: A History of the International Monetary System. Princeton University Press.
- Eichengreen, B. (2008). Globalizing Capital: A History of the International Monetary System (2nd ed.). Princeton University Press.
- European Central Bank. (2003). A History of the European Exchange Rate Mechanism. Retrieved from https://www.ecb.europa.eu
- Frankel, J. (1999). No Single Currency Regime is Right for All Countries or at All Times. Princeton Essays in International Finance, 215.
- Frankel, J. (2003). Experience of and Lessons from Exchange Rate Regimes in Emerging Economies. NBER Working Paper No. 10032.
- Frankel, J. A., & Rose, A. K. (1995). Empirical Research on Nominal Exchange Rates. In Handbook of International Economics (Vol. 3, pp. 1689-1729). Elsevier.
- Friedman, M. (1953). Essays in Positive Economics. University of Chicago Press.
- Friedman, M. (1953). The Case for Flexible Exchange Rates. In Essays in Positive Economics (pp. 157-203). University of Chicago Press.
- Ghosh, A. R., Ostry, J. D., & Tsangarides, C. G. (2010). Exchange Rate Regimes and the Stability of the International Monetary System. IMF Occasional Paper No. 270.
- Hossain, M. (2020). Exchange Rate Regime Transition and Performance in Bangladesh: An Updated Analysis. Journal of Asian Economics, 68, 101203.
- International Monetary Fund. (n.d.). Bangladesh. Retrieved from https://www.imf.org/en/Countries/BGD
- International Monetary Fund. (n.d.). The End of the Bretton Woods System (1972–81). Retrieved August 9, 2023, from https://www.imf.org/external/about/histend.htm
- International Monetary Fund. (2020). [Country Report No. 20/001]. Retrieved from https://www.imf.org/~/media/Files/Publications/CR/2020/English/1BGDEA2020001.ashx
- International Monetary Fund. (2021). Recognizing Reality: Unification of Official and Parallel Market Exchange Rates. Retrieved from https://www.imf.org/en/Publications/WP/Issues/2021/02/06/Recognizing-Reality-Unification-of-Official-and-Parallel-Market-Exchange-Rates-50047
- International Monetary Fund. (2021). World Economic Outlook, April 2021: Managing Divergent Recoveries. Retrieved from https://www.imf.org
- International Monetary Fund. (2023). Bangladesh: Article IV Consultation. IMF Country Report No. 23/120.
- Krugman, P. (1991). Target Zones and Exchange Rate Dynamics. The Quarterly

Journal of Economics, 106(3), 669-682.

- Krugman, P., & Baldwin, R. E. (1987). The Persistence of the U.S. Trade Deficit. Brookings Papers on Economic Activity, 1987(1), 1-55.
- Krugman, P., Obstfeld, M., & Melitz, M. (2014). International Economics: Theory & Policy (10th ed.). Pearson.
- Krugman, P., & Obstfeld, M. (2009). International Economics: Theory and Policy (8th ed.). Pearson.
- Ministry of Finance. (2023). Bangladesh Economic Review 2023. Retrieved from https://mof.portal.gov.bd/site/page/28ba57f5-59ff-4426-970a-bf014242179e/Bangladesh-Economic-Review-2023
- Mundell, R. A. (1961). A Theory of Optimum Currency Areas. The American Economic Review, 51(4), 657-665.
- Obstfeld, M., & Rogoff, K. (1995). The Mirage of Fixed Exchange Rates. Journal of Economic Perspectives, 9(4), 73-96.
- Obstfeld, M., & Rogoff, K. (2005). Foundations of International Macroeconomics. MIT Press.
- OGR Legal. (n.d.). Foreign Exchange Laws. Retrieved from https://resource.ogrlegal.com/foreign-exchange-laws/
- Rahman, M. (2022). The Impact of Exchange Rate Flexibility on Bangladesh's Export Competitiveness. World Economy, 45(3), 765-789.
- Rehman, A., & Ahmed, Q. M. (2021). Analyzing the Volatility of the Floating Exchange Rate in Developing Countries: Evidence from Bangladesh. Journal of Monetary Economics, 125, 203-219.
- Shambaugh, J. C. (2004). The Effect of Fixed Exchange Rates on Monetary Policy. The Quarterly Journal of Economics, 119(1), 301-352.
- Trading Economics. (n.d.). Bangladesh Foreign Exchange Reserves. Retrieved from https://tradingeconomics.com/bangladesh/foreign-exchange-reserves
- Williamson, J. (1985). The Exchange Rate System. Policy Analyses in International Economics, 5. Washington: Institute for International Economics.
- Williamson, J. (2000). Exchange Rate Regimes for Emerging Markets: Reviving the Intermediate Option. Paper presented at the World Bank Annual Conference on Development Economics, Paris.

Youthquake
Harnessing the Young Demographic Dividend

M Aminul Islam

The Author is a Senior Journalist and Newspaper Columnist based in Dhaka

Abstract

Bangladesh is a country of a conservative estimate of 180 million people, a nation bigger than Russian Federation in terms of a pullulating population and a nation 66 times smaller than the United States in terms of its land mass. As things stand, Bangladesh is tiny but strong and robust. This small country boasts the power of a youthquake, celebrates the strength of a young demographic and harnesses the potential of the youth workforce. The government stands ready to utilise the power of the nation's youth to reap this demographic dividend. Again, the world is about to live in the "Society 5.0" which is fast approaching with all its boom and bust. The world has entered into the age of the rapid march of artificial intelligence (AI), big data, internet of things (IoT) and robotics, also known as Fourth Industrial Revolution (4IR). The world is currently standing on the brink of this neo-technological revolution that will fundamentally alter how people live. The youth of today is the power of tomorrow. They will be able to cruise through this revolution successfully and keep abreast of the 4IR race only if they adapt.

Keywords

Youthquake, Bangladesh, Demographic Dividend, 4IR, 4AR, 5G

Introduction

A little over a half-century into its independence now, Bangladesh is no more a Kissinger's Bangladesh. Today's Bangladesh has witnessed a miraculous development boom on socio-cultural and economic fronts. It is no hyperbole, but it has yet to exploit the full potential of more than 180 million people, mostly a young demographic. Strategic location, natural resources and the youthquake make Bangladesh one of the most alluring hubs of all things Bangladeshi. Even the country's graduation to a developed one needs digital transformation marked by breakthroughs like 5G, AI, robotics, nanotechnology, biotechnology, cloud and quantum computing, and fully unmanned, autonomous vehicles. The nation's youth must be made ready to unlock the world of prospects, possibilities and potentialities. This opinion piece is a humble tribute to the celebration of the demographic dividend as well as a call for making today's youth ready to brace for challenges and predilections on offer.

Bangladesh—Yesterday and Today

Bangladesh has been on the right track as a growth engine in many sectors, but it is still to ensure that the promised living standard that people need not bother about their lives and livelihoods. Yet, it is a matter of pride that the country has long

shed Henry Kissinger's proverbial "bottomless basket" parlance in the 1970s, soon after Bangladesh came into being as a sovereign state through a sanguinary war against its long-distance enemy Pakistan. At 99, Mr Kissinger may be embarrassed to see the ribbon development of Bangladesh and also for the trademark comment he made 50 years ago. The changes came for everyone's part in the making of Bangladesh's development amid a partly turmoil-tattered political landscape of 53 years, including 15-plus years of dictatorial rule.

Ageing vs Youth: A Japan-Bangladesh Study

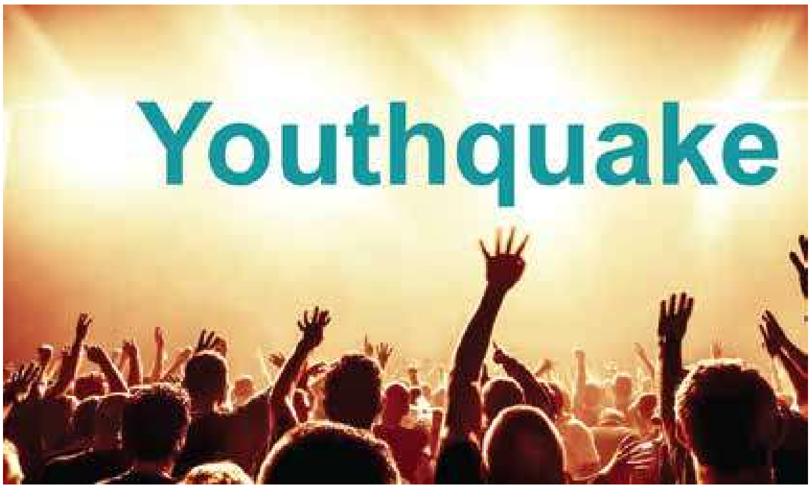
Bangladesh and Japan are time-tested, tried, trusted and true friends. But they are undergoing two different demographic problems, with Japan having a declining working population and a fastest-growing elderly population. On the other hand, Bangladesh has an increasingly young demographic and it is on the up and up. Demographers and social scientists have rightly called it a youthquake. Bangladesh must find effective and pragmatic ways to harness this youthquake and must utilise this young force. Unlike Japan that suffers a setback with some significant social issues like a declining working population, low birth rate and an increasingly ageing population, Bangladesh is at an advantageous edge. Japan has been facing a demographic crisis for decades as the number of its elderly population is growing on the one hand, but the birth rate is declining on the other. As a result, the number of working people there is shrinking alarmingly. Japanese society is currently called a super-ageing society as 20 per cent of the population grew older than 65 years in 2022 and the figure is estimated to increase to more than 35 per cent by 2049. On the other hand, the population between 0 and 19 years old is projected to decrease by 15 per cent by 2049.

Labour Shortages

A significant reason for this decline in the working population is the low fertility rate and the decline of a young demographic in Japan. Labour shortages in Japanese companies are having a significant negative impact on the country's economy. Due to a protracted economic downturn and labour shortages in health care, construction, agriculture and multiple other sectors, Japan has been compelled to abandon its long-standing conservative immigration policy. Earlier, immigration was always discouraged in Japan. But this stringent immigration system worked wonders for Japan to establish its unique culture during the Tokugawa era. In another development, women and the elderly in Japan find it hard to manage jobs despite a high level of enthusiasm and energy for work. In order to arrest this faster depletion of the working population, it is essential to create a working environment where people, who want to work and maximise their productivity, can choose various ways of working that match their lifestyles and fully demonstrate their abilities.

Challenges Ahead

The challenges ahead are daunting. The challenges ahead are harder. But a pragmatic approach to face them would be



the best possible answer amid competitiveness. It is indeed a matter of admiration that Prime Minister Sheikh Hasina has recently announced a 'smart Bangladesh' programme, a follow-up to her 'digital Bangladesh' campaign, apparently to march ahead with newer and cutting-edge technologies. In order to achieve the Sustainable Development Goals-2030 set by the United Nations and also Sheikh Hasina's much-trumpeted bandwagon for a prosperous Bangladesh by 2041, the country needs to put its focus on a few vital areas that include an ideal doing-business climate. The government must arrest political instability and eliminate endemic corruption and red tape that demotivate foreign investors. Investment in building new highways, ports and airports can improve connectivity within and outside the country, thus easing business here.

Unleashing Demographic Dividend

Bangladesh should have no worries to go ahead as the brave nation is out to capitalise on the power of its demography. Demographers have dubbed this sprawling population on a small land size as 'density dividend'. The country can easily benefit from this so-called density dividend. An estimated 69 per cent of the population falls under the 15-64 age band in this South Asian country . It should give them proper education and skills, especially in the area of ICT and digitalisation so that they can be more productive and contribute to the economy. This nation belongs to the youth, so they need to work accordingly to help foster its faster growth on socio-political and economic fronts. To materialise this, a youthquake can alter the landscape of Bangladesh through unleashing the transformative power of youth. The country can bring about a significant cultural, political or social change arising from the actions or influence of young people. But skills and education are immediate concerns because the imperatives of economic diversification and uplift in the value chain will require higher levels of education and diversification of skills.

Development of Diverse Skills

Bangladesh is one of the countries having a large unskilled population base. We have to address the shortage of skilled human labour force through turning them into a human capital in order to make Bangladesh a country manpower-surplus, food-surplus country. Time is opportune to use this army of cheap labour and labour-intensive methods. The government should take a youth-focused approach, upskill and reskill them with industry-first initiatives to unleash the potential of the demographic dividend into future drivers of economic progress and tap into 4IR opportunities. In this digital era, it is crucially important for Bangladesh to collectively equip the burgeoning youth populace with future-ready skills to truly become a knowledge-based high-income nation by 2041. By the same token, it is vital to upskill public servants, including the female workforce, with intent to expand their capabilities and raise their creativity. Young people need to

acquire social skills allied with technical as well as technological know-how, dedication and management skills to compete with peers in the workplace at home and abroad. Practical skills and tenacity are an absolute must in today's world of work.

Digital Innovations in Youth's Way

Innovation holds the master key. Innovation makes life easy. It is imperative for the youth to travel to new worlds of digital technology through discovering the frontiers of their knowledge and expanding the horizons of their wisdom. The 4IR is the outcome of the previous three similar revolutions and their core technological innovations. The first industrial revolution was about the mechanisation of factories using water and steam engines in the late 18th century, the second about mass production using electricity in the early 20th century and the third about further automation using electronic and information technology in the 1970s. In such a social transition to the 4IR, innovation as well as increased productivity is the key to achieving sustained economic growth. It is necessary to address problems through developing and using new, compatible technologies and innovations to do so.

Action Plan for Youth

Youth against famine: Our Prime Minister at a 2022 National Youth Day programme called upon the youth to get involved in food production and processing with an eye to combat possible global food shortages and famine as predicted by various international organisations due to the coronavirus epidemic and the Russia-Ukraine war. To keep Bangladesh free from these perils, we must cultivate every inch of our fertile land and take special measures in the production and processing of food products. In that situation, our youth should take more initiatives. If we can produce and process food products, we will be able to meet our own needs and also help many famine-stricken countries.

Youth leadership: Putting the incumbent government's focus on increasing the social status of the youth, the head of government said the qualities and talents of leadership should be developed among them. Sheikh Hasina said youth councils were being formed in every district and upazila (sub-district) to train young people so that they can work and contribute to the country's socio-economic development.

Job creation: The process of creating a database of how many trained youths there are now in the country is well under way to ascertain who is getting an employment opportunity and who is out of the benefit. Successive governments have made adequate endeavours to bring the unemployed young population under the workfare system.

Youth power: Our greatest strength is our youth. So many countries in the world today have become countries of the elderly. Bangladesh still has a large working youth. 'Youth power is the prosperity of Bangladesh' is the slogan put in the 2018 election manifesto of the current government to utilise this power of the youth.

Concluding Remarks

Keeping the thoroughgoing development, Bangladesh is now flying towards space and reaching sea in blue economy aspects and it has now the prospect of harnessing opportunities from sky to sea with intent to touch the blue. Henry Kissinger's "basket case" is now a "South Asia's economic bull case". Bangladesh is now an economic success story with an impressive track record for growth and development, despite problems like food crisis, inflation and unemployment. In this case, youth can be better utilised as change-maker or game-changer . The fastest-growing youth is the key tool to help the country cruise through so many inhospitable terrains to raise their heads high and carry the national flag on the global stage. The state must train our youth properly to exploit their full potential in all possible domains of development, be it agriculture, technology, business, trade and technical. Before that, it is imperative to close the digital divide and get the most out of the digital revolution, dividend, innovation and expansion.

Bangladesh must leverage its young demographic and bank on its record population density as the 'density dividend'. Concerned Government divisions and departments need to better manage our young people to make Bangladesh hunger-free and poverty-free and a better place for the generations to come. In this era of automation push, the government is working tirelessly to equip the youth with up-to-date knowledge of science and technology so that they are competitive in the rapidly changing world. The government's youth and sports ministry should take further initiatives for imparting training to youths in all 64 districts to make them entrepreneurs in startups and thereby self-employed.

Sources of Information and Acknowledgement

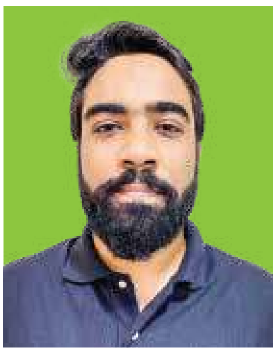
- 'Demographic Dividend, Digital Innovation and Economic Growth: Bangladesh Experience' (https://www.adb.org/publications/demographic-dividend-digital-innovation-economic-growth-bangladesh), published by Asian Development Bank in March
- 2021
- 'PM's call for youth engagement in combating possible famine' (https://www.prothomalo.com/bangladesh/409gcbt2r4), published by Prothom Alo on 01 November 2022
- 'Japanese Studies: Evolution and Way Forward', published by the Department of Japanese Studies in October 2022
- Half a century of Bangladesh biz: Time to walk the talk (https://newsnextbd.com/half-a-century-of-bangladesh-biz-time-to-walk-the-talk/), published by newsnextbd.com on 12 March 2023
- (Facts and figures garnered from the information superhighway have also contributed to making this opinion piece more analytical, insightful and illustrative.)

The Role of Independent Audit in Enhancing the Transparency and Accountability in the Corporate Sector of Bangladesh

Mohammed Moin Uddin Reza[1] | Towfiquzzaman[2]

The Authors are:

[1]Assistant Professor
Department of Accounting and Information Systems
Bangladesh University of Professionals



[2]VAT and Account Graduate
Islam and Co Chartered Accountants, UK
Graduate, University of Liverpool

Abstract

The main objective of the paper is to explain how independent audit enhances the transparency and accountability in corporate sector of Bangladesh. The paper examines the factors for accountability and transparency along with relation with independent audit. Factors like internal control, appropriate risk disclosure, adherence with International Financial Reporting Standards (IFRS) structure and presence of competent internal auditor are incorporated in the study which consequently pointed out which area should be focused for further development. The study also investigates why accountability and transparency is not maintained within the corporations and if independent audit within the corporation can help to enhance it. Cross sectional deductive study has been conducted on primary data collected from two groups namely external auditor and management. 5 Point Likert scale has been used in the questionnaire with 15 questions and stratified sampling has been used for the fulfillment of the study. It has been evident that internal control, risk disclosure, adherence with IFRS and presence of competent internal auditor have a significant influence over maintaining accountability and transparency. Apart from this, presence of independent board helps the management to sustain better in the corporation and grow the confidence of the investors. The co-operation between the management and external auditor ensures the suitable environment which is appropriate to create accountability and transparency for the long run.

Keywords

Independent Audit, Transparency, Accountability, Corporation, Internal Control, Independent Board.

Introduction

While the stakeholders are placing intense confidence over the external auditors, it also burdens them with huge responsibility. Such responsibility needs to be covered through absolute independence. No scope for biasness or intimidation is allowed in this case. But it is a tragic scenario where most of the auditors are facing independence issue due to self-interest, intimidation, and self-review. Independence is always a subjective aspect which is really hard to measure. There are no facts or figures to evaluate or measure the level of independence though experts have developed a model to evaluate the relationship of the external auditor with the company to assess the independence of the auditor. Primarily the experts consider an auditor to be independent when no financial interest is observed with the auditor and the entity. Independence is considered to be a priority when it comes to ensuring

transparency and accountability of the management.

The term transparency and accountability are usually delineated by the policy and governing legislature of the company. Transparency and accountability are responsible to shape the company's performance and its reputation. Accountability helps to grow confidence among the stakeholders. Transparency is not a zero-sum game; it helps to enhance better management and assist while developing better information systems and being effective in execution. Transparency and accountability are both interrelated and helps to complement each other. Accountability is ensured when there is a distinct line of guideline about responsibility and authority. Usually, the financial audit directs the range of details and obligations for statutory reporting. Heads of the departments play a vital role to set a trend regarding the management reporting obligation incorporating the essence of transparency and accountability. Audits are mainly a tool to hold management accountable about their work and performance within the company. Consequently, it helps develop the level of transparency to public authority for proper operation and monitoring.

The study investigates why accountability and transparency is not maintained within corporations and if independent audit within the corporation can help to enhance it. Transparency and accountability are among the foundations which should be capitalized by the corporations. Previous studies were based on different relations among corporate governance, financial reporting, audit, transparency and accountability. The sectors were defined as well into public and corporate sector. After thorough study of the subject, it is evident that there is a gap in identifying the relation of independent financial audit to seek transparency and accountability in the corporate sector. It has been a visualized research based on public platform but little to no empirical research was evident to address the corporate sector.

Research Objectives

General Objective

The major purpose of this paper is to explain how independent audit enhance the transparency and accountability in corporate sector.

Specific Objectives

- Searching for factors that enhances the accountability as well as the transparency in corporate organization through audit.
- To identify that the openness and liability of management in corporate sector is enhanced by independent board.
- To identify the medium to assure the investors about enhancement of clarity and openness in corporate sector.
- To identify ways of monitoring all recommendations and conclusions based on the factors.

Literature Review

Particular segment about transparency and accounting inside a corporation has been a prime concept of research due to its sensitivity level and expectation. These factors have been researched associating various combination like governance, public fund, IFRS compliance etc. Very few articles addressed the financial audit independence in terms of gaining transparent and accountable reporting from the corporation. Previously extensive research was conducted to form a relationship within the public sector in terms of accountability and transparency. While arguing about the relationship Kim (2009) states low institutional capacity, limited stakeholder participation, and relatively high levels of corruption are all characteristics of developing nations that may impact the control and evaluation of public accountability in the public sector. The statements resonate previously stated concern by Karim & Ahmed (2005) who states the international financial world appears to be concerned about the quality of financial reporting in emerging markets. As a result, the public sector is becoming more and more aware of the situation and implementing policy to address the problem. In emerging nations, the public sector is now seeking robust accountability for government entities at both the national and local levels (Adhikari & Mellemvik, 2011).

According to Leffel (2004), it is an obligation and responsibility of the organization to disseminate the truth in line of the work they have done. In Bangladesh it is a problem since the transparency and accountability has been questioned on many occasions. Starting from stock market crash in 2011 due to the bubble, there are various recent issues which raises the question about proper transparent accounts and reports. While analyzing the case of Janata Bank and Crescent Group, the auditors were also found irresponsible which resulted in harsh measure for the audit firm. Demand for transparency from the organization is not a new thing rather it can be traced back to Magna Carta in England. Transparency is only established when overall information exclusive to the firm is provided by the publicly traded organization (Bushman et al. 2004). Accountability and Transparency is ensured when the firm goes through systematic steps by gathering, validating, and dispatching the information. Kothari (2001) stated that, "No country, no company, no organization, no individual is inherently transparent takes hard work and commitment to achieve it". International community has always been indignant about the standard of financial reporting in the developing countries (Karim & Ahmad, 2005). Responding towards such issues, agencies like UNDP, UNDCTAD, IMF and World Bank are stepping forward to solidify the system through reinforcement in accounting and auditing sector of the aforementioned area of territory. The structure of international reporting cannot function properly when majority of the trading nations are failing to report inclusive and transparent financial statements. Vested interest among the regulators and stakeholder are increasing with the increase of globalization in both financial and product market. Reich (2018) has observed that exposure to learning, influencing, and increasing accountability with an inclusive goal of shaping firm productivity is facilitated and allowed by Transparency being a morale-boosting institutional strategy. The moral ground being established creates an aura of confidence among the stakeholders. Also, in a nutshell, transparency acts as an ethical corporate strategy with a materialist worldview that stakeholders have access to fundamental, substantive and procedural information, that may provide additional benefits to the associated stakeholders (Filho et al., 2016).

Financial reporting is not a new concept rather it has been continuing from the age Greek and Roman civilization. Though it has evolved but the purpose has remained the same. According to Davis (2001) we have glided towards the age of information from the age of industry through structural change which was slow paced initially and accelerated at present within the corporation reporting system. The investors along with the regulators seek corporation specific information which are prepared by the auditors after rigorous structural process of formulation of financial statements backed by documents and evidence for consolidation of the basic expectation (True and Fair View). Bushman & Smith (2002) acknowledged the issue and also pointed towards the monetary and economic factor while sustaining ever growing financial disclosure. They also figured positive relation among financial disclose and economic development. Glassman (2003) states "Capital is the engine of any economy and information is the oil that keeps the engine running smoothly". Opposing elements and objectives, such as regulatory changes, external rhetoric, and corporate standards, are driving different actors' curiosity, but the agreement is obvious and acknowledged that it is just beyond time to fully comprehend the implications and efficacy of Transparency and Accountability Initiative (Gaventa & McGee, 2013).

The literature presented in the sector delineates previous study based on different relation among corporate governance, financial reporting, audit, transparency, and accountability. The sectors were defined as well into public and corporate sector. After thorough study of the subject, it is evident that there is gap in the identifying the relation of independent financial audit to seek transparency and accountability in the corporate sector. We have visualized research based on public platform but sighted little to no empirical research to address the corporate sector. Multiple research projects were conducted in different countries like Zimbabwe, Malaysia, European Countries, Latin America, Brazil, Nepal, Nigeria, USA and UK. Only one research conducted by Nurunnabi et al (2011) was close to this study. Other studies conducted in Bangladesh were based on Compliance and Corporate governance in the corporations. This indicates lack of research on this particular topic. No study as per our knowledge has addressed the notion, how independent audit facilitates the enhancement of transparency and accountability by addressing the factors responsible within the corporation. Thus, the study was successful to figure out the gap and capitalized on it.

Methodology

It is a quantitative cross-sectional study which is based on deductive research approach. The cross-section study is observational research where the data for the sample is collected at the same period of time or for one given point. In this study the questionnaire was provided to all respondent at the same time. The study collected the responses from the time snapshot and recorded it. The deduction research approach was used since it moves from generalized point view to a specific conclusion by testing the hypothesis and analysing different prevalent phenomenon from prior studies. Here in this study the prior literatures were studied to set out some of the factors for accountability and transparency and was traced back to independent audit. Hypothesis testing was also done by formulating a regression model. Different phenomenon were also validated and questioned after being studied from prior studies. The study constitutes both descriptive and inferential statistics. A set of questions is prepared to be distributed to the respondents. The questionnaire consists of 15 questions. The questions were formulated using 5-point Likert Scale.

The population of the study included all the accounts management team of the company and the external auditors in practice. The sample size is 200. Even though the sample size is 200, we were successful in collecting more than that. All the data set was collected via online media which facilitated the study and also respect the ongoing situation at hand. The study incorporates stratified random probability sampling method.

In the study we collected responses from two different parties. By taking stratified random sampling, we separated both the contingent into groups

of similar characteristics and drew out sample so that all levels of population are ensured. The goal was to ensure proper ratio of different officials of different ranks are incorporated in the study so that the study put forward all the ideologies and thought processes from different segment of the population. Descriptive Statistics and Regression analysis was performed for the purpose of the study.

Research Hypotheses

HaA- Internal control system within the corporate has influence over enhancement of accountability and transparency.

HbA- Disclosure of risk have influence over enhancement of accountability and transparency.

HcA- Competency of Internal Auditor have influence over enhancement of accountability and transparency.

HdA- Adherence to IFRS by the company have influence over enhancement of accountability and transparency.

Analysis and Interpretation

SPSS version 25 was used to analyze the data for the purpose of inference and conclusion. The following tables represent the descriptive and inferential statistics. For descriptive statistics there is descriptive and cross tabulation to show the overview of the data and the results. The regression was conducted to infer about the model related to accounting and transparency.

Demography

The study was conducted with respondents from two different groups. The questionnaire was circulated to both male and female group. For the purpose of the study external auditors and staff of the management were selected to conduct the survey. From the table we can see that it was a heterogenous mixture. In total there were 213 respondents although the aim was to get 200 respondents in total. Among the 213 respondents, there were 159 males and 54 females.

Descriptive Analysis

The following table is the descriptive statistics based on the data collected. The descriptive statistics was conducted to know about the broad overview of the response. Specifically, it shows the mean value with the highest and lowest responses in the spectrum. The standard deviation shows the response dispersion throughout the responses provide by the respondent. It is essential to the level of standard deviation to know about the variability of responses. It also helps to know the general perception from the mean value. Since there was no missing value, total 213 respondent were calculated in the descriptive statistics.

Table 01: Demographic Details

	Male	Female	Total
External Auditor	69	27	96
Management	90	27	117
Total	159	54	213

Table 02: Descriptive Statistics

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Accountability and Transparency	213	1	4	2.30	.741
Internal Control	213	1	4	2.02	.934
Risk Disclosure	213	1	4	2.27	.967
Adherence with IFRS	213	1	4	2.23	.600
Presence of Internal Auditor	213	1	5	2.94	1.293
Independent Audit and Internal Control	213	1	5	3.53	1.084
Independent audit and Risk Disclosure	213	1	5	3.54	1.122
Independent audit and IFRS	213	1	5	3.65	1.112
Independent audit and Internal Auditor	213	1	5	3.43	1.129
Management liable for independent board	213	1	5	3.67	1.089
Management competent among independent board	213	1	5	3.60	1.123
Investor confidence with Risk Disclosure	213	1	5	3.70	1.118
Independent audit and accountability and transparency	213	1	5	3.31	1.263
Co-operation of management and external auditor	213	1	5	3.68	1.154
Management role in external auditor independence	213	1	5	3.64	1.250
Valid N (listwise)	213				

From the table 02 it can be seen that the respondents think that the accountability and transparency in the corporation of Bangladesh is moderately satisfactory with a mean score of 2.30. The main reason behind such thought process is lack of proper implementation of regulations and monitoring of the regulatory bodies. Successive market crashtook toll on the confidence of both the investors and creditors. The management and external auditors had the chance to introspect on the businesses since they are working from inside. The mean score for the variables internal control, risk disclosure, adherence with IFRS and Internal Auditor ranges from 2.02-2.94 which provides a mere perception about the respondent intuition regarding issue affecting the accountability and transparency. The value is close to neutral which indicates that the respondents are not sure about the present scenario and still finding it difficult to confer about the situation with a solid answer. Adherence with IFRS ensure proper accountability and transparency but the respondent had a mean score of 2.23 which needs to be addressed. The reason needs to be figured out why the respondents who form core part of the management and audit have such intuition when it comes to adherence with IFRS. From the descriptive analysis it can be seen that the independent audit has a positive impact on Internal Control, Risk Disclosure, Adherence with IFRS and Internal auditor. The mean score ranged between 3.43 to 3.65 which shows a positive sign and signify the trust on the external independent audit. Respondent also believe that the Management perform well with the presence of independent board in the corporation and remain open and liable with a mean score of 3.67 and preparation of good financial statement with a mean score of 3.60. The industry standard disclosure for enhancing investors' confidence and coordination and co-operation between auditor and management also seem necessary from the perspective of the respondent with a mean score of 3.70.

Cross Tabulation

The Cross tabulation was conducted to see the perception of External auditors and management on different statements. The results are interpreted on a summarized version. The full details are provided in the appendix for reference.

The following table 03 is the summarized version of the cross tabulation.

All the figures and values for individual statements were sourced from SPSS version 25 where the raw data was presented and cross tabulated. Previously we went through the descriptive analysis of all the 15 questions which gave us the overall idea about the data set and the perception of the respondents. Now if we analyze each of the statements on the basis of the cross tabulation, we can interpret the following-

We all know that for external audit we need to scrutinize financial statements and seek out the material misstatements, but it is also the responsibility to assess the internal control system of the company for increasing the frequency of the scrutiny. From a general point of view, people expect the auditors to seek out any flaws in the internal control system. The respondent in the study were also adhering to the common perception which reflected in the crosstabs that 54.95% of the total sample agreed with the statement and 28.2% were neutral on the ground. 55.3% and 54.7% of the external auditors and the management, respectively, agreed to the statement.

While discussing about the disclosure of the risk and financial figures of the company it is a grave responsibility of the external auditor to remain independent while assessing it. The independent audit provides a good platform to ensure that the company is disclosing the evident risk within their financial statements. The results of the study also acknowledges the same, where 57.3% of the respondents agreed and 25.4 % remained neutral.

Each and every company prepares their financial statements according to the rules and representation provided by the IFRS. Among the responsibilities of the external auditor, scrutinizing the adherence of the financial statement of the company with

Table 03: Cross Tabulation Summary

Statement	Agree (%)	Neutral (%)
Independent audit is able to detect flaws and evaluate internal control system	54.95 (EA- 55.3, M- 54.7)	28.2 (EA-25, M-30.8)
Independent audit ensures proper disclosure of risk and financial figures of the company.	57.3 (EA- 62.5, M-53)	25.4 (EA-24, M-26.5)
Independent audit scrutinized financial statement adherence with IFRS by the company	60.6 (EA- 65.6, M-56.4)	23 (EA-18.8 M-26.5)
Independent audit can rely on the figures presented by management in presence of competent internal auditor.	53 (EA- 62.5, M- 45.3)	23.5(EA-19.8,M-26.5)
Independence in External audit doesnot provide platform for enhanced accountability and transparency	48.8 (EA- 50.1, M- 47.9)	21.6 (EA-19.8, M-23.1)
Independence of External audit is not controlled by Management	58.7 (EA- 63.2, M-54.7)	22.1 (EA-21.9, M-22.2)
The Management is more open and liable in presence of independent board	60.5 (EA- 55.2, M-65)	22.1 (EA-25, M-19.7)
The Management functions well and prepare flawless financial statement in presence of independent board.	57.3 (EA- 58.4, M-56.4)	24.9 (EA-20.8, M-28.2)
Industry standard disclosure and selfexplanatory financial figures made available online enhance investors' confidence.	61.5 (EA-60.4, M-62.4)	23.9 (EA-20.8, M-26.5)
Co-operation and Coordination between management and external auditor ensures investors' confidence	59.6 (EA- 60.4, M-59)	25.4 (EA-28.1, M-23.1)

IFRS is a vital one. The respondents also think the same as 60.6% of the total agreed with the statement where the external auditors were 65.6% and management were 56.4%. For this statement, 23% of the respondents remained neutral about it.

Presence of a competent internal auditor within the company makes it easier for the external auditor to conduct the audit. The management is being supervised by the internal auditor which ensures the check and balance within the company. It helps the external auditor while assessing the materiality and the sampling procedure during the audit tenure. From the responses of respondents, 53% of the total sample agreed with the statement that independent audit can rely on the figures presented by the management in presence of competent internal auditor. This portion of the study needs to be analyzed more since a fair portion of the respondents disagreed with the notion. The study would like to raise a flag on the issue.

Independence in external audit is highly essential for creating a good platform for accountability and transparency. Through independence in external audit, proper accountability is ensured and enforces the management to be transparent in their performance and day to day transaction which also confirms with the respondent's intuitions where people agreed 48.8% and 21.6% remained neutral. External auditors at the more 50.1% and the management agrees lesser extent at 47.9%

Audit is a procedure which is entrusted by the shareholders to give them assurance about the business functionality and precision. The board is usually responsible in selecting the auditor for the company. Management is also an integral part of the decision-making process. During the audit procedure, independence is one of the core values which needs to be carried out throughout the audit tenure. Biasness in any regards jeopardizes the main goal of the audit and deterioratesaudit quality. The management should not influence the independence of the external auditor. From the responses we can affirm that 58.7% agree that independence of external audit is not controlled by management. 62.3% of the External auditors and 54.7% of management agrees to the statement. 22.1% were neutral in their opinion.

Having an independent board is a necessity for a company to run smoothly and free of bias. According to Company Act 1994, it is mandatory to have an independent director in the board to maintain independence within the board. From the responses provided, we can affirm that the management remains open and liable and also prepares flawless financial statements in the presence of an independent board.

While talking about the confidence of the investors, disclosure and self-explanatory financial figures enhances the investor confidence manyfolds. Most of the investors try to make informed decisions while investing into different companies. A company trying to provide distinct and clear financial data will surely be embraced by the investors with confidence. It indicates accountability and transparency within the company. 61.5% of the total sample agree that industry standards disclosure and self-explanatory financial figures made available online enhances investors' confidence. Among the group 60.4% and 62.4% of external auditors and management agreed to the statement. This reflects that a fair number of respondents could relate with the statements.

Regression

The study relied on the model:

$$AccT= \alpha+ \beta_1 IC+ \beta_2 RD+ \beta_3 IFRS+ \beta_4 IA+ \varepsilon$$

Where AccT is Accountability and Transparency, IC is the Internal Control, RD is the Risk disclosure, IFRS is the adherence with the IFRS standards and IA is the presence of competent in Internal auditor. The ε is the error term or the residual which is used in the model. By the running the regression in the SPSS. We got the following results.

Table 04: Regression Results

Model	Unstandardized B	T Value	Sig
(Constant)	.857	4.402	.000
IC	.138	2.878	.004
RD	.210	4.748	.000
IFRS	.420	5.589	.000
IA	-.087	-2.787	.006
R	62.7%	**R Square**	39.4%
F (4,208)	33.770	**Sig**	.000
Dependent Variable: AccT			

After the regression if the values are put within the equation, then we see the following:

.857+ .138*IC+ .210*RD+ .420*IFRS+ (-.087) *IA+ ε

From the above table 04 we can see the regression result which was conducted with a vision topredict relationship of the Accountability and Transparency of the corporation in Bangladesh with the variables like Internal control, Risk disclosure, adherence with IFRS and presence of competent Internal auditor. From the regression we know that the value of R is 62.7% which indicates that the four variables are moderately correlated with dependent variable accountability and transparency. The R square value is 39.4% which represents the moderate strength of prediction. So, 39.4% can be explained with this model and residual can be added by including more variables into it. It was found in previous studies that an R square value of 0.75 is considered substantial, 0.50 is moderate, and 0.25 is weak (Hair et al., 2011). All the variables are statistically significant since the significance for each of the variables lies within the 95% confidence interval. As a result, we are allowed to reject all the 4 hypotheses which we have promulgated earlier. So, it can be said that presence of good internal control, providing proper and adequate risk disclosure in the financial system, adhering with the IFRS rule and standards and presence of competent internal auditor has a significant relationship with Accountability and Transparency of the Company in Bangladesh. In the summary it can be told that the R and R Square value of the model is 62.7% and 39.4% respectively which indicates the explanatory power for the variables which are independent to delineate about 62.7% of the changes in the dependent variable Accounting and Transparency. Here, the p-value associated with this F value is very small, p =0.000, which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data). To summarize, the model is statistically significantly in predicting the accounting and transparency in the corporation F (4,208) = 33.770, p (.000) <.05.

From the above analysis the following table can be concluded.

Table 05: Hypotheses Decisions

Null Hypotheses	Decision
H_{a0} Null Hypothesis- Internal control system within the corporate has no influence over enhancement of accountability and transparency.	Reject
H_{b0} Null Hypothesis- Disclosure of Risk does not have any influence over enhancement of accountability and transparency.	Reject
H_{c0} Null Hypothesis- Competency of Internal Auditor does not have any influence over enhancement of accountability and transparency.	Reject
H_{d0} Null Hypothesis- Adherence to IFRS by the company does not have any influence over enhancement of accountability and transparency.	Reject

Conclusion

The main objective of the study was to explain how independent audit enhances the transparency and accountability in corporate sector. The study was successful in finding the factors for transparency and accountability. From the study it was evident that internal control, risk disclosure, adherence with IFRS and presence of competent internal auditor has a significant influence over maintaining accountability and transparency. The model was formulated which was a good fit and moderately explains the dependent variable which is accountability and transparency. 'The factors identified were related to both accountability and transparency and independent financial audit. Accountability and Transparency can be ensured through independent audit which tackles internal control system of the corporation, risk disclosure requirements, checks adherence with IFRS and relies on competent presence of internal auditor. Apart from this presence of independent board help the management to sustain better in the corporation and grow the confidence of the investors. The co-operation between the management and external auditor ensures a suitable environment which is appropriate to create accountability and transparency for the long run.

Initially the study identified four factors which can enhance accountability and transparency within the corporation. Later independent audit was able to establish a relationship with those previous factors. According to the respondents Independent audit is successful in addressing all four factors within the corporation. And thus, independent audit has a relation to ensure accountability and transparency within the organization. For further research we can introduce more variables in the regression model to explore more factors which influence transparency and accountability. For a company to earn trust and goodwill while protecting the firm's reputation among investors, partners, rmployees, customers and other stakeholders, it is important to be as transparent and accountable as possible. It ensures stronger adherence to compliance. Major factors acting as prerequisites to accountability and transparency include strong internal control system, efficient, proper and adequate risk disclosure system, strong adherence to IFRS standards and having complete disclosure of internal audit.

References

- Abdul, Abu & Wahid, Emelin & Syed Mustapha Nazri, Sharifah Nazatul Faiza & Hudaib, Mohammad., (2006). Auditor-client relationship: The case of audit tenure and auditor switching in Malaysia. Managerial Auditing Journal. 21. Pg-724-737. 10.1108/02686900610680512.
- Adhikari, P. & Mellemvik, F. (2011), "The rise and fall of accruals: a case of Nepalese Central government", Journal of Accounting in Emerging Economies, Vol. 1 No. 2, pp. 123-143.
- Animasaun, R.O., Issa Adewola, Adegbite & I.A.,(2016). Auditors' Independence and Accountability of Federal Higher Institutions in Ogun State, Research Journal of Finance and Accounting, ISSN 2222-1697 (Paper), ISSN 2222-2847 (Online), Vol.7, Page No.24, 2016
- Armstrong C., Core J. & Guay W., (2014) Do Independent Directors Cause Improvements in Firm Transparency?, Journal of Financial Economics, Vol. 113, Pg. No. 301 Sep, September 21
- Bahrami, T. & Bejan, K., (2015). Firms' Financial Reporting Transparency and the Rank of Financial Reporting Transparency. Research Journal of Finance and Accounting, 6, Pg-1-7.
- Bushman, R.M, Piotroski, J.D. & Smith, A.J. (2004) 'What determines corporate transparency?', Journal of Accounting Research, Vol. 42, No. 2, pp.207–252.
- Bushman, R.M. & Smith, A.J. (2002) 'Transparency, financial information and corporate governance', FRBNY Economic Policy Review, (online version).

- Carmichael, D. R., (2004). The PCAOB and the social responsibility of the auditor. Accounting Horizons, 18(2), pp. 127-133.
- Davis, C.E. (2001) 'The future of business and financial', AICPA, Reporting Issue 3. (Online Version)
- DeFond, M., Hann, R. & Hu, X., (2005). Does the market value financial expertise on auditcommittees of boards of directors. Journal of Accounting Research 43 (2), pg-153–193.
- Dubnick, M., (2005). Accountability and the promise of performance: In search of the mechanisms. Publ. Perform. Manage. Rev. 28 (3), pg-376–417.
- Ferraz, C. & Finan, F., (2008). Exposing corrupt politicians: The effect of Brazil's publicly released audits on electoral outcomes. Quarterly Journal of Economics, 123(2), pg-703–745.
- Filho W. Leal & Brandli, L. (2016) Engaging Stakeholders for Sustainable Development. Engaging Stakeholders in Education for Sustainable Development at University Level. World Sustainability Series. Springer, Cham. Pg-03
- García, Martha Del Pilar & Cortez Alejandro, Klender & Mendez Saenz, Alma & Sánchez, Héctor. (2016). Does an IFRS adoption increase value relevance and earnings timeliness in Latin America?. Emerging Markets Review. Pg-06
- Gaventa, J. & McGee, R. (2013). The impact of transparency and accountability initiatives. Development Policy Review, pg. 2. Available at: https://onlinelibrary.wiley.com/doi/epdf/10.1111/dpr.12017. Retrieved on: August 12, 2021.
- Glassman, C.A. (2003) 'Obstacles to good financial reporting', Speech by SEC. Commissioner, US Securities and Exchange Commission, American Enterprise Institute, Washington, DC, September.
- Hair, J.F., Ringle, C.M. & Sarstedt, M. (2011). PLS-SEM: indeed a silver bullet. Journal of Marketing Theory and Practice, Vol. 19, No. 1, pp.139–151.
- Heald, D.A. & Hood, C. (2006) Transparency: The Key to Better Governance?, Oxford University Press, Oxford, UK. Pg-59
- Hossain, M.A, Cooper, K. & Islam, K.S., (2006) 'Compliance with IASs: the case of Bangladesh', paper presented at the Seventh Asian Accounting Association Conference, 17–19 September, Sydney, Australia. Pp-15-19
- Islam, M. R., & Sadekin, M. S., (2020). Reporting disclosure levels and compliance with BB, AAOIFI, B/IFRS and SEC of Islamic financial institutions in Bangladesh. International Journal of Economics Business and Accounting Research (IJEBAR), 4(2), pg-110-122.
- Karim, A.K.M.W. & Ahmed, J.U. (2005) 'Determinants of IAS disclosure compliance in emerging economies: evidence from exchange-listed companies in Bangladesh', Working Paper Series, Working Paper No. 21, Victoria University of Wellington, New Zealand. Pg-01
- Kim, P.S., (2009). Enhancing public accountability for developing countries: Major constraints and strategies. Aust. J. Publ. Admin. 68 (s1), S89–S100. Pg-06
- Kordestani, G.R. & Alavi, S. M., (2010) "Investigate the transparency of accounting earnings on the cost of common stocks". Quarterly Journal of Stock Exchange, winter 2010, No. 12, pp. 43-90.
- Kothari, S.P. (2001) 'The role of financial reporting in reducing financial risks in the market', in E. Rosengren and J. Jordan (Eds.): Building an Infrastructure for Financial Stability, pp.89–102, Federal Reserve Bank of Boston
- Krambia-Kapardis, M., Clark, C. & Zopiatis, A., (2016). Satisfaction gap in public sector financial reporting. J. Account. Emerg. Econ. 6

(3), pp-232–253.

- Leffel, T. (2004) 'What is transparency?', Journal of Business Strategy, available at http://www.journalofbusinessstrategy.com', [accessed on 27 August 2021].
- Lin, Z.Jun & Liu, M., (2009). The Impact of Corporate Governance on Auditor Choice: Evidence from China. Journal of International Accounting, Auditing and Taxation. 18. Pp-02
- Mcgrath, S., A. Siegel, T. W. Dunfee, S. A. Glazer & Jaencke, H. R., (2001). A framework for auditor's independence. Journal of accountancy Online; AICPA, January. Pp-04
- Mizrahi, S. & Minchuk, Y., (2019). Accountability and performance management: Citizens' willingness to monitor public officials. Publ. Manage. Rev. 21 (3), pp-334–353.
- Myring, M. & R. Bloom, (2003). ISB's conceptual framework for auditor s independence. The CPA Journal; pg-3.
- Nakmahachalasint, O. & Narktabtee, K., (2019). Implementation of accrual accounting in Thailand's central government. Publ. Money Manage. 39 (2), Pg-139–147.
- Norman, C. S., Rose, A. M. & Rose, J. M., (2010). Internal auditing reporting lines, fraud risk decomposition ans assessment of fraud risk. Accounting, Organisation and Society, Vol 35 (5), pp. 546-557.
- Nurunnabi, Mohammad & Karim, Wares & Norton, Simon. (2011). The perceived need for and impediments to achieving accounting transparency in developing countries: a field investigation on Bangladesh. International Journal of Managerial and Financial Accounting. Pg-02.
- Okollie, A. O., (2007). Auditor's re-appointment and its impact on audit independence, the Nigerian accountant, Pg-04
- Reich, Utz-Peter (2018) Accounting for international trade in value added: a comment on the OECD–WTO project, Economic Systems Research, 30:4, Pg-462 477
- Rezaee, Z., (2009), Corporate Governance and Ethics, John Wiley & Sons, Inc, USA. Pg-01
- Setyaningrum, D., Gani, L., Martani, D. & Kuntadi, C. (2015). The Effect of Auditor Quality on The Follow-Up of Audit Recommendation. International Research Journal of Business Studies, 6(2), Pg-89-104
- Steccolini, I., (2004). Is the annual report an accountability medium? An empirical investigation into Italian local governments. Financ. Account. Manage. 20(3), Pg-327–350.
- Sylvester, F. A., (2013). Assessment of accountability in the public sector in Nigeria. Pg-02
- Tran, Y. T., Nguyen, N. P. & Hoang, T. C., (2020). The role of accountability in determining the relationship between financial reporting quality and the performance of public organizations: Evidence from Vietnam. Journal of Accounting and Public Policy, 106801. Pg-26
- Verdi, S., (2006). "Financial reporting quality and investment efficiency". A dissertation, university of Pennsylvania. Pg: 2-3

Adoption of Cash-Basis IPSAS in Bangladesh
Expected Benefits and Preparedness

Bulbul Singha[1] | Md. Arifur Rahman[2]

The Authors are:

[1]Additional Deputy Comptroller and Auditor General (ADCAG)
Office of the Comptroller and Auditor General of Bangladesh

[2]Bangladesh Civil Service (Audit & Accounts)
Director
Civil Audit Directorate

Abstract

Bangladesh has recently adopted a new set of financial statements for government accounts which are in compliance with IPSAS cash-basis standard. This paper examines the major changes in terms of reliability and understandability of financial reports under IPSAS cash basis compared to that of existing government standards of Bangladesh and analyses the success factors and challenges in implementing IPSAS. Qualitative research method through document reviews is adopted for this study. The legal framework of Bangladesh, government accounting framework, audited financial statements, cash-basis IPSAS, and other literature on public sector accounting have been extensively reviewed. This study finds that the significant differences in existing practices of government accounting from the IPSAS cash are mainly on the presentation and disclosure requirements, and the new IPSAS compliant financial statements are more understandable. Reduced number of financial statements, a robust statement of cash receipt and payment with a reliable cash balance, comparative figures and accounting policies on the face of the financial statements are the features of new format. Comprehensive Chart of Accounts, a homegrown IFMIS and surge of electronic payment and receipts are identified as the success factors for implementing IPSAS cash in Bangladesh. However, there is a need for capacity development of government accountants and updating account code/standards and manuals to yield the promised benefits of IPSAS.

Keywords

IPSAS cash, government accounting, Finance Accounts, Bangladesh.

Introduction

Public Sector Accounting (PSA) plays a crucial role in producing reliable and timely information to the decision makers to achieve core objectives of PFM (PEFA, 2018). In order to enhance quality and standardization of financial reporting practices, the main focus of reform in PSA has been put on harmonization of financial reporting (Legenzova, 2016; Wang, 2014). the International Public Sector Accounting Standards (IPSAS) has become a global standard for assessing these reform initiative (Polzer, et al., 2022). Some of the significant benefits from adoption of IPSAS are better decision making, enhanced accountability and transparency and comparability (ACCA, 2017). According to World Bank (2010), IPSAS adoption facilitates the evaluation of public institutions' effectiveness, enhances the standard of financial management, and streamlines communication with the general public by providing an accurate

and unbiased representation of the government's assets, finances, revenues, and expenditures. Despite numerous promised benefits, country specific studies suggest that adoption of IPSAS is a complex and technically demanding, lengthy and resource consuming process (Adhikari et al., 2021; Polzer et al., 2020).

Generally, development partners recommend to adopt cash-basis IPSAS first; as a stepping stone to pathway to accrual (Adhikari et al., 2015). For Bangladesh, World Bank (2007, 2010) emphasized the importance of adopting IPSAS cash to enhance timeliness and quality of financial reports. In order to improve decision making and transparency, adoption of cash-basis IPSAS has been one of the major PFM reform actions of the government of Bangladesh (PFM Reform Strategy 2016-2021). Following the strategy, The PFM Action Plan 2018-2023 of government of Bangladesh outlines the road map for implementation of IPSAS compliant financial reporting. In line with the action plan, Bangladesh adopted cash-basis IPSAS in the year 2021. Government accounting of Bangladesh is mainly cash basis with a few exceptions and this system of accounting persists since British colonial period. For developing countries, local accounting practices are not always defective and, to some extent, it surpasses the requirements of IPSAS, but epistemic community ignores the positive aspects of local accounting practice when advocating for IPSASs (Jayasinghe et al., 2021). This warrants a detail study to find out whether there is any notable benefit from migration to cash based IPSAS from inherited government accounting or the adoption of IPSAS cash is merely an exercise to meet the development partners' requirements.

It is also important to study particular jurisdiction to see the specific changes in financial reporting and the corresponding benefits from adopting IPSAS cash. In this backdrop, this study seeks to identify the major improvements in terms of reliability and understandability of financial reports under IPSAS cash basis compared to that of existing government standards of Bangladesh and aims to analyse the major success factors and challenges in implementing IPSAS.

The remainder of this paper is structured as follows: section-II discusses the existing government accounting framework of Bangladesh from legal and technical perspective, section-III highlights the features of IPSAS and its adoption process in Bangladesh, the notable impacts on usefulness by migration from current national accounting to IPSAS based accounting are highlighted in section-IV, various factors regarding implementation of IPSAS are analysed in section-V and section-VI concludes.

Existing Government Accounting Framework of Bangladesh

The existing accounting procedure and financial reporting structure of government accounting originated from the British India when, the main emphasis of accounting was to report amount of cash inflows from taxations and borrowings against cash outflows for expenditures; and the closing balance is produced by adding the changes in cash to the opening balance (Edwards, 2023). As far as basic accounting principles and style of presenting accounts are concerned, there has been little changes from colonial period to current period. The title of the annual accounts became “Finance Accounts” instead of ‘Finance and Revenue Accounts’ after Promulgation of Audit and Accounts Order,1936 repealing the Auditor General Rules, 1926. In Bangladesh era, laws such as: The Comptroller and Auditor General (Additional Functions) Act, 1974 and The Public Moneys and Budget Management (PMBM) Act, 2009 have maintained the same nomenclature. According to these statues, the main subject matter of these accounts is annual receipts and disbursements.

The pivotal provision for setting of accounting principles and procedures was explicitly spelled out in Government of India Act 1935, section no 168. It established the Auditor General as the authority to prescribe the “forms of accounts” with the approval of the Governor General which still exists in Bangladesh constitution (article 131). This far-reaching provision authorizes the Comptroller and Auditor General (CAG) with the approval of the President to change the formats of accounts without any new legislation (World Bank,2007).

In the year 1938 a four volume Account Code was first issued by the Auditor General. the latest account code issued in 1996 also contain four volumes: Volume-I deals with general principles and methods of accounts; Volume-IV details the technical procedure of compilation of accounts and prescribes the Format of the Finance Account (templates of all statements included in the Finance Accounts); and Volume-II and III are dedicated to accounting procedures performed at district and thana accounts offices and departmental offices respectively.

The format of Finance Account is dictated by the legal framework under which budgetary and other financial subjects operate. Separate presentation of: charged expenditures from other expenditures and revenue expenditures from other expenditures is a constitutional requirement (Article 87) for budget which are eventually reflected in the annual accounts. Moreover, the constitution of Bangladesh (Article 84) establishes two funds: Consolidated fund and The Public Account of the Republic; all financial transactions of the government have to be linked to anyone of these two. As a result, accounts have to be prepared in line with two funds. Apart from Finance Accounts another annual account of government is Appropriation Account which is mainly a comparative statement of budget versus actual amounts in terms of expenditure made out of the Consolidated Fund.

Adoption of IPSAS cash standard in Bangladesh

It is argued that conventional cash based accounting is not capable of presenting a comprehensive picture of the total assets and liabilities of the government to visualize the long term impacts of political decision on the financial statements (PWC, 2013).

In addition to accrual standards, IPSAS cash standard was first issued in 2003 which was updated in 2006 and 2007 and the latest revision took place in 2017 (Huang, 2018). Despite the huge number of promised benefits, migrating from conventional cash accounting to accrual based accounting is not an easy and simple process (Khan and Mayes, 2009), and countries have struggled and in extreme cases reverted to cash based accounting (Adhikari, et el., 2021). For most of the developing countries it is difficult to implement IPSAS accrual as these nations have weaker PFM and accounting system (Christiaens et al., 2015). Due to the similarity to the traditional cash based accounting, less technical complexity and limited cost implications, developing countries are likely to embrace cash- basis IPSAS (Chan, 2006).

The purpose of the IPSAS cash basis standard is to prescribe a framework for general purpose financial reporting under cash basis of accounting. IPSAS cash standard has two parts: mandatory requirements and non-mandatory requirements (IPSASB,2022). Adherence to the mandatory requirements and the encouragements of this standard will increase comprehensiveness and transparency of the financial reports prepared focusing on cash receipts and cash payments by an entity (Jensen, 2018).

Although the adoption of cash based IPSAS was expected to be simple to compare with accrual based IPSAS, only limited number of nations adopted IPSAS cash (IPSASB, 2010). There is a gap between announcement for adoption of IPSAS and actual implementation of IPSAS by various nations (Polzer et al., 2020). The factors behind poor implementation statistics could be divided into two categories: (a) technical factors and (b) non-technical factors. Apart from true technical issues, reasons for non-adoption of IPSAS are: the benefits are often exaggerated and untested (Wall and Connolly, 2016); for some countries it is only an exercise seeking legitimacy (Lassou, 2017; Nagirikandalage and Binsardi, 2015); and adoption of IPSAS is mainly a development partners' requirement rather than a domestic need (Hopper et al., 2017).

However, on the technical ground, IPSASB Task Force Report, 2010 identifies the followings as major obstacles in the process of adopting IPSAS cash:

i. mandatory requirement to prepare consolidated financial statements,

ii. mandatory requirements for disclosures of information about external assistance and payments made by third-parties.

Taking into consideration of the facts related to technical impediments in implementing IPSAS cash, the particular standard has been revised accordingly in 2017. This major step by IPSASB paved the way for smoother adoption of IPSAS cash by many developing countries.

The process of adoption of IPSAS cash in Bangladesh started in 2007. According to the report of World Bank (2007):

"Ministry of Finance (MOF) has issued an order requesting the Controller General of Accounts (CGA) to do the needful to prepare GOB financial statements in accordance with IPSAS Cash Basis. The first set of IPSAS-based statements for the core ministries (excluding specialized organizations) will be produced for (fiscal year) 2007-2008."

The formal adoption of IPSAS cash took place in 2021 as the President approved the new IPSAS compliant Finance Accounts format prescribed by the CAG (Finance Division, Ministry of Finance, memo no. 07.00.0000.082.35.001.21-439, date 29-12-2021).

Expected benefits of migration from existing cash-based national accounting to IPSAS cash-based accounting

Being a cash-based accounting system, there is little fundamental changes in accounting recognition and measurement when adopting IPSAS cash. However, the notable changes will be there as far as presentation and disclosures are concerned. Cash-based IPSAS, with its standardized framework, is expected to be superior to the traditional cash basis and modified-cash basis accounting systems, which lack a universally accepted standardized mode of accounting (Mostafa et al., 2017). It is argued that timely reporting of reliable and understandable accounting information leads to greater usefulness of government financial statements (Ferguson, 2017). The significant changes due to migration from existing government cash based accounting to cash basis IPSAS, and the expected benefits from these changes are analyzed here:

Standardised Financial Statements: the old Finance Accounts consisted of 14 statements with 25 schedules

and 7 appendices. Although the number of statements is plenty, the information presented is of limited use to the users (PFM Reform Strategy 2016-2021). The schedules and appendices do not have a direct relationship with the statements (Khan, 2022). Users are to a large extent baffled by maze of statements and schedules which make the overall Finance Accounts less appealing and understandable. The former Auditor General of Canada, Ferguson (2017) argues that care should be taken to prepare and present the government financial statements in such a way that users understand them better.

The new Finance Accounts format includes only 5 statements: (1) Statement of cash receipts and payments, (2) Comparison of Budget and Actual amounts, (3) Comprehensive receipts and disbursement under public accounts, (4) Summary of Financing activities and (5) Summary of Balances. First two statements are prepared in accordance with the mandatory requirements of IPSAS cash basis standard. The other statements are prepared in compliance with the provisions of the Constitution and other legal requirements. Besides, there are adequate notes on the face of the accounts to provide additional information. Therefore, smaller number of financial statements supported by logically arranged sufficient notes for fair presentation of information significantly increases the understandability and robustness of the information presented.

Visible Accounting Policies: New IPSAS cash compliant format of Finance Accounts discloses the accounting policies explicitly in the Financial statements. In the earlier format these principles and rules are not usually disclosed on the face of the financial statements rather they were contained in Account Code. Publishing principles and policies in a different document rather than on the face of Finance Accounts makes the financial statements less comprehensive and transparent.

Robust Statement of Cash Receipts and Payment: One of the mandatory requirements of IPSAS cash standard is to produce a statement of cash receipts and cash payments which recognizes all cash receipts, cash payments and cash balances controlled by the entity. Tt can be seen that Government Accounting is not strictly in cash basis. It is actual cash plus a few transactions under accrual basis accounting (Account Code volume-I; GASAB, 2008; ADB, 2018). Transactions for which cash actually do not move e.g. General Provident Fund (GPF) interest, write off of loans are also reflected in previous finance accounts. As a result, there are harmonization issues between traditional statement and new IPSAS compliant statement of cash receipt and payments. If proper care is taken in this regard, the cash receipt and payments statement will be more focused and transparent leading to reliable cash balance.

Reliable Cash balance: In line with IPSAS cash standard, the cash balance of the entity is to be presented at the year end and rest of the items presented in statement of cash receipts and disbursements are just cash inflow or cash outflow. Being a balance, the closing balance of cash has to be carried forward from reporting year to following year as opening balance of the latter one. Therefore, it is fundamental to ensure the faithful representation of the cash balance which must be complete, free from material error and most importantly verifiable (para 1.3.27. IPSAS cash standard).

In the earlier Finance Accounts disclosures on face of the financial statement relating to cash balance are extremely limited (Iqbal, 2021; Audited Finance Accounts 2017-18, World Bank, 2007). Which reduces the level of financial integrity of the Accounts to certain extent (PEFA, 2018) and can potentially lower the confidence of the users on the accounts. Other than a few exceptions, cash balances of the public accounts are kept with the banks and banking business of government is conducted by Bangladesh Bank (Account Code, Volume-I). it is necessary to reconcile the cash balances recorded in books of accounts of CGA against the balance reported by the bank. The obvious reasons for any difference between the two balances are: cheque issued but not paid, cheque deposited but not credited (IPSASB, 2011). In addition, difference could arise due to hybrid (cash and accrual) accounting treatment, cash remained unreported to the bank or in extreme cases, unsettled mismatches cumulated over the years.

Although article 129 of Account Code IV requires monthly bank reconciliation certificate, in published accounts so far such reconciliation and other related disclosures have not been presented (PFM Reform Strategy 2016-2021; Khan, 2022). IPSAS cash compliant financial statement is supposed to present the financial information fairly with sufficient disclosures to provide the assertions required by International Standards on Auditing (ISA) 315 such as existence, rights and obligations, completeness and valuation on cash balance

Prior Period Adjustments and Errors: Even though the existing Account Code does have a provision for correction of error after submission of June final accounts (Account Code, Vol-IV, article-107.b), there is no provision for restating the comparative figure, neither any provision for disclosures on correction of errors. This is one of the significant issues the new IPSAS compliant Finance Accounts going to address. The current opening balance of cash has to be drawn from the restated closing cash balance in prior year if there is any error. Prior year adjustment, nature of error and amount of correction has to be disclosed in the notes to the Financial Statements (IPSASB,2022).

Comparative Figures: This important aspect of presenting financial information was missing in previous government financial statements. The new IPSAS compliant financial statements will help the users more to understand how the financial performance of the government changed over time and to identify areas for improvement.

Reporting on Restrictions on Cash Balances: Cash restrictions refer to the limitations or conditions placed on the use of cash resources, IPSAS cash standard requires governments and other public sector entities to report on cash restrictions According to IPSAS cash (paragraph 1.4.9) an entity must disclose in notes to the financial statements together with commentary on nature and amount of:

i. Significant cash balances that are not available for use by the entity;

ii. Significant cash balances that are subject to external restrictions; and

iii. Undrawn borrowing facilities that may be available for future operating activities and to settle capital commitments, indicating any restrictions on the use of these facilities.

Disclosures on cash balance subject to external restriction may become significant when receipts from grant or donations need to be used for a specific purpose.

Comparison of Budget vs Actual Amounts: it is an authoritative requirement of IPSAS cash standard to present a comparison between budget amounts and actual amounts when the entity makes the approved budget publicly available. According to the cash-basis IPSAS standard (Paragraph 1.7.2), the approved budget reflects the anticipated revenue or receipts expected to rise in the annual budget period and expenses or expenditures approved by a legislative body. Since Appropriation Account deals with expenditure/ disbursement only, these accounts do not fulfill the requirement of the IPSAS. The statement no. 2 of the newly approved format of Finance Accounts presents the required comparison between budget and actual amounts

Success Factors and Challenges in Implementing IPSAS Cash

IPSAS cash requires a number of relevant aspects of accounting and overall PFM are working in synchronization. In this connection, the success factors (currently available) and challenges (require significant improvement) are summarized below:

Success Factors

A new Chart of Accounts: A massive shift took place in the arena of government accounting when a new chart of accounts (COA) namely Budgeting and Accounting Classification System (BACS) has been introduced in financial year 2018-2019. In addition to the national requirements this COA is aligned with Government Finance Statistics (GFS) and IPSAS (Khusru, et al., 2022). Unlike previous classification, this coding structure now embraces the internationally accepted classification of business transaction known as revenue, expenditure, assets, liabilities and equity. The coding structure is capable of gathering of information on a broader set of government entities, reporting on both financial assets and liabilities, and reporting on the location of spending. Technically, this system has been developed based on general ledger framework concept. Moreover, it is designed in such a way that consolidation could be performed and accounting for third party payments such as Direct Project Aid is possible now (Khan, 2019).

Success factors	Challenges
Comprehensive Chart of Accounts	Need for capacity development
Homegrown Integrated Financial Management Information System	Revision of Account Code
Surge in electronic payments and receipts	Increasing awareness towards government accounts (Financial statements)
ISSAI based auditing standards	

iBAS++: Integrated Budget and Accounting System is the integrated financial management information system (IFMIS) of the Government. This system has brought remarkable improvements in structural strength of government accounting by speeding up accounting activities and enhancing disclosure of information (Rajib and Hoque, 2017). Being an in-house development, the system is more likely to respond efficiently to changes and adjustments when necessary (Uña and Pimenta, 2016). The introduction of "General Ledger" is aimed to strengthen budgetary and accounting control, facilitate double entry accounting and producing reliable financial report for the users (Cavanagh et al., 2016; Premchand, 1995).

Furthermore, it is able to record and process a huge amount of government transactions comprehensively and efficiently in line with new COA. Delay in submission of accounts from Defense, Railways and other self-accounting entities to CGA have been identified as the major impediment in producing timely annual accounts for Bangladesh (ACCA, 2017 ; Mnif and Gafsi, 2017; Wang and Miraj, 2018). iBAS++ is likely to resolve the problem of delay and will assist in producing timely financial reports. This system which is working based on a robust COA will facilitate preparation of reliable financial report as required by IPSAS cash (Khusru et al., 2022). However, iBAS++ has some issues with timely reporting (Saxena et al., 2022) and in some cases the system struggles due to lack of appropriate software requirements specification (SRS) (Khan, 2022).

Surge in Electronic Payments and electronic receipts: A significant rise in disbursements through Electronic Fund Transfer (EFT) has been observed. On the receipt side, an increase in use of Automated Chalan (A- Chalan) almost eliminates the cash float i.e. cash already received but delay in reporting to the Treasury Single Account (TSA) because of intermediate banking operations. These are two highly impactful instruments for providing more efficient and responsive cash management processing and service provision (Chowdhury, 2022). However, coverage of EFT and A-Chalan have to be increased as the share of both EFT and A-chalan is not satisfactory (Saxena et al., 2022).

New Auditing Standards: CAG Bangladesh has promulgated Government Auditing Standards of Bangladesh in 2021 which are based on International Standards on Supreme Audit Institution. The new standardized set of financial statements warrant compatible auditing standards. The newly issued auditing standards of CAG will fulfill the auditing requirement of the Finance Accounts.

Challenges

Need for Capacity Development: Although the new Finance account is IPSAS cash based which seems simple, it demands certain level of technical knowledge. There is a shortage of skilled and interested personnel in the field of government accounting (Khan,2022). Moreover, there is little incentive for government accountants/ officials to pursue reforms such as implementation of IPSAS standard which requires high level of commitment and support from the management (Rajib et al.,2019).

Professional qualifications such as CIPFA and IPSAS trainings are useful in understanding the concepts of IPSAS, however, these initiatives lack adequate fusion between national accounting practices and international standards. Continuous professional development is a must in terms of updates on IPSAS and its corresponding impact on the government financial statements. In an IT reliant accounting environment, accounting staff should have thorough command over the accounting issues so that effective business requirements could be placed to IT staff.

Revision of Account Code: IT based accounting, new chart of accounts and surge of electronic receipts and payments have warranted a requirement to overhaul the existing account code. Adoption of cash-basis IPSAS is going to amplify the need for revision of Account Code. The traditional national accounting standards i.e. account code contains accounting principles, description of accounting methods and accounting procedure, whereas IPSAS standard mainly deals with reporting, evaluating and disclosure of accounting information (Otavova, 2011). The new chart of accounts and the IPSAS compliant Finance Account Format are the integral part of Accounts Code, therefore, the account code is already updated. However, revision of accounting procedures in line with IPSAS cash fulfilling financial reporting requirements will be a challenging work.

According to the Audited Finance Account 2017-2018, there are issues with the reconciliation of external debt. The account code needs to incorporate adequate provisions for comprehensive recording and fair presentation of balances of the government.

Attention for Government Accounts: Despite being the statement on how budget estimates realised in actual, annual accounts of the government get a negligible attention from the media and the parliamentarians compared to the budget (Stewart, 2022). In Bangladesh, the popularity of government accounts among public, especially, media, government departments and Public Accounts Committee (PAC) is not noteworthy.

Therefore, the accounts should be prepared and presented in such a way that users with reasonable understanding can easily access and can grasp the essence of it. After producing timely and reliable accounts additional measure is required to sensitize users such as parliament, media, and development partners about quality and useability of the accounting information.

Conclusion

The format used to present the annual account of the government namely "Finance Accounts" has not been standardized according to best practices. The transition from conventional cash based government accounting to cash basis IPSAS accounting is expected to bring comparability at international level and to cater the users with reliable and understandable financial information for useful decision making. However, there are substantial challenges in the implementation, Training should not be focused on IPSAS alone rather than emphasis has to put on how the various practical government accounting transactions are recorded, processed and reported so that final accounts are in harmony with IPSAS. Continuous professional development has to be the main focus of the government accountant.

In a highly IT based accounting environment, accounting personnel are required to possess thorough command over various accounting issue to place effective business requirements to the IT staff. Updation of Account code has now become more than necessary, and in doing so, accounting principles, reporting and disclosure requirements should be arranged distinctly from the detail accounting methods and procedure. Capacity of iBAS++ has to be enhanced to timely report generation and to be compatible with the requirement of IPSAS. Finally, there is a need to increase awareness for government accounts amongst various stakeholders such as parliament, media, government officers.

References

ACCA (2017). IPSAS implementation: current status and challenges. https://www.accaglobal.com/gb/en/professional-insights/global-profession/ipsas-implementation-current-status-and-challenges.html (accessed on 04-03-2023)

Account Code (1996) Volume- I, II, III & IV. Issued by The Comptroller and Auditor General of Bangladesh. https://cag.org.bd/audit-resources/codes-standards

Adhikari, P., Kuruppu, C., Ouda, H., Grossi, G., & Ambalangodage, D. (2021). Unintended consequences in implementing public sector accounting reforms in emerging economies: evidence from Egypt, Nepal and Sri Lanka. International Review of Administrative Sciences, 87(4), 870-887. https://doi.org/10.1177/0020852319864156

Adhikari, P., Kuruppu, C., Wynne, A. and Ambalangodage, D. (2015). Diffusion of the Cash Basis International Public Sector Accounting Standard (IPSAS) in Less Developed Countries (LDCs) – The Case of the Nepali Central Government, Research in Accounting in Emerging Economies, Vol. 15 No. 1, pp. 85-108.

Asian Development Bank (ADB) (2018). Public Financial Management Systems - Bangladesh: Key Elements from a Financial Management Perspective. ADB

Audited Finance Account 2017-2018, Office of the Controller General of Accounts, http://cga.portal.gov.bd/sites/default/files/files/cga.portal.gov.bd/page/8f687cc7_cf87_4178_8492_75b0e004830a/2022-12-19-04-54-8f212fcf584cbc5a383888b7831ad617.pdf

Cavanagh, J., Flynn, S., & Moretti, D. (2016). "Implementing Accrual Accounting in the Public Sector," IMF Technical Notes and Manuals 2016/006, International Monetary Fund.

Chan, J. L. (2006). IPSAS and government accounting reform in developing countries: Accounting reform in the public sector mimicry, fad or necessity.

International Journal of Public Sector Performance Management, 2(1), 31–42.

Chowdhury, M.M. (2022) The Public Financial Management of Bangladesh – An Overview. Public Financial Management Review: Vol-1, Issue-1. Financial Management Academy (FIMA).

Christiaens, J., Vanhee, C., Manes-Rossi, F., Aversano, N., & van Cauwenberge, P. (2015). The effect of IPSAS on reforming governmental financial reporting: an international comparison. International Review of Administrative Sciences, 81(1), 158–177. https://doi.org/10.1177/0020852314546580

Edwards, J. (2023) Cash to accruals accounting in British central government: A journey through time. Financial Acc & Man. 39: 40–59. https://doi.org/10.1111/faam.12295

Schmidthuber, L., Hilgers, D., Hofmann, S., International Public Sector Accounting Standards (IPSASs): A systematic literature review and future research agenda. Financial Acc & Man 2022; 38: 119– 142. https://doi.org/10.1111/faam.12265

Ferguson, M. (2017, November 27). Why is more attention not paid to government financial statements? [notes for speech], Office of the Auditor General of Canada. https://www.oag-bvg.gc.ca/internet/English/sp_20171123_e_42872.html (accessed on 15-03-2023)

Government Accounting Standards Advisory Board (GASAB) (2008). A Study on Gap Analysis of Indian Government Accounting with International Standards. A Research Study by GASAB Secretariat. Office of the Comptroller and Auditor General of India. https://gasab.gov.in/gasab/pdf/Gap_Analysis.pdf (accessed on 16-02-2023)

Government of India Act, 1935.

Haas, P. (1992). Introduction: Epistemic communities and international policy coordination. International Organization, 46, 1-35.

Hopper, T., Lassou, P. and Soobaroyen, T. (2017). Globalisation, accounting and developing countries, Critical Perspectives on Accounting, Vol. 43 March, pp. 125-148.

Huang, G. (2018). New Cash Basis IPSAS. International Monetary Fund PFM BLOG. https://blog-pfm.imf.org/en/pfmblog/2018/01/a (accessed on 04-04-2023)

IPSASB (2010). Review of the Cash Basis IPSAS, "Financial Reporting Under the Cash Basis of Accounting", Report of The Task Force.

IPSASB. (2011). Study 14, Transition to the Accrual Basis of Accounting: Guidance for Public Sector Entities, 3rd edition. IFAC.

IPSASB (2022). Handbook of Public Sector Accounting Pronouncements. 2022th edition.

Iqbal, A. (2021, March 20). Impact of Public Financial Reforms in Bangladesh on Public Sector Financial Reporting. ICAB Members' Conference. Institute of Chartered Accountants of Bangladesh. https://www.icab.org.bd/icabadmin/uploads/ckeditor/88615.%20Ashik%20Iqbal%20Key%20Note%20on%20PFM%20Financial%20Reporting.pdf (accessed on 02-03-2023)

Jayasinghe, K., Adhikari, P., Wynne, A., Malagila, J., Abdurafiu, N., and Soobaroyen, T. (2021). Government accounting reforms in Sub-Saharan African countries and the selective ignorance of the epistemic community: A competing logics perspective, Critical Perspectives on Accounting.

Jensen, G.R. (2018). International Public Sector Accounting Standards (IPSAS). In: Farazmand, A. (eds) Global Encyclopedia of Public Administration, Public Policy, and Governance. Springer, Cham. https://doi.org/10.1007/978-3-319-20928-9_2280

Khan, M.A.R. (2019), PFM Reform: Introduction of New Budget and Accounting Classification System (BACS) in

Bangladesh, The Cost and Management, Volume-47, Number-05, September-October 2019, ICMAB.

Khan, T.A.H. (2022). IPSAS Cash and Our Current Accounting Practices, Public Financial Management Review, volume-I, Issue-1. Financial Management Academy (FIMA).

Khusru, M.H., Rajib, S.U. and Hoque, M. (2022). Evolution of Coding System: Lynchpin of Successful PFM in Bangladesh, ICAB. https://www.icab.org.bd/publication/news/4/646/Evolution-of-Coding-System:-Lynchpin-of-Successful-PFM-in-Bangladesh (accessed on 01-05-2023)

Lassou, P. (2017). State of government accounting in Ghana and Benin: a "tentative" account, Journal of Accounting in Emerging Economies, Vol. 7 No. 4, pp. 486-506.

Legenzova, R. (2016). A concept of accounting quality from accounting harmonisation perspective. Journal of Economics and Business, 28(5), 33–37.

Mnif, Y. S. and Gafsi, Y. (2019). Institutional and Economic Factors Affecting the Adoption of International Public Sector Accounting Standards, International Journal of Public Administration, 42:2, 119-131,

Mustapha, M., Ku Ismail, K. N. I., & Ahmad, H. N. (2017). The Adoption of Cash-basis IPSAS: A Conceptual Framework for Enhancing Decision-Useful Financial Reporting. Journal of Business Management and Accounting, 7(1), 51–68.

Nagirikandalage, P. and Binsardi, B. (2015). Exploring public sector accounting reforms in an emerging economy: a case of Sri Lanka, in Jayasinghe, K., Nath, N. and Othman, R. (Eds.), The Public Sector Accounting, Accountability and Auditing in Emerging Economies (Research in Accounting in Emerging Economies), Emerald Group Publishing Limited, Vol. 15, pp. 51-83.

Otavová, M. (2011). Harmonisation Efforts in the Field of Accounting of Public Sector. Acta univ. agric. et silvic. Mendel. Brun., LIX, No. 4, pp. 195–202

PEFA (2018). PEFA Handbook, Volume-II, PEFA Assessment Fieldguide, Second Edition, PEFA Secretariat, Washington DC, USA

PFM Action Plan 2018-2023, Finance Division, Ministry of Finance, Government of People's Republic of Bangladesh. https://mof.gov.bd/sites/default/files/files/mof.portal.gov.bd/notices/77d6a1c8_c54d_4ca2_9bce_eda010df71d5/PFM%20Action%20Plan_2018-2023_FinalVersion.pdf (accessed on 06-01-2023)

PFM Reform Strategy 2016-2021, Finance Division, Ministry of Finance, Government of People's Republic of Bangladesh. https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/2cb25ee7_d82c_4a1f_81ae_bacc4a03374e/PFM%20Reform%20Strategy%202016-21%20Final.pdf (accessed on 06-01-2023)

Polzer, T., Gårseth-Nesbakk, L. and Adhikari, P. (2020). "Does your walk match your talk?" Analyzing IPSASs diffusion in developing and developed countries, International Journal of Public Sector Management, Vol. 33 No. 2/3, pp. 117-139.

Polzer, T., Grossi, G. & Reichard, C. (2022). Implementation of the international public sector accounting standards in Europe. Variations on a global theme, Accounting Forum, 46:1, 57-82, DOI: 10.1080/01559982.2021.1920277

Premchand, A. (1995), Effective Government Accounting. International Monetary Fund.

PwC (PricewaterhouseCoopers) (2013). Towards a New Era in Government Accounting and Reporting. Global Survey on Accounting and Reporting by Central Governments. https://www.pwc.com/gx/en/psrc/publications/assets/pwc-global--ipsas-survey-government-accounting-and-reporting-pdf.pdf (accessed on 05-01-2023)

Rajib, S.U., Adhikari, P., Hoque, M. and Akter, M. (2019). "Institutionalisation of the Cash Basis International Public Sector Accounting Standard in the

Central Government of Bangladesh: An example of delay and resistance", Journal of Accounting in Emerging Economies, Vol. 9 No. 1, pp. 28-50.

Rajib, S.U., and Hoque, M. (2017). Application of ICT in Public Sector Accounting of Bangladesh. Dhaka University Journal of Business Studies, Special International Edition, 1(1), 1-16,

Saxena, S., Sharan, R., Gamkrelidze, D. and Wilkinson, M. (2022). Bangladesh: Strengthening the Treasury Single Account, [Unpublished Report], Fiscal Affairs Department, International Monetary Fund.

Stewart, E. (2022). Why politicians should pay attention to government financial reports. ICAEW Insights. https://www.icaew.com/insights/viewpoints-on-the-news/2022/nov-2022/why-politicians-should-pay-attention-to-government-financial-reports#content (accessed on 03-02-2023)

The Auditor General's Rules, 1926. https://cag.org.bd/storage/app/media/auditor-generals-rules-1926.pdf

The Comptroller and Auditor General (Additional Functions) Act, 1974. Act number XXIV of 1974.

The Constitution of the People's Republic of Bangladesh (n.d.)

The Government of India (Audit and Accounts) Order, 1936. https://cag.org.bd/storage/app/media/66208023020db6fde584b5c16d62960b.pdf

The Public Moneys and Budget Management Act, 2009. Act number 40 of 2009.

UNCTAD (2022). Developing country external debt: A cascade of crises means more countries face debt distress. https://sdgpulse.unctad.org/debt-sustainability/# (accessed on 12-03-2023)

Uña, G., & Pimenta, C. (2016). "Chapter 7. Integrated Financial Management Information Systems in Latin America: Strategic Aspects and Challenges". In Public Financial Management in Latin America. USA: Inter-American Development Bank. https://www.elibrary.imf.org/view/book/9781597822268/ch07.xml (accessed on 08-03-2023)

Wall, A. and Connolly, C. (2016). Implementing IFRSs in the UK developed administrations, Accounting, Auditing & Accountability Journal, Vol. 29 No. 2, pp. 198-225.

Wang, C. (2014). Accounting Standards Harmonization and Financial Statement Comparability: Evidence from Transnational Information Transfer. Journal of Accounting Research, Volume-52, Issue-4, pp. 955-992.

Wang, Z. and Miraj, J. (2018). Adoption of International Public Sector Accounting Standards in Public Sector of Developing Economies -Analysis of Five South Asian Countries, Research in World Economy, Vol. 9, No. 2.

World Bank (2007). Bangladesh Public Sector Accounting and Auditing: A Comparison to International Standards, South Asian Region Financial Management Unit, Washington DC.

World Bank (2010). Public Sector Accounting and Auditing In South Asia: A Comparison to International Standards. World Bank.

Association between Interactional Justice and Affective Organizational Commitment of Banking Personnel

Md. Shajedul Islam[1] | Md. Motahar Hossain[2]

The Authors are:

[1]1Associate Professor (Management)
Department of Business Studies
North Bengal International University
Rajshahi, Bangladesh

[2]Research Scholar & Instructor
Department of Business Management
University School of Business
Chandigarh University, Punjab, India

Abstract

The efficient performance of a bank's personnel is crucial for its dynamic operation. Employee competence, motivation, and commitment are all influenced by their perception of interactional fairness, which in turn has an impact on how well they perform for the company. The purpose of this study is to investigate the connection between affective commitment and interactional justice among Bangladeshi bank employees. Although the study has a quantitative foundation, it also incorporates qualitative data to achieve its objectives. In order to quantify organizational commitment and interactional justice, the study developed questionnaires based on those employed by Allen and Meyer and Jason A. Colquitt, respectively. The study uses both descriptive and inferential statistics to examine the relationship between affective commitment (a dependent variable) and interactional fairness (an independent variable) among the employees. The study results reveal that the formulated hypotheses are accepted when the F value for the ANOVA of interpersonal justice and affective commitment (H1) is F = 9.77; p =.000.05; and informational justice and affective commitment (H2) is F = 18.355; p =.000.05. The study found a strong correlation between affective organizational commitment and interactional justice procedures among the personnel of private commercial banks in Bangladesh. Last but not least, this finding implies that the sense of interactional justice raises perceptions of fairness of treatment, which raises employee engagement (commitment) and performance level in a company.

Keywords

Interactional justice; interpersonal justice; informational justice; affective organizational commitment.

Introduction

Performance appraisal is an important component and indicator of organizational success. Almost every organization now evaluates employee performance through performance appraisals. Additionally, performance evaluations are used to make a number of crucial administrative and developmental decisions, including compensation increases, promotion, training, and reward distribution (Griffin, R. W., 2002). The performance appraisal system's effectiveness will depend on how fairly employees perceive it and how they react to its many components. Many academics have discussed the organizational justice of performance reviews in terms of fairness. Workplace organizational justice is concerned with how just employees see particular organizational procedures or outcomes (Cropanzano, R., & Greenberg, 1997). Employees'

opinions of justice at work are referred to as organizational justice. Distributive justice and procedural justice were the two facets of justice that Greenberg initially used to measure performance (Greenberg, J., 1986). The three types of justice considered by Skarlicki, D. P., and Folger, R. (1997) are procedural, distributive, and interactional justice. The two divisions of interactional justice that have recently emerged are interpersonal justice and informational justice. Interpersonal justice measures the degree to which people are treated with courtesy, dignity, and respect by the authorities involved in implementing procedures or determining outcomes, as opposed to informational justice, which is concerned with the justifications given to people as to why specific procedures were used or why specific outcomes were distributed (Colquitt, J. A. et al., 2001).

Organizational commitment is the force that ties a worker to a path of action relevant to one or more goals (Meyer, J. P., and Lynne Herscovitch, L., 2001). Or, to put it another way, devoted employees who feel a strong sense of connection to their organization are said to be loyal (Cohen-Charash, Y., & Spector, P. E., 2001). These employees regularly put in more effort, work more effectively, and take the initiative to help others, all of which provide value to the company. Organizational commitment was separated into three kinds by Meyer & Allen (1991): affective commitment, normative commitment, and continuity commitment. Meyer and Allen (1990) defined affective commitment as the emotional bond a worker has with the company.

Justice perceptions can have a favorable or unfavorable effect on employees' attitude and behavior, which can then have an effect on how well an individual, a group, or the entire organization performs and succeeds (Baldwin, S., 2006). According to empirical data, employees' outlook towards the company is influenced by their impression of organizational fairness (Konovsky, M. A., 2000). People are more likely to feel pleased and dedicated at work if they perceive organizational justice to be positive (McFarlin, D. B., & Sweeney, P. D., 1992). Employees are known to be less devoted to the organization when they feel that organizational decisions and procedures, other people's treatment of them, and the informational foundation for decision-making are unjust. They become preoccupied with undesirable or counterproductive mental and physical withdrawal behaviors (Colquitt, J. A., 2001). Employees respond more positively to an organization when it is fair and just in its processes, policies, relationships, and distribution methods. Employee performance improved as a result of improving organizational justice. To reduce employee turnover intentions with the aid of interactional justice, managers should take steps to increase employees' organizational emotional commitment.

Literature Review and Conceptual Framework

Interactional justice is concerned with how individuals are treated and whether this is done with consideration, respect, and thorough justification. Interactional fairness is the standard of attitudes and actions people experience when organizational procedures are put into practice. In other words, it refers to how people perceive how a choice has been or will be communicated to them. Rajabi and Najafzadeh (2015) conducted a study to ascertain the link between Iranian teachers' affective commitment and interactional justice. The results looked at how the fair application of interactional justice affects teachers' levels of affective organizational commitment (Rajabi, A., & Najafzadeh, M. R., 2015). The relationship between organizational commitment and interactional justice among the staff of the department of youth and sports was examined by Fariba et al. (2013). The results demonstrated a distinct and significant relationship between organizational commitment and reciprocal fairness in interactions.

Bies (1986) focuses on how employees view the interpersonal behavior used when decisions and procedures are represented. It entails a range of socially responsible behaviors, such as when managers treat employees with dignity and respect (e.g., by giving adequate justifications for decisions, paying attention to their worries, and demonstrating sympathy for their plight) (Skarlicki, D. P., & Folger, R., 1997). The emphasis of interactional justice is on the relationships between individuals who will be impacted by distribution decisions and the results of those decisions. Interactional justice and emotional commitment are significantly correlated in insurance firms in Rivers State.

According to the study's findings, insurance businesses in Rivers State see an improvement in employee dedication when interactional justice is implemented (Osaro, N. et al.). Based on a quantitative study, Naidua et al. (2014) analyze the connection and impact of informational justice on professors' dedication to the institution. The study's conclusions showed a strong relationship between instructors' affective commitment and information sharing. This study demonstrates the close connection between informational justice and the academic workforce's organizational commitment at UUM. This study supports earlier research by Sökmen et al. (2017) that highlighted interactional justice as a crucial sign of a person's emotional connection to their employer. According to research by Hakan et al. (2012), interactional justice has a favorable impact on affective commitment.

The dependent variable (organizational affective commitment) and the independent variable (feeling of interactional fairness) exhibit a positive connection in this model.

Based on the foregoing, the study recommended that:

H_{01}: Informational fairness and affective commitment are significantly related.

H_{02}: Interpersonal justice and affective commitment are significantly correlated.

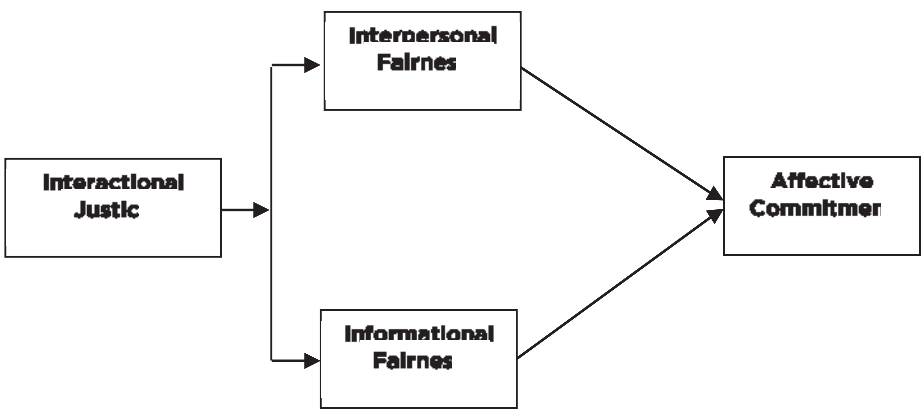


Figure 1: Conceptual Framework

Objectives

The major goal of this study is to evaluate the connection between affective commitment and interactional justice among employees of Bangladeshi banks. The study's particular goals are as follows:

1. To look into how employees' opinions of interpersonal justice practices in private commercial banks in Bangladesh relate to their affective commitment.

2. To investigate the connection between workers' affective commitment and their perceptions of informational justice practices in private commercial banks in Bangladesh.

Methodology

The study is quantitative in nature but also uses qualitative data to accomplish the goals of the study. The study included both primary and secondary data sources. Related literature is reviewed for secondary data. Enlisted private commercial banks of the Dhaka Stock Exchange (DSE) have been considered for this study. The enlisted banks were divided into three generations, i.e. first generation from 1980 to 1989, second generation from 1990 to 1999 and third generation from 2000 to 2010. From each generation two banks were selected on the basis of generation wise having highest number of branch in all over Bangladesh. From the first generation of Pubali Bank Limited and Uttara Bank Limited, the second generation of Prime Bank and Dutch-Bangla Bank Limited, and the third generation of Jamuna Bank Limited and BRAC Bank Limited, participants for this study have been selected. The study developed questionnaires based on those used by Allen & Meyer (1990) to assess organizational commitment and Colquitt (J. A., 2001) to assess interactional fairness. A questionnaire was used to collect primary data from the 195 employees of the selected institutions. A 5-point Rensis Likert scale, with 1 denoting strongly disagree, 2 denoting disagree, 3 denoting no comments, 4 denoting agree, and 5 denoting strongly agree, was used for this inquiry (Likert, R., 1932). According to Pihie (2009), strong perceptions are indicated by a mean score of 3.80 or above, moderate perceptions by a mean score of 3.40 to 3.79, and low perceptions by a mean score of 3.39 or lower. Therefore, the aforementioned levels consider how the staff members view interactional fairness and affective commitment. The study uses both descriptive and inferential statistics to examine the relationship between affective commitment (a dependent variable) and interactional fairness (an independent variable) among the employees. For data analysis, IBM SPSS version 22 is employed.

Data Analysis and Interpretation

Table 1: Reliability Coefficients

Variables	Statements	Cronbach's Alpha	Decision
Interpersonal Justice	4	.695	Accepted
Informational Justice	5	.775	Accepted
Affective Commitment	8	.859	Accepted

The results of the pilot study show that the Cronbach's alpha values of the variables vary from 0.695 to 0.859. Because all the variables had Cronbach's alpha values of at least 0.6, the result was accepted (Straub, D. et al., 2004). As a result, the researcher thought of using this questionnaire to collect data from the target sample size of 195 respondents without making any other changes.

Association concerning Interpersonal Justice and Affective Commitment

With the aid of linear regression, the study examined the connection between affective commitment and perceptions of interpersonal fairness. Following is a summary of the findings:

Table 2: Model Summary- Affective Commitment and Interpersonal Justice

Model	Adjusted R Square	R	R Square	Std. Error of the Estimate
1	.153	.413[a]	.171	.454574

a. Predictors: (Constant), My superior behaved politely, My superior dealt with dignity, My superior dealt with respect, My superior abstained from offensive comments

The interpersonal justice views explained 17.1% of the variation in affective commitment, according to the r-square value of r^2=0.171.

Table 3: ANOVA- Affective Commitment and Interpersonal Justice

Model		Mean Square	F	df	Sum of Squares	Sig.
1	Regression	2.019	9.770	4	8.075	.000[b]
	Residual	.207		190	39.261	
	Total			194	47.337	

a. Dependent Variable: Affective Commitment

b. Predictors: (Constant), My superior behaved politely, My superior dealt with dignity, My superior dealt with respect, My superior abstained from offensive comments

Interpersonal justice views are a strong predictor of changes in affective commitment, according to the statistic F=9.770, p = 0.000 <0.05. This outcome suggests that the model was statistically significant.

This result corroborated a study by Andrews et al. (2008) that looked at affective commitment among workers in the pharmaceutical industry and discovered that interpersonal justice has a positive and significant impact on it (Andrews, M. C. et al., 2008).

Table 4: Regression Coefficients- Affective Commitment and Interpersonal Justice

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.399	.245		9.801	.000
My superior behaved politely	.019	.039	.037	.478	.633
My superior dealt with dignity	.173	.048	.283	3.627	.000
My superior dealt with respect	.045	.048	.076	.932	.353
My superior abstained from offensive comments	.165	.052	.216	3.204	.002

a. Dependent Variable: Affective Commitment

The linear model's explanation equation is

$$Y = a + b_1X_1 + b_2X_2 + \dots\dots\dots + b_iX_i$$

Affective Commitment = 2.399 + 0.19 (My superior behaved politely) + 0.173 (My superior dealt with dignity) + 0.045 (My superior dealt with respect) + 0.165 (My superior abstained from offensive comments).

The findings in table 4 demonstrate a positive and substantial association between affective commitment and superior treated with dignity and inappropriate comments perception. However, the perception of polite behavior from superiors and respect from superiors exhibited a favorable but insignificant link with affective commitment.

Relationship between Informational Justice and Affective Commitment

With the aid of linear regression, the study examined the connection between affective commitment and perceptions of informational fairness. Following is a summary of the findings:

Table 5: Model Summary- Affective Commitment and Informational Justice

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.572[a]	.327	.309	.410600

a. Predictors: (Constant), My superior is available to me for candid communication, My superior articulately explains the appraisal process, My superior is capable enough to make me understand the procedures, My superior timely communicated the appraisal details, My questions have been responded by the superior to the point

The informational justice views explained 32.7% of the variation in affective commitment, according to the r-square value of r^2= 0.327.

Table 6: ANOVA- Affective Commitment and Informational Justice

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.473	5	3.095	18.355	.000[b]
	Residual	31.864	189	.169		
	Total	47.337	194			

a. Dependent Variable: Affective Commitment

b. Predictors: (Constant), My superior is available to me for candid communication, My superior articulately explains the appraisal process, My superior is capable enough to make me understand the procedures, My superior timely communicated the appraisal details, My questions have been responded by the superior to the point

Informational justice views are a strong predictor of changes in affective commitment, according to the statistic $F= 18.355$, $p = 0.000 <0.05$. This outcome suggests that the model was statistically significant.

This result corroborated a study by Andrews et al. (2008) that looked at affective commitment among workers in the pharmaceutical industry and discovered that informational justice has a positive and significant impact on it.

Table 7: Regression Coefficients- Affective Commitment and Informational Justice

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.509	.253		9.921	.000
My superior is available to me for candid communication	-.061	.047	-.100	-1.293	.198
My superior articulately explains the appraisal process	.260	.045	.419	5.795	.000
My superior is capable enough to make me understand the procedures	.178	.053	.248	3.370	.001
My superior timely communicated the appraisal details	-.173	.052	-.237	-3.316	.001
My questions have been responded by the superior to the point	.126	.038	.235	3.328	.001

a Dependent Variable: Affective Commitment

The equation to explain the linear model is

$$Y = a+ b_1X_1 + b_2X_2 + \dots\dots\dots + b_iX_i$$

Affective Commitment = 2.509 + (-0.061) (My superior is available to me for candid communication) + 0.260 (My superior articulately explains the appraisal process) + 0.178 (My superior is capable enough to make me understand the procedures) + (-0.173) (My superior timely communicated the appraisal details) + 0.126 (My questions have been responded by the superior to the point).

According to the regression model's findings, candid and timely communications are positively but statistically insignificantly related to affective commitment. However, informational fairness and affective commitment were significantly related to explanation of the assessment procedure, clear procedure, and reasonable explanation. These results suggest that affective commitment is highly influenced by informational justice perceptions.

Suggestions for Further Research

This study aims to investigate and evaluate the relationship between affective organizational commitment and interactional fairness in private commercial banks in Bangladesh. For this study, data was collected from 195 employees of only six banks. Additionally, data for this study was only gathered from one part of the nation—the Rajshahi Division. Therefore, it is advised that future studies be carried out using a larger sample size, more respondents, more bank branches, and other geographic regions.

This study investigates the link between employee emotional commitment and interactional fairness in private commercial banks in Bangladesh. Future research should look into the connections between affective commitment and other facets of justice, like procedural justice and distributive justice. More research may be done on the connection between interactional justice and other organizational commitment aspects like normative commitment and continuance commitment.

Conclusion and Recommendations

For any organization, interactional justice and affective organizational commitment become critical issues. Interactional justice encourages employees to become more emotionally involved, and dedicated people guarantee organizational success. This pilot study examined the connection between workers' affective organizational commitment and fair interactional justice practices in Bangladeshi private commercial banks. Regression analysis results reveal that the formulated hypotheses are accepted when the F value for the ANOVA of interpersonal justice and emotional commitment (H1) is F = 9.77; p =.000.05; and informational justice and affective commitment (H2) is F = 18.355; p =.000.05. Employees of private commercial banks in Bangladesh exhibit a strong correlation between organizational loyalty and performance evaluation processes, according to the study. The results of this study are consistent with Rajabi and Najafzadeh's (2015) and Andrews et al.'s (2008) findings. They looked at the connections between affective organizational commitment and interactional justice and discovered a significant and positive relationship between the two. The managers should aim to build organizational justice in order to obtain employees' affective engagement since the most precious and crucial capital of an organization is its human capital, and the more attention devoted to this valuable capital, the more success the organization will have. There is a greater chance that organizational justice will arise in an environment where interactions are fair.

The establishment of organizational justice will be more difficult if there is a lot of injustice at work and significant social injustice. These results suggest that as interactional justice increases, organizational commitment increases, and as interactional justice diminishes, organizational commitment falls. It is advised that managers, authorities, and banking sector experts pay attention to the fact that developing and maintaining fair behaviors, creating a sense and perception of justice in the organization and employees, and increasing employee commitment, loyalty, and motivation for individual and team performances are necessary for increasing the employees' positive attitudes, commitment, and performance on both an individual and team basis. The more of it there is, the more of an effect employees' interactional justice will have on organizational commitment. This improves organizational commitment, which in turn improves the efficacy and performance of organizational operations. Last but not least, this finding implies that the sense of interactional justice raises workers' perceptions of fairness of treatment, which raises employee engagement and performance level in an organization.

Reference

1. Griffin, R. W. (2002). Management. 7th ed., New York: Houghton Mifflin Company.
2. Cropanzano, R., & Greenberg, J. (1997). Progress in organizational justice: Tunneling through the maze. International review of industrial and organizational psychology, 12, 317-372.
3. Greenberg, J. (1986). Determinants of perceived fairness of performance evaluations. Journal of applied psychology, 71(2), 340-342.
4. Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. Journal of applied Psychology, 82(3), 434-443.
5. Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O., & Ng, K. Y. (2001). Justice at the millennium: a meta-analytic review of 25 years of organizational justice research. Journal of applied psychology, 86(3), 425-445.
6. Meyer, J. P. and Lynne Herscovitch L. (2001). Commitment in the Workplace: Toward a General Model. Human Resource Management Review, 11, 299-326.
7. Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. Organizational behavior and human decision processes, 86(2), 278-321.
8. Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. Human resource management review, 1(1), 61-89.
9. Ibid. [8]
10. Baldwin, S. (2006). Organisational justice. Brighton: Institute for Employment Studies.
11. Konovsky, M. A. (2000). Understanding procedural justice and its impact on business organizations. Journal of management, 26(3), 489-511.
12. McFarlin, D. B., & Sweeney, P. D. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. Academy of management Journal, 35(3), 626-637.
13. Colquitt, J. A. (2001). On the dimensionality of organizational justice: a construct validation of a measure. Journal of applied psychology, 86(3), 386-400.
14. Rajabi, A., & Najafzadeh, M. R. (2015). The Relationship between Organizational Justice and Organizational Commitment of Physical Education Teachers of Tabriz. International Journal of Basic Sciences & Applied Research, 4(5), 255-259.
15. Fariba Rafei-Dehkordi, Sardar Mohammadi and Mozafar Yektayar (2013). Relationship of Organizational Justice and Organizational Commitment of the Staff in General Directorate of Youth and Sports in Chahar Mahal Va Bakhtiari Province." European Journal of Experimental Biology, 3(3), 696-700.
16. Bies, R. J. (1986). Interactional justice: Communication criteria of fairness. Research on negotiation in organizations, 1, 43-55.

17. Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. Journal of applied Psychology, 82(3), 434-443.

18. Osaro, N., Ogbonda, E. H., & Bassey, U. L. Interactional Justice and Employee Commitment in Insurance Companies in Rivers State. International Journal of Business Systems and Economics, 13(5), 250-263.

19. Naidu, P., Sharif, M. Y., & Poespowidjojo, D. A. (2014, August). Informational justice in performance appraisal and its influence on organizational commitment of UUM lecturers. In Procedia-Social and Behavioral Sciences. International Conference on Business Management (ICBM), 1-6.

20. Sökmen, A., Kenek, G., and Ekmekçioğlu, E. B. (2017).The Relationship between Interactional Justice and Affective Commitment: The Moderating Role of Perceived Organizational Support, Journal of Business Research, 4(1), 196-199.

21. Turgut, H., Tokmak, I., & Gucel, C. (2012). The effect of employees' organizational justice perceptions on their organizational commitment: a university sample. International journal of business and management studies, 4(1), 21-30.

22. Allen, N. J. and Meyer, J. P. (1990). The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organization. Journal of Occupational Psychology, 63, 1-18.

23. Colquitt, J. A. (2001). On the dimensionality of organizational justice: a construct validation of a measure. Journal of applied psychology, 86(3), 386-400.

24. Likert, R. (1932). A Technique for the Measurement of Attitudes. Archives of Psychology, 140, 5-55.

25. Pihie, Z. A. L. (2009). Entrepreneurship as a career choice: An analysis of entrepreneurial self-efficacy and intention of university students. European journal of social sciences, 9(2), 338-349.

26. Straub, D., Boudreau, M. C., & Gefen, D. (2004). Validation guidelines for IS positivist research. Communications of the Association for Information systems, 13(1), 24.

27. Andrews, M. C., Kacmar, K. M., Blakely, G. L., & Bucklew, N. S. (2008). Group cohesion as an enhancement to the justice—affective commitment relationship. Group & Organization Management, 33(6), 736-755.

28. Andrews, M. C., Kacmar, K. M., Blakely, G. L., & Bucklew, N. S. (2008). Group cohesion as an enhancement to the justice—affective commitment relationship. Group & Organization Management, 33(6), 736-755.

29. Andrews, M. C., Kacmar, K. M., Blakely, G. L., & Bucklew, N. S. (2008). Group cohesion as an enhancement to the justice—affective commitment relationship. Group & Organization Management, 33(6), 736-755.

30. Rajabi, A., & Najafzadeh, M. R. (2015). The Relationship between Organizational Justice and Organizational Commitment of Physical Education Teachers of Tabriz. International Journal of Basic Sciences & Applied Research, 4(5), 255-259.

BE BETTER INFORMED! SUBSCRIBE TO THE PREMIER ACCOUNTANCY JOURNAL IN BANGLADESH

The Institute of Chartered Accountants of Bangladesh (ICAB) is the apex accountancy body of Bangladesh. The professional qualification it offers is highly prized. Membership of ICAB testifies to recognition of high standards and exceptional skills. Under a twinning project, the syllabus of ICAB has been revised and is equivalent to that of the Institute of Chartered Accountants in England and Wales (ICAEW), the premier global accountancy body.

ICAB publishes a quarterly Journal, The Bangladesh Accountant, to keep its members updated on technical issues and global developments in the profession. It is regularly read by all the members of ICAB both in Bangladesh and across the world. Circulation includes many major companies and financial institutions, governmental and semi-governmental organisations, NGOs and international accounting and professional bodies.

The journal is also gone through regularly by other professionals related to the accounting profession, for example, those in businesses and other organisations, students of Chartered Accountancy and all those who wish to keep themselves abreast of developments in the accounting profession.

To paraphrase Mark Twain "Those who do not read a good publication have no advantage over those who do not know how to read"! Don't be left out. Become a subscriber to this exclusive professional publication.

Annual Subscription (4 issues) (including postage)
Tk 2,000 (Bangladesh)
Tk 2,500 (Overseas)

Special Rate of Annual Subscription (4 Issues) for Students of Chartered Accountancy in Bangladesh - Tk 1,000 (including postage)

Contact us today and subscribe to 'The Bangladesh Accountant'

Shubhashish Bose
Chief Executive Officer (CEO)
The Institute of Chartered Accountants of Bangladesh
CA Bhaban, 100 Kazi Nazrul Islam Avenue
Kawran Bazar, Dhaka-1215, Bangladesh
Tel: 880 2 9115340, 9612612100, 9117521, 9137847 (Off.)
Fax : +880-2-9125266
E-mail: ceo@icab.org.bd, sds@icab.org.bd
facebook.com/ca.bangladesh

For more issues of
The Bangladesh Accountant visit
icab.org.bd

GLOBAL RECOGNITION TO ICAB

CA BANGLADESH

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF BANGLADESH

Recognition of ICAB membership by ICAEW

Membership Scheme of The Institute of Chartered Accountants of England and Wales (ICAEW) allows the members of ICAB to apply for ICAEW membership based on their experiences.

Eligibility criteria of this membership scheme are a series of questions which assess ICAB Member's experience, achievements, skills and expertise. Each application must be supported by an eligible sponsor. Applicants need to complete an Examination of Experience.

Details of ICAEW Membership Scheme is available at http://www.icaew.com/membership/becoming-a-member/members-of-other-bodies/ campaigns/pathways-to-membership.

ICAB signed it's first Memorandum of Understanding (MoU) with the Institute of Chartered Accountants in England and Wales (ICAEW) in 2009. Since them, ICAB has been working with ICAEW as the learning and professional development partner, and also recognized as an approved tuition provider of ICAEW.

As per MoU, ICAB Members can be the members of ICAEW after successful completion of 04 papers out of 15. These members have the opportunity to apply for UK Practicing Certificate (PC) subject to meeting the standard ICAEW PC requirement.

Recognition of ICAB Membership by CIPFA, UK

Members of the Institute of Chartered Accountants of Bangladesh (ICAB) are eligible to apply for membership of the Chartered Institute of Public Finance and Accountancy (CIPFA), a globally recognised membership body for the public sector.

An MoU between ICAB and CIPFA, UK was signed on 28 January 2017. Under this MoU, an ICAB member can also become a members of CIPFA subject to fulfillment of certain criteria.

An ICAB Member with good standing having five or more years post-qualification public sector experience are eligible for Full Membership of CIPFA as Chartered Public Finance Accountant (CIPFA) and the members having fewer than five years post-qualification public sector experience are eligible as Affiliate member of CIPFA (CIPFA Affiliat).

ICAB members having CIPFA Affiliate membership, or having no working experience in public sector can gain CIPFA status with the successful completion of exams of only two papers i.e. Public Sector Financial Reporting and Strategic Public Finance.

Membership Pathways Agreement (MPA) with CPA Australia

The Institute of Chartered Accountants of Bangladesh (ICAB) has recently signed a Membership Pathways Agreement (MPA) with CPA Australia, one of the largest accounting bodies around the world. Through this agreement, ICAB members can be the members of CPA Australia just after passing 04 papers (i.e. 1. Ethics and Governance, 2. Financial Reporting, 3. Global Strategy & Leadership and 4. Strategic Management Accounting) out of their 12 papers. This MPA has been in effect since 20 July 2018.

Membership through Chartered Accountants Australia & New Zealand (CA ANZ) International Pathway Program (IPP)

The Institute of Chartered Accountants of Bangladesh (ICAB) signed an MoU with the Chartered Accountants Australia & New Zealand (CA ANZ). Under this, ICAB members living in Australia or New Zealand having five years post qualification experience at anywhere will be eligible to be member of CA ANZ after successful completion of CA ANZ International Pathway Program (IPP).

There will be no requirement of passing CA ANZ general route examinations by eligible ICAB members as their International Pathway Program (IPP) workshop through case studies would examine the contemporary Australasian business, accounting and finance environment relevant for members of ICAB. On the other hand, CA ANZ members can also be members of ICAB subject to having Bangladeshi citizenship and other requirements as prescribed by ICAB Bye-laws.

Membership of the International Valuation Standards Council (IVSC)

Efforts are underway for ICAB to Become a member of the International Valuation Standards Council (IVSC). This would create an opportunity for the members of ICAB to involve in the valuation process of local and foreign investment in Bangladesh.

This would allow Chartered Accountants to put up their highly essential services and play positive roles in attracting foreign investment. With regard to this, ICAB has already conducted a Members Conference. More so, a virtual meeting with the CEO of IVSC was held on 8 June 2021 where the IVSC proposed ICAB to become member of IVSC on pro-rata basis.

Other Memberships

ICAB is an active member of International Federation of Accountants (IFAC), Confederation of Asian and Pacific Accountants(CAPA) and South Asian Federation of Accountants (SAFA). ICAB is also an associate member of Chartered Accountants Worldwide (CAW).