



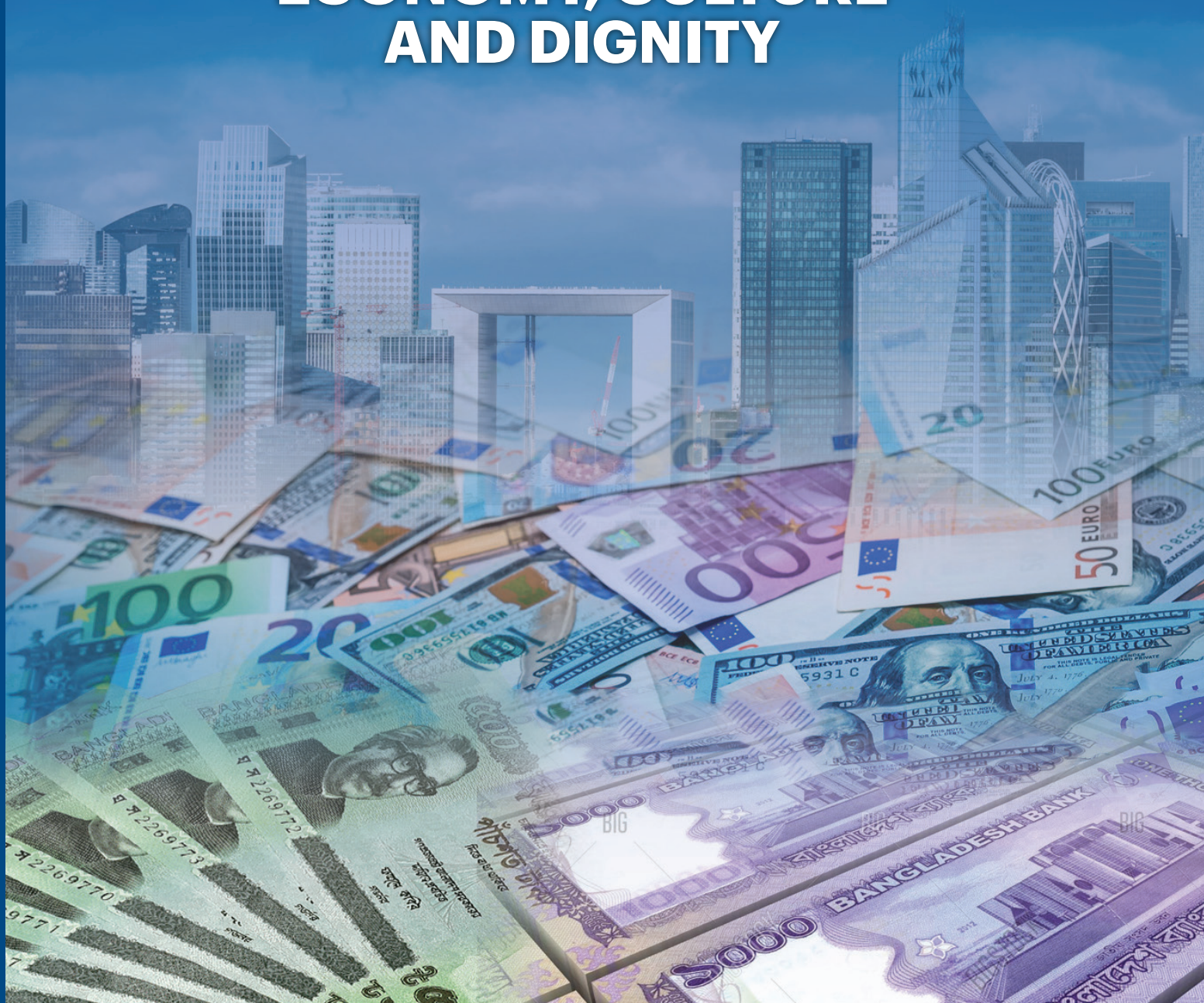
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OF BANGLADESH

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January - March 2023

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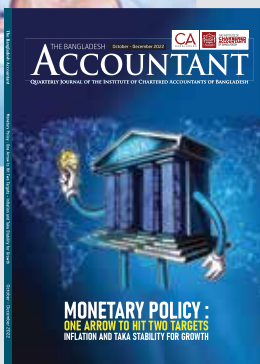
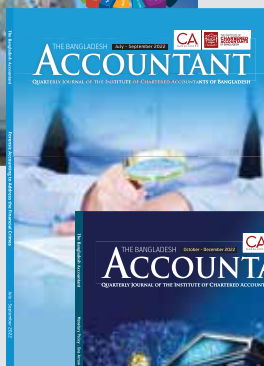
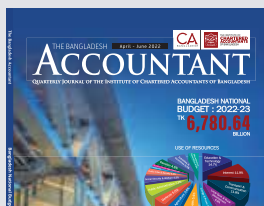
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In the quarterly journal, articles of ICAB Members, Members from other Accountancy bodies, Academics and Business Leaders from home and abroad are published.

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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.



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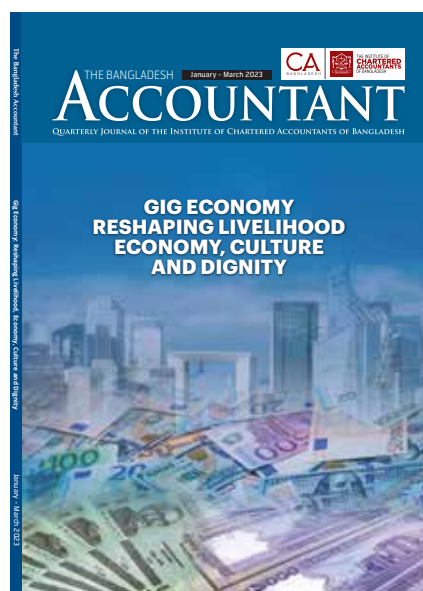
P6

Contents

January - March 2023

P4 Editorial

P5 President's Desk



P7 Accounting and Reporting System of Budgetary Central Government Entities in Bangladesh
Md. Abdul Kuddus

P21 Safety and Protection of Workers in Factories and Depots: Bangladesh Perspective
M Jalal Hussain FCA

P27 Gig Economy Workers in Bangladesh: Reshaping the Careers
Dr. Mohammad Omar Faruq
Foysal Habib
Sabuj Miah

P37 Cash Flow Reporting System of Commercial Banks in Bangladesh
Dr. Nurul Alam
Mohona Biswas
Dr. Zahurul Alam



Digital Highlights

www.icab.org.bd

P45 Effects of Forensic Accounting Skills on Detecting White-collar Crimes in Bangladesh
Md. Mobarock Hossain ACA
Ayndrilla Hossain

P51 Impacts of Liquidity on Profitability: Case Study of Listed Pharmaceutical Companies of Bangladesh
Abdullah Al Shaekh
Sheikh Mohammad Rabby
Md Aminur Rahaman Turza FCA

P60 Overview of Insurance Industry in Bangladesh
Abdul Hamid FCA

News & Events

Circular & Notice

News Bulletin

Journals



Editorial

“The Realities of the financial sector are ever changing. Introduction of new technologies in the financial system, and demand for new financial products are growing at an unprecedented level.”



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

This issue of The Bangladesh Accountant is being brought out while the economy of the country is passing a very critical time caused by the attrition of Russia-Ukraine war and the disruption of the global supply chain system. Therefore, it hit the commodity prices like other countries in the world. Prices of some industrial and consumer products have been skyrocketing. There is a great feeling of uncertainties in the minds of people as to the longevity and severity of the turbulent situation.

Apart from this, the governance system related to the financial sector and financial institutions in macro and micro-level of the society becomes major concern in the age of digital transformation specially when we are thinking cashless transactions. 'Trust' and 'confidence' in the financial sector are also critically important because investors and the users do not only consider the 'promises of return, but also consider how the businesses are run and if they will sustain at all for a longer period or not.

We know that corporate good governance ensures 'business sustainability' which also help forming people's trust, could be established through placing systems, controls, and maintaining ethical standards. It is a reality that most companies encounter leakages in their governance structure mainly for the lack of internal control and compliance mechanisms. This can be synonymous with lack of 'self-governance' as well. Therefore, there is an urgency for maintaining financial reporting standards, ethical standards and good governance specially during this turbulent period of global economic crisis.

Our suggestion is that companies need to adhere to a system of governance that fosters ethical practices so that business can thrive and sustain. Not only that, the regulatory regime of the country must to be strengthened for a robust governance structure to safeguard stakeholders' interests in a sustained manner.

The Realities of the financial sector are ever changing. Introduction of new technologies in the financial system, and demand for new financial products are



growing at an unprecedented level. In this context, it is true and almost impossible to come up with specific guidelines that will cover all aspects of governance that the companies may face.

We are aware that in recent times, some revisions to be brought about in Financial Reporting Standards; IFRS, ISA and ethical standards. Such updates in auditing areas would directly impact the area of auditors' responsibilities in relation to fraud in the financial statements and risk assessment. Understanding the nature and extent of the changes will be a significant task for performing audits.

We must welcome what is new. Therefore, we are to try new things cautiously and see what works and what does not in the changing realities of the economy. We must continuously take a move so that everyone would work together in a coherent manner to face the newer challenges.

At the end, I would like to appreciate the contributors of this journal for their hard works to make the publication a resourceful one. Thanks to the members of the Editorial Board who came up with their sincere efforts, thoughtful guidance and suggestions for bringing out the issue successfully, and best wishes to all the readers, patrons and stakeholders.

President's Desk

“The economy of the country is facing a number of headwinds that are required to be dealt with prudently. Chartered Accountants with their acumen, knowledge and expertise can tackle these challenges by ensuring accountability and transparency in the financial sector of the country, while they conduct audits of the companies.”



Md. Moniruzzaman FCA
President-ICAB

The quarterly journal of the ICAB is a platform of sharing of knowledge on concurrent economic and professional issues. The publication is aimed of adding value to the development of professional skills as well as help the government, and the other external agencies to formulate policies for a thriving economy of the country.

Although there is no particular theme of this issue, the articles published in the journal mostly deal with business, trade, commerce and economy of the country. This journal gives us an invaluable insight of the economy that provokes ideas to the policy makers.

ICAB always comes up with proposals on upcoming National Budget with a view to improving revenue collection, simplification of direct and indirect tax laws and creating an atmosphere for ease of doing business in Bangladesh. We had already exchanged opinions & views regarding VAT, Tax & Customs policies with NBR Chairman. In this regard, we submitted a written proposal to help the NBR to formulate policies for the welfare of all.

Currently, the economy of the country is facing a number of headwinds that required to be dealt with prudently. Chartered Accountants with their acumen, knowledge and expertise can tackle these challenges by ensuring accountability and transparency in the financial sector of the country, while they conduct audit of the companies. The auditing guidelines help determine the extent of auditing steps and procedures and will ensure high quality audit with sufficient and appropriate audit evidence. The Quality Assurance Division (QAD) of ICAB makes sure that the auditors maintain standard while conducting statutory or other audits.



We are aware that in recent times, some revisions to be brought about in Financial Reporting Standards; IFRS, ISA and ethical standards. Such updates in auditing areas would directly impact the area of auditors' responsibilities in relation to fraud in the financial statements and risk assessment. Understanding the nature and extent of the changes will be a significant task for performing audits. Managing the delicate balance between independence and understanding the intricacies of a business is also a daunting task while establishing a constructive rapport with management and governance personnel is crucial for auditors to ensure audit quality.

Last but not the least, I would like to extend my heartfelt thanks to the Chairman, the Co-chairman, members of the Editorial Board and everyone associated with this publication for bringing out this issue successfully.

Warmest regards.

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ARTICLES

The Bangladesh Accountant | January - March 2023

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Accounting and Reporting System of Budgetary Central Government Entities in Bangladesh

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Abstract

This article has critically examined the effectiveness of government accounting and reporting methods followed by budgetary central government entities of Bangladesh. This is a mixed-method research. Both qualitative and quantitative data have been used in this research. By analyzing data with a mixed-method approach, the researcher has developed an integrated model for measuring the effectiveness of the government accounting and reporting system in Bangladesh. This integrated model has been developed based on the binary logistic regression analysis. Before developing the model exploratory factor analysis was conducted to measure the reliability of the indicator used in the study. Key Informants Interviews (KIIs) and contents analysis were also conducted to conclude the effectiveness of the governmental accounting and reporting system in Bangladesh. However, this integrated model will help assess the effectiveness of the government accounting and reporting system of the budgetary central government of Bangladesh.

Keywords

BACS, Central Government, General Government, Government Accounting and Reporting

JEL Classification: M41, M48

Introduction and Background Information of the Study

As per the C&AG Additional Functions Act 1974, three institutional bodies are involved in accomplishing governmental accounting and reporting activities. These bodies are the Comptroller General of Accounts (CGA), Comptroller General of Defence Finance (CGDF) and Finance Advisor and Chief Accounts Officers (FACAO), Railway (Government of The People's Republic of Bangladesh, 1974).

Comptroller General of Accounts is the chief authority of General Government accounting and reporting wing of the government of Bangladesh. However, four tiers of financial administrative structure are in effect for general government accounting and reporting in Bangladesh to record financial transactions. The names of the administrative bodies are Upazilla Accounts and Finance Officer (UAFO), District Accounts and Finance Officer (DAFO), Divisional Comptroller of Accounts (DCA), and Chief Accounts and Finance Officer (CAFO). All these administrative bodies are working under the umbrella of the Ministry of Finance, and they have maintained different forms and contents for recording and reporting financial transactions (S., U., Patwary, 1989).

Accounting is a system that identifies, records, measures, and reports the financial events

Accounting and Reporting System of Budgetary Central Government Entities in Bangladesh



of an economic entity in a systematic way. It has got many specializations, and government accounting is one of them. Government accounting is primarily concerned with the recording and reporting of government revenues and expenditures. In particular, it is concerned with identifying, recording, communicating, and interpreting financial transactions relating to the revenues and expenditures of all government entities.

There remain various bases of accounting that can be used for recording and reporting financial transactions. Important bases of accounting are accrual basis accounting, cash-basis accounting, fund accounting, and modified cash-basis accounting (Finance Division, Ministry of Finance (GoB), 2017). As per the Account Code

(Vol.-I), related to General Principles and Methods of Accounting in Bangladesh, accounts of government entities should be prepared based on cash (Comptroller and Auditor General of Bangladesh, 1983). But the rules used in Bangladesh to prepare financial statements are not entirely cash basis. Some items like employees' gratuity and provident funds related accounts follow the accrual basis accounting is followed. Hence, we can conclude that the rules followed in Bangladesh are modified cash basis accounting. The government entities of Bangladesh are currently using a modified cash basis accounting approach to recording and reporting these financial transactions (Mohammad Rakibul Islam, 2017). One of the Key Informant Interviewees states:

There is an option of 'Forward Estimation' in the iBAS++ system (not in function to date), which is consistent with the Medium Term Budgetary Framework (MTBF). In the future, this system will help us to prepare a need-based budget for governmental entities. It will then stop the traditional budget preparation process only by increasing a certain percentage of the amount. This system will recognize both Accounts Payable and Accounts Receivable concepts in congruence with International Public Sector Accounting Standard Board (IPSASB) accrual reporting standards. Because of not having functioning 'Forward Estimation', revenues and expenditures are comparatively less at the beginning of the year than the end of the year (KII 1, MoF Dhaka, 2021).¹

Additionally, from the definition of government accounting and reporting system, we can find out the various stages of or cycle of government accounting and reporting system in Bangladesh. Identification of transactions or events generally means the charged (Non-voted) revenues and expenditures or voted (Other) revenues and expenditures. It does help us to understand the nature of transactions such as revenue-type or capital-type financial transactions, exchange-type transactions or non-exchange-type

¹ Samiul Masud, Deputy Secretary, Ministry of Finance, GoB, Dhaka, 2021.



transactions. After properly selecting the types of transactions, the next step is to record those events in different books/registers mentioned earlier by proper authorities or by the accounts offices. Recording transactions in selected registers, the next issue is measuring the amount in terms of Bangladeshi currency (Comptroller and Auditor General of Bangladesh, 1983). The final step in government accounting is to report and interpret financial events by preparing Annual Appropriation Accounts (AAA) and Annual Finance Accounts (AFA). AFA is the balance sheet of Bangladesh that contains cash and others resources. The office of the CGA prepares this statement after consolidating the balances received from the different circles, namely CGA, CGDF and FACAO, Railway. The

Comptroller and Auditor General (C&AG), Bangladesh has stated the concepts of General Government:

The public sector comprises the components of public corporations (PC) and the general government (GG). Public corporations include state-owned enterprises (SOE) and state-owned public companies (SOPC). Components of GG are the budgetary central government (BCG) (which includes Ministries and Departments), Public Statutory Authorities (PSA)/Autonomous Bodies (AB), Commissions (C), and Local Governments (LG). On the other hand, the components of SOEs are public financial and non-financial corporations (PF&NFC) and state-owned public companies (SOPC). So, Public Sector = General

Government (GG) + Public Corporations (PC) + State Owned Public Companies. Here, General Government = BCG + PSA/AB + C + LG and Public Corporations = PF&NFC + SOPC (KII 2, Dhaka, C&AG Office, 2022).²

The study has been conducted only on the different aspects of the general government financial administrative framework in the accounting reporting system in Bangladesh. However, Annual Finance Account (AFA) is the leading financial statement that include 14 statements and 25 schedules for necessary explanations and clarification of increasing or decreasing of the assets and liabilities of government entities (Annual Finance Accounts (2015-2016), 2020). In that one of the key informant interviewee said:

To prepare AFA 56 digits BACS has been initiated from 2018-2019. Some amendment has been made in preparing and presenting AFA with the consistency of IPSASB. To implement the amendment, the President office approved the format of AFA, and the C&AG office has approved AAA. As per the amendment, 14 statements of AFA have reduced, and significant changes have been made in statements 1, 2 and 3. In that regard, 25 schedules have also been changed (KII 3, CGA official, Dhaka, 2022).³

² Md. Muslim Chowdhury, *Comptroller and Auditor General Bangladesh, Dhaka, 2022.*

³ Iffat Ara Khatun, *CGA office (Accounts and Procedure Division), Hishab Vaban, Dhaka, 2022.*

Accounting and Reporting System of Budgetary Central Government Entities in Bangladesh

This study may explore the knowledge of financial reporting for the effective and efficient management of credit operation by the government in case of inter-period equity and services effort and accomplishment. In the future, the research could be extended to reviewing the Public Financial Management reform strategies and action plans taken in 1988, 2003, 2007-2012, 2016-2021, and 2018-2023.

Reporting time is a very important issue in assessing the efficiency of the government accounting and reporting system. Reporting time is the vital Performance Indicator (PI) used by the Public Expenditure And Financial Accountability (PEFA) for measuring efficiency and accountability (Kristensen et al., 2019). One of the audit and accounts officers has also

affirmed that there is legally binding for reporting governmental financial events by the accounts office to their superiors. The accounts offices mandatorily follow this system (KII 4, MoF, Dhaka, 2022)⁴. The following time schedule for reporting financial events to the upper authority has been approved by the comptroller and auditor general, Bangladesh with the conversation with the Ministry of Finance (Comptroller General of Accounts, MoF, 1998).

Proper maintenance of the time schedule helps improve the accounting offices' efficiency.

One of the Key Informants Interviewees described the recording and reporting system of government financial events by the bank as under:

The Ministry of Finance is the mother body of all banking/financial activities of the government. Bangladesh Bank (BB) plays the role of banker to the government. Out of the total of 9 branches of BB, 8 branches are doing government treasury functions except for the Mymensingh branch. On the other hand, Sonali Bank's (SB) head office plays the role of the agent of the (BB). In the case of SB, it has two wings, namely the treasury branch and the non-treasury branch. Of the treasury branch of SB some has played only as the receipt branch, and some branch has both roles as receipts and payments. Horizontally, the Comptroller General of Accounts (CGA) has the role of the accountant of the government. CGA has three tiers of field offices that are DCA, DAFO, and UAFO (KII 5,

Table 1.1: Time Allotted for Govt. Accounting and Reporting

SL	Name of the Accounts Offices	Name of Accounts	Date of Accounts	Name of the office to which submission is to be made
1.	UAFO	Monthly Account	5 th Day of The Following Month	DCA
2.	DAFO	Monthly Account	10 th Day of The Following Month	DCA
3.	Regional Accounts Office (Demolished) and replaced by DCA	Monthly Account	15 th Day of The Following Month	CGA
4.	CAFO	Monthly Account	10 th Day of The Following Month	CGA
5.	CGA	10 th Day of The Following Month	14 th Day of The Following Second Month	Ministry of Finance and C&AG Office
6.	CGA	June (Final) Account	31 October	Ministry of Finance and C&AG Office

Source: CAFO Manual, 1998

⁴ Samiul Masud, Deputy Secretary, Ministry of Finance, GoB, Dhaka, 2021



Accounts and Budgeting Department, Bangladesh Bank, Dhaka 2021).⁵

Upazilla Accounts and Finance Officers (UAFO) working under the jurisdiction of the CGA have also described the accounting and reporting system of the budgetary central government in Bangladesh in the following manner:

Coding is the cornerstone of government accounting and reporting system. This is not a

new thing, but fifty-six (56) digits nine (9) levels multi-purpose coding system is the addition of the previous thirteen (13) digits four (4) level code. In 1989 code was in Roman numeric and was divided into major and minor heads. Later the coding system transferred to Arabic numeric, and after 2009, thirteen digits coding system was introduced. Finally in 2014, the coding system moved into fifty-six (56) digits currently in operation. With this coding system,

financial statements in AFA (Made up of 14 statements and 25 schedules) and AAA are made automatically in the office from CGA [KII, 6 UAFO officials, Mohanpur, Rajshahi, 2021).⁶

The above analysis shows that the government accounting and reporting system is going on based on rules and regulations formulated by the Government. However, the effectiveness of the current system should be measured for accountability and international comparison. So, the key question of this study is to find out the effectiveness of the government accounting and reporting system in Bangladesh in terms of internal legitimacy and external accountability.

Research Methods and Materials

As it is a mixed method research, the researchers have applied different strategies for data collection. Many scholars have shown different ways and philosophical views for selecting sample size in the qualitative study. Sample size may differ with the methodological view and field of study the researcher selects. Sandelowski (1995) has stated that the sample size in qualitative research may not be too small and too large. It is argued that taking a sample can be stopped when it reaches at saturated point of targeted data and information (Sandelowski, 1995).

⁵ Md. Tariqul Islam, Joint Director, Bangladesh Bank, Dhaka, 2021.

⁶ Md. Alauddin, Upazilla Accounts and Finance Officer, Mohanpur, Rajshahi, 2021.

Accounting and Reporting System of Budgetary Central Government Entities in Bangladesh



In view of Morse (1994), in a phenomenological study six experienced participants, in ethnographical research, 30 to 50 interviews and/or observation is enough (Morse et al., 2002). Van Kaam (1959) has recommended that a phenomenological study as a qualitative research 10-50 sample size is optimum (Van Kaam, A. L., 1959). Miles and Huberman (1994), Strauss and Corbin (1990) has instructed to select the purposive sampling method in qualitative research for collecting necessary data and information (Miles, M. B., & Huberman, A. M., 1994).

Patton (1990) has supported the purposive sampling method, and he describes 14 various purposive sampling procedures, including the in-depth study (Michael Quinn Patton, 1999).

For this study, the researchers have adopted the concept of the open-ended number of Key Informant Interviews (KII) and conducted a survey with semi-structured questionnaires for collecting relevant data and observation. KII ended after the 6th interview and has been considered informational repetitiveness and theoretical saturation. The selected sample comprised of 5 different government accounts and audit officials and their representatives.

The sample was chosen as a purposive sampling method. For triangulating method and data, 120 respondents were selected for mixed methods analysis as supported appropriate sample size of 100-150 by Lin Ding et al. (Ding et al., 1995). Officials working

under the CGA and C&AG offices were considered service providers, and iBAS++ users from a different section of civil government officials were treated as service receivers.

Finally, the collected qualitative data were analyzed on the basis of their theme, and quantitative data were analyzed using SPSS assuming the necessary inferences used in statistics.

Summary of Factor Analysis

The latent framework of the government accounting and reporting system (GARS) was explored by means of Principal Axis Factoring (PAF) with Promax Rotation. The preliminary examination of the R-matrix recommended a significant quantity of the coefficients were above .30. The Kaiser-Meyer-Olkin (KMO) index was .795, greater than the suggested score of .60 (Kaiser, 1970) and Bartlett's Test of Sphericity (Bartlett, 1954) attained statistical importance ($\chi^2 = 766.019$, $p = .000$ that is $< .05$), representing our data were appropriate for factor analysis. The outcome of the preliminary examination exposed four factors/dimensions with Eigenvalues over 1, explaining 33.540 percent, 13.827 percent, 6.469 percent, and 4.748 percent variances, respectively. However, the Scree plot suggests a clear break after the four factors, suggesting a potential two-factor solution for the GARS with four latent factors.

Selection of Variables and Indicators

Based on the literature review 27 items/sub-variables were selected for the study. After conducting the Exploratory

Factor Analysis (EFA) with the Principal Axis Method, the following 14 items/sub-variables were identified for the four variables/factors to conclude the government accounting and reporting system in Bangladesh.

Descriptive Data Analysis

Data were collected from different accounts offices from Dhaka and Rajshahi Divisions from October to December 2021. Descriptive statistic of the data has been shown in the following table:

Table 1.2: Items/Indicators of the study

Items/Sub-variables	Sources
Basis of Accounting and Reporting	Account Code, 1983, AFA, 2015-2016
Constitutional Mandate for Recording and Reporting	Constitution, 2016
SAFE, CONTASA, DOSA, RPA, and IMPREST Accounts for Foreign-Aided Project	Motahar, 1994
Recording and Reporting in iBAS++	GFR, 1998, AFA, 2015-2016
Govt. Financial Administrative Structure	C&AG Act, 1974
Forms and Contents of Financial Statements	Patwary, 1985, Account Code, 1983, AFA, 2016
Duties of Govt. Officials for Accounting and Reporting	DFP, 2016
Training for Govt. Accountants for Adopting Technologies	Account Code, 1983
Performance/Integrity of Govt. Accountants	DFP, 2016, Constitution, 2016
Designation of the Officers/Accountants for iBAS++	iBAS++ Manual, 2020
Account Code is International Comparable	BACS Manual, 2017, GFS, 2014
Opportunity to Prepare AFA and AAA in iBAS++	AFA, 2015
Forward Estimation in iBAS++	iBAS++ Manual, 2020
iBAS++ software has reduced the workload of govt. accountants	BACS Manual, 2017, GFS, 2014

Source: Literature review and field data/ Factor Analysis, 2021-2022

Table 1.3: Job Title

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Upazilla Accounts and Finance Officer	10	8.3	8.3	8.3
	District Accounts and Finance Officer	12	10.0	10.0	18.3
	Divisional Comptroller of Accounts	12	10.0	10.0	28.3
	Chief Accounts and Finance Officials	50	41.7	41.7	70.0
	Others	36	30.0	30.0	100.0
	Total	120	100.0	100.0	

Accounting and Reporting System of Budgetary Central Government Entities in Bangladesh



From the above table (Table: 1.3) it is seen that data have been collected from six different sources i.e., Upazilla Accounts and Finance Officials (UAFO), District Accounts and Finance Officials (DAFO), Divisional Comptroller of Accounts Officials (DCA), Chief Accounts and Finance Officials (CAFO) and Others which includes the Ministry of Finance, NBR officials, Sonali Bank, etc. Of the total respondents maximum i.e. 50 respondents were from the CAFO office which stands for 41.70 percent working under the CGA office. From the DAFO and DCA offices, respondents were taken 12 and 12 respectively as percentage of 10 percent of the total respondents. Another 10 respondents were selected from the UAFO and 36 respondents from different other sources, which have already been mentioned above.

Logistic Regression

The purpose of this part is to explore the association between the dependent and independent

variables of the study based on the logistic regression analysis. Logistic regression is used to forecast a discrete finding/outcome based on variables that may be discrete, continuous, or mixed. Therefore, when the dependent variable may have two or more than two discrete outcomes, logistic regression is a generally used method (Gaur & Gaur, 2009). From the critical review of literature it is discovered that, the Comptroller and Auditor General Additional Functional Act, 1974 described the administrative framework for government accounts and audits (Government of The People's Republic of Bangladesh, 1974).

On the other hand, the accounting functions of C&AG has been vested to the CGA by issuing an office order in 1983. Finally, in the month of June 17, 2002 Audit and Accounts administration has been separated for accomplishing government accounting and reporting for internal efficiency

and external legitimacy (A., H., M, Shamsur Rahman, 2014). From the study it is seen that financial administrative framework has the impact on government accounting and reporting system in Bangladesh.

The new budget and accounting classification system (BACS, 2017) was prepared by the Deepening of Medium-Term Budgetary Framework (DMTBF) and strengthening the financial accountability project. It was developed in parallel with another area under that project, the integrated budget and accounting system (iBAS++) design and development (International Monetary Fund, 2014). This classification helps determine the effectiveness of reporting entities in the government accounting and reporting system (EGARS) in Bangladesh. From the study, it is found that selecting reporting entities has an impact on EGARS.

General Financial Rules (GFR, 1998) and Account Code, 1983 have directed the accounting and reporting methods, forms and contents of financial statements for recording and reporting government financial events (Ministry of Finance, GOB, 1998). Basis of accounting, forms, and contents used in Annual Finance Accounts (AFA) and Annual Appropriation Accounts (AAA) has an impact on communicating accounting information for interested users like citizenry, statesmen and international donors' bodies.

From the critical review of the iBAS++ manual (2020), it is

evident that the Integrated Budget and Accounting System (iBAS++) impacts the timely preparation and presentation of the in-year budget, providing complete information to users with AFA and AAA. (Ministry of Finance, Finance Division, GoB, 2020) From the above literature analysis, the researcher wants to test the following four hypotheses:

Ha₁: Govt. financial administrative framework has positively related to the government accounting and reporting system for internal efficiency and external legitimacy.

Ha₂: The budget and accounting classification system has positively related to the government accounting and reporting system for internal efficiency and external legitimacy.

Ha₃: The recording and reporting process has positively related to the government accounting and reporting system for internal efficiency and external legitimacy.

Ha₄: iBAS++ positively relates to the government accounting and reporting system for internal efficiency and external legitimacy.

So, the null hypothesis, in this case, would be that the government accounting and reporting system is not related

to the administrative framework or BACS, recording methods, and of the iBAS++.

Research Model

Considering the above study, effectiveness of government accounting and reporting system for internal efficiency and external legitimacy has been selected as the dependent variable. On the other hand government administrative framework, budget and accounting classification system (BACS), recording and reporting methods, and iBAS++ have been selected as independent variables. To test the hypothesis, the following logistic regression model has been specified:

$$\text{Egars} = \beta_0 + \beta_1 \text{Gaf} + \beta_2 \text{Bacs} + \beta_3 \text{Rrp} + \beta_4 \text{ibas} + \varepsilon$$

Variable Definitions

Dependent Variable

Egars = the effectiveness of government accounting and reporting system for internal efficiency and external accountability/legitimacy (1 if efficient and accountable accounting and reporting system established, otherwise 0).

Independent Variables

Gaf = Government financial administrative framework for accounting and reporting

Bacs = Budget and accounting classification system for identifying reporting entities

Rrp = Recording and Reporting process of government financial transactions

ibas++ = integrated budget and accounting system for digital accounting and reporting

β_0 = Constant

ε = Random error term

Result of Regression Analysis

From the SPSS output, the researcher gets some more tables under the heading Block 0: Beginning Block. Here are not showing these tables for analysis and interpretation. These are not of much relevance and should be ignored. Next, the researcher gets output under the heading Block 1: Method = Enter as shown in table 6.5. The table titled Omnibus Tests of Model Coefficients gives general tests of how well the model performs. In the next table labeled Model Summary, the researcher gets -2 Log likelihood and two other statistics equivalent to R Square values in multiple regressions. However, -2 Log likelihood is used to compare models and assess if the inclusion of additional terms in the model significantly improves model fit or not. Cox & Snell and Nagelkerke R Square values give an approximation about how much variance in the dependent variable can be explained with the hypothesized model. In this example, govt. administrative framework, BACS, recoding and reporting methods, and iBAS++ can explain between 23.7 percent and 60.00 percent variance in the entities' efficiency and accountability.

Accounting and Reporting System of Budgetary Central Government Entities in Bangladesh

Block 1: Method = Enter:

Table 1.4: Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	32.430	4	.000
	Block	32.430	4	.000
	Model	32.430	4	.000

Source: Calculated by the researcher from field data, 2021

Omnibus Tests of Model Coefficients are used (Table: 1.4) to test the fit of the model is significant. This shows that there is a significant improvement in fit as compared to the null Model; hence the model is showing a good fit.

Table 1.5: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	20.936 ^a	.237	.660

a. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.

Source: Calculated by the researcher from field data, 2021

Model summary (Table: 1.5) shows the Pseudo R-Square. Pseudo means that it is not technically explaining the variation. But they can be used as an approximate variation in the criterion variable. Normally used is Nagelkerke's R², which is an adjusted version of the Cox & Snell R-square that adjusts the scale of the statistics to cover the full range from 0 to 1 (Nagelkerke, 1991). In this case, we can say that 66.00 percent change in the criterion variable can be accounted for the predictor variable in the model (Cox & Snell, 1989).

Table 1.6: Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	.785	1	.376

Source: Calculated by the researcher from field data, 2021

The Hosmer and Lemeshow test (Table: 1.6) is also a test of Model fit. The Hosmer-Lemeshow statistic indicates a poor fit if the significance value is less than 0.05. Here, the model is adequately fit the data because its significance is .376 which is greater than 0.05. Hence, there is no difference between the observed and predicted model (Hosmer & Lemeshow, 2000).

Table 1.7: Classification Table

		No	Yes	
Step 1	The Efficiency and Accountability of EGARS depend on Admin. Framework, BACS, recoding method and iBAS++	No		
		3	4	42.9
	Yes	1	112	99.1
Overall Percentage				95.8

a. The cut value is .500

Source: Calculated by the researcher from field data, 2021

From the above analysis (Table 1.7), we get the classification table, which summarizes the results of our prediction about the efficiency and accountability of government accounting and reporting system based on govt. administrative framework, BACS, recoding and reporting methods and iBAS++ of the government entities. This model can correctly predict that 42.9% of the entities is not making efficient but 99.1 percent of the entities are efficient and accountable if using this integrated model. Overall, our model predicts 95.80 percent of the entities' efficiency and accountability correctly.

Table 1 .8: Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Gaf	3.574	1.486	5.782	1	.016*	35.665
	Bacs	3.604	1.461	6.090	1	.014*	36.752
	Rrp	4.662	2.010	5.378	1	.020*	105.826
	ibas++	2.423	1.434	2.855	1	.091**	11.278
	Constant	-8.227	3.151	6.818	1	.009*	.000

a. Variable(s) entered on step 1: Q10, Q11, Q12, and Q14.

b. *, ** Result is significant at the .05 and .10 levels of significance respectively

Source: Calculated by the researcher from field data, 2021

The regression result of the study has been presented in the above table (Table 1.8). The estimated result of the govt. financial administrative structure ($\beta = 3.574$) is statistically significant at 0.05 level of significance. Therefore, the study results support the first assumption, which leads to accepting hypothesis Ha1. The study result positively impacts the government accounting and reporting system for efficiency and accountability. Similarly, BACS ($\beta = 3.604$), and accounting and reporting methods ($\beta = 4.622$) are also statistically significant at 0.05 level of significance, and iBAS++ ($\beta = 2.423$) is statistically significant at 0.10 level of significance. This leads to accepting hypotheses Ha2, Ha3 and Ha4. Hence, the result positively impacts the effectiveness of the government accounting and reporting system for internal efficiency and external accountability.

Decision Criteria

The Beta coefficients in logistic regression are not easily interpretable. Hence, look at the last column under Exp(B) for the interpretation. Exp(B) takes a value of more than one if Beta coefficient is positive and less than 1 if it is negative. In our model, a value of 105.826 for the accounting and reporting method indicates that for one unit efficiency increase in using proper accounting and reporting method by the government entity, the odds of the entity having an efficient and accountable performance increased by a factor of 105.826. An overall decision criterion has been given below (Magdalena Szumilas, MSc, 2010):

Odd Ratio	Associate Decisions
Odd Ratio: 1	The possibility of falling into the aim group is similar to the possibility of falling into the non-target group.
Odd Ratio >1 (Probability of events occurring)	The possibility of falling into the aim group is greater than the possibility of falling into the non-target group. The incident is probable to happen.
Odd Ratio <1 (Probability of events occurring decreases)	The possibility of falling into the aim group is less than that of the non-target group. The incident is improbable to happen.

Source: Magdalena Szumilas, 2010

Accounting and Reporting System of Budgetary Central Government Entities in Bangladesh



A logistic regression model (Table: 1.8) was developed assuming that the model is true if the constitutional mandates, relevant laws and regulations, and other dimensions are applied properly, which are related to the variables selected to ascertain the effects of govt. administrative framework, BACS, accounting and reporting methods and iBAS++ on the likelihood that government accounting and reporting system has internal efficiency and external accountability. The developed logistic regression model was statistically significant, $\chi^2 (4, N = 120) = 32.430, p < .009$. The model explained as a whole between 23.70 percent and 66.0 percent (Cox and Snell R² and Nagelkerke R²) of the variance in efficiency and accountability correctly classified 95.80 percent of the cases. This indicated that accurate

accounting and reporting methods were 105.826 times more likely to exhibit efficiency and accountability than the system does use the integrated model. The odd ratio of increasing government financial administrative efficiency is 35.665 times, budget and accounting classification system (BACS) is 36.752 times, and integrated budget and accounting system (iBAS++) is 11.278 times was associated with an increased likelihood of exhibiting internal efficiency and external accountability in government accounting and reporting system in Bangladesh.

Additionally, if we think that the model is like a multiple additive regression model and it was also expected that for the case of significant hypotheses, all variables had been counted as the possible value of '1' and for non-significant hypotheses as

'0', then we can find out the value of efficiency i.e., 181.294 times more efficient accounting and reporting system than the system do not use the efficiency model (Andy Field, 2017). Calculation of the efficiency values using the model are as under:

We have the model, $Egars = \beta_0 + \beta_1 Gaf + \beta_2 Bacs + \beta_3 Rrp + \beta_4 ibas + \epsilon$

From table 1.8 (above), we have $\beta_0 = -8.227, \beta_1 = 35.665, \beta_2 = 36.752, \beta_3 = 105.826, \beta_4 = 11.278$, and $\epsilon = 0$, Substituting the values, we get:

$Egars = -8.227 + 35.665 (1) + 36.752 (1) + 105.826 (1) + 11.278 (1) + 0$

So, $Egars = 181.294$ times

Concluding Remarks

This article has concentrated on the government accounting and reporting methodology based on the analysis and interpretations of the data. A logistic regression model was developed based on the data collected through Key Informant Interviews (KII) and survey questionnaire. This model was adequately fit as the Nagelkerke's R² is explained 66.00 percent variance of the model. From the table of (table 1.8) variables in equation it was also seen that the selected variables for the models are significant at appropriate levels of significance, i.e., 5 percent and 10 percent as $p < .005$ and $p < .10$. So, the study results



support our hypothesis and find that proper administrative framework, budget and accounting classification system (BACS), accurate accounting and timely reporting system and digitalized accounting and reporting system specially iBAS++ has a positive effect on increasing the internal efficiency and external accountability of the governmental entities in Bangladesh. Hence, it is also mentionable that KII has been qualitatively explained along with quantitative analysis. However, quantitative data have been analyzed through the statistical tools of SPSS. With the logistic regression model, this article has identified the relationship between the independent and dependent variables with the help of related indicators.

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Safety and Protection of Workers in Factories and Depots Bangladesh Perspective

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Bangladesh is an emerging economy due to large supply of skilled and un-skilled workers at comparative cost of wage advantage. Apparels and textiles manufacturing and exports, have become important livelihood for millions of urbans and rural people. It is a major labor-intensive sector of the country with huge employment-generating quiescent and the biggest source of export earnings. It is pertinent to stress that 80% of export earnings of the country emanate from these sectors. As opposed to it, sadly several catastrophes have befallen in apparels and chemical factories and depots claiming thousands of lives, scandalously becoming the subject of great concern both for Bangladesh related international but world-famous buyers, local trade unions, and regulatory authorities. As a result, despite the prodigious success of the apparel industry in Bangladesh in the last three decades, it have led to a downturn in the growth of this sector in the recent pasts. The industry has been beleaguered by building collapses, frequent fires, boiler-bust and other avoidable and unavoidable industrial disasters.

It was a fine morning on 10th September 2016. The workers of Tempaco Foils Ltd. started their works in the morning as usual. Nobody knew that 34 people would lose their lives; few dozen would get serious injuries from a human created catastrophe. "At least 34 people have the

confirmed death, 9 more are missing and a further few dozens of people are injured from the devastating fire blaze at a packaging factory in Bangladesh" the latest faux pas and most cataclysmic news published in most of local and international dailies and gleamed the tearful-eyes of the billions of people who watched the heartbreaking scene through the electronic media.

The blast was caused by an explosion in the boiler room and spread the whole of the four storied building, at the start of the working day when the unfortunate workers and staff were busy with their daily works. Accidents in factories have become common, never-ending and consistent catastrophic occurrences in Bangladesh. In 2012, 112 workers died in a fire and 150 people got fire-injured at a factory just outside Dhaka.

The country had the worst such tragedy in 2013. This had 1,135 people killed in Rana Plaza, a garment complex collapsed at the outskirts of Dhaka. On 24 April 2013, where an eight-story commercial building called Rana Plaza collapsed which housed five garment factories. The building contained clothing factories, a bank, apartments and several shops. The shops and the bank on the lower floors were immediately closed after cracks were discovered in the building. The building owners insanely ignored warnings to avoid using the building after cracks had appeared the day before. Garment workers were

Safety and Protection of Workers in Factories and Depots
Bangladesh Perspective



Picture of Chittagong Depot Fire Explosion



Picture of Chalk Bazar, Dhaka Plastic Factory Fire (Photo: TBS)

unfairly ordered to return to work in the following day and the building collapsed during the morning rush-hour.

On the night of 4 June 2022, a fire and subsequent explosions at a container depot in Sitakunda Upazila, Chittagong

District, Bangladesh killed at least 49 people and injured around 450 others. A deadly fire broke out at a polythene factory in Old Dhaka's Chowk Bazar area on 15 August, 2022 around noon that killed 6 people. All these internecine reminiscences could be apostatized if the concerned authorities enforced with the owners having complied and followed the safety rules and regulations properly.

A very prevalent question is -How much do the owners of factories or Government of Bangladesh (GOB) really care about terrific tragedies bringing in casualties of hundreds of people? Yes, when it happens en masse, in a high-income country, people express their heartache and sorrow, by declaring a day of mourning, keep the national flag half-mast, and observe a moment of silence or getting together to express sympathy and condolences. But in our country things like these are frequent happenings. Take each category and add up reported deaths in daily newspapers, and it would not be long before the number one hundred is reached. A number like one thousand or more dead is not very uncommon in Bangladesh, due to non-enforcement by concerned authorities.

The avoidable accidents are happening in this country by insouciance & negligence plus many more, involving large number of people making it difficult to determine the



MAJOR FACTORY FIRES IN BANGLADESH SINCE 2005 SINCE 2005

 WHEN	 WHERE		 DEATHS	 INJURED
April 2005	Garment factory building collapse	Dhaka	64	100+
February 2006	Fire at a textile factory	Chattogram	65	
December 2010	Fire at a factory supplying global retailers	Outside Dhaka	26	100
June 2010	Fire at Nabab Katra, Nimtoli	Old Dhaka	124	150+
November 2012	Fire at Tazreen Fashions	Dhaka	112	150+
September 2016	Fire at Tampaco Foils packaging factory	Tongi, Dhaka	36	
January 2019	Fire at Churihatta, Chawkbazar	Old Dhaka	71	
08 July 2021	Fire at Hasem Food	Narayanganj	52	25 RESCUED

Safety and Protection of Workers in Factories and Depots

Bangladesh Perspective



singularity of the negligence. So where does the responsibility lie to ensure that such accidents are prevented? The government of Bangladesh? Local manufacturers? The international world-class buyers that source their clothing there? Charles Kernaghan, Director of International Global Labor and Human Rights is quoted in CNN stating: "These are the lowest wages in the world, and the factories are with the worst health and safety conditions. Yet the big companies love the cheap wages, the long hours, because they are all about the costs."

The NY Times quotes one expert from University of California, Berkeley that the prices paid by Western buyers in Bangladesh "are so low that they are at the root of why these factories are cutting corners on fire safety and building safety." Bloomberg reports that at a meeting in Dhaka.

A fire engulfed a food and drink factory in Bangladesh killing at least 52 people, many of whom were trapped inside by an illegally locked door, according to fire officials. This disaster happened on 8th July 2021. The blaze began on Thursday night at the five-storied Hashem

Foods factory in Rupganj, in proximity of Dhaka, sending huge clouds of black smoke into the sky. Police initially gave a toll of three dead, but on Friday afternoon discovered piles of bodies after the fire was extinguished. Few of the largest US retailers, including Wal-Mart had meetings and discussed a memorandum that would require the retailers to pay for improvements, but unfortunately the buyers refused. Wal-Mart representatives are quoted to have said that modifications needed to improve fire and safety standards are costly, and with 5,500 such factories, the cost would not be cost-ineffective for the buyers. It's a real-time fact that the owners of the factories and their world-class buyers want to save costs, risking and jeopardizing the lives of millions of workers in Bangladesh.

The UN Guiding Principles on Business and Human Rights, which were signed unanimously by all member states in March 2011 including Bangladesh, provide a framework for defining the roles and responsibilities of both governments and businesses in regard to human rights. It is based on a framework of three separate "pillars": Protect, Respect and Remedy. This framework can be applied in situations where any human right impacts could occur, including breaches of labor rights in the workplace. All these asseverations appear to be in papers only.



All workers have the right to work in an environment which is safe and not harmful to their health. The ILO Constitution sets forth the principle that workers should be protected from sickness, disease and injury arising from their employment and have established a number of conventions to promote this principle. ILO Convention 155 on Occupational Safety and Health outlines action to be taken by governments and within enterprises to promote occupational safety and health and to improve working conditions. This convention has not been ratified by the government of Bangladesh (GOB).

In addition to international laws and international organizations, Bangladesh has its different Directorates under different Ministries to regulate and ensure factories and factory-workers' safety, protection and rights. Fire and Civil Defense for

overseeing factories fire and safety conditions, Boiler Department (Chief Inspector of Boiler) to look after boilers at different factories, Labor Directorate has to look after workers' rights to name a few. There are few associations of manufacturers, employers and employees, namely BGMEA, BTMA, BKMEA and Trade Unions in different organizations to oversee and look after factories and their safety conditions. Some international companies are working in Bangladesh notably Accord, Alliance who give compliance certificates to different industries especially Apparel industries. Now the valid question comes to the minds of the general people of the country especially those who lost their near and dear ones: What are these departments, organizations doing for the safety, protection and security of the factory workers who are getting killed by boiler

explosion, fire, building collapse every year? Who's responsible for the unwarranted deadly accidents and disasters caused by the negligence of many responsible people at different departments and different organizations?

Bangladesh got comprehensive law on boiler control and regulations. Boiler Act 1923, Boiler Regulations 1951 (amended in 2007) have wide-ranging provisions for control, starting from purchase of boiler to running and maintaining boiler at factories' premises. The owner of any factory, who purchases a boiler, must have registration for boiler and a boiler license renewable annually. The recent tragedy that killed 34 people and injured few dozens of people arouse from the boiler explosion, could have been avoided if everybody starting from boiler inspector (government staff), boiler attendant and the owner of the factory; check, verify and maintain the boiler properly or replace the very old one with a new one or follow the regulations and laws. Everything is done in papers only. According to the published news it appears that the license for boilers of the factory was renewed up 2017. Thus, the enforcers failed to perform their responsibility to ensure such accidents are prevented.

Similarly, the Rana Plaza tragedy that killed 1,137 people due to building collapse could have been circumvented if responsibilities emanating from

Safety and Protection of Workers in Factories and Depots
Bangladesh Perspective



proper building codes were enforced & followed. Regulations and building codes in Bangladesh were rarely complied with by the concerned authorities. Going against the nation's persistent corruption, our bureaucracy & politics could play the pivotal role in Bangladesh. Building owners are able to exercise their influence in order to get around the law or to sway officials to sanction what they want. There are numerous instances where construction like that of the Rana Plaza could have been stopped or corrected or canceled, but wasn't done. On the contrary the Approval Authorities have never been brought into purview of law. The owner was able to take advantage of the loopholes in

the system banking on his abundant wealth. Minimum 18 certificates/licenses are required to start an apparel (100% export oriented) industry in the country which include ERC, IRC, Factory Labor License, Factory Layout Plan Approval, Boiler Certificate plus many more. Annual renewal of these many licenses and certificates are required only to persist procrastination & unholy meets with licensees. The stakeholders can keep away with rules etc. for such unholy alliance.

According to the analysis of Fire Risk Index (FRI) in Bangladesh, FRI results shown that the mean FRI is 2.8 on a scale of 5.0 for the fire hazard condition of our RMG sector, which signposts an

alarming condition. Many of these buildings are converts from residential or commercial to factory building violating construction ACT as well as Planning ACT etc. Negligence of duties, responsibilities by different parties, mainly the owner and the enforcer (GOB) to protect and safeguard the lives of workers at work places (factories), are causing deaths of hundreds of workers with problems remaining unresolved for years together.

Citizens being the owners of the state are losing their lives; their bereaved families are facing huge sufferings and heart-breaking pains of losing their beloved ones. Even in such perspective the authorities are neither distraught nor overwrought. Preventive steps & regulations must be enforced by GOB authorities precisely and neutrally. The absolute responsibilities to safeguard and protect workers at factories are with the owners and the ultimate onus is on GOB to effectively enforce the legal frameworks. Eradication of rampant corruption, enforcement of rule of law, justice and good governance at private, public and government organizations are sine qua non to stop long ques of deaths of people stemming from fire, accidents, collapse of buildings etc. at working place recurrently.

Gig Economy Workers in Bangladesh Reshaping the Careers

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Abstract

This study is an attempt to explore how gig economy workers reshape their careers in Bangladesh. The purpose of the study is to evaluate gig workers' career-related attitudes, determine their career-related skills and examine their career-related behaviors. A total of 200 respondents from Dhaka and Brahmanbaria were surveyed using a questionnaire and their responses were evaluated using descriptive statistics.

According to the findings, roughly 75.43 percent of respondents of the gig workers in Bangladesh were highly positive about their risk appetite, positive mindset, working independence, emotional awareness, technical and social abilities, accountability, networking, and time management in reshaping their careers. The findings also show that the young generation is the best performer in the gig economy since they are well-versed in the technology required.

In the gig economy, low-wage employees from poor nations such as Bangladesh can earn more by working in similar tasks in affluent countries such as the United States and Europe. This study will aid gig workers' understanding of attitudes, competences and behavior in order to improve the quality, productivity and employment rate of their gig labor.

Keywords: Gig economy, career-relevant attitudes, competencies and conduct, jobs available, Digitalization, delivery services, ride-sharing services, and freelancing.

Introduction

Bangladesh observes a rapid rising in terms of the shared economy. Therefore, it is required to understand the importance of investment in automation and digitalization. Developing countries like Bangladesh should focus on skill-based education, developing skilled youth, financial support to start-ups and appropriate training programs.

In this changing world, the gig economy is growing very fast. Huge numbers of people are engaged with the gig economy. They can work digitally, manually, physically, in house, outsourcing, temporarily and permanently. Ultimately, they are working with an economy where they have equal opportunity to access information and technology.

The gig economy is creating job opportunities as freelancers in the local and international markets, job opportunities in restaurants, agent as customer care call service and job opportunities in the world of technology like - Graphic Design, 3D animations, web and software development. The gig economy is also creating the opportunity for women to raise their voices and take a place in

Gig Economy Workers in Bangladesh Reshaping the Careers



the job market. They are also contributing to the remittance per year by utilizing skill-based performance.

Bangladesh has already started working within the gig economy by introducing delivery services like Pathao, Food panda and ride-sharing services like Uber and Obhai. The gig economy provides a job market where different contractors and freelancers work for different companies contractually. The economy is transforming from a traditional concept to a digitalization concept.

This study will help the young generation to prepare themselves for the future, develop communication and become computer experts. This study will also benefit business people to increase their scope of work.

Objectives of Study

General Objective: The general objective of this study is to explore how gig economy workers reshape their careers in Bangladesh.

Specific Objectives:

- i. To analyze the attitude of gig workers toward the gig economy in terms of their careers.
- ii. To identify career-related competencies among gig economy employees.
- iii. To examine the career behavior of the gig workers who make up gig economy.

Literature Review

The term “gig economy” comes from a slang word for a live

musical performance and recording session that a musician or group is hired to do (usually for money). The same thing can also be called the “sharing economy”, the “collaborative economy”, the “platform economy”, or the “on-demand economy”. The gig economy is a transformative and disruptive economic model in which physical goods, assets, and services are consumed through the rental, sharing, or exchange of resources using technology across the globe via crowd-based services or intermediaries without any permanent transfer of ownership, thereby increasing the efficiency and effectiveness of economic activities by lowering transaction costs and providing consumers with more information (Sundararajan, 2017).

There are a significant number of individuals in the gig economy who work part-time or on a contract basis. The gig economy has cheaper prices than the traditional economy, and the services provided, such as Uber, are more efficient. The tasks of gig work are diverse. Part-time academics, for example, are not tenured or tenure-track professors, but rather contract employees. Colleges and universities can save money and better match instructors to their academic needs by recruiting more adjunct and part-time teachers. 'Gig' or platform-based work is one of the most recent and publicly recognized labor market shifts. One type of



non-standard employment made possible by technology and digital marketplaces on-demand is gig and platform-based work, which is linked to rising employer demands for flexibility and, in some situations, rising employee demands for more flexibility (Johnston and Land-Kazlauskas, 2018).

Despite its relatively small scale (Stanford, 2017) The gig economy has the potential to fundamentally alter how work is organized and carried out, as well as the nature and extent of employment and industries. The advantages and disadvantages of platform and gig employment for businesses, employees, and society are still hotly debated. Advocates claim that socially marginalized people including the unemployed, the isolated, and immigrants can monetarily gain from digital labor platforms (Gawer and Srnicek, 2021). For

businesses, in order to reduce transaction and labor costs, increase numerical flexibility in response to fluctuating demand, and promote competitiveness, gig employment combines technological innovation with a range of contractual relationships. (Theodore & Peck, 2013; ILO, 2016).

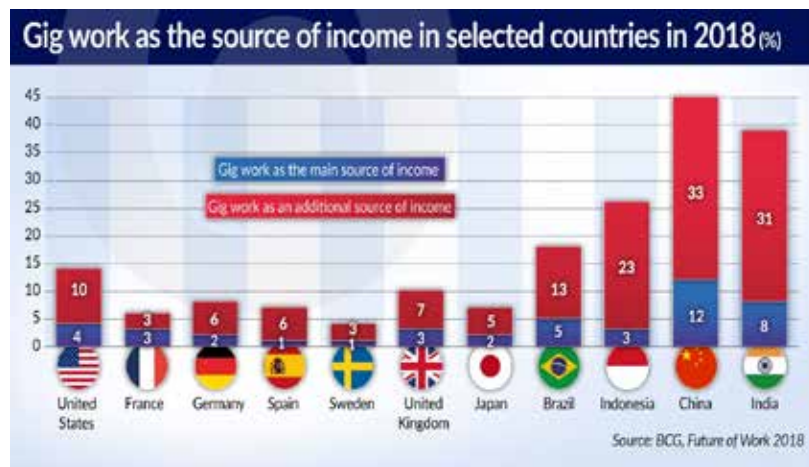
Regardless of the potential benefits, the job markets might be set up in a way that is harmful to both employees and corporations (Viladerrams, 2021). Because consumers want the quickest, most flexible, and least expensive means of transportation, ride-sharing services are quickly becoming a viable alternative to traditional modes of transportation in Bangladesh. (Islam et al., 2019). The gig economy's effects on the labor market and income distribution were examined, and it was determined that they were likely to have a positive impact on total productivity

(Tolba, 2021). Advanced economics is characterized by non-economic variables like research output, press freedom, reduced corruption, international student mobility, and trading controlled commodities and services (Kusujiarti and Kusdarjito, 2022). The effects of globalization on workers and how workplaces are becoming multi-sited (Graham and Anwar, 2019). The labor and social media platforms will become more interwoven, fostering conflict and maybe producing pushes for user empowerment in general (Vallas and Schor, 2020). The on-demand gig economy's impact on women was underlined by the fact that it often provided less skilled and remunerated jobs than other categories of freelance work (Hunt et al., 2019). The gig economy allows for direct competition between employees from low and high-income nations, as well as an easy entrance point for inexpensive labor (Estrella et al., 2017).

The workers have low awareness about the adoption of the gig economy as a tool for sustainable livelihood strategy. The adoption is hindered by corrupt practices within the construction industry and poor collaboration among construction workers (Osunsanmi et al., 2019). The flexibility of work timing is the most attractive feature of gig work in India. Other findings include women are more satisfied with training and

Gig Economy Workers in Bangladesh

Reshaping the Careers



learning opportunities input and raw material support (Chaudhary, 2020).

Gig Economy in Different Countries

Digitalization such as internet access and smartphone availability has played a significant influence in the development and expansion of the gig economy in Bangladesh. Rapid technological advancements have simplified and accelerated many difficult and time-consuming tasks, making gig labor simpler. Being a worker in the gig economy is facilitated for technically savvy individuals by the availability of numerous devices. Hence, ridesharing and food and grocery delivery applications have become a part of our daily urban lives.

According to a study conducted by the Policy Research Institute (PRI), Bangladesh's ridesharing industry is worth Tk.2200 crores and represents 23% of the

transportation sector. Within the next five to seven years, the estimated market value of ridesharing start-ups is likely to reach one billion dollars.

In recent years, the number of gig workers in e-commerce companies has grown a lot. According to the Oxford Internet Institute, Bangladesh is now the second-largest source of online labor in the world, with a 16 percent share of the global online workforce. This is after India, which has a 24 percent share of the global online workforce. Bangladesh has been a popular place to outsource work since the beginning of worldwide online freelance work. According to the ICT Division of the Bangladesh Government, there are about 650,000 freelancers in Bangladesh. The Pioneer's Global Gig-Economy Index, which was released in 2019, ranks Bangladesh as the eighth country with the highest year-on-year growth in freelance income.

Bangladesh's gig economy is largely dominated by the on-demand sector. App-based start-ups, who developed their online platform even before the Covid-19 pandemic, are the biggest job creators in Bangladesh's on-demand sector. As more and more consumers prefer to use e-commerce platforms during the pandemic, e-commerce companies reported a significant rise in their order volume. As stated in the Daily Star newspaper report, Food panda (Online shopping and grocery delivery platform) saw a 300 percent year-on-year growth last year, Chaldal's (online grocery shop) order volume increased by more than 150 percent during the Covid-19 pandemic, eFood's (Food delivery platform) online delivery increased by 15-20% and Daraz (Online market place) hired more than 7,000 employees in the last two years.

According to a survey conducted by the Centre for Policy Dialogue (CPD), at present, there are 50,000 Facebook-based entrepreneurs in Bangladesh. With around 43 million Facebook accounts in Bangladesh, the platform gives businesses opportunities to contact clients on a far wider and more diverse scale. At present many women, entrepreneurs are involved in homemade food delivery services as well as clothing, cosmetics, and jewelry businesses through Facebook (Rashidujaman et al, 2022).



Methodology of the Study

This study for evaluating how the gig economy workers reshape careers in Bangladesh is based on a survey questionnaire. The population for the study is freelancers, car & bike riders, content writers, YouTubers, and so forth. The Sample size was set to 200 users. Due to time constraints and convenience, a non-probabilistic sampling method was chosen to conduct the study. This allowed collecting data from the people who are well known for these gig jobs rather than a random selection of respondents. A questionnaire was designed to collect primary data from the sample population. The secondary sources of data were collected from various websites, books, articles, and experts on the gig economy. The last stage of this study includes results and discussions of outcomes based on descriptive analysis of data.

Results and Discussion

Demographic Profile

The respondent group consists of 82.2% male and 17.8% female. This shows that male gig workers are more prone to involving in gig work having a larger contribution to the gig economy. Moreover, the majority of the respondents are students (70.1%) followed by jobholders (17.8%), self-employed, (7.5%), and others (4.7%). Students have the flexibility to choose the type of work they wish to undertake and their payment is determined by the type of job, the level of difficulty, and the duration of the assignment. They have more freedom in how they use their time and they can take a day off whenever they want. Because of these conveniences, gig jobs attract students particularly and these jobs have become the most popular contemporary trend.

Moreover, the age distribution of the respondents shows 45.3% of the total respondents belong to below 25 and also 45.3% of the total respondents belong to the 25-30 age groups. There are less than 9% of respondents aged above 30 years and about 1% of respondents above 40 years. Thus this age distribution between 20 to 35 years shows that internet access and smartphone availability have played a key role in the growth and expansion of the gig economy among young people.

Besides, the educational level among gig workers entails graduation and post-graduation level (80.4%), higher secondary level (16.8%), and the rest are secondary level. Students are now engaging in gig work and earning a substantial amount of money to help fund their fees, especially at graduation and post-graduation levels.

Income information of the Gig Workers Based on Survey Data

Income	
Mean	24877
Standard Error	1211.067527
Median	23000
Mode	22000
Standard Deviation	12110.67527
Sample Variance	146668455.6
Kurtosis	0.073874644
Skewness	0.752635035
Range	53000
Minimum	7000
Maximum	60000
Sum	2487700
Count	200
Confidence Level (95.0%)	2403.020717



In both Dhaka and Brahmanbaria, the mean value reveals that the average salary of gig workers is roughly 24,877 BDT. Standard Deviation (12111) shows that our sample values are sufficiently dispersed from the mean value. We can infer that the sample values utilized tend to be flat because the kurtosis value (0.0738) is less than 3. Since the sample values utilized tend to be right skewed, the value of skewness (0.7526) is higher than 0. The range of respondents' average incomes is 22,474 to 27,280 BDT, with a 95% confidence level.

Descriptions of Asked Questions and on Gig Workers' Responses

In our nation, the gig economy is still a relatively new concept. Accepting a high level of uncertainty, which manifests in the acceptance of risk, is a requirement for becoming a gig worker. Gig workers face a variety of dangers due to their temporary employment,

including fluctuating pay, job insecurity, and a lack of institutional and social recognition. Their labor does not qualify as a typical job. They are smarter, make more money, and everything is OK, but neither society nor the institute value their job.

Risk-Taking Appetite for Gig Work

The figure shows gig workers' appetite for risk-taking while involved in the gig economy. Gig workers such as freelancers and Pathao riders were questioned about whether or not they would be interested in adopting an almost entrepreneurial-like appetite for risk in order to embrace their career path in the gig economy. According to the findings, 69 percent of the respondents were willing to adopt virtually an entrepreneur-like appetite for risk-taking in order to change their careers in the gig labor industry. Gig workers identify risks, determine the exposure

levels and then adopt strategies to deal with the various risks that exist.

Positive Attitude of Gig Workers:

Gig workers were questioned regarding whether or not they require a positive attitude in order to cultivate new relationships and develop meaningful ties with their employers and customers. The findings indicate that 79% of the people who responded stated that they intended to require a good attitude in order to drive their rapport with employers and customers having a positive mindset that will spread across a spectrum of self-development, client work, and future endeavors while also embracing self-development. They need to be curious and to have continuous learning.

Work Independence of Gig Workers

The capacity to operate freely and make decisions is crucial for gig workers to succeed in the gig economy since they prefer independent employment to formal roles. 82 percent of respondents said they would prefer to work alone and be in charge of their own decisions.

Required Technical Know-How

In order to perform their jobs, gig workers must possess a certain level of technical proficiency that is linked to the transferrable abilities they have developed via their numerous

experiences. Gig workers must not only possess a certain set of skills and knowledge in their area of specialization, but it is also expected that they have knowledge about the industry in which they work. 70.7% of those surveyed said that having technical skills would help them perform better in gig jobs.

Emotional Awareness of Gig Workers

Gig workers need to be emotionally savvy in order to succeed in their chosen job. 82% of survey respondents underlined the significance of having emotional intelligence when working in the gig economy.

Acquaintance with Industry Practices

In addition to carrying out their role- or job-specific responsibilities, gig workers are also expected to shed light on industry practices as a result of their exposure, allowing them to align their employment with their personal interests. 92% of individuals who took part in the study agreed that it's crucial to uphold accepted industry standards as well as to execute duties that are specific to one's job or role.

Smart Communication for Negotiating Contracts

To work remotely and negotiate contracts, gig workers need to be able to communicate both orally and nonverbally. Written and spoken communications are

both included in verbal communication, which is linguistic in nature. It is essential for defining expectations, communicating expectations, and deciding on results. The recipient of communication can, on the other hand, be either cognizant or oblivious of non-verbal indicators like body language, which also includes things like facial emotions. According to research, 92 percent of those who responded to the poll stated that verbal and non-verbal communication might hasten contracts and distant work.

Perceived Accountability for Gig Work

The workforce and the makeup of the labor market have both undergone major changes as a result of the economy's recovery. Freelancers are typically held solely accountable for completing the tasks entrusted to them. Individual gig workers must prove that they are capable of handling a variety of duties because they are frequently responsible for delivering the work. 92 percent of those who participated in the survey said that they were accountable for the quality of the work that they delivered.

Adaptive Outlook for Changing Environment

As a result of significant technical reasons, business models are changing and the nature of employment is altering. Technology is changing

the way labor is organized by enabling connections between owners of human capital and consumers of that talent through new platforms that were previously not conceivable. Gig workers need to be aware of their surroundings, both physically and socially, as well as the situations they find themselves in, and be prepared to adapt. The findings show that 82% of research participants connected being aware of oneself and others with being able to adjust to changing situations. The ability of an independent worker to adapt to their social surroundings while balancing career aspirations determines their potential for success in their professional development.

Persistency for Gig Contract

In order to continue in the face of difficulty with an uncertain end, gig workers must be tenacious when there are ups and downs between contracts. In accordance with the findings, 92 percent of respondents said they would keep working as independent contractors. Freelancers are occasionally compelled to spend their time with tedious jobs. Riders on the Pathao experienced the same thing.

Preferred Time Management

For gig workers to get the most out of their investments in themselves, they must not only manage the time they spend on activities but also set time limitations. The majority of gig

Gig Economy Workers in Bangladesh

Reshaping the Careers



workers are students, which means that they have a set amount of time to complete their tasks and get the most value out of their employment. According to the study, 92 percent of poll respondents agreed that this was productive. It's probable that in the gig economy, efficient time management of gig workers will be a crucial success component.

Strong Networking for Gig Work

Networking is essential for independent contractors because they are in charge of finding new employment. The creation of countless relationships is made possible by networking. The results showed that 91 percent of respondents focused on successful networking to get new jobs since they need to consistently market themselves

and look for new opportunities.

Increased Demand for Gig Work

In Bangladesh, demand for gig workers is rising. Gig workers frequently take on more technologically demanding occupations that include using the internet. Approximately 75.43 percent of gig workers responded positively when asked about their willingness to take risks, independence when working, emotional awareness, positive outlook, technical and social competence, accountability, networking, and time management, among other factors that are used to evaluate the attitudes, skills, and behaviors of gig workers with regard to their careers. As a result, all of these factors have a greater influence on the demand for gig work in Bangladesh.

Conclusion

Bangladesh is experiencing a tremendous rise in the gig economy. Ride-sharing, e-commerce, online marketplaces, social networking and app-related activities are all popular among the country's youth. Bangladesh is ranked second in the South Asian region in terms of the gig economy statistic, according to experts. This study investigates how Bangladeshi gig economy employees change jobs. The study's purpose is to look at how gig workers feel about their occupations as well as their abilities and working behavior.

According to our data, the bulk of respondents (70.1%) are students, followed by jobholders (17.8%), self-employed (7.5%), and others (4.7%). Bangladesh's job market has always been in short supply due to the increasing number of fresh graduates each year. The vast majority of respondents indicate that gig workers' risk appetite, working independence, emotional awareness, technical and social talents, accountability, networking, and time management are all extremely favorable. This research is beneficial to current and future gig economy service providers. It would assist them in better comprehending future developments in the gig economy.

However, there are certain restrictions with this study. This perception-based study

examines how gig economy workers in Bangladesh alter their career paths using a small number of convenience samples. More study can be done to, among other things, compare intra-gig employment services to traditional formal positions, measure client pleasure, and ascertain clients' attitudes about gig work services. Future studies could evaluate the gig economy from the demand side or from the perspective of service users. Examine the career-related activities of gig workers and their related skills.

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Reshaping the Careers

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Cash Flow Reporting System of Commercial Banks in Bangladesh

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Abstract

Separation of ownership from management led to the enactment of laws for the disclosure of financial information by the companies during the 19th and 20th centuries. Financial information is disclosed annually, half yearly or quarterly. It is presented in formats laid down or approved by the government and other regulators. In view of the importance of financial reporting, the government of the People's Republic of Bangladesh has made provisions in the banking companies Act-1991 for preparation of financial statements and their submission to the shareholders at the annual general meeting and to other regulatory bodies. Commercial banks operating in Bangladesh prepare five components under financial statements, namely profit and loss account, Balance sheet, cash flow statement, statement of changes in equity and statement of liquidity analysis to provide information to their shareholders and stakeholders. All the commercial banks operating in Bangladesh prepare cash flow statement as the third major component of financial statements along with Balance sheet and profit and loss account to get an overall idea of the major cash inflows and cash outflows. It is an essential tool of the commercial Banks for providing information. Commercial banks prepare cash flow statement in accordance with BAS- 7 "Cash flow statement" and under the

guidelines of Bangladesh bank. This paper examines the cash flow reporting system followed by the commercial Banks operating in Bangladesh in preparation and presentation of cash flow statement and concludes that they are in line with the requirement of Bangladesh Accounting Standard (BAS)-7.

Introduction

Cash flow reporting is the provision of cash flow information about an entity to external users. Cash flow information is made available to the users by preparing cash flow statement. Cash flow statement is regarded as an integral part of the financial statements by the International Accounting Standard (IAS)-7 and Bangladesh Accounting Standard (BAS)-7. Like other entities, Banking companies of Bangladesh prepare cash flow statement as the third major financial statement along with profit and loss account and balance sheet to get an overall idea of the major cash inflows and outflows during a specific period of time. It is an important and essential tool of financial reporting. This statement shows the structure of change in cash and cash equivalent during the financial year. Cash flow statement is prepared by the banking companies in Bangladesh principally in accordance with BAS-7 "cash flow statement" and under the guidance of Bangladesh Bank BRPD circular no 14 dated 25 June 2003.

Cash Flow Reporting System of Commercial Banks in Bangladesh



An entity may have a strong financial position and a good performance during the period, but may have suffered significant cash out flows. The financial information is therefore not complete to the users without the cash flow information which may tell a different story for the original assessment of an entity's performance. The purpose of preparing cash flow statement by the banking companies is to provide information on the cash flow from a bank's operating, investing and financing activities to enable the users of its financial statement to evaluate the ability of the bank to generate cash and to use the cash to predict future cash flows. Cash flow information enhances the comparability by the reporting of operating performance of the banking companies, because it eliminates the effects that arise from the use of different accounting treatments for the same transactions and events.

The use of cash flow information is gaining an importance in the analysis of financial statements. Cash flow information is considered less open to manipulation than information on earnings, because profit and loss account of the banking companies is normally based on the accrual method of accounting in which revenues and expenses are recognized when they occur. While cash flow statement is based on the actual receipts and payments of cash only and not on the accrual and other accounting principles. In view of the importance of cash flow reporting, Bangladesh has accepted the International Accounting Standard 7 "cash flow statement." This acceptance has added a new dimension to the preparation and presentation of financial statements in Bangladesh. This paper attempts to state the cash flow reporting system of the commercial banks operating in Bangladesh.

Objectives of the Study

The principal objective of the study is to investigate and present reporting system of cash flow of the commercial banks operating in Bangladesh. To accomplish this principal objective, following specific objectives have been covered:

- i) To highlight the objectives and scope of BAS 7: cash flow statement;
- ii) To investigate and present reporting system of cash flow statement format and structure with the light of information provided in the annual reports of the selected commercial banks operating in Bangladesh; and
- iii) To identify the variation in reporting cash flow by the commercial banks operating in Bangladesh.

Cash Flow Statement-an Overview

Cash: Cash in hand and demand deposits (IAS 7.6)

Cash equivalents: short term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value (IAS 7.6) cash equivalents may include: short term deposits, loan notes, bank deposit accounts and government securities

Operating activities: The principal revenue producing activities of the entity and other



activities that are not investing or financing activities. (IAS 7.6)

Investing activities: The acquisition and disposal of long-term assets and other investments not included in cash equivalents (IAS 7.6)

Financing activities: Activities that result in changes to the size and composition of the contributed equity and borrowings of an entity. (IAS 7.6)

IAS 7 permits an option between two possible methods for representing net cash flow from operating activities.

- Direct method whereby major sources of gross cash receipt and gross cash payments are shown.
- Indirect method starts with profit before tax and adjusts it for non-cash charges and credits to reconcile it to the net cash flow from operating activities.

Objective and Scope of BAS-7: Cash flow Statement

The objective of BAS-7 “cash flow statement” is to provide information about the historical changes in cash and cash equivalents of an entity. This information is presented by means of a cash flow statement that classifies cash flows during the financial year under the broad headings of operating, investing and financing activities. An entity should prepare a cash flow statement in accordance with the requirements of BAS-7 and should present it as an integral part of its financial statements for each financial year for which financial statements are prepared. User of an entity’s financial statements is interested in how the entity generates and uses cash and cash equivalents. Cash means cash in hand and demand deposits. On the contrary, cash equivalents are short-term and highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of

changes in value. However, although by definition, cash equivalents refer to the short-term, highly liquid investments, they are usually held for the purpose of meeting short-term cash commitments rather than of other purposes. To qualify the definition of cash equivalents, an investment must be readily convertible to a known amount of cash and be subject to insignificant risk of changes in value. Therefore, an investment normally qualifies as a cash equivalent only when it has a short maturity of, say, three months or less from the date of acquisition. Equity investment is excluded from the cash equivalents, because they are subject to a significant risk of changes in value.

Preparation of Cash Flow Statement

BAS -7 requires cash flows to be classified into operating, investing and financing activities. The Commercial banks operating in Bangladesh prepare cash flow statement in accordance with BAS-7 and show the cash flow from operating activities under direct method as prescribed by the Securities and Exchange Commission (SEC) Rules 1987.

Cash flow from operating activities:

Cash flow from operating activities are primarily derived from the principal revenue producing activities of the entity. Therefore, they generally result from the transactions and

Cash Flow Reporting System of Commercial Banks in Bangladesh



other events that enter into the determination of net profit or loss. Examples of cash flow from operating activities are:

- Interest receipts in cash
- Interest payments
- Dividend receipts
- Fees and commission receipts in cash
- Income from investment
- Recoveries of loan previously written off
- Cash payment to employees
- Cash payment to suppliers
- Income tax paid
- Receipts from other operating activities
- Payment for other operating activities
- Increase / decrease in operating assets and liabilities
- Statutory deposits

- purchase/ sale of trading securities
- Loan and advances to banks
- Loan and advances to customers
- Other assets
- Deposits from other banks
- Deposits from other customers
- Other liabilities on account of customers
- Trading liabilities
- Other liabilities

Cash flow from investing activities

The separate disclosure of cash flows from investing activities is important, because the cash flows represent the extent to which expenditures have been made for resources intended to generate future income and cash flows. Examples of cash

flows arising from investing activities are:

- Proceeds from sale of securities
- Payment for purchase of securities and bond (investment)
- Sale of property, plant and equipment
- Purchase of property, plant and equipment
- Purchase/ sale of subsidiary
- Dividend received
- Payment against lease obligation

Cash flow from financing activities

The separate disclosure of cash flows from financing activities is important, because it is useful in predicting claims on future cash flows by providers of capital to the entity. Examples of cash flows arising from financing activities are:

- Receipts from issue of loan capital and debt securities
- Payments for redemption of loan capital and debt securities.
- Receipts from issues of ordinary share
- Payments/receipt from borrowings
- Receipts from issue of right share
- Dividend paid

Legal framework of cash flow reporting

In case of cash flow reporting commercial banks operating in



Bangladesh need to follow the following laws, regulations and guidelines:

- The companies act 1994
- The Banking companies act 1991
- The Securities and exchange rules 1987
- Bangladesh Accounting Standards and
- Bangladesh Bank circular

As per Bangladesh Bank circular (BRPD circular no.14) issued on June 25, 2003 commercial banks operating in Bangladesh prepare their balance sheet, profit and loss account, cash flow statement, statement of changes in equity and liquidity statement from the year 2004. This circular is provided 28 instructions on notes to the

financial statement and 22 general instructions regarding preparations and presentation of financial statement. Basically, this circular is the detailed guideline regarding accounting and reporting of the financial statement- cash flow statement of the banking companies in Bangladesh and banks are also compelled to follow each and every instructions of this circular.

As per part 3 of the schedule of Securities and Exchange Rules 1987, the cash flow statement shall be so made out as to disclose clearly the cash flows of the company from its operating, investing and financing activities disclosing every material feature. In this rules issues relating to interest paid on short term borrowing

interest and dividend received and income taxes are clearly clarified. For example, interest paid on short-term borrowing shall be cash outflow under operating activities, interest and dividend received shall be a cash inflow under investing activities and interest paid on long-term borrowing and dividend paid shall be a cash outflow under financing activities. Under paragraph 35-36, taxes on income should be treated as operating cash out flow unless they can be identified in financing and investing activities.

Variation of Reporting Activities for Cash Flows

- 1) Operating or financing activities: Transaction with different categories included in cash flows are classified in a different manner. IAS 7:12 states that a single transaction may include cash flows that are classified differently. For example, when the cash repayment of loan includes both interest and principal, the interest element may be classified as operating activities and the principal amount may be classified as financing activities.
- 2) Operating or investing and financing activities: Some cash flow may be classified as arising any activities, such as interest, dividend, and income tax. The detailed provisions of these types are as follows:

Cash Flow Reporting System of Commercial Banks in Bangladesh

ii) Interest

- a) For a bank/financial institution, interest paid and interest received are usually classified as operating cash flow.
- b) For other enterprise, interest paid and interest received may be classified as operating cash flows because they enter into the determination of net profit or loss. Alternatively, interest paid may be classified as financing cash flows, because it is the cost of obtaining financial resources. Interest received may be classified as investing cash flow, because it is return on the investment. However, IAS-7 also permits interest paid to be reported as part of the enterprises investing activities.

ii) Dividend

- a) For a Bank/Financial Institution, dividends received are usually classified as operating cash flows.
- b) For other enterprise, dividends received may be classified as operating cash flows, because they enter into the determination of net profit or loss. Alternatively, dividends received may be classified as investing cash flows, because they are returns on the investment. IAS 7.31 also permits dividends received to be reported as part of the enterprise's financing activities

- c) Dividends paid may be classified as financing cash flows because they relate to cost of obtaining equity finance. An alternative treatment permitted under IAS -7 is to include them as part of the operating activities of the enterprise. Although dividend paid is not deducted in arriving at the profit or loss for the period in the statement of income, this presentation allows a user to assess the enterprise future ability to pay dividends out of its operating activities.

iii) Income tax

Taxes paid on income are usually shown under cash flow from operating activities. According to IAS-7, taxes paid on a single taxable transaction with investing or financing activities may be shown under cash flow from investing or financing activities. Therefore, taxes paid are usually classified as cash flows from operating activities. However, when it is practicable to identify the tax cash flow within individual transaction that gives rise to cash flows that are classified as investing or financing activity as appropriate. When tax cash flows are allocated over more than one activity, the total amount of taxes paid is disclosed in the notes.

Methodology of the Study

The study is mainly based on secondary data. Secondary data

have been collected from the annual reports of the selected commercial banks. The commercial banks are selected on the basis of random sampling procedure. The selected commercial banks are Southeast Bank Ltd, Prime Bank Ltd., Mercantile Bank Ltd., Pubali Bank Ltd, Trust Bank Ltd., IFIC Bank Ltd., Eastern Bank Ltd., Premier Bank Ltd, Uttara Bank Ltd. and Janata Bank Ltd. In order to make the study more informative, it also covered some research articles, textbooks and publications of various accounting bodies.

Findings

To know the extent of cash flow reporting system by commercial banks operating in Bangladesh, a survey has been conducted covering ten annual reports of ten banks. The major findings of the study are given below in terms of general, variation in reporting and voluntary disclosure:

i) General

It includes the current format and structure of cash flow statement and the extent of compliance of international accounting standard (IAS-7/ Bangladesh accounting standard (BAS)-7 followed by the sample commercial banks in Bangladesh.

- All the sample banks prepare cash flow statement as required by IAS- 7 /BAS- 7 adopted by the Institute of Chartered Accountants of

Bangladesh (ICAB) and presents it as an integral part of the financial statements. Notes to the cash flow statement have been presented as part of the financial statements in case of all the sample banks.

- All the sample banks prepare cash flow statement in vertical form and show figure of cash flows of the current year and previous year.
- All the sample banks cash flow statement contains a classification in operating, investing and financing activity.
- All the sample banks

illustrate the policy adopted in determining the formulation of cash and cash equivalents.

ii) Variations in reporting

Another objective of the study is to determine which alternatives permitted by the IAS- 7/BAS-7 are used most by the commercial banks operating in Bangladesh in cash flow reporting. It is found that there are not many differences between banks in their reporting of cash flow information. This is expected because the preparation of cash flow statement does not allow for many choices, differences of interpretation or different

accounting treatments. The results are set out in the following table 1:

IAS-7 /BAS-7 and SEC Rule 1987 have encouraged entities to report cash flows using the direct method. The direct method provides information which may be useful in estimating future cash flows and which is not available under the indirect method. Table-1 reveals that all the sample banks 100% followed the direct method in reporting operating cash flows.

All the sample banks have shown interest received and interest paid, income taxes paid under operating activities and dividend paid under financing

Table-1: Variation in cash flow reporting

SL. No	Factors	Options	No. of banks	%
1	Notes to Cash Flow Statement (CFS)	Separately, following the CFS	00	
		Part of the notes to the financial statements	10	100
		Incorporated in CFS	00	
		Total	10	100
2	Operating activities	Direct method	10	100
		Indirect method	00	
		Total	10	100
3	Interest received and income taxes paid	Operating activities	10	100
		Financial or investing activities	00	
		Total	10	100
4	Dividend paid	Financing activities	10	100
		Operating and investing activities	00	
		Total	10	100
5	Dividend received	Operating activities	80	80
		Investing activities	01	10
		Nothing disclosed	01	10
		Total	10	100
6	Definition of cash and cash equivalent	Separately, following the CFS	09	90
		Part of accounting policy note	01	10
		Total	10	100

Cash Flow Reporting System of Commercial Banks in Bangladesh

activities. All the sample banks (except two) have shown divided received under operating activities. Out of these two sample banks including Mercantile Bank Ltd. has shown divided received under investing activities and the other disclosed nothing.

Conclusions and Suggestions

From the above discussion, it can be concluded that commercial banks' cash flow reporting system in Bangladesh are good and the banks are reporting sufficient cash flow information in their annual report complying with all the rules and regulations. The study reveals that all the sample commercial banks prepare cash flow statement as per International Accounting Standard -7 (BAS-7) and Bangladesh Bank circular (BRPD circular no.14). The study further reveals that all the sample banks report cash flow from operating activities using direct method. In addition, it is found that there are not many differences between banks in their reporting of cash flow information. This is expected because the preparation of cash flow statement does not allow for many choices, differences of interpretation or different accounting treatments. To make cash flow statement more informative and useful for users the commercial banks should disclose the following additional voluntary information:

- Cash and Cash equivalent not available for use

- Undrawn borrowing facilities
- Cash flow by segment
- Additional cash flow required to maintain operating capacity
- Cash flow per share
- Clarification of items consisting of cash flows from operating, investing and financing activities in the notes of the financial statements.

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Effects of Forensic Accounting Skills on Detecting White-collar Crimes in Bangladesh

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White-collar crimes have been predominant in almost every sector of the country at present due to their distinct traits including getting away with crimes and remaining unidentified. Such crimes are often found to be committed by people of high stature and vary from conventional crimes in a way that offenders mostly breach a fundamental element of trust by practicing illegal and unethical businesses driven by financial gains. The social and professional position of the perpetrator provides them with the opportunity to commit such corruption. Exponential growth in information technologies, loopholes in the legal system and insufficiency of reporting and accountability are some of the grounds which have paved the way for a significant upsurge in corporate frauds and white-collar crimes in recent years. White-collar crimes being extremely rampant in the current corporate scenario can be fruitfully discovered and prevented if forensic accounting is widely developed and practiced as a fraud detection tool for minimizing economic losses in Bangladesh. This study was conducted with the purpose to examine the effectiveness of forensic accounting as a fraud detection tool for white-collar crimes and investigate the associated effects of different sets of forensic accounting skills and abilities on fraud detection at present in the context of Bangladesh.

Context of White-collar Crimes and Forensic Accounting

The outbreak of the economic crisis, which was largely prompted by corporate malfeasance and fraudulent financial practices, eroded the confidence of the investors in financial reporting and auditing services, necessitating a shift from traditional accounting practices, which seemed to only fulfil the requirements of compliance. The prerequisite of a different field of accounting, combining the skills of financial accounting and auditing with expertise in legal matters, was felt to detect financial frauds in the context of the increasing number of white-collar crimes perpetrated by conspiracies involving complex accounting methods, earnings manipulation, creative accounting and explicit falsification of books of accounts. This new branch of accounting came to be known as 'forensic accounting'.

Forensic accounting is modern and rapidly emerging field of accounting which encompasses the integration of business and financial knowledge, auditing and information technology skills, and proficiency in legal procedures. Contrarily, white-collar crimes characterized by financial frauds have been extremely prevalent in the county and worldwide because of the failure of concerned regulatory authorities in convicting lawbreakers. Conventional

Effects of Forensic Accounting Skills on Detecting White-collar Crimes in Bangladesh



theories, tools and techniques proved to be incapable of detecting such frauds due to the lack of proper skills and expertise required in many disciplines which needed to be incorporated into a particular different area of study which led to the emergence of forensic accounting.

The increase in demand for investigative and forensic accounting has stemmed from the difficulties of a modern form of transactions by maintaining a large volume of complex data which gives rise to various complications in monitoring the dealings using manual auditing procedures. Recent financial frauds distressing the corporate world with well-known cases of Enron and WorldCom scandals have therefore propelled the need for forensic accounting to

the forefront. In this view forensic accounting has surfaced to be one of the most productive tools at present for executing effective investigations and prosecutions of those involved in white-collar crimes. As forensic accountants make preemptive efforts by watching out for errors, operational inconsistencies and unusual transactions, this can be attributed to the fact that forensic accounting is not just appropriate as a detective tool but can be used to converse the outflows instigating corporate failures before crystallizing into fraud (Centre for Forensic Studies, 2010).

A structured questionnaire, considering the knowledge, technical skills, investigative abilities and interpersonal skills of forensic accountants as

independent variables to derive the dependent variable of detection of white-collar crimes, was formulated based on which primary data has been collected from a purposive sample of 100 respondents informed in related fields and professions and analyzed through multiple linear regression. The focus of this research has been on issues concerning the current state of employing forensic accounting in Bangladesh and how useful it has been substantiated to be as a fraud detection tool.

Problem with White-collar Crimes and Scope of Forensic Accounting in Bangladesh

White-collar crimes are expensive and an estimation of \$3.5 trillion worldwide was mentioned by A.O. Enofe (2015) which were mislaid because of falsified financial statements, asset misappropriation and corruption. Basic Bank and Sonali Bank along with Hallmark Group scams are among the largest frauds the banking industry has seen in the last decade with a total amount of Tk 9,000 crores being stolen from these two banks. Crescent Group loan scam of Tk 3,443 crores from Janata Bank, Bismillah Group loan scam of Tk 1,200 crores from four banks, Farmers Bank (Now Padma bank) funds misappropriation and embezzlements scam are some of the most well-known banking sector financial scandals in Bangladesh (Karim, 2020). The involvement of three

top auditing firms in addition to verifying the admissibility of scam-ridden Crescent for cash incentive even after having Tk 408 crore pending export bills and covering forgeries in audit reports was another paradoxical discontentment contradicting the principal responsibilities of the auditing profession. Bangladesh Bank robbery amounting to nearly US\$1 billion likewise regrettably made its place in the biggest cyber hacking in history which remains unresolved for more than five years. Embezzlement of Tk 3,500 crores from different financial agencies by PK Halder (Tribune Report, 2021) has garnered a lot of media attention which directs the importance of raising awareness towards such crimes and working for their timely detection and prevention to mitigate economic losses of the country.

The low literacy rate in the country not being able to understand corporate fraud in time and the greed of a few people as major causes behind such crimes being committed in Bangladesh. In a seminar named "Forensic Accounting - A Dynamic Tool for Combating Corruption in Bangladesh" organized by ICAB, Professor Muzaffar Ahmad stated that the impairments caused by the corrupted forces of the country can be dismantled at least partially, if not completely, with the aid and assistance of forensic accountants. Md. Jahirul Islam (2011) in a study revealed the applicability of

forensic accounting as a fraud detection tool against fighting corruption in Bangladesh. However, forensic accounting has been rarely practiced in Bangladesh in the past few years except for some multinational organizations although measured as an applicable fraud identification tool and termed as adequate for fighting against corporate corruption in Bangladesh.

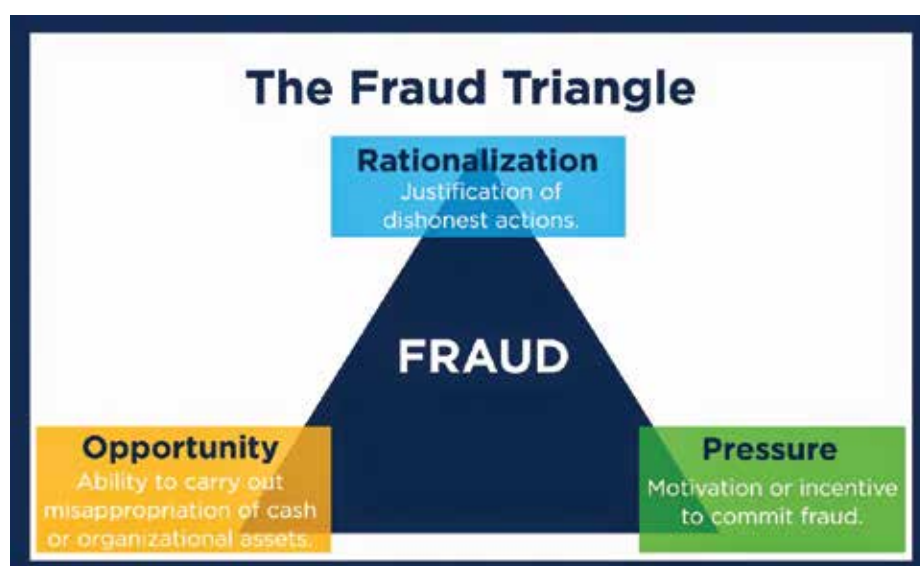
Without relentless participation of forensic experts and improvements in the area of forensic accounting, white-collar crime cases will be difficult to specify, leading to greater financial fraud occurrence, ultimately failing to meet the expectations of the internal and external stakeholders. Application of proper skills, knowledge and experience by forensic accountants may subsequently

conclude in well-timed detection of white-collar crimes which can help in culminating probable economic losses along with the re-establishment of a productive financial environment in the country. Hence this study sought to determine the impacts of forensic accounting skills on the identification of white-collar crimes in the context of Bangladesh.

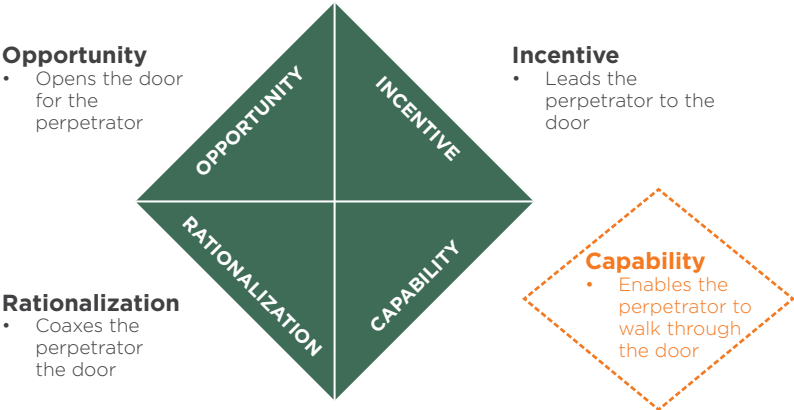
Fraud Theories

The fraud triangle hypothesis is the pioneer of concepts in accounting literature that explicate why people commit fraud. Perceived opportunity, rationalization, and perceived pressures are all interconnected, and each has an impact on another.

The fraud triangle was followed by the fraud diamond model



Effects of Forensic Accounting Skills on Detecting White-collar Crimes in Bangladesh



developed by Wolfe and Hermanson in 2004. Hermanson (2004) discussed that while perceived pressure may exist alongside an opportunity and a rationalization, fraud is improbable to occur unless the fourth factor, capability, is also extant. The supporting elements of capability include position, intellect, ego, manipulation, deception, and stress.

Pivotal Role of Accountants

Forensic accountants are qualified to look beyond the numbers and deal with the business realities of cases according to Bhasin (2007). Prominent features of this profession include analysis, description, summarization, and representation of complex financial and business problems. Forensic accountants however need to be skillful in different arrays of knowledge and experience for the successful determination of such crimes. Forgers execute and conceal fraud in a way which can be extremely difficult to detect. In

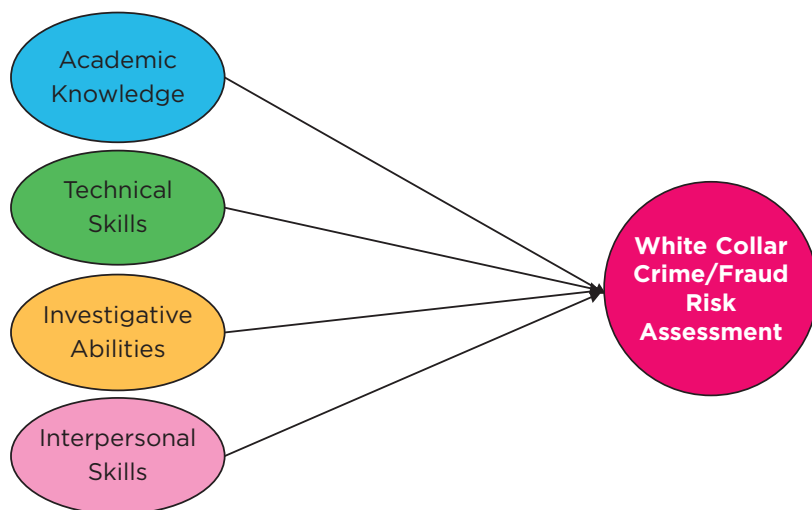
addition, the perpetrator may alter original facts and figures to ensure concealment and layer the gains to fulfil his needs. The irregularities can go unnoticed by forensic accountants if they lack a good balance of knowledge, experience, and interpersonal skills with a high level of professionalism to conduct forensic accounting assessments and rigorous investigations to obtain evidence. Since forensic accountants have specialized training and experience in financial events and investigations accompanied by the ability to discover appropriate evidence crucial for legal decision-making, forensic accountants presently have developed to become the most reliable experts in dealing with white-collar crimes.

Moreover, prosecutors often struggle to demonstrate and provide sufficient evidence to convict criminals in prison without the coordination of forensic accounting experts. Forensic accountants in this case can assist by producing

appropriate accounting or financial records along with other evidentiary details for legal purposes. Hence active participation of forensic accountants in all stages of risk assessment and audit plan creation, rather than simply involving them as consultants are required. This would result in the early detection of fraud and, as a result, the elimination of crimes, mitigating any further losses. Therefore, in wake of the foregoing economic and financial downturn, forensic accountants are anticipated to make impactful contributions to the corporate environment by promoting a conducive working atmosphere which stimulates the investigation of suspicious incidents, and effective collaboration to perceive the indications of white-collar crimes for timely detection and prevention.

Summary of Findings

The outcome of this research is consistent with previous studies that forensic experts have to obtain competency and proficiency in various disciplines of knowledge, abilities and expertise accompanied by individual traits to succeed in this new aspect of forensic accounting and efficaciously contribute to the detection of white-collar crimes. The regression analysis has demonstrated that the detection of white-collar crimes is significantly impacted by the level of knowledge, technical skills, investigative abilities and interpersonal skills of forensic



accountants and the mentioned variables need to be developed proficiently by forensic experts for effective detection of corporate frauds. Depending on the variables listed, we have constructed a conceptual framework underneath which will eventually help in examining the effects of forensic accounting skills on detecting white-collar crimes.

Findings suggest that the knowledge of forensic accountants has a significant impact on the discovery of white-collar crimes and that knowledge cannot be confined to a specific subject rather forensic experts are required to know a combination of other relevant subjects including accounting and finance to detect financial irregularities, audit to scrutinize relevant information for assessing any contingent fraud, information and technology to evaluate electronic information and

perform analysis with the help of software, fraud schemes to understand the type and extent of crime involved and law to recognize a breach of laws and collect appropriate evidence for any organized fraud.

Results exhibit a significant effect of technical skills of forensic accounting on the deterrence of white-collar crimes which demonstrate that forensic accountants in addition should be efficient in technical skills including analyzing to decode relevant information using logical reasoning, and critical thinking to visualize different circumstances and possibilities of any suspicious transaction or contract, effective problem solving to proficiently interpret the findings and draw conclusions, comprehension of internal control systems for better understanding of the functions operated by an organization and proper assessment of risks

to ascertain the possibilities of crime.

A significant impact of the investigative abilities of forensic accountants on the identification of white-collar crimes is likewise displayed where the forensic accountants are expected to illustrate professional skepticism for remaining observant towards probable crime, abilities to collect and verify related information for gathering adequate evidence required for the examination, background checking for being aware of the operations, financial position and reputation of the client, interviewing skills for obtaining appropriate evidence and verify statements of interviewees, negotiation skills for extracting the required information and evidence and capabilities to analyze the collected evidence for assessing whether a crime has been committed.

Detection of white-collar crimes in conclusion is significantly affected by the interpersonal skills of forensic accountants involving the psychological capacity to understand the impulses behind the crime being committed, attention to detail for noticing the anomalies which can specify a larger form of crime, the practice of ethical behavior before scrutinizing and preventing frauds, communication skills for conducting the investigation and disseminating the findings and confidence on their instincts and assessments.

Effects of Forensic Accounting Skills on Detecting White-collar Crimes in Bangladesh



Conclusion

This field of accounting is relatively new and infrequently practiced in Bangladesh though the number of white-collar crimes in the country is found to be increasing at an alarming rate. Moreover, the effectiveness of the practice of forensic accounting for the detection and prevention of financial corporate frauds is reliant on the expertness of the level of skills, knowledge and experience held by such professionals which the country appears to be lacking in the current scenario. Nonetheless, the relevance and adequacy of forensic accounting for the identification and prevention of white-collar crimes and corruption in Bangladesh have been substantiated. Forensic

accounting hence should be increasingly practiced as a fraud detection tool for white-collar crimes along with raising awareness to increase the familiarity of corporates regarding forensic accounting and white-collar crime detection in Bangladesh.

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Impacts of Liquidity on Profitability

Case Study of Listed Pharmaceutical Companies of Bangladesh

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Abstract

This article studies trade-offs between a corporation's liquidity and profitability. We sequentially test for a linear relationship using several traditional profitability and liquidity measures such as return on asset, return on equity, return on capital employed, current ratio, quick ratio, and liquid ratio. We found no evidence of a statistically significant impact of liquidity on profitability in the Bangladeshi pharmaceuticals sector.

Keywords

Liquidity, Profitability, Relationship, Pharmaceuticals, Bangladesh

Introduction

Liquidity management is essential for any organization since a corporation cannot meet its near-future obligation and manage current operations without maintaining adequate liquidity. Liquidity is a measure of a corporation's availability of cash and cash-equivalent assets. Whereas profitability measures the degree to which a corporation generates income. There exists an inverse relationship between liquidity and profitability. Liquidity and profitability are directly related to working capital. A corporation is considered more liquid when it maintains a high level of working capital and vice versa. A corporation that maintains a high liquidity level is

considered less risky. Highly liquid corporations yield lower profitability because their funds are stuck in operation, and these funds cannot be used for business expansion. On the contrary, if a corporation has insufficient liquidity, it will not be able to meet its near-term obligations. There is a trade-off between liquidity and profitability; gaining more of one translates to giving up some of the other. Liquidity ratios are used to manage liquidity in any corporation in the form of current, quick, and cash ratios. Liquidity ratios work with cash and near-cash assets as current assets on one side of the balance sheet and immediate payment obligations as current liabilities on the other side. Typically, current assets include cash, cash equivalent, short-term investments, receivables, and inventories. However, current liabilities include short-term loans, the current portion of long-term loans, and payables. There has not been enough comprehensive research on the effect of liquidity on profitability in the context of Bangladeshi-listed manufacturing companies. This literature aims to investigate the statistical relationship between liquidity and profitability.

Literature Review

Although there has been much research on the effect of liquidity on profitability, the results are mixed. Some research provides a significant inverse relationship between

Impacts of Liquidity on Profitability

Case Study of Listed Pharmaceutical Companies of Bangladesh



liquidity and profitability, which matches with the principal concept of the trade-off between liquidity and profitability. Other study provides no significant relationship between liquidity on profitability. Liquidity and profitability have been extensively discussed and analyzed in the literature. While the immediate survival of a business depends on its liquidity, its long-term survival and growth are dependent on profitability.

Research conducted by Lairodi et al. (1999) revealed that the cash conversion cycle (CCC), current ratio (CR), and quick ratio (QR) have a negative relationship with the

profitability ratios such as net profit ratio and return on assets ratio and return on equity ratio of the companies listed in the London Stock Exchange from the period of 1993 to 1997.

Niresh (2012) revealed a negative correlation exists between the return on capital employed and all the liquidity variables, measured by the current ratio, quick ratio, and liquid ratio. A positive correlation was found between quick ratio and net profit, current ratio and return on equity (ROE), and quick ratio and return on equity. But the correlation values were found to be statistically insignificant between all the independent and dependent variables used in

the study. There is no evidence of a statistically significant relationship between liquidity and profitability among the listed manufacturing firms in Sri Lanka.

Saleem & Rahman (2011) found there is a significant impact of liquidity ratio on return on asset (ROA) while no significant impact on return on equity (ROE). The results indicate that ROE is not significantly affected by the current ratio, quick ratio, and liquid ratio, while ROI is greatly affected by current ratios, quick ratios, and liquid ratios. The study's main results demonstrate that each ratio significantly affects the financial positions of a corporation with differing amounts along with the liquidity ratios in the first place.

According to Eljelly (2004), effective liquidity management is related to planning and controlling current assets and current liabilities in an optimum approach to eliminate the risk of non-payment of dues for short-term obligations and to avoid excessive investment in these assets. Using correlation and regression analysis, the connection between profitability and liquidity was examined by the current ratio and cash conversion cycle on a sample of joint stock companies in Saudi Arabia. Eljelly pointed out that the cash conversion cycle is the most effective device to measure liquidity compared to the current ratio, which affects profitability.



According to Ware (2015), liquidity measured in terms of the Corporation's Cash Conversion Cycle, Average Collection Period, and Average Payment Period has an insignificant statistical impact on profitability. A conclusion was drawn that managers can increase profitability by implementing a good credit policy, a short cash conversion cycle, and an increase in current ratios.

Research conducted by Wolski & Bolek (2012) reveals that Polish market investors consider profitability more critical than liquidity in valuing companies on the Warsaw Stock Exchange. In investors' eyes, companies should be profitable and liquid on the level of cash to meet the opportunities on the market to enhance their return.

Another study was conducted by Nassirzadeh & Rostami

(2010) tried to determine the statistical relationship between Liquidity Indices (traditional and modern) and the profitability of companies listed on Tehran Stock Exchange. The research concludes that there is a correlation between traditional and contemporary liquidity indices, but this correlation is inadequate, suggesting that the information content of these ratios is different.

Liarodi and Lazaridis (2000) found the relationship between liquidity and leverage ratios and profitability for 82 corporations in the food sector of the Greece Stock Exchange in 1997. They found a positive and statistically significant relationship between cash conversion cycle and asset return.

In 2014, a study was conducted by Akter and Mahmud to identify the statistical relationship between liquidity

and profitability of the Bangladeshi banking sector. They studied 12 banks from 4 different sectors i.e., government, Islamic, multinational, and private commercial banks, from 2006 to 2011. They found no significant relationship between liquidity and profitability in the banking sector.

Ajanthan (2013) found a statistically significant relationship between liquidity and profitability by studying eight listed trading companies in Sri Lanka from 2008 to 2012. He concluded that the current ratio had a statistically significant correlation with return on asset and return on equity and the quick ratio was only significant with ROA. In contrast, the liquid ratio was insignificant with both return on asset and return on equity.

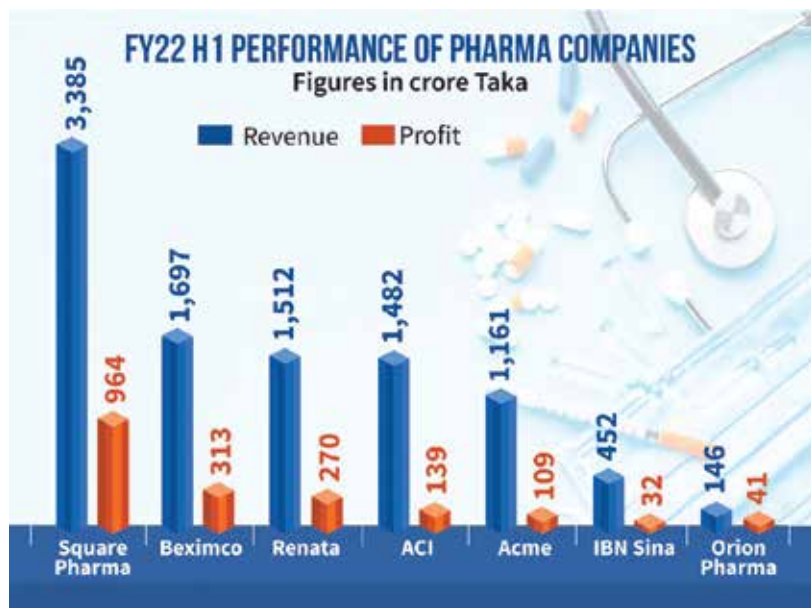
Vieira (2010) studied the relationship between the liquidity and profitability of airline companies from 2005 to 2008 and found a positive relationship.

Research Methodology

To test the impact of liquidity on the profitability in the context of Bangladeshi pharmaceutical corporations, we collected the data of 22 pharmaceutical companies listed in DSE over the period 2017-2021. So, the data set is balanced panel data of 22 corporations, and their time series sequence is for five years (2017-2021). The total number of observations is 110.

Impacts of Liquidity on Profitability

Case Study of Listed Pharmaceutical Companies of Bangladesh



The financial data of these corporations were manually collected from the annual reports and the DSE website.

The research is being conducted to evaluate the effect of liquidity ratios on profitability by examining the selected pharmaceutical corporations by applying the fixed effect OLS regression model.

Variable Selection:

Dependent Variables

- Return on assets (ROA) = Net profit after tax/ Total assets
- Return on equity (ROE) = Net profit after tax/shareholder's equity
- Return on Capital Employed

(ROCE) = Operating Profit / (Total Asset - Current Liabilities)

Independent Variables

- Current Ratio (CR)= Current assets/ current liabilities
- Quick ratio (QR)= (Current assets - Inventories) / Current liabilities
- Liquid ratio (LR)= (Cash and Cash Equivalent Assets) / current liabilities

Research Model: This research investigation is based on the following research model:

- Pairwise correlation between profitability measures (ROE, ROA, ROCE) and liquidity ratios (CA, QR, LR).

- $ROA_{i,t} = a + b_1(CR_{i,t}) + b_2(QR_{i,t}) + b_3(LR_{i,t}) + e$
- $ROE_{i,t} = a + b_1(CR_{i,t}) + b_2(QR_{i,t}) + b_3(LR_{i,t}) + e$
- $ROIC_{i,t} = a + b_1(CR_{i,t}) + b_2(QR_{i,t}) + b_3(LR_{i,t}) + e$

Hypothesis

H_0 : Liquidity ratios have no impact on ROA.

H_1 : Liquidity ratios have an impact on ROA.

H_0 : Liquidity ratios have no impact on ROE.

H_1 : Liquidity ratios have an impact on ROE.

H_0 : Liquidity ratios have no impact on ROIC.

H_1 : Liquidity ratios have an impact on ROIC.

Data Analyses and Results

Table 1: Correlation between liquidity ratios and profitability ratios.

		Correlations					
		ROE	ROA	ROCE	CR	QR	LR
ROE	Pearson Correlation	1	.848**	.682**	.110	.071	.143
	Sig. (2-tailed)		.000	.000	.254	.459	.137
	N	110	110	110	110	110	110
ROA	Pearson Correlation	.848**	1	.594**	.254**	.262**	.265**
	Sig. (2-tailed)	.000		.000	.007	.006	.005
	N	110	110	110	110	110	110
ROCE	Pearson Correlation	.682**	.594**	1	-.182	-.155	.002
	Sig. (2-tailed)	.000	.000		.058	.105	.986
	N	110	110	110	110	110	110
CR	Pearson Correlation	.110	.254**	-.182	1	.918**	.445**
	Sig. (2-tailed)	.254	.007	.058		.000	.000
	N	110	110	110	110	110	110
QR	Pearson Correlation	.071	.262**	-.155	.918**	1	.481**
	Sig. (2-tailed)	.459	.006	.105	.000		.000
	N	110	110	110	110	110	110
LR	Pearson Correlation	.143	.265**	.002	.445**	.481**	1
	Sig. (2-tailed)	.137	.005	.986	.000	.000	
	N	110	110	110	110	110	110

** . Correlation is significant at the 0.01 level (2-tailed).

It is observed that the correlation values are to be both positive and negative between the variables. The correlation coefficients are found to be negative between ROCE with liquidity as measured by the current ratio and quick ratio with R values of -0.182 and -0.155, respectively. The negative correlation between ROCE with current ratio and quick ratio are not statistically significant since their P-value is greater than 0.05. Only ROA has a statistically significant positive correlation with the current and quick ratio.

Impacts of Liquidity on Profitability

Case Study of Listed Pharmaceutical Companies of Bangladesh

Regression Analysis

Model (1) : $ROA_{i,t} = a + b_1(CR_{i,t}) + b_2(QR_{i,t}) + b_3(LR_{i,t}) + e$

Dependent Variable: ROA

Method: Panel Least Squares

Date: 10/29/22 Time: 14:39

Sample: 2017 2021

Periods included: 5

Cross-sections included: 22

Total panel (balanced) observations: 110

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CR	-7.35E-05	0.015328	-0.004797	0.9962
QR	-0.005731	0.020447	-0.280269	0.7800
LR	0.021963	0.012974	1.692821	0.0942
C	0.063860	0.009622	6.636923	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.772759	Mean dependent var	0.059733
Adjusted R-squared	0.708597	S.D. dependent var	0.050851
S.E. of regression	0.027451	Akaike info criterion	-4.156148
Sum squared resid	0.064050	Schwarz criterion	-3.542402
Log likelihood	253.5881	Hannan-Quinn criter.	-3.907209
F-statistic	12.04384	Durbin-Watson stat	1.340663
Prob(F-statistic)	0.000000		

The Above regression analysis result suggests that ($p > 0.05$) there is no significant statistical relationship between ROA and liquidity ratios. The P-values of the regression coefficients are all greater than 0.05. So we cannot reject the Null Hypothesis that Liquidity ratios have no impact on ROA.

Model (2) : $ROE_{i,t} = a + b_1(CR_{i,t}) + b_2(QR_{i,t}) + b_3(LR_{i,t}) + e$

Dependent Variable: ROE

Method: Panel Least Squares

Date: 10/29/22 Time: 14:48

Sample: 2017 2021

Periods included: 5

Cross-sections included: 22

Total panel (balanced) observations: 110

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CR	-0.014282	0.033573	-0.425389	0.6716
QR	-0.003435	0.044785	-0.076702	0.9390
LR	0.032201	0.028417	1.133165	0.2603
C	0.126270	0.021075	5.991578	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.635359	Mean dependent var	0.097983
Adjusted R-squared	0.532402	S.D. dependent var	0.087924
S.E. of regression	0.060124	Akaike info criterion	-2.588109
Sum squared resid	0.307263	Schwarz criterion	-1.974364
Log likelihood	167.3460	Hannan-Quinn criter.	-2.339171
F-statistic	6.171082	Durbin-Watson stat	1.529326
Prob(F-statistic)	0.000000		

The Above regression analysis result suggests that ($p > 0.05$) there is no significant statistical relationship between ROE and liquidity ratios. The P-values of the regression coefficients are all greater than 0.05. So, we cannot reject the Null Hypothesis that Liquidity ratios have no impact on ROE.

Impacts of Liquidity on Profitability

Case Study of Listed Pharmaceutical Companies of Bangladesh

Model (3) : $ROCE_{i,t} = a + b_1(CR_{i,t}) + b_2(QR_{i,t}) + b_3(LR_{i,t}) + e$

Dependent Variable: ROCE

Method: Panel Least Squares

Date: 10/29/22 Time: 14:50

Sample: 2017 2021

Periods included: 5

Cross-sections included: 22

Total panel (balanced) observations: 110

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CR	-0.011761	0.033762	-0.348346	0.7284
QR	-0.005375	0.045036	-0.119348	0.9053
LR	0.032703	0.028576	1.144409	0.2557
C	0.177633	0.021193	8.381775	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.682322	Mean dependent var	0.151959
Adjusted R-squared	0.592625	S.D. dependent var	0.094728
S.E. of regression	0.060461	Akaike info criterion	-2.576920
Sum squared resid	0.310720	Schwarz criterion	-1.963174
Log likelihood	166.7306	Hannan-Quinn criter.	-2.327981
F-statistic	7.606956	Durbin-Watson stat	1.264756
Prob(F-statistic)	0.000000		

The Above regression analysis result suggests that ($p > 0.05$) there is no significant statistical relationship between ROEC and liquidity ratios. The P-values of the regression coefficients are all greater than 0.05. So, we cannot reject the Null Hypothesis that Liquidity ratios have no impact on ROEC.

Conclusion

This research attempted to explore the trade-off between liquidity and profitability for the pharmaceuticals sector of Bangladesh based on financial data of 22 listed firms in this sector for 5 years (2017-2021). Correlation and fixed effect OLS regression models were used for this purpose. The correlation analysis has identified that ROA has a statistically significant positive correlation with the current and quick ratios. No statistically significant correlation exists between ROE and liquidity ratios, and the same between ROCE and liquidity ratios. Fixed effect OLS regression models found that liquidity ratios do not significantly impact profitability. So liquidity ratios have no impact on profitability in the Bangladeshi pharmaceuticals sector. Although this study found no significant association between liquidity and profitability, the financial managers of these corporations should not neglect the importance of maintaining adequate liquidity for meeting short-term obligations.

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Overview of Insurance Industry in Bangladesh

Abdul Hamid FCA



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Chief Executive Officer (CEO)
Prime Insurance Company Ltd

Introduction

Father of the Nation Bangabandhu Sheikh Mujibur Rahman soon after the liberation of Bangladesh nationalized insurance industry vide the Bangladesh Insurance (Nationalization) Order 1972. Insurance business in the country were placed in the public sector under five corporations. These were: the Jatiya Bima Corporation, Tista Bima Corporation, Karnafuli Bima Corporation, Rupsa Jiban Bima Corporation and Surma Jiban Bima Corporation. The Jatiya Bima Corporation was an apex corporation only to supervise and control the activities of the other insurance corporations.

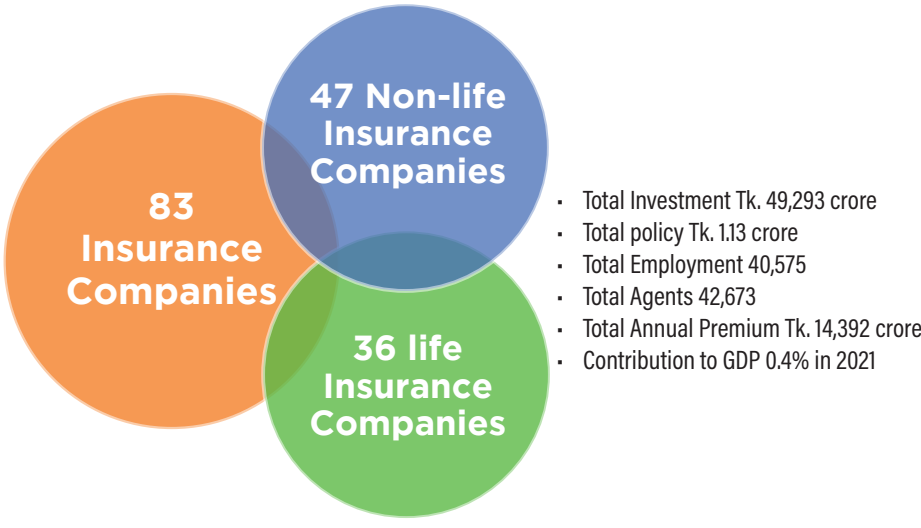
On 14 May 1973, a restructuring was made under the Insurance Corporations Act 1973. Following the Act, in place of five corporations the government formed two: the

SADHARAN BIMA CORPORATION for general insurance business and JIBAN BIMA CORPORATION for life insurance business.

After 1973, general insurance business became the sole responsibility of the Sadharan Bima Corporation. Life insurance business was carried out by the Jiban Bima Corporation.

In 1984, the Government amended the Insurance Act 1938 and the Insurance Corporation Act 1973 to enable the private insurance companies to do insurance business.

The control over insurance companies including their functions relating to investments, taxation, and reporting are presently regulated by the Finance Act, the Insurance Act 2010 and Insurance Development and Regulatory Authority Act 2010.



Insurance Industry in Bangladesh

**Insurance Development & Regulatory
Authority (under the Ministry of
Finance)**

**State owned
Non-life
Insurance
Company-(SBC)**

**State owned
Life Insurance
Company-
(JBC)**

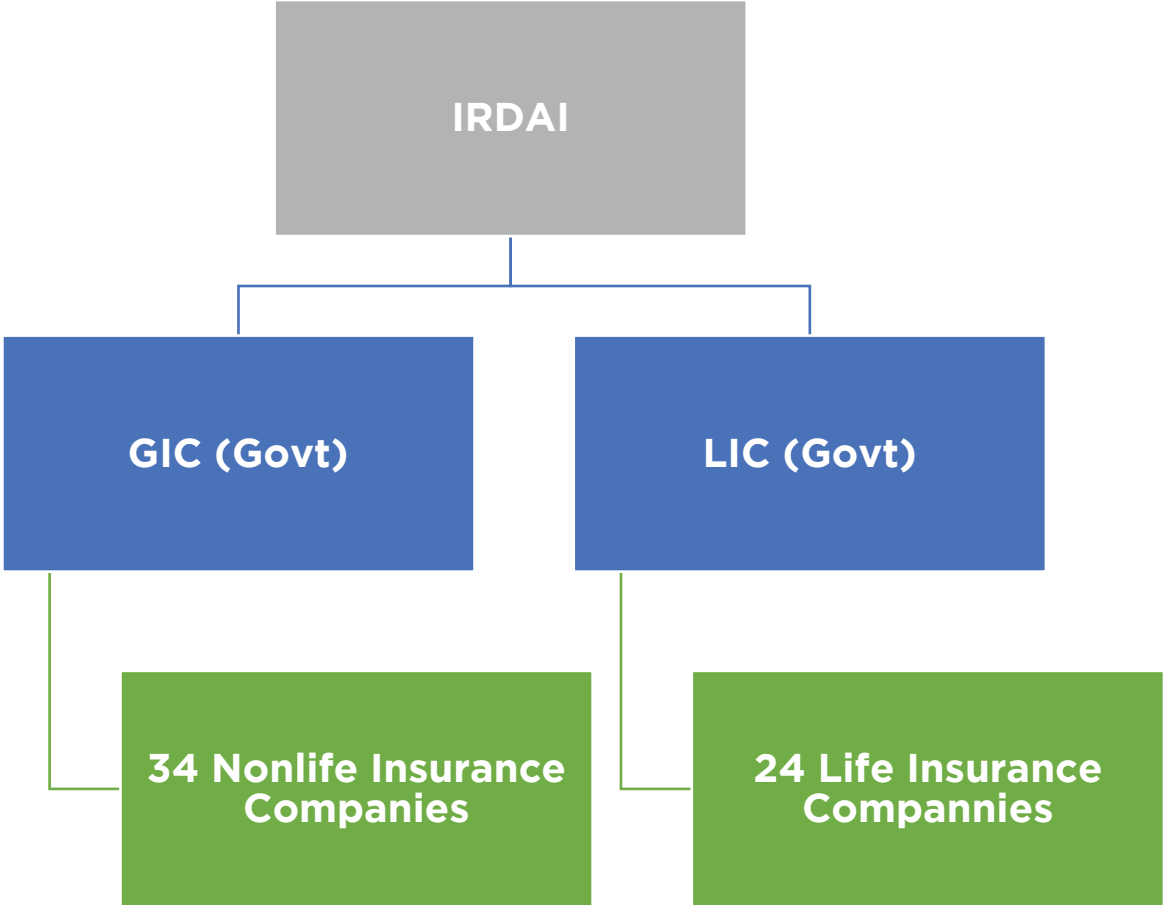
**46 Non-life
Insurance
companies in
Private Sector**

**35 Life
insurance
Companies in
Private Sector**

**State owned only
Non-life Insurance &
Re-Insurance
Company in
Bangladesh**

Total GDP Size in Bangladesh 416.26 billion US Dollar
Total Population # 16.83 crore

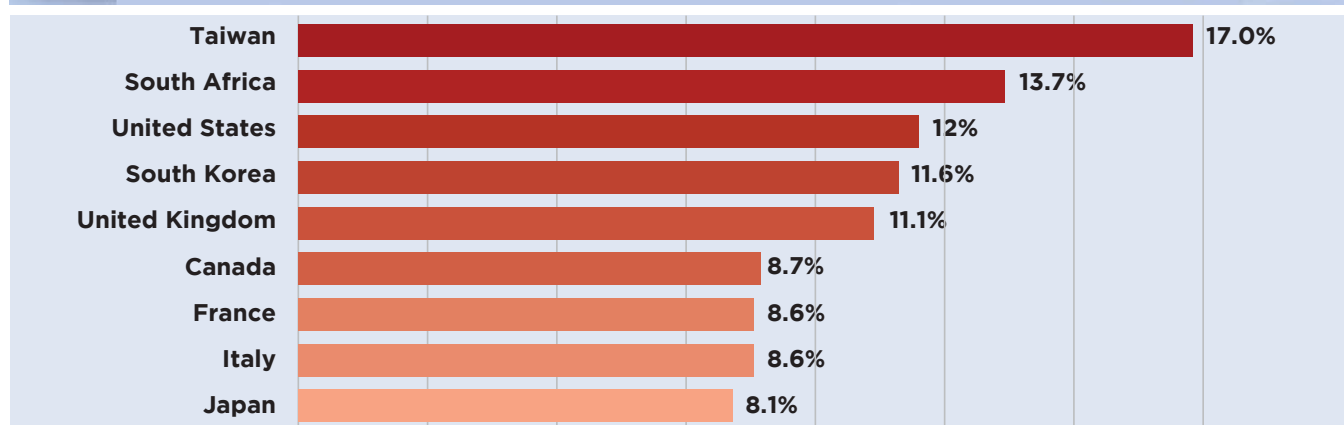
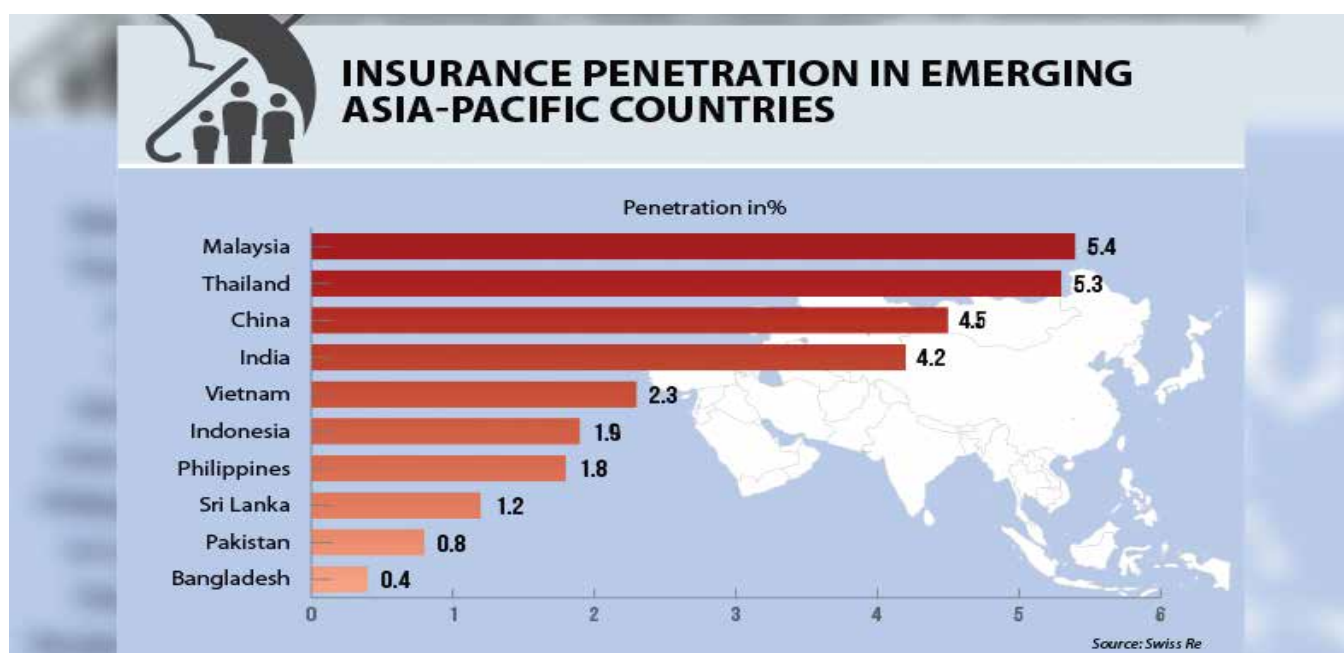
Insurance Industry of India



GIC is a re-insurance company & other 10 private re-insurance company including foreign Reinsurance company's branches are operating as re-insurer in India currently.

Total GDP Size in India 3.535 trillion US Dollar
Total Population # 141, 71, 73,173 crore

Insurance Penetration: Bangladesh at rock bottom in Asia-Pacific regions



At a time when major economic indicators are doing better and economy is growing steadily, Bangladesh's insurance penetration meaning premiums as a share of GDP is the lowest at 0.40 per cent among the emerging Asia-Pacific nations.

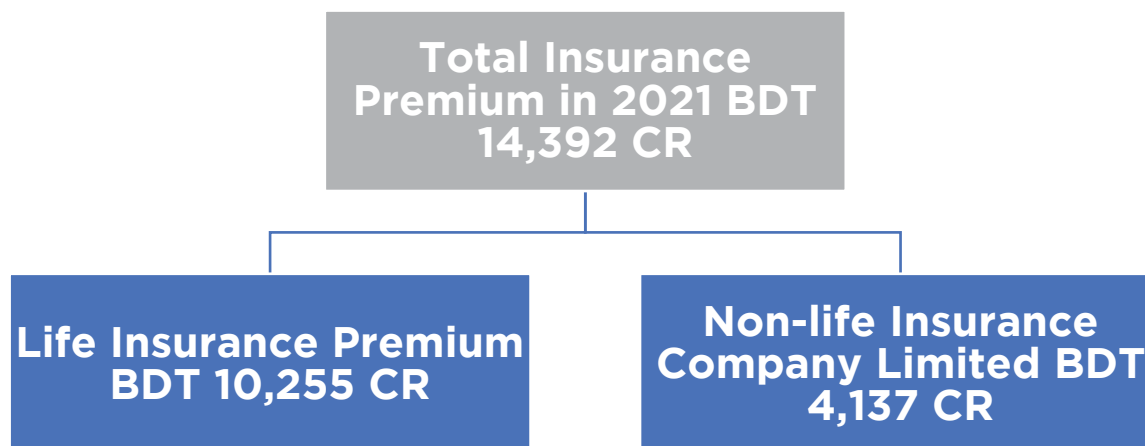
How to boost Insurance business: Business Development in 2022

Emerging markets are poised to become global growth drivers, skyrocketing availability of data, advances in digital & mobile technology & rampant progress in analytics & artificial intelligence all mark at the end of 2021 for the insurance industry, according to Aon's 2022 Asia Market Review: Managing Risk in Connected Asia.

5 Strategies to Grow Your Insurance Business in 2022

Key takeaways

- Shifting into digital transformation and embracing a more modern approach to conduct business, insurers can streamline and reduce operating and maintenance costs.
- Spearheading green initiatives that proactively tackle climate change within the insurance market can be a key factor of success for insurers.
- The industry has seen a rise of customer-centric services that have transformed how consumers relate to their insurers.
- With increasing costs and risks to organizations, any insurance business that has adopted or is planning to adopt digital transformation cannot afford to ignore cyber security
- Cloud computing in the insurance industry is the glue that brings together all the other strategies covered so far.



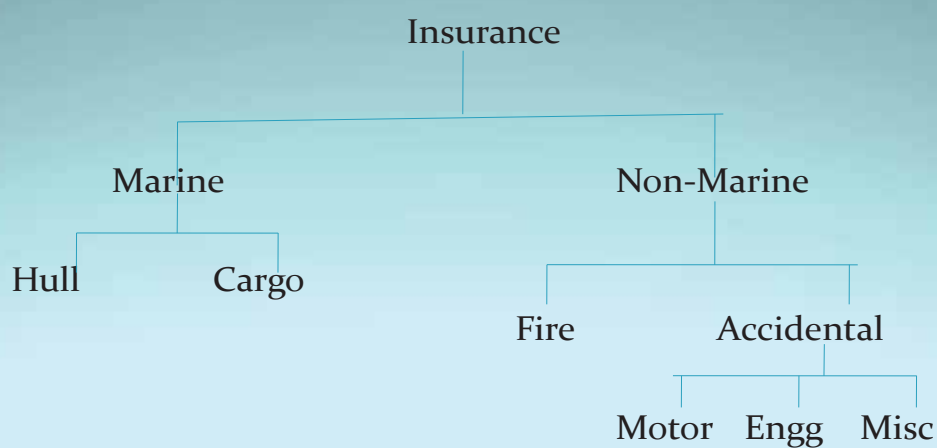
Current Regulatory Framework

Insurance and Other Regulations

Bangladesh Insurance Sector is currently governed by the following regulatory framework:

- The **Insurance Act, 1938** and the corresponding **Insurance Rules, 1958**
- The **Insurance Act, 2010** (Corresponding Insurance Rules or Regulations are being prepared & promulgated simultaneously)
- The **Financial Reporting Act, 2015**
- The **Companies Act, 1994**
- The **Securities and Exchange Rules, 1987**
- **IFRS** (International Financial Reporting Standards)

Types of Insurance



Principles of Insurance



Fire Insurance



What is meaning of Fire?

To constitute a fire within the meaning of a fire insurance policy, 3 requirements must be complied with-



- There must be actual ignition
- The fire must, so far as concerns the insured, be accidental or fortuitous in origin
- There must be something on fire.

Fire Insurance



Standard Fire Policy Covers:

1. Fire
2. Lightning
3. Explosion of boilers used for domestic purposes only

Fire Insurance



Additional Special Perils

The standard fire policy excludes some types of losses most of this can be covered by the payment of additional premium. The perils for which additional covers can be arranged are:

- Riot and strike damage
- Explosion damage
- Malicious damage
- Earthquake
- Spontaneous combustion
- Tempest, storm, hail, cyclone and flood
- Electrical Clause "B"
- Bursting or over flowing of tanks/ pipes etc
- Subsidence and land slide
- Articles dropping from air craft
- Consequential loss or business interruption

Fire Insurance

Importance of Proposal Form

- The proposal for fire insurance must be a written one. It is most vital document before and during the contract. Because it is the only document signed by the proposer and includes all necessary information regarding the risk.
- On receipt of the proposal form the insurer decides whether to accept or to seek further information on it.
- On the other hand if any dispute arises during the contract proposal for plays the key rule to resolve it.

Fire Insurance

Underwriting Features – Property

- Location
- Occupation
- Premises – Construction
- Heating/Electric
- Condition
- Maintenance programmes
- Contents - Types / Values
- Fire Protection
- Security
- Housekeeping

Fire Insurance

Standard Fire Policy Components

- Preamble or introduction
- Definitions
- Cover - Operative Clauses
- Extensions
- Exclusions - within cover sections and/or overall
- Conditions including claims conditions
- Schedule
- Warranties
- Endorsements

Fire Insurance



Condition for special Rate

- insurer should earn minimum TK. 75,00,000/ for the last 3 years from the insured as per circular of CRC.

Conditions for Package Rate

- Insured Sum-Insured should be minimum TK. 20,00,00,000/ to qualify for the special package rate as per circular of CRC

Under all following terms & conditions of all policy

- Minimum sum insured required to qualify for package rate is TK 20 crore.
- Minimum additional perils to be covered are 5 (five), in addition to the main fire peril.
- No 10% tariff discount presently available is allowed for package tare.
- A discount of 40% is allowed on the total cumulative rate of the perils insured.

Fire Insurance



➤ Industrial All Risks:

Required Information

➤ Minimum Sum Insured BDT 50 Crore in single location

Deductible :

- 5% of the claim amount subject to minimum of Tk. 5 lac and maximum of Tk.50 lac for all section except textile sector.
- For Textile 10% of loss amount but minimum Tk.5 lac and 10% self insurance warranty will be applicable

Papers & documents required in respect of Fire Claim



- Claim form duly filled in, signed & sealed by the Insured & the Bank.
- Policy with endorsement
- Final survey report
- Fire brigade report
- FIR is not necessary but in case of RSD claim or any death claim FIR is essential to consider the claim .
- Final police Investigation report
- Stock Position from inception of the policy
- Photo copy of stock register for the current month (month of incident)
- Estimate from the repairers in case of any electric motor or any repairing claim, for example, any parts of machine.
- Copy of invoice for importable goods.

Types of Marine Insurance

Marine Insurance

- a) Hull Insurance
- b) Cargo Insurance
- c) Marine Liability Insurance
- d) Freight Insurance

Difference Types of Marine Insurance- Cargo Risks

- ICC 'A' (All Risks)
- ICC 'B', ICC 'C' – Restricted perils
- Institute Air Clause – Cargo
- Institute War Clause – Cargo
- Institute Strike Clause- Cargo
- Institute Transit (Rail or Road) Clause
- Non Delivery
- Theft, Pilferage & Non Delivery
- Hooks Holing, Bursting, Tearing etc
- Breakage, scratching
- Fresh Rain water damage

Marine Insurance- Cargo

- **ICC 'A'** : All risks of physical loss/damage, except those specifically excluded. Cover includes piracy and malicious damage.
- **ICC 'B'** : Fire, Explosion, Stranding, grounding, sinking, discharge of cargo at port of distress, Earth Quake , volcanic eruption, lightning, GA, Jettison, Washing Overboard, entry of lake, river, water, sling loss.
- **ICC 'C'** : As per B, however, excludes EQ, volcanic eruption, lightning, entry of lake, river water, washing overboard, sling loss.

Marine Insurance- Cargo

Exclusions

- In no case shall this insurance cover:
- General Exclusion Clause:
 - 1.1 Loss. Damage or expense attributable to willful misconduct of the Assured.
 - 1.2 Ordinary leakage, ordinary loss in weight or volume, or ordinary wear and tear of the subject matter.
 - 1.3 Loss, damage or expense caused by insufficiency or unsuitability of packing or preparation of the subject matter insured or when the subject matter is carried in open wagon/lorry/vehicle unless covered by tarpaulin.

Marine Insurance- Cargo

Required Documents for Claim Settlement

- Original Marine Policy/Certificate
- Original Bill of Lading/Air Way Bill/Truck Challan/Rail Receipt
- Original Invoice
- Original Packing List
- Claim Bill
- Copies of correspondence exchanged between the Insured and carrier or third parties in connection with the recovery of claim from them
- Original Survey report (in case of non delivery, Short Landing Certificate)
- Original Bill of Entry (Not always)
- Affidavit/Note of Protest

Conclusion

Bangladesh has made outstanding contributions in various fields of development in the last decade under the dynamic leadership of Prime-Minister Sheikh Hasina, the daughter of Bangabandhu Sheikh Mujibur Rahman .The government announced of Smart Bangladesh recently. 'Vision 2041' was adopted to accelerate the vision of developed nation. One of the goals of this ambitious initiative is to eliminate extreme poverty and graduate to upper-middle income status by 2031 and to become a developed nation by 2041.

In view of the above, Insurance industries have been adapting to the changing patterns of business trends in terms of corporate governance responding to environmental factors and impacts, digitalization, enhancing partnerships with different external partners and renovations that can ascertain sustainability in the long run. IDRA is going to introduce one of the new concepts of Bancassurance — providing banking and insurance together — a relatively new idea in the financial sector of Bangladesh. If implemented, Bancassurance will be the trigger to implement Vision 2041 by ensuring proper socioeconomic protection of the people.

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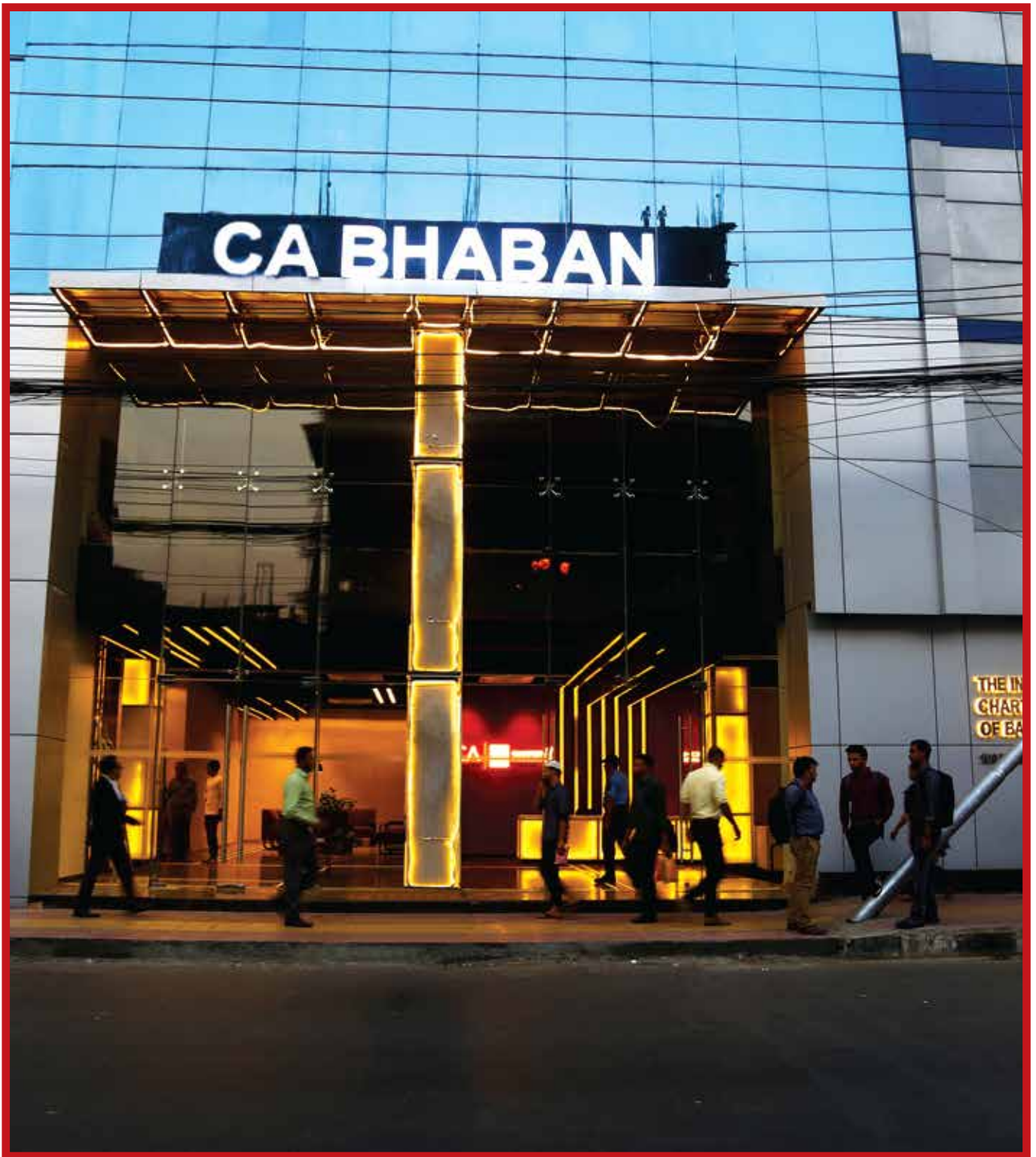
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GLOBAL RECOGNITION OF ICAB



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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 its first Memorandum of Understanding (MoU) with the Institute of Chartered Accountants in England and Wales (ICAEW) in 2009. Since then, 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 Practising 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).