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The term **financial technology** can apply to any innovation in how people transact business, from the invention of money to double-entry bookkeeping. Since the internet revolution and the mobile internet revolution, however, financial technology has grown explosively, and fintech, which originally referred to computer technology applied to the back office of banks or trading firms, now describes a broad variety of technological interventions into personal and commercial finance.

The Institute of Cost and Management Accountants of Bangladesh
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Editorial

Fintech is the new buzz word both in technology and financial sector. The word is the portmanteau of Financial Technology. It encompasses wide range of technological product developed recently in the financial arena like Mobile money, person to person (P2P) lending, mobile wallet, internet banking, crowd funding, investment advisory, Block chain, crypto currency or Bitcoin etc.

Use of technology in financial arena is, at all, not new. It went back to the double entry system, which was invented in 15th century by Luca Pacioli. Or even we can trace back to the invention of 'money' which brought change in people's behavior in trade, production, saving and investment. Gradually Fintech's area broadens to encompass all technological innovation in financial sector. Accenture recently released a report which shows that investment in Fintech around the world has increased from US$ 930 million in 2008 to more than $ 12 billion by early 2015.

Initially the term Fintech referred to technology applied to trade or consumer finance of financial institution. Automated Teller Machine (ATM) or debit card and credit card were the innovation last century which gave customer comfort of not carrying cash. Core banking software made the banking processes and record keeping automated. Banks don't need to maintain big journal books at the branches any more. It also gave convenience to transact from any branch of a bank. A customer became the customer of the bank not of a particular branch of that bank.

Bangladesh Bank implemented (Bangladesh Automated clearing House) BACH processing which functions as clearing house of cheques of all banks. Electronic Fund Transfer Network (EFTN) gave the advantage of transferring fund through internet from one bank to another.

In Bangladesh Bkash is the iconic example of Fintech company. It surpassed all the global money transfer company including M-paisa of Kenya which was leading few years back. bKash allows people to make payments and transfer money via their phones. Some 22% of Bangladeshi adults now use bKash, and more than 4.5 million transactions pass through the system every day, making it the country's most popular mobile financial service provider.

Fintech is not only started by financial institution (FI) but also by technological companies as well. Innovation and technology is disrupting the turf of financial institution which were monopoly of them. So FI are in threat. Most of the FIs have good money and have regulatory support which make them complacent. But technology firms are coming up like guerilla and attacking the turf of hitherto protected turf of FI. If FIs don't become proactive and agile it will be difficult to keep their hegemony in financial sector. We, being CMA, are somehow related in the financial arena. We also need to update ourselves in the development of Fintech. Future will be of whom, who can adopt to the latest technology.

Therefore, our current issue's theme is selected Fintech.

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BLOCKCHAIN:
The Architecture of New Financial System

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Abstract

Recently, Blockchain technology has drawn a comprehensive attention among finance professionals due to its possible disruption in exiting financial system. The main objective of this paper is to focus on the application of Blockchain in financial industry. Blockchain is considered as the most valuable innovation in finance after the invention of Double Entry System. Using Blockchain technology, individuals can conduct any financial transaction without the involvement of financial intermediaries. As the Blockchain technology ensures highest level of transparency of transactions, it may create radical change in the exiting architecture of financial system. Now the important question is: how much financial institutions are prepared or preparing to tackle the inevitable challenge Blockchain technology is going to bring?

Keywords: Blockchain, bitcoin, financial industry.

1. Introduction

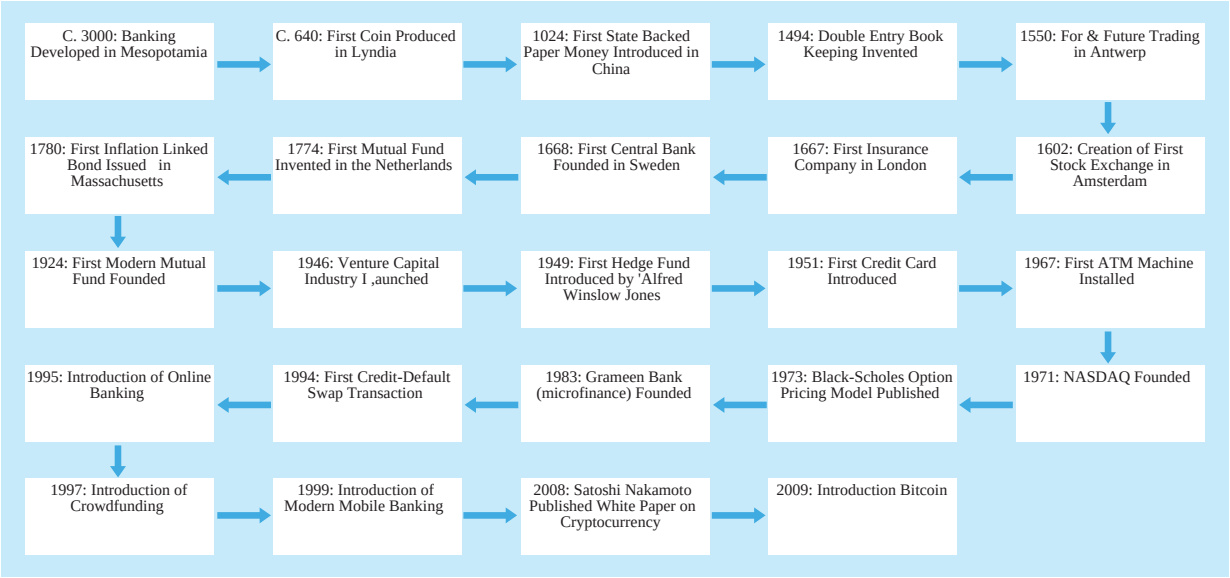
Internet has done almost everything it possibly could to improve our lives. Surprisingly it promises even more, only this time with the help of artificial intelligence, big data, and cloud computing. It promises to connect all possible things surrounding us and to establish communication line among them so that we do not need to worry about them anymore for maintenance or whatsoever. All these things, if true, could fundamentally change how we live today. Future looks great! However, though internet has been solving many of our problems in this universe, it utterly failed to surpass its major limitations such as privacy, security, and inclusion. For business and economics, all these three issues are very important. For security and privacy, we cannot rely on internet; rather we seek help from third parties (public/private institutions) who sometimes also fail to provide us necessary security. Even sometimes, they breach our privacy, intentionally or unintentionally. Trust is rare in the world of internet. And even with partial trust institutions are so costly that billions of people cannot afford their services. How to solve all these issues? This question had been a puzzle for so long.

Finally, we have a solution! Blockchain, the underlying technology of Bitcoin is here to solve the puzzle. Using programming, game theory and cryptography, Blockchain promises to provide the sought after "trust" without taking any help from third party and thus also solve the problem of security and privacy. Though Blockchain technology (Bitcoin is just one application of this technology) could touch every aspect of our lives the way internet did, this paper primarily focuses on the application of Blockchain in financial industry. We start with a brief history and nature of innovation in financial industry. Then, we delve into the mysterious world of Blockchain i.e., how it could bring radical innovation in financial industry. In concluding section, we also discuss some weakness/limitation and implementation problems of Blockchain technology.

2. Innovation in Finance

Financial industry is one of the oldest industries in the history of mankind. Since the introduction of banking in Mesopotamia in 3000 B.C., the industry has been evolving. Today's financial industry is the result of 5000 years of evolvement and innovation (Figure 1 represents a chronological demonstration of innovation in financial sector). Surprisingly, in this long period of time, we hardly saw any radical or disruptive innovation that fundamentally changed the way industry operated. As such most of these innovations were mainly incremental, changed little to the overall service the industry has been providing. And, most of these innovations were endogenous to the industry, meaning innovations came from within the industry. Until recently, we did not even see any exogenous threat that could grab the attention of industry top players. Banking industry is the last place for innovation to reach. Schumpeter's "Creative Destruction" just cannot get in there. As a result, we just saw some product or minor process innovation and that is it. However, things changed a bit when internet came into the action. Inspired by the possibilities of internet and digitalization, some brave minds from Silicon Valley came to play in this old and boring industry (e.g. Paypal). This time the top players of the industry took notice and they started to get busy in bringing innovations in the industry. They came up with innovative and exotic financial products (e.g. CDS, MBS etc.). However, the roles these products played in the global financial crisis of 2007 and 2008 have generated a vigorous debate about the true value of financial innovation and the proper regulatory response to the development of novel financial products and leaving some people even believe that financial innovation is largely useless (Gulber, 2011).

Figure 1: Financial Innovation Over Time (created from Allen & Yago (2010) & The Economist (2012)



3. Why Innovation is Scarce in Finance?

Besides the failure or ineffective result of financial innovation, there are some other reasons why we do not see radical innovation in Finance. Financial sector is the most regulated one and also highly networked. To implement any new idea, it is imperative to convince a lot of people in the network[1]. Moreover, everything here is judged by values and numbers. Before going for any investment, banks need to calculate its return. A proper valuation is required to justify any investment. But, determining the value of an innovation is not only difficult but also, sometimes, impossible[2]. Another reason is the organizational structure of banking industry. Banks have a relatively rigid hierarchical organizational structure. Ideas easily get lost or forgotten in this complex chain of command[3]. Innovation requires a culture of failure - it is a process of trial and error. Innovation often demands startup like culture which is very unlikely to be found in traditional financial industry. It also involves high inherent risk, especially since 90 percent of startups fail[4]. It is often impossible for even big players of the industry to go for this risk. Moreover, the main capital of financial industry is trust. People trust financial institution with their assets. No firm can afford to risk this trust by taking high risk in its operation and failing in the process. It is sometimes considered as religion i.e., they cannot fail. Even, politicians cannot afford any failure of this industry due to its adverse domino effect on other institutions and on overall society (Scardovi, 2016).

All these barriers of innovation within the industry have let the door open for Fintech startups from all over the world to break into the game. Digitalization movement has helped them in the way. Startups are starting to provide traditional financial services such as payments, fund transfer, insurance etc. using technology with much less efforts and resources than the traditional financial firms. All these Fintech startups/firms (e.g. Paypal, Square) have made our lives easier. However, they could not reduce our dependency on financial institutions let alone disrupting the industry. Things could go like this forever if not a person or persons did not publish a whitepaper named "Bitcoin: A Peer-to-Peer Electronic Cash System". This apparent naïve publication that introduced the idea of Blockchain and Cryptocurrency, has changed everything. This is a revolution we have been waiting for. Next section of the paper is all about this super technology called: Blockchain.

4. Blockchain: The Long Due Disruptor in Financial Industry

Transactions are the hearts of any business. When we cannot trust each other in doing transactions, we turn into institutions which act as middlemen to complete a transaction or business. Banks, insurance companies, and other financial intermediaries are the examples of these kinds of institutions. Advent of internet created some other kind of intermediaries which help to fill the trust in online transaction (e.g. Paypal). No matter where the transaction is done, people always turn to these intermediaries in search of trust. As a result, since pre-historic time these intermediaries, utilizing the distrust and doubt between parties, have been doing business and acting like deities (Tapscott&Tapscott, 2016). However, each of such intermediaries couldnot keep their excessive greed in check while acting as trust provider. In effect, the global financial industry crashed in 2008. In that volatile period of global financial crisis, a pseudonymous person or persons named Satoshi Nakamoto published a whitepaper outlining a new protocol for a peer-to-peer electronic cash transfer system using a cryptocurrency called Bitcoin. Cryptocurrencies or digital currencies are different from traditional fiat currencies in that they are not created or controlled by countries. The process described in Satoshi paper is considered the most important innovation in finance since the invention of double entry method and considered as the "internet of money" (Tapscott&Tapscott, 2016).

Current digital economy is based on the reliance on a certain trusted authority; be it the email service provider telling us that our email has been delivered; be it a social network such as Facebook telling us that our posts regarding our life events have been shared only with our friends or be it a bank telling us that

[1] https://blogs.cfainstitute.org/investor/2017/05/02/the-fintech-files-understanding-blockchain/?s_cid=smo_CFASocial
[2] https://thefinanser.com/2011/06/why-innovation-is-so-difficult-in-banks.html/
[3] https://thefinancialbrand.com/55915/banking-innovation-challenges-barriers/
[4] https://www.forbes.com/sites/darden/2012/06/20/creating-an-innovation-culture-accepting-failure-is-necessary/#238822d3754e

our money has been delivered reliably to our dear ones in a remote country. For all our online transactions, we need to rely on trusting someone. Nevertheless, living in this digital world by relying on a third entity for the security and privacy is threatening (Crosby et al. 2015). What if our trusted third party sources are hacked, manipulated, or compromised? Here comes the Blockchain technology. It has the potential to revolutionize the digital world by enabling a distributed consensus where each online transaction ever occurred can be verified at any time in the future without compromising the privacy (Berke, 2017). Although the technology behind Blockchain is complicated, the main idea is simple. Blockchain enables us to send money directly and safely to anyone, without the help of a bank, a credit card company, or PayPal.

5. What is Blockchain?

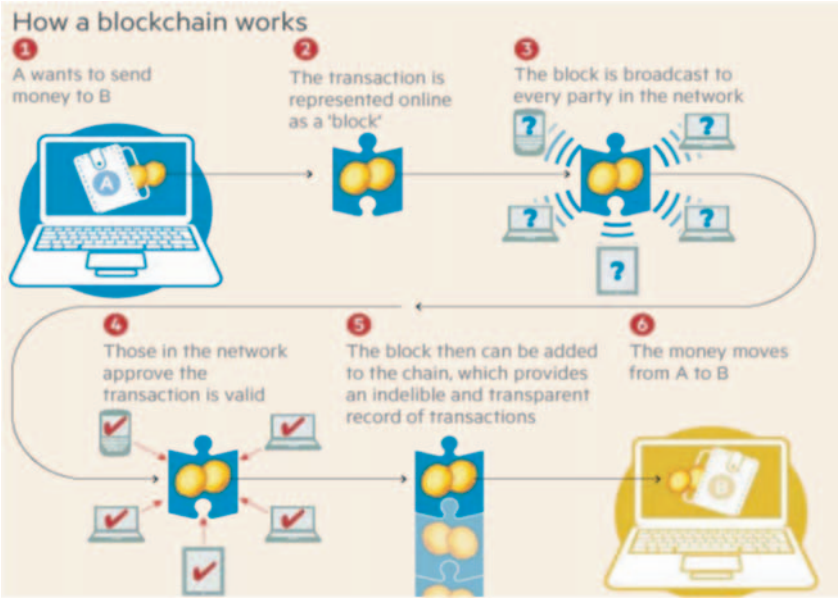
Satoshi Nakamoto's 2008 paper explains Blockchain through Bitcoin as a purely peer-to-peer version of electronic cash that would allow online payments to be sent directly from one party to another without going through a financial institution. The process does not require any third party to prevent double spending problem as this is preventable using peer to peer network (Nakamoto, 2008). According to Gupta (2017a), Blockchain is a "distributed database that maintains a continuously growing list of ordered records." Blockchain has established a set of rules, commonly known as protocol - dubbed as "Trust Protocol", in the form of distributed computations (Tapscott&Tapscott, 2016). Mougayar (2016) describes Blockchains as "en change that hit at govern traditional corporate models institutions". He also menti challenges the old ideas tha minds for decades, if not cent challenge the governance controlled ways of enfo Blockchain is trustless in th does not need to trust the ot the transaction, but does need to trust the system i.e., the Blockchain Protocols. The "blocks" in the chain are groups of transactions posted sequentially to the ledger and can be inspected publicly (Swan, 2015). For example, anyone can see a Bitcoin transaction in www.Blockchain.info by entering a Blockchain address. Currently almost every major financial institution in the world is doing Blockchain research and by the end of 2017, 15% of the banks are expected to be using Blockchain technology. (Gupta, 2017a).

6. How does Blockchain Work?

To understand how Blockchain works, it is helpful to look into how Bitcoin works. Blockchain is at the heart of Bitcoin - a virtual currency (Inasiti& Lakhani, 2017). If we ignore all other yet unexplored potentials of Blockchain technology, the introduction of Bitcoin itself is a core breakthrough in computer science as it solves the long-standing double spend problem of any digital cash (Swan, 2015).

For any online transaction, we depend on the trusted intermediaries. However, for any transaction in Bitcoin, we don't need to put our trust on third party anymore, as it uses cryptographic proof instead of the trust in the third party to complete an online transaction (Nakamoto, 2008). Even though, there is no third party mediating the transaction, each transaction is protected through a digital signature. Each transaction is sent to the "public key" of the

Figure 2: Bitcoin Working Process (Wild et al. 2015)



receiver, digitally signed by the sender using the "private key". To spend money, owner of the cryptocurrency needs to prove the ownership of the "private key". The entity receiving the digital currency verifies the digital signature -thus ownership of corresponding "private key"-on the transaction using the "public key" of the sender. Each transaction is broadcast to every node in the Bitcoin network. Every single transaction needs to be verified for validity before it is recorded in public ledger (Crosby et al. 2015). Figure 2 demonstrates the whole process.

Bitcoin could be considered as a microcosm of how a new, decentralized, and automated financial system could work (Ito et al. 2017). It is in its early stage of development. However, it offers a glimpse of the future of finance where mere codes define the system and regulations (The Economist, 2015). Unlike in current financial system where all rules and regulations are monitored and applied by third party, in Bitcoin everything is done by codes. Even Bitcoin's "monetary policy" is written into its code. In every 10 minute, new money is created. This make the supply of money limited to 21 million, a hard money rule, similar to the gold standard (Ito et al. 2017).

7. How does it Change the Existing Value Chain?

Financial industry is the world's most powerful industry which moves trillions of dollars daily and in the process serving a $100 trillion global economy consists of billions of people (Tapscott & Tapscott, 2016). The whole system is so strongly engraved in our daily life that we cannot think a day without it. Everything we do, we need to take help from this system. As Blockchain does not require any trusted third party in performing a transaction, full implementation of Blockchain technology in finance could fundamentally change the whole financial industry (Gupta, 2017b). According to Ito et al. (2017), due to the very complex nature of the existing financial system there exists high risk. They postulate that a new decentralized financial system created by Blockchain with cryptocurrencies could make the whole system much simpler by removing layers of intermediation and could help insure against risk. Blockchain technology promises to mitigate several forms of financial risk such as settlement risk, counterparty risk, and most importantly systemic risk (Tapscott & Tapscott, 2016). Instant settlement on the Blockchain could eliminate almost all these risks completely. Irrevocability of a transaction and instant reconciliation of financial reporting would eliminate one aspect of agency risk -the risk that unscrupulous managers will exploit the cumbersome paper trail and significant time delay to conceal wrongdoing.

There are 2.4 billion people who cannot present a proper identity card (Mainelli, 2017) and 2.2 billion people who earn less than $2 a day (Tapscott & Tapscott, 2016). All these people are considered ineligible and unprofitable for financial industry. Cryptocurrencies could open up the financial system to all these people. Regulators could remake the financial system by rethinking the best way to achieve policy goals, without diluting standards (Ito et al., 2017).

Blockchain with its "Trust Protocol" for the first time in history enables two parties who neither know nor trust each other to do transaction and business. It uncrowns the sole authority of financial intermediaries to verify identity and ensure trust (Mainelli, 2017). Blockchain network both clears and settles peer-to-peer value transfers at the same time and keeps its ledger always up to date. If banks could harness this capability, they could eliminate an estimated $20 billion in back-office expenses without changing their underlying business model (Tapscott & Tapscott, 2016). With radically lower costs, banks could offer individuals and businesses greater access to financial services, markets, and capital, especially for underserved communities.

At present, sending remittances is a lengthy and costly process. It takes three to seven days to settle. On the other hand, stock trades take two to three days, bank loan trades take on average twenty-three days to settle[5]. Although the SWIFT network handles fifteen million payment orders a day between ten thousand financial institutions globally, it takes days to clear and settle them[6]. The same is true of the Automated Clearing House (ACH) system, which handles trillions of dollars of

[5] www.bloomberg.com/news/articles/2015-07-22/the-blockchain-revolution-gets-endorsement-in-wall-street-survey.
[6] www.swift.com/assets/swift_com/documents/about_swift/SIF_201501.pdf.

U.S. payments annually. The Bitcoin network takes an average of ten minutes to clear and settle all transactions conducted during a particular period (Nakamoto, 2008). Other Blockchain networks are even faster, and new innovations, such as the Bitcoin Lightning Network, aim to dramatically scale the capacity of the Bitcoin Blockchain while dropping settlement and clearing times to a fraction of a second. Indeed, the shift to instant and frictionless value transfer would free up capital otherwise trapped in transit, and reduce the cost of sending remittance from 8-10% to 1-2% (Tapscott & Tapscott, 2016). The financial services industry is built on a technology stack of legacy. Any change is difficult to make because each improvement must be backward compatible. As an open source technology, Blockchain can solve this problem as well, as it can constantly innovate, iterate, and improve, based on consensus in the network (Tapscott & Tapscott, 2016).

The bitcoin Blockchain was designed initially for moving bitcoins. It was not designed for handling other financial assets. Nevertheless, due to the open source nature of Blockchain technology, innovators are developing separate Blockchains, known as altcoins (Mougayar, 2016). Many more startups are coming up with new kind of applications based on Blockchain technology[7]. For example, open source startups such as Ethereum, and Codiusare providing smart contract service, Medici is providing security exchange service, Blockstream focuses on sidechains, Augur works in prediction market and Everledger is in insurance industry.

8. Who will Benefit from Blockchain Most?

If implemented according to the principles outlined in Satoshi paper, the ultimate beneficiary of Blockchain technology would be the mass public. It reduces transaction cost drastically and promises to bring transparency in the process and billions of unbanked people in the financial system. It will facilitate global trade by making it faster and easier (Casay& Wong, 2017). By facilitating mass level peer to peer loans, Blockchain could also inspire entrepreneurship. Blockchain crowdfunding platform would be much cheaper and user friendly (Kastelein, 2017). Incumbent businesses could also benefit from this technology as Blockchain drastically saves cost, ensures transparency, and simplify business operations. And most importantly, the decentralized nature of Blockchain makes it extremely difficult, if not impossible, to hack into it which makes Blockchain the most secure system that ensures privacy for all (Underwood, 2016).

9. Conclusion

In technical word, Blockchain is a back-end database that maintains a distributed ledger that is open to all. In Business, it is an exchange network for moving transactions, value, assets between peers, without any help from intermediaries. In legal term, it validates transactions. Whichever way we define it, Blockchain indicates a radical change to the world's second oldest industry in which dwell some of the most powerful firms and people of the universe. It is predictable that the development of Blockchain will face resistance. Blockchain is still not fully developed. There are uncertainties regarding its proper regulations. How and who will regulate the new system is a big question. However, it is not easy to resist the advancement of any technology. And if the technology is as revolutionary as Blockchain, even a layman would understand that it wouldn't be possible to completely stop it. That's why every big player of the industry is investing big to utilize Blockchain in their favor. Forming of R3 consortium and Hyperledger by the world's biggest banks and financial institutions is the proof of this. All these attempts are positive signs in the sense that industry incumbents do not want to repeat the mistakes of Blockbuster or Kodak. However, when all these attempts are to set standards on the development and the use of private Blockchain, we cannot help but need to worry. Using private Blockchain would help the incumbents to save billions; but the question remains: whether the benefits of these savings would reach to the end customers or not? Moreover, this practice does not go with the principle of Satoshi paper which promises a transparent, distributed and fair financial world in the public domain. An open Blockchain is the technology we have been waiting for so long. This is a gift we shouldn't ignore.

[7] http://www3.weforum.org/docs/WEF_The_future__of_financial_services.pdf

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INTERVIEW WITH

Mr. C. Q. K. Mustaq Ahmed

Chairman of the Financial Reporting Council (FRC), Government of Bangladesh.

Mr. C. Q. K. Mustaq Ahmed had a long career in the Bangladesh Civil Service. He obtained BA (Hons) and MA degrees in Economics from the University of Dhaka. Mr. Ahmed was Senior Secretary, Ministry of Home Affairs. He was appointed as Chairman, Financial Reporting Council (FRC) in June 2017. He served in other major positions as Senior Secretary, Ministry of Agriculture, Secretary, Bridges Division, Ministry of Road Transport and Bridges and Secretary, Ministry of Liberation War Affairs. He also served as First Secretary Bangladesh High Commission, London, Deputy Commissioner and District Magistrate Narayanganj, Joint Secretary ERD, Director General NGO Affairs Bureau, Additional Secretary Ministry of Health and Ministry of Agriculture etc. He joined the Bangladesh Civil Service (Administration) in January 1981. He retired from the Bangladesh Civil Service on July 8, 2015. He attended a series of training courses both at home and abroad during his long career in the Civil Service, including leadership courses at Harvard University Kennedy School of Government in USA and Birmingham University in U.K.

1. ***Financial Reporting Act (FRA) has a long history. In 2003 the World Bank recommended an independent oversight body for financial reporting. Last caretaker government passed a Financial Reporting Ordinance which was not passed in the parliament. In 2012 Financial Reporting Act was proposed by the community which was finally passed in 2015 after many debate and discussion. Financial Reporting Council (FRC) is established under FRA to implement the Act. You are the first chairman of that council. How do you feel?***

   It's a privilege and also great honour to have been selected by the Government to head the Financial Reporting Council (FRC) which is a national regulatory body in its very vital area of operation. It is of course a new field for me. I was by profession a public servant and now my main work will involve the private sector and professional bodies of

accountants, auditors and actuaries. I have however worked with professionals of other specialisation i.e. doctors, engineers, agriculturists etc. in my working in various development Ministries and in the field administration. I am now looking forward to working with you and the other professionals of the field.

2. ***You are entrusted with a new organization to establish standard, code and policies for financial reporting. It is a positive step towards ensuring corporate governance of public interest institutions. If implemented properly, it will enhance public confidence in these institutions. What will be your priority in order to deliver your responsibility?***

Instilling confidence in the minds of the various stakeholder groups is a prime objective of what we in the FRC will be striving to achieve. You, the Accountancy bodies have of course been doing it on a "self-regulation" basis. Now the question remained on whether this was being done to the full satisfaction, trust and confidence of the stakeholders, especially the potential local and foreign investors, the government regulators, revenue collectors, law enforcers and so on. So our priority will be to make the FRC as a national institution where stakeholders can have their full confidence in its regulatory and oversight functions.

3. ***We have to address the needs of information to the different stakeholder groups, so that public confidence can grow. Sir, what will be your priorities to address the issue of information in order to promote public confidence?***

As I said, confidence building is the main reason behind the creation of the FRC. We acknowledge that you and the other professional bodies have been trying to make quality information available to the stakeholders. But it was felt that this self-regulating arrangements needed to be strengthened by involvement of the government in order to further build stakeholder confidence. In other words, the Government should actively engage in this process, since it is they who represent the people and is entrusted to protect the interest of the people.

And I think bringing the Accountancy and the Actuarial professions under the oversight of the Government will bring two advantages: firstly, it will enhance the level of confidence of stakeholders on the working of these two professional groups by way of having the Government's seal of approval, and secondly it will elevate the respect, reputation and image of the professionals since their work will be meeting the optimum standards and scrutiny by an independent national body like the FRC.

In addition, by our work we will also be able to make investors aware of the need to examine the financial fundamentals of a business entity before investing in it. We feel that the coming of FRC into the scene will enhance the relevance of financial statements and information to all groups of stakeholders and investors. Put differently, the FRC will create a three-way bridge between the investors, the accounting, auditing, actuarial and management professionals, and the Government. This will go a long way towards instilling trust and confidence in the published financial statements, which is again one of the critical preconditions suggested by our development partners and demanded by potential investors for creating a favourable investment climate in our country.

4. Keeping the above in mind, could we perhaps talk a little bit about the Capital market and how FRC will impact upon this vital sector of the economy

Of course to streamline the functioning of the Capital Market we have regulators like the BSEC, Bangladesh Bank, RJSC etc. and relevant clauses in the Companies Act 1994. But to what extent the regulatory works were being effective had always been a concern to the government and the members of the public, particularly in view of some major unusual market fluctuations in the past.

In this backdrop it is important not just to improve the standard of financial reporting, but also to further strengthen the effective functioning of the regulatory mechanism and principles of good governance in the financial sector. Towards this end we need to set and enforce standards for corporate behaviour of the company directors and top managers like the CEO, CFO etc. This is one area where FRC plans to play an important role as well.

5. ICMAB is one of the professional accounting bodies which will be supervised by FRC. How can ICMAB assist you in your endeavour?

ICMAB and ICAB will have a crucial role in the functioning of the FRC. The Presidents of the two professional bodies are on the Board of FRC, thereby through their representation the professionals will be actively assisting the Council. Participation by the two accounting bodies will cooperate in reviewing and reforming the existing rules, regulations, standards, process, procedures which govern the accountancy professions.

We will however have to ensure that there be no conflict of interest between representatives of the accountancy profession as well as the independent professionals who will be employed in the FRC, and the rest of the bodies of professionals. As you know, the FRC has a multi-disciplinary team consisting of bureaucrats, professional accountants, representatives of trade bodies and the academia. It will be the responsibility of this team to determine the extent to which the prepared financial statements are in conformity and compliance with relevant accounting standards. If need be, we will hire more professionals who are well versed in these standards and can provide us support. This process will also help FRC to develop institutional expertise in this field. This will be

thus mutually beneficial for both FRC and the professional Institutions.

I am sure a lot of the relevant rules, regulations are being implemented by our professionals. But the question is: Are the common investors aware of that? What about foreign investors? Do they know or trust that our professional bodies do indeed ensure compliance of these rules? These are areas which fall within our sphere and this is where we will build our reputation as a respectable national institution where everyone can put his trust in.

6. Sir, keeping the above in view how do you foresee the role, the achievements and the challenges over the next 4 years. How do you visualise FRC after 4 years?

I want to be optimistic about the role of the FRC in the coming years. To fulfil the visions of the Honourable PM for 2021 and 2041 the country needs to move faster towards greater economic growth and financial development and for that we need accelerated investment, which in turn is dependent on sound financial discipline on the ground.

The role of FRC must be viewed in the context of the other official regulators in the financial sector, be it BSEC, Bangladesh Bank, NBR, etc. A well coordinated and collaborative role by all of them under respective rules will be necessary for each to perform and succeed.

Identifying the shortcomings, irregularities, wrongdoings in the areas of financial reporting will remain our main focus. Additionally, we will have to move against not just wrong-doings, but also wrong-doers. Therefore, enforcement of the laws, rules, standards, codes of conduct, etc. is also an important challenge.

Sir, thank you very much for giving us your valuable time for this interview. Wish you all the best in your noble endeavours.

[Interviewed by R. Tareque Moudud FCMA,
Associate Editor, THE COST & MANAGEMENT.]

Big data, analytics, AI, and the finance professional

Data gathering and accounting's role in it continues to change. A thought leader explores the opportunities.

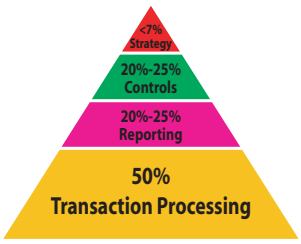
By **Aubrey Joachim**, FCMA, CGMA

Artificial intelligence (AI) and robotisation will affect many elements of the human endeavour. That includes the way humans interact, how work is done, and what work need not be done by humans.

These advancements present an opportunity for finance professionals, provided they embrace these tools. Businesses will still have roles in which insight, transparency, stewardship, and ethical corporate conduct are valued, and strategic finance professionals can fill these roles. Risks remain, but mainly for those who fail to appreciate the new tools and get left behind.

Finance professionals must live with this changing, disruptive, but opportune environment and explore opportunities whereby the finance function itself can harness the power of big data and analytics to significantly transform itself and the organisation.

Transformation can manifest itself in a number of ways across the entire finance spectrum, from the transactional space of the finance pyramid to the top end of knowledge and value generation. The two figures below contrast the traditional finance function and the emerging future.



The traditional finance pyramid where less than 7% of the function is focused on organisational strategy

The transformed finance profile where a greater proportion of the function is focused on strategic decision support

In today's age of digitisation there is a major shift in the way transactional data are captured, recorded, verified, and converted into information. All of this is about to change even further with the advent of technologies such as blockchain and distributed ledgers.

Inventories and inventory transactions are another case in point. Inventory receipts, issues, stock-takes, and valuations are today automated and digitally tracked using radio frequency identification (RFID), which can be reflected directly as transactions in ledgers and financial statements. Human accountants may not be required at all in this once major role that they played in organisations.

Add to this mix all the other data – customer, supplier, human resource, as well as myriad external data. The end game is that massive volumes of organisational data can be accurately captured more quickly and much more efficiently. The challenge now is deriving value from all these data.

The era of preparing periodic accounts – month-end, quarter-end, etc. – will be over. An organisation's financial position will be quite accurately ascertained instantaneously and at any point in time. The human accounting involved in the process will also decline.

Reporting will take an entirely different meaning in organisations. A report by definition is a backward look. Self-service reporting, where organisational managers will be taught by their finance business partners how to extract the information they need, will replace the need for defined periodic reports. Instead, smart finance professionals will be required to provide insights into the future.

This is the challenge for next-generation finance professionals. Already in world-class companies, not

only has the volume of standard reports produced been significantly reduced, but also, more importantly, a greater proportion of the remaining reports are forward-looking insights.

It must also be said that reports will need to be automated and dynamic, and take the form of intelligent dashboards based on data visualisation techniques (https://www.cgma.org/magazine/2017/aug/effective-data-visualisation-201717223.html) that engage the audience. Once again the human element of processing reports will decline, but a different human element will be called for. Finance professionals will be called on to play a major role in this reporting shift if they are to retain their influence in organisations.

Finance has traditionally played a significant and sometimes preferred role in respect of organisational controls from simplistic reconciliations to audits, forensics, and even governance. This is perhaps the space that has been impacted the most due to digitisation and automation. Processes involving data sharing and distribution from one point to another are digitally verified, and thereby dynamic controls have been embedded. Therefore, the significant involvement of finance professionals in the traditional controls space is disappearing.

Instead, there is a need for finance to shift its focus to dynamic and perhaps preventive controls, as well as risk management, using significantly more sources of data. With this shift the transformed finance function should be able to play an even more important role in stewardship and governance within organisations.

The top of the pyramid is the space where big data and analytics must play the most significant role in the transformation of the finance function and the shift of the finance professional to the role of a trusted and valued business partner.

The pre-digitisation era restricted finance to a narrow window of organisational data – mostly financial – and therefore prevented the finance professional from using the significant management accounting tools and techniques that he or she is taught.

The current era of big data and analytical platforms has opened up an entirely new opportunity in which finance can get involved: strategic decision support. This is perhaps where the future of finance and the finance profession is. Let's explore this role further.

The CFO function has the important prerogative of being able to cut across the entire organisation. This opens to the finance professional access to all of the organisation's data, not just the financial data. Thus the opportunities for providing decision support are significant and can lead to more engaging business partnering.

Increasingly finance professionals are called upon to play an expanding role in organisational strategy as well as integrated reporting. It is in this context that big data and analytics have the most influence. Finance must broaden its perspective to harness all organisational data as well as external data to construct the bigger picture of the organisation in its operating environment and, more importantly, to add value.

Thus, budgeting will no longer be a simplistic spreadsheet exercise of transposing a set of sales figures provided by the sales and marketing manager to a financial spreadsheet, but rather will involve working closely with the business managers to add significantly more robustness to operational projections based on multiple sources of internal and external data that have been analysed and related to drivers that influence the bottom-line outcomes.

Finance professionals should be able to combine their powerful management accounting skills and exploit management accounting tools to convert data into predictive insights. In this way finance can definitively claim that it is influencing the organisation's strategic direction.

Further, the traditional simplistic budget-to-actual variance reporting must give way to a much more insightful understanding of organisational performance. Combining the analytics and the AI perspective, such performance management will not only be dynamic but also be customisable in order to influence different parts of the organisation.

A number of analytic and data visualisation software platforms allow finance professionals to provide the strategic decision support demanded of them. Many other value-adding opportunities can open to finance professionals in this space. The limit is beyond imagination.

The challenges for finance professionals in the fast-shifting era of big data, analytics, and AI are many, the most important being a willingness to keep an open and changing mindset. The other factors are improving and enhancing technical skills in analytical sciences such as statistics as well as in the use of analytic software platforms.

—Aubrey Joachim *is the founder of Leading Edge Change, a business-partnering firm in Australia. He is a past global president of the Chartered Institute of Management Accountants.*

IMPACT OF FINANCIAL LEVERAGE ON FIRM'S VALUE:

A Comparative Study between Listed MNCs and Domestic Companies of Bangladesh

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Abstract

Capital structure has received much attention for half of a century. The debate about it is still of major interest in corporate finance. The basic objective of this research was to analyze and compare the impact of capital structure on firm value of DSE-listed MNCs & domestic companies of Bangladesh over a 20-year period (1996-2015). The study was based on secondary data. Two populations in the study are; one for MNCs and other for domestic companies. Stratified and Quota Sampling techniques were applied for the selection of MNCs and domestic companies respectively. Seven companies from each of the two populations were selected as sample from six industrial sectors. It is seen that increase of weight of debt (Wd) results in increase of firm value (FV) and vice-versa for both domestic companies and MNCs. MNCs' rate of increase of firm value is more than rate of decrease of firm value for a particular % change in Wd. 1% increase of Wd results in 0.499% and 0.706% or Tk. 30.49 and Tk. 30.06 million increase of FV for domestic companies and MNCs respectively. On the other hand, 1% decrease of Wd results in 0.54% and 0.607% or Tk. 33.07 and Tk. 25.86 million decrease of FV for domestic companies and MNCs respectively.

Keywords: Capital Structure, Firm Value, Debt.

1. Introduction:

Capital structure is the proportion or composition of debt and equity capital. Every company has its unique desired capital structure. Financing policy determines the composition of debt and equity capital. An appropriate capital structure is a critical decision for any business organization and this decision is very important not just because of its need to maximize shareholder's wealth or increase the market value of companies but also because of the impact such decision has on the company's ability to deal with the competitive environment through satisfactory financial performance. This paper analyzed the impact of financing pattern on cost of capital of both MNCs and domestic companies. Both time series and company-wise analysis is performed to evaluate the changes in period of time as well as changes of average from one group to another.

2. Statement of the Problem:

The global financial crisis that hit the world economy during 2007-08 brought with it the most significant economic recession. Many giant corporations went bankrupt during this period and a significant reason behind these bankruptcies was excessive use of debt capital or borrowing. According to Allen (1983), two important questions related to financial decision regarding maximization of owners' wealth is -how should the company finance its investment and how should the company distribute its revenue. Ross, Westerfield and Jaffe (2005), state that "As financial distress costs cannot be expressed in a precise way, no formula has yet been developed to determine a firm's optimal debt level exactly." To gain advantages of tax shield and higher earnings per share many companies raise too much debt capital which is detrimental to their good performance and survival. Excessive use of debt capital leads to financial distress and excessive use of equity capital leads to poor financial performance and low company value.

There have always been controversies among finance scholars when it comes to the subject of capital structure. So far, researchers have not yet reached a consensus on the optimal capital structure of firms by simultaneously dealing with the agency problem. Allen (1983), states that no definite conclusion can be reached about the existence and nature of an optimum capital structure. According to him, financial markets are imperfect and the exact status of company financial decisions in imperfect markets are inconclusive due to formidable difficulties in statistical and economic work in this area. Capital structure is very important decision for firms so that they can maximize returns to their various stakeholders. Moreover an appropriate capital structure is also important for firm as it will help in dealing with the competitive environment within which the firm operates. Schall and Haley (1991) state that some of the complications found in practice provide advantages to debt financing whereas other factors favor equity financing.

3. Literature Review:

Hossain (1988) in his study took a Jute mill as a case study to analyze the capital structure and profitability of the firm. The average debt-equity ratio of the mill during the period under study was 0.67. Hoque (1988) had conducted a research on capital structure pattern of DSE-listed 26 companies and concluded that capital structures among sampled industries were significantly different. Siddiqui and Rahman (2002) in their study attempted to present a comparison of capital structures between MNCs and local blue chip companies enlisted with the DSE. The results indicated that the capital structures of the firms depend on the industry within which they operate. Islam and Islam (2003) had studied on the linkage between capital structure and profitability of a firm. The unfavorable debt-equity ratio had adversely affected the profitability of the firm.

Chowdhury and Chowdhury (2010) conducted research study to analyze the impact of capital structure on the value of Bangladeshi firms. A strong positively correlated association between stock price and leverage ratio was evident. Research work of Islam, Rahman and Khan (2011) revealed that, profitability and risk played significant role in explaining the capital structure of cement industry in Bangladesh. Lima (2011) had conducted a research work on the determinants of capital structure of pharmaceutical companies in Bangladesh. Important observation of this study was that pecking order theory helps describe the capital pattern of the pharmaceutical companies. Hasan, Ahsan, Rahaman & Alam (2014) in their study investigated the influence of capital structure on firm's performance. They found that EPS is significantly positively related to short term debt while significantly negatively related to long term debt.

Modigliani and Miller (1958) were the first ones to landmark the topic of capital structure and they argued that capital structure was irrelevant in determining the firm's value. Lubatkin and Chatterjee (1994) as well as many other studies have proved that there exists a relationship between capital structure and firm value. Fama and French (1998) found that there was negative relationship between debt and financial achievement. Hovakimian and Tehranian (2004) concluded that the importance of stock returns in studies of corporate financing choices was unrelated to target leverage. Barakat (2014) in his study aimed to investigate the effect of financial structure, financial leverage and profitability on industrial company's value. He concluded that there is statistically significant direct relationship between two independent variables: return on equity and capital structure and the dependent variable represented by stock market price. Myres (2002) argued that capital structure theories are conditional, not general and are at best dependent on firm, industry and country specific factors.

4. Objective of the study:

The main objective of the research is to analyze and compare the impact of capital structure on firm value of DSE-listed MNCs & domestic companies of Bangladesh over a 20-year period (1996-2015). Specific objectives are:

a. To determine unlevered part of firm value of both MNCs & domestic companies over the study period.

b. To determine levered part of firm value of MNCs & domestic companies over the study period.

c. To explore the change in total firm value due to change of weight of debt for both MNCs & domestic companies and makes a comparison between them.

5. Methodology of the study:

Type of Research: Type of research is explanatory or causal. An attempt was made to identify cause and effect relationship between financial leverage and sustainable growth rate. Nature of research is Empirical and research approach is Quantitative.

Population: Population one consists of all MNCs listed on DSE which continue operation during the study period. Eight MNCs are found in 6 industrial sectors. Population two consists of all DSE listed domestic companies of the same 6 industrial sectors and which continue operations during the study period. Population size is 45.

Types of Data: Secondary data was used. The research method employed basically involved quantitative analysis of secondary data. Nature of data is both time series and cross sectional.

Sources of Data: Books, Journals, Company documents, Annual reports of sample firms, Reports of Securities and Exchange Commission and Dhaka Stock Exchange (DSE) and Websites of sample firms and DSE. Study period is from year 1996 to 2015.

Sampling Technique: Stratified Sampling technique was applied for the selection of sample items of population one. Each of the two populations has been divided into several sub-populations or strata according to industry sector or type of industry. Samples are taken from each stratum of each population. As the study is a comparative one, so the numbers of domestic blue chip companies were kept equal to the MNCs in any particular industrial sector. For the sake of comparison with the MNCs, it is necessary to select only those domestic companies that are performing well and on a consistent basis. So, Quota Sampling method was applied in selecting sample firms of population two.

Sample Size & Sample Items: The sample in this study consists of 14 companies (7 from each population) listed in Dhaka Stock Exchange (DSE). Two companies are selected from Pharmaceuticals & Chemicals industry and one company is selected from Engineering, Food & Allied, Tannery, Cement and Fuel & Power industry in each category. Name of the domestic companies are: Aftab Automobiles Ltd., Agricultural Marketing Company Ltd., Beximco Pharmaceuticals Ltd., Square Pharmaceuticals Ltd., Apex Footwear Ltd., Confidence Cement Ltd., and Padma Oil Co. Ltd. Name of the MNCs are: Singer Bangladesh Ltd., British American Tobacco Bangladesh Co. Ltd., GlaxoSmithKline Bangladesh Ltd., Reckitt Benckiser (BD) Ltd., Bata Shoe Co. Ltd., Heidelberg Cement Bangladesh Ltd., and Linde Bangladesh Ltd.

Techniques of Data Analysis: Mean is used to determine yearly average and grand average. Collected data has been processed by MS Excel, SPSS (version 20) and Gretl software. Presentation of data is done in two forms; text and tabular.

6. Results and discussions:

6.1 Analyzing the Effect of Leverage on WACC:

To analyze the impact of financial leverage on Weighted Average Cost of Capital, WACC equation is used. The equation is described below:

$$WACC\ (k_a) = W_d.k_d(1-T) + W_p.k_p + W_e.k_e$$

Here, W_d = Weight of debt = D/(D+E+PS)
W_e = Weight of Equity = E/(D+E+PS)
W_p = Weight of preferred share = PS/(D+E+PS)
$k_d(1-T)$ = After tax cost of debt, k_p = Cost of preferred share, k_e = cost of equity

6.1.1 Effect of Leverage on WACC of Domestic Companies:

Last row of table A1 and A2 shows the grand mean value which is the average of all nineteen years' mean values. After putting the ultimate mean value, the model becomes as follows:

$$WACC\ (ka)\ (0.1086) = (0.455\times0.0854) + (0.007\times0.00) + (0.538\times0.1296)$$

W_d $k_d(1-T)$ W_p k_p W_e k_e

From the above model it is observed that if weight of debt (Wd) changes the WACC will also change. Now, changing Wd by 1%, 5% and 10% the changes of WACC are expressed in as follows:

Table 1: Impact of Weight of Debt on WACC of Domestic Companies

% change in Wd	New Wd	New We	Existing WACC	New WACC	% change in WACC
1% decrease	0.445	0.548	0.1086	0.1090	0.37
5% increase	0.505	0.488	0.1086	0.1064	-2.03
5% decrease	0.405	0.588	0.1086	0.1108	2.03
10% increase	0.555	0.438	0.1086	0.1042	-4.05
10% decrease	0.355	0.638	0.1086	0.1130	4.05

Source: Derived from WACC equation Note: Data compiled by the researcher

6.1.2 Effect of Leverage on WACC of MNCs:

Last row of table A1 and A2 shows the grand mean value which is the average of all nineteen years' mean values. After putting the ultimate mean value, the model becomes as follows:

$$WACC\ (ka)\ (0.1456) = (0.12\times0.0794) + (0.88\times0.1545)$$

W_d $k_d(1-T)$ W_p k_p

From the above model it is observed that if weight of debt (W_d) changes than WACC will also change. Now, changing W_d by 1%, 5% and 10% the changes of WACC are expressed in the following analysis.

Table 2: Impact of Weight of Debt on WACC of MNCs

% change in W_d	New W_d	New W_e	Existing WACC	New WACC	% change in WACC
1% increase	0.13	0.87	0.1456	0.1448	-0.52
1% decrease	0.11	0.89	0.1456	0.1463	0.52
5% increase	0.17	0.83	0.1456	0.1418	-2.58
5% decrease	0.07	0.93	0.1456	0.1493	2.58
10% increase	0.22	0.78	0.1456	0.1380	-5.16
10% decrease	0.02	0.98	0.1456	0.1530	5.16

Source: Derived from WACC equation
Note: Data compiled by the researcher

6.2 Analyzing Effect of Leverage on Firm Value by Valuation Model:

In the above section it is seen that WACC is influenced by weight of debt. According to the valuation model, firm value is influenced by WACC. So, to analyze the impact of financial leverage on firm value (FV), Valuation Model is used. The model is described below:

$$FV = \frac{(EBIT\times(1-T)}{WACC} + PVTS$$

Here,
FV = Firm Value, EBIT = Earnings Before Interest and Taxes
T = Effective Tax Rate, WACC = Weighted Average Cost of Capital
PVTS = Present Value of Tax Shield = B.T = Amount borrowed × Tax rate

Above valuation model has two portions - first part is unlevered and second part is levered. Effect of change of Wd on each is determined separately and then summed to reach at change in total firm value due to leverage. For analyzing the model, mean or average values of all the variables are determined. Grand mean value is computed in two stages. Firstly, arithmetic mean values of above-mentioned five independent variables of all the seven companies are determined at each year and then target variable [each of the two part of FV] at each year is computed separately. Secondly, average of all 20 years' (1996-2015) mean values of target and all independent variables are determined to reach at ultimate mean value which is used to analyze the impact of WACC on firm value.

In the above section, impact of leverage on WACC is analyzed. So, by using the information of above section, effect of leverage on firm value is analyzed by valuation model. Following table shows the average unlevered portion of firm value in each year of both types of companies by using the seven companies' average EBIT and T. WACC is determined in the above section by taking the seven companies' average value of components of WACC.

Table 3: Average Unlevered Part of Firm Value (in million Tk.)

Year	Domestic Companies				MNCs			
	EBIT	T	WACC	UFV	EBIT	T	WACC	UFV
1996	137.14	0.1551	0.0881	1315.11	191.35	0.3149	0.1383	947.74
1997	160.54	0.1648	0.0907	1494.82	231.63	0.2764	0.1283	1306.09
1998	184.88	0.1519	0.1131	1386.42	267.74	0.3076	0.1107	1675.23
1999	210.26	0.1384	0.1289	1402.13	217.66	0.2929	0.1271	1211.23
2000	242.49	0.1283	0.1193	1770.26	314.08	0.2209	0.1653	1480.57
2001	284.34	0.1305	0.1189	2079.27	347.80	0.2950	0.1520	1613.05
2002	282.38	0.1279	0.0988	2490.11	309.49	0.1591	0.1262	2062.51
2003	282.14	0.1608	0.1063	2242.22	319.71	0.1100	0.1357	2097.47
2004	322.38	0.1248	0.0925	3070.19	289.22	0.2145	0.0942	2412.24
2005	417.68	0.1119	0.0947	3950.25	245.52	0.3116	0.1021	1655.73
2006	454.42	0.2010	0.0998	3656.16	378.09	0.3615	0.1760	1371.47
2007	518.83	0.2222	0.1141	3533.55	518.03	0.3214	0.1413	2488.00
2008	621.09	0.1889	0.1128	4494.18	728.16	0.2848	0.1790	2911.88
2009	872.04	0.2563	0.1388	4706.07	992.97	0.2680	0.2229	3262.64
2010	1093.19	0.1986	0.1267	6936.15	1480.31	0.2795	0.2214	4818.92
2011	1330.35	0.2086	0.1244	9527.71	1286.12	0.3371	0.1440	6013.44
2012	1598.49	0.2646	0.1128	10486.84	1643.05	0.3301	0.1562	7047.93
2013	1819.95	0.2719	0.1113	12035.24	2128.56	0.3132	0.1827	8000.70
2014	1908.44	0.2669	0.0924	15443.32	2376.11	0.3232	0.1302	12356.49
2015	2224.11	0.2728	0.0920	17590.09	2674.52	0.3186	0.1054	17284.07
G.Mean	748.26	0.1873	**0.1086**	5055.33	848.12	**0.2820**	0.1456	4181.70

Source: Derived from table A2, A3, A4, A5 and A6
Note: UFV means Unlevered part of Firm Value, Data compiled by researchers

Table 4: Average Levered Part of Firm Value (in million Tk.)

Year	Domestic Companies			MNCs		
	Average Debt (B)	T	PVTS(LFV)	Average Debt (B)	T	PVTS(LFV)
G.Mean	2709.69	0.1873	**507.56**	269.11	**0.2820**	75.89

Source: Derived from table A3, A4, A7 and A8
Note: LFV means Levered part of Firm Value, Data compiled by researcher

6.6.1 Impact of Leverage on Firm Value of Domestic Companies:

Each row of column 'EBIT' and 'T' of the table 3 under column header 'Domestic companies' shows the mean values of seven domestic companies at each year and column 'WACC' shows seven domestic companies' average of components of WACC. Last row shows the average of all nineteen years' mean values. Table 4 shows PVTS. After putting the ultimate mean value, the model becomes as follows:

$$FV(6108.36) = \frac{(748.26\times(1-0.1873)}{0.1086} + (2709.69 \times 0.1873)$$

EBIT WACC B T

From the above model it is observed that, change of WACC changes firm value. In the previous section it is seen that change of Wd changes WACC. Changing Wd by 1%, 5% and 10% the changes of WACC and firm values (in million Tk.) are expressed as follows:

it is observed that, change of WACC changes firm value.
In the previous section it is seen that change of Wd changes WACC.
Changing Wd by 1%, 5% and 10% the changes of WACC

Table 5: Impact of Weight of Debt on Firm Value of Domestic Companies

% change in W_d	New W_d	New WACC	New UFV (million)	New B	New PVTS (million)	New FV million)
1% increase	0.465	0.1082	5620.13	2769.25	518.72	6138.85
1% decrease	0.445	0.1090	5578.88	2650.14	496.41	6075.29
5% increase	0.505	0.1064	5715.21	3007.46	563.34	6278.55
5% decrease	0.405	0.1108	5488.25	2411.92	451.79	5940.04
10% increase	0.555	0.1042	5835.87	3305.23	619.11	6454.99
10% decrease	0.355	0.1130	5381.40	2114.16	396.01	5777.41

Source: Derived from Valuation Model
Note: Data compiled by the researcher

The following table shows % change of firm value for % change of debt weight.

Table 6: Percentage Change in Firm Value of Domestic Companies Due to Leverage

% change in W_d	New W_d	Existing FV (million)	New FV (million)	Change in FV(million)	% change in FV
1% increase	0.465	6108.36	6138.85	30.49	0.499
1% decrease	0.445	6108.36	6075.29	-33.07	-0.541
5% increase	0.505	6108.36	6278.55	170.19	2.786
5% decrease	0.405	6108.36	5940.04	-168.32	-2.756
10% increase	0.555	6108.36	6454.99	346.63	5.675
10% decrease	0.355	6108.36	5777.41	-330.95	-5.418

Source: Derived from Valuation Model
Note: Data compiled by the researcher

From the above analysis it is evident that increase of weight of debt (Wd) results in increase of firm value (FV) and vice-versa. Rate of increase of firm value is more than rate of decrease of firm value for a particular % change in Wd. 1% increase of Wd results in 0.499% or Tk. 30.49 million increase of FV while 5% and 10% increase of Wd results in 2.79% or Tk. 170.19 million increase and 5.68% or Tk. 346.63 million increase respectively. On the other hand, 1% decrease of Wd results in 0.54% or Tk. 33.07 million decrease of FV while 5% and 10% decrease of Wd results in 2.76% or Tk. 168.32 million decrease and 5.42% or Tk. 330.95 million decrease respectively.

6.6.2 Impact of leverage on firm value of MNCs:

Each row of column 'EBIT' and 'T' of table 3 under column header 'MNCs' shows the mean values of seven MNCs at each year and column 'WACC' shows seven MNCs' average of components of WACC. Last row shows the average of all nineteen years' mean values. Table 4 shows PVTS. After putting the grand mean value, the model becomes as follows:

$$FV(4257.59) = \frac{(848.12 \times (1-0.2820)}{0.1456} + (269.11 \times 0.2820)$$

EBIT WACC B T

From the above model it is observed that if WACC changes then firm value will also change. In the previous section it is seen that change of Wd changes WACC. Changing Wd by 1%, 5% and 10%, the changes of WACC and firm values (in million Tk.) are expressed as follows:

it is evident that increase of weight of debt (Wd) results in increase of firm value (FV) and vice-versa. Rate of increase of firm value is more than rate of decrease of firm value for a particular % change in Wd.

Table 7: Impact of Weight of Debt on Firm Value of MNCs

% change in W_d	New W_d	New WACC	New UFV (million)	New B	New PVTS (million)	New FV (million Tk.)
1% increase	0.13	0.1448	4205.35	291.81	82.30	4287.65
1% decrease	0.11	0.1463	4162.24	246.41	69.49	4231.73
5% increase	0.17	0.1418	4294.33	382.63	107.91	4402.23
5% decrease	0.07	0.1493	4078.60	155.59	43.88	4122.48
10% increase	0.22	0.1380	4412.58	496.15	139.92	4552.50
10% decrease	0.02	0.1530	3979.97	42.07	11.86	3991.83

Source: Derived from Valuation Model
Note: Data compiled by the researcher

The following table shows % change of firm value for % change of debt weight.

Table 8: Percentage Change in Firm Value of MNCs Due to Leverage

% change in W_d	New W_d	Existing FV (million)	New FV (million)	Change in FV(million)	% change in FV
1% increase	0.13	4257.59	4287.65	30.06	0.706
1% decrease	0.11	4257.59	4231.73	-25.86	-0.607
5% increase	0.17	4257.59	4402.23	144.64	3.397
5% decrease	0.07	4257.59	4122.48	-135.11	-3.173
10% increase	0.22	4257.59	4552.50	294.91	6.927
10% decrease	0.02	4257.59	3991.83	-265.76	-6.242

Source: Derived from Valuation Model
Note: Data compiled by the researcher

From the above analysis it is evident that increase of weight of debt (Wd) results in increase of firm value (FV) and vice-versa. Rate of increase of firm value is more than rate of decrease of firm value for a particular % change in Wd. 1% increase of Wd results in 0.706% or Tk. 30.06 million increase of FV while 5% and 10% increase of Wd results in 3.40% or Tk. 144.64 million increase and 6.93% or Tk.294.91 million increase of FV respectively. On the other hand, 1% decrease of Wd results in 0.607% or Tk. 25.86 million decrease of FV while 5% and 10% decrease of Wd results in 3.18% or Tk. 135.11 million decrease and 6.24% or Tk. 265.76 million decrease of FV respectively.

7. Conclusion:

Domestic companies are more leveraged than MNCs as proportion of debt is more in domestic companies' financial structure than that of MNCs. MNCs' WACC and firm value is more responsive than domestic companies for a change in weight of debt. As MNCs' debt proportion is very low so they can increase debt in capital structure to reduce cost of capital and increase firm value. Besides financial leverage, both types of companies can decrease WACC and increase firm value by taking necessary measures to maximize market price of share. There are some limitations of the study. The study is restricted to financial data of firms listed on DSE for the 20 years (1996-2015). It therefore does not represent time period beyond this as well as unlisted companies or companies listed on other stock exchange. Moreover, ending dates of annual accounting period of the companies are not unique. Further researches can be conducted on impact of financial leverage on firm's profitability, value, growth and financial riskiness.

Domestic companies are more leveraged than MNCs as proportion of debt is more in domestic companies' financial structure than that of MNCs. MNCs' WACC and firm value is more responsive than domestic companies for a change in weight of debt.

Acronyms:

TD/TA = Total Debt to Total Asset ratio,
TD/SE = Total Debt to Shareholder's Equity ratio
TD/CE = Total Debt to Capital Employed ratio,
LTD/TA = Long-Term Debt to Total Asset ratio,
LTD/SE = Long-Term Debt to Shareholder's Equity ratio,
LTD/CE = Long-Term Debt to Capital Employed ratio,
WACC = Weighted Average Cost of Capital.

AAL = Aftab Automobiles Ltd.,
AFL = Apex Footwear Ltd.,
AMCL = Agricultural Marketing Co. Ltd.,
BPL = Beximco Pharmaceuticals Ltd.,
CCL = Confidence Cement Ltd.,
POC = Padma Oil Company,
SPL = Square Pharmaceuticals Ltd.

BSC = Bata Shoe Co.,
BATB = British American Tobacco Bangladesh,
GSK = GlaxoSmithKline,
HCL = Heidelberg Cement Ltd.,
LBD = Linde Bangladesh,
RBB = Reckitt Benckiser Bangladesh Ltd.,
SBD = Singer Bangladesh

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The important thing about outsourcing or global sourcing is that it becomes a very powerful tool to leverage talent, improve productivity and reduce work cycles.

- Azim Premji

Best practices to improve cybersecurity

By Sabine Vollmer

Cybersecurity remains a significant concern despite the progress companies worldwide have made in the past two to three years building up corporate shields against breaches, EY research suggests.

A majority (87%) of more than 1,700 C-suite, information security, and IT executives EY polled worldwide said they lacked confidence in their company's level of cybersecurity.

They are most worried about poor user behaviour around mobile devices such as laptops, smartphones, and tablets (73%), unauthorised access (54%), and the inability to identify suspicious traffic over networks that connect an increasing number of devices (49%).

"Boards and C-suites are becoming more informed," said Marco Bodellini, CPA/CITP, CGMA, an internal auditor and consultant in New Orleans. "They're realising that you have hackers and hacker nations out there that are becoming very advanced and looking at this as a business model to make money.

"[Boards and C-suites] are also realising that spending money on cybersecurity – buying a whole bunch of software and hardware, hiring an expert or two – doesn't mean you don't have to worry about it."

Cybersecurity is better incorporated into corporate risk management in the US than in Europe, but executives in Europe are also waking up to the threat of cyberattacks, said Alex Lattner, ACMA, CGMA, head of finance at the Deutsche Cyber Sicherheitsorganisation (DSCO). Four large German multinational companies, Volkswagen, Bayer, Allianz, and BASF, founded DCSO in 2015 to work with government agencies and improve cybersecurity in German industry.

Cybersecurity risks persist

Risks persist despite the cybersecurity arms race, the EY survey found. Effective services and tools that companies can use to resist cyberattacks exist and cybersecurity budgets are increasing, but more than half (57%) of the participants in the EY survey reported recent, significant cybersecurity incidents.

Spotty compliance with policies and guidelines or insufficient policies create vulnerabilities, Bodellini and Lattner suggested.

More training and awareness are needed to prevent employees from clicking on links that download malware. And password policies are frequently too lax or not followed.

Sixty-one per cent of respondents in the EY survey considered budget constraints an obstacle to

better cybersecurity. But more money doesn't necessarily translate into more security.

"There's no way to purchase absolute assurance," Bodellini said.

To balance budget constraints with security demands, companies should focus on identifying and classifying their data based on their level of importance to determine the level of protection needed. Additionally, not only should companies perform regular maintenance, such as timely vendor patch updates, but also risk assessments to determine vulnerabilities. Companies should ensure contemplated software and hardware purchases are aligned with the organization's IT governance policies and enterprise architecture requirements.

Also, hiring skilled IT people may improve cybersecurity, but 56% of respondents to the EY survey said lack of skilled resources is the second biggest challenge for corporate cybersecurity operations behind budget constraints.

Best practices to prepare for, manage, and recover from a cyberattack

Companies have made significant progress in taking measures to resist cyberattacks, according to EY. They have not spent as much time, effort, and money on preparing for and recovering from an attack. Especially the involvement of the board and C-level executives in both areas has been low.

To improve cybersecurity, Bodellini suggested some best practices to prepare, manage, and recover from a cyberattack.

To prepare:

- Inventory the business's data, identify the most valuable asset, and prioritise it for protection.
- Prepare a written incident response plan and practise its steps.
- Consider purchasing data breach insurance and using the risk management tools many insurers provide.
- Adopt and test compliance with standards and security frameworks developed by different industries.
- Determine whether the company is subject to multiple security breach notification standards, including disclosure requirements.
- Practise and test backup and restoration procedures regularly as part of business continuity and disaster recovery practices.
- Establish contacts with all stakeholders, such as regulators, organisations sharing cybersecurity information, suppliers, vendors, and law enforcement.

To manage:

- Assess the breach once it is discovered and repeatedly afterwards to determine its extent and damage.
- Perform actions to reduce the impact of an ongoing attack or contain a breach.
- Record and collect data while preserving evidence for a forensic examination.
- Document what is occurring, the actions that were taken to respond, and the conclusions that were reached.
- Avoid using a compromised computer system to communicate.
- Refrain from retribution, such as hacking back into a network suspected of spearheading an attack.

To recover:

- Perform all notification required by local, state, and federal laws and by contractual obligations.
- Communicate with law enforcement.
- Determine the root cause of the data breach and show compliance with the incident response plan.
- Debrief everybody involved in responding to a data breach and conduct a lessons-learned exercise that addresses systematic weaknesses and suggestions to improve the incidence response plan.
- Continue to monitor the cyber network for anomalies and unusual activity.

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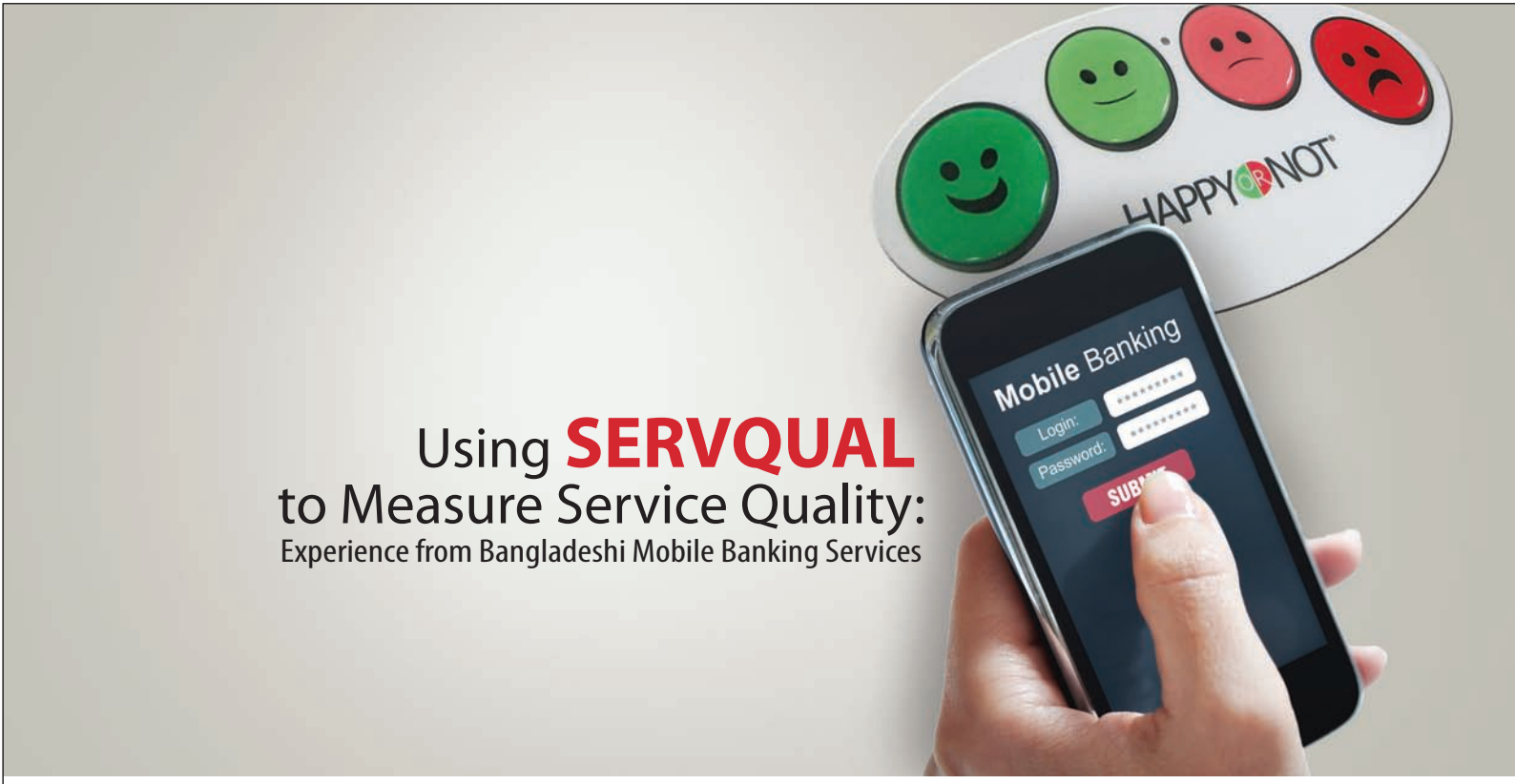

Using SERVQUAL to Measure Service Quality:

Experience from Bangladeshi Mobile Banking Services

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Abstract

Over the last few years, mobile banking service is getting popularity in Bangladesh. Enabling people to transfer their money within minimum possible time at a low cost is behind its gaining popularity. Although mobile banking services started with Dutch Bangla Bank Limited (DBBL) and bKash Limited many banks are now getting interest here, making the business environment more competitive. The mobile banking companies those are serving the customers in a better way are going to succeed in this competition. The purpose of this study is to examine the customer satisfaction on mobile banking services in Bangladesh. The aim is to assess the service quality based on several attributes to facilitate the companies to identify the key factors to customer satisfaction. The SERVQUAL model is used for this purpose and a modified model has been proposed afterward to measure different factors related to service quality. Based on the findings some suggestions have been made which may assist the mobile banking companies to increase their customer base through quality improvement and therefore more satisfied customers.

Keywords: Mobile Banking, SERVQUAL Model, Customer Satisfaction.

Introduction

Today, every company drive to be a customer-oriented, customer focused or even customer driven enterprise. Due to increase in competition, organizations are paying more attention to the customers in order to create and retain customer value. Customer satisfaction being a relative measure depends on a number of physical and psychological variables.

The mobile banking sector has been increasing in our country over the past couple of years. Enormous competition in the banking sector coupled with saturated mobile communication industry has successfully addressed the need for mobile banking here. The uses of such mobile banking features have been become a regular feature of our day to day life. Through the use of mobile banking the economy of Bangladesh has entered into a new era. Although the activity of mobile banking is directly regulated by Bangladesh Bank, the central bank of Bangladesh, there is a great scope for conducting the research on the customer satisfaction of such services.

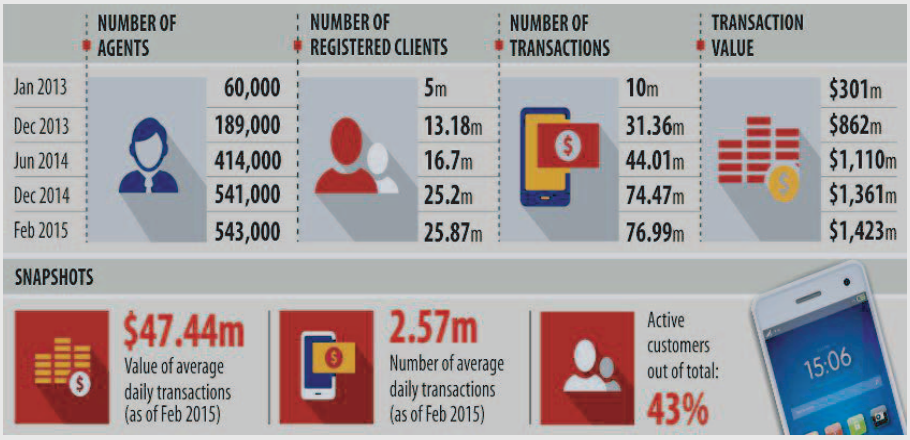
Mobile Banking in Bangladesh

Mobile banking in Bangladesh is in growth stage. Within a short time of its inception, it has become incredibly popular to reach at the growth stage. On July 2011, Bangladesh Bank has granted permission for mobile banking. Initially 5 banks responded positively to this initiative and by 2012 the early expansion is received from bKash and Dutch Bangla Bank Limited (DBBL). In our country the concept of mobile banking has been initiated by Dutch Bangla Bank Limited. Although DBBL is the pioneer of mobile banking services in our country, the BKash, a subsidiary institution of the Brac Bank Limited, has topped on the lists of mobile banking services.

The said concept of mobile banking has been successfully followed by other banking companies of our country: Trust Bank Limited, Eastern Bank Limited, Brac Bank Limited, Mercantile Bank Limited, AB Bank Limited, Dhaka Bank Limited, Premier Bank Limited, Southeast Bank Limited, Prime Bank Limited, Bank Asia, UCBL, NCC Bank Limited, First Security Islami Bank Limited, Islami Bank Limited, Commerce Bank Limited and Standard Bank Limited. There are more several banks in the line of introducing such mobile banking services: Sonali Bank, Jamuna Bank, One Bank, IFIC Bank, Al Arafah Islami Bank, Exim Bank, Janata Bank, Shahjalal Bank Limited and City Bank Limited.

Mobile banking service in Bangladesh in enabled through the use of bank agents who actually act as an independent one outside of the bank branches. Each mobile user can open a mobile bank account and can transact real cash through these agents. Such banking system involves a set of activities: training agents, service marketing, acquiring customers and account opening processes.

There are 55.6 million Bank accounts operating through branch banking in July 2012 which is only 36% of total population. This indicates a large number of populations outside the net of banking sector. Mobile banking allowed reaching these market segments in a convenient way. With 109.35 million subscribers (BTRC, 2013) and 98% population under network coverage, mobile banking emerged as a potential one. Within two years of operation mobile banking customers proliferated at 7.21 million in September 2013 (Saha, 2013). So, enormous opportunities are still waiting for exploration by the mobile banking companies.



Rational of the Study

The banking sector is facing enormous challenges today and they are bringing more products to the customers. In order to reach more customers, the mobile banking has emerged as a new financial product. In connection with the mobile phone operators these mobile banking is making it possible to transact more money through mobile network. The current market size for such product is as vast as under the mobile network coverage.

The use of mobile banking has smoothened the money transaction or transfer easier. Especially it contributed to eliminate the distance barrier for transferring money between rural and urban areas. Many features and potentials of such mobile banking are yet to be explored by the customers. So, the exploration of customer satisfaction will help the mobile banking companies to overcome the limitations of their service features and also to add new dimension to their existing market offerings.

Customer Satisfaction Defined

Customers are the important stakeholders of the company. Satisfaction of the customers is relatively an abstract concept and the same factor may or may not have similar impact on satisfied feelings. According to Kotler, "customer satisfaction is the extent to which a products perceived performance matches a buyer's expectations". WTO (1985) defined customer satisfaction as a psychological concept that involves the feeling of well-being and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service.

Since, customer satisfaction is not a universal phenomenon, same experience or process doesn't result in same experience. Due to differences in customer needs, expectations, objectives and past experiences the satisfaction level differs among the people. Thus it necessitates the developing identifying and understanding of the differences in customer satisfaction. Further the attributes of the service quality is also important to identify. Based on such identification, market segmentation should be made and different products or services should be offered to the customers.

Literature Review

Mobile banking has become an emerging concept in today's digital age. It is the latest approach made by the financial institutions for providing financial services through the use of mobile networking. The spread of mobile communication coupled with banking industry aiming to serve more customers has resulted in mobile banking services. The first application of mobile banking was based in Finland as early 1992 (Barnes & Corbitt, 2003). From that time being mobile banking is gaining its popularity and different literatures have been developed. The broad aim of m-banking is to fit a financial institution on a mobile phone (Goswami & Raghavendran, 2009). Mobile banking allows the customers to have a bank access in this pocket to use it in anywhere and anytime (Crosman, 2011), (Laukkanen & Kiviniemi, 2010). Technology is considered to be a fundamental factor for the emergence of mobile banking (Steadman, 2011). Widespread proliferation, availability and acceptance of mobile or smart phones and devices are the main drivers of m-banking (Halime, 2010).

There are number of factors favoring adoption of mobile banking users. Several studies have dedicated to reveal the factors for adoption of mobile banking. To fit with the lifestyle, young people are more using m-banking (Koenig-Lewis et al., 2010 and Howcroft et al., (2002). Study of Awasthi, (2011) revealed that people having a busy life and being constantly on move rather than having a sedentary life are more prone to adopt and use mobile banking. According to Suoranta, (2003) the convenience, privacy, time and effort savings together with the location-free access that m-banking offers encourage its adoption and use.

This study aims to contribute at measuring the satisfaction level of the customers of mobile banking which may contain important policy implications. One of the research instruments for measuring service quality is the SERVQUAL model, developed by Parasuraman, Berry and Zeithaml (1985). This model includes 22 items for assessing customer satisfaction regarding the service quality, grouped into five service quality dimensions. These are: Tangibles (physical facilities, equipment and service personnel appearance), Reliability (ability to perform the promised service), Responsiveness (Willingness to help and respond to customer need), Assurance (ability of the employees to gain trust and confidence among the customers) and Empathy (providing individualized attention to the customers).

Due to growing importance of service quality in the business performance, a variety of service quality studies have been conducted in recent times. The SERVQUAL model has been widely used in different service sectors- accounting and audit

firms (Ismail, 2006), health spas (Snoj & Mumel, 2002), Restaurants (Andaleeb & Conway, 2006), travel agents and hotel industry (Markovic & Raspor, 2010). Despite its criticism, the SERVQUAL items are agreed to be reliable predictors of overall service quality by the academicians.

Objective of the Study

The objectives of the study can be summarized as:

i. To determine the customer satisfaction of mobile banking stemming from the variety of products and services offered by the different banks.

ii. To identify the various variables that influence customer satisfaction and

iii To offer some recommendations that may help mobile bankers to retain their share of customers through excellent products and services.

Methodology

This study is based on primary data. The primary data is collected through a self-administered questionnaire survey. As a foundation for questionnaire development, the SERVQUAL model was used. The original items of the model have been modified slightly to suit mobile banking settings. The service quality perceptions were measured on a 5 point balanced Likert-type scale ranging from 1 'strongly disagree' to 5 'strongly agree' and therefore the score 3 or above is interpreted as the customer satisfaction.

This study was conducted on total 100 respondents. Such respondents are customers of two leading mobile banking companies of Bangladesh: Dutch Bangla Bank Limited (DBBL) and Brac Bank Limited (bKash). The respondents are reached based on convenience sampling method.

Descriptive statistical analysis was used to describe respondents' demographic characteristics and to evaluate service quality perceptions of mobile banking users. An exploratory factor analysis was performed on the 22 perception attributes included in the questionnaire in order to determine underlying dimensions of the service quality perceptions. Principal component analysis with varimax rotation was conducted. Items with eigenvalues equal to or greater than 1, factor loadings above 0.2, and factors which contain at least three items were retained.

Analysis and Findings

In order to achieve the study's goals descriptive analysis was performed. First, the respondents' demographic characteristics are provided.

Items	Percentage	Items	Percentage
Gender		Education	
Male	50.0	Primary	5.0
Female	50.0	Secondary	47.0
Age	Graduate	35.0	
20 and Below	11.0	Post Graduate	13.0
21-35	73.0	Occupation	
36-49	13.0	Student	68.0
50 and Above	3.0	Business	25.0
MBanking Company		Service	7.0
bKash	66.0		
DBBL	34.0		

Table 1: Demographic profile of the respondents.

Next, the results of descriptive analysis of the guests' perceptions are presented. The range of service quality items was from 1 (very low) to 5 (very high). The mean scores of the guests' perceptions ranged from 2.96 to 3.85. The lowest perception item was 'Using all the features of the mobile banking service' which indicates that customers are not fully using all the offers made by the mobile banking companies. On the other hand the highest ranking perception was regarding 'confidence on future prospect'. The higher ranking attributes were for Assurance, Empathy and Tangible variables. The scores indicate that the customer satisfaction for mobile banking services is very much positive.

		Variable	Mean	Std. Dev.
Variable	1	Using all the features of mobile Banking service	2.96	1.205375
	2	Enable to withdraw expected amount irrespective of time and place	3.31	1.244747
	3	When it promises to do something by a certain time, it does so.	3.21	1.06643
	4	Its service charge is reasonable.	3.16	1.16965
	5	Mobile banking transactions with it are always accurate.	3.41	1.146757
Responsivenes	6	The bank quickly resolves problems, when customer is encountered with transactions.	3.2	.9847319
	7	This bank gives prompt services through its call center.	3.33	1.101468
	8	Its official responds quickly for any problem.	3.31	.9607972
	9	Its customer's service representatives available 24/7.	3.23	1.013594
	10	It tries to understand the need of customer by communicating them.	3.45	914253
Assurance	11	It will flourish in near future.	3.85	1.067187
	12	Safe feeling when using its mobile banking services.	3.33	1.206506
	13	Feeling of ease while using Mobile Banking services.	3.45	1.0088
	14	The bank does not misuse personal information.	3.51	1.193374
Empathy	15	It always responds to customer queries.	3.44	.9462312
	16	It helps customer providing valuable information.	3.45	.9782999
	17	It always tries to make mobile banking transaction procedure simple and convenient.	3.47	1.123262
	18	It performs their server maintenance work in off-peak hour for their customer benefit.	3.28	.8537499
Tangible	19	Its mobile banking Network is good.	3.43	.9455371
	20	The procedure/software of doing mobile banking transaction is very much user friendly.	3.47	1.077361
	21	Enough number of mobile banking agents is available for doing transaction conveniently.	3.47	1.029416
	22	Never facin any problem with transaction.	3.07	1.191341

The exploratory factor analysis extracted seven factors, which accounted for 63.1 per cent of the total variance in the data. For simplicity of analytical purpose, each statement of the questionnaire was coded as Q1Ralia, Q2Ralia, Q1Respon, Q2Respon and so on. Since, last two factors contained only one item, it could not be considered as a factor and is not interpreted. Most of the factor loadings were greater than 0.50, implying a reasonably high correlation between the factors extracted and their individual items.

Rotated Component Matrixa							
	Factors						
	1	2	3	4	5	6	7
Q1Relia				.501			
Q2Relia	.565						
Q3Relia		.644					
Q4Relia				.575			
Q5Relia				.715			
Q1Respon		.486					
Q2Respon				.563			
Q3Respon				.838			
Q4Respon				.608			
Q5Respon					.761		
Q1Assu	.580						
Q2Assu	.805						
Q3Assu	.576						
Q4Assu	.597						
Q1Emp	.451						
Q2Emp	.557						
Q3Emp	.648						
Q4Emp		.712					
Q1Tan			.633				
Q2Tan			.623				
Q3Tan							.850
Q4Tan			.868				
Eigenvalue	5.184	2.268	1.616	1.394	1.258	1.119	1.044
% of Variance	23.565	10.308	7.345	6.337	5.719	5.087	4.744
Cumulative %	23.565	33.874	41.219	47.556	53.275	58.363	63.106
Number of Items	8	3	3	3	3	1	1

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 14 iterations.

Table 3 : Factor Analysis results.

As the table shows, the first factor contains the maximum Eight items including all items of Assurance variable. The three variables from the initial SERVQUAL model retained: Reliability, Responsiveness and Tangible. The extraction of the factors suggests the regrouping of the variables. Five retained factors can be labeled as follows:

Emerged Factor	Retained Items	Labels for Component Dimensions
1	Q2Relia, Q1Assu, Q2Assu, Q3Assu, Q4Assu, Q1Emp, Q2Emp, Q3Emp	Assurance on the Mobile Banking Transactions
2	Q3Relia, Q1Respon, Q4Emp	Capability to solve Emergency Crisis
3	Q1Tan, Q2Tan, Q4Tan Tangible	
4	Q1Relia, Q4Relia, Q5Relia	Reliability
5	Q2Respon, Q3Respon, Q4Respon	Responsiveness

Factor 1 is good combination of Assurance, Empathy and Reliability. These items are basically related to the customers' confidence over the mobile banking transactions. Factor 2 focuses on the customers' perception and insight about the service provider's capability to cope up with the emergency situations. Factor 3, 4 and 5 have identified in the above table.

Conclusion

This research is the first to apply the SERVQUAL scale to measure the customer satisfaction of the mobile banking services users. The customers of the mobile banking services are satisfied with the service quality of the providers, measured through different items and variables. Although the SERVQUAL model itself is well established, the applicability of it in mobile banking services needs to be modified. As the findings suggest, the service quality of the mobile banking can be measured through modified SERVQUAL scale with 5 variables: Assurance on the Mobile Banking Transactions, Capability to solve Emergency Crisis, Tangible, Reliability, and Responsiveness- last three being retained from the original model.

Based on the findings and objective to provide some suggestions to the mobile banking services, the following points are worth to note:

- Capacity improvement through infrastructure development and employee & agent training, since these are found as key attributes to customer satisfaction.
- Inform customers about its new features and services.
- Enrich customer communication.
- Prompt in responding to the problem encountered by the customer.
- Creating knowledge among the customers, especially of the rural people.

There are several limitations that need to be acknowledged. The data collected in a small scale and questionnaires were distributed in Dhaka district. Also, the measurement of the customer satisfaction was limited to 22 attributes. Even though these attributes were included in many studies, there could be other relevant attributes that are likely to influence the satisfaction of the mobile banking customers. Additionally, the results of the present study should be interpreted in the context of Bangladesh. Future research should explore other relevant attributes of the service quality and assess their impact on the different context.

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CFOs' growing role: Culture champions

By Neil Amato

The title says "financial" squarely in the middle, yet CFOs these days are doing far more than overseeing an organisation's standard reporting. Increasingly, the changing remit of the finance chief includes a greater role in shaping corporate culture.

Finance executives say culture can take on a number of meanings, from smaller things such as a company's dress code or its social media presence, to key values such as integrity and transparency. And while a CFO certainly sets a standard for the finance team first, the role of shaping culture goes company-wide.

CFOs should assist the CEO in establishing the company's code of ethical conduct so that employees in all departments follow the C-suite's lead. If there is a lack of emphasis on ethics, "it can spin the organisation into trouble" in the eyes of employees, shareholders, customers, and regulators, according to Mark Biersmith, CPA, CGMA, a partner at Andre + Associates PC in Dallas.

CFOs can also model behaviours that go beyond must-haves such as integrity. Slightly more than half (51%) of CFOs are at least somewhat involved in shaping corporate culture, according to a recent survey of US finance chiefs by staffing firm Robert Half.

The main ways CFOs go about being culture leaders, according to the survey, are by:

- Using company principles and values to guide actions (83%)
- Contributing to the development of the company's mission (79%)
- Collaborating with other executives to define the desired culture (78%)
- Speaking regularly with employees about culture (76%)
- Contributing to training and onboarding programmes (72%)

Hiring as part of culture

CFOs who want to uphold and grow a company's culture can use strategic hiring to accomplish that goal, according to Duncan Brodie, FCMA, CGMA, managing director of training provider Goals and Achievements. He said finance chiefs should not be afraid to hire people who might someday ascend to the CFO role.

"If you hire people who are better than you, hire people who have got high expectations, it raises the standard right up the line," Brodie said. "Hire people who are smart and driven, and they'll keep you on your toes."

Biersmith agreed, saying that culture and hiring go hand in hand. CFOs should ensure implementation of culture to enable the organisation not only to retain staff but also to attract and hire new talent.

Building culture can also help better position a CFO for a CEO role (https://www.cgma.org/magazine/podcast/ascending-from-cfo-to-ceo.html). And that demonstration of non-financial acumen is critical for those looking to ascend to the CFO job. Showing support for employees, treating them with fairness and respect, and communicating how their work matters go a long way in modelling culture, Brodie said.

"You don't get to a senior level in accountancy by being good at doing numbers," Brodie said. "You get to a senior level because you've got good people skills. You can manage, you can lead, you've got strong interpersonal skills and can build relationships, and you understand how businesses work."

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Exploring the Pattern of INTELLECTUAL CAPITAL REPORTING in the Annual Reports of Bangladeshi Listed Companies

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Abstract

The study intends to explore the pattern of Intellectual Capital (IC) reporting by the Bangladeshi listed companies in their annual reports. To achieve the purpose, content analysis method is applied on the annual reports of forty sample companies listed with Chittagong Stock Exchange Ltd. Findings reveal that, although the extent of Intellectual Capital Reporting (ICR) is low, all the sample companies have provided at least some intellectual capital information. 92.5% of the sample companies reported less than 50 sentences in their annual reports. Among the industry sectors, 'Banks' released the highest amount of IC information (on average 65.2 sentences), while the 'Insurance' sector provided the least (on average 20.6 sentences). It is also found that most of the IC information are narrative in nature. Further, all the companies reported information on 'Company name', 'Customer' and 'Customer satisfaction/loyalty'. Conversely, not a single company communicated any information on 'Patent', 'Copyright' and 'Trademarks'. Finally, after specifying some limitations, the paper provides some directions for future research.

Keywords: Intellectual Capital, Intellectual Capital Reporting, Bangladeshi listed companies.

1. Introduction

Intellectual Capital (IC) is being given huge importance by the firms in every economy of the world. A number of factors such as, rapid technological change, innovation, wide spread internet and information technology, stiffer global competition, etc. have contributed to shift the concentration of firms from traditional physical and financial resources to intangible resources. Best machineries and equipment, products and commodities alone no longer guarantee the company the success in this era of globalization (Khan and Ali, 2010; Yi and Davey, 2010; Goh and Lim, 2004). Intellectual capital such as innovativeness, brand name, skilled manpower, networking systems, etc., are the secrets of success for many successful giant companies in the world such as, Microsoft, Google, Facebook, Amazon.com, etc. As a result, firms are attaching growing importance in recognition, measurement and reporting of IC information in their annual reports. Consistently, researchers have paid their attention to the examination of the status of Intellectual Capital Reporting (ICR) by the corporations in many economies (e.g., Yi and Davey (2010) in China, Ousama et al. (2011) in Malaysia, Singh and Kansal (2011) in India, Ahmed and Hussainey (2010) in Egypt, Guthrie et al. (2006) in Hong Kong and Australia, Branco et al. (2010) in Portuguese, White et al. (2010) in Australia and UK, Oliveras et al. (2008) in Spain, Abeysekera (2007) in Sri Lanka and Australia, Wagiciengo and Belal (2012) in South Africa, etc.). In Bangladesh, a few studies examined the reporting of IC, but the scope of those researches was limited to some specific industry sector or some specific aspects of the broader concept of intellectual capital. For example, Khan and Ali (2010) investigated the status of ICR of the Banking sector of Bangladesh only. Again, Khan and Khan (2010) explored the disclosure practices of human capital, which is a specific aspect of intellectual capital, of top Bangladeshi companies. In addition, Uddin et al. (2013) highlighted the reporting practices of human capital by the listed companies of Bangladesh. Furthermore, Aowrangazab and Hossain (2012) examined the reporting of human capital and its determinants in the publicly traded non-financial companies of Bangladesh and compared the results with those of Indian and US corporations. In such a context, the present study intends to carry out an in-depth analysis to explore the pattern of ICR by the listed companies of Bangladesh.

2. Objectives of the Study

The paper intends to achieve the following specific objectives:

(i) To explore the overall status of Intellectual Capital Reporting (ICR) by the listed companies of Bangladesh;

(ii) To provide a industry-wise comparative picture of ICR;

(iii) To unearth the feature of ICR (category-wise and item-wise) by the corporations in their annual reports.

3. Intellectual Capital - the Concept

In literature, the terms 'intellectual capital', 'intangible assets', 'intangibles', 'intellectual property', 'invisible assets', 'knowledge resources', 'intellectual assets' etc. were used synonymously (Choong, 2008; Haji and Ghazali, 2012; Yi and Davey, 2010; Abeysekera, 2006). IC is often viewed as invisible/intangible or knowledge resources which can contribute to the value addition for firms and help the firm achieving competitive advantage over its competitors (Sharma et al., 2007; Sveiby, 1997). Similarly, Stewart (2000, p.11) defined IC as "intellectual material - knowledge, information, intellectual property, experience - that can be put to use to create wealth". In a similar vein, Al-Ali (2003, p. 6) also viewed IC as "the knowledge, experience, and brainpower of employees as well as knowledge resources sorted in an organization's databases, systems, processes, culture, and philosophy". Brooking (1996, p.12) defined it as "the combined intangible assets which enable the company to function". Itami (1991) narrated IC as intangible or invisible assets that "include a wide range of activities such as technology, consumer trust, brand image, corporate culture and management skills." Edvinsson (2006) defined IC of the firm, quoted by Singh and Kansal (2011, p.302), as "possession of knowledge, applied experience, organizational technology, customer relationships and professional skill that provides it with a competitive edge in the market".

Categorization of Intellectual Capital

Literature reveals that all the prior researchers classified IC into three categories although they leveled different names for each category. Among many the most popular and widely cited classifications were forwarded by Sveiby (1997). In his paper, Sveiby classified IC into three components: (i) internal structure; (ii) external

structure; and (iii) employee competence. Edvinsson (1997) renamed the same classification of Sveiby as: (i) human capital; (ii) organizational capital; and (iii) customer capital. Bontis (1998) and Sullivan (1998) also adopted the same classifications of Edvinsson. Consistent with these prior researches, this paper also classified IC into three components: (i) internal capital; (ii) external capital; and (iii) human capital. Each category of IC includes the following specific intangibles:

(i) **Internal Capital:** Internal capital refers to "the knowledge embedded in organizational structures and processes" (Petty and Cuganesan, 2005, p.41). It includes Patents, Copyrights, Trademarks, Management Philosophy, Corporate Culture, Information Systems, Networking Systems, and Financial Relations. These intangibles create value for stakeholders. For example, Management philosophy shapes the company's interactions with diverse stakeholders namely, customers, employees, environment, business community, etc. These will ultimately enhance the protection of shareholders' interest and ensures the company's growth.

(ii) **External Capital:** External capital may be explained as the relationship a firm has with outside stakeholders, such as relationships with customers and suppliers, business collaborations, etc. (Branco et al., 2010). Brand image, company names, customer loyalty, etc., help in building such relationships. And these relationships may observable by favorable contracts, market share, etc. Thus this category of IC includes Brand, Company names, Customers, Customer loyalty/satisfaction, Distribution channel, Business collaboration, Licensing/Franchising agreement, Favorable contracts, and Marketing and reputation.

(iii) **Human Capital:** Guthrie et al. (2004) defined human capital as the internal intangible asset originated from the expertise and competency of the employees of the organization. It includes Employee number, Employee education, Employee training, Work related knowledge/ competency, Vocational qualification, Entrepreneurial spirit/innovativeness. In this era of knowledge based economy, human capital is considered vital for firm's success. Human capital of a firm may be measured in both qualitatively and quantitatively. Qualitatively indicators may include, for example, employee knowledge, competency, innovativeness, etc. Quantitative indicators may, for example, include employee number, value added per employee, etc.

4. Prior Research

A good number of prior studies investigated different issues related to ICR. For example, Goh and Lim (2004) examined the IC disclosure practices of the top 20 profit-making public listed companies in Malaysia in their annual reports, both qualitatively and quantitatively. Employing content analysis method, they found that the incidences of voluntary disclosure of IC in company reports are high qualitatively, but not quantitatively. They further reported that of the three categories of IC, external capital had the most disclosures, compared with internal capital and employee competence. It was also highlighted that very limited disclosure was made on patent, copyright, trademark, franchising agreement, know-how, and vocational qualification.

In a similar research, Haji and Ghazali (2012) studied the trend of ICR over a three-year period (2008-2010) taking samples from Malaysian listed companies. The results revealed an increasing trend of ICR by the sample Malaysian companies, particularly a significant increase in human capital disclosures. They also reported significant differences between the categories of the IC disclosures.

An identical study was carried out by Wagiciengo and Belal (2012) in South Africa. They examined the extent and nature of ICR in 'Top 20' South African companies over a 5-year period (2002-2006) applying the content analysis method. Like the findings of Haji and Ghazali, they have also warranted an increasing trend of ICR over the 5-year study period with certain firms reporting considerably more than others. Further, out of the three broad categories of intellectual capital disclosures human capital appeared to be the most popular category.

Oliveras et al. (2008) conducted a longitudinal study to analyze the ICR by leading Spanish firms over a three-year period from 2000 to 2002. Like the findings stated above, they also found a statistically significant increase in the volume of ICR over the period under study although the overall level was relatively limited. But unlike those findings, they identified a greater volume of

communication in the area of external capital than in either internal or human capital.

Yi and Davey (2010) investigated the extent and quality of ICR by the Chinese listed companies. Applying the content analysis method on 49 dual-listed companies in mainland China, they reported that the level of IC disclosures by the sample companies was not high. Most of the disclosures were narrative rather than numerical or monetary in nature. They, however, pointed out that the average number of items disclosed was high enough to suggest that there was a clear awareness of the significance of ICR.

Oliveira et al. (2010) explored the level and pattern of ICR in sustainability reports of Portuguese companies. Results indicate that the level of ICR varies considerably among companies ranging from 31 percent to 67 percent of the possible items. The principal types of IC items disclosed were matters of strategy, process, and human capital.

Sing and Kansal (2011) investigated inter firm ICR and its variations in top 20 listed pharmaceutical companies in India. They commented that although the sample companies were from knowledge-led industry, ICR were low, narrative and varying significantly among companies. ICR score varied in a range of 4 to 36 against expected score of 96. External capital with mean score of 18.78 was the most disclosed category. Brands and business collaborations was the most disclosed element of IC, followed by employee competence and internal capital respectively.

Joshi et al. (2012) carried out a comparative analysis of ICR by the top 20 software and technology sector companies in a developing nation, India, and a developed nation, Australia. The study found that there was a significant difference in the level of ICR by both countries. Indian companies were reporting IC information on a higher scale as compared to their Australian counterparts. The volume of ICR, however, was found to be low in both the nations and most of the disclosures were declarative in nature.

In Bangladesh, although many researchers enquired into the status of human capital reporting, study of ICR is very rare. Khan and Ali (2010) examined the state of ICR and the users' perception about it confining their study to the private commercial banks of Bangladesh. They finally contended that the managements of Bangladeshi commercial banks were not enthusiastic about the necessity of ICR, even though the stakeholders were in favor of such reporting. Like the findings in many other economies, most of the companies focused on the provision of information relating to human capital. This dearth of research acted as an impetus to undertake a comprehensive study with a view to measure the extent and understand the pattern of ICR by the listed companies of Bangladesh.

5. Methodology of the Study

5.1. Method - Content Analysis

This study is carried out by applying content analysis method, which has been a very popular and widely applied method in IC disclosure research. Guthrie et al. (2006, p.257) defined content analysis as "codifying both qualitative and quantitative information into pre-defined categories in order to track patterns in the presentation and reporting of information". As a systematic, objective and reliable method, content analysis was extensively employed by many IC researchers (e.g., Bruggen et al., 2009; Striukova et. al., 2008; Vergauwen and Alem, 2005; Kang and Gray, 2011; Sing and Kansal, 2011; Joshi et al., 2012; Abeyesekera, 2011; Oliveras et al., 2008; Branko et al., 2010). Application of this method requires the selection of counting unit to capture the disclosures made in the published documents. Different counting units such as, words, number of lines, number of sentences, number of paragraphs, etc. were used by different IC researchers earlier. But each measure has its own relative merits and demerits. For example, Zeghal and Ahmed (1990) argued in favor of word counts as it is the smallest unit of measurement for analysis and can be expected to provide the maximum robustness to the study in assessing the quantity of disclosure. On the contrary, Hooks and Staden (2011) criticized it as words are meaningless unless they are placed into a sentence. Examination of the annual reports, sources of data for current research, reveals that the disclosure of IC information is not enormous, making it incompatible for using paragraphs or proportion of pages as counting unit. The paper, thus, uses number of sentences as a measure of ICR.

5.2. Sample Selection

The paper intends to explore the pattern of ICR by the Bangladeshi listed companies in their annual reports. The samples are, thus, selected from the companies listed with both Chittagong Stock Exchange (CSE) Ltd. and Dhaka Stock Exchange (DSE) Ltd. Considering the resource constraints at the disposal of the researchers, five companies from each industry sector have been selected. The selected companies belong to eight different

sectors, namely, Bank, Insurance, Leasing and Finance, Pharmaceuticals and Chemicals, Cement, Ceramic, Engineering and Electrical and Textiles and Clothing. Finally, the sample size becomes forty. A complete list of sample companies is given in Appendix - 1.

5.3. Data

A company may disclose information through a variety of media including annual report, prospectus, website, newspaper, press release, etc. Among these annual report is the principal media for communicating corporate information. Jenkins and Yakovleva (2006) opined that annual report is the most important disclosure document for the organization to communicate a view of its operations to the public. Wilmshurst and Frost (2000) argued that annual report is a statutory report incorporating both statutory and voluntary disclosures, which is produced regularly and can be accessed easily. Taking these views into consideration and like many other IC researches, this paper has also used annual report as the only source of IC information released by the corporations. The latest available annual reports of the financial year 2016 are consulted for the required information.

One of the inherent limitations of the content analysis method is the subjectivity in the coding process. To minimize this subjectivity, the two researchers independently studied the annual reports of the sample companies and carried out the coding process. Where differences arise, the relevant issues are double checked by authors and necessary adjustments are made. Reliability of data were ensured following the same approach by many prior researchers also (e.g., Abeysekera, 2010; Striukova et al., 2008; Cowan and Gadenne, 2005; Frost, 2007).

6. Findings and Their Analyses

6.1. Status of ICR

Table - 1 and Table - 2 summarize the status of intellectual capital reporting by the listed companies of Bangladesh. Table - 1 indicates that all of the sample companies (100%) have disclosed at least one intellectual capital information on their annual reports. This is an indication that the companies have realized the importance of reporting IC information to the stakeholders that help the company achieving competitive advantage over their rivals.

Table-1: Status of ICR of companies in annual reports

Particulars	Number of companies	Percentage
Companies disclosing at least one IC information	100	100%
Non-disclosing companies	0	0%
Total	**100**	**100%**

Table - 2 reveals that only three companies (7.5% of the sample) have disclosed more than 50 sentences of intellectual capital information, while none of the companies have disclosed less than 5 sentences. 11 companies (i.e., 27.5% of the sample) have reported 26 to 30 IC related sentences in their annual report. Apart from these, 8 companies' (20% of the sample) disclosure lies between 31 to 50 sentences. On the other hand, 18 companies (45% of the sample) reported 6 to 25 sentences in their annual reports.

Table-2: ICR in annual reports

Number of sentences disclosed	Number of companies	Cumulative no. of companies	Percentage
1-5	0	0	0
6-10	3	3	7.5
11-15	4	7	10
16-20	5	12	12.5
21-25	6	18	15
26-30	11	29	27.5
31-35	2	31	5
36-40	3	34	7.5
41-45	2	36	5
46-50	1	37	2.5
51-above	3	40	7.5
Total	**40**		**100**

6.2. Status of ICR - a sector wise comparison

Table - 3 demonstrates a comparative picture of IC reporting by various sectors under study. There are eight different industry sectors including Bank, Textile, Pharmaceuticals & Chemicals, Engineering & Electrical products, Cement, Ceramic, Insurance and Leasing. It's inspiring to see that all the companies under any sector are disclosing at least some IC related information. A closer look reveals that the highest number of sentences (on average 65.2 sentences) pertains to IC information has been reported by 'Bank' industry (ranked 1), followed by 'Leasing' (ranked second, average number of sentences disclosed are 30.2).

On the other hand, the least number of sentences has been disclosed by 'Insurance' industry (on average 20.6 sentences). Almost equal number of sentences are reported by the companies belonging to 'Ceramic' sector (ranked seventh, average number of sentences are 20.8).

Cement and Textiles industries have ranked third and fourth disclosing, on average, 24.8 and 24.2 sentences respectively. The other sectors' IC reporting ranges from about 20 to 22 sentences showing a poor scenario as compared to top rated sectors. It is also evident from the table that the variations in ICR among the sectors are significantly high (the maximum number of sentences are 65.2, while the minimum is 20.6).

Table-3: Status of ICR in annual reports-a sector wise comparative analysis

Sector	No. of sample companies	No. of companies disclosing IC info	Number of sentences reported in total	Average number of sentences	Rank (with respect to average disclosures)
Pharma & Chemicals 5	5	112	22.4	5	
Banks 5 5 326 65.2 1					
Textiles and Clothing	5	5	121	24.2	4
Engineering & Electrical	5	5	108	21.6	6
Cement	5	5	124	24.8	3
Ceramic	5	5	104	20.8	7
Insurance	5	5	103	20.6	8
Leasing	5	5	151	30.2	2
Total	**40**	**40**	**1149**	**28.73**	

6.3. Characteristics of Intellectual Capital Reporting

Table - 4 provides a summary of the characteristics of IC information disclosed by Bangladeshi listed companies. The table shows that although all the companies reported both narrative and quantitative information, most of the IC information (93.21% of the total number of sentences) are narrative in nature. Number of sentences disclosing quantitative information are few (total 78 i.e., 6.79% of the total number of sentences) and mainly related to 'employee number', 'employee training' and market share.

With respect to category of ICR, all the companies disclosed information relating to 'external capital' and 'human capital' but 5 companies (12.5% of the total sample) did not provide any information relating to 'internal capital'. Out of the total number of sentences, most (68.32%) are related to 'external capital'. Almost equal numbers of sentences are conveying information related to 'internal capital' and 'human capital' amounted to 190 and 174 respectively.

As far as the location of disclosure in annual report is concerned, 'Directors' report', 'Chairman's Message' and 'MD's statement' are the most popular for disclosing IC information. All the companies have provided most of their IC information in these three locations amounting to approximately 88.69% of the total number of sentences. Apart from these, 33 companies used 'Mission or Vision statement' for releasing IC information but volume of disclosure here is minimum (only 9.92% of the total number of sentences). Only 4 companies provided few sentences (1.4% of the total number of sentences) in 'other' section of the annual reports. None of the companies used both 'Chairman and MD's Statement' or both 'MD's and Directors' Report' for reporting IC information.

Table-4: Characteristics of ICR in annual reports

Base	Particulars	Number of disclosing companies	Disclosing companies as a % of total samples	Number of disclosed sentences	No. of disclosed sentences as a % of all disclosed sentences
Type of ICR	Quantitative	40	100	78	6.79
	Narrative	40	100	1071	93.21
	Total	**40**	**100**	**1149**	**100**
Category wise ICR	Internal Capital	35	87.5	190	16.54
	External Capital	40	100	785	68.32
	Human Capital	40	100	174	15.14
	Total	**40**	**100**	**1149**	**100**
Location in report	Chairman's Statement	40	100	303	26.37
	MD's Statement	40	100	394	34.29
	Directors' Report	40	100	322	28.02
	Both in Chairman and MD's Statement	0	0	0	0
	Both in MD's and Directors' Report	0	0	0	0
	Vision, Mission Statement	33	82.5	114	9.92
	Others	4	10	16	1.40
	Total	**40**	**100**	**1149**	**100**

6.3. Extent of ICR - Item wise

Table - 5 portrays the status of item-wise reporting of IC information, followed by Table - 6 citing some examples of IC information from the annual reports of the sample companies. It is found from the table that all the sample companies together provided total 190 sentences on different items within the category of 'Internal Capital'. Further scrutiny reveals that none of the companies provided any information on patents, copyrights and trademarks. On the other hand, 'Information Systems', 'Management Philosophy' and 'Networking Systems' are reported by most of the companies amounting to 77.5%, 67.5% and 57.5% of the sample companies respectively.

Among the IC information, items within the category of 'External Capital' are widely reported by the sample companies amounting to total 785 sentences with an average of 19.63, whereas the average number of sentences relating to 'Internal

Capital' and 'Human Capital' are 4.75 and 4.35 respectively. Again, within 'External Capital', most of the sentences (654 or 83.31% of the total sentences) containing IC information are related to 'Company Name', 'Customer' and 'Customer Loyalty/satisfaction'. Many of the sample companies have also reported information on 'Market Share' and 'Brand' amounting to total 60 and 38 sentences respectively. Conversely, only two companies disclosed information on 'Licensing/Franchising agreement' and 'Favorable contract' in only 3 sentences in their annual reports.

The last category of IC information 'Human Capital', although very important, have not been disclosed with due emphasis by the sample companies. The total number of sentences communicating information on different items belonging to 'Human Capital' is only 174 with an average of 4.35. The most reported items under this category are 'Work related knowledge/competence', 'Employee training', 'Employee education' and 'Employee number'. 92.53% of the sentences conveying information on 'Human capital' are related to these four information items. Only few sentences (13 i.e., 7.47% of the total 174) provided information on 'Vocational qualifications' and 'Entrepreneurial spirit or innovativeness'.

Table-5: Extent of ICR - Item wise in annual reports

ICR	No. of companies disclosing IC info	Percentage of Companies disclosing	Number of sentences reported in total	Average number of sentences
Internal Capital:				
Patents	0	0	0	0
Copyrights	0	0	0	0
Trademarks	0	0	0	0
Mgt. Philosophy	27	67.5	54	2.0
Corp Culture	8	20	12	1.5
Info systems	31	77.5	58	1.87
Networking systems	23	57.5	48	2.09
Financial relations	10	25	18	1.8
Total	**40**	**100**	**190**	**4.75**
External Capital:				
Brands	18	45	38	2.11
Company names	40	100	253	6.33
Customers	40	100	252	6.30
Customers loyalty/satisfaction	40	100	149	3.73
Distribution Channels	10	25	15	1.50
Business collaboration	12	30	15	1.25
Licensing/Franchising agreement	01	5	01	1.0
Favorable contracts	01	5	02	2.0
Marketing and Reputation	35	87.5	60	1.71
Total	**40**	**100**	**785**	**19.63**
Human Capital:				
Employee number	23	57.5	28	1.22
Employee education	30	75	39	1.30
Employee training	32	80	44	1.38
Work related knowledge/ competence	35	87.5	50	1.43
Vocational qualifications	7	17.5	9	1.29
Entrepreneurial spirit, innovativeness	3	7.5	4	1.33
Total	**40**	**100**	**174**	**4.35**

A few examples of IC information reported by the sample companies are cited in the following table.

Table - 6: Examples of IC information

Information on	Example sentences	Example sentences
Corporate Culture	"We understood that our ability to succeed ultimately depends on our culture to deliver our strategy from the performance and compliance, to stewardship and responsibility. As an important determinant of the culture we wish to build, our dynamic and engaged leadership teams enhancing Bank's values each day and holding themselves accountable and responsible for the business, celebrating success and learning from their mistakes."	Annual Report 2016, p.9, Prime Bank Ltd.
Management Philosophy	"The philosophy of business operations that our company continue to uphold does not leave any scope of discrimination amongst genders, religion, race and regionalism. We give priority to fairness, righteousness, equitable opportunity to all of our employees, stakeholders, regulators and other agencies of government on the basis of legal orders, professionalism, corporate social responsibility, humanism and business ethics combined with morality."	Annual Report 2016, p.13, Square Pharmaceuticals Ltd.
Employee Training	"Continuous development of the Human Resources and their transformation into Human Capital through constant training both at home and abroad shall be pursued more passionately than ever before."	Annual Report 2016, p.10, Prime Bank Ltd.
Employee innovativenes s	"FFIL believes in diversity and therefore, we consciously employ deserving candidates from diverse backgrounds. We believe diversity is an important sources of creativity and innovation."	Annual Report 2016, p. 31, FAS Finance & Investment Ltd
Customer Satisfaction	"Customer needs customer care and customer satisfaction to be central to all operating activities."	Annual Report 2016, p.6, Meghna Bank Ltd.
Distribution Channel	"Considering the overall scenario, the Bank continues to focus on its delivery channel, technology, human resource and its brands along with branch network, business promotion and corporate social responsibility and product diversification."	Annual Report 2016, p.93, Shahjalal Islami Bank Ltd.
Financial Relations	"Not only should we be a commercially successful business, but we should also be seen a having a noble purpose in helping our millions of customers managing their financial needs whilst playing a core and highly valued role in funding enterprise and supporting country's long term economic growth."	Annual Report 2016, p.40, Premier Bank Ltd.

7. Summary and Conclusion

The paper attempts to explore the pattern of IC reporting by the listed companies of Bangladesh. With this view, 40 companies belonging to eight different industry sectors listed with Chittagong Stock Exchange have been selected. Applying content analysis method, the paper has revealed the extent and natures of IC information that are released by the sample companies in their annual reports.

Findings show that, although the extent of ICR is low, all the sample companies have provided at least some information in their annual reports. Only 3 companies reported more than 50 sentences conveying IC

information, while the remaining 37 (92.5% of the sample) companies spent less than 50 sentences for giving IC information to their stakeholders.

A sector-wise comparative analysis depicts that the 'Bank' sector have reported the highest amount of IC information (average 65.2 sentences) followed by 'Leasing' (average 30.2 sentences) and 'Cement' (average 24.8 sentences). Conversely, 'Insurance' and 'Ceramic' sectors are providing the least amount of IC information amounting to, on average, 20.6 and 20.8 sentences respectively.

The paper also found that most of the IC information are narrative in nature (93.21% of the total number of sentences). Moreover, information relating to 'External Capital' are much more (68.32%) as compared to 'Internal Capital' (16.54%) and 'Human Capital' (15.14%). Furthermore, most of the information are reported either in 'Chairman/MD's Statement' or in 'Directors' Report'.

Results also reveal that none of the companies provided any information on patent, copyright and trademarks. On the other hand, all the companies disclosed information on company names, customers and customer loyalty/satisfaction. Apart from these two extremes, significantly greater number of companies reported information on 'Information systems', 'Marketing and reputation', 'Employee training', 'Employee education', 'Work related knowledge', etc. Conversely, fewer companies disclosed information on 'Corporate culture', 'Financial relations', 'Licensing/Franchising', 'Favorable contracts', 'Entrepreneurial spirit', 'Vocational education', 'Distribution channel', etc.

The paper offers significant implications for investors and policy makers. Recognizing the growing dominance IC in the knowledge based economy, IC information in addition to the conventional financial disclosure would help investors make a more comprehensive evaluation of company performance at the time of making their investment decisions. The regulators and the policy makers may take necessary steps to enhance the corporate disclosure of IC information with a view to ensure informed judgment and decision by the stakeholders.

Like all other research, this is also not free from any limitations. Firstly, the sample size is confined to only forty listed companies belonging to eight different industry sectors taking five companies from each. Resources available at the disposal of researchers did not allow to enlarge the sample size so as to make the research a more comprehensive one. Secondly, the inherent limitation of the content analysis method is subjectivity in selecting the coding unit and measurement of the units. In spite of the utmost care taken by the researchers to minimize this subjectivity, the limitation might not be eliminated fully. Finally, data of the study are pertaining to a single year and, hence, do not reveal any trend rather providing a snap shot of the subject.

Further research may be conducted by taking larger samples and time series data to understand the progress in ICR over the years. Further research may also try to find out the factors contributing to the provision of IC information in annual reports by the companies.

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Relevance of Internal Audit:

A Case Study in Private Limited Company

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Abstract

Internal audit is emphasized too much in Public Ltd. companies. Research on internal audit and its success factors, effects & effectiveness has mainly focused on public limited company. It is also relevant for private limited company. This article is a case study conducted on Madina group, a group of private limited companies in the country to see the relevance and effectiveness of internal audit for private limited company. The study systematically examined the effectiveness of internal audit in Madina Group. The findings indicate that internal audit, is important and contributing for private limited company also. Regulatory requirements for internal audit for private limited company is not as strong as for a public limited company. Internal audit for private limited company may contribute for fraud detection, risk management, organizational performance appraisal, etc.

Keywords: Relevance, Internal audit, public limited company, private limited company, etc.

1. Introduction

There are many factors that accelerate the development of any business organization. Since information asymmetry and moral hazard - two major but common problems of our financial sector are prevailing at large; ensuring internal audit process has become a better mechanism to protect company from such problem. The demand for both external and internal audit has increased so that an independent verification happens which will reduce record-keeping errors, asset misappropriation, and fraud within business and non business organizations as per the Institute of Internal Auditors (IIA, 2003). There are many studies on literature focusing on internal audit as a tool for fraud detection, corporate governance, risk management, etc. (The Institute of Internal Auditors Research Foundation, 2003; Mastan et al, 2015; IIA position paper, 2009; Karagiorgos et al., 2010). These research papers consider only public limited company and exclude private limited company. In a report of IIA (2003) Flesher (1996, pp. 1, 3) quotes Arthur E. Hald (1944) that internal auditing is emerged due to its necessity and thus it become an integral part of modern business. The importance of internal audit is so much that no large business can escape it. If they haven't got it now, they will have to have it sooner or later, and, for a developing business environment it is an obvious, researcher opines. IIA (2003) quotes Walsh (1963) that the over increasing gap between management and stockholders and the action pattern has made it necessary to develop a series of controls by means of which the business may be administered efficiently. The internal auditor perfects and completes each of these activities by providing appropriate control on the system. Author found no known substitute for this activity.

Public limited companies have to comply with accounting standards according to regulatory requirements. Hence, internal audit is important for public limited company to make its activities comply with accounting standards, so that an external audit does not get material misstatements. Although there are some other functions of internal audit, it is one of the main functions. But in case of private limited companies, regulatory requirements for compliance are comparatively less than the public ltd. company. Private limited companies are sometime proprietorship firm in real sense. Now question is, in spite of having less compliance requirements, is internal audit necessary for private limited companies. In Bangladesh perspective, we got four papers which mainly focused on internal audit report disclosure, effect of internal audit on internal control system, internal audit relation with external audit fees regarding public limited companies (Sarkar et. al, 2009; Saha and Arifuzzan, 2011; Afroze and Zohra, 2014; Zohra and Huq, 2014). Internal audit for private limited companies is not well researched in Bangladesh. This paper may be one of the initial efforts in evaluating the significance of internal audit for private limited company. We attempted to investigate issue whether internal audit is relevant and contributing in case of private limited company.

The authors got the opportunity to intimately involve with internal audit & inspection department of Madina Group and got the chance to see the internal audit process of the company. Based on that practical experiences and interviews from Madina Group's personnel, a case study research has been developed to see relevance of internal audit in a private limited company. The

article is a case study as well as qualitative research.

Findings indicate that in spite of having less regulatory requirements for compliance, internal audit is necessary for a private limited company for fraud detection, risk management, organizational performance appreciation. These findings will create value for upcoming & existing company and will help them deciding to what extent they will strengthen their internal audit process.

The rest of this paper is organized as follows: Section 2 reviews the existing internal audit literature. Section 3 discusses methodological aspects. Section 4 describes the context of the company. Section 5 presents the results of the study. Conclusion is then drawn in Section 6.

2. Prior Research

The significance of research on auditing has drawn attention of the researchers since various corporate failure occurred (Tepalagul and Lin, 2015; Cahan and Sun, 2015). To keep peace with external audit, researchers also concentrated on internal audit. Since the 2008 financial crisis, regulatory and economic pressures are forcing organizations to do a more thorough job when conducting enterprise wide risk assessments, pursue strategic opportunities in a risk effective manner, increase the effectiveness of risk mitigation efforts, and focus on a more holistic approach to risk management. Organizations are under pressure to identify all the business risks they face; social, ethical and environmental as well as financial and operational, and to explain how they manage them to an acceptable level. Internal audit could play an important role in risk management IIA (2011). Significance of internal audit is described as:

"*The globalization of economy, technological advancements, complexity of business and allegations of fraudulent financial reporting have recently sharpened the ever increasing attention on internal control and internal auditing*" *(Afroze and Zohra, 2014).*

Some of the researchers concentrated on effectiveness of internal audit (Carcello, Hermanson and Neal, 2002; Savcuk, 2007; Sawalq & Qtish, 2012; Matari et al., 2014; Miller, 2014; George et al., 2015). Previous researchers also discussed about internal audit influence on Corporate Governance (Karagiorgos, 2012; Abdullah, 2014). Some also cover internal audit influence on internal control system which ultimately manipulates firm performance (Afroze and Zohra, 2014). A group of researchers concentrated on internal audit quality (Augustine, 2013; Alzeban, 2014).

However in the context of developing countries such as Bangladesh, we have got three research papers (Sarkar et. al, 2009; Afroze and Zohra, 2014; Zohra and Huq, 2014). But, of the three papers none of them mentioned relevance of internal audit regarding private limited company.

Sarkar et al. (2009) conducted a research on banking companies in Bangladesh and found that internal audit function (IAF) has significant influences on external audit fees. They also argued that more qualified accounting and finance back-grounded personnel in internal audit section would also reduce audit fees. But a questionnaire survey by Saidin (2014) on 387 head of internal auditors and 142 external auditors of the English local authorities revealed in the opposite. Saidin (2014) concluded that the reliance on internal audit work does not have much impact on reducing external audit fees which is contradictory with Sarkar et al.'s (2009) findings.

Afroze and Zohra (2014) on conducting a research on banking sector of Bangladesh (2013 up-to-date) found elements of internal audit important for overall audit procedure and also for the stability of banking system. Taking sample from Dhaka University graduates, a research have been carried out to gain a better understanding of the effects of internal audit report disclosure on investor confidence and decisions (Zohra and Huq, 2014). Authors found internal audit disclosure significantly increase investor's confidence that financial statements are free from both errors and intentional misstatements. They also found investor's confidence differ more for high fraud risky company than to low fraud risky company. Holding congruity with Zohra and Huq (2014), Sun (2015) opines that internal control evaluation and disclosure have significant influence on operating decisions within the firms.

On the basis of report from central bank of Nigeria, Augustine et al. (2013) conducted a research on the banking sector of Nigeria and found that effective and efficient internal control system has a greater influence on the quality of audit work. They argued that internal control system significantly influence the bank's operations and the quality of audit work. Authors also recommended employing a good internal control system by the management of every company. Based on 83 target populations, especially accountants, finance directors, chief cashiers and chief executive officers in remittance firms, Mohamud (2013) in a non-experimental descriptive research suggested that internal

auditing improves internal control system and he got positive correlation between internal auditing and internal control system. Ljubisavljevic and Jovanovic (2011) mentioned internal audit as a part of internal control system. They also identify the task of internal audit as assessing the efficiency, effectiveness, economy, and fairness of the performed work, providing consultation services to the enterprise's management, and promoting the effectiveness of risk management with the aim of creating added value and enhancing business activities. But Badara and Saidin (2013) conducted a research on the local government level and the research paper concluded that effective internal control system can influence the effectiveness of internal auditors at local level.

Mastan et al. (2015) identify sufficient and appropriate resources, competent personnel and independent audit committee and finally internal audit charter for internal auditors, as internal audit success factors for Wollo University.

Stewart and Subramaniam (2010) conducted an extensive review of the auditing literature on internal audit independence and objectivity. They reviewed internal audit literature since 1999 and investigate the internal audit independence and objectivity. Authors showed that research on internal audit was performed on different region and scanty amount of research was performed internationally.

As internal audit is necessarily related to corporate governance, corporate governance issues have to be included in literature review. Due to recent corporate scandal, the importance of strong corporate governance has been increasingly acknowledged. Internal audit function has great role in corporate governance by monitoring risks & ensuring financial reporting reliability (Zohra and Huq, 2014). Mihret and Grant (2015) identified internal audit significant for company.

From the above review of both developed and developing countries, it is clear that there is a gap in existing literature. Most of the researchers concentrated on effectiveness, impact, success factors, and importance of internal audit in public limited company. To the best of our knowledge, to date no research has been performed on internal audit considering solely private limited company. The study observes the contribution of internal audit in the private limited company.

3. Methodology

Given the nature of the problem, case study research is conducted to investigate the dimension of the problem and to test the primary and supportive research objectives. Gonzalez and Bebbington (2001) quotes Yin (1994, p. 2) that a case study aims to explore a "contemporary phenomenon within its real life context". Hence as a research method, it is seen as contributing uniquely to our knowledge of individual, organizational, social and political phenomena.

The article has qualitative characteristics also, as one the authors had an attachment with Madina Group's internal audit department for three (03) months. During this three months program, he got the opportunity to intimately involve with the organization and got the chance to see what are the significances of having internal audit in a private limited company. Thus the research is also partly action research, as he is also participating in process of internal audit that forms the basis of the research. This level of access to the organization enables researchers practically to observe and to explain the internal audit process.

Data collection method includes interviews, observation and documentation at various implementation stages and archives. In addition to interviewing the individual personnel who involves in the internal audit process, various working teams are interviewed through Focus Group discussion sessions.

Profile of the interviewees at Madina Group

Interviewee	Position	Location	Involvement with internal audit
A	Assistant General Manager, Internal Audit	Head Office	Leader of the entire internal audit implementation process
B	Manager, Internal Audit	Head Office	Coordinator of the internal audit process
C	Assistant Manager, Internal Audit	Head Office	Checker of bill, voucher, salary sheet, etc.
D	Assistant Manager, Special Audit	Head Office	Market verifier
E	Executive, Internal Audit	Head Office	Helping in internal audit implementation
F	MTO, Internal Audit	Head Office	Helping in internal audit implementation

4. Company background

4.1 General overview of Madina Group

Madina Group, a leading private sector business conglomerate in the country, commenced business in the year of 1978 in the name and style of Madina Trading Corporation. Initially it was engaged in marketing of cement after purchasing from the local importers. In 1982 it started importing quality cement from Indonesia, China, South Korea and other countries. It emerged as a private limited company in 1987. The main objectives of the groups are to get engaged efficiently and responsibly in Cement, Polycon, Shipping, Real Estate and other businesses and to participate in the search for the development path in the country to ensure a sustainable growth. Around 2000 skilled manpower is employed with the Madina Group (Madina Group website). It diversified its business following a successful operation over the last two decades which resulted in Madina Trading Corporation to take the shape of Madina Group. The Group now comprises about ten companies. Each and every business concern has proved a very successful in its respective areas within the group.

4.2 Internal Audit department of Madina Group

Internal Audit department of Madina Group started its journey since 1991 and continue till now (2017). Internal Audit department of Madina Group exists to support Senior Management and the Board in the effective discharge of their responsibilities. Using knowledge and professional judgment, personnel of the Group provide evidence-based independent appraisal of the Group's financial, operational, and control activities. This department also concern with the adequacy of internal controls, the accuracy and propriety of transactions, the extent to which assets are accounted for and safeguarded, and the level of compliance with institutional policies and government laws and regulations. Additionally, it will provide analysis, recommendations, counsel, and information concerning the activities reviewed. Natures of Audit are Financial Audit, Cost & Budget Audit, Management Audit, Performance & Efficiency Audit, HR Audit, and Tax & VAT Audit. Reporting Process of Madina Group is: Observation, Risk Assessment, Risk Grading, and Recommendation.

5. Analysis and Finding

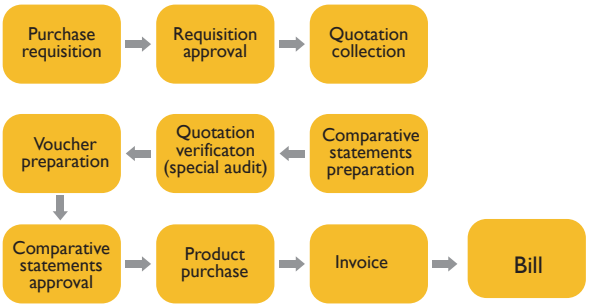
Internal auditors play a vital role in ensuring that an organization is efficiently run, morally sound, technologically advanced, cognizant of the environment and other areas of concern, and safe from unnecessary risk (Institute of Internal Auditors, 2000). The internal audit department of Madina Group performs several works like purchase bill checking, salary sheet verification, tour bill verification, oil bill checking, post audit on ledger posting, physical inventory valuation, advertising bill checking, mobile phone bill verification, improving organizational performance, risk assessment, etc. By systematically showing whether these are significant for the company, we will be able to draw an inference about relevance of internal audit in Madina Group and more generally in a private limited company.

5.1 Fraud detection

In recent years the importance of good corporate governance has received significant public and regulatory attention. A crucial part of an entity's corporate governance is its internal audit function. In association with this, there has also been significant public concern about the level of fraud within organizations. This study aims to see how internal audit functions are more likely to detect fraud.

5.1.1 Purchase bill verification

Purchase process of Madina Group is given below:



Internal auditors check whether products are purchased according to purchase requisition. If purchase amount is more than purchase requisition, internal auditor cut the additional amounts which reduce the company's expenditures. Again, internal auditors verify whether voucher or bill amount is overstated. In case of product purchase, main work of internal auditor is quotation rate verification. A team of special audit works for verification of quotation

rate. If they get any incongruity with market rate and purchase department's presented rate, they immediately take action. Another work performed by internal auditor is checking of Material Receipt Report (MRR) with voucher and bill. After that internal auditor verifies bill which is prepared by accounts department. The last step of verification is payment schedule approval. In all the steps, internal auditors play a significant role by saving company's interest. On the other hands, purchase department is warned to misappropriate because of internal auditor's fraud detection tendency.

5.1.2 Tour bill verification

Tour bill verification of Madina Group has two parts: first one is comparing travelling bill with guidelines, second is comparing accommodation bill with guidelines. If anyone exceeds the maximum limit which is prescribed by the company's guideline, the excess amount will be deducted. For example, an executive may use normal bus as his transport for tour purpose, but if he/she uses AC bus, then the extra amount may be deducted from him. Again, an executive will get Tk. 60.00 for breakfast, Tk. 150 for lunch, Tk. 150 for dinner. If anyone exceeds the limit, extra amount will be deducted.

5.1.3 Advertising bill check

Madina Group gives responsibility of advertising to different advertising agency. Special audit teams physically verify whether advertising is performed according to requisition, and bill which is prepared, is congruent with field verification. In a physical verification of advertising by an advertising agency, one of the the internal audit executive finds the fraud of advertising which is amounting to sixty five thousand taka.

> [executive of internal audit]…..there are many square feet of advertisements which are included in bill but are not found physically….

5.1.4 Salary sheet verification

A salary sheet is prepared by Human Resources Manager before the ending of month. Before submitting it to the Deputy Managing Director for his kind consideration, internal auditors verify whether it comply with company's salary policy, whether it deduct TDS where required, whether working days are calculated in accordance with punch card information, etc.

During one of the author's three month's period, one employee's TDS was not deducted by HRM and unfortunately internal audit was not able to detect that, but it was detected by DMD. So he became very angry.

> [Deputy Managing Director]….I will not be happy with these sorts of auditors.....
> [Strong internal audit team will be able to protect these types of error.]

5.1.5 Oil bill verification

In case of oil bill verification, auditors first see the previous reading, then see the present reading and make the difference between these two. This differenced amount is multiply by three taka. Company's policy is to pay this amount or actually consumed oil price which is lower.

5.1.6 Physical inventory valuation

A group of auditors are assigned to physically verify the inventory of different branches. For example, a company of Madina Group is Madina Heemagar Ltd. In a physical inventory valuation process, auditors found that four bags of cement are absent from original amount. Asraful Alom Bhuiyan, an audit manager works to find out reason of this defect.

> [manager of internal audit]…..we verified all the voucher, bill and other supporting documents but didn't find any document about where these four bags went out. There may be any problem with delivery officer…..

Thus auditors evaluate whether branch personnel perform their assign duty accordingly, whether any fraud or error occurred.

5.1.7 Post audit on ledger posting

When all the transactions are posted into ledger book, a group of auditors work so as to determine whether the posted transactions are in congruity with voucher and bill made. If there are any incongruities, auditor promptly informed to the manager. Based on that report audit manager arrange meeting to resolve the problem.

These results show that organizations with an internal audit function are more likely to detect and report fraud than those that do not. These results are important for many groups such as new entrepreneur, existing corporate managers and owners because it provides evidence on the value of the internal audit function, and this evidence of 'value' is also in the very topical and important area of fraud detection.

5.2 Improving organizational performance

Internal audit has been identified as the most effective mechanism to improve the performance of the organizations. The result of such audit assures the conformity of the operation standards and effective process implementations in operations areas to contribute in organization efficiency. The internal audit can be used as a base to assure the management about the conformity of the company's rules and regulations, but also to contribute and assure company's goals. Madina Group experienced similar issues which help to develop its performance.

5.3 Risk management

Over the last few years the importance to the strong corporate governance of managing risk has been increasingly acknowledged. Companies are under pressure to identify all the business risks they face: social, ethical and environmental as well as financial and operational, and to explain how they manage them to an acceptable level. Therefore in order to reach its objectives each company has to develop and implement an approach to assessing and managing the uncertainties and opportunities it faces in the pursuit of its business strategy. Internal audit helps company to manage these sorts of risk.

Risk Assessment Criteria of Madina Group is given below:

Measurement Length (Point)	Remarks
1 - 20 ☐	Good
21 - 30 ☐	Satisfactory
31 - 40 ☐	Needs Improvement
41 - 50 ☐	Unsatisfactory
51 - above ☐	Adverse

Measurement Length (Avg.)	Remarks
1 - 2☐	Good
2.1 - 3☐	Satisfactory
3.1 - 4☐	Needs Improvement
4.1 - 5☐	Unsatisfactory
5.1 - above☐	Adverse

- High risk - 5 , Medium risk - 3 , Low risk - 1

If any item audited falls between 4.1-5 ranges, it is considered to be unsatisfactory and auditor recommends taking immediate action. If overall departments points become 41- 50, it is considered to be unsatisfactory.

Company sets some criteria to measure the fraud or error identified. For example, in a physical inventory valuation of Madina Heemagar, internal auditor gets five hundred bags of cement are missing. Internal auditor gives it 4.2 which indicate unsatisfactory.

5.4 Evaluating internal control system

Reviewing and evaluating the adequacy and effectiveness of an organization's internal control system in carrying out assigned responsibilities is representative of several primary core activities of internal audit work. The purpose of the review of the internal auditing of Madina Group is to ascertain whether the established system provides reasonable assurance that the organization's objectives and goals will be met efficiently and economically. Madina Group's internal audit is also designed so as to strengthen its internal control system.

6. Concluding remarks

The case study based on a Bangladeshi private limited company named Madina Group finds internal audit is relevant and contributing for private limited company also. The findings suggest that in spite of having few compliance requirements, internal audit is inevitable for private limited companies also. Furthermore, analysis reveals that fraud and error detection are main factors that suggest that company should have a strong internal audit process. Risk management, enhancing the performance of the firm, upgrading quality of internal control system are some other factors that make internal audit relevant for a privately held company also. Though there is strong control over private Ltd. companies from the owners or owner group; large or expanding companies need internal audit. The findings have research and policy implications. The paper also enhances the internal audit literature by providing information about relevance of internal audit in a private limited company. This will also encourage existing company to develop its internal audit process and also guide upcoming organization to initiate strong internal audit at their beginning point.

Because of lacks of some contextual factors, internal audit may fail to provide appropriate services. The following factors may contribute to make the internal audit relevant, successful & to attain audit objectives: (i) top management should provide internal auditor as more supports as possible to keep auditors independent, (ii) increase the number of staff in audit department, (iii) employ qualified audit personnel. These suggestions, if applied appropriately, might lead to situation that will made internal audit trustworthy and contributing.

The case study is based on only one company, which may be considered to be its limitation. Moreover these results cannot be generalized for other company as size, context, culture of different companies may vary. Further research can be carried out on solely considering internal audit influence on internal control system in a private limited company.

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In the Quest of Increasing Direct Tax Revenue: Ways and Means

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Of late Bangladesh has posted remarkable success in various socio-economic indicators. The toddler of 70's now in 2017 is a 46 year old young energetic performer in economic front. With the most cited success in Real GDP (RGDP) growth rate and per capita income one can hardly stop speaking high of the country's laudable performance in mobilizing internal resources. Getting out of the sordid legacy of dependence on donors' aid and grant the country has become increasingly reliant on its own resources in recent years. Consistent hefty increase in tax revenue in every successive year over a fairly long period has made it possible to contain debt as a percentage of GDP within the bracket of 5% while maintaining robust RGDP growth. However, in order to keep the spur of current growth momentum continued and thereby to achieve the Sustainable Development Goals (SDG) by 2030 and to attain the status of developed country by 2041 mobilization of internal resources shall be augmented further. In particular, direct tax as a percentage of GDP shall be enhanced from the current 3.2% to 5% within next five years for which the growth rate of direct tax shall be maintained at least 18% in every successive years. Succinctly said, there is no question about the importance and necessity of collecting increased amount of direct tax revenue for fuelling the development of the country; but the question is how to collect the increased amount particularly in view of direct tax revenue collection target of TK. 87,190/- thousand crore in the fiscal year 2017-18 as against the actual collection of TK. 63,781.76 thousand crore in 2016-17.

Expanding the direct tax net and base not increasing the tax rate is the strategy Bangladesh is currently following to fulfill her appetite for growing amount of revenue. In view of 36.70% growth of direct tax revenue collection target in 2017-18 with respect to actual collection of TK. 63,781.76 thousand crore in 2016-17, around 14% may be achieved for 7 plus percentage RGDP growth rate and 6 plus percentage inflation rate. Hence, the rest 22.70% growth of direct tax revenue collection should come from the growth of the expansion of direct tax net and base. Given the present status of Bangladesh economy there exists enormous untapped potentiality for the expansion of direct tax net and base as argued in Mamun (2017) this article aims at detailing ways and means as well as avenues of expanding direct tax net and base that may translate into yielding higher amount of revenue.

A deeper look into the constituents of direct tax revenue collection identifies that Tax Deduction at Source (TDS) contributes about 57% to the collection while three major items - TDS at import stage, supply and execution of contracts, and from interest on deposits - prominently comprise more than 60% of total TDS. Available data in this regard are presented below:

Particular	2010-11	2011-12	2012-13	2013-14
Income Tax (IT) Collected (Crore TK)	23007.53	28652.43	37120.65	43207.27
TDS inCrore TK (% of Collected IT)	12233.59 (53.17%)	15113.67 (52.75%)	20078.71 (54.09%)	24893.94 (57.62%)
Major Heads of TDS Crore TK:				
Contract, Supply (% of Collected TDS)	3195.74 (26.12%)	4544.65 (30.05)	5699.63 (28.39%)	7231.16 (29.05%)
Import (% of Collected TDS)	2841.86 (23.23%)	3016.61 (19.97%)	3462.37 (17.24%)	3472.85 (13.95%)
Interest on Deposit (% of Collected TDS)	1815.10 (14.84%)	2501.77 (16.56%)	2869.85 (14.29%)	5115.31 (20.55%)
Total Major Heads (% of Collected TDS)	7852.7 (64.19%)	10063.03 (66.58%)	12031.85 (59.92%)	15819.32 (63.55%)

Source: Annual Reports, National Board of Revenue (NBR)

That slightly above 40% of the total direct tax revenue is collected from sources other than TDS indicates that given the strength of the economy with thoughtful and appropriate measures direct tax revenue collection can be enhanced to a great extent. Nevertheless, contrary to the wider scope of TDS as mandated by the legislation, its concentration only to a few items leaves enough space to augment collection from TDS as well. Section 52(2) (a) of the Income Tax Ordinance (ITO) 1984 authorizes 14 specific authorities to deduct/ collect taxes at source and according to chapter seven of the said ordinance 57 heads are under the jurisdiction of TDS. However, available data suggest that currently the deduction activities of only a few government agencies, financial institutions, and some prominent corporate taxpayers on a few common heads out of 57 heads are properly monitored. Lack of workforce and absence of appropriate administrative structure may be valid reasons for such glitches. Measures have been undertaken to put appropriate administrative structure for TDS in place shortly. Nevertheless, meanwhile, within the scope of existing administrative structure in which TDS activities are monitored as ancillary along with much focused and emphasized traditional functions relating to tax demand creation and collection strengthening auditing and monitoring of some of the potential but yet unexploited or even unattended areas of TDS may greatly boost revenue mobilization from this sector. In particular, among 14 specific authorities, TDS activities of firm, co-operative society, co-operative bank, NGOs, hospital, clinic, diagnostic center, school, college, institutes - coaching center, kinder garden etc. on the payment for house rent, professional fees, honorarium, supply, and execution of contract shall be prioritized for intensive monitoring.

The upside of intensifying monitoring TDS is that against the backdrop of the legal peculiarity of collecting direct tax at least one year later of earning the income TDS allows to collect revenue as and when the income is earned. Moreover, it ensures collecting revenues at least to some extent from some sources which would otherwise have not been possible to bring under tax net particularly in the context of Bangladesh. Nevertheless, the most momentous contribution of TDS apart from mobilizing increased revenue is its usual concomitant of vast influx of information that may be credibly cooked to the advantage of revenue. Such information, particularly in the context of Bangladesh where the direct linkage for mutual exchange of information between tax authority and financial as well as other related important sector of the economy is literally nonexistent, has much implication to revenue mobilization. In order to expand tax base, tax net and to reduce tax evasion and thereby to increase revenue mobilization arrangement shall be made for the availability of the information of all economically and financially valued transactions taking place at any part of the economyto the tax authority instantly and automatically. As a matter of priority, binding arrangement shall be made immediately for information generating at sub registrar offices relating to the transfer of real estate - land, flat, apartment, Bangladesh Road Transport Authority (BRTA) in relation to the registration of vehicles, financial institutions with regard to fixed deposit, term deposit and the purchase of saving certificates, brokerage houses about transactions in shares and debentures to flow to the tax authority automatically. Until the said arrangement is put in place, information generated and come along with TDS may be used effectively for the benefit of revenue. Particularly, at the present context, the collection, collation, and use of information relating to TDS by the financial institutions from the interest on deposits - fixed deposits, term deposits, and saving accounts may have colossal effect in assessing total income and determining tax liability and thereby realizing tax revenue from the earners of interest income. However, the downside of the TDS is that it may be abused as a tool of tax evasion claiming and deducting tax on the expenses which are essentially false and thereby reducing taxable income and hence shifting the imposition of regular rate of tax on income to the rate of TDS usually much lower than the regular rate. Therefore, in order to curb tax evasion through the channel of TDS along with ensuring the compliance of TDS the authenticity, relevance, and necessity of the expenses claimed must be verified. To this effect, compliance of section 75A and 75AA of ITO 1984 regarding submission and examination as well as audit of with holding tax return shall be strengthened.

Given the present legal and administrative framework of direct taxation in Bangladesh, preponderance of cash transactions in the economy is weighed as the major impediment towards revenue mobilization. ITO 1984, nonetheless, contains a few provisions to impulse transactions through banking channel. For example, section 30(i) requires gross monthly salary or remuneration per person of Taka fifteen thousand or more to be paid through banking channel, section 30(m) stipulates any payment other than purchase of raw material and government obligation to be made through banking channel, sections 19(24), 19(26), 19(28) inhibit the transactions of paid up capital, receipt of loan, gift other than banking channel. However, the application of these sections in the present context is either inadequate or to some extent inoperative. To impede cash transactions and thereby to augment revenue mobilization along with intensifying the application of the existing provisions of ITO 1984 particularly section 30(m) strong legal measures shall be stipulated in all relevant statutes and appropriate arrangement shall be put in place to force all valued economic and financial transactions to

pass through banking channel and the information of these transactions to make available to the tax authority instantly and automatically. It may be cited in this regard that in tandem with demonetization Modi government of India banned cash purchases over 200,000 rupees and introduced the provision of linking biometric identity numbers to income tax filings for purchases over 200,000 rupees (The Daily Star, September 28, 2017). The same report continues claiming - "That's already yielding ground level results. For example, it is no longer quite as easy or socially acceptable to brag about cheating. And even corporate lawyers say clients are no longer interested in using funky structures to minimize tax bills, preferring to play by the book."

According to section 20 of ITO 1984 seven heads of income are subject to tax. Among these, even though three heads namely - Salaries, Income from house property, and Income from business or profession are prominent, at present, salaries income to some extent is taxed fairly while the record of revenue mobilization from other two heads is lackluster. It implies that in terms of national income, labor share is taxed to some extent but a significant proportion of capital share is still remaining outside the scope of taxation. Sections 75(1) (c) (viii) and75(1) (c) (ix) of ITO 1984 regarding the compulsion of submitting income tax return by the public and private sector employees, sections 30 (a) and 30(aaaa) stipulating not to allow salary expenses if TDS is not applied thereon and income tax return of the employees is not submitted within tax day, section 30(i) insisting on paying the monthly salary of Taka fifteen thousand or more through banking channel may be attributed to the mobilization of higher amount of revenue from salary income. Nevertheless, section 75 (1) (e) (iii) of ITO 1984 requiring the earners of business or professional income having license from city corporation, paurashava, or union parishad to submit income tax return fails to prove its effectiveness in absence of some related stringent and binding provisions in the statute. In order to make the section 75 (1) (e) (iii) of ITO 1984 effective and thereby to augment revenue from business or professional income some stringent and binding provisions may be inserted in ITO 1984. Similarly, harnessing more revenue from house property income requires the insertion of some strict provisions in statutes. For example, payment of household gas bill cannot be made without presenting the substantial document of income tax return submission of the concerned house property owner.

Globalization and digitalization of the economy is offering opportunities vis - a - vis posing threats as well as challenges for internal resources mobilization. Recently it is reported that approximately five lakh freelancers working in Bangladesh are, at present, earning income from abroad (The Daily Star, October 10, 2017). This is a huge opportunity for expanding tax base and mobilizing direct tax revenue. However, identifying and bringing such large number of earners of income from abroad residing in Bangladesh into tax net is a big challenge. Moreover, with the rise of cross border transactions in tandem with increasing international trade and commerce as well as external opening of financial sector the issues of money laundering and transfer pricing is posing the threat to tax base erosion. Income tax department needs to equip adequately to address such threat and challenge as well as reap dividend of this opportunity.

Aside all the aforesaid deliberations perhaps the most momentous measure that may prove its relevance, significance, and effectiveness in mobilizing direct tax revenue at the present context of Bangladesh is to promote voluntary compliance of the taxpayers. To this effect, in recent years series of changes have been made in the statute and swathe of awareness as well as motivational programs have been implemented. However, in this regard the most important task to be done is to ignite the patriotic feelings and basic human instinct of the taxpayers.

Despite its effect of obvious inefficiency as postulated by economic theories, apart from the argument of equity taxation may be deemed as a tool for solving the problem of market failure. Since there is no private market for public goods because of their innate nature nonetheless their provision and existence is prior, prime, and essential condition for capital accumulation and private sector led development, government has to embark on taxation to finance for their provision. As a dictum of competitive market, since the ability to pay the price, efficiency dictates the destination of resources hence income, the disadvantaged, inefficient folk of the society will extinct notwithstanding chaos, confusion, disorder in the society , are they left only to the disposal of market. Nevertheless, as the creation of the universe, the disadvantaged, inefficient folk of the society have inherent, inalienable claims on the resources of the universe. Hence, they have the right to exist and therefore, the overarching role of the market as the sole distributor of the resources of universe is not acceptable. This essentially justifies the existence and inevitability of taxation as the tool of redistribution of the income distributed through the market mechanism and as a consequence paying taxes has evolved as a legal compulsion in modern society. However, the traditional view of paying taxes as a legal compulsion has been gradually shifted to voluntary compliance - on their own motion, taxpayers will comply, among others, without any prejudice will disclose actual amount of income and pay tax thereon. Nevertheless, promoting voluntary compliance requires, along with the shift of traditional

view of paying taxes from legal compulsion to voluntary compliance, shifting the role of the tax authority from regulator to facilitator - a wholesale over hauling of the attitude of the taxmen.

In contrast to the legal compulsion of paying taxes, voluntary compliance version of paying taxes is associated with the free choice of the taxpayers and this is the area where the idea of rationality kicks in. Since the taxpayers do not derive any direct tangible benefit or satisfaction in exchange of spending the money for paying tax unlike the money spending for consuming goods and services, as economic agents they may not find any rationality in paying taxes. However, according to Professor Richard Thaler - the Nobel Prize winner in Economics in 2017 such rationality is limited rationality as it focuses on the narrow impact rather than the overall effect of paying taxes. This essentially leaves the space for incorporating the aspect of humanity into the concept of paying taxes. Such argument may be underpinned by the work of Professor Richard Thaler who shows that economic and financial decision makers are not always rational but mostly deeply human. He was also reported saying as a reaction to his Nobel Prize winning -"I think the most important recognition is that economic agents are human and economic models have to incorporate that." (The Daily Star, October 10, 2017). Therefore, in order to promote voluntary compliance, rather than limited rationality humanity aspect of taxation shall be emphasized.

In essence, the aspect of humanity is ingrained in the total process of taxation - ranging from paying and collecting taxes to the use of fund raised as taxes. In addition to the provision of public goods and other development works, tax money is used to support and for the welfare of suffering humanity and from this perspective, paying taxes taxpayers are essentially championing the cause of humanity. From the aspect of humanity, the taxpayers may derive satisfaction viewing that the money they paid as taxes is supporting vulnerable groups of the society, providing education, healthcare to the groups who would be otherwise deprived of these services and such satisfaction would be greater than that could be derived from the consumption of goods and services spending the same amount of money paid as taxes. What essentially need at this juncture to promote voluntary compliance is to stir basic human instinct of the taxpayers through proper campaign and effective actions - good governance. However, the most important segment of this argument is linked to the collection process of taxes. The tax authority should uphold the ideal of humanity shunning the scheme of harassing the taxpayers in every sense of the term while collecting taxes. If the aspect of humanity is propelled by all the parties - taxpayers, tax authority, and the users of tax money voluntary compliance will gain huge momentum and taxation in Bangladesh will reach to unique height.

Another important aspect of furthering voluntary compliance is to recognize the fact that paying taxes is still sense of pride and ownership among the taxpayers. Taxpayers may take pride in the public goods provided using tax money and they may also feel the sense of belongingness, ownership to those; hence to the country. This essentially fosters patriotism as the endowment effect of Professor Richard Thaler says that the same thing people value more when they own it as opposed to when they do not. In this way, paying taxes and patriotism reinforces each other. Taxpayers pay taxes as voluntary compliance out of patriotism and paying taxes in turn fortifies patriotism.

Perhaps the most important argument of paying taxes voluntarily for the present generation of Bangladesh after 46 years of our independence achieved through the great liberation war is that we are enjoying the benefits of the independent country. However, our contribution and sacrifice, except a few survivors of freedom fighters, to the independence is literally nothing. We are reaping a great benefit without paying anything; rather at the cost of our great freedom fighters and martyrs. We are indebted to freedom fighters and martyrs. We, therefore, need to repay our debt owed to our freedom fighters and martyrs in the form of paying taxes voluntarily for our nation building - the one they dreamt. We dream of a developed Bangladesh by 2041. Our martyrs sacrificed their lives and rewarded us the independent Bangladesh. Cannot we sacrifice something at least in the form of paying taxes voluntarily and reward our future generation a developed, prosperous Bangladesh?

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Africa is a Pharmaceuticals Blue Ocean

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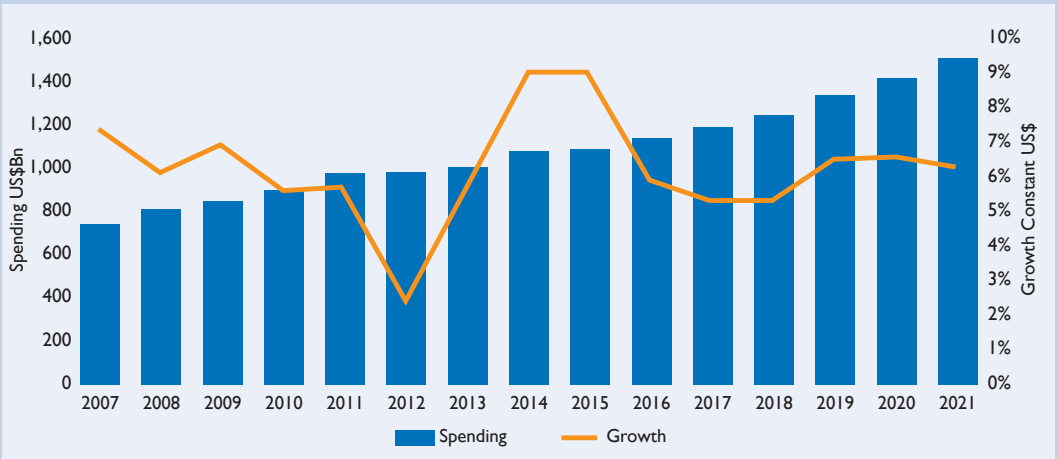
Global Pharma Market

The overall total population of the world is approximately 7.45 billion, as of July 2016. Its overall population density is 50 people per km² (129.28 per sq. mile), excluding Antarctica. Nearly two-thirds of the population lives in Asia and is predominantly urban and suburban, with more than 2.5 billion in the countries of China and India combined. All global leaders are working to meet the basic needs (Food, Clothing, Medicine, Shelter, Education, Etc.) of this population. Among these basic needs food, clothing and shelters are designed according to the Geo-Economic and Social culture. But Education and Medicine is uniform for all the population irrespective polls, hemisphere or religion. One can survive few days without education but without medicine, in some case few minutes is difficult.Global medicine spending for this 7.45 billion (it is growing @ 1.09% per annum) will reach nearly $1.5 trillion by 2021 on an invoice price basis, up nearly $370 billion from the 2016 estimated spending level. Importantly for the outlook is that spending growth is slowing in 2016, declining from nearly 9% growth in 2014 and 2015 to just 4-7% CAGR over the next five years. The short-term rise in growth in 2014 and 2015 was driven by new medicines in hepatitis and cancer that contributed strongly to growth but will have a reduced impact through 2021. Most global spending growth, particularly in developed markets, will be driven by oncology, autoimmune and diabetes treatments where significant innovations are expected.

Exhibit 1: Global Market Spending and Growth 2007-2021



Source: IMS Market Prognosis, Sept 2016: QuintilesIMS Institute, Oct 2016

The U.S. (Population of 330 million consuming 46% of global medicine expenditure) will continue as the world's largest pharmaceutical market and pharmerging markets will make up 9 of the top 20 markets. China will continue as the #2 market, a rank it has held since 2012. Developed market spending growth will be driven by original brands, while pharmerging markets will continue to be fueled by non-original products that make up an average 91% of pharmerging market volume and 78% of spending. On other hand the African continent is bearing 14% of global population (1,037 Million) with 40% of global diseases burden and produce 3% global production consumes only 7%-8% of global medicine supply. It is painful for any human mind but it is a blue ocean for Pharmaceuticals and health care business.

Bangladesh Pharma Market

The pharmaceutical sector in Bangladesh is a developed sector which is contributing substantially to its economy. After the promulgation of Drug Control Ordinance - 1982, the development of this sector was accelerated. The professional knowledge, thoughts and innovative ideas of the pharmacists working in this sector are the key factors for such developments.

Due to recent development of this sector, we are exporting medicines to global market including the European one. The local pharmaceutical manufacturers cater to about 97% of the internal demand. Leading pharmaceutical companies are also expanding their business with the aim to expand export market.

The annual per capita drug consumption in Bangladesh is one of the lowest in the world. However, the industry has been a key contributor to the Bangladesh economy since its independence. In Bangladesh, the pharmaceutical market has grown tremendously in the last few years.

Bangladesh medicine sales reached USD 2,315 million (18,755 crore), in value terms, in 2017, with a growth of 19% as per Quintiles Data of 2Q MAT, 2017.

	Ranking	M (USD)	Share (%)	Growth (%)
INDUSTRY TOTAL		**2,315.5**	**100.00**	**19.92**
SQUARE	1	410.6	17.73	12.92
INCEPTA PHARMA	2	236.5	10.21	20.31
BEXIMCO	3	194.2	8.39	18.02
OPSONIN PHARMA	4	128.2	5.54	19.63
RENATA	5	115.2	4.97	18.59
HEALTHCARE PHARMA	6	105.8	4.57	45.05
A.C.I.	7	102.6	4.43	23.37
ARISTOPHARMA	8	101.3	4.38	18.92
ESKAYEF	9	101.1	4.36	16.43
ACME	10	90.6	3.91	20.34

Pharmaceuticals Export from Bangladesh

Pharmaceutical industry mulls to export drug items to more & more destinations from the existing 127 countries by the next few years to give a big boost to the country's export earnings. The pharmaceutical sector is the highest contributor to the national exchequer and the largest white collar labor intensive employment-giving sector of the country. Through exporting medicine Bangladesh earned USD 90.3 (732 crore) in 2016-17 financial year (Source: EPB, Bangladesh) and expects to earn much more in coming days.

African Pharma Market

Despite the efforts done in the last decade by governments and global organizations, about 2 million Africans have no access to essential medicines. 74% of drugs against HIV/AIDS are still under the monopoly of big pharmaceutical groups and 77% of Africans still lack access to treatment. As a result, tuberculosis, AIDS and malaria still kill more than 6 million people on the continent each year. A possible solution to this situation would be the production of generic drugs in the continent. Being 70-90% cheaper than brand name drugs, generic drugs are more affordable for a large majority of Africans.

The continent has 14% of the world population but produces only 3% of the world medicines. While the overall pharmaceutical market in sub-Saharan Africa is growing worth USD 3.8 billion annually, the pharmaceutical manufacturing sector in Africa contributes only 25-30 per cent of the continent's needs. The production of life-saving drugs is furthermore concentrated in very few African countries: 70% of pharmaceutical manufacturing takes place in South Africa and an additional 20% in Nigeria, Ghana and Kenya. Apart from Morocco, more than 85% of drugs sold in Africa are imported. Senegal imports 80% of its medicines. Currently most generic come from India. Though they are cheap the high cost of transport makes it difficult for governments and national health systems to provide treatment for all those who need it

Today no African country, whatever its size and level of economic development, is entirely self-sufficient in pharmaceuticals. This is a concern for governments and patients. To answer this need, in 2001 the 55 members of the African Union (AU) signed the Abuja Declaration to support the development of a plan for pharmaceutical

innovation in Africa. The 2005-AU Assembly decided to develop a Pharmaceutical Manufacturing Plan for Africa within the framework of NEPAD. The AU Conference of Ministers of Health that followed with the support of some partners decided took practical steps to produce generic medicines on the continent and to make full use of the flexibilities within the Trade and Related Aspects of Intellectual Property Rights (TRIPS) and DOHA Declaration on TRIPS and Public Health.

The 59th World Health Organization Regional meeting for Africa discussed the issue and the AU Commission in collaboration with the World Health Organization (WHO) conducted a drug production capacity mapping exercise. A series of questions were raised: was it better to strengthen local production of essential medicines or to import essential medicines from reputable sources? A realistic appraisal and analysis was needed before deciding on local manufacturing. A number of issues had to be taken into account: technical feasibility, financial viability, sound regulatory systems, market size necessary to ensure sustainability as well as technical and financial viability.

Current Production

Pharmaceutical production occurs at three levels:

1. **The primary level** includes the manufacture of active pharmaceutical ingredients and intermediates from basic chemical and biological substances.
2. **Secondary production** includes the production of finished dosage forms from raw materials and excipients.
3. **The tertiary level** is limited to packaging and labelling of finished products or repackaging of bulk finished products.

Out of the 46 countries in the WHO-African Region 37 have pharmaceutical industries, of them 34 have secondary level production and 25 have tertiary production. Only South Africa has limited primary production. Nine countries have no production capacity.

Medicines and international AID

The role played by the global health community has been decisive in the supply of affordable drugs to fight against neglected diseases. International Health organizations and Western governments have provided the majority of medicines that the continent needs. They have played an important part in the diminishing of deaths from malaria, HIV/AIDs and TB, and of the diminishing cases of river blindness among others. They have also contributed to the increasing number of HIV/AIDs patients treated by antiretroviral drugs (ARV). But these advantages bring with them some dangers. These International groups set up the agenda for health research and drug development in Africa. It is important that countries be allowed to set their own priorities and formulate their own strategies in order to meet the needs of their populations. They need to take measures not to rely so much on international aid.

The efforts towards medicine production

Till now in most African countries the production units were made up of subsidiaries of foreign pharmaceutical firms. They import almost all of the raw material. In the ECOWAS region there are 17 production units including 8 in Ivory Coast, and 4 in Senegal, but they ensure only 10% of the needs of the region.

Backed by the African Union (AU), several African countries have launched into the production of generic drugs for HIV/AIDS, tuberculosis, and malaria. Kenya, Nigeria, South Africa and Tanzania, among others, have adopted policies to invest into the development, production and procurement of drugs for their populations.

Cameroon and Gabon have developed their own production of generic drugs. In April 2010, Cinpharm-Cameroon opened a factory in Douala, which is the most modern pharmaceutical company in West and Central Africa. It will produce painkillers, antibiotics, anti-malarial, intestinal parasiticid, anti-inflammatory, antibiotics (repetition), antiretroviral and TB drugs. Eventually, the production should meet 25% of national needs.

With the help of the government Aspen Pharmacare in Port Elizabeth **(South Africa)** produces under license eight generic antiretroviral drugs. Aspen in (is) Africa's largest pharmaceutical manufacturer and has become the world's leading manufacturer of generic triple therapy and is also among the three producers of generic ARVs (the other two are Indian) approved by the World Health Organization (WHO). Aspen has four sites in South Africa, one in Kenya and one in Tanzania.

In November 2011, Universal Corporation, a **Kenyan** pharmaceutical company has been granted the prequalification (The prequalification means that the WHO has tested the safety, quality and efficacy of medicinal products before they are released to the public) certification by the World

Health Organization (WHO) allowing the production of Lamizido, a combination ARV drug of Zidovudine and Lamivudine, which will be produced in 150 and 300 gram doses. The cost of the Kenyan drugs is supposed to be cheaper by at least 30% than the drugs bought currently from foreign manufacturers.

The Quality Chemicals plant, in Kampala (**Uganda**), has got a WHO pre-qualification process, which means the manufacture plant has passed a severe quality check. It is the first production plant in sub-Saharan Africa, except from South Africa, to get WHO pre-qualification. Now the company is trying to get the pre-qualification, for the malaria and HIV/AIDS drugs the firm produces. Once it is obtained, international agencies such as UNICEF, will be allowed to buy from the company. The success of Quality Chemicals is in part due to one of India's leading generic pharmaceutical companies, Cipla, which designed the plant (a carbon copy of Cipla's facility in Goa, India). Cipla sent its experts to train Ugandan staff and even applied for WHO pre-qualification certification on behalf of Quality Chemicals.

SOGAMA in **Gabon** was the first plant to produce generic antiretroviral and antimalarial. The plant supplies also the member countries of the CEMAC (Economic and monetary Community of Central Africa) which represents a market estimated at 30 million people.

In **Senegal** there are four production units (Sanofi Aventis, Pfizer, Canon and ValdafriqueWest Africa Pharma) that provide the licensed production of specialty and generic, which is exported (20 to 30%). A project for the production of generic ARVs is finding a lot of difficulties.

South Africa, Nigeria, Ghana, Morocco, but also **Ethiopia, Tanzania, Uganda, Kenya** and other countries have different kind of pharmaceutical production.

Benefits of local production

The lack of access to basic generic medicines is a good reason to produce local medicines and to be less dependent from other countries. Local production can facilitate access to medicines for those in need.

Most Africans have no health insurance, so either the government buys and import the drugs from foreign companies to distribute them in the national health system; or the patient has to pay from his own pocket.

A series of benefits are expected as a result of local production: save of foreign exchange; creation of jobs; increase of exports; technology transfer; raw materials produced locally will be cheaper; improvement of self-sufficiency in drug supply. The problem is that these benefits are not always there when drugs are produced. Local manufacturing is supposed to make the drugs cheaper, accessible to more people, thus resulting in significant savings for the government's treatment programs, but sometimes the price cannot compete with those from India and China.

Difficulties in the path to production and Initiatives to overcome

A series of bottlenecks make difficult the production and the selling of medicines produced in Africa: lack of access to inputs and raw materials, strong competition from foreign laboratories, lack of research and development, a proven system of pharmacovigilance and qualified human resources. These factors are sometimes responsible of pharmaceutical production behind in Africa.

Infrastructure. Unreliable water and electricity supplies, difficulties of transport, the need to import machinery, packaging, and active pharmaceutical ingredients (APIs) result of a weak chemical production in many African countries are constant difficulties that that contribute to making the product more expensive. Furthermore the business environment in Africa has many deficits. **But the Kenya, the Ethiopia, the Uganda and some other African nations providing very economic and reliable source of water and electricity for production facility. According to World Bank report some African Nations are more ahead of us in ease of doing business ranking. E. g. Mauritius 49th , Rwanda 56th Uganda-115th and Kenya 92th according to World Bank doing Business report 2017.**

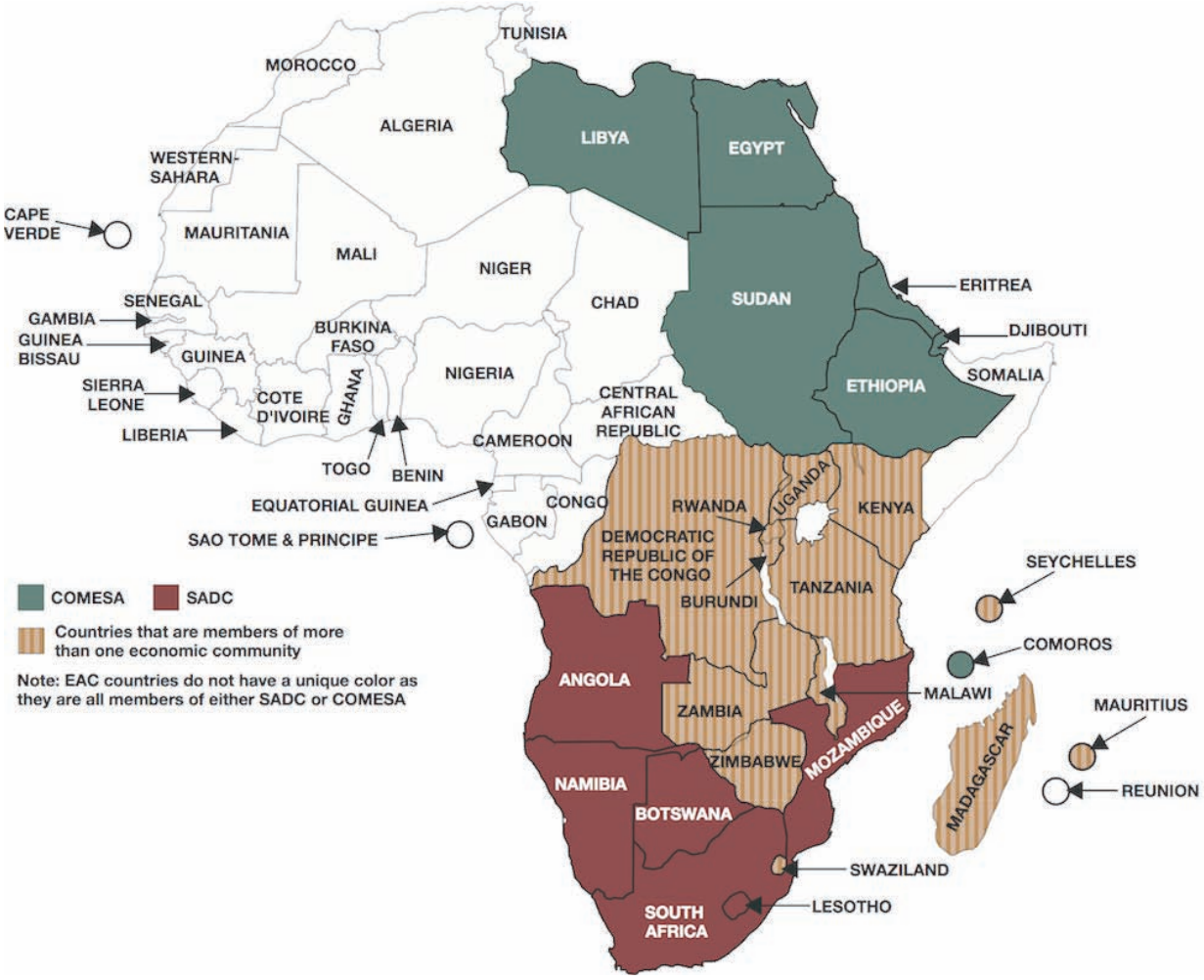
Quality. The big challenge is to produce high quality drugs. The operating environment can be difficult and the weaknesses at plant level in reaching and maintaining quality standards in line with established international standards (WHO) can be hard. **This can be easily resolved by bringing in Tech know how from abroad.**

Human Resources. The production of good medicines and the maintenance of the facilities

needs pharmaceutical experts and technical personnel with high and specialized skills that are missing in many African countries. The lack of high quality education at university is the main cause. Another difficulty is the lack of expertise and of means in drug regulatory authorities, responsible for approving the marketing of these drugs. **To succeed in the production of medicines Africa needs good pharmacists, biologists, chemists, doctors, and technicians. It is also available in rest of the world.**

Legislation. The lack of regulation and of clear political will does not allow an investment security. The pharmaceutical sector lacks effective support functions among others by regulatory authorities and quality control labs. **Some nations are proving Guarantee to investors for safety, disinvestment, no future government acquisition and even citizenship for investors.**

Small domestic markets. In Africa markets are small because the countries are small and the many in the population do not have the means of buying the medicines. The small size of domestic markets diminishes the prospects for achieving optimal production efficacy. E. g. Uganda has a population of 30 million, not enough market for a production unit. **The creation of bigger markets like the East African Community (EAC) of 65 countries, Common Market for Eastern and Southern Africa (COMESA) of 19 countries, Southern African Development Community (SADC) of 15 countries and Economic and monetary Community of Central Africa (CEMAC) can be a solution. By this time EAC, COMESA and SADC entered into a tripartite agreement for economic development and common market sharing. It is a market of 26 countries Price.**



Manufacturers in Africa face a multitude of expenses: high cost of inputs (expatiates salary, packaging), transport and imported commodities, together with small volumes produced raise the cost of medicines beyond those from India and China. **But African Countries are providing Quota facility for Price (+15%) and Quantity (+15%)in national Purchase for local manufacturers. WHO and All donors are also facilitating local manufacturers.**

Economic viability of local production is hard particularly where the production is undertaken by private entrepreneurs as a commercial venture. The sustainability of the production will depend on factors such as the size of the market and the demand for the produced medicine, as well as the ability to export such medicines. **Manufacturing in African countries is tax exempted for first 10 year and loss carry forwarded for next 10 years and African Continent receives AGOA Quota facility from USA and Preferential trade facility with EU.**

Opportunity for Bangladeshi Pharmaceuticals Investment

Export from Bangladesh to African Market: Top five Bangladeshi Pharmaceuticals manufacturing companies are exporting medicine to the following countries of Africa in last 15 years and Bangladeshi medicines are very well accepted in Africa;

Cameroon, Eritrea, Ivory Coast, Kenya, Libya, Mauritania, Mauritius, Mozambique, Nigeria, Somalia, Sudan, Tanzania, Uganda, Ghana, Zimbabwe, South Africa, DR Congo, Congo Republic, Togo, Lesotho, Burundi, Mali, Swaziland.

Investment in Facility Development in Africa: Bangladeshi pharmaceuticals products are well accepted in Africa. After tripartite agreement among, EAC, COMESA and SADCthe market is now more lucrative than ever. Square Pharmaceuticals Limited is exporting medicine to Africa in last 14 years to Kenya. Square Pharmaceuticals Limited is in the process of investing an amount of USD 20 Million in Athi River EPZ, Nairobi, Kenya to put up a Pharmaceuticals manufacturing Facility. This facility shall cover EAC, COMESA and SADC market. The market is about USD 34 Billion in 2020. It is a blue ocean shift for Square Pharmaceuticals Limited.

> To succeed in the production of medicines Africa needs good pharmacists, biologists, chemists, doctors, and technicians. It is also available in rest of the world.

Conclusion

Despite the difficulties met by the production of medicines in Africa, the adventure continues and Africa is developing its own production of generic drugs. This is a sign of hope for all those who care for a better health for the African people. For the local production of pharmaceuticals to be effective and efficient, African countries, donors and International Health Institutions need not only words, but the political will, investments and actions that will lead to a local production of essential generic medicines of quality in the continent, so that all Africans may have access to medicines of quality. Africa is a blue ocean for Pharmaceuticals investment.

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Doing Business 2017 in Kenya, World Bank Group

Update on IFRS, IAS, IFRIC and SIC *for Professional Accountants*

"The journal is running a series of updates on IFRS, IAS, IFRIC and SIC. The updates mostly collected from different sources of IASB publication, seminars, workshop & IFRS website. This issue is based on a newly developed standard IFRS 15 which has been collected, collated & summarized by Mr. Saifur Rahman. He has been working as Head of Resource Management for Ericsson South East Asia, Oceania & India (the region consist of 30 countries). Before promoting to this role he has worked as Head of Business Operations for LM Ericsson Bangladesh Limited. He is a fellow member of the institute of Cost & Management Accountants of Bangladesh. He is also an Associate Editor for the institute bi-monthly journal THE COST & MANAGEMENT."

IFRS 15: Revenue from Contracts with Customers

There were some issues with revenue recognition from contracts; previously which has been referring multiple standards and interpretations. It was confusing & conflicting sometimes for the professionals and user of financial statements. By then IASB came forward to develop a standard to bring the harmonization for revenue recognition from contracts with customers and it is numbered IFRS15. It is effective for annual periods beginning on or after 1 January 2018. Earlier application also permitted by IASB.

IFRS 15 supersedes: (a) IAS 11 *Construction Contracts;* (b) IAS 18 *Revenue;* (c) IFRIC 13 *Customer Loyalty Programmes;* (d) IFRIC 15 *Agreements for the Construction of Real Estate;* (e) IFRIC 18 *Transfers of Assets from Customers; and* (f) SIC-31 *Revenue-Barter Transactions Involving Advertising Services.*

Reasons for issuing the IFRS 15

Previous revenue recognition requirements in IFRS provided limited guidance and, consequently, the two main revenue recognition Standards, IAS 18 and IAS 11 could be difficult to apply to complex transactions. In addition, IAS 18 provided limited guidance on many important revenue topics such as accounting for multiple-element arrangements. In contrast, US GAAP comprised broad revenue recognition concepts together with numerous revenue requirements for particular industries or transactions, which sometimes resulted in different accounting for economically similar transactions.

Accordingly, the International Accounting Standards Board (IASB) and the US national standard-setter, the Financial Accounting Standards Board (FASB), initiated a joint project to clarify the principles for recognizing revenue and to develop a common revenue standard for IFRS and US GAAP that would:

(a) remove inconsistencies and weaknesses in previous revenue requirements; (b) provide a robust framework for addressing revenue issues; (c) improve comparability of revenue recognition practices across entities, industries, jurisdictions and capital markets; (d) provide useful information to users of financial statements through improved disclosure requirements; and (e) simplify the preparation

of financial statements by reducing the number of requirements to which an entity must refer.

Main features

The core principle of IFRS 15 is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity recognizes revenue in accordance with that core principle by applying the following steps:

Step 1: Identify the contract(s) with a customer

An entity shall account for a contract with a customer that is within the scope of this Standard only when all of the following criteria are met:

(a) the parties to the contract have approved the contract (in writing, orally or in accordance with other customary business practices) and are committed to perform their respective obligations;

(b) the entity can identify each party's rights regarding the goods or services to be transferred;

(c) the entity can identify the payment terms for the goods or services to be transferred;

(d) the contract has commercial substance (ie the risk, timing or amount of the entity's future cash flows is expected to change as a result of the contract); and

(e) it is probable that the entity will collect the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer. In evaluating whether collectability of an amount of consideration is probable, an entity shall consider only the customer's ability and intention to pay that amount of consideration when it is due. The amount of consideration to which the entity will be entitled may be less than the price stated in the contract if the consideration is variable because the entity may offer the customer a price concession

Step 2: Identify the performance obligations in the contract

At contract inception, an entity shall assess the goods or services promised in a contract with a customer and shall identify as a performance obligation each promise to transfer to the customer either:

(a) a good or service (or a bundle of goods or services) that is distinct;
or

(b) a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer

Step 3: Determine the transaction price

An entity shall consider the terms of the contract and its customary business practices to determine the transaction price. The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both.

Step 4: Allocate the transaction price to the performance obligations in the contract

The objective when allocating the transaction price is for an entity to allocate the transaction price to each performance obligation (or distinct good or service) in an amount that depicts the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer.

To meet the allocation objective, an entity shall allocate the transaction price to each performance obligation identified in the contract on a relative stand-alone selling price basis in accordance with paragraphs 76-80, except as specified in paragraphs 81-83 (for allocating discounts) and paragraphs 84-86 (for allocating consideration that includes variable amounts).

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation-

An entity recognizes revenue when (or as) it satisfies a performance obligation by transferring a promised good or service to a customer (which is when the customer obtains control of that good or service). The amount of revenue recognized is the amount allocated to the satisfied performance obligation. A performance obligation may be satisfied at a point in time (typically for promises to transfer goods to a customer) or over time (typically for promises to transfer services to a customer). For performance obligations satisfied over time, an entity recognizes revenue over time by selecting an appropriate method for measuring the entity's progress towards complete satisfaction of that performance obligation.

There are two methods for measuring progress towards complete satisfaction of a performance obligation given as per IFRS 15. Methods that can be used to measure an entity's progress towards complete satisfaction of a performance obligation satisfied over time in accordance with paragraphs 35-37 include (a) output methods (details in paragraphs B15-B17); and (b) input methods (details in paragraphs B18-B19).

Output methods recognize revenue on the basis of direct measurements of the value to the customer of the goods or services transferred to date relative to the remaining goods or services promised under the contract. Output methods include methods such as surveys of performance completed to date, appraisals of results achieved, milestones reached, time elapsed and units produced or units delivered. When an entity evaluates whether to apply an output method to measure its progress, the entity shall consider whether the output selected would faithfully depict the entity's performance towards complete satisfaction of the performance obligation.

Input methods recognize revenue on the basis of the entity's efforts or inputs to the satisfaction of a performance obligation (for example, resources consumed, labor hours expended, costs incurred, time elapsed or machine hours used) relative to the total expected inputs to the satisfaction of that performance obligation. If the entity's efforts or inputs are expended evenly throughout the performance period, it may be appropriate for the entity to recognize revenue on a straight-line basis.

[Source: IFRS website & IFRS provided free unaccompanied pdf version of the IFRS15]

There were some issues with revenue recognition from contracts; previously which has been referring multiple standards and interpretations. It was confusing & conflicting sometimes for the professionals and user of financial statements. By then IASB came forward to develop a standard to bring the harmonization for revenue recognition from contracts with customers and its numbered with IFRS15. It is effective for annual periods beginning on or after 1 January 2018. Earlier application also permitted by IASB.

UPDATE ON Capital Market

The Journal is running a series of updates on Bangladesh Capital Market. In this issue of THE COST & MANAGEMENT, **Mr. Mohammad Shamsur Rahman** FCMA has given a reflection of relevant changes and updates on Bangladesh Capital Market. The analysis of the capital market has been done considering the period from September 04, 2017 to October 31, 2017. Mr. Rahman is currently working with Chittagong Stock Exchange Limited as Chief Regulatory Officer.

Bangladesh Economic Outlook

Particulars	28 September 2017	25 October 2017
Foreign Exchange Reserve (In million US$)	32815.91	33362.51
Interbank Taka-USD Exchange Rate (Average)	80.80	80.85
Call Money Rate (Weighted Average Rate)	3.86	3.84
Rate of Inflation on the basis of Consumer Price Index for National (Base:2005-06=100)	August 2017	September 2017
a) Twelve Month Average Basis	5.50	5.89
b) Point to Point Basis	5.55	6.12
GDP Growth Rate (in percent, Base: 2005-06=100)	7.11 (2015-16)	7.24 (2016-17)

Source: Bangladesh Bank

International Stock Market Review

All American Indices (As on 31 Oct 2017)

Index	Last	Chg	Chg %
Dow Jones Industrial Average	23,377.24	+28.50	+0.12%
Nasdaq Composite Index	6,727.67	--	--%
NYSE Composite Index	12,341.01	+0.00	+0.00%
Thomson Reuters Equity US Index	229.49	+0.44	+0.19%
Thomson Reuters Equity Canada Index	300.09	+0.52	+0.17%
Thomson Reuters Equity Latin America	342.89	-0.57	-0.17%
NYSE International 100 Index	5,685.25	--	--%
NYSE TMT Index	8,302.94	--	--%
NYSE US 100 Index	9,914.05	--	--%

All European Indices (As on 31 Oct 2017)

Index	Last	Chg	Chg %
Thomson Reuters Europe (ex UK & Ire)	185.08	+0.65	+0.35%
Thomson Reuters Em Mkt Europe	317.03	+2.98	+0.95%
Thomson Reuters Equity UK Index	147.40	+0.12	+0.08%
Thomson Reuters Equity Germany Index	206.79	+0.00	+0.00%
Thomson Reuters Equity France Index	182.72	+0.32	+0.18%
FTSE 100 Index	7,493.08	+5.27	+0.07%

Only corporate bodies, financial institutions and funds will be allowed to subscribe the bonds through the private placement.

Asia/Pacific Indices (As on 31 Oct 2017)

Index	Last	Chg	Chg %
Thomson Reuters Equity Japan Index	155.89	+1.58	+1.02%
Thomson Reuters Equity HK Index	315.33	+1.99	+0.64%
Thomson Reuters Equity India Index	1,277.14	+10.52	+0.83%
Nikkei Stock Average 225	22,386.02	+374.41	+1.70%
Hang Seng Index	28,413.82	+168.28	+0.60%
CASPI (CSE All Share Price Index)	18,633.29	+71.80	+0.39%
CSE 50 (Benchmark Index)	1,400.35	+2.43	+0.17%
DSEX Index	6,019.59	+23.34	+0.39%
DS30 Index	2,168.03	+5.22	+0.24%

Commodity Exchange

	Last	Change	% Change	52-week price range	Last Update
Energy New York Mercantile					
Oil (Light Crude) Dec. 2017 contract $ / barrel	54.69	+0.31	+0.57%	42.05-55.24	Oct 27, 2017
Heating Oil Dec. 2017 contract $ / gallon	1.89	0.00	0.00%	1.36-1.89	Oct 27, 2017
Natural Gas Dec. 2017 contract $ / million BTUs	2.91	0.00	0.00%	2.55-3.94	Oct 27, 2017
Unleaded Gas Dec. 2017 contract $ / gallon	1.75	+0.0164	+0.95%	1.27-1.78	Oct 27, 2017
Metals New York Mercantile					
Gold Dec. 2017 contract $ / troy ounce	1,275.40	+4.90	+0.39%	1,124-1,362	Oct 27, 2017
Silver Dec. 2017 contract $ / troy ounce	16.88	+0.182	+1.09%	15.15-19.01	Oct 27, 2017
Platinum Jan. 2018 contract $ / troy ounce	928.80	+9.20	+1.00%	888.70-1,048	Oct 27, 2017
Copper Dec. 2017 contract $ / pound	3.16	+0.06	+1.93%	2.20-3.26	Oct 27, 2017
Agriculture Chicago Board of Trade					
Corn Dec. 2017 contract ¢ / bushel	346.00	+0.25	+0.07%	335.50-417.25	Oct 27, 2017
Soybeans Jan. 2018 contract ¢ / bushel	986.50	+1.75	+0.18%	900.25-1,080	Oct 27, 2017
Wheat Dec. 2017 contract ¢ / bushel	418.25	-0.25	-0.06%	392.50-574.50	Oct 27, 2017

Source: CNN

Update on Bangladesh Capital Market

The government extended the tenure of capital market refinancing scheme by two more years, cutting interest rate on loans from the scheme by 1.5 per cent to 6 per cent. The extension was granted following appeals from the Bangladesh Securities and Exchange Commission and the Investment Corporation of Bangladesh (ICB). The tenure of the refinancing scheme was extended for the third time by two years to December 31, 2019 as the tenure of the scheme was scheduled to end on December 31, 2017 to ensure full utilization of undisbursed loans.

Bashundhara Paper Mills Limited and Aman Cotton Fibrous Limited has got the Bangladesh Securities and Exchange Commission's (BSEC) consent to conduct bidding process of determining cut-off price in a bid to raise fund worth Tk 200 and Tk. 80 Crore respectively under book building method.

The reality is that business and investment spending are the true leading indicators of the economy and the stock market. If you want to know where the stock market is headed, forget about consumer spending and retail sales figures. Look to business spending, price inflation, interest rates, and productivity gains.

- Mark Skousen

The cut-off price of the shares of Bashundhara Paper Mills has been fixed at Tk 80, including a premium of Tk 70 for each Tk 10 share for eligible investors (EIs). As per the rules of book building method, the general investors are allowed to get the IPO (initial public offering) shares at 10 percent discount on the cut-off price. So, the general investors will get the shares of Bashundhara Paper Mills at Tk 72 each.

Energypac Power Generation Limited has conducted Road Show for the forthcoming Initial Public Offer (IPO) under Book-Building Method on October 15, 2017 at the Westin Dhaka.

Bangladesh Securities and Exchange Commission (BSEC) has given consent for Tk 4.50 billion Mudaraba Subordinated Bond to be issued by First Security Islami Bank Limited (FSIBL). The redemption of the company's bond will be completed within seven years. The FSIBL will raise the fund through bond issue to fulfill the condition of Tier-II Capital Base.

Bangladesh Securities and Exchange Commission (BSEC) has approved the IPO (initial public offering) proposal of Indo-Bangla Pharmaceuticals which will raise a capital worth Tk 200 million under the fixed price method. The company will utilise the IPO fund for constructing factory and building of godown and garage along with purchasing machineries and bearing the IPO expense.

ICB AMCL First Agrani Bank Mutual Fund and aamra Networks Limited were listed on September 19, 2017. On the other hand, Oimex Electrode Limited and Nahee Aluminum Composite Panel Ltd were listed on October 24, 2017 in CSE.

Bangladesh Securities and Exchange Commission (BSEC) has given consent of Tk 50-crore non-convertible subordinated bond of Paramount Textiles. The tenure of the bond will be for four years and will be fully-redeemable. The face value of each unit of the bonds will be Tk 1 crore.

Only corporate bodies, financial institutions and funds will be allowed to subscribe the bonds through the private placement.

Bangladesh Securities and Exchange Commission (BSEC) has approved the draft prospectus of HFAML Unit Fund with an initial size of Tk 500 million. The sponsors of the fund will contribute Tk 50 million, while remaining Tk 450 million will be collected from public. The face value of the units of the fund will be Tk 10 each. The units of the fund will be sold to investors under a systematic investment plan.

DSE and CSE Market Update

September 04, 2017 to October 31, 2017.

- The benchmark index of Dhaka Stock Exchange (DSEX) was up by 0.22% during the period. The daily turnover was highest on September 18, 2017.

  Changes in indices of DSE (from September 04, 2017 to October 31, 2017):

Index	Open	Close	Point Change	% Change
DSEX	6,006.43	6,019.59	13.16	0.22%
DSES	1,322.10	1316.25	-5.85	-0.44%
DS30	2,138.73	2168.03	29.30	1.37%

- The benchmark index of Chittagong Stock Exchange (CSE50) was up by 1.75% during the period. The daily turnover was highest on September 28, 2017

  Changes in indices of CSE (from September 04, 2017 to October 31, 2017)

Index	Open	Close	Point Change	% Change
CASPI	18604.76	18633.29	28.53	0.15%
CSCX	11242.47	11271.74	29.27	0.26%
CSE50	1376.259	1400.344	24.09	1.75%
CSI	1207.349	1203.477	-3.87	-0.32%

- Total market capitalization of DSE increases by 1.42% to Tk. 4090.27 billion as on October 31, 2017 from Tk. 4032.91 billion on September 04, 2017. On the other hand, Total market capitalization of CSE increases by 1.58% to Tk. 340.99 billion as on October 31, 2017 from Tk. 335.68 billion on September 04, 2017.

Disclaimer:

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CMA Students' World

This section focuses on reflections from young students of ICMAB and how they have been pursuing their CMA career path and facing challenges in CMA study at the beginning of their career.

Ishrat Jahan, a student of CMA operations level, currently working as a lecturer in Victoria University of Bangladesh. She completed her schooling in Comilla; SSC & HSC from Nawab Faizunnessa Govt. Girls' High School & Comilla Victoria Collage respectively. She did graduation & post-graduation in Business administration from Comilla University. Born and bought up in comilla and her father is an Engineer and mother is a homemaker.

Why do you pursue CMA education from ICMAB? Explain in detail.

I was a student of Comilla Victoria Collage and from the very first day of my collage life I started get attracted to CMA professional degree as the branch of ICMAB comilla is functioning it's activities from my collage. My father always wanted me to pursue a global professional degree. On the other hand, some of my relatives were in good position after being qualified CMA.

After completing HSC, I got admitted in Comilla University at the Department of Accounting and Information Systems. My respected teachers also supported me and bestowed trust on me. I always wanted to get involved in educational sector after my graduation. I found so many associate and fellow members in different public and private universities as teacher, this has enhanced my determination.

How do you make a comparison between CMA education and other academic qualifications?

I think, in today's world, professional degree is a big support to hold a better position in job market. There is big difference between theoretical and practical knowledge. Academic education prepares us theoretically but professional degrees like CMA make us confident to face the challenging business world. In terms of specialization, professional degree is a must. On top of that CMA degree provides us the CPD program which helps us in practical specialization.

Another Important point, I would like to mention that CMA education is compared of some ethical standards which enriches the acceptability of this degree.

What are the main challenges you faced in studying CMA education?

After completing MBA program, I started my CMA journey. I passed out the business level immediately before my marriage. Now I am a home maker and a lecturer in a private university. So, I think the current phase of my CMA journey is challenging. Time management, cope up with new life, new schedule, all these are challenging for me. But, challenges are part of our life and that make us confident, I think.

Do you think that CMA qualification will help you to get added advantage in the job market?

I am a lecturer of a private university. CMA qualification will definitely add value in my profession. As a teacher, I should be well informed about professional degree. It will enrich my teaching method. CMA qualification will help to give proper practical knowledge to my students. I can motivate them to get involved themselves in professional education. This degree will help me to provide the practical solutions to students.

What are the strategy you are following to complete the CMA education on schedule?

Study with proper planning is a key. Making a proper plan, implementing, executing and reviewing the outcomes of planning, library work, group discussion, attending classes with full concentration, solving previous questions- these are the strategies would be required to accomplish the CMA education on schedule.

What do you expect to get from ICMAB as a student?

Being a student of ICMAB is a precious feeling itself. It is giving us quality education. According to my opinion, it would be great if we could get learning facilities through internet anywhere we go, especially for job holders. Conference, workshop, short course on up to date topic of various subjects (IT, accounting etc.) will be advantageous for the students.

Could you remember any memorable event during your study at ICMAB?

The first lecture of Naba Krishna Muni sir will always be like a motivational session for me. The guidelines he gave us were tonic for me to gear up my self. Sir is still continuously motivating and supporting us through social networking site.

To fulfill your future dream; do you think the CMA qualification will be able to fulfill your aspirations?

I think, professional qualification with academic qualification is a blend of quality education and a great combination of theoretical and practical knowledge. My dream is to be a qualified university teacher with the designation of CMA. And obviously, CMA qualification will help me to improve & further develop my teaching method. It will definitely help me in terms of my research work.

[Interviewed by Md. Saifur Rahman,
Associate Editor, THE COST & MANAGEMENT.]

There is far difference between theoretical and practical knowledge. Academic education prepares us theoretically but professional degrees like CMA make us confident and capable to face the challenging business world. In terms of specialization, professional degree is a must. On top of that CMA degree provides us the CPD program which helps us in practical specialization.

ICMAB News

Seminar on **Prospects and Challenges of Development of Capital Market**

In observance of "World Investor Week 2017" the Institute of Cost and Management Accountants of Bangladesh (ICMAB) organized a seminar on "Prospects and Challenges of Development of Capital Market" on October 03, 2017 at ICMAB Ruhul Quddus Auditorium, Dhaka to aware general investors.

Professor Dr. M. Khairul Hossain, Chairman, Bangladesh Securities and Exchange Commission (BSEC) was present as the Chief Guest. Mr. Arif Khan FCMA, Past President, ICMAB and CEO & Managing Director, IDLC Finance Ltd. presented the keynote paper. ICMAB President Mr. Jamal Ahmed Choudhury FCMA presided over the program.

Professor Md. Helal Uddin Nizami and Professor Dr. Swapan Kumar Bala FCMA Commissioners, Bangladesh Securities and Exchange Commission (BSEC) and Mr. K.A.M. Majedur Rahman, Managing Director, Dhaka Stock Exchange Ltd. was present as Discussants.

The Chairman of BSEC Dr. M. Khairul Hossain told that the unwanted incident as occurred in 2010 in capital market will not happen in future since proper regulatory measures have already been taken by BSEC. He further added that investors' confidence on the capital market restored following the regulatory reforms. One should invest in shares doing proper analysis of financial statements.

ICMAB Secretary Mr. Md. Abdur Rahman Khan FCMA offered vote of thanks. A large number of Fellow and Associate Members and Students of the Institute attended the Seminar.

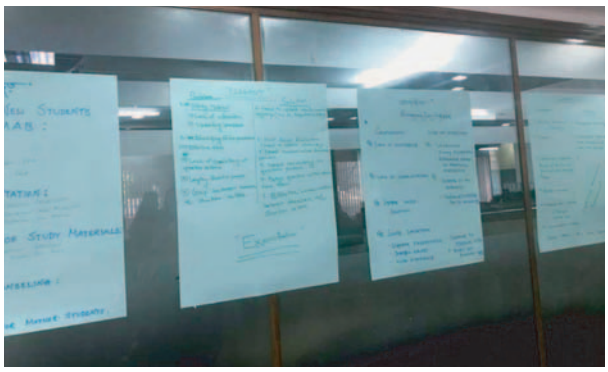
Ideas exchange workshop of ICMAB Women Affairs Committee

ICMAB Women Affairs Committee organized a Networking Lunch and Ideas Exchange Workshop at the Padma Lounge of Dhaka Club on Saturday, September 23, 2017. The program was attended by President, ICMAB, Mr. Jamal Ahmed Choudhury FCMA, Past President Mr. Mohammed Salim FCMA, National Councilors Prof. Dr. Swapan Kumar Bala FCMA and Mr. Md. Abdur Rahman Khan FCMA. A significant number of women members and CMA finalist women students joined the program.

Ms. Akhtar Sanjida Kasem FCMA, Chairperson, ICMAB Women Affairs Committee welcomed the participants and briefly introduced the purpose of the program. After the networking lunch, a half-day workshop was held to explore enablers for attracting women students to the profession, prepare them for the examination and studies, provide guidance for employment and further career advancement. The session was moderated by Ms. Zinnia Huq FCMA, Finance Director of GSK Bangladesh Ltd.

Four individual groups worked on four themes and presented their respective recommendations, which will be further fine-tuned and be presented to the National Council for their kind consideration.

This was an interactive session in which the National Council Leadership, the members of the Committee and all participants freely exchanged views and ideas. All suggestions and recommendations were noted for future follow-up.



ICMAB delegation called on Chairman, BSEC

A delegation of ICMAB led by its President Mr. Jamal Ahmed Choudhury FCMA called on the Chairman, Bangladesh Securities & Exchange Commission on September 27, 2017. The ICMAB President apprised the Chairman regarding the present status and activities of the Institute. They discussed matters relating to professional interest. Among others, Professor Md. Helal Uddin Nizami, Comissioner of BSEC; Mr. Mohammed Salim FCMA, Past President of ICMAB; Prof. Dr. Swapan Kumar Bala FCMA, Commissioner of BSEC & Treasurer of ICMAB and Mr. Md. Mahbub Ul Alam FCMA, Executive Director of the Institute were present in the meeting.

New Appointment

Abu Hasnat FCMA
Joined as CEO of PANNA GROUP

Mr Abu Hasnat, a fellow member of ICMAB, has joined as the Chief Executive Officer of Panna Group. Prior to his appointment as the CEO, Mr Hasnat was an adviser of the Board of Directors of Panna Group. Mr Abu Hasnat is one of the pioneers of developing international battery business in Bangladesh. Out of his 30 years of experience he spent more than 20 years in the global business. He possesses a strong business and leadership record as CEO and has a deep understanding of the customer and business landscape in the Asian, Middle East, African Europen region since his first General Management role in 2006. He has an extensive travelling experience covering 40 countries over the globe. A resident of Dhaka, Mr Hasnat was born in 1964 in Comilla in a well-educated Muslim family. His father was a government official. His mother was awarded the prestigious "Rotnogorva" award in 2016 for her outstanding achievement as a mother and to recognize her contribution to the nation. He has done his Masters in Accounting and also Post Graduation in Industrial Management. Apart from this, he has attened many training courses in Bangladesh, UK, India, Japan, Singapore, Sri Lanka, etc .

Mohammad Shamsur Rahman FCMA
appointed as Chief Regulatory Officer (CRO) of Chittagong Stock Exchange (CSE)

Bangladesh Securities and Exchange Commission (BSEC) has approved the appointment of Mr. Mohammad Shamsur Rahman, FCMA as the new Chief Regulatory Officer (CRO) of Chittagong Stock Exchange (CSE). Mr. Rahman started his career with CSE as DGM and Head of Corporate Finance Department from 2011. At present he is discharging the responsibility as Chief Regulatory Officer (Acting) from February, 2016.

Mr. Mohammad Shamsur Rahman is a fellow member of the Institute of Cost and Management Accountants of Bangladesh (ICMAB). He completed his graduation and post graduation from University of Dhaka. Before joining CSE, Mr. Rahman worked with BRAC International as Head of Internal Audit. He also worked as an Assistant Professor of Dhaka City College.

Reception to the CMAs passed in June 2017 examination

The Council of the Institute of Cost and Management Accountants of Bangladesh (ICMAB) accorded a warm reception to the students who recently passed CMA final examination. The colorful and joyous program was held on September 26, 2017 at the ICMAB Ruhul Quddus Auditorium, Dhaka. 32 students successfully qualified to achieve the prestigious CMA degree after passing all the subjects of the CMA course.

ICMAB President Mr. Jamal Ahmed Choudhury FCMA in his speech advised the newly qualified CMAs to maintain the highest standard in rendering their professional services. He also emphasized on strict compliance to the professional code of ethics and conducts that CMAs are highly regarded for. He told that as a professional they should remain committed to their responsibilities to the society.

The newly qualified CMAs shared their feelings of joining the CMA family and expressed firm commitment to uphold the image of the profession.

A CMA graduation signature book was unveiled on this occasion by the senior most member and past President of the Institute Mr. Rafiq Ahmad FCMA.

Among others, Past Presidents of ICMAB Prof. Mamtaz Uddin Ahmed FCMA, Mr. Mohammed Salim FCMA, Mr. Arif Khan FCMA, Treasurer Prof. Dr. Swapan Kumar Bala FCMA and Council Member Mr. Abu Bakar Siddique FCMA attended the program. The program was conducted by ICMAB Secretary Mr. Md. Abdur Rahman Khan FCMA.

Mr. Md. Mahbub Ul Alam FCMA, Executive Director of the Institute offered vote of thanks. A large number Fellow & Associate Members and Students of the Institute attended the Reception program.

ICMAB delegation called on Chairman, IDRA

A delegation of ICMAB led by its President Mr. Jamal Ahmed Choudhury FCMA called on the Chairman, Insurance Development and Regulatory Authority (IDRA) on October 25, 2017. The ICMAB President apprised the Chairman regarding the present status and activities of the Institute. They discussed matters relating to professional interest.

Among others, Mr. M. Abul Kalam Mazumdar FCMA and Mr. Mohammed Salim FCMA, Past Presidents of ICMAB; Mr. Md. Abdur Rahman Khan FCMA, Secretary of ICMAB and Mr. Md. Mahbub Ul Alam FCMA, Executive Director of the Institute were present in the meeting.

Courtesy meeting with the Office bearers of ICAB

Office bearers of ICMAB led by its President Mr. Jamal Ahmed Choudhury FCMA had a courtesy meeting with the Office bearers of ICAB on October 22, 2017 at Pan Pacific Sonargaon Hotel. They discussed matters relating to professional interest.

Among others, from ICMAB Mr. Mohammed Salim FCMA, Vice President; Mr. Md. Abdur Rahman Khan FCMA, Secretary & Mr. Md. Mahbub Ul Alam FCMA, Executive Director and from ICAB Mr. Adeeb Hossain Khan FCA, President, Mr. Moddassar Ahmed Siddique FCA, Vice President (Tech), Mr. Mostafa Kamal FCA, Vice President (E&T) and Mr. Md. Mahamud Hosain FCA, Vice President (F&A) were present in the meeting. The meeting was hosted by the Institute of Chartered Accountants of Bangladesh (ICAB).

ICMAB President joins DCCI's seminar on "Financial Reporting Act 2015 and Its Economic Implication"

ICMAB president Mr. Jamal Ahmed Choudhury FCMA was invited by Dhaka Chamber of Commerce and Industry (DCCI) to join as a special guest in a seminar on "Financial Reporting Act 2015 and Its Economic Implication" held on October 23, 2017. Chairman of the Financial Reporting Council Mr. C Q K Mustaq Ahmed attended the program as Chief Guest while Mr. Aftab Ul Islam FCA, Former President DCCI and Mr. Adeeb Hussain Khan FCA, President ICAB were the special guests.

The President ICMAB in his speech, gave a brief on the historical perspective of independent audit oversight that replaces the self-regulatory system. He mentioned that 51 countries around the world has established independent audit oversight bodies. FRC will help improve the quality of reporting by companies and the trust and confidence of the investors on the reported financial statements. There is nothing for the companies to be scared about FRC.

We Mourn

With profound sorrow, we inform that we lost one of our beloved fellow member- Dr. G. M. Baqui Billah FCMA (F-0194) on October 04, 2017 (Inna Lillahe-------Rajiun). He was a committed CMA professional, loved and respected by his friends and fellows. May Almighty Allah give him eternal peace.

Train the Trainers program

The Institute of Cost and Management Accountants of Bangladesh organized a two day long 'Train the Trainers' program at ICMA Bhaban, Nilkhet, Dhaka on September 22-23, 2017. ICMAB members from Dhaka, Chittagong, Comilla and Khulna attended the program. After the adoption of new syllabus in 2015, the CMAB community felt the requirements of such a program. The attendees of the program were the faculty members, question setters, moderators, and script examiners of the institute. The program catered to address the revised needs of the attendees under new curriculum. The resource person of the program was Mr. Palpolage Don Channa Nirosha Gunawardana, Chief Operating Officer, Hirdaramani Knit Cluster, Sri Lanka. Mr. Gunawardana has vast experiences in conducting such program in different parts of the world, particularly in Asia. He presented modern teaching methods, question setting patterns, assessment matrices etc. which helped the participants a lot. Inauguration of the training program was held on September 22, 2013 at 9:00 a.m. Mr. Jamal Ahmed Choudhury FCMA, President of the Institute, Mr. Mohammed Salim FCMA, Vice President and Chairman of Education Committee, Mr. Md. Abdur Rahman Khan FCMA, Secretary, Prof. Dr. Swapan Kumar Bala FCMA, Treasurer, Dr. Nikhil Chandra Shil FCMA, Consultant, Academic Affairs and Mr. Md. Mahbub Ul Alam FCMA, Executive Director of the Institute attended the inaugural session. Altogether 55 Teachers, Question Setters, Moderators and Script Examiners participated in the aforesaid training program.

Dr. Swapan Kumar Bala FCMA attended the OECD ART on CG 2017 in Japan

OECD ART on CG 2017 inaugurated by Mr. Taro Aso, Deputy Prime Minister, Japan

Dr. Swapan Kumar Bala FCMA in the program of the OECD ART on CG 2017

Dr. Swapan Kumar Bala FCMA, Commissioner, Bangladesh Securities and Exchange Commission (BSEC) and Treasurer, ICMAB, attended the two-day OECD Asian Roundtable on Corporate Governance, held in Tokyo, Japan on 19-20 October 2017. The OECD (Organisation for Economic Co-operation and Development) Asian Roundtable (ART) on Corporate Governance (CG) was hosted by the Financial Services Agency of Japan and the Japan Exchange Group. The OECD ART on CG 2017 was the 19th year of such program and the largest gathering ever of delegates from twenty-seven countries.

ICMAB *Holds*
ACCOUNTING EDUCATORS' CONFERENCE

Speakers in a recent conference organized by The Institute of Cost and Management Accountants of Bangladesh (ICMAB) emphasized the need for greater co-operation of academicians and the practitioners to narrow down the gap between the theory and the real-world management accounting practice. ICMAB arranged a day-long "Accounting Educators' Conference" on the theme "Recent developments in the field of Management Accounting and Corporate Reporting" at ICMAB premise in Dhaka on October 27, 2017.

Mr. Shubhashish Bose, Secretary, Ministry of Commerce, Government of the Peoples Republic of Bangladesh inaugurated the program as Chief Guest. Mr. A K M Delwer Hussain FCMA, Chairman, Bangladesh Sugar and Food Industries Corporation and past president of the Institute attended the program as special guest. The objective of the conference was to build a bridging platform between the professionals and the practitioners and to promote Cost and Management Accounting education across the country. Faculty members of Accounting and Business Studies departments of different universities and colleges of 25 districts of the country attended the program.

The chief guest in his speech emphasized that Accounting is a continuously evolving profession. Rapid changes are taking place in the real world practice all around. The academicians and the professionals should keep themselves updated of the changes. He also highlighted the need for skilled human resources to materialize the 2021 vision to make Bangladesh a middle income country.

Three technical papers were presented in the conference. Mr. Mohammed Mehadi Masud Mazumder PhD, ACMA Associate Professor, department of AIS, University of Dhaka presented paper on "Integrated Reporting (IR): The Future of Corporate Reporting" in the first technical session. Professor Salim Uddin PhD, FCMA, Department of Accounting, University of Chittagong presented paper on "Management Accounting Tools for Organizational Sustainability" while Mr. Musfiqur Rahman ACMA, PhD, Associate Professor, AIS, Dhaka University presented paper on "Revenue from Contracts with Customers (IFRS 15): A New Way of Thinking About Revenue" in the second and third technical sessions respectively.

Mr. Md. Touhidul Alam Khan FCMA, DMD and Chief Business Officer, Prime Bank limited; Mr. Abdul Matin Patwary FCMA, CFO, Dhaka Stock Exchange Ltd. Ms Zinnia Tanzina Huq FCMA, Finance Director, Glaxo SmithKline and Ms. Akhtar Sanjida Kasem FCA, FCMA, Partner, A Qasem Co. attended different technical sessions as Commentators.

Prof. Dr. Swapan Kumar Bala FCMA, Commissioner, BSEC and Treasurer, ICMAB; Mr. M. Abul Kalam Mazumdar FCMA and Professor Mamtaz Uddin Ahmed FCMA, Past Presidents of ICMAB Chaired different sessions. Among others Mr. Jamal Ahmed Choudhury FCMA, President ICMAB along with Mr. Mohammed Salim FCMA Past President and Chairman Education Committee and Mr. Md. Abdur Rahman Khan FCMA, Secretary ICMAB attended the inaugural program.

CMA June-2017 Examination Results

The Institute of Cost and Management Accountants of Bangladesh has published the results of the CMA June-2017 Examination held at Dhaka, Chittagong, Khulna, Rajshahi, Comilla, Doha(Qatar) centers. The Names and Roll numbers of the students who have passed CMA Final Examination and the roll numbers of the students who have passed different Levels are given below:

Passed CMA Final Examination:

Dhaka

Md. Shahadat Hossen
(DHK-08623)

Md. Shahin Hossain
(DHK-08695)

Md. Jahirul Haque Chowdhury
(DHK-08797)

Jahangir Alam
(DHK-09051)

Anuj Kumar Paul Choudhury
(DHK-09237)

Mohammed Nurul Alam
(DHK-09307)

Md. Asgar Hossain
(DHK-09394)

Younus Ali
(DHK-09653)

Mohammad Shariful Islam
(DHK-09667)

Ahmed Raquibul Islam
(DHK-09670)

A.K.M. Qamruzzaman
(DHK-09673)

Mohammad Ruhul Amin
(DHK-09798)

Mir Aminur Rahman
(DHK -09929)

Rana Mazumder
(DHK-09993)

Md. Shahnows
(DHK-10035)

Mohammed Akbar Hossain
(DHK-10119)

Md. Monzurul Karim
(DHK-10145)

Sabuj Chandra Bhowmik
(DHK-10188)

Rama Prasad Chaudhuri
(DHK-10224)

Raju Kumar Paul
(DHK-10535)

Gopal Chandra Paul
(DHK-10536)

Mohammad Zainal Abedin
(DHK-10747)

Mohammad Moniruzzaman
(DHK-11080)

Shah Alam
(DHK-11613)

Chittagong

Mohammed Ajgar Ali
(CTG-01195)

Md. Khairul Amin
(CTG-01225)

Asma Begum
(CTG-01234)

Kazi Monowar Hossain
(CTG-01328)

Md. Shahadat Hossain Khan
(CTG-01370)

Noumaan-E-Alam Khan
(CTG-01524)

Khulna

Lawrence Oli Gomes
(KHU-00378)

Abroad

Md. Shakil Iftekhar Sarker
(QATAR-00006)

Passed Professional Level-IV:

DHK-08623, DHK-08695, DHK-08797, DHK-09015, DHK-09237, DHK-09653, DHK-09667, DHK-09670, DHK-09798, DHK-09929, DHK-09992, DHK-09993, DHK-10035, DHK-10119, DHK-10188, DHK-10224, DHK-10535, DHK-10536, DHK-10747, DHK-11613, RAJ-00203, KHU-00378, CTG-01195, CTG-01234, QTR-00006 = 25.

Passed Professional Level-III:

DHK-08580, DHK-08584, DHK-08585, DHK-08609, DHK-08637, DHK-08742, DHK-08764, DHK-08809, DHK-08855, DHK-08880, DHK-08978, DHK-08992, DHK-08996, DHK-08998, DHK-09001, DHK-09051, DHK-09302, DHK-09307, DHK-09343, DHK-09345, DHK-09394, DHK-09494, DHK-09673, DHK-09741, DHK-09744, DHK-10145, DHK-10322, DHK-11017, DHK-11080, DHK-11093, KHU-00488, CTG-01154, CTG-01182, CTG-01195, CTG-01225, CTG-01227, CTG-01259, CTG-01321, CTG-01328, CTG-01370, CTG-01376, CTG-01524, COM-00165= 43.

Passed Professional Level-II:

DHK-08650, DHK-08785, DHK-08972, DHK-09015, DHK-09045, DHK-09137, DHK-09214, DHK-09391, DHK-09587, DHK-09725, DHK-09744, DHK-10249, DHK-10861, DHK-10921, DHK-10925, DHK-10947, DHK-11005, DHK-11127, DHK-11204, KHU-00442, KHU-00461 = 21.

Passed Professional Level-I:

DHK-08744, DHK-08772, DHK-08872, DHK-08878, DHK-09179, DHK-09535, DHK-09711, DHK-09773, DHK-09980, DHK-10075, DHK-10109, DHK-10204, DHK-10210, DHK-10628, DHK-10723, DHK-10730, DHK-10754, DHK-10760, DHK-10761, DHK-10766, DHK-10857, DHK-10917, DHK-10925, DHK-10942, DHK-11118, DHK-11120, DHK-11243, DHK-11291, DHK-11407, DHK-11427, RAJ-00218, KHU-00461, KHU-00462, CTG-01217, CTG-01230, CTG-01357, CTG-01478 = 37.

Passed Foundation Level:

DHK-08606, DHK-08873, DHK-10855, DHK-11417, KHU-00484, CTG-01425, COM-00159 = 07.

Passed Management Level:

DHK-09148 = 01.

Passed Operational Level:

DHK-09062 = 01.

Passed Business Level:

DHK-08720, DHK-08912, DHK-08927, DHK-08929, DHK-08932, DHK-08947, DHK-09028, DHK-09056, DHK-09057, DHK-09128, DHK-09130, DHK-09138, DHK-09166, DHK-09174, DHK-09282, DHK-09284, DHK-09287, DHK-09308, DHK-09339, DHK-09388, DHK-09451, DHK-09504, DHK-09505, DHK-09605, DHK-09674, DHK-09839, DHK-09904, DHK-09949, DHK-09986, DHK-09988, DHK-10255, DHK-10341, DHK-10354, DHK-10364, DHK-10365, DHK-10531, DHK-10539, DHK-10541, DHK-10610, DHK-10622, DHK-10639, DHK-10700, DHK-10703, DHK-10796, DHK-10809, DHK-10894, DHK-10897, DHK-10904, DHK-11168, DHK-11171, DHK-11188, DHK-11259, DHK-11295, DHK-11531, DHK-11605, RAJ-00205, KHU-00476, KHU-00491, KHU-00511, KHU-00521, CTG-01152, CTG-01185, CTG-01214, CTG-01265, CTG-01289, CTG-01298, CTG-01342, CTG-01430, CTG-01443, CTG-01459 = 70.

Passed Knowledge Level:

DHK-08735, DHK-08753, DHK-08897, DHK-08982, DHK-09095, DHK-09101, DHK-09188, DHK-09200, DHK-09283, DHK-09450, DHK-09461, DHK-09593, DHK-09603, DHK-09604, DHK-09618, DHK-09680, DHK-09748, DHK-09852, DHK-09893, DHK-09933, DHK-10130, DHK-10201, DHK-10257, DHK-10337, DHK-10356, DHK-10389, DHK-10404, DHK-10418, DHK-10878, DHK-10996, DHK-11101, DHK-11210, DHK-11552, DHK-11587, RAJ-00170, KHU-00456, CTG-01166, CTG-01285, CTG-01351, CTG-01409, CTG-01456, CTG-01457, CTG-01458, CTG-01515, CTG-01522, COM-00145, COM-00186 = 47.

DBC News

Seminar on
Business Process Risk Management & Productivity

The Dhaka Branch Council (DBC) of ICMAB organized a Seminar on "Business Process Risk Management & Productivity" for ICMAB Members on September 23, 2017 at ICMA Bhaban, Nilkhet, Dhaka. Mr. Md. Mushfiqur Rahman FCMA, Chairman of DBC presided over the session. Mr. Zillur Rahman FCMA, Chairman of Dhaka Branch Knowledge Sharing & Study Circle Committee offered welcome address and introduced the Resource Person. Mr. Abul Bashir Khan FCMA, CFO of SMC Enterprise Limited spoke as the Resource Person and Mr. Rafiq Ahmad FCMA, Past President of ICMAB was present as Session Chairman. A good number of members and students were present and actively participated in the session.

Workshop on
Internship Report Writing

The Dhaka Branch Council (DBC) of ICMAB organized a Workshop on "Internship Report Writing" for recently qualified CMAs on September 26, 2017 at ICMA Bhaban, Nilkhet, Dhaka. Mr. Md. Mushfiqur Rahman FCMA, Chairman of DBC presided over the Program. Mr. Nikhil Chandra Shil FCMA, Assistant Professor, East West University was present as the Resource Person. Mr. Zillur Rahman FCMA, Chairman of Dhaka Branch Knowledge Sharing & Study Circle Committee-2017 nicely conducted the program and offered the vote of thanks. A good number of newly qualified CMAs of the Institute were present and actively participated in the program.

DBC News

Prayer (Do'a) for ICMAB's *Founder President* Late Ruhul Quddus FCMA (F- 0001)

The DBC of the Institute organized a Prayer (Do'a) for ICMAB's Founder President Late Ruhul Quddus FCMA (F-001) on September 28, 2017 at DBC Floor, ICMAB, Dhaka. DBC Chairman Md. Mushfiqur Rahman FCMA presided over the program and gave a brief overview of the checkered life-sketch of the founder President and the pioneer of CMA profession Mr. Ruhul Quddus. Institute's President Mr. Jamal Ahmed Choudhury, FCMA was present in the program as the principal speaker. It may be mentioned that Mr. Ruhul Quddus left on 28th September, 2002. Council Members and Past Presidents of ICMAB, current office bearers and other council members of DBC and a large number of fellow and associate members and officials of the Institute attended and prayed for the salvation of the departed soul.

Reception to the Newly Qualified CMAs

The Dhaka Branch Council (DBC) of the Institute organized a reception to the newly qualified Cost and Management Accountants on October 05, 2017 at ICMAB Seminar Room. Md. Mushfiqur Rahman FCMA, Chairman of DBC presided over the program. Mr. Mohammad Salim FCMA, Vice-President of the Institute was present as the Guest of Honor. In the June 2017 about 32 CMAs qualified, who attended the program along with their family members. They also spoke the hindrances in achieving the success. They were awarded a memento and a small DBC souvenir as a token of recognition by the Institute's Vice-President. DBC Councilor Mr. Mashiur Rahman ACMA gave the welcome address and nicely conducted the program. DBC Treasurer Md. Mumlook Hossain FCMA, Secretary Mr. Monjur Md. Shaiful Azam FCMA, Councilor Mr. Md. Abdur Sattar Sarker FCMA, Mr. Zillur Rahman FCMA also spoke on the occasion. DBC Vice Chairman Mr. S.M. Afjal Uddin FCMA offered the vote of thanks.

Outbound Workshop on Servant Leadership Excellence 2017

DBC organized an Outbound Workshop on Servant Leadership at Hotel Dendalion, Lake Side, Pokhara, Nepal. The program was held on October 11-14, 2017. DBC Chairman Mr. Md. Mushfiqur Rahman FCMA presided over the program. Resource Person of the program was Rajendra B. Shrestha, Executive Chairman/Lead Trainer. A Large number of ICMAB members participated in the training program.

BRANCH activities COUNCILS

CBC News

Workshop on Cost Audit- A Practical Approach

Chittagong Branch Council (CBC) of ICMAB organized a workshop on "Cost Audit- A Practical Approach" on 06 October, 2017 at Agrabad, Chittagong. Mr. Golam Kibria FCMA, Chairman of Chittagong Branch Council of ICMAB presided over the program while Mr. M. Abul Kalam Mazumdar FCMA, Past President, ICMAB was present as Session Chairman. Mr. Mohammad Shaheed FCA, FCMA, Senior Partner of Ahmad & Akhtar, Chartered Accountants, Chittagong was present as resource person. Branch chairman stated that today`s topic is very crucial for CMA members. It is very important to implement cost audit in every sector of our industry. The resource person describe how to proceed cost auditing in the industries. Mr. M. Abul Kalam Mozumdar FCMA, Chairman of the session mentioned that the use of cost accounting and verification of the costing by Cost Accountants is the prerequisite for making the manufacturing and service sector cost competitive, which can help to country's overall competitiveness.

ICMAB *Chittagong Branch Council organized* Orientation Program of July-Dec. 2017 session

Chittagong Branch Council of ICMAB organized "Class Orientation of July-December' 2017 session" on 13th October, 2017 at CMA Bhaban, Agrabad, Chittagong. Mr. Golam Kibria FCMA, Chairman, Chittagong Branch Council of ICMAB presided over the Program while Mr. Jashim Uddin Chowdhury, Managing Editor, Dainik Purbokone was present as Chief Guest. Mr. Md. Abdur Rahman Khan FCMA, Secretary, ICMAB and Mr. Mahbub - Ul - Alam FCMA, Executive Director of ICMAB were present as special guest. In his speech, the Chief Guest motivate the newly admitted students for their success in passing CMA to attain global career & bright future. Special guest state that the demand for professional accountants is huge. He greeted the newly admitted students on behalf of the daily Purbokone Family and advised the students to reach the destination with the proper study. He thanked CBC for arranging the grand program successfully.

BRANCH activities COUNCILS

CBC News

ICMAB Chittagong Branch Council organized

Reception of Newly Qualified CMA's

Chittagong Branch Council of The Institute of Cost and Management Accountants of Bangladesh (ICMAB) organized "Reception to the CMA June-2017 Final Examination Passed students" on 13th October, 2017 at CMA Bhaban, Agrabad, Chittagong.

Mr. Golam Kibria, FCMA, Chairman, Chittagong Branch Council of ICMAB presided over the Program while Mr. Jashim Uddin Chowdhury, Managing Editor, Dainik Purbokone was present on the occasion as Chief Guest. Mr. Md. Abdur Rahman Khan FCMA, Secretary, ICMAB and Mr. Md. Mahbub Ul Alam FCMA, Executive Director of ICMAB were present in the program as special guest.

In his speech, the Chief Guest congratulated the newly qualified students for their success in passing CMA as global career. Special guest state that the demand for professional accountants is huge. He greeted the newly qualified CMA`s on behalf of the daily Purbokone Family.

Annual Picnic

Canada Chapter held its annual picnic on August 19, 2017. A large number of members participated and went to the scenic location of historic McFarland house on the bank of Niagara River. The participants enjoyed and shared the time with fellow members and their family while entertained by raffle draw and friendly games. Annual Members night is planned during holiday season in early January of 2018.

Delighted members of the Chapter at the Annual Picnic

Discussion and Doa Mahfil

Khulna Branch Council (KBC) of ICMAB arranged a discussion session and Doa Mahofil on September 28, 2017 at CMA Bhaban, Sonadanga, Khulna for the eternal peace of the departed soul of late Ruhul Quddus FCMA, Founder President of ICMAB. On the occasion the discussant focused on the contribution of Ruhul Quddus FCMA for establishment of the CMA profession in the country. Mr. Abdul Motaleb FCMA, Chairman, KBC and a good number of members, student and officer/staff were present on the occasion.

Workshop on Financial Literacy

Khulna Branch Council (KBC) of ICMAB arranged a workshop on "Financial Literacy" on October 30, 2017. Mr. Mohammed Mohiuddin FCMA, honorable Past-President of ICMAB and Managing Director of Island Securities Ltd. was present in the program as keynote speaker. The program was presided over by Mr. Abdul Motaleb FCMA, the Chairman of KBC and Company Secretary, West Zone Power Distribution Company Limited. Prof. Sheikh Ziaul Islam FCMA, Secretary, a good number of fellow & associate members and students of Khulna Branch actively participated in the program.

The ICMAB Council 2017

Mr. Jamal Ahmed Choudhury FCMA
President

Prof. Mamtaz Uddin Ahmed FCMA
Vice-President

Mr. Mohammed Salim FCMA
Vice-President

Mr. Md. Abdur Rahman Khan FCMA
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Mr. Arif Khan FCMA
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Mr. Md. Mamunur Rashid FCMA
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Mr. Md. Munirul Islam FCMA
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Member

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Member

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Member

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