Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Economics

Diploma Thesis

Analysis of Banking Sector of Bangladesh (Central and Commercial banks)

Author:
Monia Alam

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Faculty of Economics and Management

DIPLOMA THESIS ASSIGNMENT

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Thesis title

Analysis of Banking Sector in Bangladesh (commercial and central banks)

Objectives of thesis

• In order to review the implemented reform policies so that the implication of the reform policies on the banking operations of Bangladesh can be measured.
• In order to measure the effect of financial performance of the banking processes both before as well as after the reform implementation. In this context, how the reform policies improve the performance can also be analysed.
• In order to recognise the limitations of the Bangladesh banking industry and therefore, propose the recommendations for the purpose of better performance of the banking sector. As a result, the opera on of the Bangladesh banking industry can be improved by minimising the loopholes and other shortcomings.
• In order to identify the effect of Bangladesh banking industry on the well-being of the employees of the organisation. In this connection, the role of the Bangladesh banking industry on influencing the standard of living of the country.
• In order to find out the role of banking industry of Bangladesh on the economy of the country. Therefore, the contribution of the Bangladesh banking industry in the GDP growth of the economy would be analysed.
• In order to determine the impact of micro financing on the economy of Bangladesh. As a result, the impact of Micro financing of Bangladesh on rural people of the country can be identified.

Methodology

The research will be qualitative in nature. The review of the topic is based on a critical review of secondary data. The same will be collected from annual reports, journals and publications of commercial banks of Bangladesh. Furthermore, information gathered from various departments databases is used to complement the existing literature of enrich the secondary published data to reach a conclusion. The thesis has covered the pre-reform stage to post-reform stage and its impact on the current performance of the commercial banking sector of Bangladesh. For the purpose of the research, I have included the period from 1985 to 1990 as pre- reform stage, and then 1990 to 2011 as post- reform stage.

The data is collected from National Commercial Banks (NCB), Agrani Bank, The City Bank (Private Commercial Bank or PCB) and IFIC Bank. The qualitative data to be used in the study comprises deposit growth, capital growth, loans advances, profitability, liquidity, credit growth etc. to analyse the financial performance of the banks. Thereby, the performance of the banks during pre-reform stage and post-reform stage in analysed and evaluated to reach a conclusion with recommendations for better performance based on the existing reforms. The research will also take into consideration various reform measures taken so far and any problem areas that the banking sector need to concentrate on.

The proposed extent of the thesis

60 pages

Keywords

Financial institutions, Loans, Capital, Rate of interest, Primary qualitative research, Secondary quantative research

Recommended information sources

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The Diploma Thesis Supervisor

Ing. Bohuslava Boučková, CSc.

Supervising department

Department of Economics

Electronic approval: 15. 11. 2018

prof. Ing. Miroslav Svatoš, CSc.

Head of department

Electronic approval: 20. 11. 2018

Ing. Mar n Pelikán, Ph.D.

Dean

Prague on 28. 11. 2018

Declaration

I declare that I have worked on my diploma thesis titled "Analysis of Banking Sector of Bangladesh (Commercial and Central Banks)" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 30th November, 2018 ___________________________

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Abstract

The banking industry has been playing an essential role in the growth and development of an economy. The function of the banking sector is to taking of funds from the account of the depositors and to lend the money to the borrowers as well. In this dissertation, the researcher has highlighted the role of the banking industry of Bangladesh in the country's economy. In this context, the researcher has developed five set of objectives, which would be addressed throughout the paper. In order to derive the conclusion, the researcher would conduct both the quantitative and the qualitative analysis. For successfully accomplish the quantitative research, this project paper is a shot to supply the performance of the Banking Sector of Bangladesh over 10 years (2007-20016) amount. The paper includes an analysis of knowledge for 10 years concerning branch enlargement, deposit assortment, loan readying, productivity, profitability, restrictive necessities etc. During this study, the researcher applied financial ratios like profitability ratio, investment ratio, and capital market ratios of Bangladesh Bank as the central bank of Bangladesh and another 3 banks performance. The data is collected from the annual report of different banks to check the efficiency. This analysis and evaluation are trying to provide with appropriate information to measure the performance of the overall banking sector of our country.

Key words: Financial institutions, Loans, Capital, Rate of interest, Primary qualitative research, Secondary quantitative research etc.

Abstrakt

Bankovní sektor hraje zásadní roli v růstu a rozvoji ekonomiky. Funkcí bankovního sektoru je získání finančních prostředků z bankovních účtu vkladatelů a zprostředkovávat půjčky klientům. V této diplomové práci je zdůrazněna role bankovního odvětví v ekonomice v Bangladéši. V této souvislosti bylo vypracováno pět cílů, které budou řešeny v celé diplomové práci. Za účelem odvození závěru bylo využito kvantitativní a kvalitativní analýzy dat z bankovního sektoru v období 10 let (2007-20016). Článek obsahuje analýzu znalostí za 10 let v oblasti rozšíření pobočky, sortimentu vkladů, hotovostní půjčky, produktivita, ziskovost, (restriktivní omezení) omezující potřeby atd. Během této studie byly využity finanční ukazatele, jako je poměr ziskovosti, poměr investic a poměry kapitálu na trhu v roce 2006 v Centrální Bangladéšské bance a třech dalších komerčních bankách. Data byla shromážděna z výročních zpráv různých bank za účelem kontroly efektivity. Tato analýza a hodnocení se snaží poskytnout vhodné informace pro měření výkonnosti celkového bankovního sektoru naší země.

Klíčová slova: finanční instituce, úvěry, kapitál, úroková míra, primární kvalitativní výzkum,

sekundární kvantitativní výzkum atd.

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List of Abbreviation:

NCB	National Commercial Bank
IFIC	The International Finance Investment and Commerce Bank
BRAC	Building Resources across Communities
NIM	National Information Market
ROA	Return On Asset
ROE	Return On Equity
MFI	Monetary Financial Institution
DBBL	Dutch Bangla Bank Ltd
SME	Small Medium Enterprise
ATM	Automated Teller Machine
GDP	Gross Domestic Product
EPS	Earnings Per Share
DPS	Dividends Per Share
IR	Interest Rate
CAPM	Capital Asset Pricing Model
NPL	Non Performing Loan
M2	Money and Quasi Money

Chapter 1: Introduction

1.1 Introduction

The banking sector has a positive influence on the development of the economy. According to Amadeo (2018), it can be mentioned that the banking sector is capable to minimize the capital deficiency by inspiring the residents of a country in increasing the savings as well as the investment. It, in turn, increases the aggregated savings rate of the country. In this context, it can be mentioned that the financial sector of the countries is identified as the procedure of economic development and hence, it is the key attributes of the growth of the economy (The Herald, 2013). The banking sector of the emerging economy like Bangladesh has been growing wider. The banking system of the country is admitted as the barometer of the growth of the economy. It is noted that the Nationalised Commercial Banks of Bangladesh were founded in the year 1972, where 12 banks used to operate their activities (The Herald,

2013). The prime objective of the banking sector was to increase the amount of domestic investment. After that, during the period of mid-1980, denationalization of banks has started in Bangladesh since the operations of the nationalization was not very impressive. On the other hand, the government of the country had changed the economic management towards the banking sector; hence, the private institutions did not get benefit from it. This is the reason, why the private sector banks in Bangladesh had played an essential role during this period. As opined by Mohsan et al., (2011), the government of the country had decided to develop local private commercial banks apart from the Nationalised commercial banks across the country. Bangladesh Bank has been playing the central role of the country, which can monitor and supervise the schedules both of the private banks and the nationalized commercial banks.

As per the statistical report of Bangladesh Bank, 2017, it can be inferred that there are 8 banks are state-owned, whereas 40 banks are privately owned banks along with the 9 foreign-owned banks successfully operating the business and the strength of the finance of the banking sector of the country is approximately 80397 Crore (Wellbeing Pulse, 2016). The operation of the plastic money is also popular across the country of Bangladesh. Standard Chartered Bank of Bangladesh has brought and introduced credit card in the country approximately 10 years ago. Since the year 1997, the banks of Bangladesh have started to launch full-scale card functioning (Seth, n.d).

Chapter 2: Objectives and Methodology

2.1 Research objectives

The research objectives of the paper are highlighted in the following, with which the researcher can derive the conclusion of the study.

- In order to review the implemented reform policies so that the implication of the reform policies on the banking operations of Bangladesh can be measured.
- In order to measure the effect of the financial performance of the banking processes both before as well as after the reform implementation. In this context, how the reform policies improve the performance can also be analysed.
- In order to recognize the limitations of the Bangladesh banking industry and therefore, propose the recommendations for the purpose of better performance of the banking sector. As
- a result, the operation of the Bangladesh banking industry can be improved by minimizing the loopholes and other shortcomings.
- In order to find out the role of the banking industry of Bangladesh on the economy of the country. Therefore, the contribution of the Bangladesh banking industry in the GDP growth of the economy would be analysed.
- In order to determine the impact of micro-financing on the economy of Bangladesh. As a result, the impact of Micro financing of Bangladesh on rural people of the country can be identified.

2.2 Rationale of the research

According to Werner (2016), it can be mentioned that banking or the financial sector has been playing the essential role in the economy. It is playing the role of intermediary for making an association among the surplus and the deficit of the economic agents. More specifically, anks are considered as the vital institutions, which can develop the economy by facilitating the businesses. In addition, banks are admitted as one of the major instrument of the monetary policy of the country, and the prime aim of the banking sector is to develop the savings plans

of the residents of the country. Apart from this, the financial sector of the country entrenches the employment rate of the economy (BBA, 2016). From this point, it can be inferred that the financial sector is one of the important engines of the growth of the economy and hence, the researcher has chosen this topic to accomplish the paper as well as to explore the research more.

2.3 Research questions

The research questions of the paper are:

- What are the major reform policies of the banking sector of Bangladesh?
- What is the effect of the financial performance of the banking sector both before and after? The reform implementation?
- What are the limitations of the Bangladesh banking industry and what are the recommendations for mitigating the loopholes?
- What is the impact of Bangladesh banking industry on the economy of the country?

2.4 Structure of the research

The research paper is divided into six chapters, and the content of the research can be analysed in the following section:

Chapter 1: In this chapter, the researcher has highlighted the brief idea of the paper. More specifically, with the help of the rationale of the paper, the reason for selecting the topic can be understood. In spite of this, the rationale of the paper is significant to discuss the implementation of the reform banking policies of Bangladesh.

Chapter 2: In this context, the financial performances of the banking sector both before and after of implementing the reform has been analyzed. Consequently, the researcher will gather efficient information, so that the conclusion can be derived. In order to generate the conclusion, both the research aims and objectives are needed to develop. Apart from this, there would be some limitation of that paper that is explained.

Chapter 3: The researcher will describe the literature in a detailed manner. In this regard, the researcher would collect information from the articles, websites and also from the peer-reviewed scholarly journals. As a result, the role of the banking industry in the development as well as in the growth of the economy can be measured. Apart from this, the gap of the literature would be described in this context. The detailed description of the research methodology would be highlighted in this section. Therefore, the data collection method would also be analyzed for completing the research methodology. Apart from this, the researcher would highlight the sampling technique, so that the importance of the interview and the survey method would be understood.

Chapter 4: Data analysis would be highlighted in this section, which would be based on the gathered data. It is noted that the data analysis chapter is highly significant for deriving the conclusion. In this regard, it can be said that the researcher will conduct qualitative primary research. Apart from this, for generating the conclusion on the effect of the banking sector of the economy of Bangladesh, the researcher would rely upon the secondary research. In this context, the researcher also needs to be dependent upon the newspapers, journals, and also on the articles.

Chapter 5: In this chapter, the researcher would draw the conclusion. As a result, the validity of the data findings of the research can be evaluated. This validation would be measured after analysing the paper based on the qualitative and quantitative analysis. More specifically, the researcher would conduct an in-depth analysis for deriving the conclusion.

Chapter 6: This is the last and ultimate chapter of the research, which would conclude the effect of the banking sector of Bangladesh on the growth of the economy. In this section, the researcher would link the objective of the research and the output of the research.

2.5 Research Methodology:

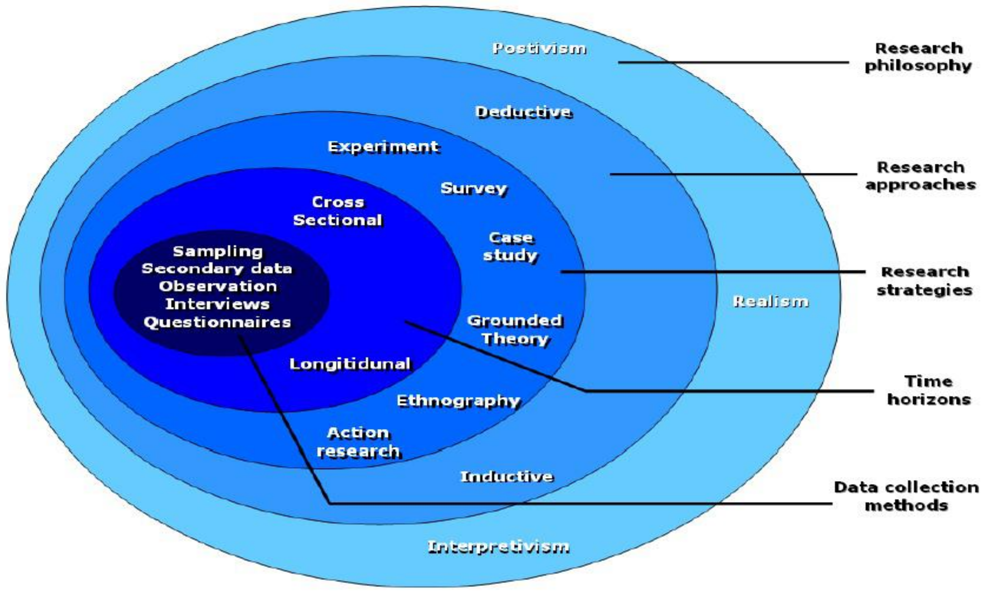
The research will be quantitative in nature. The review of the topic is based on a critical review of secondary data. The same will be collected from annual reports, journals, and publications of commercial banks of Bangladesh. Furthermore, information gathered from various department’s databases is used to complement the existing literature to enrich the econdary published data to reach a conclusion. The thesis has covered the pre-reform stage to post-reform stage and its impact on the current performance of the commercial banking sector of Bangladesh. For the purpose of the research, I have included the period from 1985 to 1990 as a pre-reform stage, and then 1990 to 2011 as a post-reform stage.

The data is collected from Bangladesh Bank as a central bank of the country, Dutch Bangla Bank, Commercial Bank of Ceylon PLC. There are also data for National Commercial Banks (NCB), Agrani Bank, and The City Bank (Private Commercial Bank or PCB) and IFIC Bank. The qualitative data to be used in the study comprises deposit growth, capital growth, loans advances, profitability, liquidity, credit growth etc. to analyse the financial performance of the banks. Thereby, the performance of the banks during the pre-reform stage and post-reform stage in analysed and evaluated to reach a conclusion with recommendations for better performance based on the existing reforms. The research will also take into consideration various reform measures are taken so far and any problem areas that the banking sector needs to concentrate on.

2.6 Research onion

The research onion is significant to identify the in-depth analysis of the research layers. In the opinion of Liikanen (2012), the research onion technique is composed of five stages, with which the detailed explanation of the research process can be analysed.

Figure 1: Research onion



(Source: Cull et al., 2010)

From the above-depicted figure, it can be observed that research onion enables to provide a detailed but precise description of the stages of research methodology.

2.7 Research method

According to Mackey and Gass (2015), research method generates the requirements of the required information for deriving the conclusion on the research topic. In order to draw the output based on the numerical analysis, then the researcher needs to conduct the quantitative analysis; otherwise, the qualitative research method would be followed. In order to shape out the conclusion of this research, the researcher would take the help of statistical analysis.

2.7.1 Approach of the research

It is known that there are two types of research approaches such as inductive research and deductive research. The inductive research approach refers that the researcher can develop a new theory based on the existing research hypothesis, whereas the deductive research approach refers that the researcher would frame a new hypothesis based on the classical theories. In this study, the researcher would consider the deductive research approach for conducting both the qualitative and quantitative research. In a nutshell, if the researcher uses existing analysis or researches for developing a new hypothesis, then the researcher requires to rely upon the deductive research approach.

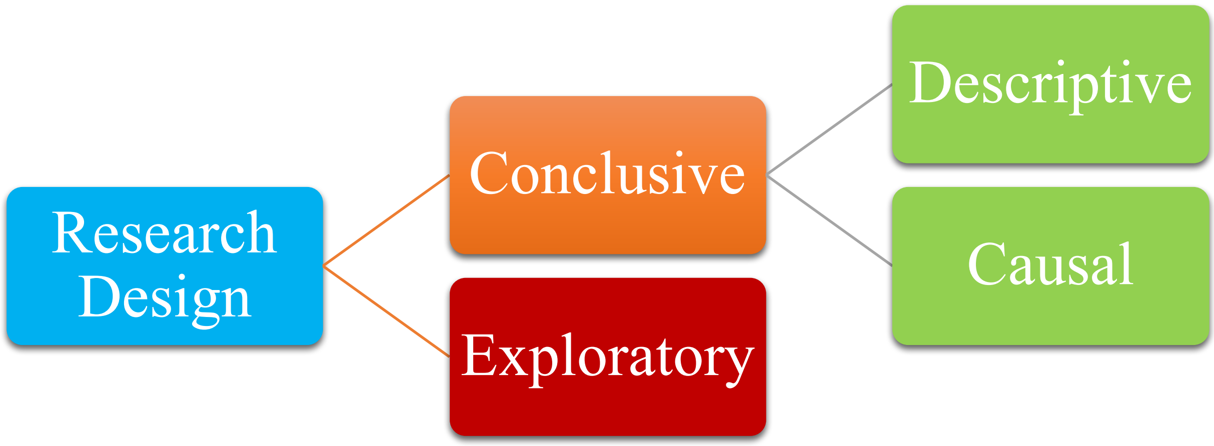
2.7.2 Research Philosophy

It is noted that the research philosophy is of three types and these are positivism, realism and he inter primitivism technique. As opined by Lewis (2015), the inter primitivism technique is beneficial for performing the secondary or primary qualitative research. In this context, the researcher would need to consider the feelings and their emotions. On the other hand, realism analysis is appropriate for developing the scientific analysis. Conversely, the positivism research philosophy adheres the factual knowledge, which is collected from the observation (Vaioleti, 2016). More specifically, the positivism research relies upon the quantifiable observations, which in turn leads to perform the statistical analysis (Vujaklija et al., 2010). In order to derive the conclusion of this research, the researcher would consider the positivism research philosophy. The researcher would collect information both from the bank's annual report and indicators to measure the performance of the bank. Since the conclusion of the research would be generated based on the gathered data, therefore, the positivism research philosophy would be appropriated in this context.

2.7.3 Design of the research

With the help of the research design process, the researcher can address the objectives of the study, which is required for successfully deriving of conclusion. The research design is two types and these are exploratory and conclusive research.

Figure 2: Design of the research



(Source: Created by author)

The exploratory research design is not able to provide the ultimate conclusion, with which the research questions can be solved. However, this research design is beneficial to the exploration of the research paper. On the other hand, the conclusive research design enables to successfully derive the conclusion or can take the decision-making process (Miller et al., 2012). As a result, the researcher would be capable to address the objectives of the research. In this segment, it can be mentioned that choosing of conclusive research design would be justified for accomplishing the research. In addition, the conclusive analysis is also significant for conducting the hypothesis testing.

2.7.4 Research strategies

It would be significant for the researcher to select the research strategies in order to successfully run the research paper. The selection of research strategies is relied upon both on the type of the study and also on the financial analysis. There are different types of research strategies and these are action research, ethnography, grounded theory, case study, survey, experiment. Among the above-mentioned research strategies, the researcher would follow the research grounded theory method for performing the primary research. 4 specified banks are chosen for this method to measure their performance. On the other hand, for completing the secondary qualitative analysis, the researcher would collect information from the official website of Bangladesh banking industry apart from the relevant websites.

2.8 Sources used for findings of the article

In order to find out the role of the banking industry on the economy of Bangladesh, the researcher would conduct both the primary and secondary research. In order to accomplish successfully the secondary research, the researcher has collected information from the online library, bank's annual report and also from the Google Scholar. In this context, it can be mentioned that the researcher needs to have access to the online database in order to get efficient information on the relevant topic. In order to collect the information, the researcher requires to focus on different keywords such as the banking industry, financial institutions, Micro financing, financial reform etc. In this connection, it can be said that the researcher would follow the thematic analysis for accomplishing the secondary qualitative research.

2.9 Time horizons

In order to carry out the study, there are two types of time horizons and these are cross-sectional study and longitudinal study. According to Vaioleti (2016), for accomplishing the study the over long period, then the researcher requires to follow the longitudinal study. Conversely, the researcher used to conduct the cross-section study when the number of participants is large for a certain period of time. For carrying out the research, the cross-sectional study would need to be considered in this context. Since the researcher would need to accomplish the research within a short period of time and also on a large number of the sample; therefore, choosing a cross-sectional study is significant for this study.

2.10 Data Collection

It is already mentioned that for completing the research paper, the researcher would conduct both the primary and secondary research. According to Silverman (2016), the data for accomplishing the secondary research would be accumulated from the previous articles or from the research papers. In addition, some essential books and web-journals are chosen as the important source of the secondary research. The governmental websites of Bangladesh would also be taken for the data analysis process. Therefore, it can be inferred that the primary research would provide better insight on the study, whereas the secondary research would consider as the base of the paper. With the help of secondary research, the researcher would get a brief idea regarding the outcome of the study from the previous research. Consequently, the researcher would make the outline of the present work. From this context, it can be said that the secondary research process is significant for framing the research proposal. For instance, if the researcher would get several outputs compared to the previous researcher, then the researcher would have the scope to cross-check the findings of the output. Based on the reason, choosing of both the primary and secondary research analysis is justified for carrying out the present study.

2.11 Data analysis process

The secondary data analysis process would be accomplished with the help of narrative and comparative techniques. In this context, most of the secondary data have been collected from the balance sheet as this balance sheet is a complete representation of a bank's economic position.

With the help of indicator in measuring whole banking sectors performance get the idea of the current economic situation of Bangladesh. For this process, need to focus on the data for GDP of Bangladesh, the number of bank account with people, operating cost and interest rate. In order to complete the financial analysis process, the most common analysis tools are ratio analysis with liquidity, profitability, risk valuation etc. are used. The numbers that are used to make the paper are from the previous year's annual report.

2.12 Gap of the literature

The researcher of the thesis did not mention the probable monetary and non-monetary risks in the banking industry. It is noted that risks in the financial institutions are determined as the systematic and unsystematic risks, which would, in turn, affect the growth of the banking sector. According to Siddiqi (2011), the financial risks occur due to the fluctuations in the price of oil, the stock market. On the other hand, risks in the financial sector stress would have a negative consequence in the real economy. Consequently, the account holders would not rely upon the privacy and the safety of the banking industry.

2.13 Limitation of Research:

Financial constraint is the major threat of this research. Due to the limited finance, the researcher would not be able to take the help of SPSS or SAS software for conducting the analytical process. It is noted that by conducting the analytical techniques, the researcher would perform the regression analysis and the correlation relationship. As a result, the effect of the Bangladesh industry of the economy of the country can be analysed. In addition, the relationship between the banking industry and the economy can be explained. Apart from this, the researcher would not collect the information from several websites since these were asking for money.

The researcher would not get the access on these websites for collecting the information. Instead of, the researcher was relied upon only the journals, newspapers or on the article, which were available in free cost. On the other hand, time is the other constraint of the research. Due to the limited period of time, the researcher would not be able to conduct the face to face interview with the managers of the banks. As a result, the researcher would not identify the emotional state of the managers during the data collection process. Nevertheless, some of the secondary sources have highlighted the changes in the behaviour of the customers of Bangladesh with the passage of time. For this reason, the researcher had taken a longitudinal study for the primary data collection process. Just a little example of three commercial banks has been considered in this project due to the limitation of time. Also for the financial analysis, all the data that is collected was in BDT as Bangladeshi currency. In order to explain the ratios author calculated it as Euro but as Euro conversational rate is changing daily, that’s why need to take an assumption rate as 1 Euro = 90 BDT Taka. Also for the lack of practical study, some weakness might be accessible in the paper. Also, there is another limitation to understand some banking terms consider as personal barriers.

2.14 Summary

In this section, the effect of the banking industry on the economy has highlighted along with the importance of the banking sector. In this context, the history of the Bangladesh industry has been highlighted in this context. The researcher has enlightened the effect of financial reforms on the Bangladesh banking sector has described for identifying the changes of the banking sector performance before and after of the financial reforms. After the discussion, it can be seen that the reform in the banking sector of Bangladesh brought improvement in the performance of the financial institutions. On the other hand, the effect of micro financial loans on the emerging economies has mentioned. In order to derive the performance of the banking industry, the types of the banking sector have been analysed. After the analysis, it can be observed that both the financial institutions, the banking sector, and the micro-financing loans have a positive effect on the growth rate of the economy.

Chapter 3: Literature review

3.1 Introduction

The researcher would highlight the impact of the Bangladesh banking industry on the economy, and therefore, the reform policies of the industry would be analysed. From the above-mentioned topic, it can be stated that the performance of the Bangladesh banking industry is considered as the dependent variable, which is relied upon the reform policies. In order to complete the research, the researcher would discuss the reform policies and the roles of the banking industry of Bangladesh in this chapter. In this context, the history of the services of Bangladesh banking industry would be discussed in order to identify the changes in their functioning after implementing the reform policies.

Research methodology would be followed by the researcher for carrying out the study as well as for deriving the conclusion. More specifically, it can be inferred that the research methodology is the road for generating the output based on the existing data regarding the given topic. In this chapter, the researcher would analyse the research philosophy, approach, strategy, and the methods. In spite of these techniques, the researcher would highlight the design of the research questionnaires, which is one of the most essential aspects of this study for the findings chapter. Therefore, it can be said that the findings and the discussion chapter would be conducted based on the research methodology chapter. It is essential to ensure that the researcher would not need to rely on unethical techniques for carrying out the study.

3.2 Role of banking industry in the economy

The banking industry has been playing an indispensable role in economic development. More specifically, the banking industry conducts several banking transactions such as loans, investments, and deposits. As opined by Caramela (2018), the banking sector receives funds from the depositor and this money lends to the borrower, and the process is referred to as the financial intermediation. During the process of financial intermediary, a certain amount of assets can be transferred to different liabilities and assets. This, in turn, allows the banking industry to lead out the money as well as also receive the money on deposit. In the opinion of Rahman (2012), the banking sector is playing a vital role and has a strong contribution in the economy since it facilitates the businesses. More specifically, the financial institutions acknowledge the development of the savings program. The credit provision of the banking industry allows businesses to increase investment. In this context, the government would also smooth out the expenses by minimizing the cyclical pattern of the tax revenues (Wellbeing Pulse, 2016). It, in turn, invests in different projects. Likewise, the liquidity provision of the banking sector needs to have stronger protection over the unexpected needs for the cash. As opined by Fatema (2016), the banking industry is considered as the major providers' liquidity. Consequently, the financial organizations allow the users to withdraw the credit. In addition, the financial institutions offer service takers to sell securities along with the modest transaction costs.

The financial institutions offer the businesses and the households to minimize the risks both in the commodity and the financial marketplace. In this context, it can be stated that the banks allow both the individuals and the businesses to take part in the foreign exchange as well as in the commodity markets (BBA, 2016). In spite of this, through the remittance of money, individuals can transfer cash as per the necessity. It helps the services takers in the transaction of distant places. As a result, both the internal and external trade markets can be expanded. It is noted that the credit instruments by the financial institutions in terms of cash, credit cards or through the real-time gross settlement (European Central Bank, 2009). In a nutshell, banking sectors offer available loans for the industry and also for the agriculture. It is one of the essential aspects of international trade and in turn, facilitates economic development. As a result, the small-sized firms and the private sectors would be capable to accelerate the pace of the growth rate of the businesses, which in turn improve the economic growth rate. Zaman (2017) cited that the financial sectors aim to encourage the entrepreneurs to increase the amount of investment for the purpose of promoting entrepreneurship.

It is known that the commercial banks are playing an essential role in the economy and also in the financial system. Being the key component of the financial process, banking sector aims to allocate the accumulated funds from the account of savers to the loan borrowers in a systematic approach. This, in turn, helps to minimize the cost of obtaining the data regarding the savings and the borrowing functioning. More specifically, the financial services of the banking industry would be capable to increase the efficiency of the economy (Tough Nickel, 2018). More specifically, it can be stated that the banking industry used to borrow money from the individuals of the account holders as well as also from the businesses, governments and from the financial institutions.

Banking sector enables in the handling of credit, cash as well as the other financial transactions. Banks are serving a secured place for storing the additional amount of cash and credit. As opined by Uzkurt et al., (2013), banking sector manages the operations with a savings account and the certificates of the deposits. After that the banks use those deposits for the purpose of making loans. On the other hand, banks provide liquidity to the families and the businesses as per their requirement in the future. More specifically, it can be inferred that the banking sector can improve the standard of living of the people of the economies. This in turn facilitates the trade, financial resources among the borrowers and the savers and can deal with the uncertainty and risks. The banking sector can get the asses of creditworthiness of the borrowers, which in turn assures the obligations of the borrowers and can meet them. Aiyar (2012) opined that maturity transformation is considered as the heart of the modern banking industry. In the developed countries, the capital markets have been playing an essential part to supply the financial services and products to the banks. The prime objective of the banking industry is to minimise the deficiency of the capital by optimising the investment and the savings rate. The capital formation holds a secured position in the development of the economy. The sound banking system increases the mobilisation among the small as well as scattered savings, which in turn increase the availability of investment within the productive enterprises. More specifically, Bushra, Ahmad and Naveed (2011) cited that the mobilization of deposits is possible by attracting the interest rate, and by converting the savings rate. In addition, digitization is able to solve problems like financial exclusion as well as can minimize the cost of banking. After that the savings rate would be distributed among those, which are associated with the growth and the development of the economy.

3.3 History of banking industry of Bangladesh

According to Liikanen (2012), the first bank in Bangladesh had founded during the period of British regime and the other financial institutions of the country had established before the independence of India. In the year 1806, the Dhaka Bank was established as the first commercial bank of Bangladesh (European Central Bank, 2009). With the passage of time and

after the development of the financial market of the country, the traditional central banking operations along with the issuing of currency, formulating of the monetary and the credit policy, conservation of the par value had started to explore the banking activities, which in turn foster the growth of the economy. As opined by Siddiqi (2011), in the year of 1972, the Bangladesh banks had nationalized except the six foreign banks. However, it can be argued that the growth rate, as well as the development of the Bangladesh industry, was very slow. After that, when the government of the country had given permission to establish the private banks and had started to decentralize the process, the performance of the banking industry of the country had started to improve after the year 1983. For instance, the Uttara Bank, the Pubali Bank, and the Rupali Bank in the year 1986 had established and therefore, the growth pattern of the banking industry of the country had changed massively (European Central Bank, 2009).

The economic history of the Bangladesh banking sector refers that the financial development of the industry was at the highest position in the early stage. In the opinion of Brown and Dinç (2011), it can be mentioned that the modern banking industry of the country has been playing an essential role in the development of the economy. Over the years, the banking sector of the country undergoes within the globalization, deregulation and also within the technological innovations. It, in turn, brings revolutionary changes in the economy of Bangladesh. In the prior stage, there were no domestic private banks until the year 1982 in Bangladesh. The private commercial bank of Bangladesh is Arab-Bangladesh Ltd. In addition, in the year 1983, five more private commercial banks had founded and the banking industry of the country had experienced a moderated growth rate.

The financial sector reform has strengthened and improves banking performance.

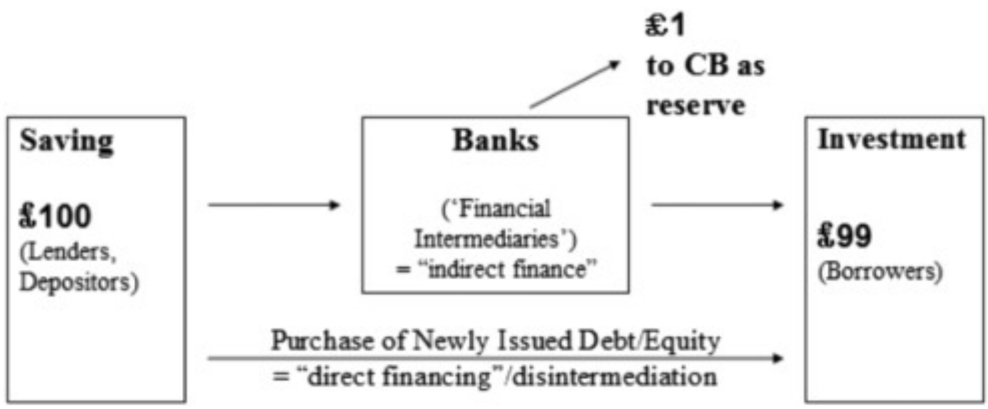
Consequently, the supervisory and the regulatory framework of the Bangladesh banking industry have improved in the year 2006. Nonetheless, Cull et al., (2010) argued that the growth rate in the banking industry is slower than the expectation. However, the entire banking operation of Bangladesh has started to improve from the year 2002 since the rate of nonperforming loans (NPL) had started to decline to 14% from 28%, whereas the new NPL has also declined from the percentage 21 to 8. Hafeez and Muhammad (2012) cited that this decrease in the NPL percentage, the banking industry of the country has started to experience a high percentage of profitability ratio. This is the reason, why the government and the other multinational companies have admitted that the underdeveloped banking industry is the obstacle for the growth and development of the economy. In addition, for uplift the performance of the banking sector of Bangladesh, the government also recommend reforming the operations of the banking industry. For instance, the government of the country had participated in the formulation of the banking sector of several international organizations such as the IMF and World Bank etc. since the year 1990 (Tough Nickel, 2018). Conversely, the banking sector of the country has issued several prudential guidelines. These norms and the guidelines are used for the purpose of loan classification as well as the policy is also used for the loan rescheduling.

3.4 Business models in the banking industry

In the opinion of Mention and Bontis (2013), the financial institutions are capable to grant the loans and to receive the deposits from the customers. It helps to successfully perform the core operations of the banking sectors. In this context, it can be mentioned that the banking sector needs to serve the optimum payment and liquidity services in terms of the deposit-taking business. In spite of this, the bank transforms the assets and can manage the associated risks. Before analysing the effect of the banking sector on the economy, it is necessary to discuss the theories on the banking sector.

3.4.1 The financial intermediation theory of banking: As per the concept of the post-Keynesian economists, the banking industry is considered as the financial intermediaries. It is working similarly with the non-banking financial institutions, such as both the banking and the non-banking institutions would accumulate deposits and then lend it to the borrowers as per their requirements. In this context, it can be mentioned that the banking industry generates liquidity percentage by the borrowers in short as well as lend it in long.

Figure 3: Financial Intermediation Banking theory



(Source: Aiyar, 2012)

The Financial intermediation of the banking theory is dependent upon two concepts such as the transaction costs and also on the asymmetric information. According to Mohsan et al., (2011), it can be stated that both of the declines of asymmetric information and the transaction, the intermediation of the banking sector would be increased. More specifically, it can be stated that the transformation process of the financial institutions includes the borrowing of money from the surplus units, whereas then the amount would be lent to the deficit spending units and thus, this process is referred as the financial intermediation (Bushra, Ahmad, and Naveed, 2011). In this context, it can be mentioned that the financial intermediation of the banking theory is compared with a multistage production procedure, which includes the intermediate process and the borrowers can lend the loanable funds from depositors by using labours or by using the capital and it would be used by the earning of assets. The main purpose of the financial intermediation is to consolidate or to transform the risks from one user to other users under the service of brokers or dealers.

3.4.2 Financial reserve theory of banking:

From the above analysis, it can be said that the banking institutions are playing the role of financial intermediary. Nonetheless, the financial reserve banking theory is different from the financial intermediation theory since this theory is more concerned about the collective and the macroeconomic role of the banking organizations. The concept of the financial reserve theory of banking can be explained with the concept of 'multiple deposit expansion' (Siddiqi, 2011).

The financial reserve banking system accepts deposits and aims to preserve the deposit liabilities as well as the reserve fractions. Atakan-Duman and Ozdora-Aksak (2014) cited that the Reserve bank hold the currency of the bank and then save the balances at the account of the central bank.

This type of banking theory is also working as the intermediary among the savers and the borrowers. In order to minimize the risks in the banking operations, the government of the nations used to serve deposit insurance to the commercial banks as per their necessity (Brown and Dinç, 2011). More specifically, the financial reserve banking theory shows that financial institutions aim to shut down the banking operations during the period of economic depression, with which the economy can be freed up.

3.4.3 The Credit creation theory of banking:

The third theory refers the banking sector is not only acting as the financial intermediary but also it is considered as the aggregate or as individual users. This theory refers that the banking industry is the total bank credit, which has the capacity to measure the money supply. More specifically, it can be inferred that the credit in the banking industry has the purchasing power. In this connection, it can be stated that the purchasing power of the banking industry is not always related to bank liabilities. In the opinion of Demirgüç-Kunt et al., (2011), the financial institutions create credit money to generate the bank deposit as well as for purchasing the assets. Credit money is the volume of money, which is owned by the borrowers. Credit creation theory is beneficial for the non-cash transactions, which can be conducted within the country. On the other hand, it is one of the potential banking ability to generate credit money, which is the exemption of 'client money rules'.

3.4.4 The loanable funds theory of interest:

As per the concept of the neo-classical economics, the demand and the supply of loanable funds are measured by the rate of interest. It is noted that the loanable funds would involve the transactions among the borrowers and the lenders. Loanable funds are highly preferable to the consumers, and also by the investors since this is the form of capital. Since, capital is highly productive; therefore, it is highly demanded. Investors are willing for the loanable funds since it is the roundabout process of production (Soana, 2011). On the other hand, the customers would also be able to borrow money in terms of low rate of interest. From this point, it can be mentioned that the demand for loanable funds would vary adversely with the interest rate. **3.5**

3.5 Current structure of Bangladesh banking industry:

The prime objective of the Bangladesh banking industry is to issue currency, deliver the better transaction facilities, maintaining of the foreign exchange reserve for the purpose of public monetary functioning. In spite of this, the banking sector of the country is also responsible for the planning of monetary policy of the country (Hafeez and Muhammad, 2012). In this context, a group of nine members of the governing body are playing an essential role in the banking industry of Bangladesh. The former Banking system of Bangladesh consists of two branch offices such as State Bank of Pakistan and the seventeen commercial banks. The banks are responsible for the foreign exchange reserves and can control the monetary policy along with the credit. Initially, the government of Bangladesh nationalised the domestic banking system.

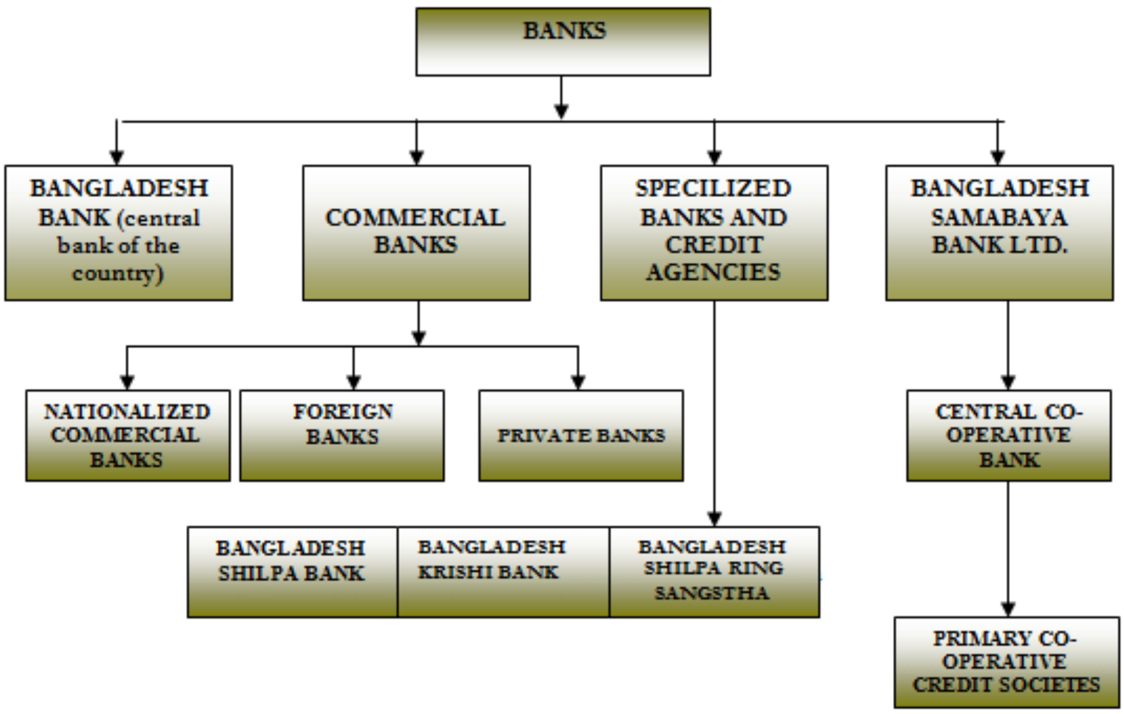
During this period, the government of the country also shed the lights to improve the performance for agricultural development as well as private industry. Jizi et al., (2014) mentioned that the Bangladesh Krishi Bank started to look after the operations of the agriculture department since it is known as the agricultural banking institution. However, after denationalisation, the industrial growth had led and influenced both the World Bank and the

Bangladesh Bank to improve the performance of the private manufacturing sector of the country. Consequently, the regional GDP of Bangladesh had increased by 2 per cent from the ear 1979 to the year 1987; consequently, private manufacturing had increased from 13 per cent to 53 per cent. In spite of this, the Grameen bank in Bangladesh had founded in the year 1976, however, started to perform as an independent bank from the year 1983 (Basso, Calvo-Gonzalez and Jurgilas, 2011). After that, the Grameen banks had successfully operated its operations across the country. For instance, the banks had provided loans in cheaper rate to the 200000 landless people in the first 10 years. According to Afsar Rehman and Shahjehan (2010), the exposure of the Grameen Bank was expanded rapidly and by the year 1980, approximately 500 Grameen Banks started to operate across the country. In a nutshell, the operational activities of the Grameen Banks have improved the well-being of the poor people as well as improved the welfare of the women.

Apart from the Grameen banks or other commercial banks, there are some other financial institutions across the country, which serves different purposes. For instance, the industrial bank such as Bangladesh Shilpa Bank, Credit organisation such as Shilpa Rin Sangstha, House Building finance is successfully running operations in their own domain. During the last three years, the banking system across the country has increased the strength, which in turn improves the regulatory environments. As a result, the economy of Bangladesh has been experiencing the infusion of taka approximately by 32000 million, with which the short fall of the economic capital can be minimised (Vazquez, Tabak and Souto, 2012). On the other hand, for increasing the performance of the Commercial banks, the banks aim to serve diversified operations across the country. The financial reforms have improved the performance level of the banking industry of Bangladesh more, which is complemented by the FOREX regime and the trade liberalisation. Conversely, the Asian Development Bank after the International Development Association contributed a large amount of money in the development of Bangladesh in the year 1980 (Hafeez and Muhammad, 2012). Therefore, from this point it can be mentioned that the Banking industry has a strong and large contribution in the development of the country.

The World Bank also leads to influence the banking operations of the financial institutions of Bangladesh, with which the structural constraints of the economy of the country can be improved (Fadare, 2010). It in turn increases employment rate of the country by maximising the assets and other opportunities of the residents of the country. As a result, it can be inferred that the socio-economic well-being of the nation can be improved. The banking industry of Bangladesh is widely expanded and there are 49 Nationalised banks across the country (Shanka, 2012). Apart from this, there are 28 local private commercial financial institutions and 12 foreign banks, which have massive contributions in the country's economy and also in its development. However, Fadare (2010) cited that among all of these banks, Bangladesh Bank is worked as the central bank of the nation since the independence of the nation. Its prime aims to issuing money apart from controlling the foreign exchange reserve of the economy.

Figure 4: Banking sector of Bangladesh



3.6 Performance of the Bangladesh financial institutions after the regulations

The banking industry of Bangladesh is categorised into four sectors such as nationalised commercial banks, private commercial banks, foreign commercial banks, and the development finance institutions. According to Atakan-Duman and Ozdora-Aksak (2014), it can be mentioned that the banking industry of the country controls both the asset and liability management programmes. In this context, the Asset Liability Committee of the Bangladesh banking industry aims to perform the operations on Balance Sheet Management as well as aims to maximise the profitability returns by minimising the risks. However, Jizi et al., (2014) argued that the banking industry of Bangladesh is working in completely different way than the developed countries. The objectives of the Bangladesh banking sector are to perform successfully the ownership pattern, therefore, the loan deployment, profitability percentage and deposit collection can be successfully operated.

The financial sector is playing the most vital role in the modern society and it has a large contribution in the growth of the economic development. This in turn improves standard of living as well as the per capita income level of the people of the country. Consequently, the economies of scale will be increased. In addition, the technological innovation would be able to increase the organisational performance of the banking industry. It in turn increases the working efficiency of the financial institutions. As a result, asset quality, capital adequacy, liquidity as well as the management efficiency can be measured efficiently (Kamau, 2011). In this connection, it can be mentioned that if the local or the public banks of the country would fail to achieve the satisfactory improvement, then the foreign banks would improve the financial performance of the economy considerably.

3.7 Effect of financial reform in the banking industry

In the year 1983, the government of Bangladesh had taken initiatives towards the "ownership reform" program, so that the private commercial banks of the country had got the allowance to spread its performance in the industry. Consequently, the banking sector of Bangladesh would be able to increase its level of efficiency. However, during this period, the government also denationalised two nationalised two central banks. In this regard, it can be stated that the denationalisation of the banking sector would be capable to improve the performance of the recovery of loans, growth rate of assets as well as would minimise the ratio of the bad loans. In spite of that, after identifying the poor performance of the Bangladesh banking sector, the government of the country took Financial Sector Reform Program under the guidance of both Banking Reform Committee and Commercial Bank Restructuring Project. According to Fatema (2016), it can be mentioned that the financial reforms are taken for achieving the purpose of financial development. Precisely, the financial reform on the Bangladesh banking sector can improve the competitiveness of the industry apart from improving the performance of the mobilisation of savings rate as well as the operational efficiency. Therefore, it can be mentioned that the financial reforms have successfully maximise the vulnerability of the banking industry of the country.

In the opinion of Zaman (2017), banking sector reform is taken when the existing banking performance would not be able to meet the anticipation in the economies of scale in the financial operations. In this context, the institutional and the regulatory measurements, micro-economic performance would bring financial solvency in the operations, with which the performance of the banking sector would be improved. The banking sector reform of Bangladesh can improve the stability of financial as well as the monetary performance, with which the position of the ransitional economies can be improved. In addition, it would influence the NIM, ROA and ROE (Basso, Calvo-Gonzalez and Jurgilas, 2011). As a result, it can be inferred that there is a positive connection between the profitability percentage and the financial reform. It is noted that the financial reform the Bangladesh banking industry is relied upon the institutional and the legal issues. As opined by Uzkurt et al., (2013), the financial reform of Bangladesh is associated with the fixation of the interest rates both on the deposits, on the market orientation regarding the banking transactions. As a result, after the reform, the banking industry of the country is able to successfully restructure the capitals of PCBs and NCBs. For instance, after the independence of Bangladesh, the financial sector of the country had suffering from deep crisis, and from the problem of loan disastrous. However, after the reform, the banking sector enables to perform successfully the loan recovery process by decontrolling the rate of interest both on the money lending and deposit process. More specifically, the computerisation of the banking industry has also improved the performance level of the banking industry of Bangladesh. On the other hand, the Financial Sector Reform Program (FSRP) would be capable to maximise the competitiveness of the banking sector, with which the market share of the PCBs in the commercial banking can be increased (Basso, Calvo-Gonzalez and Jurgilas, 2011). The prime objective of the FSRP program was to help the NCBs in privatisation process. In this context, the risks connected with the lending techniques can be analysed. Bushra, Ahmad and Naveed (2011) cited that after the FSRP reform program, the use of MIS has become effective. In this context, the Central Bank of Bangladesh that is Bangladesh Bank used to supervise and inspect the operations of the financial institutions.

3.8 Reforms in Bangladesh and its effect

It is noted that the reforms in the financial sector are of three types such as legal reforms, policy reforms and the institutional reforms. The framework of the Bangladesh policy reform would highlight the risk-based capital adequacy, credit risk grading, performance planning system, loan classification and the interest rate deregulation process. According to Werner (2016), the risk based capital adequacy can minimise the credit risks and thus, the financial health of the banking sector of Bangladesh can be improved. More specifically, capital adequacy program is considered as one of the major indicators of the current banking system, which shows the balance in capital to liabilities approach. On the other hand, the loan classification formulated the provisioning policy as well as the loan classification process for recognising the non-performing loans. After the policy reform in the Bangladesh banking industry, Bangladesh Bank has initiated the Credit Risk Grading System. In spite of this, after the policy reform, the Bangladesh Bank has deregulated the rate of interest both on the lending and also on the deposit. In the opinion of Caramela (2018), with the help of Performance Planning System, the NCBs can recover all of the banking operations.

The institutional reforms in the financial institutions cover the off-site supervision in the banking operations, large loan reporting system and the credit information Bureau etc. In this context, the performance of the capital adequacy, asset quality, banking liquidity rate can be measured. However, Rahman (2012) argued that the poor legal framework of the financial institutions of Bangladesh has drawbacks on the performance of the banking sector. In order to strengthen the legal reforms of the banking industry, some essential acts were considered and these are the Banking Companies Act 1991, Bankruptcy Act, 1997 and the Artha Rin Adalat Act, 1990 (Uzkurt et al., 2013). After the discussion, it can be mentioned that the primary objectives of the Bangladesh Banking industry were to raise the inter-competitive characteristics among the financial institutions of the country, with which the profitability percentage of the industry can be improved. Reform in the banking sector can improve the financial deepening. As a result, the mobilisation of savings among the customers would be increased and consequently, the stimulation of the long run savings propensity would be maximised. In addition, the cash flows of the banking system can be emphasized.

3.9 Growth of Micro financing in Bangladesh

In this context, the growth and the macro effect of micro financing in Bangladesh would be described. It is known that the effect of micro financing has positive effect on the poverty alleviation and also on the well-being of the households. According to the report of World Bank, approximately 2 million people across the World do not have the access in bank account (Bushra, Ahmad and Naveed, 2011). Micro financing institutions are significant to improve the standard of living by providing the loans in turn of low rate of interest. As per the statistical export of Computable General Equilibrium, the micro financing loans have increased the GDP of the country from 8.9% to 11.9% as well as the efficiency of the labour market has increased (Siddiqi, 2011). Presently, approximately 32 million people of Bangladesh are getting the benefits from micro financing. Consequently, the micro financing institutions provides $7.2 billion amount of loans to the poor, which refers that the performance of the micro financing institutions have been growing successfully across Bangladesh. For instance, Bangladesh rural Advancement Committee (BRAC) is one of the successful micro financing institutions, which had started its operations since the year 1972. Apart from serving of micro financing loans, BRAC contributes a certain amount for running 32000 primary schools across Bangladesh.

The demand for micro finance has been growing across Bangladesh and therefore, the skills and the marketing opportunities of the lower income level people would be improved. In this context, it can be mentioned that the credit percentage would not be capable to boost up the productivity percentage, but also the micro financing institutions need to increase the income level of the poor people for minimising the poverty level. In addition, the interest rate of the MFIs is lower compared to the informal moneylenders in Bangladesh. In the year 2011, the rate of interest charged by MFIs was comparatively high, which was not affordable by all of the households whose per day average income less than $2 was. This is the reason, why the Micro Credit Regulatory Authority of Bangladesh had declined the cap of interest rate for maximising the number of loan borrowers. The micro financing loans are capable to boost up the self-worth and the self-confidence. Based on the success of the micro financing models, these models are exported in the global markets. The Grameen Foundation USA has developed the Grameen Bank Replication Program for supporting the performance of the micro financing institutions of Bangladesh. The MFIs of Bangladesh are highly concerned to bring huge difference in the clients' lives. On the other hand, as per the survey of Grameen Bank, 2015, approximately 25% of the banking account is owned by 25%, whereas the remaining part is hold by the women of the country. As a result, it can be mentioned that the micro financing loans of Bangladesh can successfully empower the women of Bangladesh. For instance, among 8658149 accounts of Grameen banks, approximately 8330986 accounts are holding by the women of the country.

As a result, it can be interpreted that the standard of living of the women of Bangladesh can be empowered through the micro finance. In the year 2013, as per the statistical report of World Bank, the poverty level of Bangladesh would be minimised to 46 million in the year 2010, which was 63 million in 2010 (Liikanen, 2012). Consequently, as per the estimation of United Nations, Bangladesh was the first country, which had achieved the Millennium Development Goal towards the poverty reduction process. In spite of this, the micro financing loans are able to improve the standard of living by empowering the women of the country.

3.10 Measuring banking sector development

There are two types of indicator used to measure banking sector development – traditional and new.

3.10.1 Conventional measures of banking sector

In order to measuring banking sector development, the traditional indicators are size, depth and development of a country with:

- The ratio of M2 to GDP
- The proportion of private credit to GDP. Specifically, both these measures have been utilized to demonstrate the causal impacts of money related improvement on monetary development.
- The proportion of M2 to GDP catches the level of adaptation in the framework yet does not catch the level of bank intermediation.
- The proportion of private credit to GDP does not control for non-performing advances and all the more, for the most part, the nature of credit allotment.
- Both measures don't catch the expansive access to bank fund by people and firms, the nature of bank administrations and the effectiveness of giving saving money administrations.

- In general, the quality and accessibility of markers on money-related steadiness are constrained and the documentation of institutional system supporting managing an account needs vigour.

3.10.2 Access limited in low-income countries

Using data from new markers, it turns out to be evident that while the contrast between the high-salary and creating nations is generally less articulated as far as size and profundity, it is very unmistakable as far as access. Utilizing the customary proportion of budgetary improvement, private credit to GDP, the contrast between the rich and poor nations is relatively less articulated. The proportion of private credit to GDP fluctuates from 15 percent in low pay nations to 95 percent in high pay nations, or at the end of the day a 6-overlay contrast. Be that as it may, air conditioning cess to fund fluctuates generally crosswise over nations, both as far as high versus low-pay and inside creating nations themselves. The quantity of financial balances per individual in high-salary nations is all things considered 2.2, contrasted with a normal of 0.1 in low-pay nations, or a 22-crease distinction. In Madagascar, just 14 out of 1000 individuals have a ledger, while in Austria; all things considered, individuals have in excess of 3 financial balances. Such a correlation, generally confined without data on financial balances, proposes that entrance to fund is especially shortened in low salary nations.

3.10.3 Concentration does not imply low efficiency

For the bank proficiency measurement, FSDI incorporates not just customary proportions of bank productivity and proficiency yet in addition data on the structure of saving money framework and proportions of the intensity of the managing an account frameworks. The general idea is that a more focused managing an account area is less effective. In any case, the outline beneath demonstrates that the three-bank resource focus isn't corresponded with the proportion of working expense to resources, a customary proportion of productivity. This proposes one ought to not centre exclusively on fixation proportions as a measure for rivalry when making derivations about the proficiency of the keeping money segment.

3.10.4 Legal rights facilitate intermediation

At last, FSDI contains point by point data about the lawful and administrative framework for the keeping money areas, including leaser rights and supervisory principles and practices. The primary factors for this arrangement of data are displayed in the table underneath. Legitimate assurance of tor rights includes as a critical determinant of bank loaning. The outline demonstrates the solid relationship between private credit to-GDP, a proportion of monetary intermediation, against a record of lawful rights that estimates how much security and insolvency laws encourage loaning.

3. 11. Financial analysis:

The procedure of basic assessment of the money related data contained in the monetary proclamations with the end goal to comprehend and settle on choices in regards to the tasks of the firm is called 'Budgetary Statement Analysis'. It is fundamentally an investigation of the relationship among different monetary statistical data points as given in an arrangement of budgetary articulations, and the elucidation thereof to pick up a knowledge into the productivity and operational effectiveness of the firm to evaluate its money related wellbeing and future prospects. The term 'money related examination's incorporates both 'investigation and understanding'. The term examination implies disentanglement of money related information by efficient characterization given in the monetary articulations. Translation implies clarifying the importance and centrality of the information. These two are corresponding to one another. The examination is futile without translation, and elucidation without investigation is troublesome or even unthinkable.

3.11.1 Features of Financial Analysis:

- To introduce a mind-boggling information contained in the monetary explanation in straightforward and justifiable shape.
- To arrange the things contained in the monetary articulation badly designed and judicious gatherings**.**
- To make an examination between different gatherings to make different determinations.

3.11.2 Effect of Bangladesh banking industry on financial analysis

It is one of the prime objectives of the Bangladesh banking industry to meet the financial obligations by using its liquidity structure. It is known that with the rise in the savings percentage of the country, the people would like to save the liquid asset to the banks and hence, the assets of the banking sector would be an industry. Consequently, the banks would invest or borrow the liquid asset to the other in terms of a certain rate of interest. This circular flow of money would influence the financial performance of the Bangladesh banking industry. This is the reason, why the asset management of the Bangladesh banking industry aims at maximizing the liquidity**.**

3.11.3 Tools of financial analysis:

- **Comparative statement:** These are the announcements demonstrating the benefit and money related position of a firm for various timeframes in a near-shape to give a thought regarding the situation of at least two periods. It usually applies to the two vital budgetary explanations, to be specific, Balance Sheet and Income Statement arranged in a near-shape. The budgetary information will be near just when same bookkeeping standards are utilized in setting up these announcements. On the off chance that this isn't the situation, the deviation in the utilization of bookkeeping standards ought to be made reference to as a commentary. Similar figures demonstrate the pattern and bearing of budgetary position and working outcomes. This analysis also called “Horizontal Analysis”.
- **Common size Statement:** These are the explanations which demonstrate the relationship between various things of a budgetary articulation with some normal thing by communicating everything as a level of the regular thing. The rate therefore computed can be effortlessly contrasted and the outcomes comparing rates of the earlier year or of some different firms, as the numbers are conveyed to the basic base. Such proclamations additionally enable an examiner to look at the working and financing attributes of two organizations of various sizes in a similar industry. In this manner, normal size articulations are helpful, both, in intra-firm correlations over various years and furthermore in making between firm examinations for that year or for quite a while. Another name of this analysis is “Vertical Analysis”.

- **Trend Analysis:** It is a strategy of concentrate the operational outcomes and monetary position over a progression of years. Utilizing the earlier years' information of a business undertaking, drift investigation should be possible to watch the rate changes after some time in the chosen information. The pattern rate is the rate relationship, which everything of various years bears to a similar thing in the base year. Pattern investigation is vital in light of the fact that, with its long-run see, it might point to fundamental changes in the idea of the business. By taking a gander at a pattern in a specific proportion, one may discover whether the proportion is falling, rising or remaining moderately steady. From this perception, an issue is distinguished or the indication of good administration is found.
- **Cash Flow Analysis:** It alludes to the investigation of the real development of money into and out of an association. The stream of money into the business is called as money inflow or positive income and the stream of money out of the firm is called as money surge or a negative income. The contrast between the inflow and outpouring of money is the net income. Income explanation is set up to extend the way in which the money has been gotten and has been used amid a bookkeeping year as it demonstrates the wellsprings of money receipts and furthermore the reasons for which instalments are made. In this way, it abridges the foundations for the adjustments in real money position of a business venture between dates of two asset reports.
- **Ratio Analysis:** The connection between two bookkeeping figures, communicated numerically, is known as a money-related proportion (or basically as a proportion). Proportion condenses huge amounts of monetary information and to make the subjective judgment about an association's money related execution. The proportion investigation is the greatest instrument of money related examination. Numerous differing gatherings of individuals are occupied with breaking down the budgetary data to show the working and money related productivity and development of the firm. Proportion investigation assumes a vital job in the corporate world. It is a generally utilized apparatus of money related investigation. Proportion Analysis is applicable in surveying the execution of a firm in regard to liquidity position, long-haul dissolvability, working effectiveness, by and large benefit, between firm correlation, and pattern investigation. With the assistance of proportion investigation, one can decide:

– The capacity of a firm to meet its present commitments;

- The degree to which the firm has utilized its long-haul dissolvability by getting reserves;
- The proficiency with which the firm is using its benefits in producing deals income ,
- The general working effectiveness and execution of the firm. Proportion Analysis, Profitability Ratio, Liquidity Ratio, Investment Valuation Ratio, Management Efficiency, Ratio Debt Coverage Ratio.

1. Liquidity Ratio:

Liquidity proportions measure the association's capacity to meet current commitments. It is to a great degree fundamental for a firm to have the capacity to meet its commitments as they end up due liquidity proportion's measure. The capacity of the firm to meet its present commitments. Actually, an examination is of liquidity needs in the readiness of money spending plans and money and assets stream explanations, however liquidity proportions by setting up a connection between money and other current advantages for current commitments give a snappy proportion of liquidity.

The proportion is worked out by partitioning the present resources of the worry by its present liabilities. Current proportions show the connection between current resources and current liabilities. Current liabilities speak to the quick money related commitments of the organization. Current resources are the wellsprings of reimbursement of current liabilities.

Along these lines, the proportion estimates the limit of the organization to meet money related commitment as and when they arise.

- **Current Ratio:**

Current ratio calculated as: Current Ratio = Current asset / Current Liabilities The current ratio is destined to evaluate to which extent the company's own liquid assets (i.e. current assets which can be converted into cash more quickly compared to non- current assets) are sufficient for covering its current liabilities. The recommended value of this ratio is at least 1.5, while lower values might indicate that the company incurs excessive risks in terms of the sufficiency of its current assets against the existing current liabilities. However, it should be noted that larger corporations can have even considerably lower values of this ratio without significant risks. Large companies have greater opportunities of financial leverage and thus can rely more on borrowed funds thanks to their market reputation and the willingness of creditors to cooperate with them. Therefore, it is important for companies to monitor this ratio's dynamics across several financial periods in order to make some grounded conclusions.

- **Cash ratio:**

Calculated as, Cash Ratio = Cash / Current Liabilities

Cash ratio analyses the sufficiency of corporate cash for the purpose of covering the company's current liabilities. Thus, it investigates the sufficiency of only cash, as the most liquid current asset, to cover current liabilities to creditors. The minimum appropriate value of this ratio is believed to be 0.3, but as like the previous two ratios, large companies can have even smaller values of this ratio for greater financial leverage.

2. Profitability Ratio:

Profitability ratios are considered to analyse the ability of a business concern to earn profitability in the course of business. The following table and graph depict the profitability position of three banking organizations operating in Bangladesh. Profitability ratio is the budgetary proportions which discuss the productivity of a business concerning its deals or ventures. Since the proportions measure the proficiency of tasks of a business with the assistance of profit, they are called productivity proportions. They are very helpful instruments to comprehend the efficiencies/wasteful aspects of a business and in this way help administration and proprietors to take restorative activities. Gainfulness proportions are the apparatuses for money related investigation which convey about the last objective of a business. For all the benefit arranged organizations, the last objective is none other than the benefits. Benefits are the existence blood of any business without which, a business can't remain a going concern. Since the gainfulness proportions manage the benefits, they are as imperative as the benefits. The reason behind figuring the gainfulness proportions are to gauge the working productivity of a business and returns which the business creates. The diverse partners of a business are keen on the benefit proportions for various purposes. The partners of a business incorporate proprietors, administration, loan losses, and banks and so on.

- **Gross Profit:**

Calculated as: Gross Profit = Gross Profit / Revenue

A budgetary metric used to survey an association's monetary wellbeing by uncovering the extent of cash left over from incomes subsequent to representing the expense of merchandise sold. Net overall revenue fills in as the hotspot for paying extra costs and future investment funds**.**

- **Net Profit:**

Calculated as: Net Profit = Net Profit / Net Sales the profitability ratio calculated as net profit divided by net sales. That means a proportion of benefit figured as net wage isolated by incomes, or net benefits partitioned by deals. It apportions the amount of each dollar of offers an organization really keeps in profit. Net revenue is exceptionally helpful when looking at organizations in comparative businesses. A higher overall revenue demonstrates a more beneficial organization that has better authority over its costs contrasted with its rivals.

3. Capital market Ratio:

Capital market ratios illustrate the analysed company's market value and the interest it represents for potential investors. They characterize the brand value which the company has.

- Earnings per share (EPS):

Calculated as: Net Earnings / Number of share EPS illustrates the number of net earnings generated per share of the company's shareholders' equity. The greater this ratio's value, the better for the company, as it means its better financial performance. Investors are more interested in financing the activities of such companies, as they have opportunities to obtain greater profits.

- Dividends per share (DPS):

Calculated as: DPS = Dividends / Number of Share

DPS reveals the number of dividends paid per share of corporate equity. Investors are interested in greater profits obtained through dividends, and therefore higher DPS values contribute to their greater interest in investing in the company.

3.12 Assessment of Banks:

There is a total of 57 banks found in the database while 48 are considered as Private Banks and rest of the 9 banks are public banks of the country. There are 54 banks in Commercial and 3 banks in specialized category. Beside of 48 Local banks, there are also 9 foreign commercial banks which are currently operating in Bangladesh. These 9 foreign banks are operating their branches of the banks which are incorporated in abroad. Among all of those banks, 4 banks are using for the financial analysis for this paper. The banks are use –Bangladesh Bank as the central bank of Bangladesh, Dutch Bangla Bank and BRAC Bank as a commercial bank and Commercial Bank of Ceylon (PLC) as a foreign bank of Bangladesh.

The reason for selection of Dutch-Bangla Bank is that it offers the most affordable and innovative banking products to its consumers. Commercial Bank of Ceylon PLC offers various ranges of banking products through its diverse segments such as corporate banking, investment banking, international operations, treasury, and dealings etc. Hence, the reason for selection of this the bank is its diverse range of operations through its branches all around Bangladesh and Sri Lanka. BRAC Bank Ltd has been selected as it is making progress strongly and steadily towards becoming the best bank in Bangladesh. Moreover, Bangladesh Bank, being the central bank of Bangladesh is an obvious choice for the research paper.

- Bangladesh Bank:

Bangladesh Bank the national bank of Bangladesh, which is additionally the main specialist to manage the state's fiscal and monetary framework. It was set up in Dhaka as an impact from sixteenth December 1971. Bangladesh Bank working with all capital and liabilities of Dhaka which is the part of State Bank of Pakistan. Bangladesh Bank has its total paid-up-capital as Tk. 30 million. The aggregate 300,000 offers of Tk. 100 every that are completely paid up by the government. A top managerial staff including the Governor as the Chairman, one appointee representative, and seven different individuals direct the issues of the bank. The Governor and the representative governors of the Bank are chosen by the government for a settled timeframe of five years and are qualified for reappointment. In absolute Bangladesh Bank has 8 branches.

- Dutch Bangla Bank:

Dutch-Bangla Bank Limited (DBBL) is a booked join experience private commercial bank in Bangladesh. The bank is set up commonly by adjacent Bangladeshi social affairs started by M Sahabuddin Ahmed (Founder and Chairman) and the Dutch association FMO. DBBL was developed under the Bank Companies Act 1991 and combined as an open limited association under the Companies Act 1994 in Bangladesh with the fundamental objective to pass on an extensive variety of dealing with a bookkeeping business in Bangladesh. In June 1996, DBBL started its formal action in the dealing with a recording part. Since then DBBL gained its monstrous pervasiveness because of its social welfare practices and sensible setting aside some cash advantage. Dutch Bangla Bank was the essential bank in Bangladesh to be totally robotized. The Electronic Saving Money Division was developed in 2002 to grasp speedy automation and bring current setting aside some cash organizations into this field. Full computerization was done in 2003 and in this way familiar plastic money with the Bangladeshi masses. Dutch Bangla Bank also works the nation's greatest ATM fleet and in the process profoundly cut client costs and charges by 80%. In addition, Dutch Bangla Bank picking the low advantage course for this section has shocked various faultfinders. Dutch Bangla Bank had looked for after the mass computerization in Banking as a CSR development and never arranged efficiency from this region. As needs are, it as of now gives an unrivalled overseeing account advancement commitments to all of its customers. By virtue of this mind-set, most adjacent banks have joined Dutch Bangla Bank keeping cash system rather than looking for after they have.

- BRAC Bank:

BRAC Bank Limited gives different business managing account items and administrations in Bangladesh. The organization offers retail, discount, little and medium undertakings (SME), and Probashi saving money items and administrations. It gives different store items, for example, current accounts, settled stores, SME stores, investment accounts, and term stores. The organization offers advance portfolio involving individual advances, automobile credits, home advances, and anchored credits/overdrafts. Also, its advance items incorporate overdrafts, here and now advances rent fund, credit against trust receipts, work arrange back, rising business, syndication, term advances, venture back, charge buy, and bank assurances; and exchange fund items involve a letter of credit and letter of certification, and money the board administrations incorporate money and exchange diagram, risk items, and securities administrations. Further, the organization gives custodial administrations; venture items; and settlement data administrations. Furthermore, it offers stock financier administrations; and speculation managing account administrations, which incorporate dealer saving money exercises, for example, issue the board, corporate warning, corporate fund, guaranteeing, and portfolio the executive's administrations. The organization additionally gives Visas, platinum cards, and prepaid cards; remote trade and related administrations involving travel and training elated administrations; ATM administrations; locker administrations; and web-based business, Internet and telephone managing an account, call focus, SMS keeping the money and security message administrations. It works 112 branches, 69 SME benefit focuses, 100 zonal workplaces, and 448 unit workplaces of SME. BRAC Bank Limited was consolidated in 1999.

- Commercial Bank of Ceylon (PLC):

Commercial Bank of Ceylon is one of the most famous bank in Sri Lanka with 250 branches and 625 ATMs. The bank has branches In Bangladesh and Maldives and they are opening soon in Myanmar. From the World Banks report its consider as Sri Lankans best bank. They are doing their operation in Bangladesh for last 14 years with 11 branches, 2 explicit OBU territories in Dhaka and Chittagong and 6 SME branches as well. Stand-out things and organizations, pervasive organization quality and powerful and adjusted responses for the necessities of corporate and individual setting aside some cash customers are indications of the powerful stroll of CBC in Bangladesh.

3.13 Revenues and profitability earned by the Bangladesh banking industry

As per the statement of the managing director of Dhaka Bank, Syed Mahbubur Rahman mentioned that the credit growth rate of the private banks of Bangladesh has been growing with the passage of time. For instance, the operating profit of the banking industry of the country has increased by 57% in the year 2017. Therefore, it would directly add in the GDP growth rate of the country. As a result, it can be mentioned that the banking industry of the country has a strong contribution to the economy. Consequently, the credit growth rate has also increased at the same fiscal year from 16.2 percentage to 19.06 percentage. On the other hand, Liikanen (2012) cited that the liquidity base of the banking industry was also stable in 2017. Since the ost of deposits was low in 2017, therefore, the willingness of the customers to deposit the money has been rising, which in turn generate a high percentage of profitability. In a nutshell, it can be mentioned that the Bangladesh bank is responsible for maintaining the stability in the foreign currency reserve as well as in the gold reserve and hence, the price stability can be sustained.

3.14 Operational efficiency

It is noted that the stable performance of the Bangladesh bank is dependent upon the operational efficiency and also on the intellectual capital (such as the intangible resources). According to Siddiqi (2011), the operational efficiency of Bangladesh is dependent upon the four elements and these are capital employed efficiency, human capital efficiency, fixed asset, and on the structural capital efficiency. It can be stated that the optimum operating efficiency of the Bangladesh banking sector would lead to an increase in the total output of the products as well as minimize the operational costs and the wastage. Consequently, the organizations can maximize the operational resources. Since the operational efficiency of the Bangladesh banking industry is directly associated with the productivity of an economy, therefore, it can be stated that the industry of the country has potential to boost up the growth rate. On the other hand, the higher operational efficiency of the banking sector would be able to attract more customers for deposits, and it would consider as the lubricants of deploying the economies. In a nutshell, it can be mentioned that the credit deployment and the deposit mobilization would be emphasized. On the other hand, the operational cost efficiency would increase the competition among the public banks and the private banks and it can be seen that the commercial banks of Bangladesh have become the most cost-effective. The prime objective of the commercial banks of Bangladesh is to increase the GDP growth rate in terms of lower social and technical cost.

3.15 Regression Analysis:

Regression analysis is a form of prediction modelling technique that examines the relationship between a dependent (target) and independent variable (predictor). This technique is to get the casual effect relationship between the variables, prediction, and time range modelling and variables. There will be a curve or line to the data points, in such a manner that the differences between the distances of data points from the curve or line are minimized.

There are multiple benefits of using regression analysis. They are as follows:

1. It indicates the significant relationships between a dependent variable and an independent variable.
2. It indicates the strength of the impact of multiple independent variables on a dependent variable.

3.16 Breaking down Regression:

There are different types of methods regression model. The two main types of regression are linear regression and multiple linear regression. Other non-linear methods are generally used to calculate and analysis more complicated data. Linear regression is use with one independent variable to expect the result of the dependent variable Y, and multiple regression is use with two or more independent variables to get the expected result. Regression method can have used to finance and investment specialist also other business professionals. It also can help to expect the sales of a company depend on weather, sale from the previous year, GDP growth and other circumstances. The most used model in finance is the Capital Asset

Pricing Model for pricing asset and finding the cost of capital.

Linear Regression: $Y = a + bX + u$

Multiple Regression: $Y = a + b_1X_1 {}^{+} b_2X_2 + b_3X_3 + ... + b_tX_t + u$

Where:

Y = the variable that you are trying to predict (dependent variable)

X = the variable that you are using to predict Y (independent variable)

a = the intercept

b = the slope

u = the regression residual

To analyse regression model, there are use few numbers of random variables to predict as Y and build a mathematical relationship between the variables. In liner regression model, the results shows as strait line with the approximate data as points. In multiple liner regression, individual variables are noticed by using numbers with a subscript.

3.17 Regression Analysis for banking sector:

Regression analyses is important for a bank to set credit criteria for the overall population, and assemble a measurable equation anticipating how new records will perform by concentrate an example of existing records. The broker needs to know the credit attributes of purchasers who are great payers, and the individuals who are poor payers. Also regression analysis Relapse analysis allows a bank to set credit criteria for the overall population, and manufacture a factual equation anticipating how new records will perform later on, that is, their capacity to reimburse obligation, by concentrate an example of existing records.

Chapter 4: Research methodology

4.1 Introduction

This chapter helps the researcher to derive analyse the finding of this paper in details. The data collected from the survey method, would be evaluated with the help of the statistical tools. Both the findings of secondary qualitative research and the primary quantitative research would be discussed in the following. Some of the questions were related to the demography, whereas with the rest of the questionnaires, the banking performance, the role of the financial institutions of Bangladesh would be analysed.

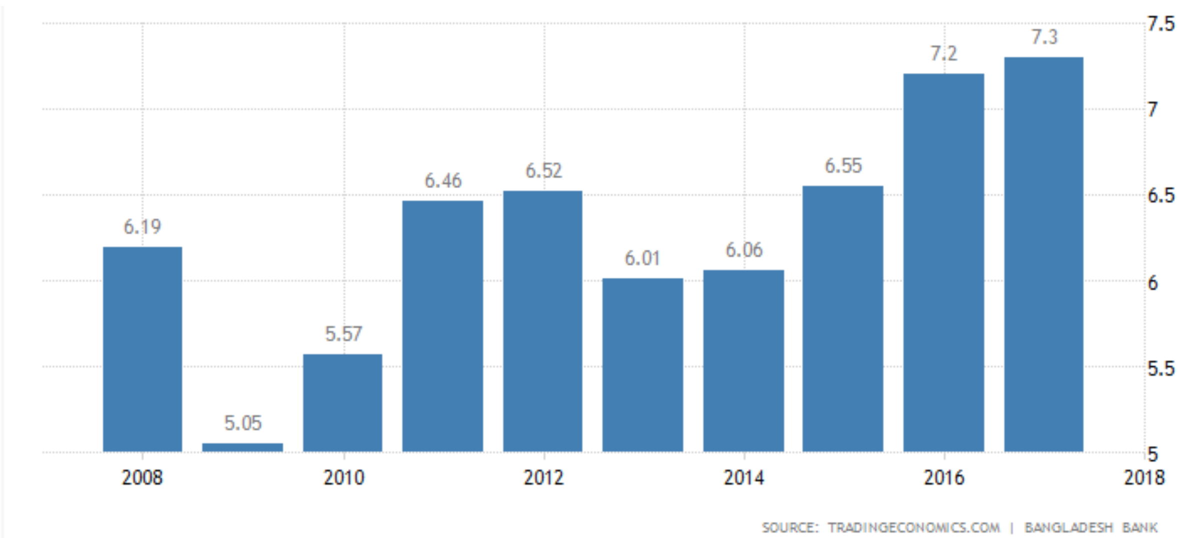
4.2. Financial Sector Development Indicators for banking:

To measure the development of financial sector of a country, there are many indicators are using such as depth, access, efficiency and satiability. The data are obtained from the world development indicators of World Banks Database.

4.2.1 GDP of Bangladesh:

In 2015, the Gross Domestic Product in Bangladesh was 6.55 percent which was expanded as 7.2 in 2016. This indicator shows Bangladesh GDP Annual Growth Rate from 2008 to 2017. The average rate is 5.69 percentage from 1994 to 2016. The lowest rate was recorded in 1994 as 4.08 percentage and the highest was in 2017 as 7.3 percentage.

Figure: 5 GDP rate

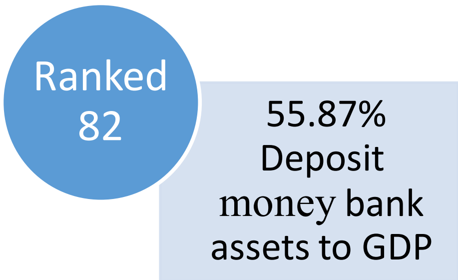


Source: Tradeconomics.com, Bangladesh Bank

4.2.2 Deposit money bank assets to GDP:

Deposit money bank assets to GDP means total assets that is deposit and held up by the commercial banks and financial institutions. It’s considered as transferable deposit like share of GDP. From annual report of The International Monetary fund the GDP from 2016 was recorded as 65.61 percent. The highest value was recorded as 242.19 percent in Hong Kong and the lowest percentage was in Afghanistan as 3.49 percent. From that report, International Monetary Fund have the record of Bangladesh from 1974 to 2016. In 1975, the value was recorded as 28.39 percent which was also the lowest value and the highest value was recorded as 55.87 percent. Bangladesh scores a rank of 82 among the records from 162 countries with 55.87 percentage.

Figure 6: Deposit money bank asset to GDP

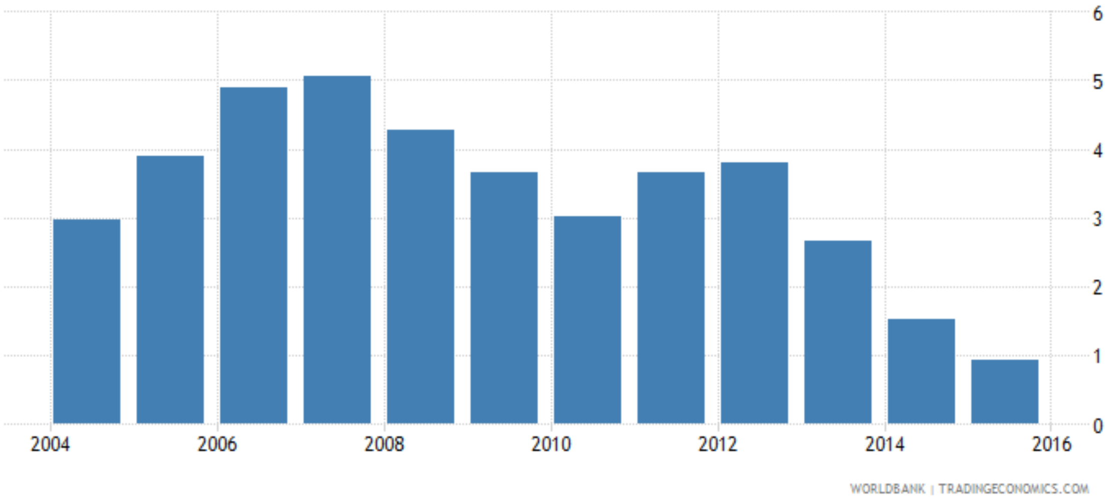


Source: The International Monetary Fund

4.2.3 Central bank assets to GDP:

Central bank assets to GDP (%) in Bangladesh was in 2004 as 2.98% and reported at 0.93 % in 2015. In 2007, the highest GDP was recorded as 5.06%, according to the World Bank collection of development indicators which is compiled from officially recognized sources of World Bank.

Figure 7: Central bank asset to GDP

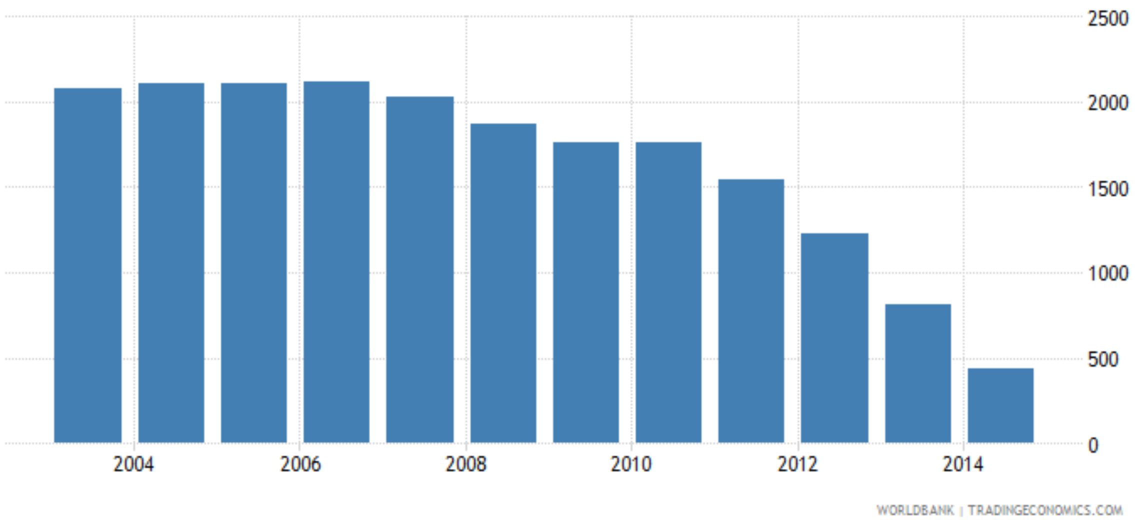


Source: World Bank, Tradingeconomics.com

4.2.4 M2 (Money and Quasi Money) to GDP:

Money and Quasi money means the supply with all important elements from M1 and near money. M1 means cash and, checking deposit. And near money is market securities, mutual fund and deposits. In 2014, the M2 was reported to Bangladesh Bank as 441percent reported by World bank.

Figure 8: M2 to GDP

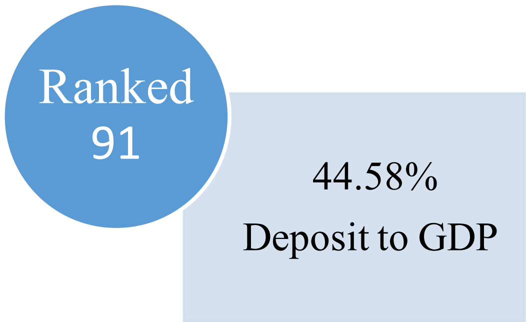


Source: World Bank, Tradeeconomics.com

4.2.5 Deposits to GDP:

In financial system, deposit to GDP is considered as 6.35 percent in 2016 with the highest value was recorded as 399.89 percent in Luxembourg and the lowest was recorded as 8.91 in Democratic Republic of the Congo. International monetary fund provides data for Bangladesh from 1974 to 2016 for this indictor. Bangladesh has the average value of 25.06 percent. The minimum percent is recorded as 7.9 and maximum is 44.91 which was from 2014. Among 160 countries, Bangladesh is ranked as 91 in 2016.

Figure 9: Deposit to GDP



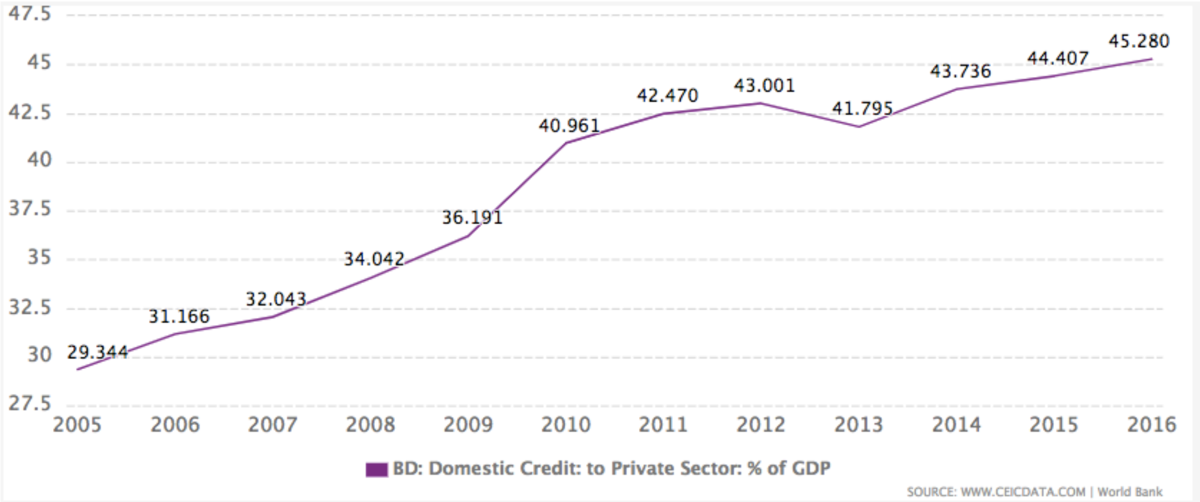
Source: The International Monetary Fund

4.3 Intermediation:

4.3.1 Private credit to total credit:

On the off chance that the managing an account credit to the private part is around 70 percent of GDP and the sky is the limit from there, at that point, the nation has a generally very much created money related framework. The measure of credit can even surpass 200 percent of GDP in some extremely propelled economies. In some poor nations, the credit could be under 15 percent of GDP. In these nations, firms and families basically don't approach credit for speculation and different buys. For that pointer, The World Bank gives information to Bangladesh from 2006 to 2017. The average value for Bangladesh during the period was 21.49 percent with at least 31. 24 percent in 2006 and a most extreme of 47.41 percent in 2017.

Figure 10: Private credit to total credit



Source: www.ceicdata.com, World Bank

4.3.2. Private credit to total deposit:

Private credit by store money banks and other budgetary foundations to GDP (%) in Bangladesh was represented at 40.95 % in 2015, according to the World Bank social event of enhancement markers requested from formally seen sources.

Figure 11: Private credit to total deposit

Source: World Bank, Tradingeconomics.com

4.3 Access:

4.3.1Board access:

Branch and ATM density: Branch and numbers of ATM can show an accurate figure of a bank.

Table 1: List of numbers of branch and ATM

Bank name	Type of Bank	Number of Branch	Number of ATM
Agrani Bank Ltd	Public Bank	10	26
Bangladesh Krishi Bank	Public Bank	1029	6
Janata Bank	Public Bank	901	20
Pubali Bank Ltd.	Public Bank	459	96
AB Bank	Private Bank	104	264
Bangladesh Commerce Bank	Private Bank	48	3
BRAC bank Ltd	Private Bank	142	267
Dutch Bangla Bank Ltd	Private Bank	181	1272
Commercial Bank of Ceylon PLC	Foreign Bank	17	4

Source: BanksBD.org

4.3.2 GDP per capital:

In 2017, the total national output per capita in Bangladesh was recorded as 1093.05 US the dollar which is comparable to 9 percent of the normal from the world. Gross domestic product per capita arrived at the midpoint of as 497.63 USD in 1960 and the most noteworthy rate is in 2017 with 1093.05 USD. The most reduced rate was recorded as 317.70 USD, 1972.

Figure 12: GDP per capital

Source: Tradeingeconomics.com, World Bank

4.3.3 Personal savings per capital:

Personal savings per capital was recorded as 5004.60 BDT Billion which was about 4328.3 in 2016. From the graph, it shows the record from 2008 to 2016. The lowest rate was recorded as 177.40 BDT billion and the highest was about 5004.60 in 2017.

Figure 13: Personal savings per capital

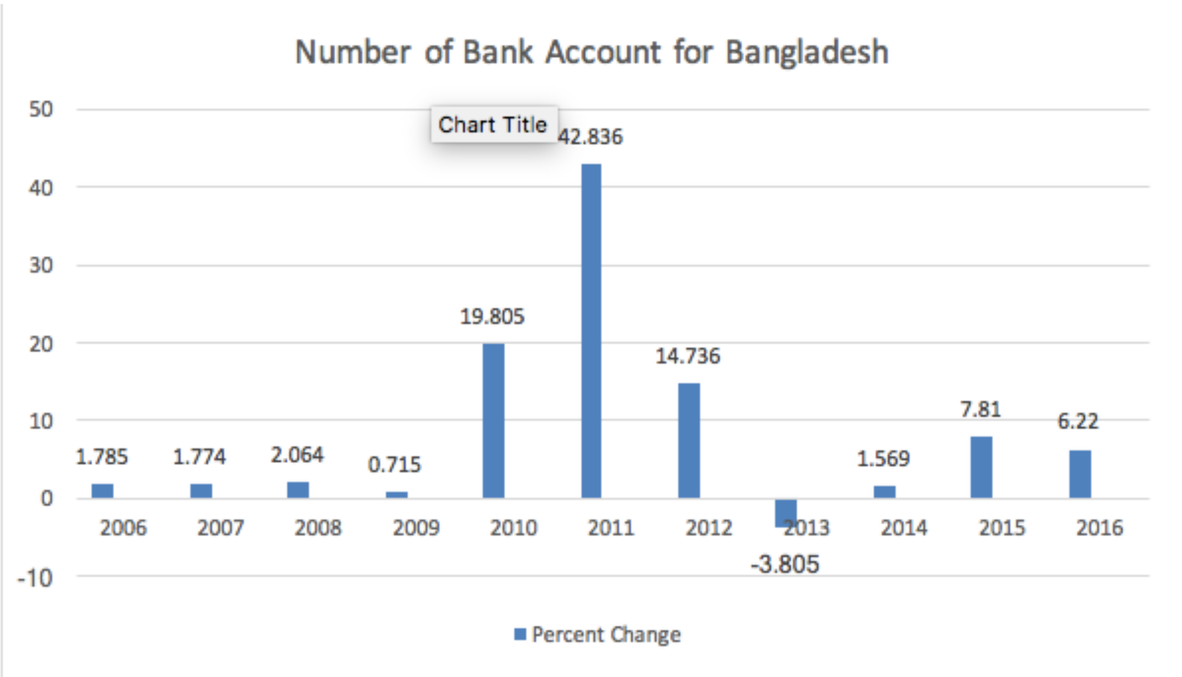
Source: Tradeingeconomics.com, Ministry of Finance, Bangladesh

4.4.2 Household Access:

Number of Bank accounts with people:

The graph indicates the total number of bank account holders from 2005 to 2016. In 2005 it was about 2.57% of the total population of the country. Then in 2010, there was a change with 19.805% which was an increase in 2011 with 42.836%. The highest value is recorded as 42.836% in 2011. Then again it was decreased by 28% from the previous year as 14.73%. And the last rate of bank accounts is recorded as 6.266 in 2016.

Figure 14: Number of Bank accounts with people.



Source: World Bank, 2018

- **Days to clear check:**

Bangladesh Automated clearing house (BACH) is starting its operation in Dhaka from October 7th, 2010. It's the first electronic clearinghouse of Bangladesh. It has two parts:

- Bangladesh Automated Cheque Processing System (BACPS)
- Bangladesh Electronic Funds Transfer Network (BEFTN).

Bangladesh Automated Cheque Processing System (BACPS) is a paper based electronics cheque processing system which is processing by using a cheque image and truncating (CIT) technology. The Cheque Truncation System is used for different types of clearing cheque.

Every clearing has individual clearing window. Usually, there are two individual time duration to place and return clearing sessions per day.

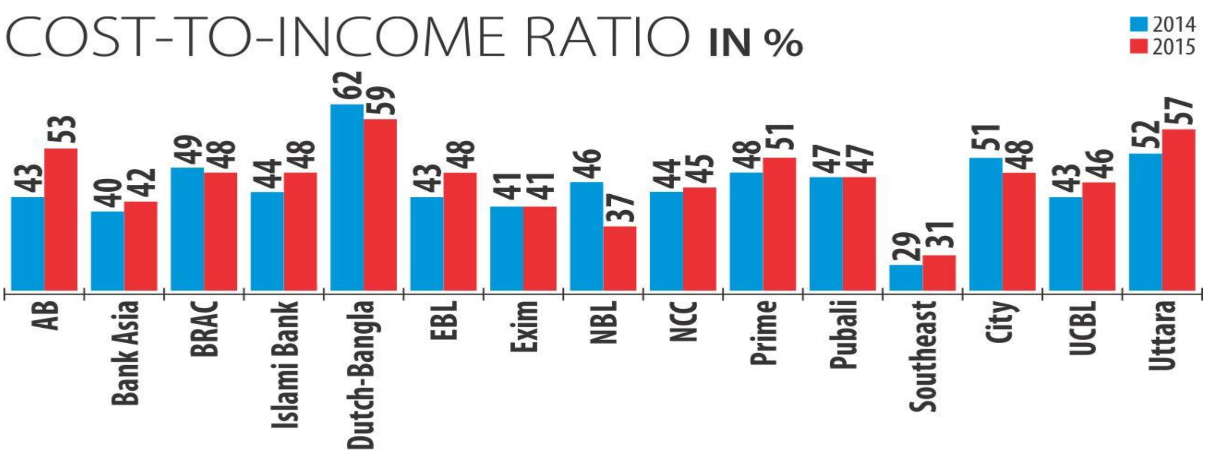
Table 2: The presentment cut offs and settlement times for these sessions

Clearing window	Placement (hrs)	Return (hrs)	Settlement (hrs)
Regular Clearing Time	13:00	18:00	18:01
High Value Clearing Time	12:00	14:00	14:01

- **Operating Costs:**

The operating cost of a bank is used to measure the efficiency and productivity of a bank. Normally the higher ratio show the lower efficiency of the bank. But if can be change according to banks size, banks business model, investment situation of a country and also depends to the banker.

Figure 15: Operating cost



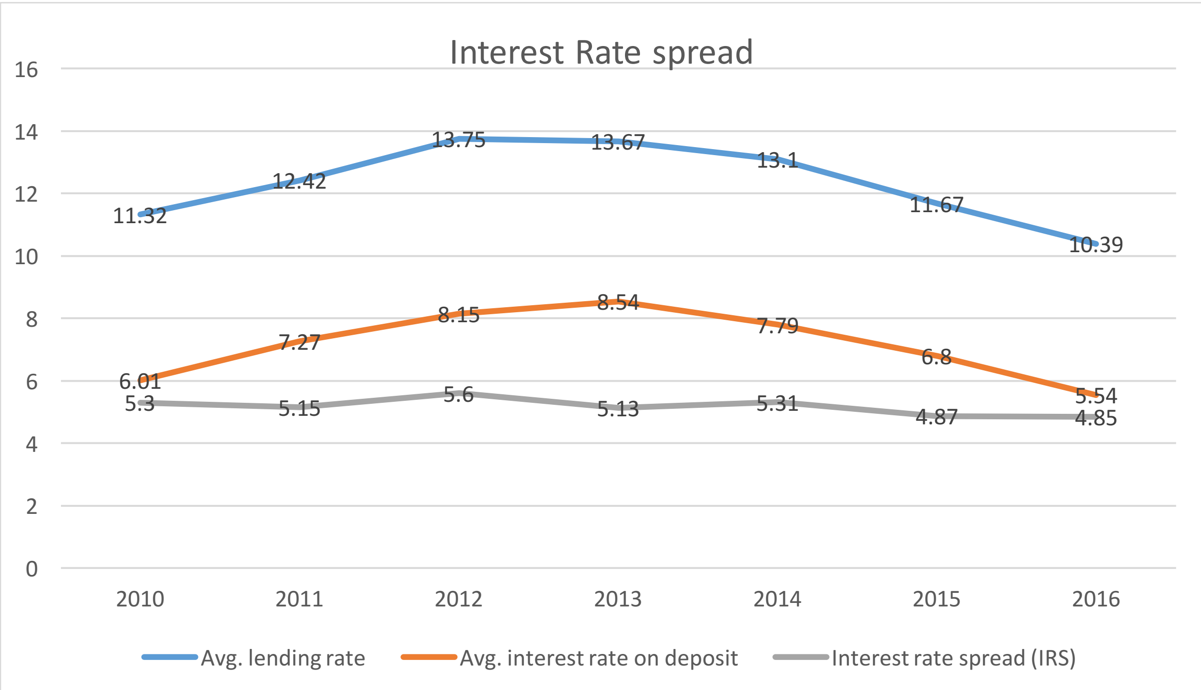
Source: www.thedailystar.net

Here we are using the data of 15 major private banks of Bangladesh to analyze the operating cost of 2014 and 2015. From the data, it shows that Dutch Bangla Bank is leading the highest position with 59 percent with the operating cost, then Uttara Bank is with 57 percent and AB The bank is with 53 percent. On the other side, South East Bank is considered as most well-organized private Bank in Bangladesh with 31 percent of cost– to-cost income ratio. As per Bankers opinion, the cost-to-cost ratio indicates the nonperforming loans (NPL). If the cost-to-cost ratio is high then it means the high nonperforming loans and if the ratio is low that means the nonperforming loan is low.

- **Interest rate spread:**

The Interest Ratio spread (IRS) is an important element to measure the stability of the financial situation of a country. The high-interest rate spread specifies the inefficiency of the banking sector or the total financial system of a country. If the IRS rate is high then it always discourages the depositors.

Figure 16: Interest rate spread in Bangladesh



Source: Monthly Economic Trends, Statistics Department, Bangladesh Bank, June 2010 to September 2016.

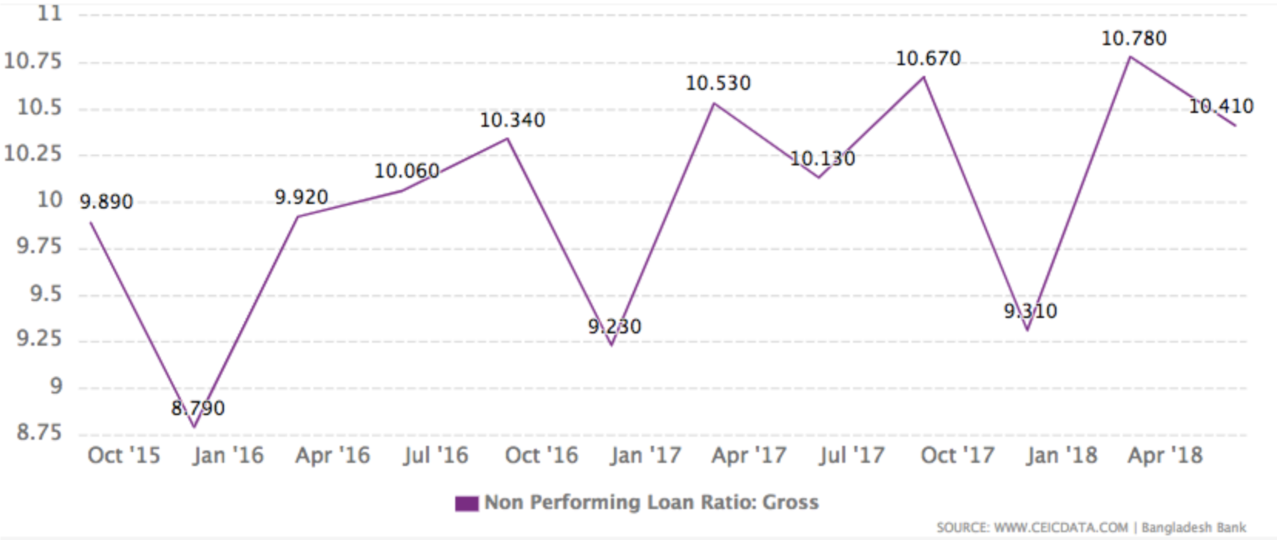
In the table 1 that is the interest rate of Bangladesh indicate the interest rate from 2010 to 2016. From the table, we can see the rate was higher in 2012 with 5.60 percent which was decrease again in 2013 with 0.47 percent. In 2016, it was become 4.85 percent.

4.5 Stability:

- **Non-performing loans:**

Non-performing loans of a bank are calculated as nonperforming loans divided by the value of a loan portfolio. The percent non-performing advances in Bangladesh mirrors the wellbeing of the saving money framework. A higher level of such advances demonstrates that banks experience issues gathering premium and vital on their credits. That may prompt fewer benefits for the banks in Bangladesh and, perhaps, bank terminations.

Figure 17: Non-performing loans



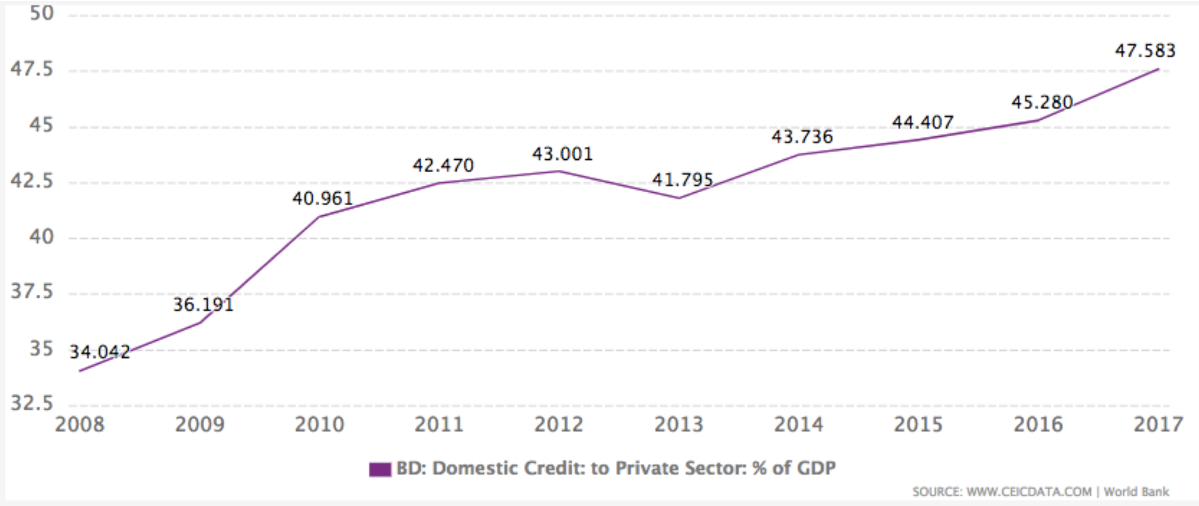
Source:www.ceicdata.com, Bangladesh Bank

From the figure 13, the indicator shows the non-performing loans of Bangladesh from 2015 to 2018 which is provided by The World Bank. The average value of the non-performing loan was 5.85 percentage in 2011. In January,2016 the lowest value was recorded as 8.79 and which was become maximum with 10.78 percentage as on April,2018.

- Real credit growth:

Local credit to private division by banks alludes to monetary assets gave to the private area by other safe partnerships (store taking enterprises with the exception of national banks, for example, through advances, buys of non-equity securities, and exchange credits and different records receivable, that build up a case for reimbursement. For a few nations, these cases incorporate credit to open ventures.

Figure 18: Real credit growth of private sector



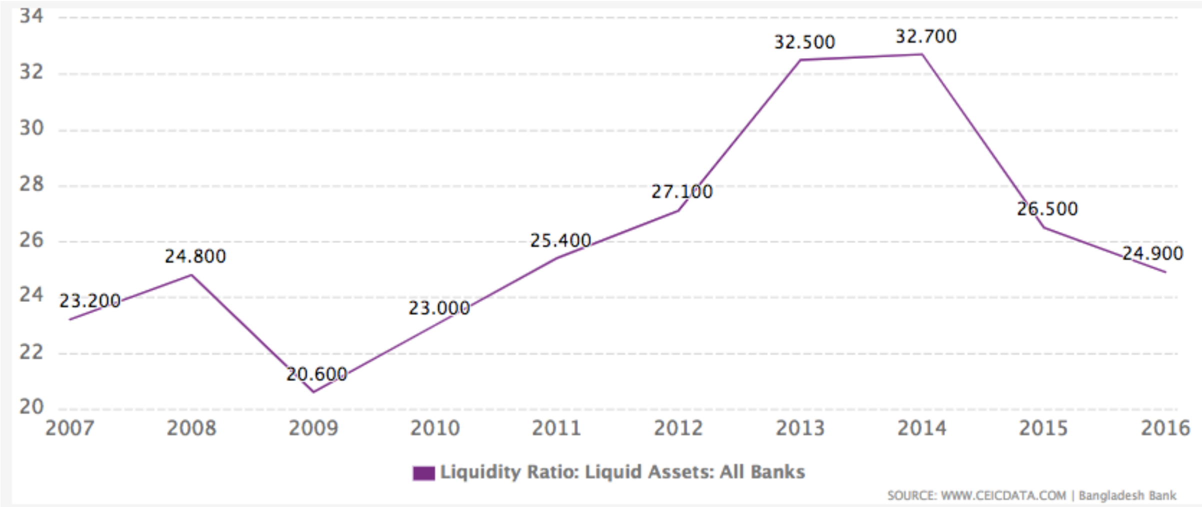
Source: www.CEICDATA.COM,

World Bank In this figure, the data is from 2008 to 2017 provided by World Bank to indicate the bank credit growth of private sector. The average value for Bangladesh was 33.82 percent in 2008 which was getting high till 2012 with 42.78 percent. In 2013, it was decreased with 1.2 percent. Again from 2014 it was increased from 43.51 till 2017 as 47.41 percent.

- **Liquidity:**

The proportion of bank fluid stores to bank resources is the proportion of household cash possessions and stores with the money related experts to claims on different governments, nonfinancial open undertakings, the private part, and other managing an account establishment.

Figure 19: Liquid asset ratio



Source: www.ceicdata.com, Bangladesh Bank

In this figure, the data is recorded from 2007 to 2016 which is provided by Bangladesh Bank the lowest liquid ratio is recorded as 20.60 percent in 2009. In 2014, it was recorded as highest ratio as 32.7 percent which become down again in 2016 as 24.9 percent.

4.6 Ratio Analysis:

1. **Profitability Ratios**

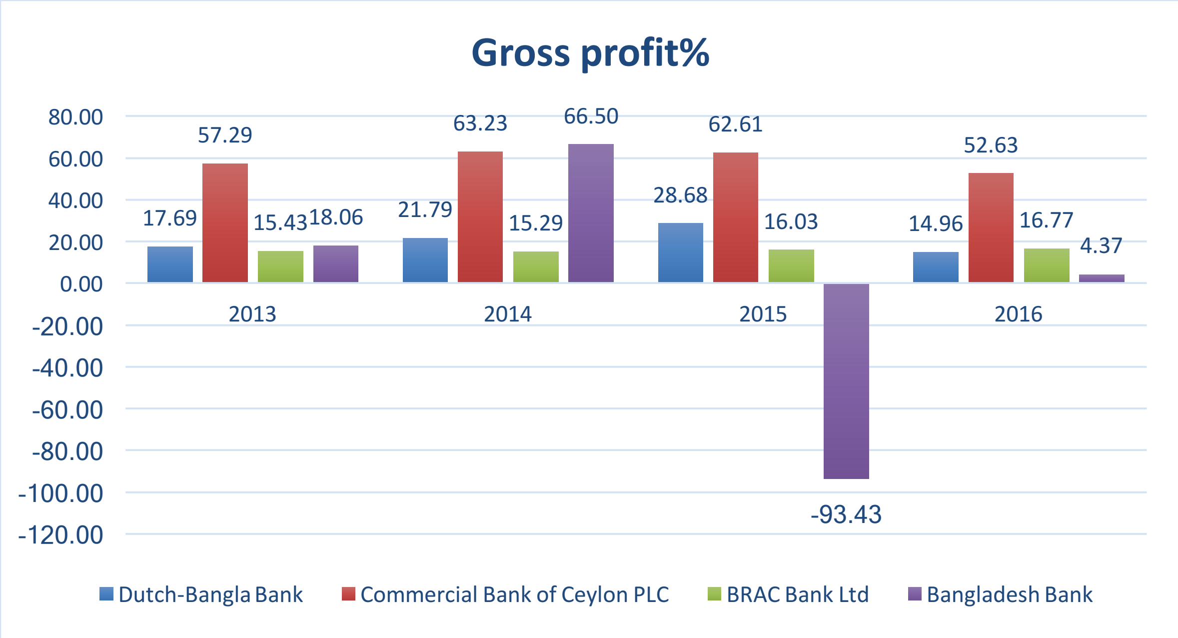
- Gross Profit Ratio: Gross Profit = Gross Profit / Revenue

Table 3: Gross Profit

Year	**2013**	**2014**	**2015**	**2016**
Dutch-Bangla Bank	17.69	21.79	28.68	14.96
Commercial Bank of Ceylon PLC	57.29	63.23	62.61	52.63
BRAC Bank Ltd	15.43	15.29	16.03	16.77
Bangladesh Bank	18.06	66.50	-93.43	4.37

(Source: Dutch-Bangla Bank, 2018; Commercial Bank of Ceylon PLC, 2018; BRAC Bank Ltd, 2018)

Figure 20: Gross profit% comparison



Source: Extracted from Excel

From figure 15, it can be stated that Commercial Bank of Ceylon has the highest gross profit margin among all the selected banks in all the comparable years. In 2013, it was about 57.29 million euro where Dutch Bangla Bank was with 17.69, Brac Bank with 15.41 and Bangladesh Bank was with 18.06 percent of total gross profit. In 2015, gross profit margin of Bangladesh Bank has declined to -93.43% in comparison to 66.50% in 2014.

- **Net Profit Ratio:**

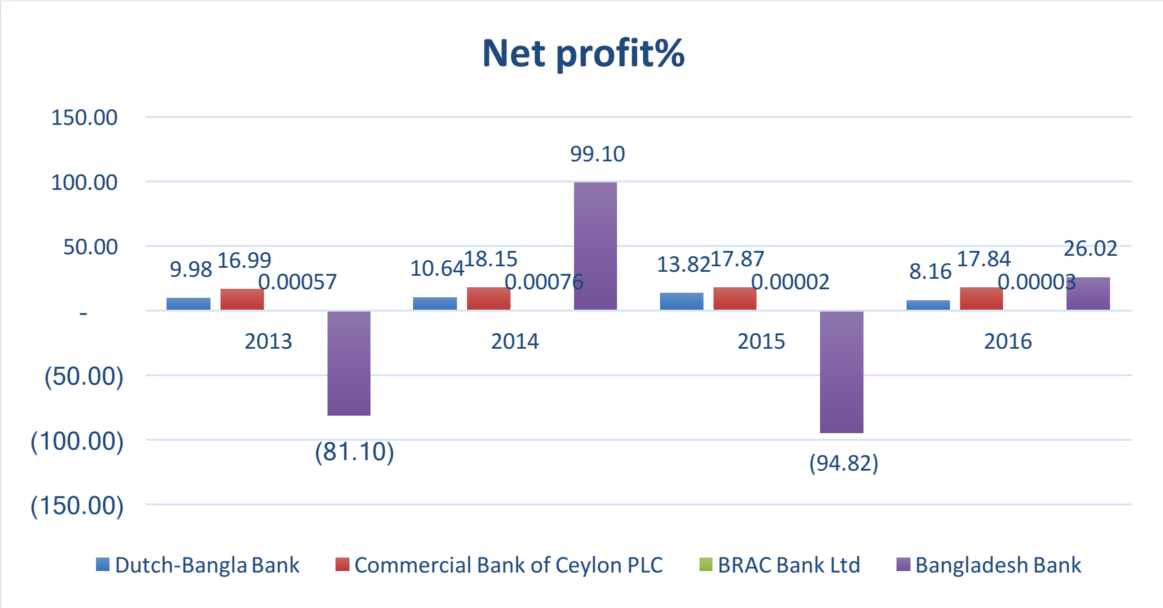
Calculated as: Net Profit / Net Sales

Table 4: Net Profit

Year	**2013**	**2014**	**2015**	**2016**
Dutch-Bangla Bank	9.98	10.64	13.82	8.16
Commercial Bank of Ceylon PLC	16.99	18.15	17.87	17.84
BRAC Bank Ltd	0.00057	0.00076	0.00002	0.00003
Bangladesh Bank	(81.10)	99.10	(94.82)	26.02

(Source: Dutch-Bangla Bank, 2018; Commercial Bank of Ceylon PLC, 2018; BRAC Bank Ltd, 2018)

Figure 21: Net profit% comparison



Source: Extracted from Excel

Table and figure 1 depict that gross profit margin of Commercial Bank of Ceylon has been consistently higher as compared to the other banks i.e. Dutch-Bangla and BRAC Bank. Such an increase in gross profit of Commercial Bank of Ceylon might be contributed towards catering to customers' proper funding and suitable financial risk management. Among all the years, the net profit margin has decline sharply of Bangladesh Bank from 99.10% in 2014 to –94.82% in 2015. Thus, in this consideration, it can be stated that Commercial Bank of Ceylon has consistent net profit margin over the evaluated years.

1. **Liquidity Ratio:**

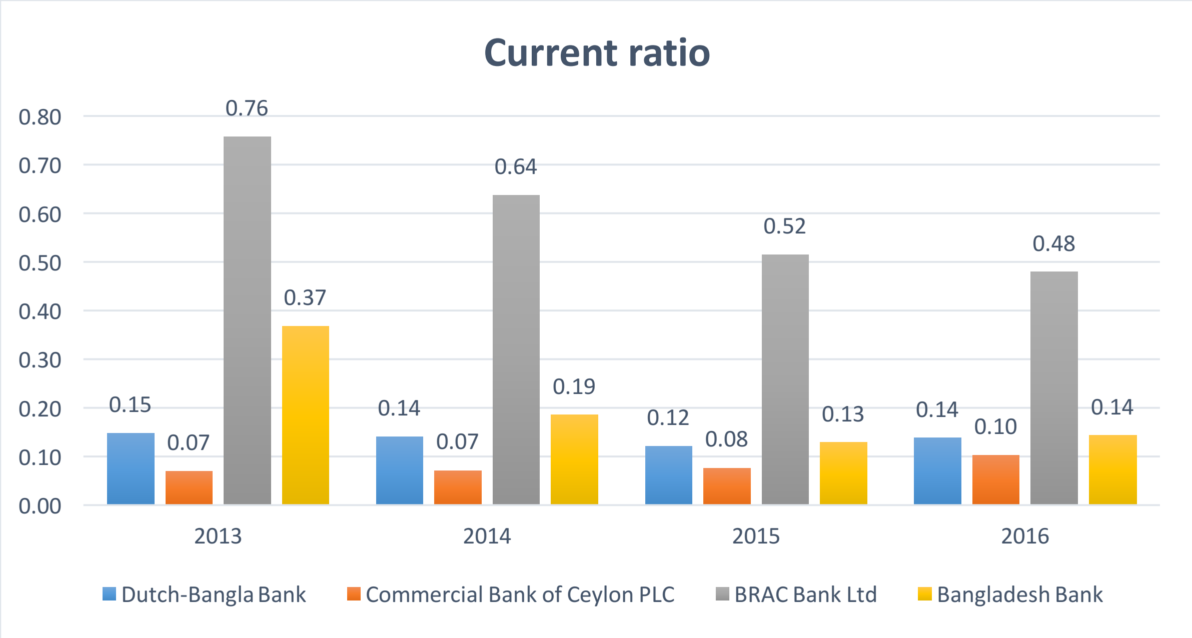
Calculated as: Current Ratio = Current Assets / Current Liabilities**.**

Table 5: Liquidity Position

Current Ratio	**2013**	**2014**	**2015**	**2016**
Dutch-Bangla Bank	0.15	0.14	0.12	0.14
Commercial Bank of Ceylon PLC	0.07	0.07	0.08	0.10
BRAC Bank Ltd	0.76	0.64	0.52	0.48
Bangladesh Bank	0.37	0.19	0.13	0.14

(Source: Dutch-Bangla Bank, 2018; Commercial Bank of Ceylon PLC, 2018; BRAC Bank Ltd, 2018)

Figure 22: Current Ratio Comparison



Source: Extracted from Excel

From table 2 and figure 3, it can be stated that liquidity position of BRAC Bank is highest among all the compared peers but it is declining in nature. It depicts that the short-term liquidity position is better of BRAC Bank than the others.

- **Cash Ratio:**

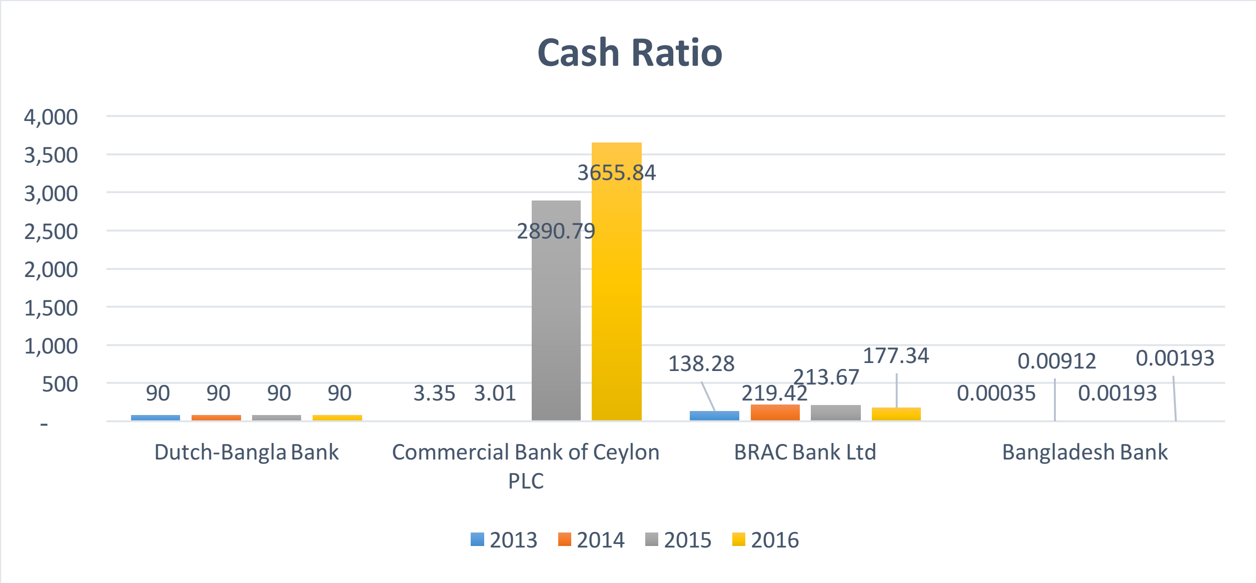
Calculated as, Cash Ratio = Cash / Current Liabilities

Table 6: Cash Ratio

Cash ratio	**2013**	**2014**	**2015**	**2016**
Dutch-Bangla Bank	90	90	90	90
Commercial Bank of Ceylon PLC	3.35	3.01	2890.79	3655.84
BRAC Bank Ltd	138.28	219.42	213.67	177.34
Bangladesh Bank	0.00035	0.00912	0.00193	0.00193

(Source: Dutch-Bangla Bank, 2018; Commercial Bank of Ceylon PLC, 2018; BRAC Bank Ltd, 2018)

Figure 23: Cash Ratio



(Source: Extracted from Excel)

From table and figure 6, it can be stated that Commercial bank of Ceylon has the greatest cash and cash equivalents over the year and most liquid among the other companies. From 2013 to 016, Dutch Bangla Bank is standby with 90. BRAC bank had its highest cash ratio in 2014 as 19.42 percent and in 2016 it was about 177.34 percent in euro million. And for Bangladesh bank 2015 and 2016 was same cash ration as 0.00193 and 0.00193.

Capital market Ratio:

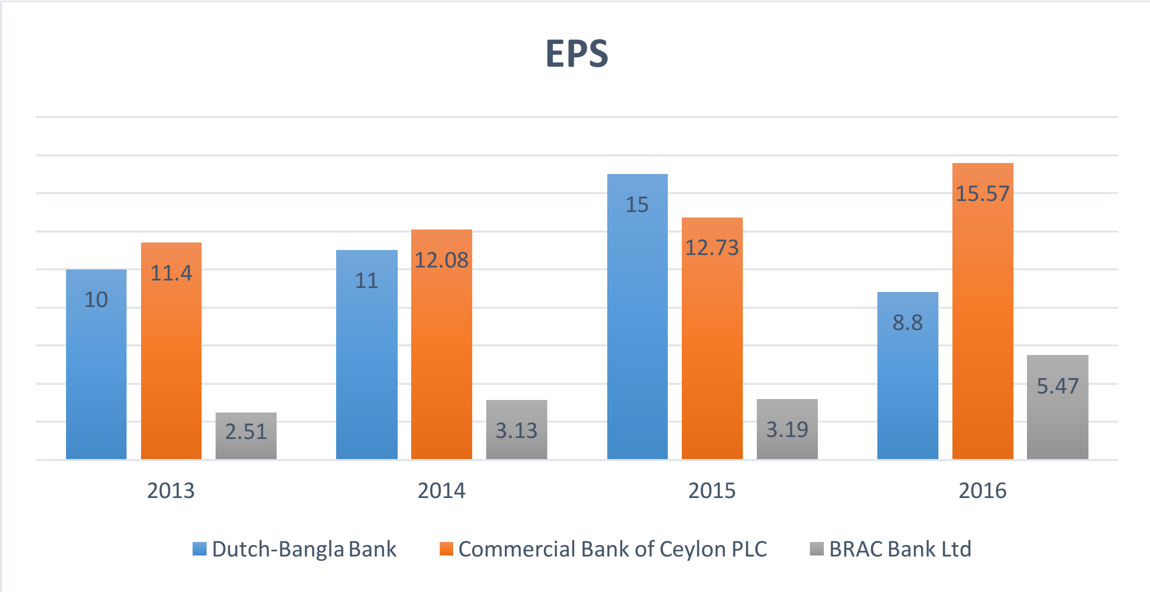
- Earnings per Share (EPS)= Net Earning / Number of Share

Table 7: EPS of companies

EPS	2013	2014	2015	2016
Dutch-Bangla Bank	10	11	15	8.8
Commercial Bank of Ceylon PLC	11.4	12.08	12.73	15.57
BRAC Bank Ltd	2.51	3.13	3.19	5.47

(Source: Dutch-Bangla Bank, 2018; Commercial Bank of Ceylon PLC, 2018; BRAC Bank Ltd, 2018

Figure 24: EPS Comparison



(Source: Extracted from Excel)

From table 7 and figure 18, it can be stated that EPS of Commercial Bank of Ceylon attained its highest in 2016 at 15.57 percent as compared to Dutch-Bangla and BRAC bank. In 2016 Dutch Bangla Bank was with 8.8 percent and BRAC Bank was with 5.47 percent of total earnings per share. It denotes that the company has been able to generate fruitful profits and enhance its share prices over the years.

4.7 Regression Analysis:

Example 1: Number of Bank account of Bangladesh

Year	Number of Bank account (Y)	GDP (X)	IR (X)
2010	19.8	5.57	6.01
2011	42.83	6.46	7.27
2012	14.73	6.52	8.15
2013	-3.8	6.01	8.54
2014	1.56	6.06	7.7

2015	7.81	6.55	6.8
2016	6.26	7.2	5.54

Here,

a. Dependent Variable : Number of Bank account
b. Independent Variable: GDP and Interest Rate (IR)

Regression Statistics	
Multiple R	0.196763928
R Square	0.038716043
Adjusted R Square	-0.441925935
Standard Error	18.49957221
Observations	7

Summary table: R square = 0.38 taken as a set, the predictors GDP and IR account for 38 percent of the variance in the Number of bank account. R square is the measure of the amount of the variance in the dependent variable that the independent variable or predictor account for when taken as a group.

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	55.1343978	27.5671989	0.08055069	0.92406685
Residual	4	1368.93669	342.234172		
Total	6	1424.07109			

ANOVA Table: The overall regression model was significant when $F(2,4) = 0.08$, $p<0.92$, R square = 0.038. Overall, regression model was statistically significant, when we take all independent variables or predictors in a group to predict bank account per capital.

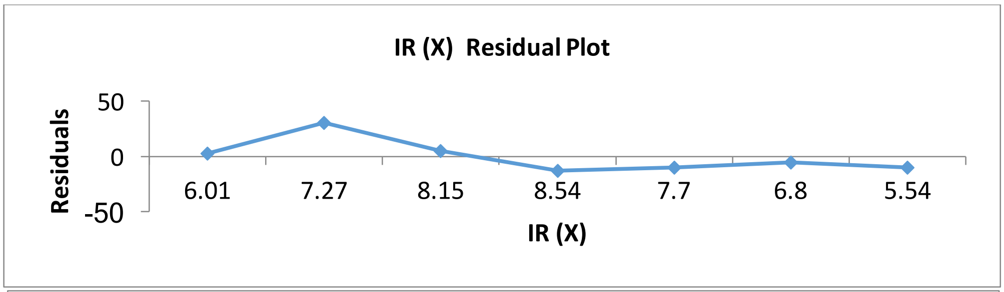
Intercept	42.57622307	122.078477	0.34876109	0.74485255	-296.36797	381.520414	-296.36797	381.520414
GDP (X)	-1.464769185	15.2407273	-0.0961089	0.92805672	-43.779812	40.8502736	-43.779812	40.8502736
IR (X)	-2.876459762	7.17718149	-0.4007785	0.70906804	-22.80351	17.0505907	-22.80351	17.0505907

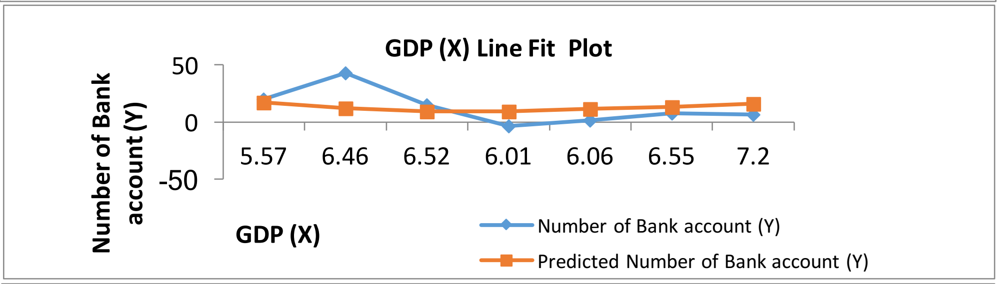
RESIDUAL OUTPUT

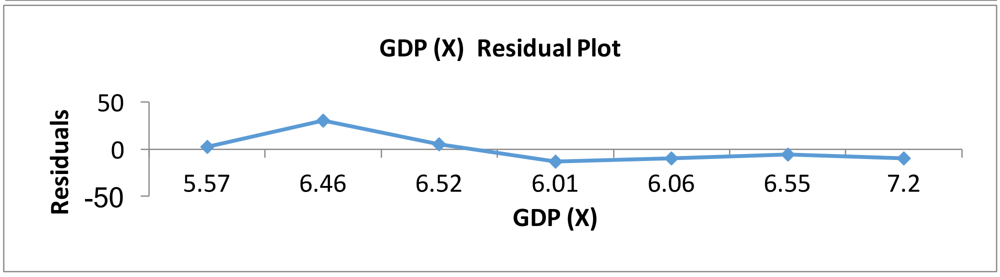
PROBABILITY OUTPUT

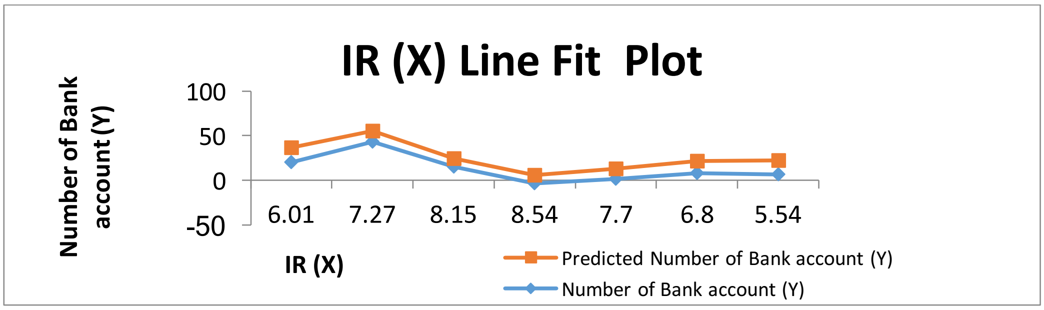
Observation	*Predicted Number of Bank account (Y)*	*Residuals*	*Standard Residuals*	*Percentile*	*Number of Bank account (Y)*
1	17.12993553	2.67006447	0.17676883	7.14285714	-3.8

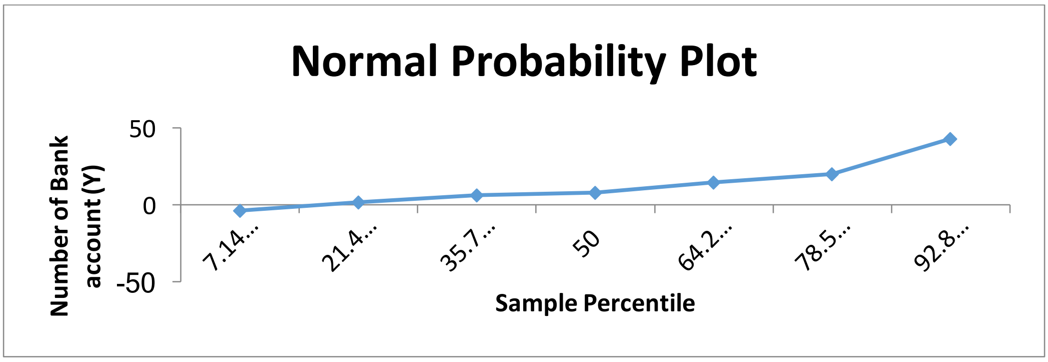
2	12.20195166	30.6280483	2.02769798	21.4285714	1.56
3	9.582780916	5.14721908	0.34076627	35.7142857	6.26
4	9.207993893	-13.007994	-0.8611807	50	7.81
5	11.55098163	-9.9909816	-0.6614425	64.2857143	14.73
6	13.42205852	-5.6120585	-0.3715405	78.5714286	19.8
7	16.09429785	-9.8342978	-0.6510694	92.8571429	42.83











Coefficient table:

(Test each predictor at R square = 0.038)

GDP	Not Significant	($P<0.92$)
IR	Not Significant	($P<0.70$)

1. Is the amount of unique variance of GDP as a predictor account for statistically significant (i.e.sig. greater than Zero)?

If $p< 0.038$, then GDP is not significant when considered as a unique variance predictor.

2. Is the amount of unique variance of IR as a predictor accounts for statistically significant (i.e.sig. greater than Zero)?

If $p<0.038$, then IR is not significant when considered as a unique variance predictor.

Example 2:

Liquid per capital :

Year	Liquid per capital (Y)	GDP (X)	IR (X)
2010	23	5.57	6.01
2011	25.4	6.46	7.27
2012	27.1	6.52	8.15
2013	32.5	6.01	8.54
2014	32.7	6.06	7.7
2015	26.5	6.55	6.8
2016	24.9	7.2	5.54

Dependent Variable : Liquid per Capital

Independent Variable : GDP, IR

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.75948321
R Square	0.57681474
Adjusted R Square	0.36522211
Standard Error	2.99166609
Observations	7

R square = 0.58 taken as a set, the predictors GDP and IR account for 58 percent of the variance in the liquid per capital. R square is the measurer of the amount of the variance in the dependent variable that the independent variable or predictor account for when taken as a group.

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	48.796879	24.3984395	2.72606253	0.17908576

Residual	4	35.8002639	8.95006597
		84.597142	

The overall regression model was significant when F (2,4) = 2.73, p<0.18, R square =0.58. Overall regression model was statistically significant when we take all independent variables or predictions in a group of predict liquid per capital significant.

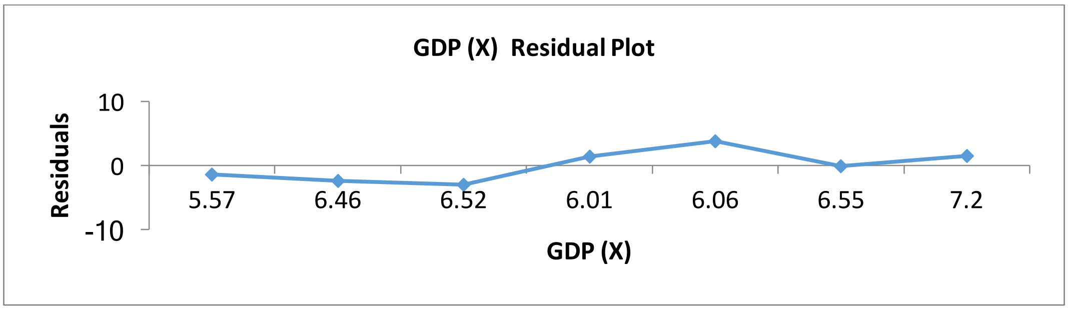
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	8.05216039	19.7419722	0.40787011	0.70425614	-46.760342	62.8646625	-46.760342	62.8646625
GDP (X)	0.11973267	2.46466062	0.04857978	0.96358307	-6.7232622	6.96272757	-6.7232622	6.96272757
IR (X)	2.60792519	1.16066092	2.24693117	0.08794364	-0.6145861	5.83043652	-0.6145861	5.83043652

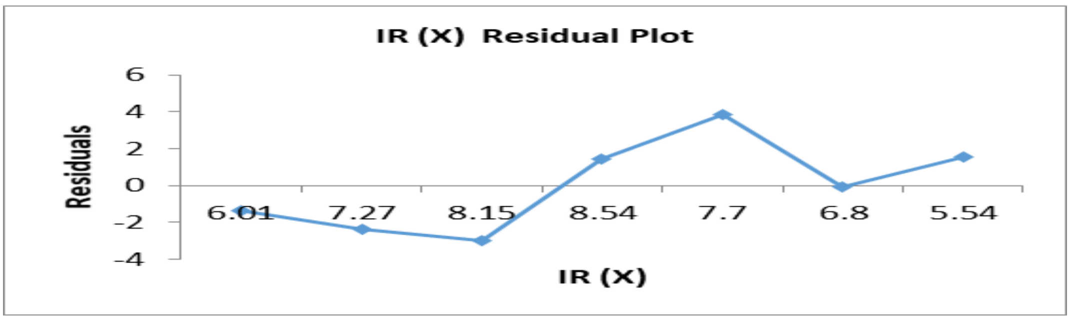
RESIDUAL OUTPUT

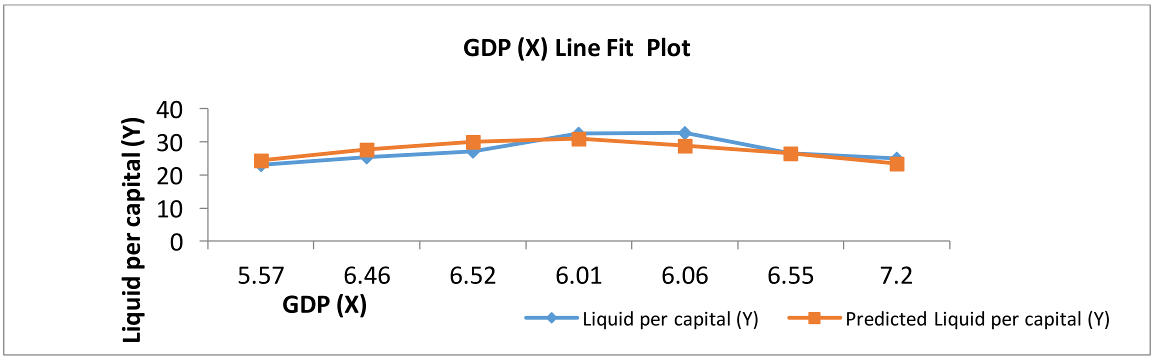
Observation	*Predicted Liquid per capital (Y)*	*Residuals*	*Standard Residuals*
1	24.3927017	-1.3927017	-0.570152
2	27.7852496	-2.3852496	-0.9764867
3	30.0874077	-2.9874077	-1.2230015
4	31.0434349	1.45656514	0.59629672
5	28.8587643	3.84123567	1.57254639
6	26.5703007	-0.0703007	-0.0287801
7	23.3621412	1.53785885	0.62957719

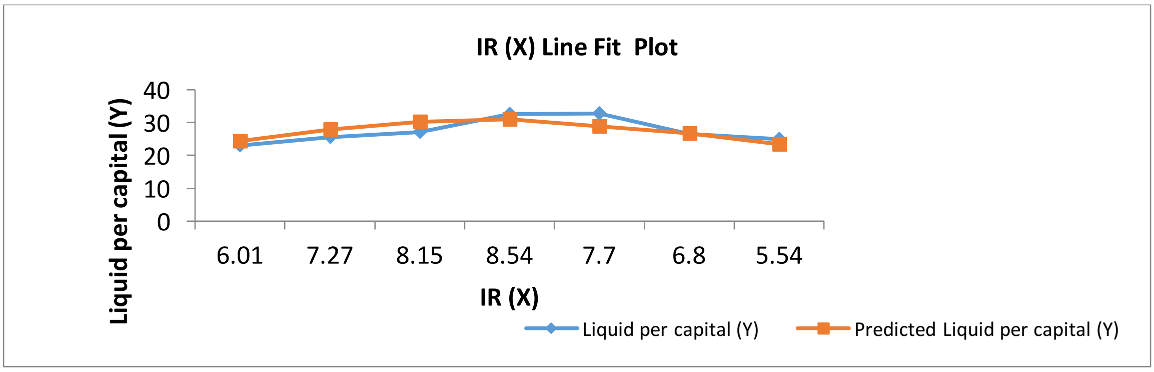
PROBABILITY OUTPUT

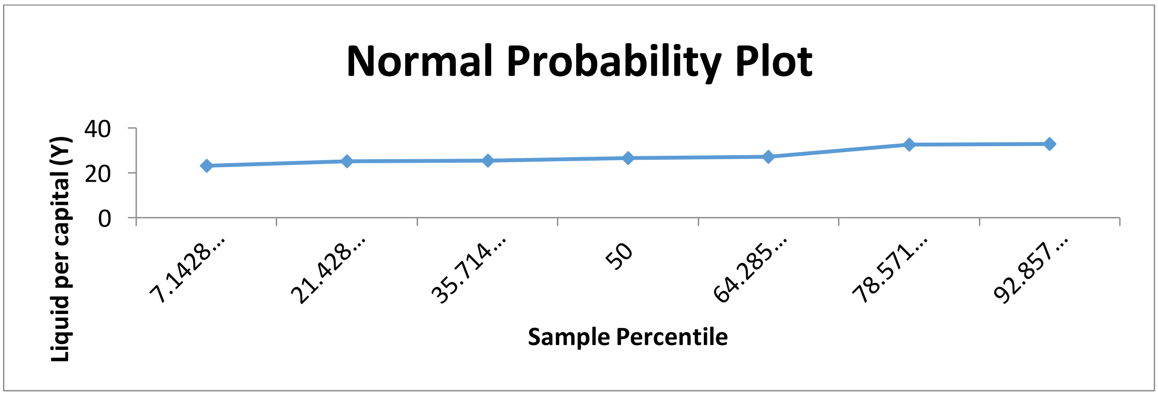
Percentile	*Liquid per capital (Y)*
7.14285714	23
21.4285714	24.9
35.7142857	25.4
50	26.5
64.2857143	27.1
78.5714286	32.5
92.8571429	32.7











Coefficient Table:

(Test each predictor at R square = 0.58)

GDP	Significant	($p< 0.04$)
IR	Not Significant	($p< 2.24$)

1. Is the amount of unique variance of GDP as a predictor accounts for statistically significant (i.e.sig.greater than zero)?

   If $p< 0.58$ then yes, GDP is significant when considered as a unique variance predictor.
2. Is the amount of unique variance of IR as a predictor accounts for statistically significant (i.e.sig.greater than zero)?

   If $p<0.58$ then yes, IR is not significant when considered as a unique variance predictor.

Example 3:

Bank credit per capital

Year	Bank credit Per capital (Y)	GDP (X)	IR (X)
2010	40.96	5.57	6.01
2011	42.47	6.46	7.27
2012	41	6.52	8.15
2013	41.79	6.01	8.54
2014	43.74	6.06	7.7
2015	44.4	6.55	6.8
2016	45.28	7.2	5.54

a. Dependent variable : Bank credit per capital
b. Independent Variable : GDP, IR

SUMMARY OUTPUT

Regression Statistics

Multiple R	0.73314987
R Square	0.53750873
Adjusted R Square	0.30626309
Standard Error	1.41628655
Observations	7

R=0.53 taken as a set, the predictors GDP and IR account for 53%of the variance in the liquid per capital Square Is the measurer of the amount of the variance in the dependent variable that the independent variable or predictor account for taken as a group .

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	9.324901064	4.662450532	2.32440593	0.21389818
Residual	4	8.023470365	2.005867591		
Total	6	17.34837143			

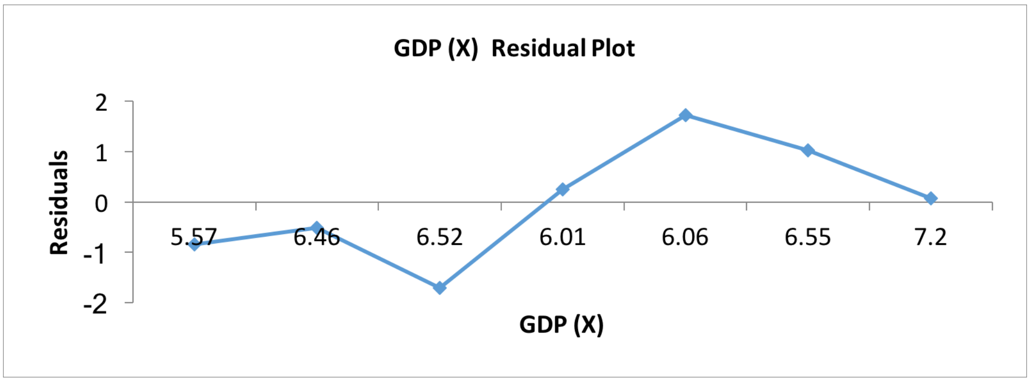
The overall regression model was significant when F(2,4)=2.32,p<0.21,R square = 0.54 .Over all regression model was statistically significant when we take all in dependent variables or predictors in a group to predict Bank Credit per Capital significant .

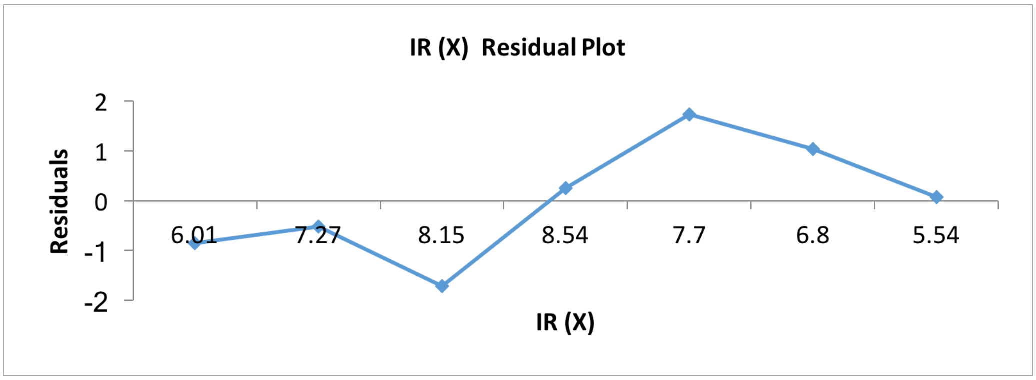
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	33.5937816	9.34605965	3.594432612	0.02287127	7.64496004	59.5426032	7.64496004	59.5426032
GDP (X)	1.9545021	1.166796554	1.675101022	0.16922491	-1.2850445	5.19404868	-1.2850445	5.19404868
IR (X)	-0.4446657	0.549469225	-0.809263985	0.4637521	-1.9702368	1.08090549	-1.9702368	1.08090549

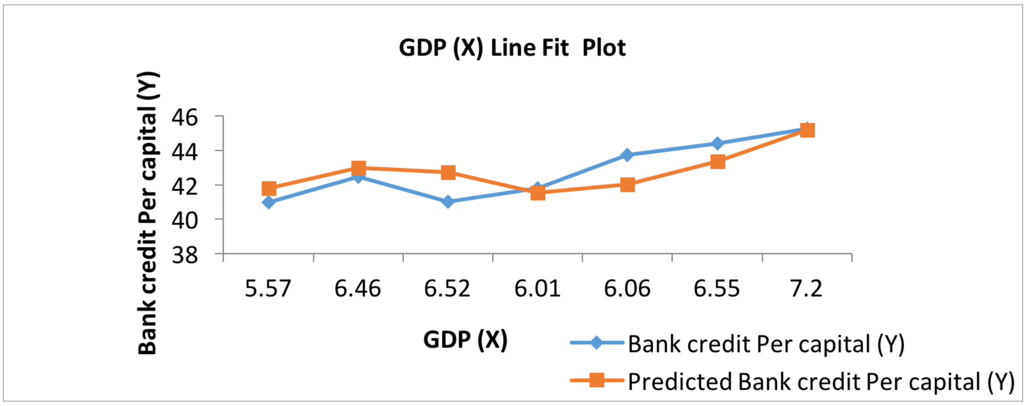
RESIDUAL OUTPUT

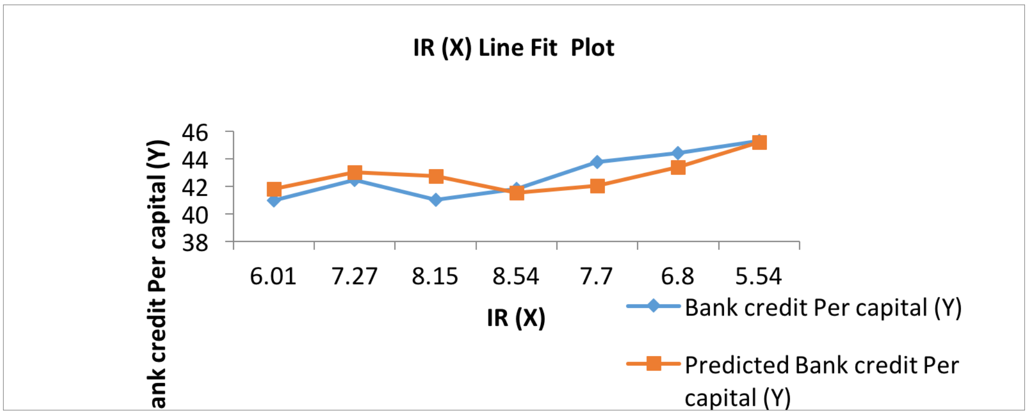
PROBABILITY OUTPUT

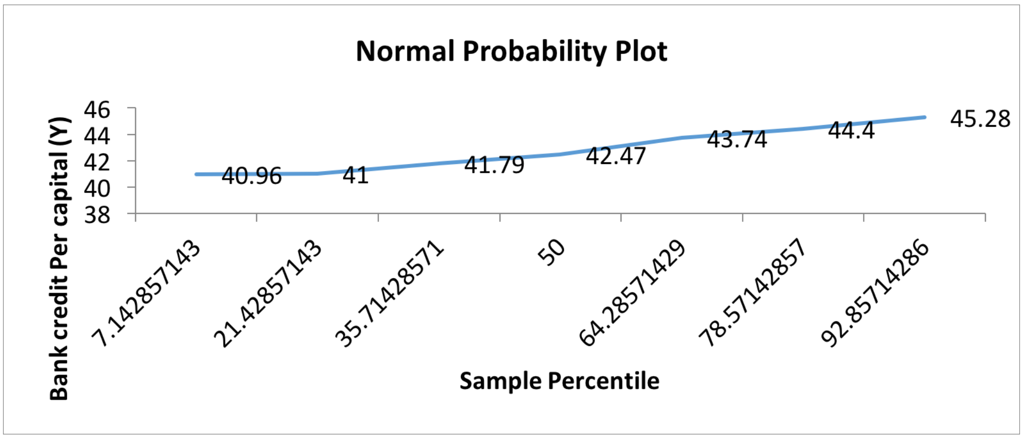
Observation	*Predicted Bank credit Per capital (Y)*	*Residuals*	*Standard Residuals*	*Percentile*	*Bank credit Per capital (Y)*
1	41.8079177	-0.847917715	-0.733243476	7.14285714	40.96
2	42.9871459	-0.517145858	-0.447205926	21.4285714	41
3	42.7131102	-1.713110208	-1.481425452	35.7142857	41.79
4	41.5428945	0.247105468	0.213686386	50	42.47
5	42.0141388	1.725861213	1.492451983	64.2857143	43.74
6	43.3720439	1.027956095	0.888933073	78.5714286	44.4
7	45.202749	0.077251005	0.066803411	92.8571429	45.28











Co-efficient Table:

(Test each predictor at R square=0.54)

GDP	Significant	($p<.17$)
IR	Not-Significant	($p<.46$)

1. is the amount of unique variance of GDP as a predictor accounts for statistically significant (i.e.sig.>0)? if $p<0.17$ than GDP is significant when considered as a unique variance predictor.

2. 1. is the amount of unique variance of IR as a predictor accounts for statistically significant (i.e.sig.>0)? If $p<0.46$ than IR is not significant when considered as a unique variance predictor.

Chapter 5: Discussion and implications

5.1 Introduction

The discussion section helps the researcher in deriving the conclusion on the chosen topic, with which the performance and the role of the Bangladesh banking industry can be identified. The discussion can be framed in such a way, so that the researcher would get a clear idea and analysis on the projected topic. In order to conduct a detailed discussion, the researcher would depend on the quantitative as well as on the qualitative research. Based on the findings of the previous chapter, it can be stated that the Bangladesh banking industry has been playing the essential role in the growth of the economy. As opined by Cull et al., (2010), the banking sector of Bangladesh has improved after the financial reform, more specifically since the last three decades.

5.2 Discussion

The Bangladesh Bank i.e. the central bank of the country has been playing an essential role in the price stability and it would be performed through the monetary policy and economic policy measurements. In addition, the Central bank is also able to control the foreign exchange rate of the country. From this point, it can be inferred that the Bangladesh Bank is playing the role of the monopolist for issuing the bank notes and currency across the country and therefore, the cost of the services of the Central Bank is expensive compared to the other banking organisations of the country. In nutshell, the Bangladesh Bank can stabilize the external as well as the domestic monetary value, with which the country would get the opportunity to experience high level of production and can also increase the rate of employment. Apart from advising the Bangladesh Government regarding the monetary policy, the Bangladesh Bank also instructs and imposes rules and regulations on the commercial banks of the country. Since, it is acted as the leader; therefore, the Central bank examines and regulates policies on the other banks. Apart from the Central Bank of Bangladesh, the commercial banks significant contribution in the money market as well as in the economy of the country. The prime functioning of the commercial banks of Bangladesh manages the deposit along with managing the advancing loans (Hafeez and Muhammad, 2012). In addition, the banks have strong contribution in running the business successfully. For instance, the commercial banks aim at increasing the amount of investments, so that the new enterprises would get the opportunity for further business exposure. On the other hand, capital formation across the country can be promoted by the commercial banks. In this context, it can be stated that with the help of these banking operations, the customers would be eligible to get a detailed idea regarding the functioning of the financial services. Likewise, in order to make the rural people aware with the banking services, the Grameen banks have significant role in this context. The micro financing loans are given by the Grameen bank, which offers the poor people to improve their standard of living. In addition, these micro financial loans are beneficial for the start-up firms, who would not be capable to manage the finances for exploring the businesses (Hafeez and Muhammad, 2012). More specifically, the performance of the Banking sector is satisfactory and it also has strong influence and contribution on the economy of the country. As opined by Brown and Dinç (2011), the banking industry of the country has power in the controlling of the country's money supply since the prime objective of the Bangladesh Bank is to keep the economy in the equilibrium position. As a result, by maintaining the internal and external currency stability of the economy, the financial institutions can also improve the purchasing power of the monetary policy of the economy. Furthermore, the banking sector of Bangladesh is able to minimise the uncertain risks and can protect the money of the account holders. Consequently, the customers get the utmost care and help as per their requirements.

It is clearly evident that the commercial banks of Bangladesh have been playing a significant role in the shaping of economy. On the contrary, Hafeez and Muhammad (2012) argued that the operations of the micro financing institutions of Bangladesh had declined in the year 2012, whereas the commercial banks have experienced the sharp growth rate. Apart from this, Shanka (2012) criticised that the accountability and the interdependency on the regulatory body of Bangladesh is questionable and hence, drastic improvement is needed. As per the report of 2017, the government of the country has invested Tk20 Billion for the purpose of recapitalisation of the state owned banks. As a result, the risk management program and the bank management operations can be improved. Consequently, the occurrence of risks on the assets of the account holders can be minimised. Apart from this, as per the current report of IMF, the banking industry of the country has been suffering from the surplus liquidity. However, Kamau (2011) criticised that the state-owned problems of the Bangladesh banking industry is relied upon the political instability of the country, hence, government has been playing an important on the performance of the banking industry. In this context, it can be stated that the Central bank of the country requires to minimise the contribution of the government in the banking operations, so that the third party intervention would not create any challenge in the financial industry of Bangladesh.

Though, the relationship between the banks and the customers of the country is dependent upon the transaction process, and also on the delivered products and services, however, most of the respondents have inferred that they have transparent relationship with the banking industry of

Bangladesh. Apart from this, for improving the banking operations, the financial institutions of Bangladesh have brought e-banking services for the customers. It in turn improves the operational efficiency of the Bangladesh banking industry. In the opinion of Mention and Bontis (2013), it can be mentioned that with the advent of e-banking operations, the customers of Bangladesh need to carry less amount of cash for the purpose of physical exchange; in turn they can improve the performance of the business transaction through the e-banking services. More specifically, the e-banking services are beneficial for having the quick access on the banking information such as auditing, review of cash flow and the fiscal transaction techniques. In addition, the electronic banking service of Bangladesh has emphasized the overall banking operations more convenient. It helps to improve the customer value by make them satisfied. In a nutshell, it can be inferred that apart from the banking operations, the banking services of Bangladesh would be able to maximise the customer loyalty.

5.3 Analysis

This chapter shows the discussion on the Bangladesh banking industry with the help of the findings. In this context, it can be mentioned that most of the respondents are satisfied with the services of the Bangladesh financial institutions. Since, the banking sector of the country maintains the transparency with the account holders; therefore, the customers would get the detailed information about the banking services. From the above discussion, it can be mentioned that transparency level is one of the important component to make the customers' satisfied. Apart from this, if any risk occurs during the operational process, the customers would get the awareness and can minimise it with the help of the banking sectors. In order to increase the satisfaction level of the customers, the Bangladesh Banking industry has initiated e-banking services. Digital banking is the backbone of the interactional banking process. On the other hand, the higher accuracy of the banking services of Bangladesh also improves the financial operations. After the analysis, it can be observed that the cost of the service of Central bank of Bangladesh is high compared to the cost of services of the commercial banks. Furthermore, the women of the country are still left behind the men in taking the banking services. From this point, it can be stated that the government of Bangladesh aims at empowering the women by serving them the micro financing loan to them. As a result, the banking industry of Bangladesh has been playing a significant role in the economic development of Bangladesh.

Chapter 6: Conclusion and recommendations

6.1 Conclusion

This chapter is beneficial for the readers to identify the role of the Bangladesh banking industry on the economy and also on the development of the country. The conclusion is derived in such a way, so that the readers can get a clear idea about the banking services of Bangladesh. The objectives of the study would need to be linked with the analysis, which refers that the research work would have fulfilled. Apart from this, in this chapter the researcher would provide recommendation by finding the loopholes or shortcomings of this study, so that the other researchers can overcome the problems in the future for further improvement. In this context, the limitations and the score of the research would be analysed along with discussing the usefulness of the study. Based on these analyses, the researchers would get the opportunity to conduct research on this same topic or in the broad aspect.

6.2 Linking with the research objectives

6.2.1 Linking with the first objective

The first objective of the research is to review the financial reform in Bangladesh and also to find out the importance of this reform policy. During the period of mid-1980, the banking industry was featured as the financial repressed period since the savings rate was low (Mention and Bontis, 2013). On the other hand, the internal control system of the Bangladesh commercial banks was weak and hence, the assets of the financial institutions were also not included in the calculation of the banking operations. Conversely, the cumulative mismanagement effect in the capital market would lead to the non-performing loans. In order to minimise the poor performance of the banking industry of Bangladesh, the financial reform would be required to implement in this context. It helped to bring legal, structural and the institutional policy reform. As a result, it can be stated that the first objective of the research would be linked with the analysis of the study.

6.2.2 Linking with the second objective

The second objective was to determine the effect of the implementation of the financial reform policies on the Bangladesh banking industry. In order to derive the conclusion on it, the researcher has relied upon the secondary qualitative research analysis process. After the analysis, it can be observed that after implementing the reform policies, the operations of the Bangladesh banking industry had improved. As a result, the economy of the country was able to achieve the financial development. More specifically, the banking reform is referred as the inevitable process, which can stimulate the desired level of economies of scale by boosting up the existing banking functioning of the country. From the above discussion, it can be seen that the banking sector reform is beneficial to improve the market orientation through the operational transactions. Apart from this, it enables to strengthen the infrastructure of both the legal and institutional capacity. With the implementation of the policy based reform in the Bangladesh banking industry, the risk based capital adequacy had emphasized (Atakan-Duman and Ozdora-Aksak, 2014). As a result, the probable risks can be minimised by the banking organisations and the operational efficiency has also been improved as well. Therefore, it can be mentioned that the researcher is capable to link the analysis with the second objective.

6.2.3 Linking with the third objective

The Banking industry faces the major challenge due to the high rate of NPLs. Since, the rate of NPLs in the state owned banks are low, therefore, most of the people and the business are willing to take loans from the state owned banks instead of the Bangladesh commercial banks. The state owned banks aim at serving the loans to the customers in very lower rate of interest. Therefore, the commercial banks of Bangladesh would not be able to increase the high percentage of profitability since high percentage of NPLs hit the profitability percentage of the banking industry (Afsar, Rehman and Shahjehan, 2010). In addition, it undermines the share of capital of the commercial banks. For instance, the operating profitability percentage of the Bangladesh commercial banks had declined by the percentage of 37, whereas the state owned or the private banks operating profitability had increased by 4.9 percentages in the similar year (Afsar, Rehman and Shahjehan, 2010). In order to overcome the situation, the government of Bangladesh would provide the constant support to the commercial banks by diverting the money of the tax payers. In addition, the government of the country aims at the implementation of structural reforms for stabilize the situation. From this point, it can be inferred that the third objective of this report has been achieved.

6.2.4 Linking with the fourth objective

The fourth objective of this paper is to determine the effect of the Bangladesh banking industry on the well-being of the employees of the organisations. In this context, it can be mentioned that the banking industry of the country has a significant role in the economy. It has boosted up the economy, which in turn influence the service sector of the country. Consequently, the standard of living of the employees, who are engaged with the Bangladesh banking industry, had also improved. In addition, a large amount of employees are working in this industry, which in turn reflects to minimise the unemployment rate of the country. In spite of this, it can be added that for improving the performance level of the employees, the banking industry also provides training program, with which the individual performance level of the employees can be improved. It in turn increases the banking services of the banking industry of Bangladesh and hence, the customers would get better care from the organisations. As a result, it can be inferred that the fourth objective of the research has linked with the analysis of the report.

6.2.5 Linking with the fifth objective

The fifth objective of the paper is to determine the effect of the banking industry on the economy of Bangladesh. The prime objective of the banking sector is to increase the rate of investment and savings of the customers. More specifically, the high savings rate is beneficial for the production of new capital assets. As a result, it can be mentioned that the capital formation is significant for uplifting the growth process of the country. This is good for the economic health of the country. On the other hand, the borrowers can lend the money as per their requirement. This helps them to save the borrowers in their trouble. Conversely, from the above analysis it can be seen that the banking system is able to create money and thus, has been playing an essential role in shaping of the monetary policy of the country. In this context, the Bangladesh Bank i.e. the Central Bank of the country has been playing the essential role. In addition, the banking industry facilitates the economy to participate in the international trade since; a vast amount of the transaction is conducted through the credit. Hence, it is proved that the banking industry has a large effect on the growth of the economy. As a result, it can be interpreted that the fifth objective of this paper has been successfully connected with the analysis of the research.

6.2.6 Linking with the sixth objective

The Microfinancing loans have positive influence on the economy of Bangladesh, which is found from based on the secondary qualitative research. The Grameen bank of the country aims at serving of loans to the poor people or the start-up firms or the entrepreneurs in turn of low rate of interest. The prime aim of the micro financing institutions of Bangladesh is to boost up the stand of living of the poor people, which has a strong reflection on the economy. Therefore, micro financing loans are considered as the catalyst, with which the poverty of the country can be alleviated. On the other hand, the micro financing institutions of Bangladesh is concerned to empower the women. More specifically, the micro financing loans are beneficial to increase the investment and hence, the GDP growth rate of the economy would be maximised. After the analysis, it can be stated that the micro financing loans can enhance the capacity to pay of the poor people for the different social services by uplifting their income level. Consequently, the socio-economic well-being of the people would be improved. From this point, it can be inferred that the sixth and the last objective of the research has linked with the analysis.

6.3 Recommendation

After the analysis, it can be observed that the NPL rate of the commercial bank is high, which would have negative effect on their performance level. As a result, the government of the country requires to improve the infrastructure of the reform policies and effective steps have to take against defaulter. Also the interest rate is not in a good percentage that can attract customer to make a big volume of deposit. Government should focus in this sector to increase the interest rate. Also commercial banks can have a separate section to analyse the financial statement of the bank to know the financial status as liquidity, profitability and other ratios. This study also suggest to concentrate on loan rescheduling and focus on risk management and internal control. Therefore, it can be recommended that the people from the rural areas require to take loan from the private banks. On the other hand, the people with per day lower wage rate less that Rs. 2 would be eligible to take loan or would borrow money from the Grameen banks. In this context, the government also requires to increase the awareness of the people.

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