Thesis Report On

Implementation of Policies directing Capital Market Investment in Bangladesh: Pandemic 2020

By

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Approval

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Declaration

It is hereby declared that

1. The thesis report submitted is my own original work while completing degree at BRAC University.

2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. I have acknowledged all main sources of help.

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Table of Contents

List of Tables

List of Figures

Abstract

Early Mach 2020, Bangladesh got the first case of Covid-19, leading to of quarantine, (TBS Report, 2020). The whole economy started to get disrupted, along with effecting the Capital market of Bangladesh. In addition, for the last few years Bangladesh has undergone negative growth in the capital market, (LightCastle Analytics Wing, 2020). The two factors combined led to a fall investors' confidence. Moreover, the Central Bank aim to apply expansionary monetary policy, increasing money supply in order to speed the recovery of the pandemic-hit and rehabilitation of the production capacity of the economy. This will impact on Capital market along with the capital market policies initiated by Central Bank, BSEC and government body, to increase capital market investment and activity with efficiency.

Keywords: Capital Market, Covid-9 Pandemic, Negative growth, Money supply, Macro economic policy, Expansionary policy, BSEC.

Chapter 1

Introduction

1.1 Introduction of the study

In a modern economy, economic growth hinges on an efficient financial market (Garcia et al., 1995). Capital market, a significant component of the financial market, plays an important role in accelerating economic development as it allows efficiency in capital allocation.

Capital Market of Bangladesh comprises equity securities (shares), debentures and corporate bonds traded through two stock exchanges, namely, Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE).

Despite the great importance of an efficient capital market on an economy, Bangladesh's capital market was unable to contribute to the country's economic growth. Bangladesh's capital market has faced negative performance in the last two consecutive years (City Bank Resource, 2020). In addition, the COVID-19 pandemic crisis has affected Capital market investment significantly, followed by a 66days market shut down (Mufazzal & Barmon, 2020).

1.2 Problem description and problem analysis

1.2.1 Negative growth

For the last two consecutive years, Bangladesh Capital Market witnessed negative growth. Just after an outstanding return of 24% in 2017, the market index fell by 13.8% in 2018 and 17.3% in 2019 (IDLC Business Review, 2019; City Bank Resource, 2020). According to the City Bank Resource (2020), during this period, the major index DSEX fell 28.7%. The source mentioned the major factors that contributed to the market failure were the liquidity crisis and the devaluation of currency.

During 2018, individuals and institutions started to divert their funds from the capital and money market to risk free rate instruments, creating a deficit of loanable funds in the banking sector causing a rise in bank interest rates and constricting the liquidity (IDLC Business Review, 2019). There was also a rise in the non-performing loan (NPL). The NPLs as a proportion of the total loans in Bangladesh rose to 11.5% during 2018, as mentioned in the IDLC report. City Bank Resource report (2020) mentioned vague macroeconomic overview and government's aggressive bank borrowing led to worsening of the capital market.

In addition, the currency depreciation of Bangladesh Taka against the US Dollar had driven foreign fund managers to partially liquidate their stakes in local blue-chips (IDLC Business Review, 2019). The Telecommunication and Pharmaceuticals sector, which dominated large portions of market capital, were significantly affected.

Along with the above mentioned causes, unsatisfactory performance of IPO and poor payout ratio of listed companies led to downfall of the market.

1.2.2 Covid-19 Pandemic

During the end of 2019, the WHO China Country Office was informed of cases of pneumonia unknown etiology detected in Wuhan City of China, (WHO Situation Report-1, 2020). Following this, Covid-19 spread globally. It had not only effected people's health and life style but also effected the world economy. Report by Mahmud N. (2020) mentioned Bangladesh announced the first COVID-19 case on March 8, creating uncertainty about the economy. The whole economy started to get disrupted, along with effecting the Capital market of Bangladesh. This caused a massive drop in investors' confidence. The report added that the DSE key index lost 279.32 points in a single day (Fig.1). Moreover, due to the coronavirus pandemic, Bangladesh capital market was the only one to be closed for two months.
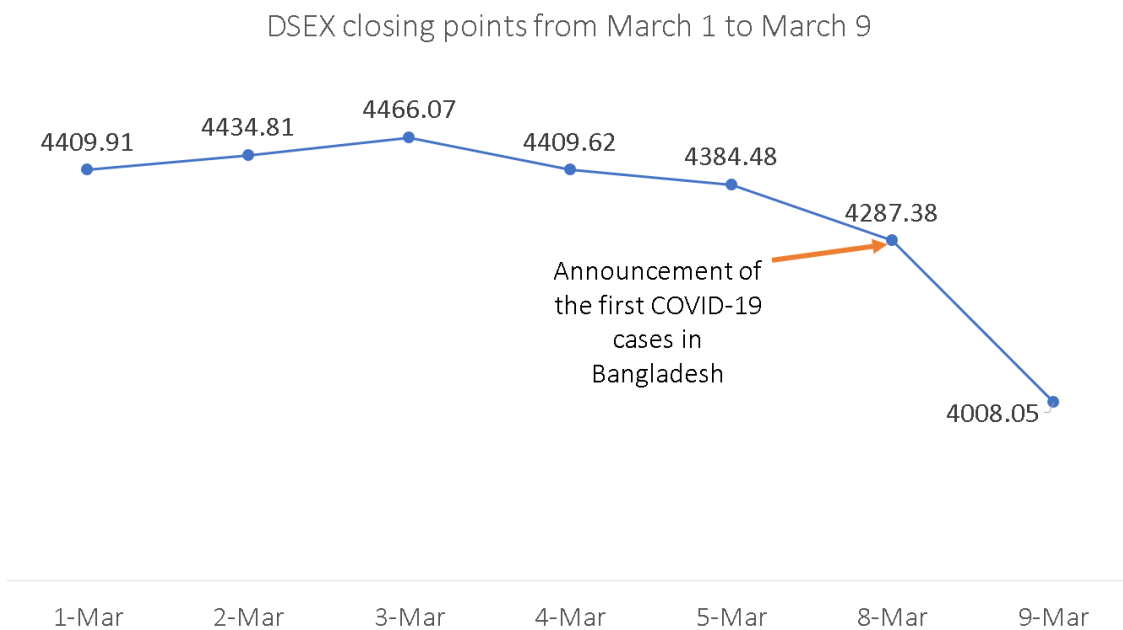
Figure 1: DSEX Closing Points from March 1 to March 9. Source: Dhaka Tribune

1.3 Research Objective

The general objective of this study is to recognize the present state of the Bangladesh capital market and the policies implied to develop a sustainable capital market in Bangladesh.

One of the specific objectives of the study is to analyze and identify the different policies implemented in order to recover the capital market investment after Covid-19 pandemic. Moreover, the research also briefly identifies the effect of the new macro-economic policies on the capital market. Lastly, the study recommends for better regulations and guidelines to strengthen the capital market of Bangladesh.

1.4 Research Question

1. *How much change occurred in investment in the Capital Market of Bangladesh since the Covid-19 Pandemic?*

2. *How were the policies initiated in order to increase Capital Market investment in Bangladesh?*

3. *The effect on investment in the Capital Market of Bangladesh since the policy is implementation?*

1.5 Limitation of the Research

The two major causes of limitation while conducting this thesis paper was resource and time constraints. Firstly, due to Bangladesh having a comparatively small capital market, there is very less authentic data and resources available to conduct research based on Bangladesh Capital market. It was difficult to find secondary data and cross check the authenticity. Secondly, it was difficult to conduct an accurate statistical analysis as the number of data was limited as it hasn't been long since Covid-19 pandemic occurred. Hence, the data available to measure after effect was limited. Lastly, there were time constraints hence, the study couldn't be conducted at a bigger scale with a wider range of information.

Chapter 2

Literature Review

2.1 Terminology

2.1.1 Capital Market

Capital Market is a financial market that allows the trade of equity-backed securities and long-term debt, (Steven M., 2003). Capital market is a venue where the savings and investments are channeled between the ones who have capital and those who require the capital, (Kenton W., 2019).

Capital markets can be primary and secondary markets. Stock market and Bond market are the most common forms of capital market, (Kenton W., 2019). Other capital market instruments are preference share, derivatives, and real estate investment trusts (REIT), (Capital & Money Market Products: Types & Examples, 2019; SEC Nigeria, 2019).

2.1.2 Expansionary Monetary Policy

Keynes (1930) encouraged the theory that lower taxes and increased government expenditures will stimulate the aggregate demand and boost the economy. Expansionary policy is a part of the Keynesian economics, implemented during economic downturns to order economic stability, (Chappelow J., 2020).

Expansionary policy can be made up of either monetary policy or fiscal policy or both policies combined, (Chappelow J., 2020). The aim is to encourage economic growth by boosting aggregate demand.

Chappelow J. (2020), mentioned expansionary policies can be implemented through expanding the money supply by lowering interest rates, open market operations and reserve requirements.

Budgeting tools such as tax reduction, transfer payments, and increase in government spending also help expand money supply.

2.1.3 Gross Domestic Product (GDP)

The monetary value of all the finished goods and services produced by a country within a specific period, typically one year, is known as Gross Domestic Product (GDP), (Worldometers; Chappelow J., 2020).

GDP gives an overview of a country, (Chappelow J., 2020). It measures the size and growth of an economy. Furthermore, GDP plays a significant role in strategic decision making for policymakers, investors and businesses.

2.1.4 Risk free rate

According to Chappelow J. (2020), the risk-free rate is the rate of return at which the investor would expect risk-free investment over a definite period of time. In other words, in theory the investment will have zero risk at this rate of return.

A true risk-free rate is non-existing, hence, often the yield of the three-month government Treasury-bill is used as a risk-free rate, (Chappelow J., 2020).

2.1.5 Repurchase agreement (Repo)

Repurchase agreement (Repo) is a type of short-term borrowing involving government securities. A dealer sells the securities on an overnight basis to investors and then at a little higher price, buy those back the next day, (Chappelow J., 2020). The difference in price is the interest rate. It is a short-term capital source and also tool for central bank to conduct open market operations for supply, (Chappelow J., 2020).

2.2 Bangladesh Economic Overview

Bangladesh is one of the fastest growing economies in the world (Bajpai P., 2019). Bajpai P. (2019) added that the country had an average growth of 6.5% over the decade.

Since 1975, Bangladesh has been on the UN's Least Developed Countries (LDC) list, (bdnews24, 2018). In 2018, Bangladesh has fulfilled the three eligibility criteria that is required to graduate from the UN's LDC list and is expected to graduate in 2024, (World Bank, 2020). According to the projection of Asian Development Bank, Bangladesh is likely to have a high growth of 8% for the year 2019 and 2020.
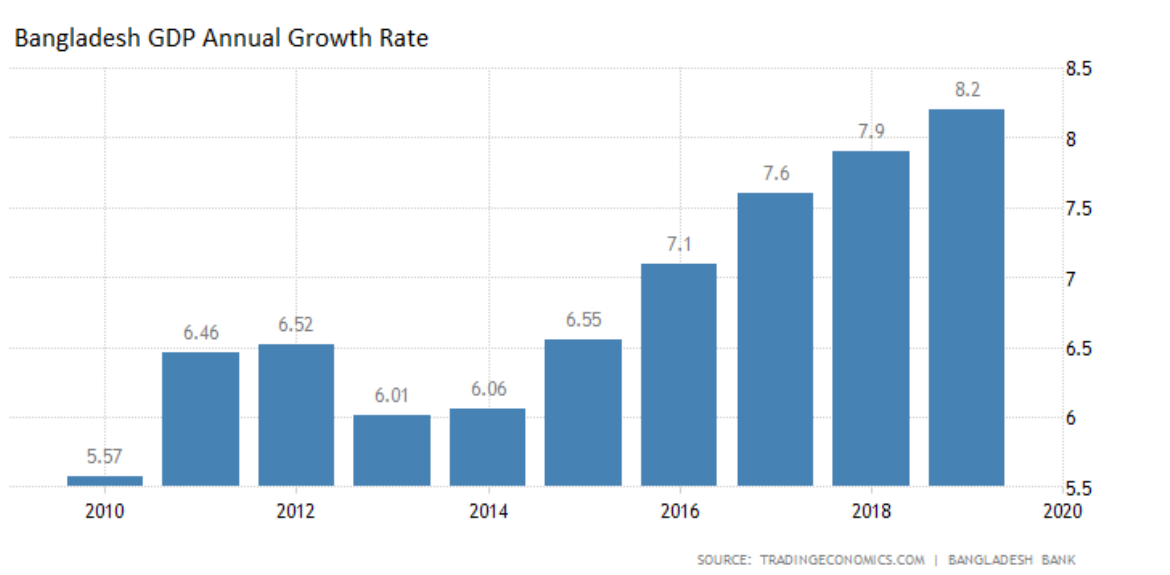
Figure 2: Bangladesh GDP Annual Growth Rate. Source: Trading Economics

The Covid-19 pandemic caused an adverse situation. Recently, Bangladesh Bureau of Statistics (BBS) (2020), reported a GDP growth of 5.24% closing for the Fiscal Year 2019-20 with a per capita income reaching to USD 2,064. According to IDLC monthly review (August, 2020), Covid-19 pandemic caused the businesses to slow down from March, this affected the banking sector as well. The report added that the real GDP as at August 2020 was 5.24% with a point to point inflation rate of 5.68%. (Appendices: 1)

Bangladesh has a considerably large amount of natural and agricultural resources despite less focus on agro-based industries due to lack of technology and investment. Bangladesh is an

import oriented economy in the case of both consumer and industrial items. The country mainly exports tea, garments, leather and leather products, seafood, paper, furnace oil, ceramics, jute and jute products. The global growth rate for fiscal year 2019 was 2.6%, whereas Bangladesh economy maintained its growth of 8.13% for the same year (World Bank, 2019). The report added that the growth was reinforced by strong domestic as well as external demand.

Industry	Employed population (mn)	Employed population (%)
Agriculture, forestry and fishing	24.7	40.5%
Manufacturing	8.8	14.4%
Wholesale and retail trade, repair of motor	8.7	14.3%
Transportation and storage	5.2	8.5%
Construction	3.4	5.6%
Other service activities	2.4	3.9%
Education	2.2	3.6%
Rest	5.6	5.6%
Total	**60.8**	**100.0%**

Source: Labor Force Survey 2017

Table 1: Industry-wise breakdown of Employment of Bangladesh. Source: UCB Capital

Bajpai P. (2019), analyzed, in a stable macroeconomic environment, with the pace of growing domestic demand and the growth in export-oriented industry, Bangladesh could be one of the fastest growing economies in the world. EBL Securities (2020), analyzed that this indicates that the economy is likely to return back to the previous growth within a short time.

2.3 Capital Market Overview

Capital markets have a significant contribution on development of an economy (Uddin F., 2020). The allocation of capital and economic growth can be achieved by an efficient capital market.

Bangladesh Capital market comprises of two Stock Exchanges, Central Depository, Sock Broker, Merchant Banks, Asset Management Companies (AMCs), Credit Rating Companies (CRCs), Custodians, and Investment Corporation of Bangladesh (ICB), (Bangladesh Bank).

The capital market instruments traded in Bangladesh stock exchange are ordinary shares, bonds and mutual funds, (Dhaka Stock Exchange, 2020). There are currently 361 listed companies, 2 corporate bonds and 37 mutual funds being traded at Stock exchange.

Figure 3: Bangladesh Stock Market (DSE) as of 24th September, 2020. Source: Trading Economics

According to an analysis by Uddin F. (2020), capital market's investors of Bangladesh have lost their confidence to invest due to negative growth of the capital market for two consecutive years and the Covid-19 pandemic crisis. Market analysts (2020) added that the inactive trading due to Covid-19 pandemic tied with low sales of share by sponsor/directors affected the government revenue from Dhaka Stock Exchange (DSE) in July 2020. According to Financial Express (2020), government's revenue from DSE fell almost 4% in the first month of the fiscal year 2021, subsequently falling 10 years low in the fiscal 2019.

Since the market reopened, the pharmaceutical industry shares dominated the market in recent trades and revenue since the pandemic outbreak, (Financial Express, 2020). The top most share from the Pharmaceuticals sector is Beximco Pharma, due to the launch of the country's first

antiviral drug for the pandemic, (Financial Express, 2020). Moreover, the report added the share of few insurance companies are also being trade. Since, the market corrections taking attempts, along with several IPOs taking place, the investment confidence rose among investor (H.M Jahid, personal communication, August 23, 2020).

2.4 Overview of Policies Imposed

2.4.1   Macroeconomic Policies

The response to the Coronavirus pandemic, fiscal and monetary policies have been embraced immensely on a global scale, (Layne, R, 2020). Cavallo (2020) stated some countries have competence to more sophisticated policy tools, than the others. His research confirmed and quantified that it was far difficult for developing economies to make declarations and implement the policies for recovery than it was for developed economies due to the immense difference of GDP share.

For the fiscal year 2020-21, the Central bank of Bangladesh announced an expansionary monetary policy for the economy's post-pandemic recovery, (TBS Report, 2020). The objective led to injecting low-cost money in the economy by cutting rates than previously stated rates. TBS report (2020) specified that Bangladesh bank aims to implement expansionary policy while keeping inflation growth stable. The report added, another reason behind the slowdown of economy due to pandemic, is natural calamities stoke cleating a potential risk as the country is agricultural sector dependent.

Figures in Percentage	Targets for FY 2020	Actual in FY 2020*	Targets for Dec 2020	Targets for Jun 2021
GDP Growth Rate	8.20	5.20	8.20	8.20
Inflation	5.50	5.65	5.04-5.93	5.04-5.93
CRR	5.50	4.00	4.00	4.00
Repo Rate	6.00	5.25	4.75	4.75
Reverse Repo Rate	4.75	4.75	4.00	4.00
Bank Rate	NA	5.00	4.00	4.00
Broad Money Growth Rate	13.00	12.70	14.00	15.60
Domestic Credit Growth Rate	17.40	13.70	15.00	19.30
Private Sector Credit Growth Rate	14.80	8.60	11.50	14.80
Public Sector Credit Growth Rate	37.70	53.30	35.60	44.40

*as of Jun 2020, Source: Bangladesh Bank, MPS

Table 2: Monetary Policy Statement for FY 2020-21: Key Figures. Source: BRAC EPL

Bangladesh Bank monetary policy cut policies from Actual in FY 2020to the Targets for December 2020 in order to achieve desired growth of 8.2% the fiscal yearend 2021without hindering inflation target of 5.4%, (TBS Report, 2020; BRAC EPL, 2020). Central bank

Bangladesh bank policy included a cut on overnight Repo rate to 4.75% from 5.25%, reverse repo to 4%, and Bank rate to 4% from 5%. In addition, public sector credit to increase by 44.4% and private sector by 14.8%.

The fixed domestic credit growth is targeted to 19.3%. This expansionary policy along with implementation of stimulus packages is likely to increase private sector credit growth (Financial Express, 2020). CRR was also reduced to 4% from 5% in order to help banks implement the government announced incentive aimed at boosting investment in productive sectors.

2.4.2   Capital Market Policies

Bangladesh Bank along with other regulatory bodies supported a favorable policy for development and to reduce the volatility of the capital market, (Monetary Policy Statement, 2020). In order to improve the capital market's liquidity, several initiatives were taken by Bangladesh Bank.

Easing of capital marker investment for Banks: According to the Monetary Policy Statement (2020), from the excess liquidity, up to 25% for Solo basis and 50% for consolidated basis, banks are to invest in capital market.

Formation of Special investment fund: A special investment fund was created for banks to invest in the stock market, (Monetary Policy Statement, 2020). Each bank are supposed to create a fund of Tk. 2.0 billion for five-years for capital market investment, (FE Report, 2020).

Introduction of new dividend disbursement policy: A new dividend disbursement policy was introduced that causes the banks to dividend distribution of up to 30% including 15% cash, (Monetary Policy Statement, 2020). Moreover, a maintenance of minimum 12.5% capital conservation is required.

Long-term repo: Long-term repo along with other liquidity improving policy measures are being taken in action which allow easy movement of funds helping the banks, (Monetary Policy Statement, 2020).

In addition, government has taken initiative to encourage the individual and institutional undisclosed cash in investing in the capital market, without any query of the source of the money, (Doulot, 2020).

Alongside, several other policies are being acted upon by Bangladesh Securities and Exchange Commission (BSEC) and DSE in order to enhance the capital market flow of fund.

BSEC, being one of the key policymakers of Capital market, has a significant role in bringing funds in the capital market, (Uddin F. 2020). FE Report (2020) mentioned, initiatives has been taken to bring potential quality Initial public offerings (POs), such as Walton, and cancelling several IPOs finding any irregularity, (Hossain, 2020; FE Report, 2020). BSEC is certifying good governance, ensuring full disclosure of company information and maintaining a 2% Directors' ownership of shares for the non-compliance matter, (FE Report, 2020; Monetary

Policy Statement, 2020; Mufazzal M. 2020). Furthermore, BSEC and DSE are incorporating innovative use of information technology, allowing ease to trading and to access of information, (FE Report, 2020; Monetary Policy Statement, 2020). Approaches to bring foreign fund in capital market investment in mutual funds and government bonds, are being in acted upon, (FE Desk, 2020). The policies has the objective to boost investor's confidence leading to investment in worthy quality businesses which can positively impact on the whole economy, (Uddin, 2020).

Chapter 3

Methodology

3.1 Research Design

Being able to connect the theories gathered and applying those to conduct a research study play a key role so that the research objectives are met accordingly. First, gathering knowledge about conducting research and observing previous research done by researchers is important. This allows us to gain general ideas and gain a sense of purpose directing how to move forward with the following research.

Second, going through similar publications and research areas in similar criteria leads to apply knowledge towards the right direction. This broadens the perspective and knowledge.

Next, outlining the contents that will be covered in the research needs to be focused so that the information is not vague or general. It is important that the research has a sense of direction and is specific.

The types of research included has a significant role. There is the presence of basic research as well as applied research. Basic research expanded knowledge whereas applied research drove a solution as their names stated.

3.2 Research Design

The process of gathering and measuring data on variables of importance in a conventional systematic manner that allows one to answer the specified research questions, test hypotheses, and evaluate the results is called data collection, (Kabir, 2016). The data collected can be either qualitative or quantitative. This research comprises of Applied Research, meaning both Qualitative Research and Quantitative research along with Action Research and Evaluation Research is conducted in order to properly analyze and interpret the results practically.

In terms of the source, data collection can be furthermore dividend into Primary data and Secondary data collection. This research data has been collected from primary data and secondary data to have a complete study and understanding of the matter.

3.2.1. Primary Data Collection

For primary source of data one on one in-depth interviews were hosted. In order to maintain reliability and validity two separate one on one interviews were conducted of two interviewee who are very closely associated to Bangladesh Capital market. Both the interviewees were Fund Managers and Researchers from Research department of Shanta Asset Management Limited (AML), Bangladesh. The interviewees were Mr. H.M. Jahid Hassan, CFA (Deputy Fund Manager, Shanta AML) and Mr. Salman Rahman, CFA (Deputy Fund Manager, Shanta AML). Their practical experience and knowledge of the Capital Market as Fund Managers and theoretical knowledge as also being CFAs, allows enriched information gathering from these interviews. The main objective of the interviews were to gather knowledge from practical

experiences interpreting the Bangladesh Capital market under current circumstances and implementation of the policies.

3.2.2.   Secondary Data Collection

Secondary data is data collected from an already published source which can be of any form, collected for the own purpose of the publisher which can be used by others for other purposes, (Kabir, 2016). This research convey multiple secondary source data such as published books, chapters, journals and newspapers. Various study materials such as CFA and CA study materials are used for several theories and information. Published reports of Capital market brokerage firms and, securities and exchanges provided essential data. Moreover, authentic website of governments, brokerage firms, exchanges, e-papers are also used.

3.3 Data Analysis Method

Qualitative Research:

In-depth interviews of Fund Managers allowed the understanding of the effect and result of policies and Covid-19 pandemic over current circumstances of Capital market and economy of Bangladesh. Moreover, linear regression applied to see the relationship between few of the policies and the DSE revenue turnover. Briefly the current condition and effect of the policies on other financial markets such as the money market and foreign exchange market of Bangladesh is observed along with their impact on the Capital market capital.

Quantitative Research:

Various statistical tools and observation technique is used to record the data on daily basis. Daily market data of index movement recorded, and changes noted.

Statistical tool:

1. **Trend Analysis:** Trend analysis of the DSE Index over time will be given in order to see the change during the period when policies are implemented.

2. **Graphical Presentation:** Daily market data used to create graphical chart and observe the change in index for the time period before and after pandemic, and time after policies applied.

3. **Regression Analysis:** 91 days T-Bill data used to gain information about the relationship between the dependent variable, DSEX Index, and independent variables, economic policies.

Action Research:

Action Research evaluate, investigate, and gives logic to research methods designed in order to recognize the problems. The developed practical solution by government and suggested solutions by economic analysists affecting the current situation is mentioned.

Evaluation Research:

Evaluation Research provide the assessments of the past, the present and the proposed solution effecting the future. The past Capital market crash due to policy changes and the effect is compared to the present if the same policy is implemented for market correction. The cost benefit analysis is performed to examine the effect so far.

Chapter 4

Analysis and Findings

4.1 Analysis of Key Macroeconomic Policies

4.1.1.   Cut in key Policy rates

According to TBS Report (2020), Bangladesh macroeconomic policy for Fiscal year 2021 includes cut of key policy rates to bring money into the economy. The report added, the cut of Repo rate to 4.75% from 5%, Reverse Repo to 4% from 4.75% and bank rate to 4% from 5%. A member of BSEC, Dr. Rahman M. (2020), has stated the lower Repo rate will provide adequate liquidity to businesses and individual households. Islam S. (2020), working with Asset Management Company, stated in his interview, a risk-free rate of 4.75% is likely to lead to private sector credit growth. A drop in the rates, allows low cost of fund for Banks, and could lead to banks lowering the lending rate, (Clear tax, 2020). Besides, there are 30 listed in stock exchange and the access to cheaper capital is likely to cause an effect on the Earnings per share (EPS), allowing rise stock market activity. Easing the source of finance and flow of fund to lead to increasing economic activity, is likely to lead to effect the earnings of the companies and their share prices.

Change of bank rate, which was unchanged since 2003, and Repo rate, Government seeks to increase money supply and flow of fund in the economy, (TBS Report, 2020). According to BRAC ELP report (2020), the goals that government seeks to achieve through the cut in the key policy rate, will work only if the people and businesses gain confident of winning against the coronavirus.

4.1.2. Policies to initiate Banks' investment in Capital market

According to Monetary Policy Statement (2020), a special investment fund Tk. 2.0 billion for each bank was created for banks to invest in the stock market. One of the main reasons behind the cut in Repo rate was to encourage banks to invest in Capital market, (FE Report, 2020). This policy was initiated due to poor response from bank's investment in Bangladesh's capital, however, there was unwillingness from the banks, (FE Report, 2020). Cutting repo rate and the special fund investment together, is likely to increase bank's involvement in capital market.

4.2 Sector wise Analysis

The policy is aimed at agriculture, SME and manufacturing sectors in order to recover the economic pace, (Haroon J., 2020). As there is a possibility of crop losses due to natural calamities hence food production and food import is aimed to be continued otherwise it will lead to an increase in CPI.

This policy is likely to reduce interest on both deposit and lending in the upcoming period. Economist (2020) cautioned that the policy needs to be monitored as it could lead to capital flight and real estate bubble. There may be an increase in demand for real estate leading this rise in price. Following the similar policy of cut in repo rate in India, neighboring country to Bangladesh, has shown a positive effect in Indian stock market index due to the rise in bank and realty stock in India, (Economic Times, 2020). Having similar circumstances and laws, Bangladesh might have a similar effect. Moreover, pandemic had caused people to be dependable on and realization of importance of digitalization, (Uddin, 2020). This may also effect the investment in IT sector, (H.M Jahid, 2020, Personal Communication).

Lastly, the present non-performing loan (NPL) situation in the banking industry might deteriorate in the longer-term due to deteriorating business conditions along with the capitalization of interest and principal obligations payable in the future.

4.3 Interest rate, Risk-free rate and Capital market

According to Alam and Uddin (2009), both interest rate and stock exchange are two very fundamental factors of economic growth of an economy. Their study based on six economies, including Bangladesh, resulted concluding that interest rate has significant negative relationship with the share price.

According to Light Castle Analytics Wing (2019) the hike in interest rate was the main factor for the capital market's incidents in 2018 was the hike in interest rates. The high difference between risk free rate and bank deposit rates caused institutional and individual investors to divert their funds from capital market and money market to the high rate offered risk free rate of National Savings Certificates (NSCs), (IDLC report, 2019).

Financial Instrument	Interest Rate Offered
National Savings Certificate (NSC)	11.04% − 11.76%
Bank Deposit	5% − 8%

Table 3: Risk free rate and Bank deposit rate 2018. Source: Star Business Report

As of July 2020, first month of the fiscal year 2021, the bank deposit rate is stated 5.02% from banks with a spread of 2.77%, while non-bank financial institution stands at deposit rate of 9.5% with a spread of 3.37%, (Bangladesh Bank Month report, 2020). The risk free rate having a lower rate than deposit rates, such that 91 days T-bill rate hovering around 4.45%, 4.52%, 3.01% as on July 2021, August 2021, September 2021, respectively, (Data collected). Hence, likely that the capital market will not be hampered by the risk free rate and bank rate as long as kept checked.

4.4 Statistical Analysis
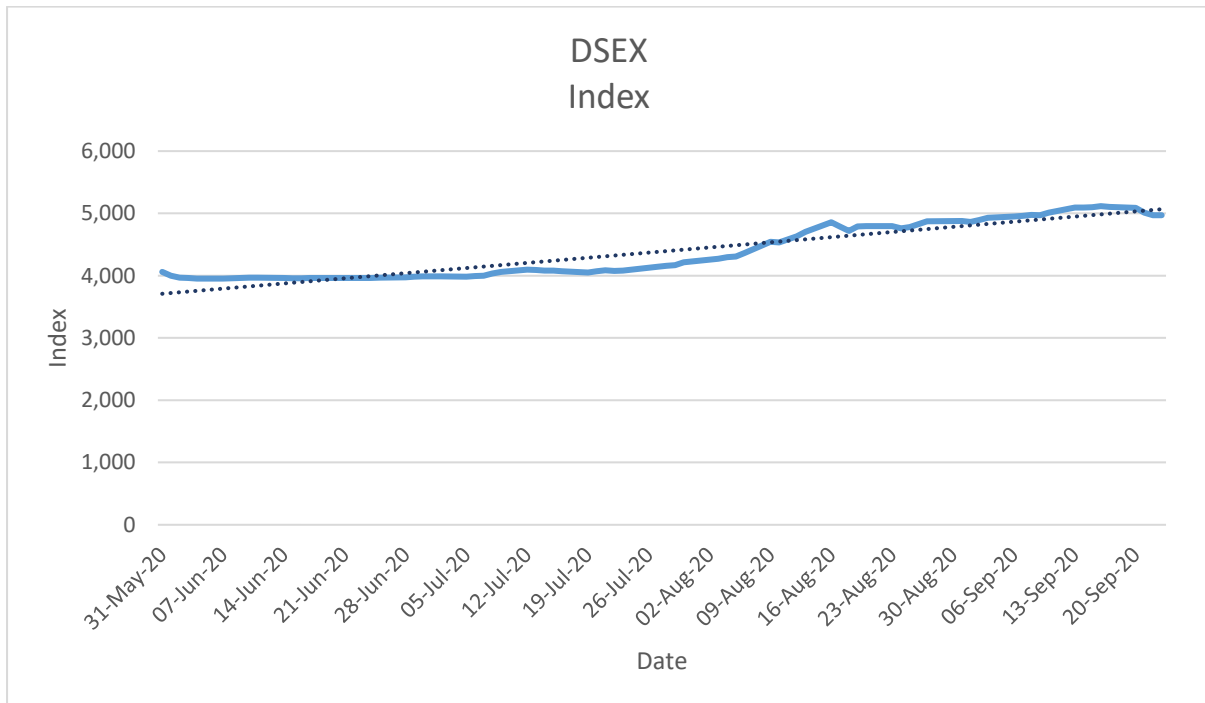
4.4.1.   Trends Analysis

Figure 4: DSEX Index since after reopening market till 23rd September

Trend analysis has been conducted from the daily market data recorded since the market reopened to show the stability of market. An upward slopping trend line is observed, giving greenlight to investment. From the trend line, a positive Capital market activity could be denoted. The policies were for the Fiscal year 2021, which starts at July 2020, and a capital market rising slope from around July can be denoted. It could be said, it is likely that the changed in policies has resulted in an upward slopping curve, or market improvement. Moreover, a forecast of DSEX Index has shown an upward or increasing slope in the near future, (Trading Economics, 2020).
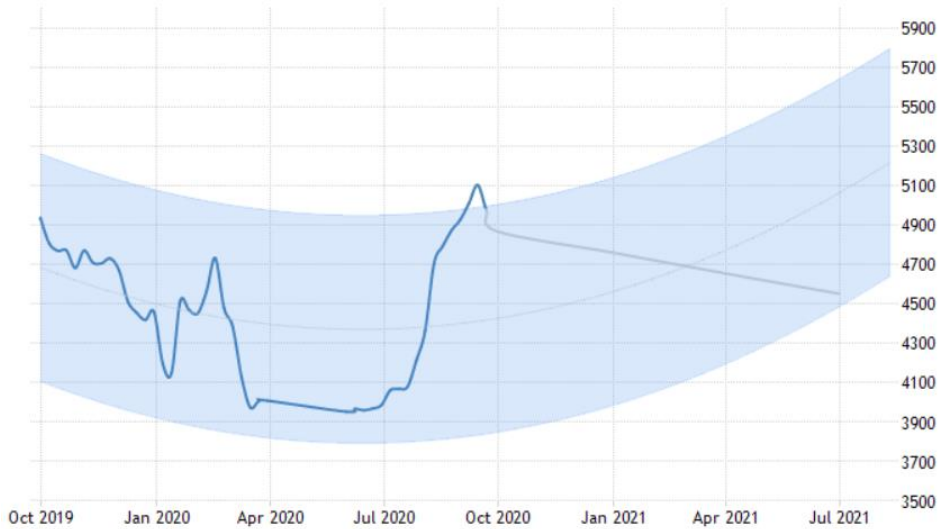
Figure 5: DSEX Forecast. Source: Trading Economics

4.4.2.   Regression Analysis
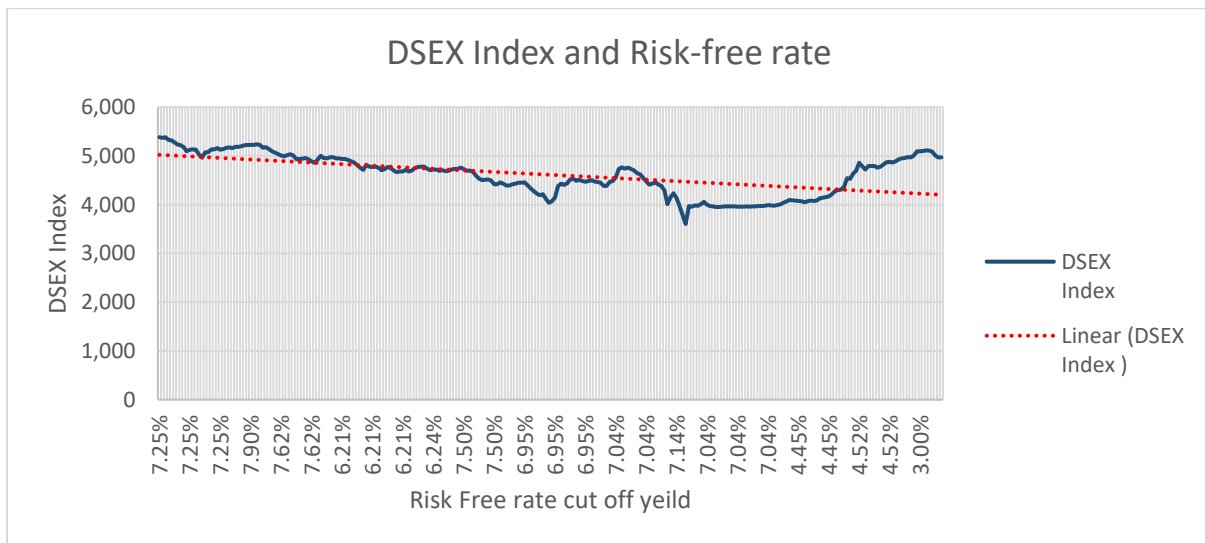
Figure 6: DSEX Index and Risk-free rate Regression

Market Index data from Fiscal year 2019 till September 2020 and monthly risk free rate, 91 days T-bill cut off yield is used for the regression model. DSEX Index was considered the dependable and T-bill rate independent variable.

The Correlation Coefficient (Multiple R) show the strength of the linear relationship between the variables, which was 0.0564, in this analysis, meaning the direct relationship between the two variables are not strong. However, only the last day of the month's index with the month

22

end cut off yield is taken, due to the lack of data, hence the accuracy cannot be fully determined. From the graph, it can be denoted that when the rates set very low, after reopening the market, they show an inverse relationship. Meaning, the lower the 91 day cut off yield, the higher the market index. The lower the cut off yield, 3%-4.45%, same time market index hovers high.

Chapter 5

Conclusion

5.1. Recommendation

5.1.1. Digitalization

According to Uddin (2020), currently the DSE uses a trading platform called Flextrade, which allows digital trading from suitable devices. The author also mentioned that only 5% of the trades occur through the online platform. Due to pandemic, the importance of a proper trading platform allowing physical distance is required. However, being a developing economic, on progress towards digitalization, it is expected traders and investors to lack proper knowledge and device to perform it. Hence, a very user-friendly platform, which is compatible with most device, and proper education and encouragement towards using the platform is required. The more hassle-free trade, the more like investors will be motivated to trade.

5.1.2. Encouraging Foreign Investors

In 2017, DSE got full a membership to The World Federation of Exchanges Limited (WFE) allowing attracting investor from around the world, (DSE report, 2018). The net foreign investment of the capital market fell by Tk. 1,399 crore in fiscal year 2020, (Niaz, 2020). According to Uddin (2020), foreign investors generally invest for a long term, bringing stability in the market. This is likely to lead to higher market capitalization. One disadvantage is that in case of an economic downturn, or currency depreciation, the investors pull back the

money, as faced in previous events. Despite, the drawback, foreign investment brings large market capital, causing reduced market inactivity, while bringing local investor's confidence back. Proper and flexible regulations must be set that encourages foreign investors along with also does not cause the problem of sudden liquidation of investment by foreign investors during any economic instability. More encouragement and attraction could be paid toward the mutual funds and government and corporate bond market to achieve so.

5.1.3.   Developing a vibrant bond market

Currently, there are only two corporate bonds that are listed DSE, Pran Group and Ashuganj Power Limited, in international and local market respectively, (DSE website, 2020; Uddin 2020). Bonds being a less risky investment along with fixed coupon payment, it can increase capital market investment. At the moment, companies prefer banks instead of bonds for financing, due to easier access. According to Uddin, the issuance bonds in Bangladesh, is a very difficult and lengthy process. Making the regulation hassle free and less time consuming, will develop a vibrant bond market.

5.2.   Summary

Covid-19, leading to of quarantine, and the last few years Bangladesh has undergone negative growth in the capital market combined led to a fall investors' confidence (TBS Report, 2020; LightCastle Analytics Wing, 2020). The Central Bank's expansionary monetary policy and the capital market policies initiated has effected the capital market investment activity. Some with positivity, other policies need to be kept in check to avoid clash with capital market achievement goals. Having capital market inefficiency does impact an economy drastically. Initiative needs to be taken to enhance the market through a broader aspect and motivation for more investment through market efficiency.

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Appendix A.

Appendices 1: Bangladesh Economy Data

Indicators	2015	2016	2017	2018	2019
Population (million)	160	162	163	165	167
GDP per capita (USD)	1,220	1,372	1,521	1,650	1,829
GDP (USD bn)	195	222	248	272	305
Economic Growth (GDP, annual variation in %)	6.6	7.1	7.3	7.9	8.2
Industrial Production (annual variation in %)	11.8	13.1	14.6	14.8	8.6
Fiscal Balance (% of GDP)	-4.0	-3.4	-3.3	-4.6	-5.2
Public Debt (% of GDP)	33.7	33.3	33.4	34.6	35.7
Money (annual variation in %)	12.4	16.4	10.9	9.2	9.9
Inflation Rate (CPI, annual variation in %, eop)	6.1	5.0	5.8	5.3	5.7
Inflation Rate (CPI, annual variation in %)	6.2	5.5	5.7	5.5	5.6
Exchange Rate (vs USD)	-	-	-	-	-
Exchange Rate (vs USD, aop)	-	-	-	-	-
Current Account (% of GDP)	1.8	1.9	-0.5	-3.5	-1.7
Current Account Balance (USD bn)	3.5	4.3	-1.3	-9.6	-5.3
Trade Balance (USD billion)	-5.9	-5.4	-9.5	-18.2	-15.4
Exports (USD billion)	30.7	33.5	34.0	36.3	40.0
Imports (USD billion)	36.6	38.8	43.5	54.5	55.4
Exports (annual variation in %)	3.3	9.0	1.7	6.6	10.2
Imports (annual variation in %)	-0.7	6.0	12.0	25.2	1.8
International Reserves (USD)	27.5	32.1	33.2	32.0	32.7
External Debt (% of GDP)	18.6	17.5	19.0	19.2	-