Economic and Financial Stability Implications of

COVID-19

Bangladesh Bank and Government's Policy Responses

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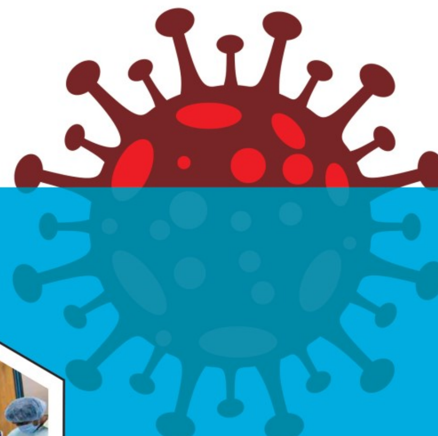

Bangladesh Bank

Financial Stability Department

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Economic and Financial Stability Implications of COVID-19: Bangladesh Bank and Government's Policy Responses

Financial Stability Department

Bangladesh Bank

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Kazi Sayedur Rahman, Deputy Governor

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Message from the Governor

The COVID-19 pandemic has wreaked unprecedented havoc and left the world with uncertainties over economic and financial stability issues. The containment measures to restrain the spread of this virus disrupted demand conditions and supply chains; which eventually resulted into substantial decline in economic activities and massive job losses throughout the world. Despite multi-faceted challenges, Bangladesh economy was able to withstand these shocks, remain resilient, and looking towards maintaining its high growth trajectory, under the dynamic leadership of Honorable Prime Minister Sheikh Hasina.

The pandemic disproportionately affected various sectors of the Bangladesh economy. Among the three broad sectors, manufacturing sector was hard hit followed by service sector while agriculture sector remained relatively insulated from the shock waves of the pandemic. Especially, the readymade garments, real estate, tourism, health, education, airlines, transport and SME sector have been largely affected. Bangladesh Bank and other financial sector regulators have made coordinated efforts with the Government in various fronts by combining fiscal and monetary stimulus, regulatory and supervisory measures and financial policy innovations to overcome the adverse impacts of the pandemic on our economy. Government has declared mass-scaled low-cost stimulus packages of BDT 1.21 trillion for all sectors of the economy. Bangladesh Bank, being the monetary authority of the country, has quickly responded to this call by introducing voluminous refinance schemes, monetary easing and reviewing the key policy rates to ensure adequate liquidity and fund flows into the financial system to facilitate the faster recovery process of the real economy.

In particular, we have reduced CRR, Repo rate and Bank Rate, enhanced the advance-to-deposit ratio (ADR), relaxed loan classification policy, introduced credit refinancing scheme, lowered interest rates and enhanced the size of Export Development Fund to support manufacturer-exporters of the country. On the humanitarian front, we have instructed the banks to extend their CSR funds to health sectors and provided foreign exchange related policy support to facilitate urgent imports of life-saving drugs, medical kits or equipment and other essential medical items used for treatment of corona virus. Fintech channels have also been beefed up for smooth transactions through ATM, POS and MFS for payment of both business obligations and wages and allowances of export-oriented industry workers.

These initiatives have reinforced the financial system and cushioned it against any major adverse shock. The external sector recovered early due to high growth of remittance inflows, sustained export growth and low-cost of import leading to Current Account Balance into positive territory. Foreign reserves recorded a new high of USD 42.97 billion at the end of December'20. Given the positive outlook in advanced economies in 2021 and rapid vaccination at home as well as by our counter-part countries, Bangladesh economy is prepared to reap the dividend of rising optimism. Hence the external sector indicators might further boost up in 2021.

Banking sector withstood the shocks with notable resilience which is reflected in its positive outlook in terms of capital adequacy, asset quality, profitability and liquidity. Financial institutions are expected to experience gradual recovery while the stock market has rebounded and remains vibrant. In the medium term, our strategy should be to give emphasis on redesigning supply chains, facilitating reallocation of workers to less vulnerable but growing sectors, adaptability with modern workplace and technology, exploring possible diversification in exports, facilitating attractive investment environment, reappraising the conventional business models, improving vigilance over the asset quality and strengthening governance of financial sector stakeholders in preserving the financial stability and attaining the confidence of all economic entities.

We hope all these strategic moves would put Bangladesh forward to realize the dream of the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman, to make the country "Sonar Bangla". We fervently urge all financial sector regulators, financial intermediaries and other related stakeholders to work diligently for proper implementation of policies for accelerating further recovery of the economy and moving ahead towards achieving upper middle-income country status within the next few years.

Finally, I hope this special publication will be able to provide valuable insights, which would guide the stakeholders to address the post-COVID economic and financial stability risks and stimulate the economy back to its accelerated path of pre-pandemic buoyancy. My heart-felt thanks to Financial Stability Department for their timely initiative and diligent efforts in preparing this seminal report.

Fazle Kabir
Governor

Message from the Deputy Governor

It is indeed a matter of great concern that the COVID-19 pandemic has left excruciating pain in human lives and livelihoods and triggered severe economic disruptions all over the world. The crisis has caused the world GDP to decline miserably compared to that of pre-COVID-19 level and forced the authorities to adopt various measures to restrict economic and social activities in almost all countries. However, countries' constant efforts have restored hope to overcome the crisis through offering and implementing fiscal and monetary stimulus packages.

Prior to the outbreak of COVID-19, Bangladesh was experiencing accelerated economic growth with moderate level of financial stability for a considerably longer period. But, the COVID-19 shock has made it really challenging for the country to maintain sustained GDP growth, exports, investment, and fiscal revenues at similar paces. The shock has already started taking toll on the Bangladesh economy as the real GDP growth declined considerably in the FY20. Key export destinations of the country have been hit hard. During the earlier phase of COVID-19, the manufacturing industry and service sectors have been affected most due to multifaceted demand and supply shocks while the agriculture sector appeared to remain relatively stable. In particular, travel, tourism, hotel and restaurants, SME, real estate, RMG and textile industries have been affected largely. However, most of these industries appeared to have regained some momentums back, which reveal the greater resilience of the economy.

On the fiscal front, COVID-19 has disrupted Government's fiscal management mainly due to contractionary effects on household and business incomes accompanied by sudden increases in social and health sector related expenditures. Yet, there seems to be no major stability threat running from fiscal balance to the financial sector of the country. More importantly, analysis of this study finds that Bangladesh, in terms of fiscal sustainability, remains in a safer zone. However, the effective management of deficit financing may still be a key issue to address in the coming years.

Though shock waves of COVID-19 were first transmitted through trade channel, the external sector still appears to be resilient. Export began to recover from May 2020 and surpassed pre-COVID level in July 2020. January to April 2020 was the distress period for remittance inflow, which began to pick up from May and has begun to surpass the pre-COVID level since July 2020. Consequently, the Current Account Balance has moved into the positive territory since July 2020. Foreign exchange reserves, external debt to GDP ratio, Foreign exchange reserve to short-term external debt demonstrate no major stability threat, at least, in the short-term period.

Both Government and Bangladesh Bank have placed all possible efforts on board for speedy recovery of the economy. Alongside various containment measures, the Government has declared several stimulus packages amounting to BDT 1,213.53 billion. To support these programs, Bangladesh Bank has provided adequate liquidity and financial supports through refinance schemes and other measures to keep the banking sector functional and ensure smooth credit flows to the real economy. Furthermore, BB took several cohesive policy measures, e.g., notable cut down in repo rate, CRR, and Bank Rate, and increase in ADR to facilitate the money market to address the liquidity challenges in the context of the pandemic.

The banking sector was reasonably affected at the earlier stage of the COVID-19. However, the sector quickly recovered this shock due to pre-emptive measures taken by the Bangladesh Bank. All the performance indicators such as capital adequacy, profitability, and asset quality remain healthy and to some extent, move positively. The financial institutions (FIs) sector also has shown a sign of recovery in the third quarter of 2020, yet, reducing the accumulated NPLs would be a substantial challenge for this sector in the post-COVID period. Bangladesh Bank continues to facilitate payment system services through its automated clearing and settlement system windows namely BACPS, BEFTN, NPSB, and RTGS for smoother transactions. Besides, transaction limit and cost of different payment channels have been relaxed. The Government has also relied on mobile financial services (MFS) for transferring social safety payments.

COVID-19 shocked the stock market at the initial phase of the pandemic, but the market has rebounded subsequently. Implementation of sizeable stimulus packages declared by Government, BB's expansionary monetary policy, robust growth of wage earners' remittance, early resumption of major economic activities and above all, prudent measures initiated by the Bangladesh Securities and Exchange Commission have enhanced public confidence in building a vibrant capital market during the pandemic. The issuance of Shariah-based Sukuk by the Government recently is a milestone in this connection. IDRA, as the insurance industry regulator, has taken necessary measures to abate the adverse impacts and bolster the insurance industry. During the initial phase of COVID-19, MFIs have been affected mainly due to their closure of business activities. However, given their high capital ratio and low NPL, the industry appears to be resilient.

Post COVID-19 period could be more challenging for us. Special attention needs to be given to the SMEs for sustaining their significant role in large-scale employment generation and fostering inclusive growth. Facilitating a conducive environment for the micro, small, and medium enterprises (MSMEs) would also be vital in supporting the livelihoods of the poor and vulnerable population. Asset quality, solvency, liquidity position of banks and FIs should be managed prudently when Bangladesh Bank would unwind the ongoing policy relaxations and other incentives. Therefore, efficient distribution of stimulus funds in various economic sectors and concomitant close monitoring of the end-use of those funds is crucial. To this end, I would urge the banks and FIs to place contingency measures to their respective boards well ahead taking into account the future challenges.

I firmly believe the business entities and other stakeholders of the financial system will be benefited from the stimulus packages and policy easing and will thus contribute to reviving the financial system from the devastating impact of COVID-19. Indeed, it is the prime time to demonstrate our strengths and efforts once again to uphold the ultimate dream and aspiration of the *Sonar Bangla* envisioned by the Father of the nation 'Bangabandhu Sheikh Mujibur Rahman'.

It is my pleasure to commend and thank the officials of the Financial Stability Department for their dedication and efforts in preparing this seminal report. I also thank the supports rendered by other departments of Bangladesh Bank along with other regulatory bodies. I believe this report will add momentous values not only for the policymakers to understand and project the risks, vulnerabilities, and potentials of the different economic and financial segments of Bangladesh in the COVID-19 perspective but will also serve as a key reference for the academicians, researchers, development organizations and other stakeholders.

Kazi Sayedur Rahman
Deputy Governor

TABLE OF CONTENTS

LIST OF CHARTS

LIST OF TABLES

LIST OF BOXES

ACRONYMS

AD	Authorised Dealer
ADB	Asian Development Bank
ADR	Advance-to-Deposit Ratio
AGM	Annual General Meeting
ALS	Assured Liquidity Support
AML	Anti-Money Laundering
ATM	Automated Teller Machine
BACH	Bangladesh Automated Clearing House
BACPS	Bangladesh Automated Cheque Processing System
BAU	Business-as-Usual
BB	Bangladesh Bank
BBLC	Back-to-Back LC
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
BEFTN	Bangladesh Electronic Fund Transfer Network
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BKMEA	Bangladesh Knitwear Manufacturers and Exporters Association
BOP	Balance of Payment
BRPD	Banking Regulation and Policy Department
BRT	Binary Recursive Tree
BSEC	Bangladesh Securities and Exchange Commission
BTMA	Bangladesh Textile Mills Association
CAB	Current Account Balance
CAMD	Capital Adequacy and Market Discipline
CAR	Capital Adequacy Ratio
CCAM	Customer Complaint Address Module
CCB	Capital Conservation Buffers
CCP	Central Counterparty
CFT	Combating the Financing of Terrorism
CGS	Credit Guarantee Scheme
CMSME	Cottage, Micro, Small and Medium Enterprise
COVID	Corona Virus Disease
CRAR	Capital to Risk-Weighted Assets Ratio
CRM	Cash Recycling Machine
CRR	Cash Reserve Ratio
CSR	Corporate Social Responsibility
DFIM	Department of Financial Institutions and Markets
DITF	Deposit Insurance Trust Fund
DMD	Debt Management Department
DOS	Department of Off-Site Supervision

DSE	Dhaka Stock Exchange
EDF	Export Development Fund
EDRP	External Data Request Processing
EGM	Extraordinary General Meeting
ETF	Exchange Traded Fund
FBCCI	Federation of Bangladesh Chambers of Commerce and Industries
FC	Foreign Currency
FDI	Foreign Direct Investment
FI	Financial Institution
FPM	Financial Projection Model
FSD	Financial Stability Department
FX	Foreign Exchange
FXR	Foreign Exchange Reserve
FY	Fiscal Year
GDP	Gross Domestic Product
GFET	Guidelines for Foreign Exchange Transactions
GoB	Government of Bangladesh
GTF	Green Transformation Fund
HFO	Heavy Furnace Oil
HSFO	High Sulphur Fuel Oil
IBFT	Internet Banking Fund Transfer
ICB	Investment Corporation of Bangladesh
ICT	Information and Communications Technology
IDR	Investment to Deposit Ratio
IDRA	Insurance Development and Regulatory Authority
IMF	International Monetary Fund
IPO	Initial Public Offering
IRF	Interchange Reimbursement Fee
IT	Information Technology
KYC	Know Your Customer
LC	Letter of Credit
LCR	Liquidity Coverage Ratio
LIBOR	London Inter-Bank Offered Rate
LSF	Liquidity Support Facility
MCR	Minimum Capital Requirement
MDR	Merchant Discount Rate
MFI	Microfinance Institution
MFS	Mobile Financial Services
MPD	Monetary Policy Department
MRA	Microcredit Regulatory Authority
NBR	National Board of Revenue
NDD	Neuro Developmental Disabilities

NFC	Near Field Communication
NSFR	Net Stable Funding Ratio
NIM	Net Interest Margin
NPL	Non-Performing Loan
NPSB	National Payment Switch Bangladesh
NSDP	National Summary Data Page
OMS	Open Market Sale
PCB	Private Commercial Bank
PCR	Polymerase Chain Reaction
P/E	Price-Earnings Ratio
PKSF	Palli Karma-Sahayak Foundation
POS	Point of Sale
PPE	Personal Protective Equipment
PPGC	Private Power Generation Company
QIIP	Quantum Index of Industrial Production
REER	Real Effective Exchange Rate
REPO	Repurchase Agreement
RMG	Ready-Made Garments
ROA	Return on Assets
ROE	Return on Equity
RTGS	Real Time Gross Settlement
SAARC	South Asian Association for Regional Cooperation
SCB	State-Owned Commercial Bank
SLR	Statutory Liquidity Ratio
SMA	Special Mention Account
SME	Small and Medium Enterprise
TT	Telegraphic Transfer
UAE	United Arab Emirates
UK	United Kingdom
USA	United States of America
USD	US Dollar
USSD	Unstructured Supplementary Service Data
VAT	Value Added Tax
VGF	Vulnerable Group Feeding
WLAMA	White Label ATM and Merchant Acquiring Services

EXECUTIVE SUMMARY

The devastating impacts of COVID-19 pandemic across the globe have brought about unprecedented challenges to the global financial system. Amidst this widespread crisis, the economy of Bangladesh is also exposed to the consequential macroeconomic shocks created by the pandemic. In the stated context, this report contains an assessment of the risks and vulnerabilities posed by the pandemic to the financial system of Bangladesh, and the initiatives taken by the Government as well as Bangladesh Bank to mitigate the adverse impacts in this regard. Moreover, the report reveals policy responses, structural changes and issues relating to developments and regulations of the financial sector in the wake of this pandemic, which might have implications for the stability of the financial system of Bangladesh.

The most significant challenge that the COVID-19 pandemic poses to the global economy is to make a trade-off between human lives and livelihoods. To this end, authorities around the world have taken all possible sorts of measures to curb the spread of the pandemic while facilitating the economic activities to the best extent possible. Yet substantial containment measures in most advanced and emerging market economies have caused heavy disruptions in demand conditions and supply chain management, resulting in sharp contraction of global economic growth and massive job losses. Though the magnitude of the impacts of the pandemic on Bangladesh economy seems to be less severe so far compared to most of the other economies due to timely policy initiatives by the Government as well as Bangladesh Bank, it remains pivotal to identify the transmission channels of the impacts of COVID-19 and assess the implications of such impacts on the macro-financial scenario of Bangladesh in order to maintain current high growth trajectory of the economy and also to mitigate any unexpected future shocks to the financial system stability.

This report outlines the major transmission channels of shock waves of COVID-19 to the four main sectors of the Bangladesh economy namely real sector, fiscal sector, external sector, and monetary and financial sector. An aggregate transmission framework including these four sectors has depicted how the impact of COVID-19 can propagate through these sectors to eventually hit the macro-financial stability. Using this conceptual framework, scenario or technical analysis has been conducted to assess the impact of COVID-19 on the respective sector and its implications for financial stability.

Due to COVID-19, the real sector of Bangladesh economy has been disrupted during the second half of FY20 by both demand and supply side shocks in varying degrees across different sectors and sub-sectors. As a result, the real GDP growth rate slowed down to 5.24 percent (provisional) in FY20, declined by 2.94 percentage points from the preceding fiscal year. Among all the three sectors of real economy, the industry sector was impacted most followed by manufacturing sector and agriculture sector. Quantum Index of Manufacturing Industry experienced sharp fall since January'20 to April'20. As the raw materials of manufacturing industry are mostly imported from abroad, particularly from China and India, it immediately affected manufacturing industry through supply-chain disruption as soon as the pandemic broke out in China, though the first COVID-19 case in Bangladesh was confirmed in March'20. However, from May'20 onwards, the industry moved along the way of strong recovery. Major industry-wise quantum index exhibits W-shaped recovery of food industry and V-shaped recovery of textile and wearing apparel industry while pharmaceuticals industry remained unaffected and experienced rising trend even during the pandemic. Furthermore, general holiday, quarantine, social distancing, restriction on social gathering and ban on international flights and other measures had consequences for service sector, the highest contributor to Bangladesh GDP. Growth rate of this sector declined by 1.46 percentage points and reached at 5.32 percent in

FY20. The major areas of service sector, which have been affected due to the containment measures, are transport, storage and communication, wholesale and retail trade, financial intermediation, real estate, renting and business activities.

On the fiscal front, COVID-19 has impacted Government's revenue collection as household and business incomes have been depressed. Revenue collection by NBR shrunk by 1.74 percent in FY20 due largely to the pandemic situation. However, growth of total revenue collection moderated to 4.43 percent in FY20 as compared to 11.81 percent in FY19. Growth in public expenditure also slowed down in FY20 compared to the preceding fiscal year. Government's borrowing from the banking system has increased markedly to meet up the fiscal deficit in this pandemic year. Though fiscal sustainability indicators deteriorated slightly in FY20, they remained mostly resilient. Tax-to-GDP ratio declined to 7.9 percent in FY20 from 8.9 percent in FY19. Public debt-to-GDP ratio in FY20 was 33.4 percent, which was well below the threshold level of 40 percent. Furthermore, Binary Recursive Tree (BRT) analysis indicates that Bangladesh economy is not likely to be crisis-prone in 2020 in terms of debt sustainability. Moreover, based on projected macroeconomic data, it is expected that Bangladesh will remain in safer zone (with a minimum 2.3 percent probability of crisis) over the 2021-2023 period.

External sector appears to be resilient. Exports and imports, which declined throughout January to April'20, recorded quicker upturn since then with a minor fluctuation. After a slow growth during January to April'20, remittance inflow began to rise sharply and surpassed pre-COVID-19 period (i.e., 2019) by some big margins on point-to-point basis despite the ongoing crisis. As a result, the current account balance, which remained negative till June'20, turned into positive in July'20 and persisted thereon. FDI sharply declined in the first quarter of 2020 as compared to the same quarter of 2019. However, the declining rate has slowed down in April-June quarter of 2020 and thereafter remained mostly stable. Similarly, inflow of external debt has moderated during the first quarter of 2020 because of a probable delay in approval or disbursement of funds by the development partners, which in turn speeded up from the next quarter and stood at nearly USD 70 billion by the end of September'20. Eventually, the foreign exchange reserve reached a new record of USD 42.97 billion at end-December'20.

Banking sector was mainly affected at the earlier stage of COVID-19 in Bangladesh. The growth of loans and advances markedly slowed down in March'20 as the banks remain cautious to increase lending due to the adversities and uncertainties in the business environment. However, loan growth has shown an overall upward trend till December'20. On the other hand, investments by banks in different types of Government bonds and securities have largely increased since March'20. After a notable decline in March'20 quarter, the deposit has been increasing, except September'20 quarter, primarily due to the expansionary monetary policy and the record level of inflows of foreign remittances. Overall, the banking sector of Bangladesh registered a moderate growth in terms of credit, investment and deposits up to December'20. As a result, the position of capital adequacy, asset quality, return on assets (ROA) and other solvency indicators have increased gradually during the period of ongoing COVID-19. The impact has been further forecasted by using the financial projection model (FPM) from December'20. It appears from the projection that profitability of the banking sector may increase due to resumption of economic activities; as a result, CRAR is projected to remain almost stable around 11.5 percent till the end-2021 under the baseline scenario. CRARs of the Private, Islamic, and Foreign Commercial Banks are expected to remain high covering both minimum capital requirement (MCR) and capital conservation buffer (CCB) throughout the projection period whereas CRARs of SCBs and DFIs are projected to remain lower than the minimum regulatory requirement level due to their engagement in diversified welfare programs of the Government, persistent low or negative profitability and their chronic NPL management. In the baseline projection, the gross NPL ratio of the banking sector is expected to move downward assuming that banks would strengthen their efforts in loan recovery at the post-COVID period. The profitability of the banking sector, as measured by ROA, is expected to maintain an overall positive trend up to December'21 in the baseline scenario. Liquidity of the banking sector is projected to be adequate for all banks throughout the projection period at baseline scenario. Overall, baseline projection indicates towards a resilient banking sector throughout the December'20 to December'21 period. Yet, the concern will remain over the performance of SCBs and DFIs if their credit management and loan recovery scenarios do not improve considerably.

Impacts of COVID-19 on financial institutions (FIs) have been assessed by analyzing the historical trend up to December'20 and a market perception survey up to December 2021. FIs' total assets declined substantially at end-March'20 and further went down at end-June'20 before recovering sharply since end-September'20 and exceeded the pre-COVID-19 level. FIs have projected their loan growth to gradually improve throughout 2021. ROA of FIs also witnessed a quick decline in March'20 quarter and thereafter increased slightly and remained mostly stable up to December'20. The profitability of FIs has been adversely impacted mainly due to severely affected real estate, textile, garments, transport, trade, and commerce sectors in which FIs have significant investments. However, FIs' projection of their interest and non-interest income reveals an expected uptrend in 2021, thereby suggesting improved profitability. Despite the regulatory relaxation on loan and lease classification, the gross NPL ratio of the FI industry exhibited an upward trend in March'20 (at 10.51 percent) and September'20 (at 15.50 percent) mainly due to its long historical accumulated outstanding of non-performing Bad/Loss loans. Yet the majority of the FIs projected that their recovery rate of loans and leases would improve in the approaching quarters. However, such improvement might be challenging for the sector after the expiry of the relaxation period, if NPL management is not strengthened properly. High NPLs resulted decrease in FIs' CAR slightly during March'20 to September'20; however, the CAR remains at 14.3 percent at end-September'20, higher than the minimum regulatory requirement of 10.0 percent. Overall, though the market perception survey indicates a likely improved performance of FIs in 2021, improvement in NPL management would remain the key challenge for this industry in the coming quarters.

Bangladesh Bank's cohesive policy measures helped the money market to overcome the liquidity challenge emanated from excess cash holding and lower cash recovery of loans during the pandemic. BB cut down the repo rate by 125 basis points, reduced CRR by 150 basis points, increased the advance-to-deposit ratio (ADR) by 200 basis points, and reduced the "Bank Rate" by 100 basis points after a long period to keep the liquidity situation stable. Furthermore, BB adopted an 'expansionary and accommodative' monetary policy for FY21. As a result, both the call money market and interbank repo market were largely stable.

As physical movements and physical payment options were getting limited due to various containment measures, Bangladesh Bank expanded and speeded up the payment system facilities through BACPS, BEFTN, NPSB and RTGS for smoother transactions. Besides, the transaction limit and cost of different payment channels have been relaxed. Moreover, Government also relied on the MFS for transferring social safety payments. Overall, the functionality and stability in payment system appeared to be robust.

COVID-19 shocked the country's capital market at the onset of the pandemic in March'20 when DSE Broad Index (DSEX) fell precipitously. However, the impact appears to be short-lived, and the market regained its confidence and started to rebound following Government's declaration of sizeable stimulus packages, BB's expansionary monetary policy, robust growth of wage earners' remittance and resumption of major economic activities. The market capitalization of top ten sectors of DSE, which usually comprises more than 90 percent of total DSE market capitalization, also depict continuous uptrend since July'20.

COVID-19 considerably affected insurance industry of the country during the first two quarters of 2020 mainly due to depressed international trade and local business activities as well as ban on local and international transport. As a result, the growth in gross premium collected by both life and non-life insurance companies declined. The total asset of insurance sector to GDP ratio has decreased substantially in March and June quarter-2020 from December quarter-2019. However, the sector is expected to recover from the third quarter of 2020 due to some decisive measures taken so far.

COVID-19 also impacted the MFIs sector of Bangladesh. Their income-expenditure, loan disbursement, recovery and savings collections were affected most during the first half of 2020. Their asset quality also deteriorated slightly during the COVID-19 period. However, given their 35 percent loan financed by own capital, 40 percent of their loan exposure in agriculture sector which remained insulated from shock waves of COVID-19 and their small stake in total asset of all lending institutions, they are unlikely to pose any stability threat for financial system. Furthermore, Bangladesh Bank has facilitated an exclusive refinance scheme for MFIs amounting BDT 30 billion with a maximum interest rate of 9 percent at borrower level. Quick implementation of the stimulus package along-with close monitoring would facilitate speedy recovery of the sector.

The Government and Bangladesh Bank have taken several policy measures and financial supports to recover the country from multifaceted impacts of COVID-19. Up to November'20, the Government has declared stimulus packages amounting BDT 1,213.53 billion, i.e., 4.34 percent of the GDP. Importantly, the stimulus package regarding export-oriented industries has been utilized fully within stipulated period followed by notable achievement in Export Development Fund of 377.2 percent while the stimulus package for financing working capital to the affected large enterprises and service sectors got considerable response as 65.60 percent of the concerned stimulus package has been disbursed by 17 December'20. BB enhanced its efforts to utilize the significant amount of stimulus packages allocated for agriculture and CMSME sectors within a reasonable period.

In tandem with measures taken by the Government and Bangladesh Bank, Bangladesh Securities and Exchange Commission (BSEC), Insurance Development and Regulatory Authority (IDRA) and Microcredit Regulatory Authority (MRA) have also taken various containment measures and extended policy support for restoring normalcy of their respective regulated institutions/entities. However, there still seems to have some policy space that may be considered by respective regulators and policymakers. In particular, the following policy options may be adopted to materialize the dream of Father of the Nation and to regain the high growth trajectory of the economy: (i) Rationalization of Banks' Dividend Payouts; (ii) Introduction of Bangabandhu Centenary Bond (BCB); (iii) Introduction of COVID-19 Pro-poor Bond (PPB) for offering Informal Sector Job Losing Workers to participate in Public-Works Projects; and (iv) Temporary Tax Rationalization for SMEs.

CHAPTER 1 : INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The world has witnessed unprecedented health emergencies, social constraints, large-scale economic and human losses in its different jurisdictions during the first wave of COVID-19 threatening the national and global economic orders and financial stability to a great extent. The global economy, particularly emerging and developing economies, seems to have turned around thereafter, which could largely be attributed to prompt and concerted efforts taken by the authorities with active assistance from international organizations and development partners. Indeed, no single country has been spared as the pandemic has already resulted in a cumulative death toll of over 1.5 million lives (as of end-November'20) and cost around USD 346.98 billion of global GDP (Statista.com[1], 2020). This unprecedented crisis has not only exposed the fragility of the countries' healthcare systems but also has caused irreparable damage to psychological health of all economic actors and sectors. In order to save human life by containing the spread of COVID-19, governments of almost all countries have been prompted to take various measures such as lockdown, social distancing and ban on national and international travels. However, outcomes of these actions have resulted serious challenge to livelihood and caused multiple equilibriums between production system, markets and institutions.

The shocks of COVID-19 in the world economy are being propagated through various ways[2], like, disruptions in global supply chains causing significant supply shortages and consequent price hikes, slowdown in investments, decrease in remittances, high volatility in stock markets, decline in tourism and international travel, decline in oil demand leading to decrease in oil prices and cut in revenue for oil exporting countries. While the economic shutdown leads towards significant job losses in some labor-intensive and supply-chain-based manufacturing industries and creating large-scale social crisis, the unanticipated increase in health and safety net expenditures have been creating the upsurge in public debt burden.

In Bangladesh, the first case of COVID-19 was confirmed on 8 March of 2020 in Dhaka. Chart 1.1 reveals that the spread was very limited and slow in the first month of detection. The infections seemed to gain momentum from 5th April 2020 when the detection of new cases reached double digit while the number of death cases was seen to get acceleration from the beginning of May. The economy was reopened formally on 31 May 2020 through calling off the prolonged general holidays. Contrary to the public perception, both the detections and deaths grew in the same rate even after the resumption of normal economic activities as indicated by the smoother trend of number of new cases and number of death cases. The disease largely precipitated in the late June of 2020 following of which both the number of detections and deaths began to slow gradually. New wave of infections was appeared to be evident from November as both detections and deaths started growing again.

It appears from Chart 1.2 that the spread of COVID-19 was highly concentrated in Dhaka division (53.5 percent) followed by Chittagong division (17.1 percent) and Khulna division (7.8 percent). As COVID-19 contaminates through people, it might be the fact that high population density is the single most important factor for higher infection in Dhaka division particularly in the capital city of Dhaka.

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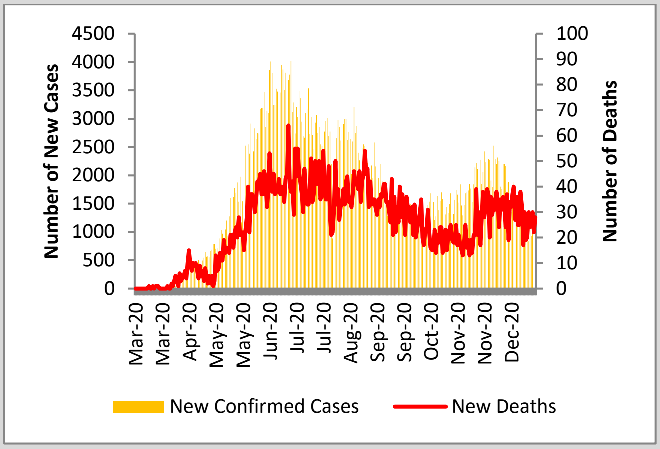
[1]A Germany-based data management company

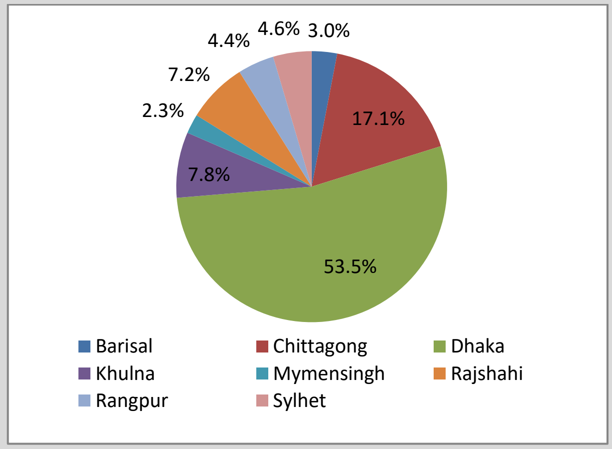
[2]The impact and policy responses for COVID-19 in Asia and the Pacific: ESCAP

CHART 1.1: NUMBER OF NEW INFECTIONS AND DEATHS



Source: Directorate General of Health Services, GoB

CHART 1.2: DISTRIBUTION OF CONFIRMED CASES BY REGION



Source: Directorate General of Health Services, GoB

Being a faster-paced growing emerging economy, Bangladesh has also been experiencing the challenges of COVID-19. The Government, as a precaution, declared general holidays spanning 26 March'20 to 30 May 2020. Due to the general holidays and subsequent status quo, the uprising states of Bangladesh economy and intermediation of financial systems have been markedly impacted. At an earlier phase of these holidays, Bangladesh experienced a moderate decline in its economic activities, especially the sectors like readymade garments (RMG), manufacturing industries, education, airlines, tourism and transportation have recorded curtailment in operation for a while. Sudden stoppage of income and wages of people employed in these sectors along with other private sectors have substantially reduced the purchasing power of their overwhelming majority, a cause for declining domestic savings as well as consumer demand. In contrast, agriculture, pharmaceuticals industries and food markets have continued their operation and remained almost benign of the COVID-19 shocks. Both Government and Bangladesh Bank immediately responded to contain the crisis and declared several financial and fiscal stimulus packages supported by targeted monetary easing measures to ensure smooth supply of credit in all affected sectors of the economy while preserving financial stability.

The purpose of this study is to identify how COVID-19 affects different sectors of the economy and how those dynamics influence the stability of the financial system. Highlighting the various policy initiatives taken by Government, Bangladesh Bank as well as other financial regulators, the report explores further policy steps, which might be initiated to address post-COVID economic and financial stability risks and stimulate the economy back to its accelerated path of pre-COVID-19 buoyancy.

1.2 SCOPE OF THIS STUDY

This report draws some notions from the financial stability point of view to measure the implications of COVID-19 on the financial system of Bangladesh. COVID-19 has affected all four broad sectors namely real, fiscal, external, monetary and financial sectors of the economy. However, nature and magnitude of impact, length of stress period and recovery phases of these sectors are not the same. These bear significance to understand from effective policy perspective. This report therefore attempts to unfold the degree of influence of COVID-19 and their dynamics on different sectors of real economy and their subsequent impacts on financial sector balance sheet. In doing so, it also takes into account financial stability measures of the four broad sectors to ascertain how

COVID-19 has impacted the macro-financial system of Bangladesh so far from financial stability standpoint. In particular, this study covers the impact of COVID-19 on agricultural production, industry and service sectors' output of real economy. It also considers magnitude of revenue shock due to COVID-19 and its impact on Government's fiscal and debt sustainability. The study attempts to identify the impact on external sector and its spillover effects on other sectors of Bangladesh economy. It explores the impact on financial health of banks, financial institutions and MFIs in terms of capital adequacy, asset quality, liquidity and profitability. Impact on insurance industry is also assessed in terms of premium collection and investment returns.

This report highlights the various initiatives taken by Bangladesh Government to deal with the pandemic situation such as revision of budget for funding Ministry of Health and Family welfare's COVID-19 preparedness, stimulus packages for export industries, housing schemes for the homeless, job losers' funding scheme, interest payment subsidy, health insurance for government employees, bonus payment for front fighters of COVID-19, suspension of duties and taxes on imports of medical supplies/equipment as well as to create new employment and development of agricultural sector. The other initiatives such as suspension of duties and taxes on imports of medical supplies including protective equipment and test kits by NBR, monetary policy measures/responses made by Bangladesh Bank such as reduction of repo rate, CRR, rise in ADR, increase in EDF, BB's own refinance schemes, agricultural subsidy, relaxation in prudential requirements in foreign exchange transactions; and sales of the US dollar by BB to make the forex market stable as well as initiatives of other central banks to stabilize their economy during the pandemic period are focused in the report. Also, some other policies which have been initiated by other financial regulators such as BSEC, IDRA and MRA are discussed in the report. The report concludes with some specific policy suggestions to address post-COVID-19 risks and streamline economy as well as financial sector back to its pre-COVID-19 status.

1.3 MEASURES OF FINANCIAL STABILITY

The importance of financial stability has been gaining momentum since the Asian financial crisis of 1997. Yet, there is no widely accepted single definition of financial stability. The term 'Financial Stability' itself is quite self-explanatory in the sense that it refers to a stable financial system in general. However, a well-structured definition of the term is important as a guiding principle to the concerned regulatory authority to frame its objectives, scope, operational target and policy responses. Economists and researchers, international organizations, and central banks/monetary authorities around the world have defined financial stability from various perspectives. While some have defined it as financial stability, others have defined it from the viewpoint of financial instability.

Mishkin (1999), Davis (2001), Ferguson (2003), and Chant (2003) defined 'financial instability' largely as inability of the financial system to perform its basic functions of allocating funds to the productive sectors of the real economy. Mishkin (1999) focused on information asymmetry as central cause of financial instability while Davis (2001) emphasized on addressing systemic risk to prevent financial instability and highlighted the importance of payment services in addition to credit intermediation. Ferguson (2003) attributed sharp divergence of asset prices from their fundamentals and significant distortion of market functioning domestically as well as internationally as basic criteria of financial instability. In addition, Rutkauskas (2015) and Lane (2011) described fiscal fragility as one of the major sources of financial instability as erosion of debt servicing capacity of the government (i.e., sovereign debt crisis) may render main debt holders insolvent due to their lack of capital to cover losses.

On the flipside, another school of thought attempted to define 'financial stability'. Crockett (1997) referred to financial stability as maintaining confidence that financial system comprising financial institutions and markets can continue to perform its functions smoothly without any outside assistance. Foot (2003), in addition to the idea of maintaining confidence in the financial system, incorporated monetary stability, price stability and stability of employment level around economy's natural rate as conditions for financial stability. According to Lager (1999), financial stability is a condition in which the financial system is able to avoid disruptions that threaten to inflict significant output losses. Schinasi (2004) argued that financial system is stable whenever it is able to facilitate smooth functioning of the real economy and withstand any exogenous or endogenous shocks.

Interestingly, central banks/monetary authorities around the world mostly provided definitions of financial stability instead of financial instability. Also, while defining financial stability, in most cases they explicitly mention financial system as a combination of financial institutions, financial markets and financial market infrastructures. Central banks/monetary authorities in major advanced and emerging market economies define financial stability broadly as a condition in which financial system encompassing financial institutions, markets and market infrastructures can withstand endogenous or exogenous shocks and unravel serious financial imbalances, and are able to uninterruptedly perform its crucial services essential to facilitate real economic activities (European Central Bank; Bank of England; Deutsche Bundesbank; Federal Reserve System; Reserve Bank of Australia; Bank of Korea; Bank of Japan; Reserve Bank of India). Adding to this viewpoint, Bank of Japan also attributes having confidence in the financial system as an essential criterion of financial stability.

Noticeable that turbulences in financial markets or failure of one or a cluster of financial institutions may not be considered as threats to financial stability as long as the ability of the financial system to facilitate economic activities largely remains unaffected (Schinasi 2006; Rosengren 2011). Also, threats to financial stability may emerge from various types of crises such as banking crisis, sovereign debt crisis, currency crisis and equity crisis (Gadanecz and Jayaram 2009). Thus, broadly speaking, financial stability can be assessed in terms of the stability of four main sectors of the economy namely real sector, external sector, fiscal sector and financial and monetary sector. Accordingly, in the context of Bangladesh, the following stability indicators related to these four sectors has been used in this study to measure the stability of the Bangladesh financial system.

TABLE 1.1:FINANCIAL STABILITY INDICATORS BY ECONOMIC SECTORS

Sector Name	Stability indicators	Sector Name	Stability indicators
Real Sector	• GDP Growth • Sectoral Growth Rate • Quantum Index of Manufacturing Industry • Inflation • Wage Rate	**Financial and Monetary Sector-Contd.**	• Profitability (ROA) • CRAR/CAR • Tier-1 Capital Ratio • Liquidity (ADR) • Leverage Ratio • Sectoral Loan Concentration • Call Money Rate • Interbank Repo Rate • Interbank Lending/Borrowing • Repo/Reverse Repo/ALS/Special Repo • Market Capitalization to GDP Ratio • Banks' Exposures to Capital Market • Change in Equity Indices • Price Earnings Ratio
External sector	• Current Account Balance to GDP Ratio • FX Reserve Adequacy • External Debt to GDP • Short Term Debt to Total External Debt • Real GDP Growth of Major Export Partners • Real GDP Growth of Major Inward Remittance Originating Countries		
Fiscal Sector	• Fiscal Balance to GDP Ratio • Fiscal Deficit to Tax Revenue • Public Debt to GDP • Public External Debt to Revenue • Tax Revenue to GDP • Sovereign Risk Premium		
Financial and Monetary Sector	• Domestic Credit Growth • Domestic Credit to GDP Ratio • Gross NPL Ratio • Net NPL Ratio		

1.4 TRANSMISSION CHANNELS OF COVID-19 AND ITS IMPLICATION FOR FINANCIAL SYSTEM STABILITY

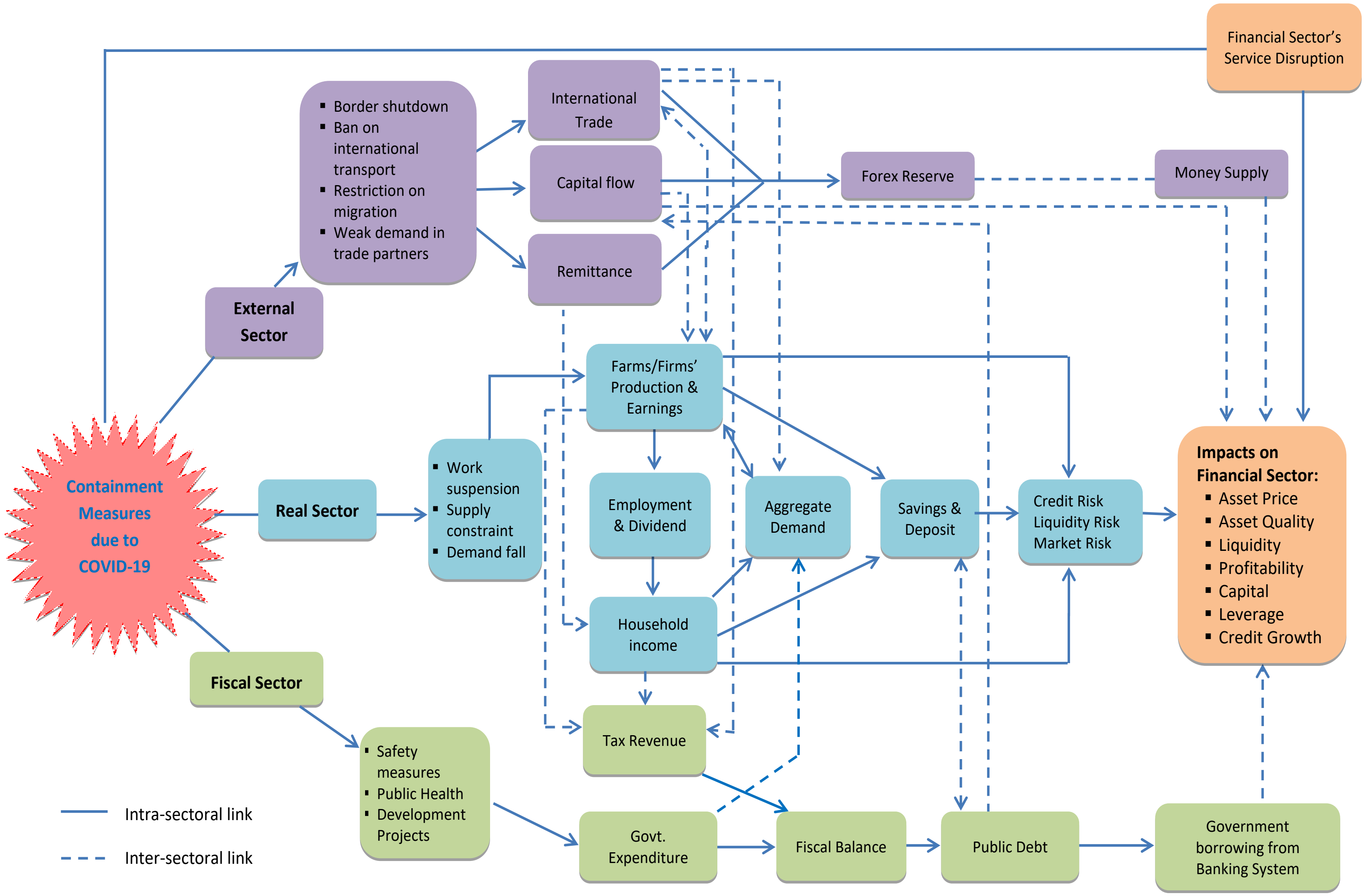
Like many economies across the globe, there is an apprehension that the economy of Bangladesh will continue to experience long-standing impact of COVID-19. With the onset of COVID-19 in March'20, Government of Bangladesh declared general holidays for more than two months and took various containment measures to safeguard lives and livelihood of the people. Further, the resurfacing of new wave is also likely to make a far-reaching impact on the economy as well as the financial stability of the country. To understand and address the unusual shocks of COVID-19 on various sectors which eventually would affect financial system stability, it is pivotal to identify the transmission channels and their inter-linkages through which shocks are mediated from real economy onto financial sector's balance sheet. Chart 1.3 outlines a picture of transmission channels through which COVID-19 would affect the financial system of Bangladesh.

1.4.1 Transmission of COVID-19 Risk from Real Sector to Financial Sector

It can be observed from Chart 1.3 that owing to the shock of COVID-19, real sector accounts for the significant transmitter of risks to the financial system as the weak financial conditions of businesses and households may pass on to financial system directly. Businesses and households are two important primary economic agents of the economy. As COVID-19 spread across the country and paralysed all economic activities, enterprises and households have been inflicted by significant economic stress. It tolled on household income, firms' production and consumption, thereby creating imbalances in demand and supply across the economy.

Because of general holidays, supply-chain disruption due to ban on local and international transports and many other containment measures, it may be assumed that production activities of all the sectors, particularly of most manufacturing and service enterprises may face considerable constraint, resulting in sudden drop in production and revenue. Shutdown of factory and offices may lead to low labour participation. Depressed production and downward operating cash flows of firms are supposed to make job cut, lay off and temporary unemployment, which would affect household income. Further, households who are owners of firms may also experience losses in income through the fall in value of the firms and lesser dividend payout. Widespread panic and uncertainties about future economic prospects among consumers may lead them to spend cautiously. This could affect the consumption demand. Therefore, overall effect of COVID-19 could end up with fall in aggregate demand, which could ignite a vicious cycle in the real economy unless there is an intervention. Firms and households have been suffering from the drop in earnings, which is also likely to spur several ramifications in different segments of the financial sector. First, due to dampened confidence of investors and their tendency for precautionary cash hoarding in pandemic period, capital market may face declining asset price on forced sale, which could create spillover effects on the balance sheets of financial institutions for their investment in the market. Secondly, credit institutions like banks and NBFIs are largely susceptible to credit risk with the poor outlook of firms and households.

CHART1.3: CONCEPTUAL FRAMEWORK ON TRANSMISSION CHANNEL OF COVID-19 SHOCK TO THE FINANCIAL SYSTEM



Consequently, they may elevate their risk perception and may set to offer lesser credit than the normal economic condition. On the flip side, lesser aggregate demand in the economy might affect the credit demand. Thirdly, liquidity condition in financial market may become tighter than usual as a result of firms and households depositing lesser fund in the financial institutions due to their fall in income. Consequently, many of the soundness indicators of financial sector may be adversely affected in the face of new risk environment.

1.4.2 Transmission of COVID-19 Risk from External Sector to Financial Sector

Chart 1.3 shows that the effect of COVID-19 may pass on from external sector to financial sector through three main channels such as international trade channel, capital flow channel and remittance channel. Since banks and other financial institutions are heavily engaged in trade financing and insurance activities, presumably disruption in these activities would directly influence balance sheets of banks and other financial institutions through trade channel. Various control measures to contain the infections at home country may restrain economic activities in the export-oriented industries. Border restrictions in foreign countries might disrupt the exports into the global market. Lesser export has also been expected to emerge due to weaker global demand spurred by control measures in the destination countries. For much of the same reasons, demand for import of consumer goods, raw materials and capital goods of the country might be weakened. Lower local demand of already imported goods and slow external demand for exported goods accompanied by continuation of industry's fixed costs may restrain the repayment capacity of entrepreneurs and thus may increase the likelihood of default risk in bank balance sheet. The remittance inflows of a country could also be affected due to temporary or permanent lay off of migrant workers, cessation in migration of new workers resulting from border control and the contraction of economic activities in the destination countries. Combined effect of exports, imports and remittance would impact Current Account Balance of a country, which has huge implication from financial stability point of view.

Impacts of both foreign investment and external debts may also pass on to a country's economic balance sheet through Capital Flow Channel. Due to elevated uncertainties and risks of COVID-19, global investors could relocate their investment in safer markets, which might adversely affect emerging economies' external balance sheets. In particular, the possibility of the reversal of foreign portfolio investment amid uncertainties of COVID-19 would undermine the asset prices and increase the risk of high volatility in the capital market resulting heightening the risk of financial stability. Combined effect of exports, imports, remittance and capital flow would impact the foreign exchange reserve, thereby creating multidimensional impacts on financial sector given the critical role of foreign exchange reserve on banking sector's liquidity and exchange rate stability.

1.4.3 Transmission of COVID-19 Risk from Fiscal Sector To Financial Sector

COVID-19 shock could primarily weigh on the fiscal sector through compelling government to enhance expenditure on public health safety measures, disease control and transfer payment to the affected firms and households. In most cases, a fiscal plan requires an immediate rebalancing of resource allocations, while containing the crisis. Fiscal space may also become narrower with the falling revenue collection from firms and households suffering from economic stress due to COVID-19. This looming mismatch between revenue and expenditure plan may result in two possibilities- slowing investment in development projects and other spending and increasing debt from domestic or external sources to close the fiscal balance. On the first possibility, effect of restructured expenditure might have an indirect effect on financial sector through affecting aggregate demand of the real economy. On the second stance, if government borrows heavily from financial markets while tax revenue-to-GDP ratio remains low, continuation of this scenario for several years may run into stability risk for the entire financial system.

CHAPTER 2 : IMPACT ON REAL SECTOR AND ITS IMPLICATIONS FOR FINANCIAL STABILITY

2.1 INTRODUCTION

This Chapter highlights the impact of COVID-19 on various sectors and sub-sectors of real economy from both demand and supply-side perspective. It has also considered the findings of a perception survey, which was conducted to understand stakeholders' views on the impact of COVID-19 on different segments of real economy and the need for credit to address those adverse impacts. Finally, the Chapter analyses how the impacts of COVID-19 on real sector are likely to be translated into banking sector risk from financial stability point of view. It appears from the study that after the onset of COVID-19 in Bangladesh, the real sector began to face disruption and output started shrinking mainly due to various measures taken to contain the spread of the pandemic. In particular, manufacturing sector suffered most followed by service sector while agriculture sector remains relatively stable. Wage rates also followed the similar declining trend. However, the real sector has begun to recover substantially from May'20 onwards.

2.2 DEMAND-SIDE SHOCK IN REAL SECTOR

Due to COVID-19, the real sector of Bangladesh economy has been exposed to twin shocks, i.e., both demand shock and supply shock in varying degrees across different sectors and sub-sectors. Demand shock is indeed an outcome of income shock. As general holidays and various other measures have been initiated to contain the damaging effect of COVID-19, households, corporate and other businesses face income shock. Furthermore, while they commonly suffer from uncertainty regarding ending of the pandemic, households, in particular, face elevated risk from extra health related cost and become over-cautious of spending their money for consumer goods and services. These income and psychological shocks have eventually turned into demand shock. On the other hand, the pandemic has been ruthless and disproportionately influenced the temporary labour force. A snapshot of income shock faced by work force in different sectors of real economy are discussed below:

It can be noted that within the workforce, permanent workers, i.e., salaried workers have been less affected as most of them have been able to protect both their jobs and earnings. However, skilled and un-skilled labour forces, who work on day-to-day basis, mobile for livelihood and do not have salaried income, are direct victims of general holidays and other measures taken to contain the downside risk of COVID-19. A large number of labour forces in Bangladesh indeed belong to this category. They are engaged in informal economy and are being exposed to twin challenges, i.e., life and livelihood shocks as compared to their counterpart fixed income group. They have suffered not only from job losses but also from depressing pressure on wage rate, which has been captured in this study by considering the Wage Rate Index developed and monitored by BBS as it appears to be a rational indicator to measure the impact of wage pressure on this poor section of labour force. The Index covers entire 64 districts across 44 occupations including 11 from agriculture, 22 from industry and 11 from service sector.

The General Wage Rate Index reveals that in the year before pandemic, wage rate had rising trend as it started from 6.21 percent in January'19 and ended with 6.54 percent in December'19, though fluctuated throughout the year within reasonable boundary (Chart 2.1). However, wage earners faced harsh reality since March'20 as wage rate began to fall sharply without any improvement till May'20. This (shocking) abnormal stagnant scenario indicates the likely effect of COVID-19. After May'20, a sluggish recovery tendency can be seen from the chart. It can also be observed that magnitude of wage shock differs from sector to sector (Chart 2.2). Maximum wage rate deterioration occurred in service sector followed by industry while work force in agriculture sector remains relatively less vulnerable due to lower erosion of wage income.

A large number of temporary labour force in service sector are involved in restaurant, tourism and transport service-related jobs. As the pandemic had worst-hit to this sector due to social distancing and immobility, pandemic harshly and disproportionately influence this segment of labour force. On the other hand, industry workers also face almost similar reality as their wage rate wanes sharply from 6.14 percent in January'20 to 5.18 percent in July'20. Due to COVID-19, their work-related industries such as construction, real estate, RMG and textile industry heavily suffered from low domestic and external demand, which ultimately influenced their livelihood.

CHART 2.1: CHANGE IN GENERAL WAGE RATE

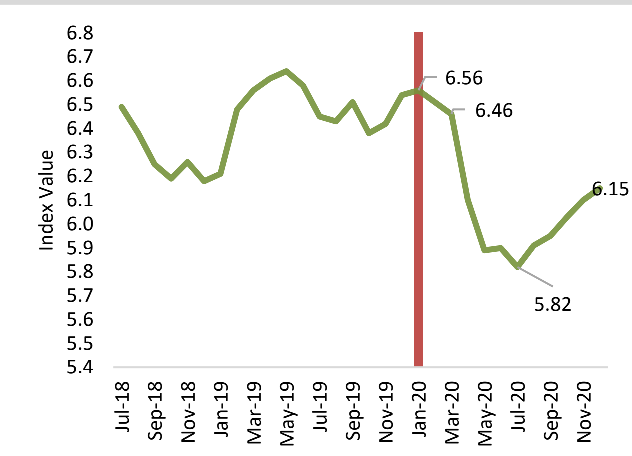
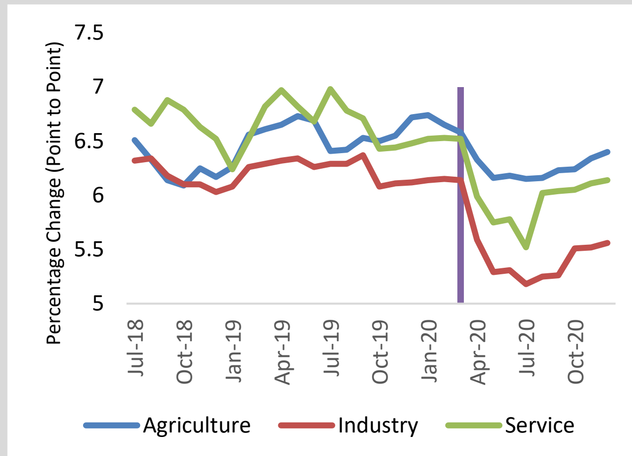


CHART 2.2: CHANGE IN WAGE RATE BY SECTORS OF REAL ECONOMY



Note: Base year for Wage Rate Index is 2010-11. The Index considers wages of low paid skilled and unskilled labor force while salary paid and high contract-based earnings are excluded from the Index.
Source: BBS; compiled by FSD, BB.

2.3 SUPPLY-SIDE SHOCKS IN REAL SECTOR

With a few exceptions, the pandemic has affected almost all sectors and sub-sectors of the real economy causing considerable output loss. The main sectors and sub-sectors of real economy are presented in Table 2.1. It appears from this Table that agriculture, industry and services are three broad sectors of real economy. Shares of these sectors are 13.35 percent, 35.36 percent and 51.30 percent respectively. Two major sub-sectors of Agriculture are (i) Agriculture and Forestry; and (ii) Fishing. Industry sector has also two sub-sectors: (i) manufacturing; and (ii) Constructions. Their shares in GDP are 24.18 percent and 7.89 percent respectively. Within manufacturing industry, large scale industries' contribution (20.22 percent) is quite notable, although small scale industry plays no less important role from employment perspective. Food products, textile, weaving, leather, chemical, pharmaceutical, metal and non-metallic products are the major economic actors in the manufacturing industry. Because of lion share, real sector's output is highly sensitive to service sector's performance. Output of wholesale and retail trade, transport, financial intermediation, health, community and social services are determining factors for service sector's output. Considering the contribution of these sectors and sub-sectors, analysis of impact of COVID-19 on real economy has been centered around them.

TABLE 2.1: SECTORAL AND SUB-SECTORAL SHARE IN REAL GDP

(In Percent)

Sectors	Sub-sectors	FY20*	
Agriculture		13.35	
	Agriculture and Forestry		9.83
	Fishing		3.52
Industry		35.36	
	Manufacturing		24.18
	Large scale		20.22
	Small scale		3.96
	Constructions		7.89
	Others		3.29
Services		51.30	
	Wholesale and Retail Trade		13.87
	Transport, Storage and Communication		11.09
	Financial Intermediation		3.39
	Real Estate, Renting and Business Activities		6.09
	Health and Social Work		1.97
	Community, Social and Personal Services		8.01
	Others		6.88
Total		100.00	100.00

Note: * provisional data.
Source: Bangladesh Bureau of Statistics.

2.3.1 Impact on GDP and Its Components

The economy of Bangladesh has experienced notable growth in the recent years (Chart 2.3). In the FY19, the GDP growth rate was 8.15 percent, which was a record growth for the economy of Bangladesh. Due to the pandemic, in the second half of FY20, the real economy faced both the demand-side and supply-side disruptions simultaneously resulting in a decline in the year-to-year GDP growth. The GDP growth declined by 2.94 percentage points and reached to 5.24 percent in FY20 (provisional). This decline is assumed to be a result of the COVID-19 shock in the real economy where the main victims of the shock are primarily the industry and service sectors while agriculture sector appears to be relatively stable.

CHART 2.3: REAL GDP GROWTH RATE

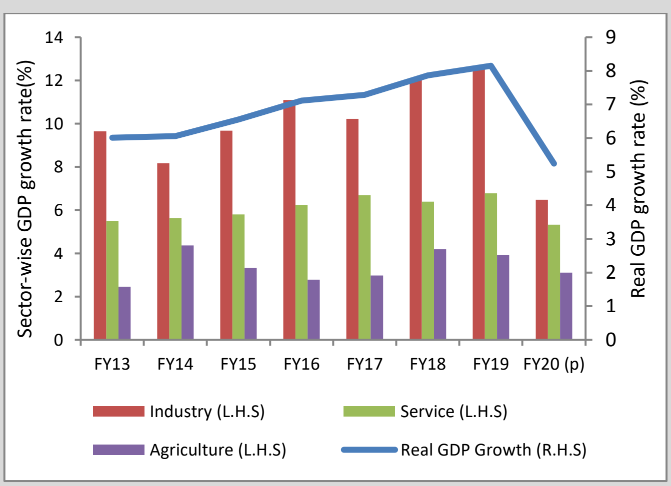
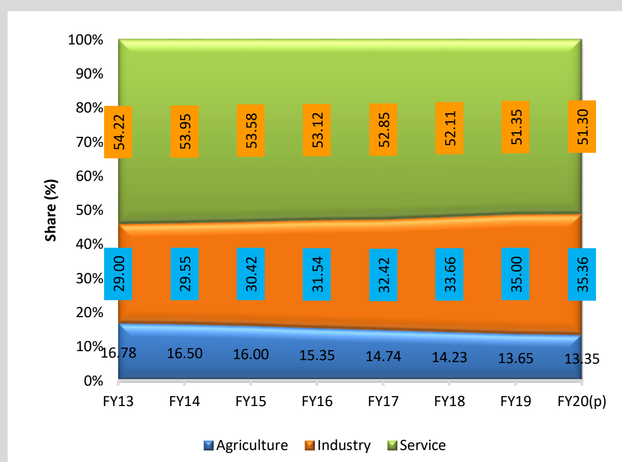


CHART 2.4: SHARE OF DIFFERENT SECTORS IN REAL GDP



p stands for provisional.
Source: BBS; compiled by FSD, BB.

2.3.1.1 Agriculture Sector

Confirmed cases of COVID-19, as mentioned in Chapter 1, reveal that pandemic has been centered around the Capital City Dhaka followed by other major cities. This implies that rural economy, particularly agriculture sector remains insulated from COVID-19 shock. In FY20, the growth rate in agriculture sector was 3.11 percent, which was 3.92 percent in FY19. However, this slowdown in growth rate could be attributed to the usual business cycle of the economy as it remains persistent within the purview of growth rates from FY13 to FY20.

2.3.1.2 Impact On Industry

Among all the three sectors of real economy, the industry sector had been greatly affected due to the pandemic shock and experienced an unprecedented decline in growth rate. It declined by 6.19 percentage points from FY19 and reached to 6.48 percent in FY20. Contributions of industry sector in GDP were BDT 3,722.92 billion and BDT 3,964.22 billion in FY19 and FY20 respectively. Both main segments of Industry, i.e., Manufacturing and Construction, have been affected in varying degrees by diverse forces emanating from COVID-19.

2.3.1.2.1 Impact on Manufacturing Industry

Chart 2.5 shows that Quantum Index of Manufacturing Industry fell sharply since January'20 and continued this trend till April'20 and then it began to rise quickly. It implies that the country's manufacturing industry had been exposed to pandemic shock since January'20 and the impact continued till April'20. From May'20 onwards, the industry moved along the way of strong recovery. It can be mentioned that a lion part of raw materials of manufacturing industry are imported from abroad, particularly from China and India. As China was exposed to COVID-19 in late December'19, it immediately affected manufacturing industry through supply-chain disruption, though the first COVID-19 case in the country was confirmed in8 March'20.

CHART 2.5: QUANTUM INDEX OF MANUFACTURING INDUSTRY

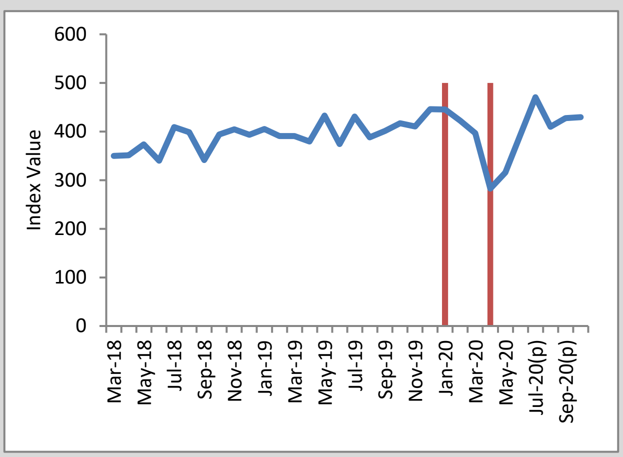
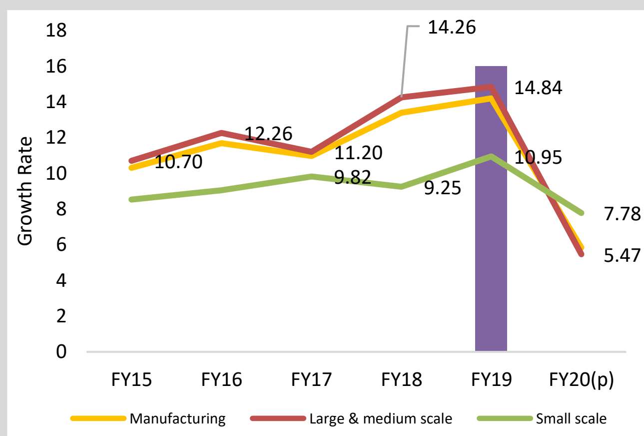


CHART 2.6: GROWTH RATE BY SIZE OF MANUFACTURING INDUSTRY



p stands for provisional.

Source: BBS; compiled by FSD, BB.

Impact by Size of Industries

Both the 'large and medium scale' and 'small scale' industries faced significant output losses (Chart 2.6). However, decline in output growth is found more severe in the 'large and medium scale' sub-sector compared to those of the 'small scale' sub-sector. Growth of the 'large and medium scale' industries declined by 9.37 percentage points and reached to 5.47 percent in FY20. On the other hand, growth of the 'small scale' industries declined by 3.17 percentage points and stood at 7.78 percent in FY20.

It is already mentioned that the large and medium scale industry has significant share in GDP (Table 2.1). However, Quantum Index of Large and Medium Manufacturing Industry shows that major industry groups play vital role as they carry almost 90 percent weight of the Index (Table 2.2). Considering their heavy weight, analysis has been further extended on this segment of Industry to get deeper insight of the impact of COVID-19.

TABLE 2.2: QUANTUM INDEX OF LARGE AND MEDIUM-SCALE MANUFACTURING INDUSTRY

Major Industry Group	Weight
Manufacture of Food Products	10.84
Manufacture of Textile	14.07
Manufacture of Wearing Apparel	34.84
Manufacture of Leather and related Products	4.40
Manufacture of Chemicals and Chemical Products	3.67
Manufacture of Pharmaceuticals Medical Products	8.23
Manufacture of Other Non-metallic Mineral Products	7.12
Manufacture of Basic Metals	3.15
Manufacture of Fabricated Metal Products	2.32
Other Groups	11.36
Total	100.00

Source: BBS website.

Table 2.2 shows that the major industry groups are Food Products, Textile, Wearing Apparel, Leather and related Products, Chemicals and Chemical Products, Pharmaceuticals and Medicinal Chemicals, Metals and Non-metallic Mineral Products. Major manufacturing food products are grain and rice milling, dairy products, bakery products, fruit juice, fish and sea food, vegetable oil, animal feed, sugar and tea. Closure of businesses and disruption in local supply chain accompanied by income shock affected production of this industry. Output of food products reached at peak in January'20 and then fell in February'20 followed by a small recovery in March'20 and then it showed fluctuating trend till August'20. However, the industry began to recover rapidly from Sep'20 onwards. Looking at the Chart 2.7, it appears that the industry has been experiencing somewhat W-shaped recovery.

Chart 2.8 demonstrates the monthly manufacturing trend of pharmaceuticals and medicinal chemical from March'18 to October'20. The Chart depicts that production in this sector was not affected by the pandemic. Rather production of this industry increased during the pandemic following the preceding year's trend. The high demand of medicine during the pandemic may be the prime reason behind this rising trend.

CHART 2.7: QUANTUM INDEX OF FOOD PRODUCTS

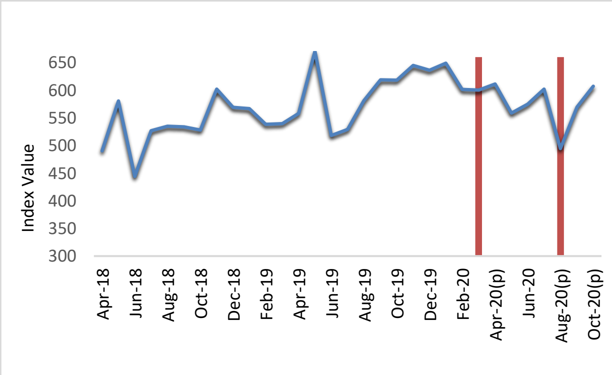
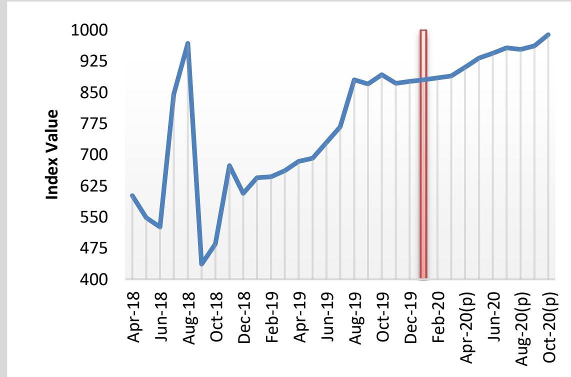


CHART 2.8: QUATUM INDEX OF PHARMACEUTICALS AND MEDICINAL CHEMICAL



Source: BBS; compiled by FSD, BB.

Chart 2.9 demonstrates the monthly manufacturing trend of textile from March’18 to October’20. The chart depicts that manufacturing of textile output declined sharply from January’20 to till May’20 and began to recover quickly from June’20 onwards. Impact on Wearing Apparel was one month lag as it started in February’20 and continued till April’20 (Chart 2.10). Both textile and wearing apparel industry appear to experience V-shaped recovery from COVID-19, though distress period for textile industry was 5 months and the same was 3 months for the latter industry. The import of related raw materials such as cotton, yarn, textile and articles thereof as well as chemicals also follow the same trend (Chart 2.11 and Chart 2.12). In other words, impact of COVID-19 on textile, RMG and their related industries was short-lived.

CHART 2.9: QUANTUM INDEX OF TEXTILE OUTPUT

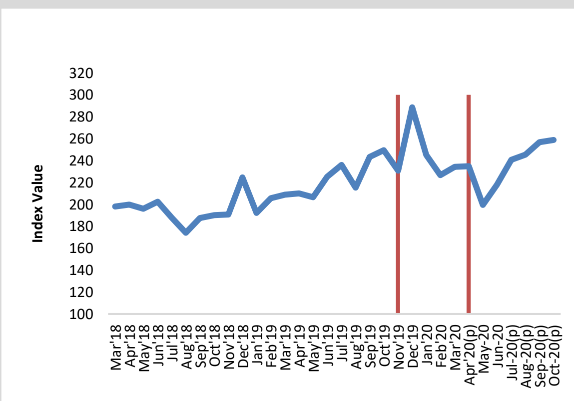
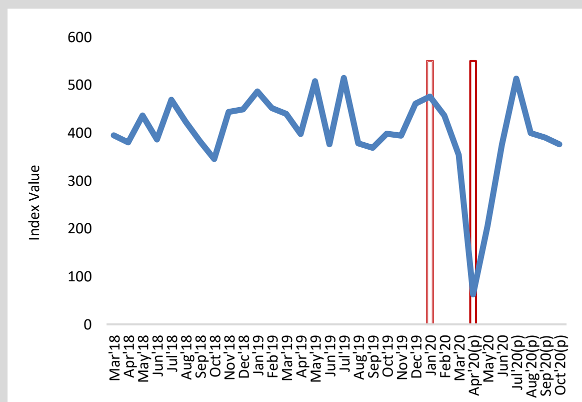


CHART 2.10: QUANTUM INDEX OF WEARING APPAREL



Source: BBS; compiled by FSD, BB.

CHART 2.11: IMPORT OF RMG RELATED INPUT MATERIALS

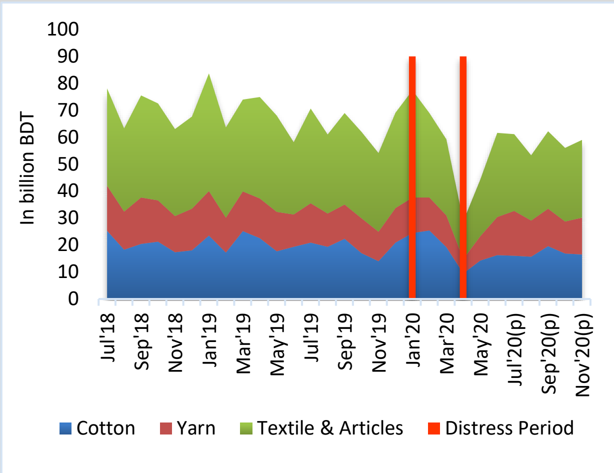
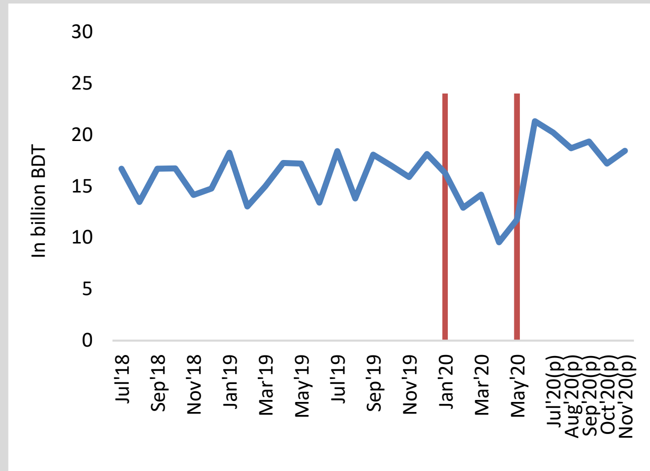


CHART 2.12: IMPORT OF CHEMICALS



Source: Monthly Economic Trends, BB

Chart 2.13 demonstrates the monthly manufacturing trend of leather and related products from March'18 to October'20. The Chart depicts that output of this sector declined from January'20 and this sluggish trend continued till June and it began to recover from July onwards. Chart 2.14 shows that local production of chemical and chemical products began to slow down in January'20 and February'20 and then upturned in March'20 and April'20 and then again dropped in May'20. Production began to recover sharply since June'20 onwards. This production pattern of the latter products shows that they got somewhat W-shaped recovery.

CHART 2.13: QUANTUM INDEX OF LEATHER AND RELATED PRODUCTS

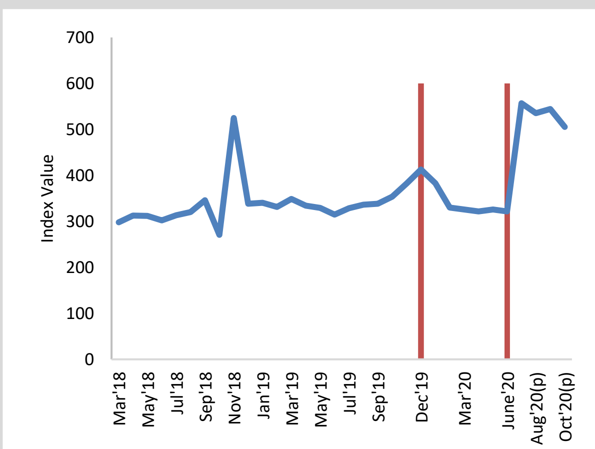
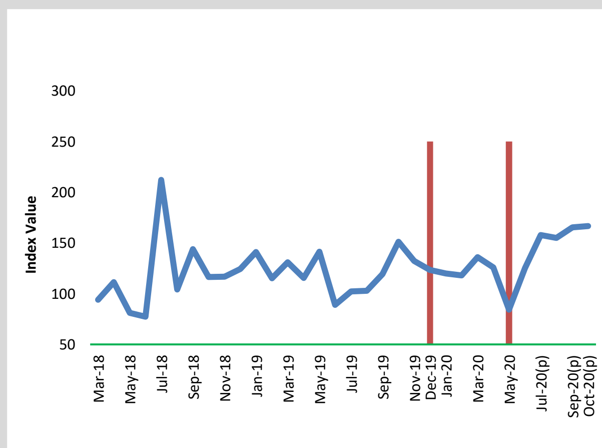


CHART 2.14: QUANTUM INDEX OF CHEMICAL AND CHEMICAL RELATED PRODUCTS



Source: BBS; compiled by FSD, BB.

2.3.1.2.2 Impact on Construction Sector

Construction sector has important bearing on performance of real economy. Besides its notable contribution in GDP, considerable number of skilled and unskilled labour forces is engaged in this sector. Exposure of this sector to COVID-19 caused both income shock and supply shock. Chart 2.15 shows that output of this sector deviated from its usual trend in FY20, mainly due to lower production in the second half of this fiscal year. Chart 2.16 and 2.17 show that output of allied products of this sector such as basic metal including iron and steel were exposed to production shock from February'20 to May'20 and began to recover from June'20 onwards. On the other hand, COVID-19 affected production of allied non-metallic minerals such as cement, ceramic, glass and lime products with 2-months' lag, i.e., impact was visible from April'20 but began to recover from June'20 onwards (Chart 2.18). Distress periods of these allied products were short-lived, and their production appears to have V-shaped recovery.

CHART 2.15: REAL GROWTH (IN PERCENT) OF CONSTRUCTION SECTOR

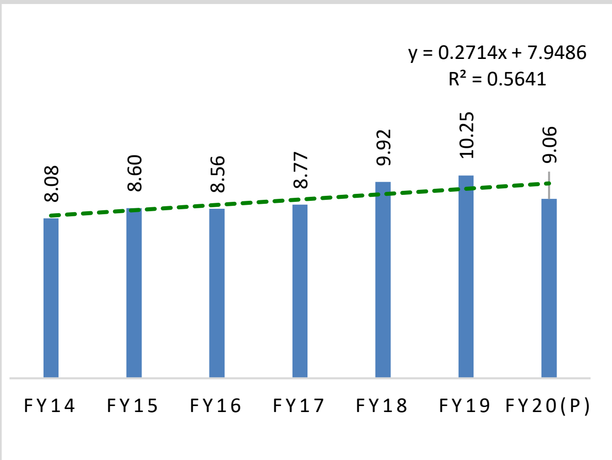
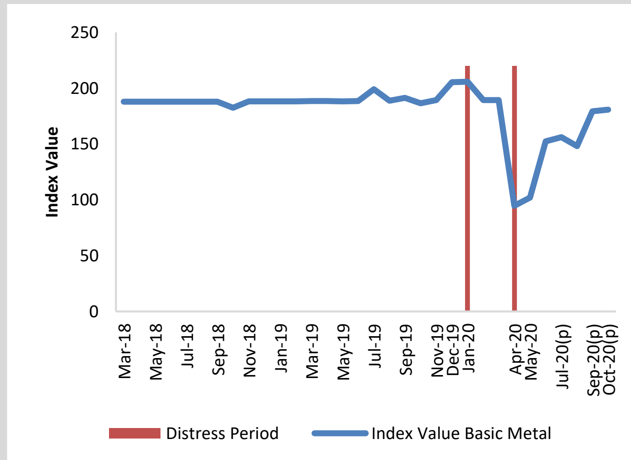


CHART 2.16: QUANTUM INDEX OF BASIC METAL



Source: BBS; compiled by FSD, BB.

CHART 2.17: MANUFACTURE OF CEMENT, IRON AND STEEL

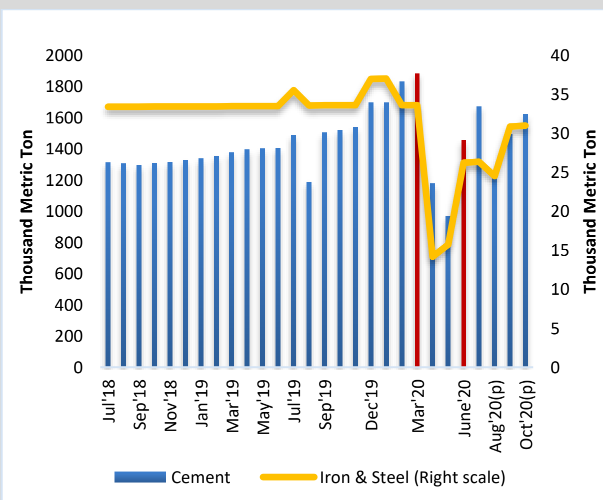
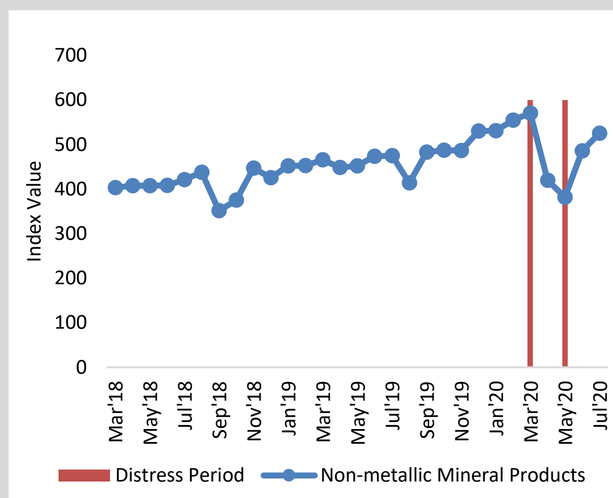


CHART 2.18: QUANTUM INDEX OF NON-METALLIC MINERAL PRODUCTS



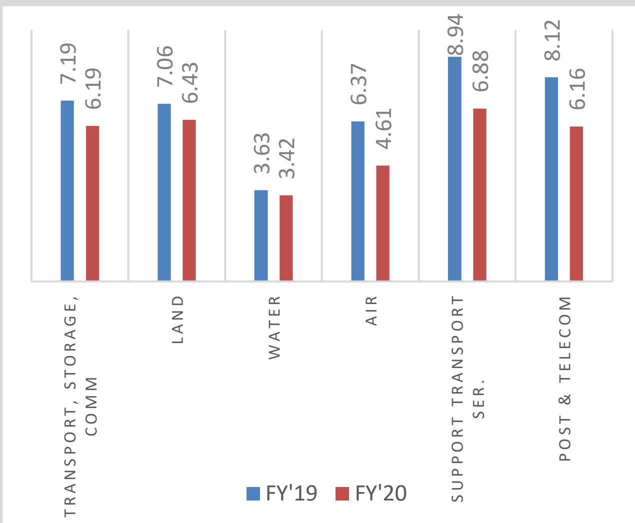
Source: BBS; compiled by FSD, BB.

2.3.3 Impact on Service Sector

It is already mentioned that service sector is the highest contributor to Bangladesh's GDP as its share was almost 51.30 percent (at constant price) in FY20. Pandemic hit major areas of this sector severely at a faster speed. General holidays, quarantine, social distancing, restriction on social gathering and ban on international flights, all of these measures had consequence for service sector performance. Consequently, growth of service sector declined by 1.46 percentage points and reached at 5.32 percent in FY20. The major areas of service sector which have been affected due to measures taken to contain the pandemic are discussed below.

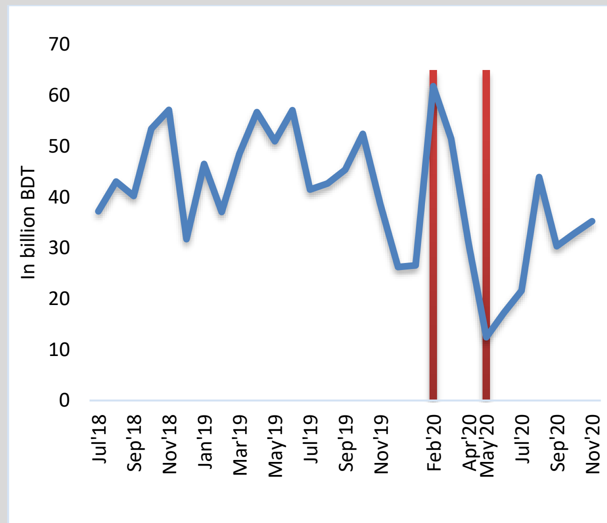
Transport, Storage and Communication is the second largest sub-sector within the whole service sector. The share of this sub-sector in GDP was 11.09 percent, amounting to BDT 1243 billion at constant prices in FY20. This sub-sector comprises of Land, Water and Air transport along with Support transport services, storage and Post and Tele communications. General holidays and maintaining social distancing all over the country due to COVID-19 have led to stagnation in transport and communication sub-sectors. Their combined effect shows that sub-sectoral growth has been decreased by 1 percent and re-fixed at 6.19 percent in FY20. Considering the growth figures, it appears that aviation industry has been the major victim followed by land and water transport services (Chart 2.19). As a result, import of crude petroleum also declined during the same period (Chart 2.20).

CHART 2.19: GROWTH RATE OF TRANSPORT, STORAGE, COMMUNICATION



Source: BBS; compiled by FSD, BB.

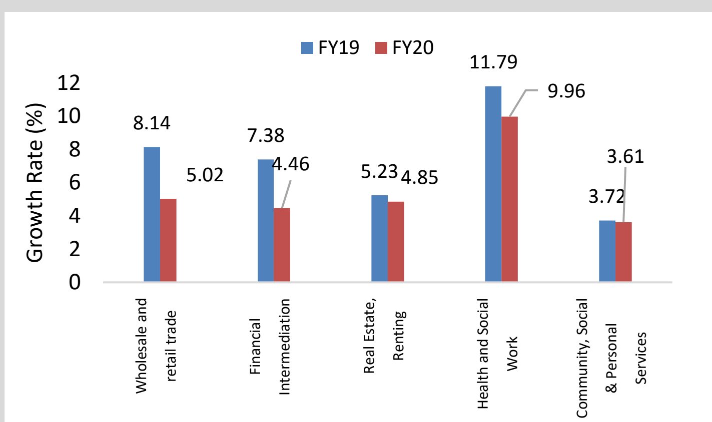
CHART 2.20: IMPORT OF PETROLIUM AND PETROLIUM PRODUCTS



Source: Monthly Economic Trends, BB.

Wholesale and retail trade is the largest sub-sector within the entire service sector. The share of this sector was 13.87 percent in FY20. The growth of this sub-sector went down to 5.02 percent at the end of FY20 compared to 8.14 percent in FY19, mainly due to demand and supply shocks arising from general holidays and other containment measures, elevated health cost and consumers' cautious approach for spending.

CHART 2.21: GROWTH RATE OF MAJOR SUB-SECTORS OF SERVICE SECTOR



Source: BBS; compiled by FSD, BB.

Chart 2.21 also shows that other areas such as financial intermediation, real estate, renting and business activities as well as health and social work services faced notable setback in FY20. Growth of financial intermediation came down drastically to 4.46 percent from 7.38 percent in FY19. Bangladesh Bank, as the country's central bank and prime financial regulator, has already taken several policy measures to overcome immediate effects ofCOVID-19. Slowdown in expansion of new businesses, decline in business and household income rein in real estate related renting activities. Due to restriction on transport facility, a large section of households, particularly elderly population face mobility constraint in getting access to regular health care services. Furthermore, health service providers were overwhelmed by contagious nature of this new disease. They responded by providing limited services due to lack of safety materials along with support staffs. Similarly, different kinds of social services such as club activities were limited to contain the spread of the disease. These activities resulted slowdown of growth profiles of health and community services.

2.4 IMPACT ON PRICE LEVEL MOVEMENT

Concurrent demand and supply-side shocks of the economy set the price levels under any given context. The COVID-19 shock influenced the movement of inflation due to disruption in major economic activities arising from disequilibrium in supply and demand conditions.

CHART 2.22: INFLATION (12 MONTH AVERAGE)

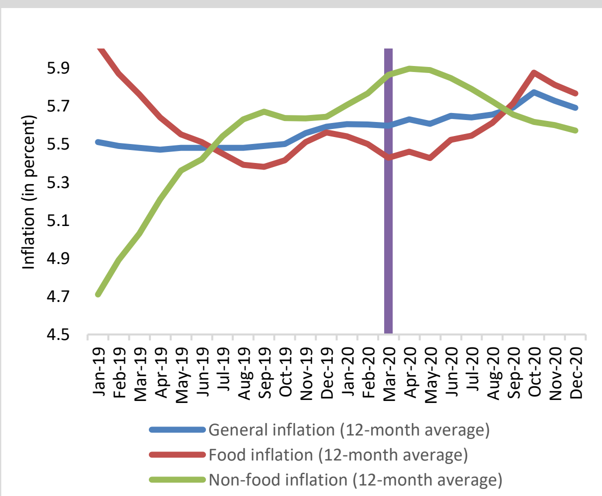
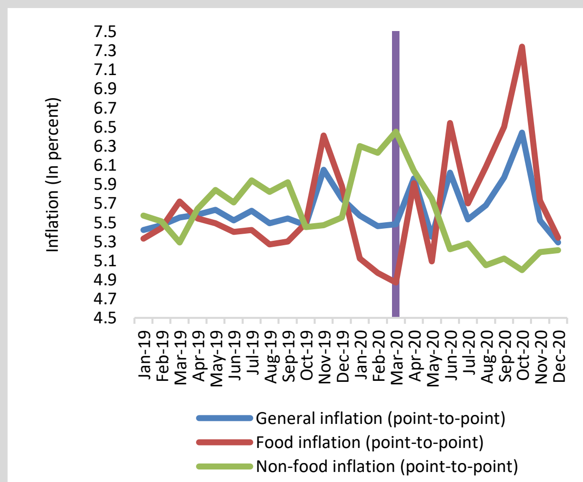


CHART 2.23: MOVEMENT OF INFLATION (POINT-TO-POINT)



Source: BBS; compiled by FSD, BB.

General inflation (12-month average) remained almost unchanged from December'19 to March'20 (Chart 2.22), i.e., before the onset of pandemic in Bangladesh. However, it began to rise slowly from 5.63 percent in April'20 and reached at 5.77 percent in October'20, though it slightly decreased in May'20. However, general inflation started to decline from November'20 and reached at 5.69 percent in Dcember'20. Food inflation showed continuous uptrend till October'20 while non-food inflation consistently declined during the same time. Hike in prices of rice, pulses and spices along with recovery of food prices in the international market mainly contributed to food inflation. In particular, rice price was the major contributor of food inflation mainly due to output loss resulted from flood and cyclone Amphan in production area.

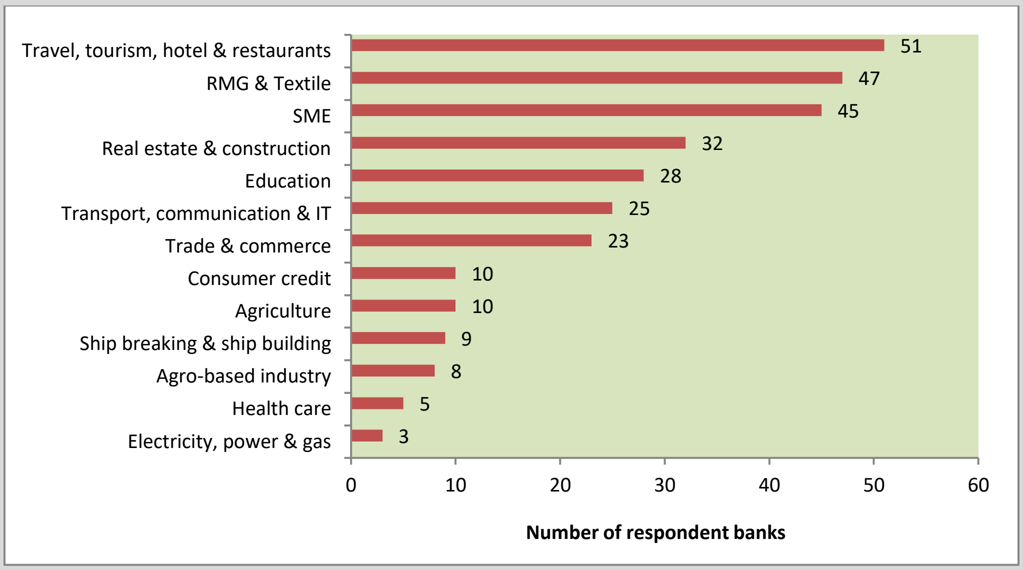
The point-to-point general inflation (Chart 2.23) also shows that the inflation increased from 5.96 percent in April to 6.44 percent in October'20. This increase was mostly driven by food inflation as non-food inflation consistently declined during this period, though some minor fluctuations were observed. The Chart also shows that the spikes in general inflation were mainly resulted from the three notable spikes of food inflation during the pandemic in April (5.91 percent), June (6.54 percent) and in October (7.34 percent). Up to September, rice, pulses and spices are the dominant determinants of this rise and the prices of vegetables, spices and pulses maintained rising trend till October'20[3]. Point-to-point non-food inflation shows a minor rising trend partly due to recovery of global oil prices. However, point-to-point general inflation started declining after October'20 and reached to 5.29 percent in December'20.

2.5 STAKEHOLDERS' PERCEPTION OF THE EFFECTS OF COVID-19

A survey was conducted among the 59 banks of Bangladesh to perceive their views on probable impact of the pandemic on different sectors of the real economy. Respondents were asked to rank the major economic sectors according to the likelihood of severity of being affected due to the COVID-19. Alongside, they were also asked to rank the sectors, which might need more credit considering the damage done by the COVID-19.

2.5.1 PERCEPTION ABOUT THE AFFECTED SECTORS

CHART 2.24: RANKING OF SEVERELY AFFECTED SECTORS BY COVID-19



Source: Market Perception Survey conducted by FSD, BB.

Every respondent ranked each of the 13 defined sectors depending on the severity of impact, where the sector which was ranked between 1-5 is assumed as the most affected one. Deploying this methodology, this study presented the respondents' views in Chart 2.24. According to the survey, the most severely COVID-affected economic sectors are *travel, tourism, hotel and restaurants, RMG & Textile, and SME*, while the *electricity, power and gas, health care, and agro-based industry* sectors are perceived to be the least affected among all the sectors. In the survey, 51 banks responded that *travel, tourism, hotel and restaurants* sector are assumed to be hard hit. *RMG and Textile* sector, according to the respondents, is the next heavily affected sector followed by SME, Real Estate and Construction Sector. E*ducation, and transportation sectors*, as explained earlier, are also perceived to be badly affected due to pandemic.

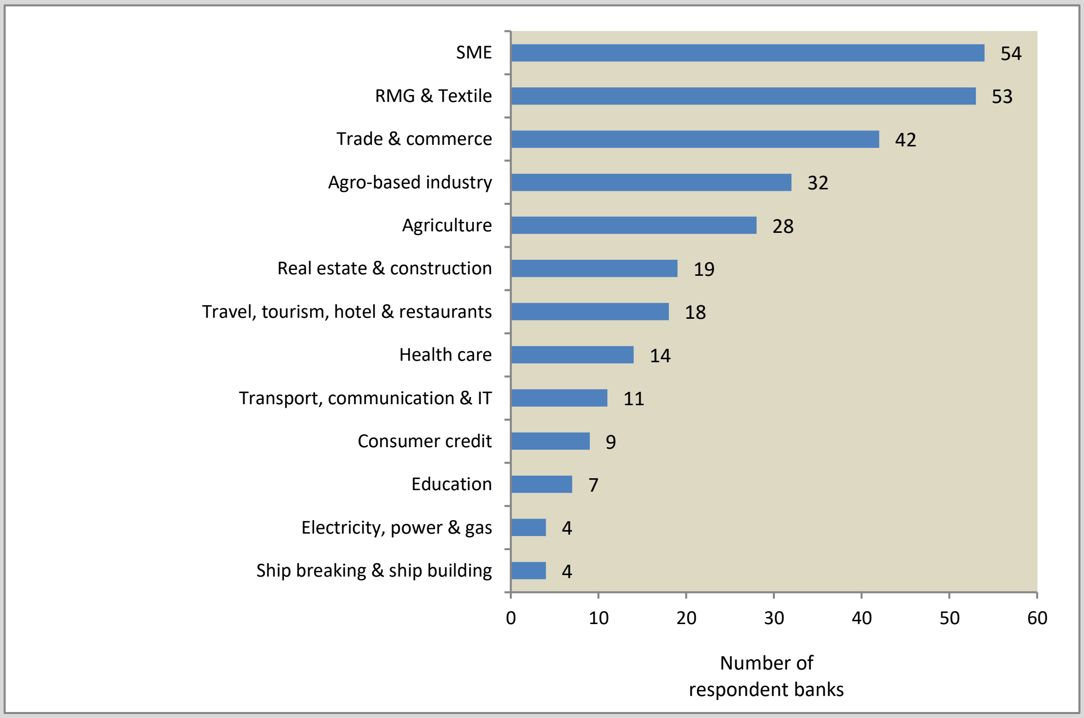
2.5.2 PERCEPTION OF FUTURE CREDIT DEMANDS (BY SECTORS)

The perception of banks for the sector-wise credit demand in the near future has been represented in Chart 2.25. As per the survey response, *SME* sector has the highest need for credit followed by *RMG and Textile, and trade and*

[3]Average Retail Prices (Open Market) Of Selected Commodities in Dhaka City during the Month of Oct'2020 as per BBS.

commerce, agro-based industry, agriculture, real estate and construction, travel tourism and restaurants, health care, transport, communication and IT, consumer credit, education, electricity, power and gas, and ship-breaking and building sectors.

CHART 2.25: RANKING OF SECTORS BY CREDIT DEMAND



Source: Market Perception Survey conducted by FSD, BB.

As the shock waves of COVID-19 heavily affected the SME sector, this sector would require adequate financial support to revive its businesses. The recovery might be slow but steady growth may be achieved in due course if proper financial support is ensured. *RMG and Textile* sector is the second highest credit-deserving sector. COVID-19 shock impacted this sector severely due to the cancellation of export orders accompanied by lower demand owing to uncertainty and continuation of spread of pandemic in the advanced economies. However, the Government has deployed sizeable stimulus packages targeting this industry, which helped the sector to revive quickly. On top of that, Bangladesh has a competitive advantage in producing RMG and textile. The export orders are expecting to grow once the coronavirus infection is contained in export partner economies and the consumer demands get restoring. 42 respondents perceived that *trade and commerce* sector has the potential to grow fast and would require more credit to regain its growth momentum back on track.

2.6 IMPLICATIONS FOR FINANCIAL STABILITY

This section analyzes the likelihood of transmission of COVID-19 shocks from real sector to banking sector and their implications for financial stability. The study also considers household and corporate income shocks and their impact on bank balance sheet through withdrawal of fixed deposits, which may in turn raise concern for financial stability. The details are as follows:

TABLE 2.3: SECTORAL SHARE OF BANK CREDIT

2.6.1 Sectoral Credit Risk

General presumption is that if a segment of the real economy is highly exposed to COVID-19 shock and the same segment has considerable exposure to banking sector credit, then the real sector shock may immediately pass on to the banking sector balance sheet via enhanced credit risk posing a concern for financial stability. Considering this conceptual argument and taking into account sectoral credit share (Table 2.3), the likelihood of impact from real sector to banking sector has been analyzed through the lens of financial stability.

Sector	Share of total credit (in percent)
a) Agriculture	3.97
b) SME	13.53
c) RMG	11.05
d) Textiles	7.28
e) Ship Building	0.58
f) Ship Breaking	0.85
g) Other Manufacturing Industry	19.08
h) Power, Gas	2.16
i) Construction	2.95
j) Commercial Real Estate Financing	2.59
k) Residential Real Estate Financing	1.93
l) Capital Market Institutions*	0.42
m) Non-Bank Financial Institution	0.69
n) Transport, Storage & Communication	1.45
o) Trade Services	16.11
p) Consumer Credit	4.68
q) Others	10.68
Total	100.00

Source: FSD (FPM data as of September 2020).

2.6.1.1 Agriculture Sector

Agriculture sector's contribution to GDP in FY20 was 13.35 percent. However, outstanding credit in this sector at the end of September'20 was BDT 453.1 billion, which was 3.97 percent of banking sector's credit. Since the impact of the COVID-19 shock on the agricultural sector seems to be minimal and the sector has relatively less exposure to bank credit, it is unlikely that any major threat may arise from agriculture to banking sector's stability.

2.6.1.2 Industry Sector

Manufacturing is the biggest sub-sector of GDP comprising 24.18 percent in FY20. This sub-sector includes some major industries of the economy such as RMG and textile. In addition, construction is another sub-sector, which has notable contribution (7.89 percent) to GDP. Therefore, this study has taken into consideration these sub-sectors to understand the magnitude of risk, which may transmit from industry sector to bank balance sheet.

RMG industry produces 34.82 percent of total industrial output[4]. This industry has significant exposure in bank credit as its share of credit as of September'20 was 11.1 percent. During the pandemic, this industry has got affected heavily, compared to the other sectors. It is evident from the Quantum Index of Industrial Production (QIIP) of manufacture of wearing apparel as the index dropped from 354.11 in March'20 to 62.53 in April'20. The market perception survey also supports the severity of impact of COVID-19 shock on this industry. However, with the financial and policy supports provided by the Government and the Bangladesh Bank, this industry started recovering very impressively from May'20 onwards. QIIP also provides evidence of early recovery as the index increased to 205.7 in May'20. Therefore, it could be presumed that despite the initial damage, this industry is gradually overcoming the COVID-19's downside risk, which is a good sign for the financial sector's stability as well as for the economy.

The textile industry holds 14.07 percent share of the total production of major industry groups. The initial impact of COVID-19 appears severe on this sector, which is also evident from the Market Perception Survey as 47 banks assumed that the 'RMG & Textile' sector is highly affected by the pandemic. The sector has been recovering gradually as output of this sector began to rise since June'20 onwards. As of September'20, the sectoral credit share

[4]Quantum Index of Industrial Production (QIIP), BBS

of the textile industry dropped to7.3 percent from 8.1 percent in December 2019. Therefore, it can be assumed that this industry has exposed to moderate level risk. Given the Textile Industry's inter-connection with RMG Industry, which enjoyed quick recovery, it can be argued that the industry is expected to recover substantially within reasonable time. Presumably, any serious financial stability threat is unlikely to arise from textile industry to banking sector's balance sheet in the current context.

The construction sub-sector accounted for 7.89 percent of GDP in FY20. The total outstanding credit of this sector at the end of September'20 was BDT336.9 billion, which was 3.0 percent of total banking sector's credit. The magnitude and duration of COVID-19's impact on this sub-sector are moderately high as predicted from the Market Perception Survey. Thus, the construction sector may pose a moderate level credit risk, despite the low sectoral credit concentration.

2.6.1.3 Service Sector

Transport and communication is another key sub-sector, which contributed around 11.09 percent to GDP in FY20. This sub-sector incurred severe losses due to ban on local and international transport. However, this sub-sector's credit share is only 1.5 percent of banking sector's total credit exposure. This implies that this sub-sector may have little impact on banking sector's stability.

The real estate sector is another major victim of COVID-19. But the shock that would be transmitted from this sector to the banking sector would not be substantial since the sectoral credit concentrations of commercial real estate financing and residential real estate financing sectors are low at 2.59 and 1.93 percent respectively. Furthermore, it has been discussed that the sector has begun to recover from the second half of 2020. According to Market Perception Survey, 32 banks assume that the real estate and construction sector are highly affected by the COVID-19 pandemic, whereas only 19 banks have the perception that this sector would need high credit in near future to recover from the damage caused by the pandemic. Foregoing discussion suggests that the credit risk that might be translated from the real economy to the banking sector would not disturb the overall stability of the system to a large extent.

2.6.2 Impact on Fixed Deposit and fixed deposit Accounts

It is discussed earlier that the pandemic has affected different sectors of real economy in varying degrees while depressing both household and corporate income. Presumably, such income shock prompted them to withdraw their savings including fixed deposits for livelihood during the distress period.

CHART 2.26: IMPACT ON FIXED DEPOSITS

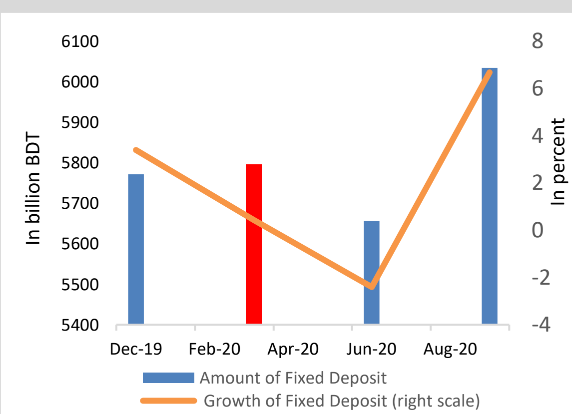
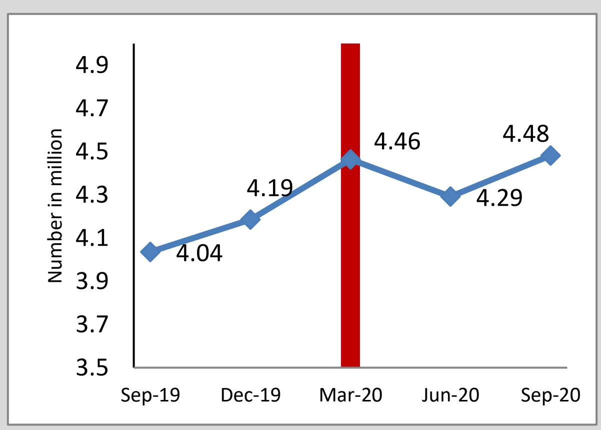


CHART 2.27: NUMBER OF FIXED DEPOSITS ACCOUNT



Source: Scheduled Banks Statistics, BB

Charts 2.26 and 2.27 show that in the March'20 quarter, before the pandemic hit, the volume of fixed deposit rendered a slow growth compared to the previous quarter. Growth of fixed deposit in December'19 was 3.39 percent, which declined to 0.43 percent in March'20. Growth of this deposit product further declined to -2.41 percent in June'20. In quantum term, fixed deposit declined from BDT 5,795.69 billion in March'20 to BDT 5,656.25 billion in June'20. The number of fixed deposit accounts also declined in this period and reached to 4.29 million in June'20 from 4.46 million in March'20. These reductions in amount and number of fixed deposits indicate an income shock which may emanate from the pandemic. However, amount and number of fixed deposit accounts began to increase from July'20 onwards reflecting gradual recovery of the economy from the shock waves of the pandemic.

CHAPTER 3 : IMPACT ON FISCAL SECTOR AND ITS IMPLICATIONS FOR FINANCIAL STABILITY

The Economic record provides evidence that fiscal sustainability and financial stability are inter-linked and because of this relationship, after the Global Financial Crises of 2007-08, financial stability-oriented fiscal policy is warranted (BIS, 2016)[5]. During a pandemic, the fiscal sector generally faces severe stress due to an increase in the cost of unprecedented health expenditure and transfer payment accompanied by poor revenue collection owing to depressed corporate and household income. In most cases, fiscal spending increases and resources are rearranged to meet immediate challenges of the crisis. Development projects and investment expenditures are staggered for implementations, and the governments seek debt from domestic as well as external sources. Moreover, in the post-pandemic time, fiscal plans require to accommodate the loss incurred in the pandemic for several years. Eventually, an economy may face slow growth and fall into a debt loop, which might impinge financial stability. Against this backdrop, this chapter discusses the possible stability risks related to the fiscal sector of Bangladesh with some widely accepted indicators, such as Fiscal Balance to GDP, External Debt to GDP, Public Debt to GDP and Sovereign Risk Premium and Binary Recursive Tree (BRT) Analysis.

3.1 IMPACT ON REVENUE COLLECTION

One of the main channels through which COVID-19 shock may affect fiscal balance is revenue collection. As mentioned earlier, containment measures of COVID-19 have depressed local and international trade as well as household and corporate income, revenue collection has lost its growth momentum.

While growth of fiscal revenue in FY19 was 11.81 percent, it sharply declined to 4.43 percent in FY20. In quantum term, aggregate revenue in FY20 was BDT 2630.6 billion, which could have reached to BDT 2906.3 billion in a normal economic scenario (Chart 3.1).

CHART 3.1: TRENDS IN TOTAL REVENUE COLLECTION

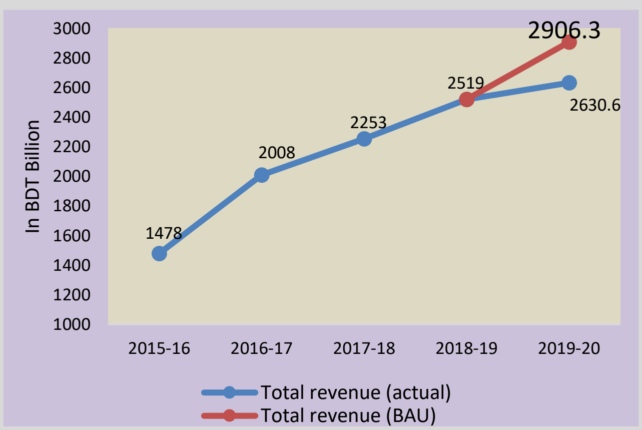
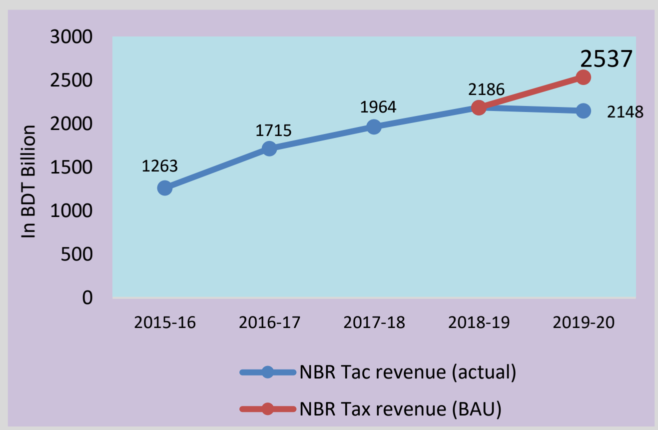


CHART 3.2: TRENDS IN NBR REVENUE COLLECTION



Source: Monthly Fiscal Macro Update, Ministry of Finance (various issues).

National Board of Revenue is the main institution of revenue collection in Bangladesh. Looking at data, it appears that revenue collection began to realize shock waves of COVID-19 through international trade channel since the beginning of third quarter of FY20. In particular, NBR's revenue collection from international trade was BDT 95.65 billion in the second quarter of FY20, which declined to BDT 21.61 billion in the third quarter of FY20. This implies that revenue from customs duty on import and export alone declined by BDT 74.04 billion. Share of revenue from international trade was 20.2 percent in July'19, which reached its lowest level of 2.5 percent in April'20 (Chart 3.3).

[5] BIS 86th Annual Report, 2016.

However, with the containment measures of shock waves such as imposition of general holidays, ban on national and international transport, and restricted business activities, aggregate revenue collection by NBR got its hardest hit in the fourth quarter of FY'20. It dropped by 12.7 percent in the April-June quarter of 2020 as compared to that of the previous quarter. Hence, total NBR revenue collection in FY20 ended up with BDT 2148 billion which is 1.73 percent lower than that of FY19. Considering the Business-as-Usual (BAU) trend, i.e., in a normal economic (i.e., non-COVID) scenario, this revenue could have reached to BDT 2537 billion as shown in Chart 3.2. Nevertheless, as the restrictions are gradually being relaxed, the NBR revenue collections seem to stabilize somewhat as the declining rate narrowed down to 4.4 percent in the July-September 2020 quarter and reached to BDT 499.9 billion.

CHART 3.3: MAJOR SOURCES OF NBR REVENUE

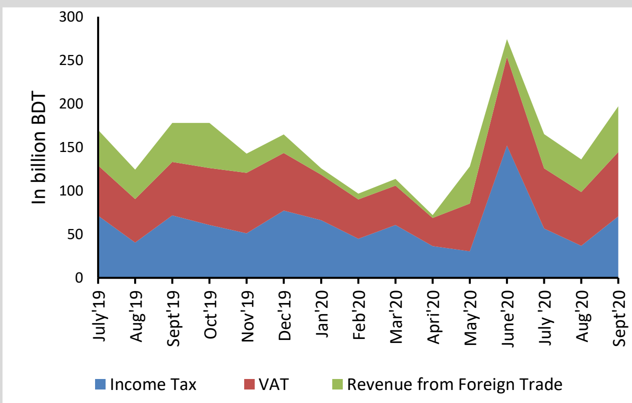
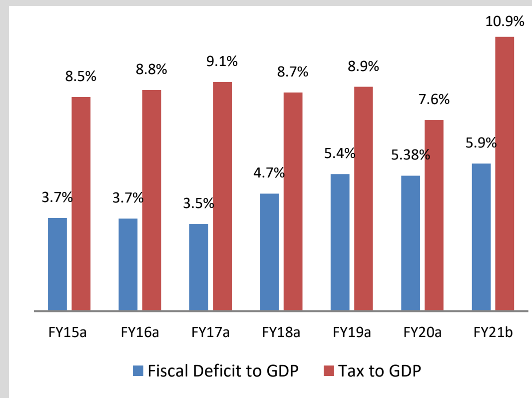


CHART 3.4: FISCAL DEFICIT AND TAX REVENUE RECEIVED



Source: Monthly Fiscal Macro Update, Ministry of Finance (various issues).

3.2 IMPACT ON FISCAL BALANCE AND FINANCIAL STABILITY

Slow growth of revenue collection impacted fiscal balance. Though fiscal deficit exceeded the generally accepted threshold of 5 percent of GDP in FY19, it further widened in FY20 and the budget declared for FY21 plans for a deficit of 5.9 percent of GDP (Chart 3.4). It is to be noted that the budget deficit may exceed the projected level for FY21 if actual revenue collection declines the estimated figure. In FY21 budget, GoB declares expenditure, revenue, and deficit for BDT 5680 billion, BDT 3820 billion, and BDT 1860 billion respectively. However, if the expenditure budget remains the same, and COVID does not toll over the economy anymore and revenue collection follows its average trend of 78 percent, GoB might incur a deficit for BDT 840.40 billion more. It could hike the fiscal deficit to GDP ratio at 8.5 percent, which might become a stability risk for the economy. Nevertheless, as tax-to-GDP ratio is still below the widely accepted threshold level of 15 percent (it was 8.9 percent in FY19 and 7.7 percent in FY20) for developing economies, automation in tax collection and efficiency of NBR might help to increase revenue without imposing further tax on citizens.

3.3 IMPACT ON PUBLIC DEBT AND FINANCIAL STABILITY

Compared to FY19, gross public debt[6] in FY20 increased by BDT 765.60 billion to BDT 9370.23 billion. Nevertheless, the public debt-to-GDP ratio dropped by 0.5 percentage point to 33.4 percent at the end of FY20 compared to the previous fiscal year (Chart 3.5). Experience of different countries suggests that a high level of public debt impinges growths and sustainability, while a 40 percent public-debt-to-GDP ratio is the threshold level

[6]Public Debt is calculated by the summation of external debt (converting into local currency) + Bank Borrowing + NSC Outstanding)

for developing and emerging economies.[7] Since the public-debt-to-GDP ratio is well below the threshold level, this does not seem to appear as a threat for financial stability in Bangladesh.

CHART 3.5: SOURCES OF PUBLIC DEBT AND ITS SHARE WITH GDP

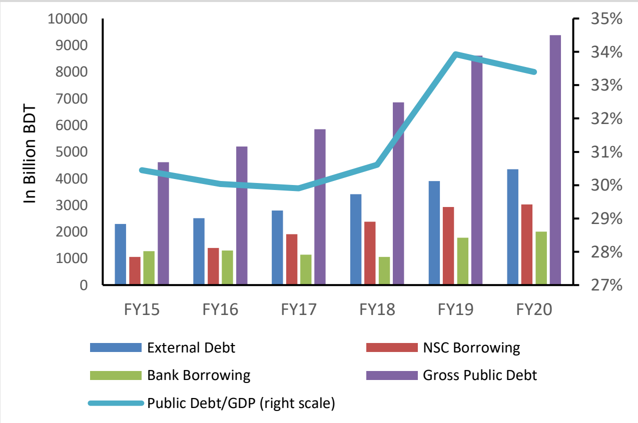
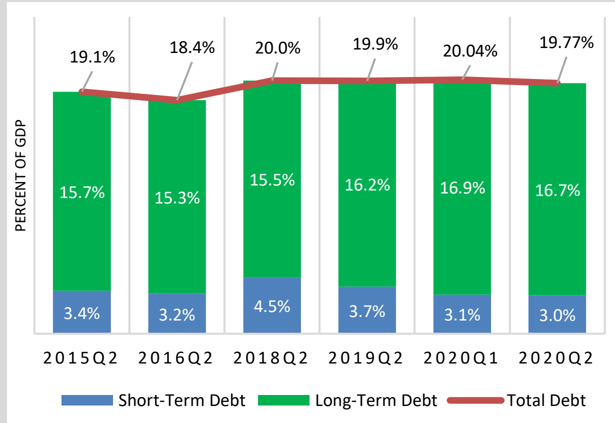


CHART 3.6: EXTERNAL DEBT AS A PERCENTAGE OF GDP



Source: Statistics Department, BB; and MoF.

3.4 IMPACT ON EXTERNAL DEBT AND FINANCIAL STABILITY

An increase in fiscal deficit translates to borrowing from domestic and or external sources. Short term and long-term external debts are important sources of financing for emerging economies, especially in an emergency. However, a high level of external debt could be a threat to the stability and future growth of an economy. Amid the pandemic of COVID-19, compared to the figures of the first quarter to the second quarter of 2020, external debt has been increased by USD 4.6 billion and registered USD 65.3 billion at the end of June'20. However, compared to the GDP, external debt has declined by 0.3 percentage point (Chart 3.6) during the corresponding period. It has also been observed that both short and long-term debt, compared to GDP, has decreased marginally from 3.1 percent and 16.9 percent to 3.0 percent and 16.7 percent respectively at the end of June'20 quarter compared to the previous quarter. Short-term debt, which may heighten foreign exchange risk, possesses only a small share of GDP while long-term debt is deployed to increase productive capacity of the economy. Given the sizeable forex reserve of USD 41 billion at the end of November'20 and its gradual increasing trend, external debt does not seem to appear as stability threat in near future.

3.5 IMPACT ON SOVEREIGN RISK AND FINANCIAL STABILITY

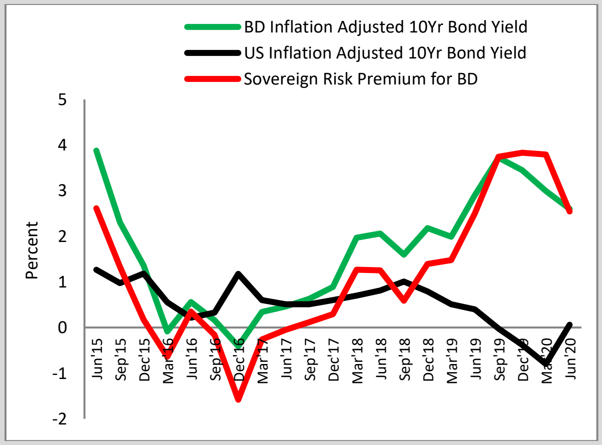
The sovereign risk premium is a well-accepted indicator to gauge the risk of a country. Generally, the sovereign risk premium is an assessment of the 'additional cost' that a country needs to pay to the investors compared to the other country that is considered risk-free. Typically, this spread estimates the risk that investors take when purchasing public bonds of a given nation. Therefore, always there remains a positive relationship between risk and interest yield. It is commonly determined by the difference between the inflation-adjusted 10 Years bonds of the respective country and the USA.

The trend of the sovereign risk premium shows that the risk to invest in Bangladesh has sharply been lessening since the last quarter of 2019 when COVID-19 has started to spread to the rest of the world. In particular, compared

[7]Chowdhury, A. (2013). *Forward-looking Macroeconomic Policies–Re-examining Inflation and Debt Limits* (No. PB14). United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).

to the end of December'19, the sovereign risk premium has recorded decline by 129 basis points at the end of June'20.

CHART 3.7: SOVEREIGN RISK PREMIUM



3.6 FISCAL SUSTAINABILITY AND FINANCIAL STABILITY THROUGH THE BINARY RECURSIVE TREE ANALYSIS

In order to assess financial stability risk associated with elevated fiscal sustainability risk due to COVID-19, this study has applied standard Binary Recursive Tree (BRT) analysis developed by Manasse and Roubini (2005). Specialty of the model is that it has considered threshold level of each vulnerability variable. The model begins with a root node, which carries threshold value of a particular vulnerability variable and then splits into two sub-trees (right and left) by adopting rule-based binary approach (Yes, No) in assessing financial stability risk originated from fiscal vulnerability risk. The schematic view of BRT Model is presented in Chart 3.8. Main findings of the Model are as follows:

(1) In its root node, the Model has considered External Debt-to-GDP ratio as the first variable and its threshold value is assumed as 49.7 percent. Given the total external debt of USD 60.29 billion and aggregate GDP of USD 209.97 billion for Bangladesh economy in the year 2019,

$$\text{Actual Value of External Debt-to-GDP} = \frac{\text{USD 60.29 billion}}{\text{USD 209.97 billion}} = 28.71 \text{ percent}$$

Since actual value of the External Debt-to-GDP ratio of Bangladesh economy is lower than the threshold value of 49.7 percent, the answer to the question of whether actual value exceeded threshold value is "No". Thus, further analysis requires to consider the variable in the left sub-tree and requires calculating the short-term external debt to reserves in the second step.

(2) The second step involves two directions. If the short-term debt over reserves ratio exceeds 1.34, it moves on to the right. Else move on to the left. According to the data set, Short-term debt of Bangladesh is USD 9.74 billion at the end-December'19, and the foreign exchange reserve was USD 32.69.

$$\text{So, short-term debt to reserve} = \frac{\text{USD 9.74 billion}}{\text{USD 32.69 billion}} = 0.30$$

Since the figure of short-term debt to reserves is 0.30 which is below the model's threshold value of 1.34. So, the direction goes on to the left side and need to evaluate the external debt to revenue ratio additionally.

(3) The direction moves on to the right side if the public external debt is above 215 percent of revenue. In case of Bangladesh, the answer is ‘no ‘because the ratio is 157.09 percent. (Public External Debt of Bangladesh is USD 47.18 billion and Government revenue is USD 30.03 billion)

$$\text{Hence, the ratio equals to} = \frac{\text{USD47.18 billion}}{\text{USD 30.03 billion}} = 157.09 \text{ percent}$$

(4) The fourth step searches for real GDP growth if it exceeds -5.45 percent. For Bangladesh, the real GDP growth rate during 2019 is 8.15 percent, which is in the right threshold level showed a minimal probability of 2.30 percent of occurring crisis in 2020.

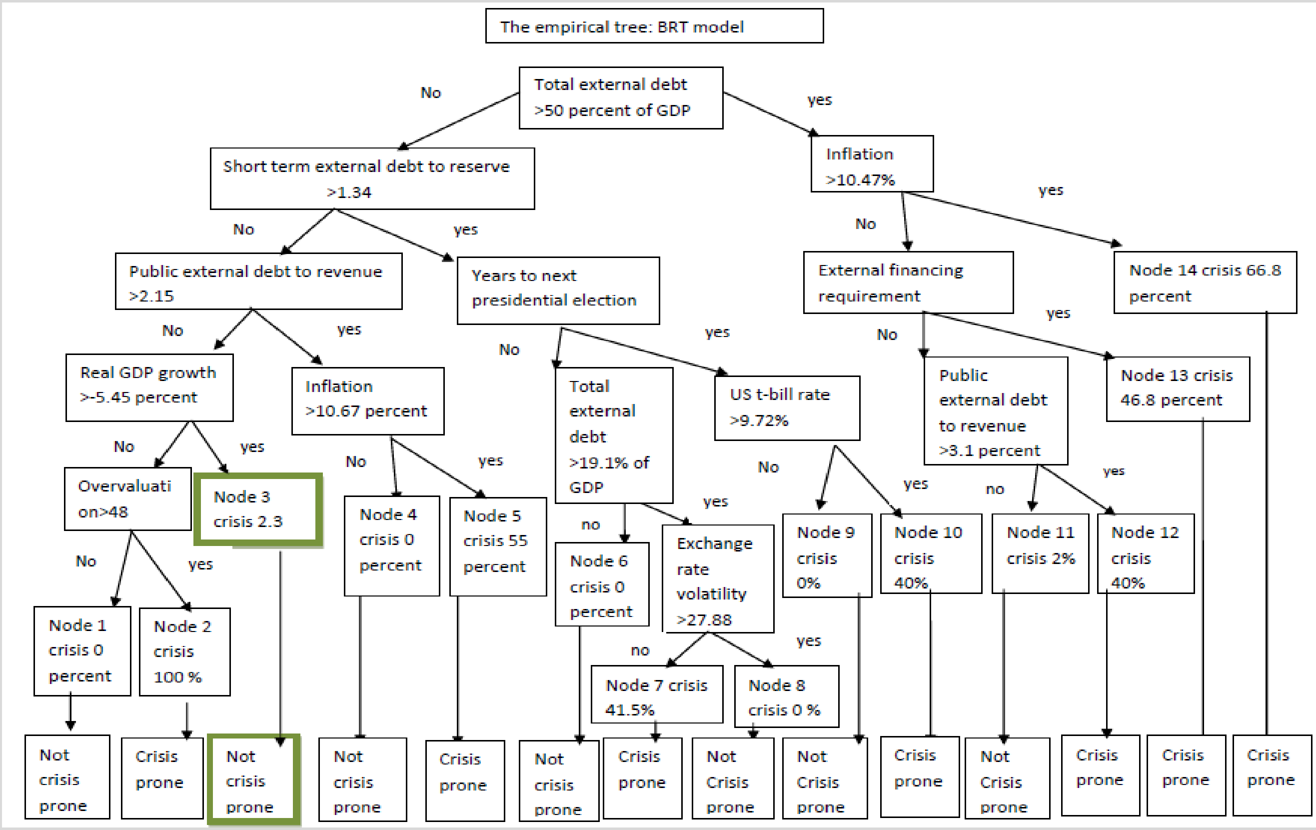
By applying the BRT model, safety level of node 3 is achieved. This result indicates that Bangladesh economy is unlikely to fall in high-risk zone of debt sustainability during 2020. By applying similar approach, the proposed debt sustainability based on the projected macroeconomic data for the year 2021-2023 has also been examined. It reveals that Bangladesh economy will be in safe zone (with a minimum 2.3 percent probability of crisis) throughout the projected periods.

TABLE 3.1:DEBT CRISIS PROJECTION OF BANGLADESH UNTIL 2023

Indicators	2019	2020	2021	2022	2023
Total External Debt to GDP	0.29	0.30	0.27	0.27	0.27
Short-term ED to FX Reserves	0.30	0.23	0.19	0.16	0.15
Public ED to Revenues	1.57	1.76	1.43	1.43	1.34
Real GDP growth rate	8.2 percent	5.3 percent	7.7 percent	8.1 percent	8.5 percent
Probability of debt crisis	2.30 percent	2.30 percent	2.30 percent	2.30 percent	2.30 percent
Decision-tree (end point)	node 3	node 3	node 3	node 3	node 3

Source: FSD Staff Calculation

CHART 3.8: BINARY RECURSIVE TREE (BRT)



Source: Manasse and Roubini (2005) (cited in Nursechafia, Nursechafia and Muthohharoh, Marhamah, 2015: 'An Early-Warning Signal of Sovereign Debt Crisis in Indonesia.')

Above analysis shows that pandemic immediately affected Government's revenue collection through trade channel since January'20 while the entire portfolio of NBR's revenue collection remained at sub-optimal level during the second-half of FY20. However, revenue collection began to get back its growth momentum since the beginning of FY21. Considering several fiscal vulnerability variables such as tax-to-GDP ratio, fiscal deficit-to-GDP ratio, public debt-to-GDP ratio, short-term debt-to-foreign reserve, sovereign risk premium, external debt-to-GDP ratio, real growth of GDP and their threshold levels of vulnerability and above all, analysis through Binary Recursive Tree Model, it appears that fiscal sustainability of Bangladesh economy still remains in safe zone. It is therefore unlikely that shock waves of COVID-19 and its containment measures would cause any major threat, which may run from fiscal to financial sector stability.

CHAPTER 4 : IMPACT ON EXTERNAL SECTOR AND ITS IMPLICATIONS FOR FINANCIAL STABILITY

The key areas of the external sector of an economy which are likely to be substantially impacted by the COVID-19 are export, import, remittance, foreign direct investment, and external debt. The consequential impact on these factors would lead to the changes in the Balance of Payment (BOP) which subsequently would affect the exchange rate as well as foreign exchange reserve (FXR) position of the country. FXR is a crucial component for a country's financial stability as it provides resilience against any unforeseen external shocks or emergencies like the COVID-19 pandemic. Under this backdrop, this chapter highlights the current states of the stated components; how COVID-19 has impacted those; and their probable movements in the near future. Finally, the chapter examines the implications of all these impacts on financial stability of the country.

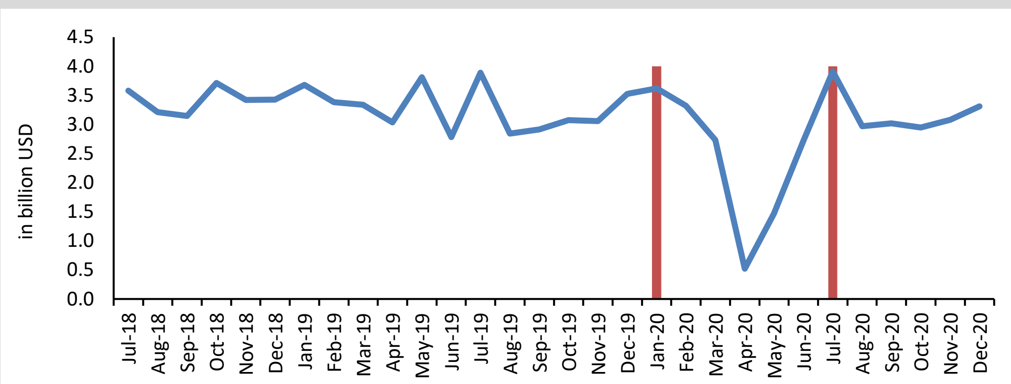
4.1 CURRENT STATES OF EXTERNAL SECTOR

This section illustrates the movements of the key external sector components both at the pre-COVID-19 phase and the COVID-19 phase till the latest available data point. It would, therefore, enlighten to realize the way the pandemic affected different segments of the external economy so far and how the sector has responded against this sudden shock.

4.1.1 EXPORTS

It is evident from Chart 4.1 that exports of the country have been affected immediately as the COVID-19 started to spread at different parts of the globe since the early 2020. Fall in demand in the global market has adversely affected the supply-side which has been deteriorated further owing to the disruptions in international transports and ban on cross-border movement.

CHART 4.1: TREND OF EXPORTS (JULY'18 – DECEMBER'20)



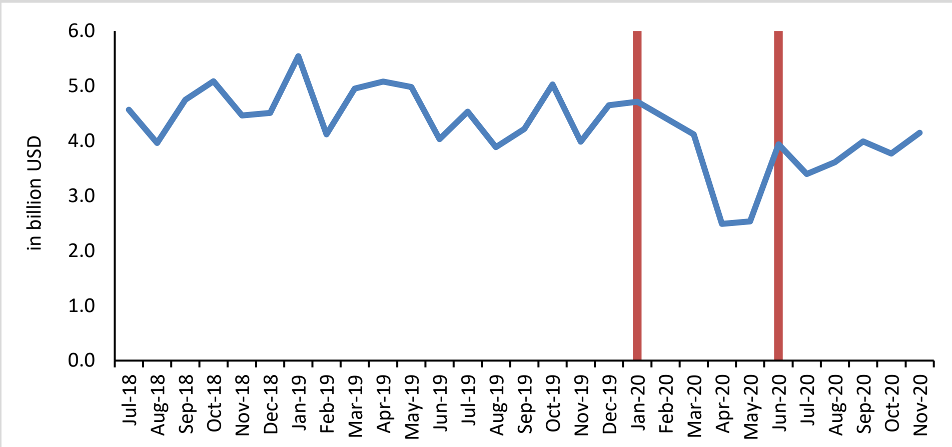
Source: Monthly Economic Trends, Bangladesh Bank (Various issues).

The amount of exports dropped sharply from USD 3.62 billion in January'20 to 0.52 billion in April'20. However, it got a quick 'V-shaped' recovery since then and reached to USD 3.91 billion in July 2020 attributable to the gradual open-ups of the global markets and the Government's stance to revive the export-oriented industries. Since July'20 the exports hovered around USD 3.00 billion per month till November'20 and rose moderately to USD 3.31 billion in December'20.

4.1.2 IMPORTS

COVID-19 had momentous impact on the imports of Bangladesh during the first two quarters of 2020. Notable reduction in firms' and households' incomes and disruptions in the global supply chain, among others, have resulted in rapid decline in import payments from USD 4.71 billion in January'20 to USD 2.53 billion in May'20. As shown in Chart 4.2, it has been regaining the momentum since then but at a slower pace to reach at the pre-COVID-19 level. Total imports reached to USD 4.15 billion in November'20.

CHART 4.2: TREND OF IMPORTS (JULY'18 – NOVEMBER'20)



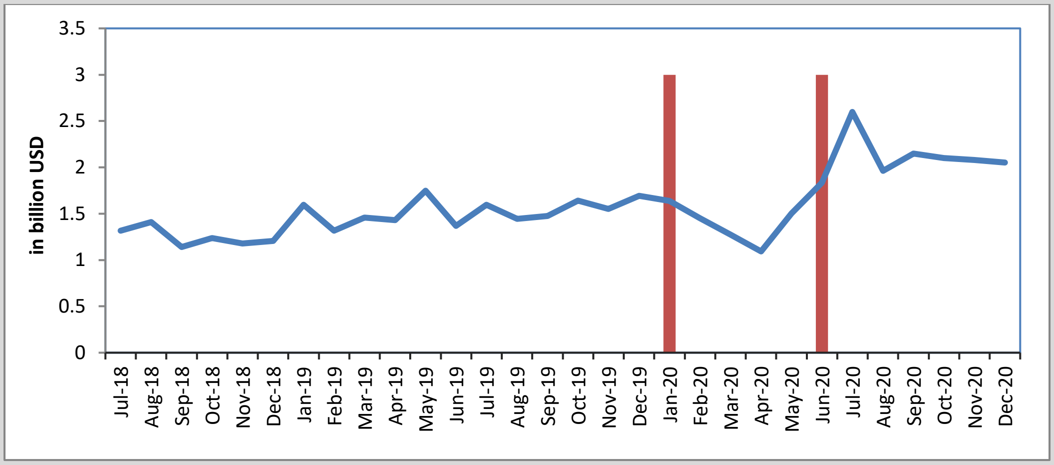
Source: Monthly Economic Trends, Bangladesh Bank (Various issues).

4.1.3 REMITTANCE INFLOWS

Remittance inflows are assumed to be largely affected as the economies of the source countries, especially, the oil-exporting countries witnessed marked slow-down since the onset of COVID-19. As an immediate effect, remittance inflows in Bangladesh declined throughout January to April'20 while it recovered quite rapidly thereafter and even surpassed the pre-COVID-19 period (i.e., 2019) by some notable margins on a point-to-point basis. As shown in Chart 4.3, remittance inflows declined from USD 1.69 billion in December'19 to USD 1.09 billion in May'20, which increased thereafter and picked up to USD 2.60 billion in July'20. It remained close to USD 2.00 billion on the following months. In December'20, total remittance inflows amounted to USD 2.05 billion.

The increase is due mainly to three plausible reasons: the transfer of higher savings by the wage-earners because of the threats of their job losses and likelihood to come back home, more use of formal channels instead of informal channels to remit the money, and the Government's incentive on inward remittances.

CHART 4.3: TREND OF REMITTANCE INFLOWS (JULY'18-NOVEMBER'20)

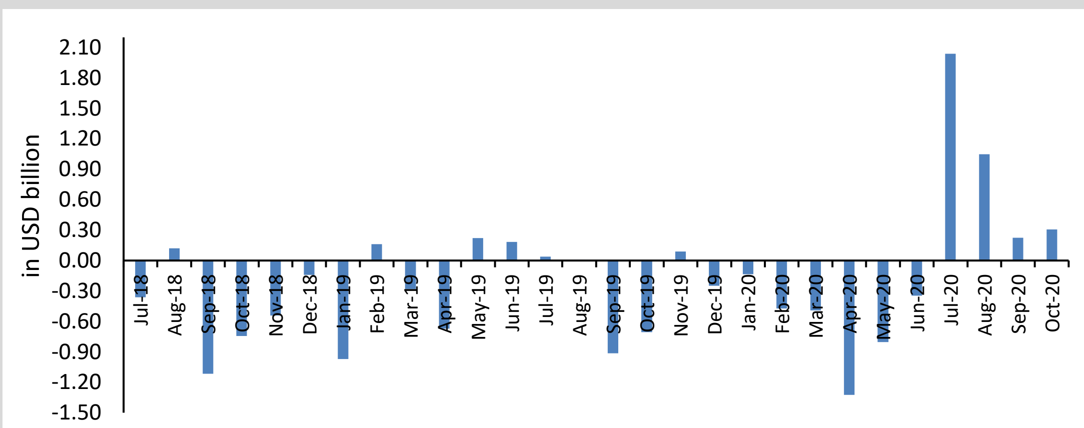


Source: Monthly Economic Trends, Bangladesh Bank (Various issues).

4.1.4 Current Account Balance

At the earlier phase of COVID-19 pandemic, the deficit in Current Account Balance (CAB) widened from USD 0.14 billion in January'20 to USD 1.32 billion in April'20. Later, as the exports and remittance rose rapidly while the imports slowed down a bit, the overall CAB situation improved and eventually it became positive (amounting to USD 2.04 billion) in July'20 as illustrated in Chart 4.4. However, with the increasing trend in import payments in the following months, the CAB started to decline, yet remained positive.

CHART 4.4: TREND OF CURRENT ACCOUNT BALANCE

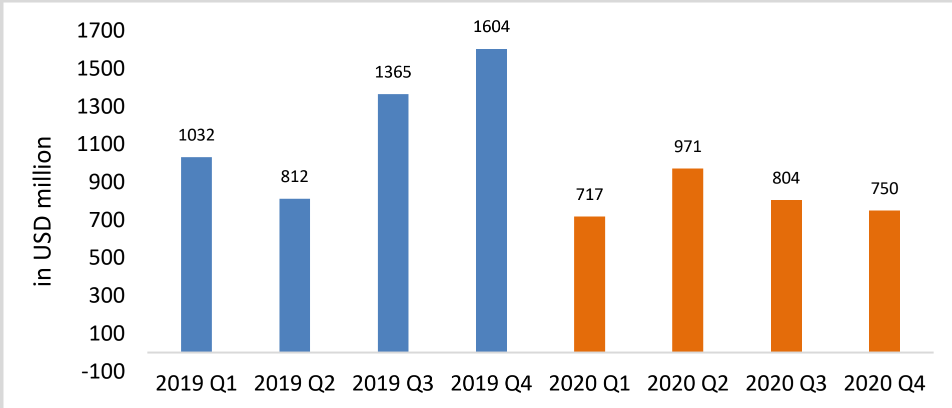


Source: Monthly Economic Trends, Bangladesh Bank (Various issues).

4.1.5 Foreign Direct Investment

The uncertainties in the global business and investment have induced the limited flows of FDIs globally. As Chart 4.5 depicts, inflows of FDI have declined in the first quarter of 2020 when COVID-19 hit the economy. However, FDI inflows recorded marked improvement in the second quarter, though it remained sluggish during the third and fourth quarters. Nevertheless, as the pandemic is expected to fade away in the near future, the FDI inflows are assumed to move with a promising momentum.

CHART 4.5: TRENDS IN FDI INFLOWS (QUARTERLY DURING 2019-2020)

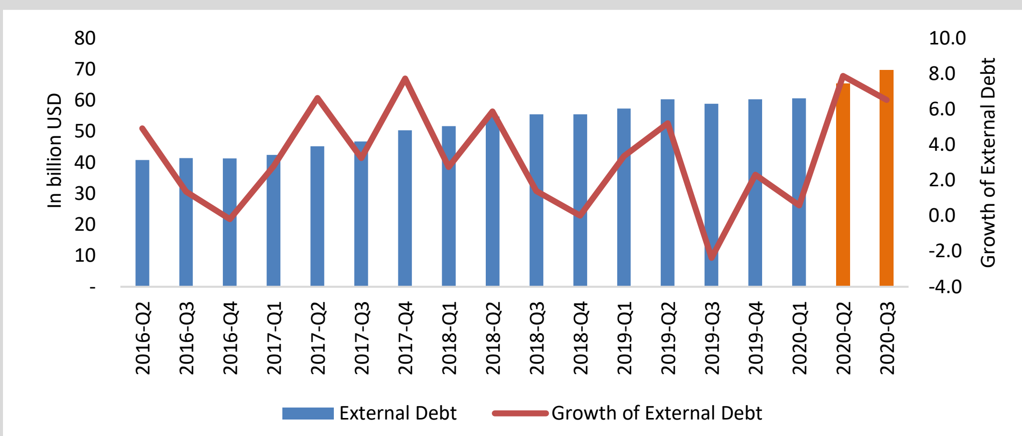


Source: Bangladesh Bank Quarterly, Bangladesh Bank.

4.1.6 External Debts

Fiscal deficit is supposed to rise in pandemic situations as the revenue collection usually declines and the governments are forced to increase their expenditure to incur social safety nets and other transfer payments. In particular, the governments of developing countries have to rely on foreign debts to overcome the adversities. In the context of Bangladesh, the growth rate of external debts was 7.9 percent and 6.5 percent respectively at the end of second and third quarters of 2020 (Chart 4.6). In monetary terms, the external debts increased from USD 60.3 billion at end-December'19 to USD 69.7 billion at end-September'20.

CHART 4.6: TRENDS IN EXTERNAL DEBT (2016-2020)

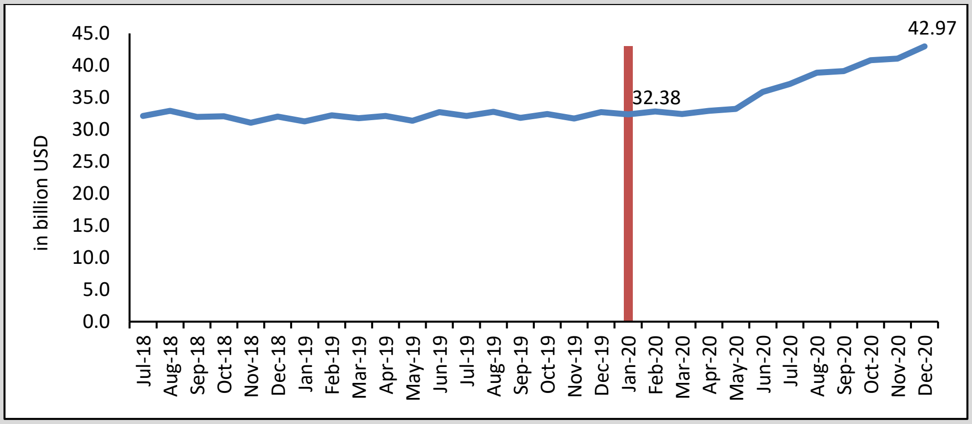


Source: NSDP, Bangladesh Bank.

4.1.7 Foreign Exchange Reserves

The effect on each component of current and financial accounts of Balance of Payments has ultimately impacted the foreign exchange reserve. As the Chart 4.7 shows, the foreign exchange reserve surged in 2020 despite the COVID-19 pandemic primarily attributed by the higher growth of remittance and external debt, lower import payments, and moderate recovery of exports. The foreign exchange reserves, which was hovering around USD 32 billion since July'18, eventually got the momentum since April'20 and piled up to a record-high amounts to USD 43.0 billion at end-December'20.

CHART 4.7: TREND OF FOREIGN EXCHANGE RESERVE



Source: Monthly Economic Trends, Bangladesh Bank (December 2020).

4.2 PROBABLE FUTURE SCENARIO OF EXTERNAL SECTOR

In the following sections, the future projections are made on key external sector components till 2023, based on the historical data and current pandemic context, to understand the probable impact of COVID-19 over the external sector. The general framework of methodology is described in Box 4.1.

4.2.1 EXPORT SCENARIO

As explained earlier, export is influenced by both demand-side shocks (i.e., due to the partner countries' economic growth or slowdown) and supply-side shocks (i.e., the production of the exporting country), this study has considered these two dimensions of shocks to find their effect on export and its projected trend till 2023.

For estimating the demand-side impact, 15 largest export-destination countries of Bangladesh are taken into account[8]. The share of exports in these countries constituted 69.5 percent of total exports in 2019[9]. Exports from Bangladesh was highest to the United States (12.8 percent) followed by Germany (12.7 percent), the United Kingdom (8.5 percent), Spain (5.8 percent) and France (5.2 percent). Considering export elasticities of Bangladesh economy with the GDP growth of 15 largest export-destination countries, it appears that the exports of the country are highly sensitive to GDP growths of France, Australia, Spain, Canada, and Japan as export elasticities of these five countries are found to be 3.97, 2.93, 2.56, 2.29, and 1.73 respectively over the 2010-2019 period[10]. Based on these historical average elasticities and the IMF's growth projection, the exports in these countries are forecasted for 2021 with Business-as-Usual (BAU) scenario. Trends of 2020 and 2021 are then extended up to 2023 as the BAU scenario. Later, one standard deviation band is used to project the optimistic and the conservative trends. The results of these demand-side shocks are considered in projecting the likely trend of exports as shown in Chart 4.8. As these shocks materialized, the exports of Bangladesh economy declined from USD 39.34 billion in 2019 to USD 33.61 billion in 2020. However, exports to these countries may pick up due to projected recovery of these economies from 2021. Projection of this study shows that the export may reach to USD 39.11 billion in 2023 at BAU scenario though it may vary within a range of USD 36.88 billion to USD 41.35 billion.

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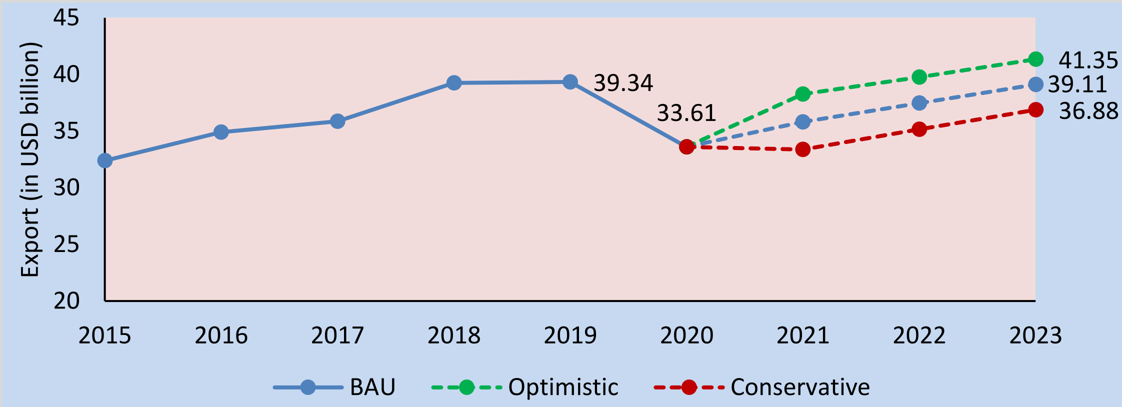
[8]Australia, Belgium, Canada, China, Denmark, France, Germany, India, Italy, Japan, Netherland, Poland, Spain, UK, and USA.

[9]National Summary Data Page (NSDP) dataset, Bangladesh Bank.

[10] Country-level data was not available for entire year of 2020 when the calculations were conducted.

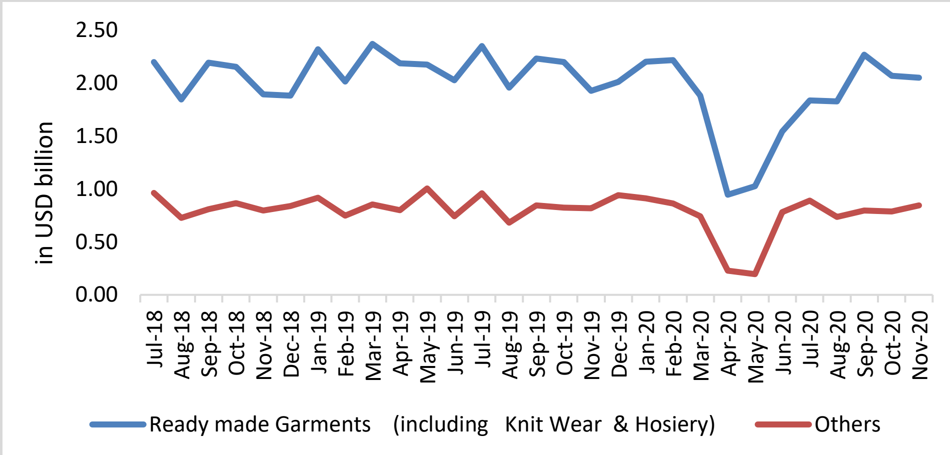
CHART 4.8: EXPORT FORECASTING BASED ON DEMAND-SIDE SHOCK



Source: Projection by FSD, based on Monthly Economic Trends and National Summary Data Page (NSDP), Bangladesh Bank.

Exports also experienced supply-side shocks due to various containment measures along-with disruption in import of raw materials. Chart 4.9 reveals that both the RMG as well as other exporting sectors are largely affected during March-May'20. Thereafter, a hint of notable revival is evident.

CHART 4.9: IMPACT OF COVID-19 ON READYMADE GARMENTS AND OTHER EXPORTS



Source: Calculation based on Monthly Economic Trends, Bangladesh Bank.

BOX 4.1: GENERAL FRAMEWORK OF THE PROJECTION METHODOLOGY

Following basic concepts are adopted to project the movements of the components:

Step 1: To find a dominant and plausible linked variable for each of the BOP components for which the forecasting is to make. For example, remittance inflows of Bangladesh are largely influenced by the economic conditions and activities of the major source countries. Hence, we may first find out the extent of influence of those countries' GDP on the remittance inflows from there. In simple term, we **calculate the elasticity**, e.g., % change in remittance for 1% change in GDP of source country.

Let's *a*: BOP component which we want to forecast

b: The linked variable

Then the *b*'s elasticity of *a* at time t is calculated as,

$$\in_{a,b,t}=\frac{\%\ change\ in\ a\ at\ time\ t}{\%\ change\ in\ b\ at\ time\ t}$$

Step 2: To take a historical trend of the elasticity. Considering the average, and variability, smoothing techniques may be used to calculate **a plausible value** of elasticity (to apply on 2020 and 2021).

$\in *_{a,b}$= Plausible value (the smooth-out average value)

Step 3: Considering that we already have the projected value (from other sources) of the linked variable (let us consider it *b'* and *b''* for 2020 and 2021), the respective elasticity is multiplied with the projected value to calculate the changes in the particular BOP component *a*.

$$\% \; change \; in \; a (in \; 2020) = \in *_{a,b} \times \% \; change \; in \; b \; in \; 2020 \; (according \; to \; the \; projection)$$

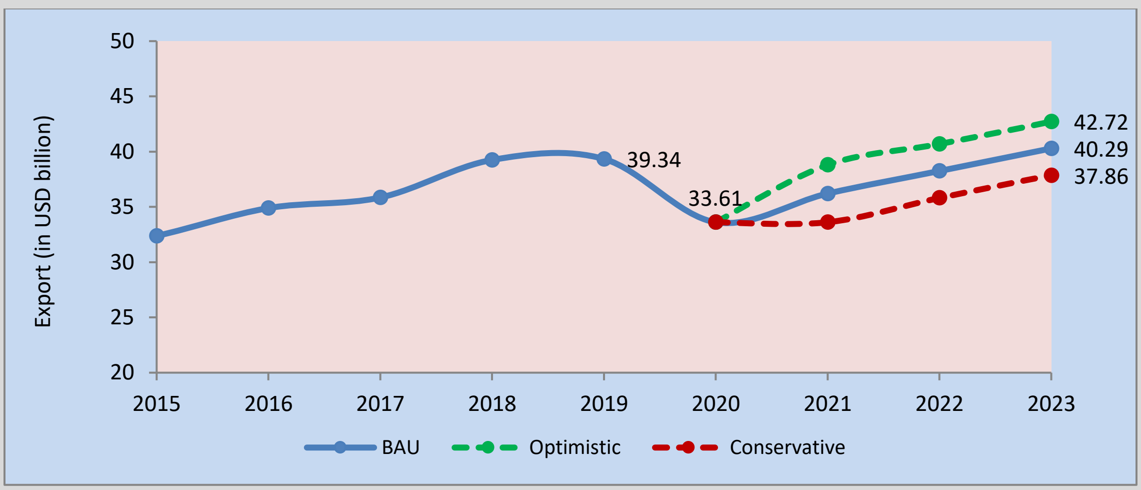
$$\% \; change \; in \; a (in \; 2021) = \in *_{a,b} \times \% \; change \; in \; b \; in \; 2021 \; (according \; to \; the \; projection)$$

Step 4: The Business as Usual (BAU) values of the BOP component *a* for 2020 and 2021 are thus calculated. A trend line is drawn from the values of 2020 and 2021 till 2023.

Step 5: Optimistic and conservative values of the BOP component *a* are also forecasted from 2020-2023. In this case, the best average growths of *a* during the last 8 to 10 years are averaged to calculate the growth rate applicable for the *optimistic* scenario. Similarly, the worst average growths of *a* during the last 8 to 10 years are averaged to calculate the growth rate applicable for the *conservative* scenario.

Impact of supply-side shock is also estimated and presented in Chart 4.10. For this analysis, GDP growth rate of Bangladesh is considered as the indicative variable to measure supply-side shock. Elasticity is calculated by dividing the percentage change in export with percentage change in GDP growth of Bangladesh. As GDP growth of Bangladesh slowed down, it affected the country's exports, which declined from USD 39.3 billion in 2019 to USD 33.6 billion in 2020. However, export is forecasted to increase to USD 36.21 billion in 2021 and may reach up to 40.3 billion in 2023 under the BAU scenario, though it may rise upto 42.7 billion under an optimistic scenario (Chart 4.10).

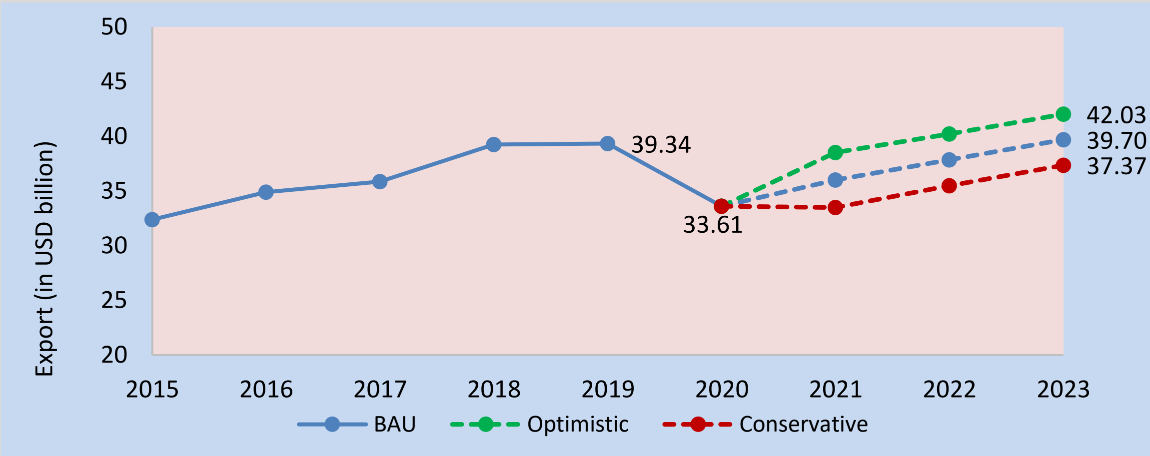
CHART 4.10: EXPORT FORECASTING BASED ON SUPPLY-SIDE SHOCK



Source: Projection by FSD, based on Monthly Economic Trends, Bangladesh Bank.

The combined effect of demand and supply-side shocks on exports is also projected and presented in Chart 4.11. It shows that considering the impact of COVID-19, the exports which ended up to USD 33.6 billion in 2020may reach within the territory of USD 37.4 billion to USD 42.0 billion by the end of 2023 under conservative and optimistic scenarios respectively.

CHART 4.11:EXPORT FORECASTING BASED ON COMBINED DEMAND AND SUPPLY-SIDE SHOCK



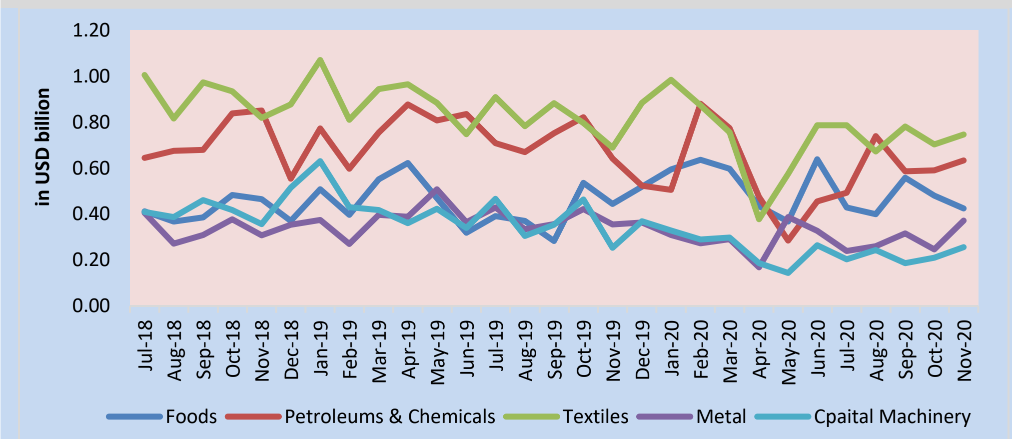
Source: Projection by FSD, based on Monthly Economic Trends and National Summary Data Page (NSDP), Bangladesh Bank.

4.2.2 Imports Scenario

Import is forecasted based only on the demand-side shock (i.e., the economic growth of Bangladesh itself). As the economic activities shrinks, the demand of imported goods is also expected to slim due to COVID-19. Supply-side shocks are not considered significant enough to affect the import demands, simply because an importer has options available to switch between the exporting sources.

Chart 4.12 implies that imports of all products declined since the February'20 till May'20; later all of them show some sign of recovery. From the investment perspective, the overall declining trend of capital machinery import seems to be a matter of concern.

CHART 4.12: IMPACT OF COVID-19 ON KEY IMPORT PRODUCTS



Source: Calculation based on Monthly Economic Trends, Bangladesh Bank.

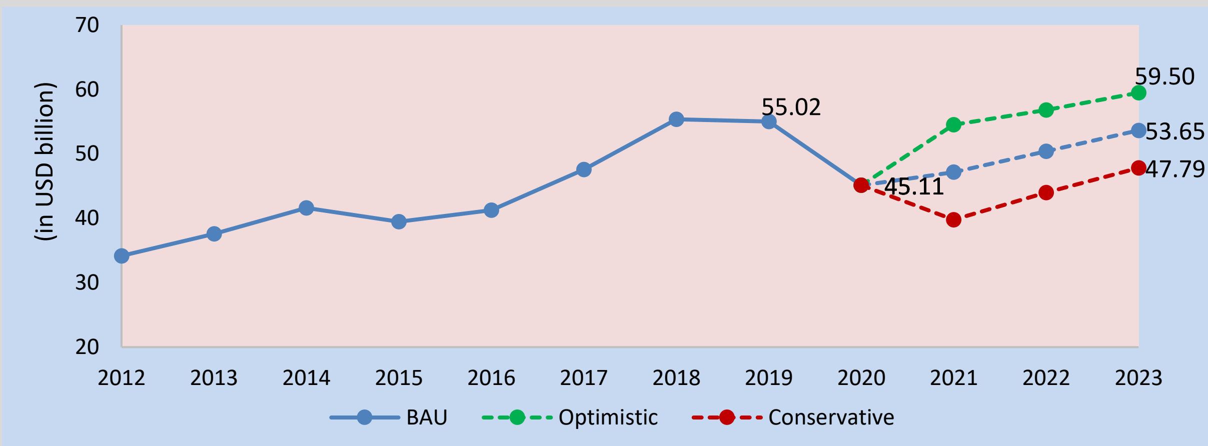
During 2011-2019 average income elasticity of imports is 0.82 (i.e., ceteris paribus, a 10 percent increase in Bangladesh's GDP may increase its imports by 8.2 percent, on average). Using this scenario as BAU and taking into account the average forecasted GDP growth of Bangladesh for 2021 (studies conducted by ADB and IMF)[11],

[11]ADB Outlook (https://www.adb.org/countries/bangladesh/economy) and IMF (http://www.theindependentbd.com/post/248974)

the import forecasts are made in accordance. Optimistic and conservative scenarios are drawn using one standard deviation band from the BAU scenario.

As shown in Chart 4.13, imports at BAU scenario may decrease from USD 55.0 billion in 2019 to USD 45.1 billion in 2020. The imports would grow and may end up at USD 53.7 billion in 2023 under the BAU scenario. However, at optimistic economic scenario, imports may even grow up to USD 59.5 billion by the end-2023. Contrarily, if the downbeat economic scenario prolongs, the imports may even end-up at USD 47.8 billion in 2023.

CHART 4.13: IMPORT TREND AND FORECASTING



Source: Projection by FSD, based on Monthly Economic Trends, Bangladesh Bank.

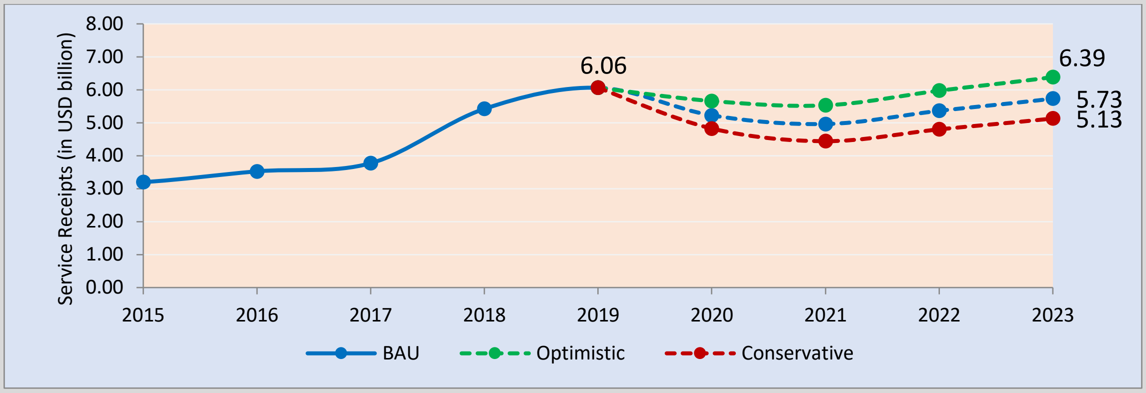
4.2.3 Services Receipts and Payments Scenario

Service incomes and payments are considered to be linked with the external economic activities of the economy. Hence, the respective ratio of service receipts (and payments) divided by sum of exports and imports are calculated. The average ratio is used for forecasting the factors at BAU scenario while the plausible maximum and minimum ratio are used for forecasting the optimistic and conservative economic scenarios. Table 4.1 shows the respective ratio matrix.

TABLE 4.1: SCENARIO DESIGNS FOR FORECASTING THE SERVICE RECEIPTS AND PAYMENTS

Scenario	Ratio for Service Receipts	Ratio for Service Payments
BAU	0.063	0.107
Optimistic	0.071	0.127
Conservative	0.057	0.095

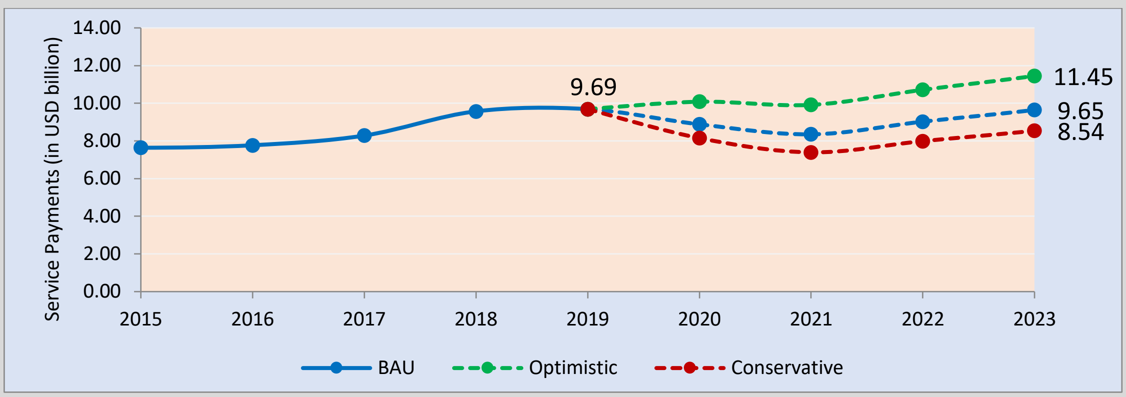
CHART 4.14: TREND AND FORECASTING OF SERVICE RECEIPTS (2015-2023)



Source: Projection by FSD, based on Monthly Economic Trends, Bangladesh Bank.

Chart 4.14 and Chart 4.15 depict that, at BAU scenario, the service receipts and service payments may decline by 13.8 percent and 8.3 percent respectively in 2020 as compared to those of 2019. Later both of these factors would get momentum as the trade activities start full recovering.

CHART 4.15: TREND AND FORECASTING OF SERVICE PAYMENTS (2015-2023)



Source: Projection by FSD, based on Monthly Economic Trends, Bangladesh Bank

The net balance of service receipts and payments depicts that the net negative balance in services may increase after 2021 mainly with the higher increase in service payments than the service receipts during that time.

4.2.4 Remittance Inflows Scenario

Remittance inflows are generally influenced by source countries' demand for labor due to expansion of economic activities). This study, therefore, considers probable changes in the economic growth of the remittance-source countries in the short-run to forecast the trend of our remittance till 2023.

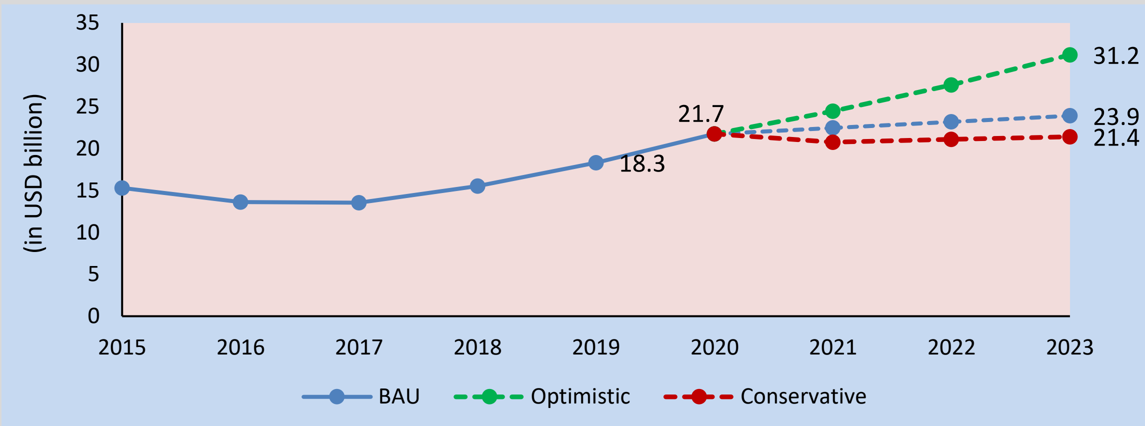
For estimating the impact, 18 major remittance source countries of Bangladesh are considered[12]. The share of remittance inflows from these countries constituted 93.8 percent of total remittance inflows in 2020. Remittance from KS constitutes the highest share with 23.6 percent, followed by the United States with 13.6 percent, the United Arab Emirates with 11.5 percent, Malaysia with 8.0 percent, and the United Kingdom with 7.6 percent. Remittance

---

[12] Australia, Bahrain, Germany, Hong Kong, Iran, Italy, Japan, Kuwait, Libya, Malaysia, Oman, Qatar, KSA, Rep. of Korea, Singapore, UAE, UK, and USA.

elasticities (i.e., remittance growth to GDP growth) for each source country are calculated over 2010-2019 (as normal period). Countries such as Oman, Republic of Korea, Malaysia, the UAE, and UK have higher positive elasticities (3.45, 3.39, 2.18, 1.89, and 1.75 respectively) than the rest of the countries. Based on these historical average elasticities and IMF's growth projection, the changes in remittances from these countries are forecasted for 2021 as BAU scenario. Later, the plausible best and worst remittance growth rates for each country are taken into account to project the optimistic and the conservative trends. The results are then compiled and projected as shown in Chart 4.16.

CHART 4.16: TREND AND FORECASTING OF REMITTANCE INFLOWS



Source: Projection by FSD, based on Monthly Economic Trends, Bangladesh Bank.

Projection shows that COVID-19 may not adversely affect remittance inflows temporarily, though the growth rates are expected to remain stable in the medium-term. Despite the COVID-19 effect, the rise in remittance inflows in the short-run could be attributed to the following major factors:

a) Many wage-earners faced the threats of job losses which compelled them to transfer most of their savings back home;

b) Lower demand for foreign exchange in informal markets during the COVID-19 might have encouraged the wage earners to send remittance through formal channel;

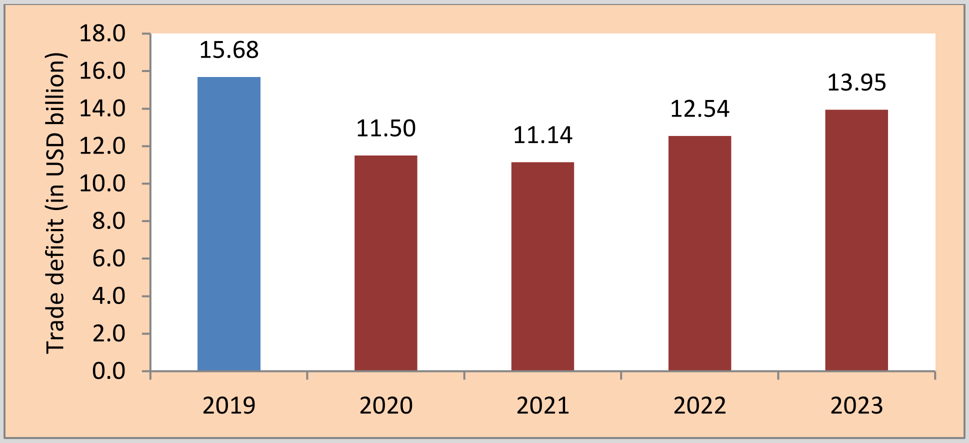
c) 2 (two) percent incentives given by the Government on remittance inflows also encouraged the wage earners to send remittance through formal channel.

According to the BAU estimation, the remittance that increased from USD 18.3 billion in 2019 to USD 21.7 billion in 2020 may slowly pick up and may reach at USD 23.9 billion in 2023 under a BAU scenario. At the optimistic scenario, it may even rise up to USD 31.2 billion in 2023. Countries like Saudi Arabia, USA, Malaysia, and UAE are expected to have more impact on the remittance growth as the global economy gets full recovering.

4.2.5 Trade and Current Account Balance Scenario

Based on the forecasting of the exports and imports, the trade balance over the 2020-2023 is calculated under the BAU scenario and presented in Chart 4.17. The trade account deficit in 2019 was USD 15.68 billion. As the imports slow down more than the exports, the deficit seems to shrink in the short-term. However, as the global economic activities are expected to revive, the trade deficit may widen again from 2022, yet it may remain below the pre-COVID-19-19 state in 2023 (USD 13.95 billion) under the BAU scenario.

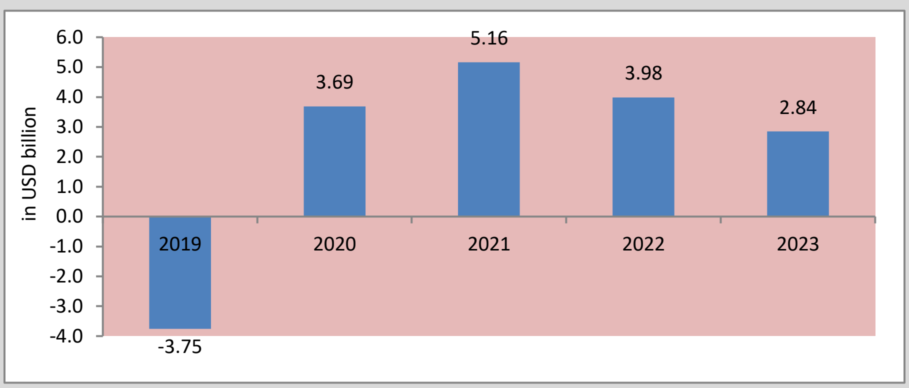
CHART 4.17:PROJECTED TRADE ACCOUNT DEFICIT



Source: FSD Staff Calculation.

Since each of the current account components are separately forecasted, this study also estimates the current account balance (CAB) over the 2020-2023 period. As Chart 4.18 illustrates, CAB is projected to improve in 2020 onwards despite the COVID-19 pandemic. Positive CAB is expected primarily due to the prospective growth in wage-earners remittances coupled with a slowdown in imports over this projection period. In 2019, the CAB deficit was USD 3.75 billion. At BAU scenario, CAB is expected to get positive and reach up to USD 5.16 billion in 2020 and USD 2.84 billion in 2023.

CHART 4.18: FORECASTED CURRENT ACCOUNT BALANCE RANGES (2020-2023)

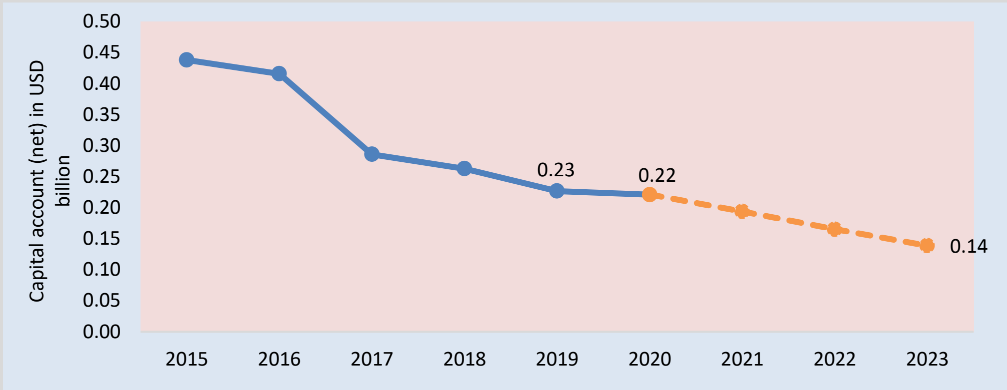


Source: SD Staff Calculation

4.2.6 Capital Account Scenario

Share of capital account in the Balance of Payment (BOP) of Bangladesh is relatively small as it includes only capital transfer. Since the available quarterly data has seasonality and cyclical patterns, this study uses *4-quarter moving average smoothing technique* to have a reasonable forecasting. The projection, as shown in Chart 4.19, indicates that the net balance of the capital account remained in downward trend all through since 2015. The balance was USD 0.23 billion in 2019, projected to decline to USD 0.19 billion in 2021 and USD 0.14 billion in 2023.

CHART 4.19: TREND AND FORECASTING OF CAPITAL ACCOUNT, NET BALANCE (2015-2023)



Source: Projection by FSD, based on Monthly Economic Trends, Bangladesh Bank.

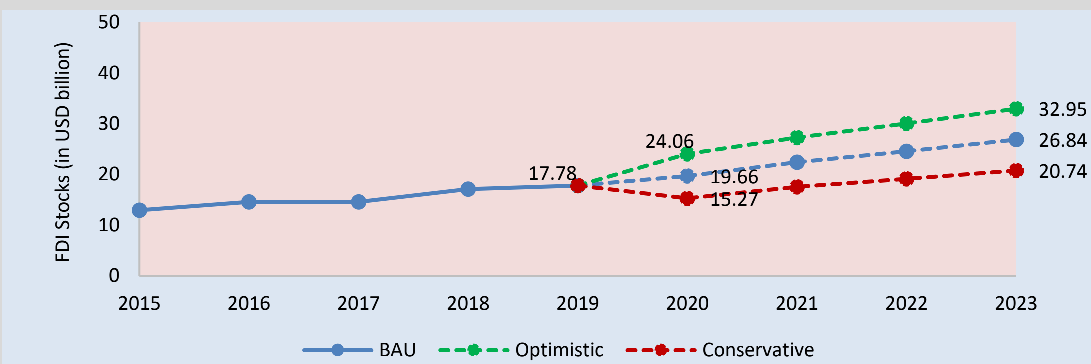
4.2.7 Financial Accounts Scenario

Three broad components of the financial account are analyzed and forecasted.

a. Foreign Direct Investments

Estimations reveal that despite the COVID-19 impact, FDI flows may experience an upward trend throughout the projected period (Chart 4.20). Especially, our development partners and investors like Japan, China, and India are showing their interest in large-scale investment in Bangladesh. Pandemic has also induced some of the countries to shift their businesses from China to other Asian countries. Bangladesh, in this connection, is considered as a prospective destination for the investors owing to its sizeable domestic market with cheaper labor costs. According to the forecast, it is expected that compared to 2019, FDI may increase within the range of USD20.74 billion to USD 32.9 billion in 2023.

CHART 4.20: TREND AND FORECASTING OF FOREIGN DIRECT INVESTMENT (2015-2023)

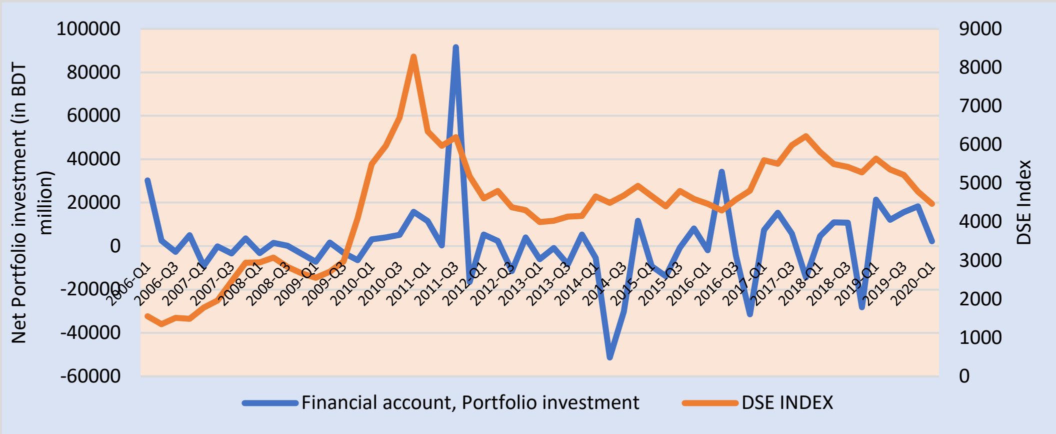


Source: Projection by FSD, based on Monthly Economic Trends, Bangladesh Bank.

b. Foreign Portfolio Investments

Initial attempt was made to establish the relationship between the portfolio investment and DSE Index. However, it remains difficult to find any plausible association between the variables primarily due to the high extent of variability into the data as depicted in Chart 4.21.

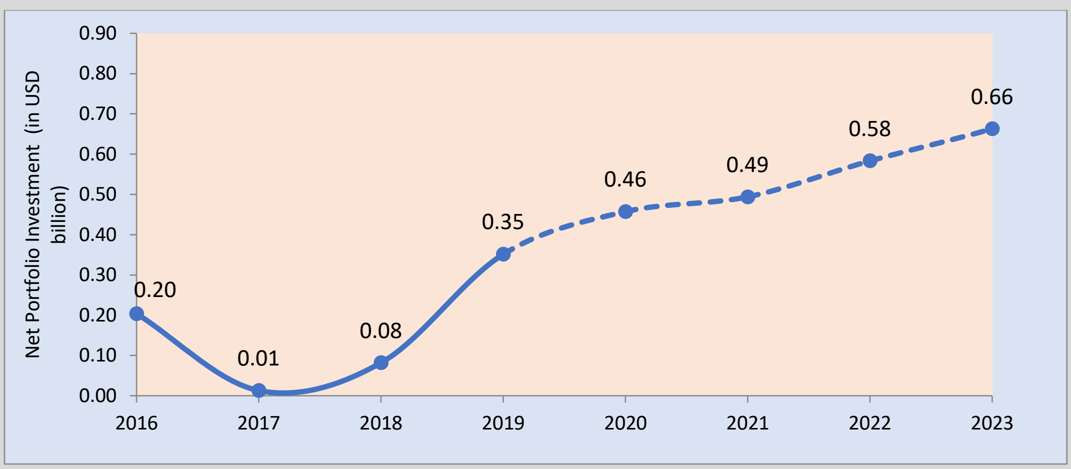
CHART 4.21: PORTFOLIO INVESTMENT AND DSE INDEX



Source: Calculation based on Monthly Economic Trends, Bangladesh Bank and Dhaka Stock Exchange (DSE).

Later the 4-quarter moving average smoothing out technique has been adopted. Since the net value remains marginal, no linked variable is used. A simple linear trend model is applied to capture the forecasted values. Result is presented in Chart 4.22. According to the estimation, the net portfolio investment would rise from USD 0.35 billion in 2019 to USD 0.46 billion in 2020. If the trend moves forward due to full recovery of the partner economies, the net portfolio investment may reach up to USD 0.66 billion in 2023.

HART 4.22: TREND AND FORECASTING OF PORTFOLIO INVESTMENT, NET (2015-2023)

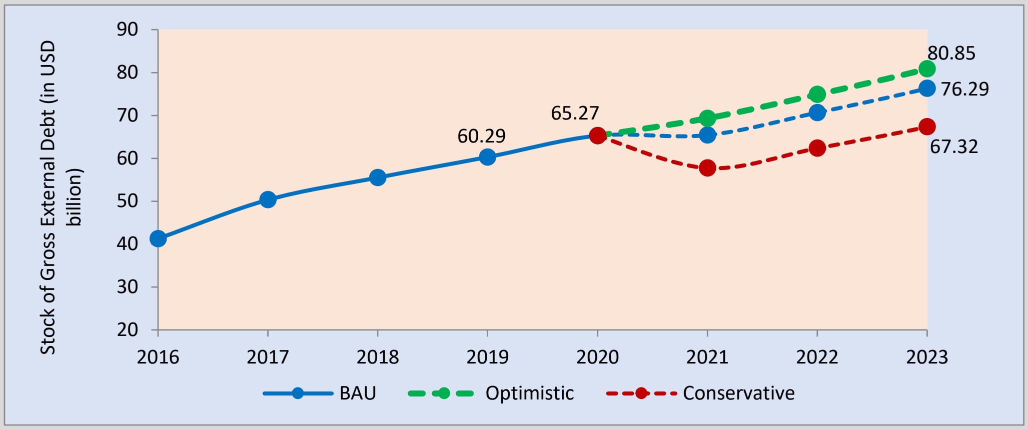


Source: Projection by FSD; Data- Monthly Economic Trends, Bangladesh Bank.

c. *External Debts*

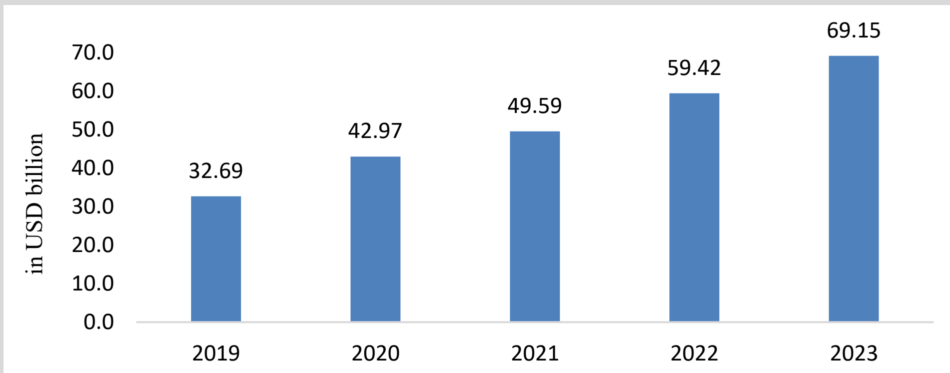
External debt is assumed to be influenced by the country's growing economic activities, such as infrastructural and industrial developments. Hence, GDP is used as the linked variable for the external debt for this study. All the stock debt values (e.g., public external debts, private external debts, long and short-term debts, and gross external debts) are calculated as a ratio of GDP over the historical 2016-2020 data. Then the average, maximum, and minimum ratios are considered for designing BAU, optimistic, and conservative scenarios respectively. Accordingly, the forecasting is made and shown in Chart 4.23.

CHART 4.23: TREND AND FORECASTING OF EXTERNAL DEBT (2016-2023)



Source: Projection by FSD, based on National Summary Data Page (NSDP).

CHART 4.24: TREND AND FORECASTING OF FOREIGN EXCHANGE RESERVE (2019-2023)



Source: FSD Staff Calculation.

Compared to 2019, external debt has increased by USD 4.98 billion in 2020. The external debt is expected to increase a little in 2021 and then may pick up onwards and reach at USD 76.3 billion in 2023 at the normal business scenario. A good number of foreign-aided mega projects are being implemented and more are in the pipeline. Hence, the external debt seems to rise in the medium-term. At an optimistic scenario, the debts may pile up to USD 80.9 billion by 2023.

CHART 4.25: TERM-WISE DEBT PROJECTION (2016-2023)

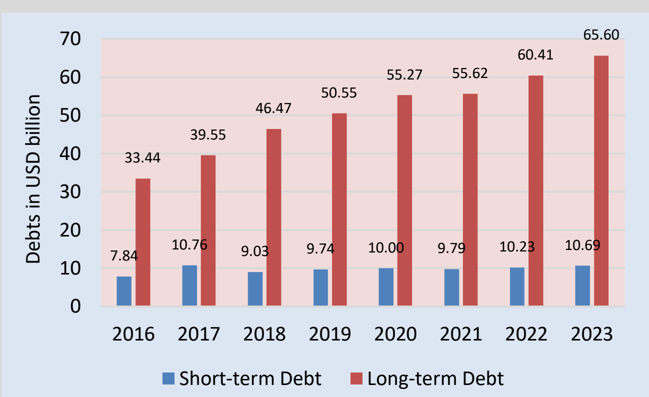
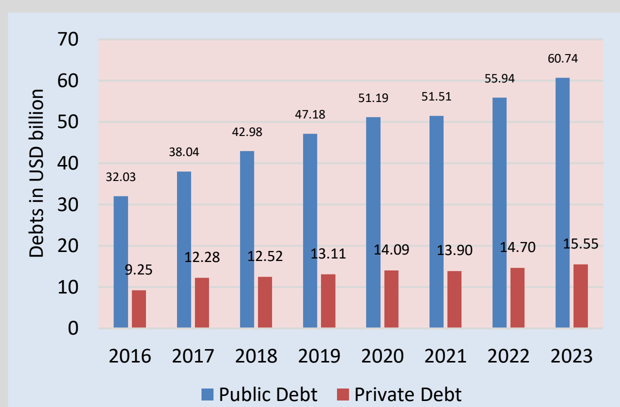


CHART 4.26: PUBLIC AND PRIVATE DEBT PROJECTION (2016-2023)



Source: Projection by FSD, based on National Summary Data Page (NSDP).

Term-wise debt projection reveals that the growth of long-term external debt may be higher than the short-term external debt. As mentioned, a number of upcoming mega projects are perceived to be financed by long-term debts. This may increase the growth of long-term debts. As the Chart 4.24 shows, compared to 2019, long-term debts may considerably increase to 65.60 billion by 2023. During this period, the short-term debts are also expected to increase from USD 9.74 billion in 2019 to USD 10.69 billion in 2023. Public sector debts, as discussed earlier, would increase at a higher pace than the private sector's debts over the projected period, as shown in Chart 4.25.

4.2.8 Foreign Exchange Reserve Scenario

Table 4.2 shows the annual incremental changes in reserve assets at the BAU scenario which is generally adjusted with the stock of Foreign Exchange Reserve (FXR). It is observed that substantial rise of reserve asset of USD 10.29 billion helped to enhance the stock of foreign reserve in 2020. This may primarily be attributed to lower trade deficit, higher inflows of remittance, and the changes in external debts during the COVID-19 period.

TABLE 4.2: COMPONENTS OF THE RESERVE ASSETS CHANGES (AT BAU SCENARIO)

	Trade Account Balance	Remittance Inflows	Other CA Balance	Capital Account Balance	FDI Net Flows	Portfolio Investment, Net	Changes in External Debts	Net Errors*	Changes in Reserve Assets
2019	-15.68	18.33	-6.40	0.23	0.72	0.35	4.79	-0.94	1.40
2020	-11.50	21.74	-6.55	0.22	1.88	0.46	4.98	-0.94	10.29
2021	-11.14	22.46	-6.16	0.19	2.72	0.49	0.13	-0.94	7.75
2022	-12.54	23.19	-6.66	0.17	2.16	0.58	5.23	-0.94	11.18
2023	-13.95	23.91	-7.12	0.14	2.30	0.66	5.65	-0.94	10.65

* Net errors are assumed constant at 10-years average value.
Source: FSD Staff projection

However, to smoothen the higher fluctuations in reserve asset, the 3-year moving average changes in reserve assets are used to forecast the following year's FXR. Chart 4.26 reflects the stock of FXR is expected to rise gradually over time and may reach at USD 69.15 billion in 2023.

4.3IMPLICATIONS FOR FINANCIAL STABILITY

In this section, 12 external sector indicators and their projected trends are considered to understand financial stability implications of COVID-19. Table 4.9 shows that trade deficit to GDP would decrease but may remain below the range of 5 percent till 2023. Projected current account balance to GDP ratio also signals no apparent threat for financial stability. Export-to-import ratio recorded an improvement in 2020 and projected to decline thereafter, yet the ratio is assumed to be higher than the pre-COVID-19 level for the projection period.

TABLE4.3: TRENDS OF FINANCIAL STABILITY INDICATORS BASED ON EXTERNAL SECTOR'S MOVEMENTS

Indicators	2019	2020	2021	2022	2023
Trade balance/ GDP	-7.5%	-4.4%	-4.7%	-4.9%	-5.0%
CAB/ GDP	-1.8%	2.1%	2.0%	1.5%	1.1%
Export/ Import	0.71	0.78	0.76	0.75	0.74
Reserve/ Average monthly import	8.93	10.94	11.81	13.29	14.59
Reserve/ Broad money	0.21	0.27	0.29	0.32	0.34
Reserve/ GDP	0.16	0.19	0.21	0.23	0.25
Reserve/ ST external debt	3.36	4.30	5.07	5.81	6.47
External Debt/ GDP	0.29	0.30	0.27	0.27	0.27
ST external Debt/ Total external debt	0.16	0.15	0.15	0.14	0.14

Indicators	2019	2020	2021	2022	2023
Public sector external debt/ GDP	0.29	0.30	0.34	0.36	0.36
FDI/ Total external debt	0.22	0.23	0.22	0.22	0.22
Growth of ST external debt/ Growth of GDP	1.54	0.51	-0.28	0.56	0.52

Source: FSD Staff projection.

Current reserve position looks to be comfortable as indicated by all related indications. It may remain well-above the benchmark of meeting 3-months' import payments and able to meet 100 percent of short-term debts upto 2023. Reserve-to-GDP ratio is also expected to increase over time.

Though the external debts are projected to increase rapidly in the medium-term, it may not pose any apparent threat to financial stability in next few years. Debt-to-GDP may remain almost stable at around 27 percent; with share of short-term external debt in total external debt at around 15 percent. Public sector debt to GDP may, however, increase slightly over time since more mega-projects are likely to be considered in the mid-term. FDI to external debt may remain stable at around 22 percent till 2023. Elasticity of short-term debt-to-GDP is expected to decrease from the pre-COVID-19 period.

In sum, external sector may demonstrate substantial resilience and contribute to the stability of the financial system in near future.

CHAPTER 5 : IMPACT ON BANKING SECTOR AND ITS IMPLICATIONS FOR FINANCIAL STABILITY

Bangladesh Bank remains proactive in ensuring the stability of the financial system including banking sector. Alongside various measures taken by other departments, Financial Stability Department of BB continuously analyzes existing scenarios, risks and vulnerabilities of banking sector from stability perspective. While taking into account current understanding, this Chapter tries to provide some insights of medium-term perspective of this sector using model based advanced tools and techniques including Financial Projection Model (FPM)[13]. In fact, banking sector's risks are multi-dimensional and dynamic in nature due to its link with real sector, fiscal sector, external sector and capital market of the economy. COVID-19 has added fuel to these complexities by impacting all these sectors simultaneously. In particular, banking sector is highly exposed to real sector through its lion share of credit portfolio, therefore any shock in the latter sector has high possibility to be translated into banking sector's risk. As adverse impact of the pandemic on the real sector may be transmitted into bank balance sheet, a perception survey has been conducted to get banking sector's views on health of the real economy and their perception on credit needs to revitalize its various segments.

5.1 IMPACT ON THE BANKING SECTOR

5.1.1 GROWTH AND STRUCTURE OF TOTAL ASSETS

Since the onset of COVID-19 in Bangladesh in early March'20, households, businesses and financial intermediaries suffered from uncertainties. Because of this adverse environment, the growth of both assets and liabilities of banks declined in March'20. However, after March'20, the assets recorded marked growth in June'20. The growth of total assets in the banking sector appeared to be higher in September'20 (12.8 percent) and in Deceember'20 (17.5 percent), compared to corresponding quarters of the previous calendar year (Chart 5.1). Indeed, the amount of total assets in banking sector reached to BDT 18,124.6 billion at end-December'20.

CHART 5.1: GROWTH OF TOTAL ASSETS

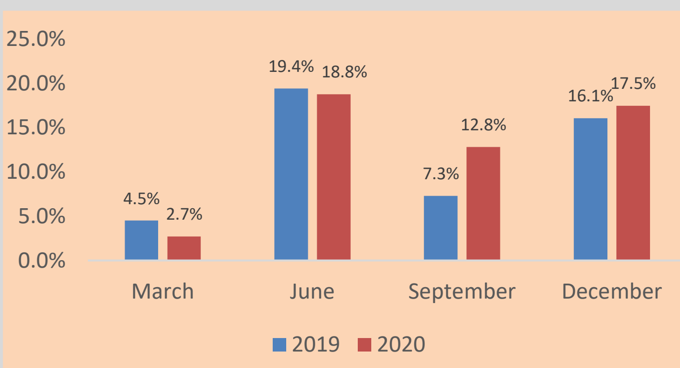
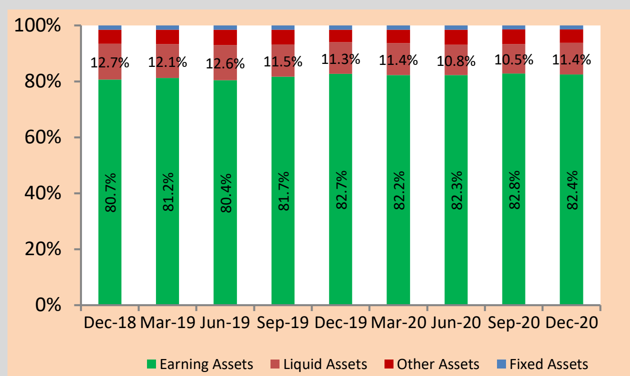


CHART 5.2: COMPOSITION OF TOTAL ASSETS



Source: FPM, FSD, BB.

Chart 5.2 shows that earning assets, comprised of loans and advances along with investments, constituted the major portion of the total assets in the banking sector. In December'19, share of earning assets was 82.7 percent, which remained almost stable till December'20.

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[13]Financial Projection Model (FPM) is a forecasting tool, developed by the officials of Bangladesh Bank mainly from Financial Stability Department (FSD)with the technical assistance from the World Bank (WB). FSD has been using this tool since March2014.

It is mentionable that, at end-December'20, total earning assets reached to BDT 15,556.6 billion from BDT 13,832.7 billion of end-December'19. Chart 5.3 depicts that loans and advances comprises about 80 percent of earning assets of the banking industry. However, during the COVID-19 period, such contribution decreased gradually while the investments in different types of bonds and securities increased. At end-December'19, the amount of loans and advances was BDT 11,181.7 billion which comprised 80.8 percent of total earning assets while at end-December'20, such contribution decreased to 77.7 percent, amounting BDT 12,087.4 billion. On the contrary, the contribution of investments in earning assets, at end-December'20, increased to 22.3 percent from 19.2 percent observed at end-December'19. It appears that banks remained cautious to increase lending due to the uncertainties in the business environment and shifted a part of their funds in more secured investment such as government bonds and securities from April'20 onwards as depicted in Chart 5.4.

CHART 5.3: COMPOSITION OF EARNING ASSETS

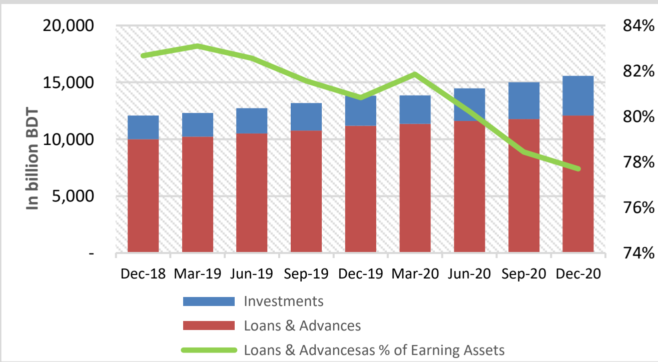
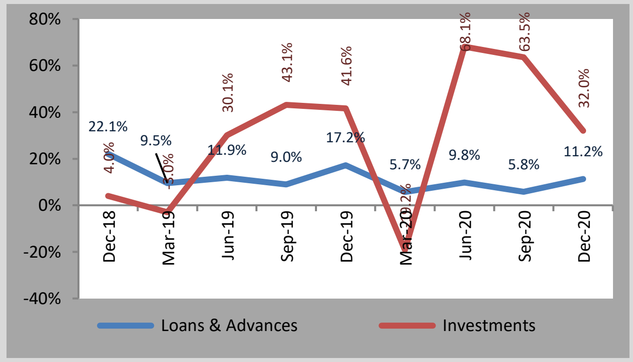


CHART 5.4: GROWTH OF EARNING ASSETS*



Source: FPM, FSD, BB.

*Quarter-to-Quarter growth annualized.

5.1.2 GROWTH AND STRUCTURE OF TOTAL LIABILITIES

Growth of banking sector's total liabilities followed the trend of total asset. Consequently, sluggish growth (3.1 percent) in total liabilities was observed at end-March'20 (Chart 5.5). The growth of total liabilities picked up notably at end-June'20 and reached almost close to the growth level of end-June'19. Furthermore, growth (12.3 percent) of total liabilities at end-September'20 surpassed the growth (8.1 percent) of the same at end-September'19. Similarly, the total liabilities at end-December'20 also increased at a rate greater than that of end-December'19. In particular, at end-December'19, the amount of total liabilities was BDT 15,575.1 billion, which reached to BDT 17,741.1 billion at end-December'20.

CHART 5.5: GROWTH OF TOTAL LIABILITIES

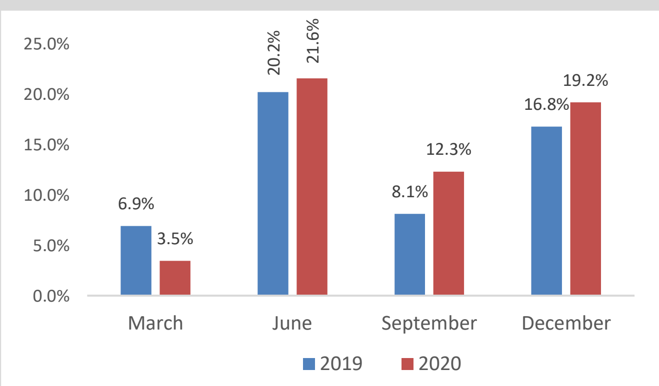
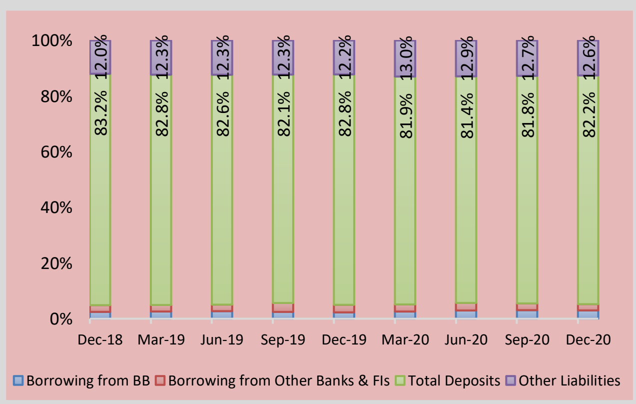


CHART 5.6: COMPOSITION OF TOTAL LIABILITIES



Source: FPM, FSD, BB.

Deposits constituted the major portion of total liabilities (82.2 percent at end-December'20). However, share of borrowing from BB in banking sector's total liabilities was higher during pandemic than pre-pandemic period as BB lent money to banks under the different refinance schemes (Chart 5.6).

It appears from Chart 5.7 that total deposits consistently increased from December'18 to December'20 except in March'20. At end-December'19, total deposits were BDT 12,897.6 billion, which declined slightly to BDT 12,864.7 billion at end-March'20. Looking at data, it appears that both time and demand deposit declined during this quarter. This might be due to the fact that households and businesses did not deposit money held at their disposal, rather they withdrew deposit from the banking system as a precautionary measure due to uncertainty arising from COVID-19 along with general holidays and limited transport facilities. However, total deposit began to pick up from June'20 onwards and reached at BDT 14583.4 billion at end-December'20.

Quarter-to-quarter analysis shows that deposit growth substantially declined and turned into negative (-0.3 percent) at end-March'20, while it was 1.2 percent in the corresponding quarter of the previous year. However, deposit growth recovered substantially in June'20. Deposit growth at end-September'20 and at end-December'20 stood respectively at 3.4 and 5.0 percent, higher than the growths recorded in the same quarters of previous year (Chart 5.8). High growth of inward remittance and sizeable refinance schemes from BB, among others, are main driving forces for deposit growth during this period.

CHART 5.7: COMPOSITION OF TOTAL DEPOSITS

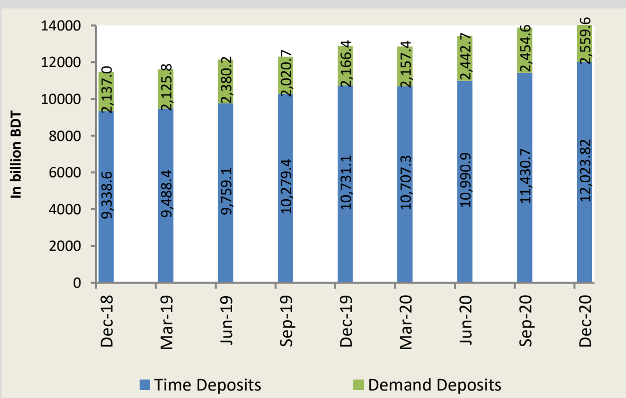
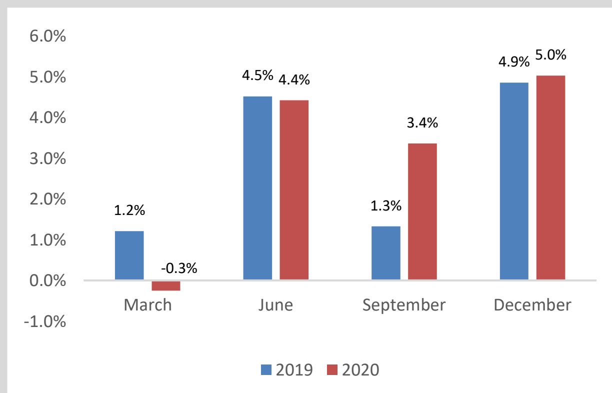


CHART 5.8: GROWTH IN DEPOSITS



Source: FPM, FSD, BB

5.1.3 KEY SOUNDNESSINDICATORS

5.1.3.1 CAPITAL TO RISK-WEIGHTED ASSET RATIO

At end-March'20, the Capital to Risk-weighted Asset Ratio (CRAR) of the overall banking industry declined slightly to 11.35 percent from 11.57 percent of end-December'19, but remained higher than minimum regulatory requirement of 10 percent. However, the CRAR rose to 11.64 percent at end-December'20. Relaxation in loan classification policy and switching of banks to lower-risk investments partly helped the banks maintaining higher CRAR during the pandemic period. In fact, majority of the banks (47 out of 57) maintained regulatory minimum capital requirement (MCR) as per the Basel III capital framework as of December'20 (Table 5.1).

TABLE 5.1: MOVEMENTS OF KEY SOUNDNESS INDICATORS OVER THE COVID-19 PANDEMIC

(In Percent)

Indicator	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20
CRAR*	11.57	11.35	11.63	11.94	11.64
NPL**	9.32	9.03	9.16	8.88	8.06
ROA	0.30	-0.12	0.30	0.57	na
ADR*	77.3	77.8	76.2	74.0	72.7

Source: FPM Data; Calculation: FSD, *DOS, **BRPD, na-Not available.

5.1.3.2 Asset Quality

Non-performing Loan (NPL) ratio declined slightly in March'20 compared to that of end-December'19 (Chart 5.9). Thereafter, the declining trend continued except for the period of end-June'20, partly attributable to relaxation in loan classification policy[14]. The fluctuation of NPL ratio from March'20 to September'20 might be due to recovery/rescheduling of classified loans, charging interest on classified amount and disbursement of fresh loan. The net NPL ratio also declined significantly after December'19 (Chart 5.10) and entered into negative territory after June'20 quarter due to high provision maintained by the banks.

CHART 5.9: NON-PERFORMING LOANS (NPL) AND RATIO

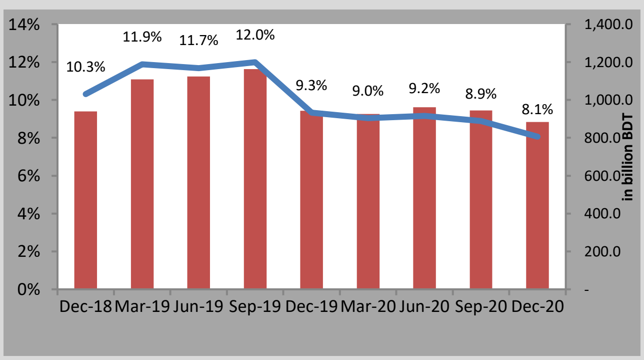
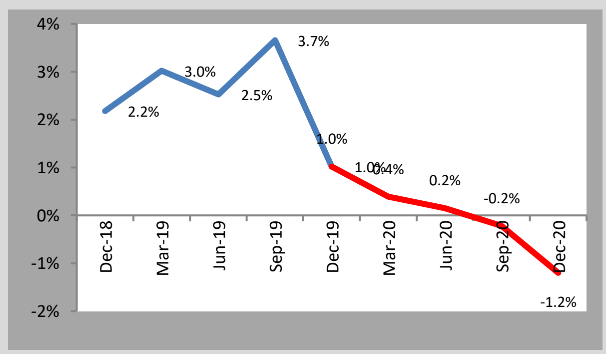


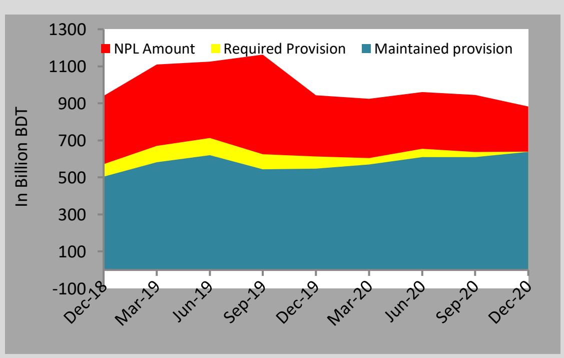
CHART 5.10: NET NPL RATIO



Source: BRPD, BB.

Chart 5.11 shows the required provision and maintained provision during December'18 to December'20 on a quarterly basis. It is noticeable that the gap between required provision and actual provision became narrower since December'19 due to high provision maintained by the banks accompanied by mostly steady provision requirement.

CHART 5.11: LOAN LOSS PROVISIONS



Source: BRPD, BB.

[14]Relaxation for the period of 1 January 2020 to 31 December 2020 vide BRPD circular no. 04/2020 dated19 March 2020 and BRPD circulars no. 13/2020 dated17/2020).

5.1.3.3 PROFITABILITY

The profitability of the banking sector, measured by return on assets (ROA), was negative in March'20 as depicted in Table 5.1. However, in the subsequent quarter, the ROA has increased to 0.30 percent partly due to the reopening of economic activities as well as policy support provided by Bangladesh Bank and the Government.

5.1.3.4 ADVANCE-TO-DEPOSIT RATIO

At the initial phase of COVID-19, advance-to-deposit ratio (ADR) of the banking sector recorded slight increase in March'20 due to slower deposit growth than credit growth. Thereafter, the ratio gradually declined to 72.7 percent at end-December'20, which appeared to be consistent with the COVID-19 events. Noteworthy that the market liquidity seemed to be adequate due to expansionary monetary policy stance of Bangladesh Bank and sizeable stimulus packages offered by the Government. Besides, the credit demand began to increase after reopening of the economy and steps taken to reduce risk against the prevailing uncertainties in business environment.

5.2 PROJECTED SCENARIO OF THE BANKING SECTOR

The Financial Projection Model (FPM) has been applied to forecast the key financial soundness indicators over the five quarters starting from December'20 to December'21[15]. The contents of Basel III principles and existing regulatory regime are followed to perform the forecasting. This projection highlights the performance of banking industry along with different clusters of banks. The customized underlying assumptions based on the banks' historical data along with the probable or expected macro-financial conditions are applied on different bank categories basis. This model is designed by integrating current regulations, principles, and practices of the banking industry[16]. It also accommodates future regulatory constraints or relaxations, if any, to justify the real scenario.

5.2.1 **BASELINE PROJECTION MODEL**

The FPM has considered a number of quantitative assumptions along with qualitative judgment to reflect the future plausible scenarios. Due to COVID-19 pandemic, there might be a lot of intertwined factors that would affect the projected outcomes both in the short-and medium-terms[17]. Some key variables and critical factors are discussed below:

1. Deposit growth: Though higher cash holdings and deposit withdrawals were observed during the periods of general holidays, most of those are likely to be returned to the banks' vaults once normal economic activities resume in full swing. Due to disruption in production and services during COVID-19, the household income was affected, which may lead to slowdown in deposit growth in the short-term. Besides, curtail of bank's deposit rate might discourage households to continue depositing in banks, especially when opportunity of higher returns from NSCs was waiting during pandemic situation. However, strong remittance growth was observed in recent months, which

[15] In the previous versions of FPMs, projection over the following 12 quarters was presented. However, owing to the uncertainties over the extent and duration of COVID-19 pandemic, this report considers a more meticulous approach to forecast for a shorter period. Any notable changes of the forthcoming situations and policies could have been incorporated in the following volume of FPM. In this study historical quarterly data from September 2017 to September 2020 have been used to forecast next five quarters financial soundness indicators. During forecasting exercise, required data for December'20 quarter were not available.

[16] Banking system in Bangladesh comprises fifty-nine banks (as of June, 2019). However, information of 57 banks has been used in this analysis due to inadequacy of historical data in some newly established banks.

[17]Assumptions are segregated into two time frames-Short-term is considered between Oct 2020 to March 2021 while the Medium-term is considered as April 2021 to December 2021.

is likely to increase gradually and may hold the deposit growth unchanged in the short-term. As effects of COVID-19 are expected to dissipate gradually, household income is expected to rise again which may be able to stabilize deposit growth in the medium-term. Overall, deposit growth is expected to remain unchanged till March'21 and then remain stable in the medium-term.

2. Loan growth: As CRR was reduced by 1.5 percentage points to 4.0 percent from 15 April 2020 and ADR limit was increased to 87 percent (92 percent for Islamic banks), there is availability of loanable funds in banks. Besides, BB's large amount of refinance scheme and term repo facility during the COVID-19 period may provide banks with adequate liquidity, even in the case of sluggish deposit growth. On the other hand, slower loan recovery may put some pressure on liquidity. However, impaired debt servicing capacity or downgraded credit rating of private businesses affected by COVID-19 may be perceived by banks as riskier investment than normal times and thus banks may be more willing to invest in risk free government securities instead. Besides, fixation of lending rate at maximum 9 percent (except consumer loans) may also influence banks to go for safer investments like government instruments. The yield curve for government securities however showed downward trend since May'20 and indicates lowering of future yields. In this context, loan growth may pick up gradually in 2021 as business sentiments domestically and internationally pick up and yields of government securities may come down gradually and policy support by the Government and BB gets rationalised. Whether this pick up will sustain in the long run will depend on holding of sustainable deposit growth and improvement in loan recovery situation of banks.

3. Deposit rate: As upper limit of deposit rate was set at maximum 6 (six) percent, deposit rate is expected to remain within the same level in short-to medium-term.

4. Lending rate: As upper limit of lending rate was fixed at maximum 9 percent (except consumer loans), lending rate is expected to remain at that level in short-to medium-term.

5. NPL development: Due to BB's instruction to maintain status quo in the loan classification from 01 January' 20 till 31 December'20 and also relaxation made to loan classification of Cottage, Micro and Small enterprises, from first quarter of 2021, the NPL ratio is expected to pick up slowly in the medium-term as some businesses may need more time to recover their debt servicing capacity.

6. Investment in equity and debt securities: With ample liquidity and attractive rates offered against government securities, banks may invest heavily in those securities in the short-term. As yield on securities may diminish over time, banks may reallocate the investment in the medium-term. Banks may be more cautious in investing in capital market which remained bearish to a large extent. However, policy support of BSEC may increase confidence in the market and thus encourage banks to increase investment in equity in the medium-term.

7. Borrowing from BB/other banks/FIs: Borrowings from BB in the form of refinance/repo/term repo may increase in the short to medium term to implement different stimulus packages and to facilitate fund to meet up the expected increase in credit demand from March'21. In the short-term, borrowing from other banks/FIs may remain low. This bank-based model has been designed on the basis of banks' internal strength, assuming no external capital will be injected from outside during the entire projection period.

Based on these assumptions, financial projections for five categories of banks were carried out[18]. The figures of aggregate balance sheet, and profit and loss account for each category of banks were used in the projection process. It should be noted that the impact of few recent years' policy decisions and events (e.g., slowdown in global economic growth, cash incentive to stimulate remittance inflow; recent trend in current account balance (CAB);

[18] Six State-owned Commercial Banks (SCBs), two Development Finance Institutions (DFIs), 31 Private Commercial Banks excluding Islamic banks (PCBs), eight Islamic Banks (IBs) and nine Foreign Commercial Banks (FCBs).

revised rules for National Savings Certificate; reduction in service charges on bank accounts; initiative to reduce lending and deposit rates; bearish capital market condition; impact of liquidation of a FI; increase in ADR limit; regulatory forbearance about provision maintenance in the SCBs; impact in case of default of large corporate borrowers etc.) are to be considered to calculate the future projections. The above-mentioned factors have been incorporated in the assumptions for designing model to make the predictions more realistic.

5.2.2 Probable outcome under Stressed and Favorable Scenario

Baseline projection shows the most likely outcome of the variables in future under plausible assumptions. However, a single estimate cannot fully capture the future uncertainties; so, two alternative scenarios have been designed to project a range of forecasted values. Stressed scenario shows projection under less likely but possible adverse conditions whereas favorable scenario depicts projection under optimistic condition. Projections from stressed scenario can also be used to assess banking sector resiliency under adverse economic condition. Few critical assumptions such as deposit growth rate, lending and deposit interest rates, default rates on new loans and rescheduling rates have been increased or decreased by one standard deviation from their baseline value to create the scenarios[19]. In some cases, where baseline projection itself seems to be little extreme, the level of shock is adjusted subjectively.

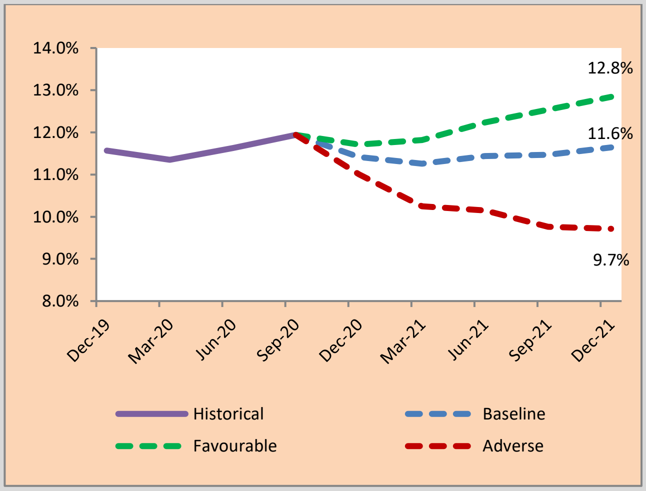
The baseline projection is based on the afore-mentioned critical factors and various other plausible assumptions. Projection may deviate from reality if some key assumptions do not materialize in the future. As future is always uncertain, the projections are stress tested using two alternative scenarios. The projections of the banking industry under different scenarios are explained in the next sub-sections.

5.2.2.1 Capital to Risk-weighted Asset Ratio (CRAR)

In the baseline case, the CRAR of the banking industry, after an initial decline, is likely to remain steady over the prediction horizon. Initial fall in CRAR till March'21 quarter is expected to result from heightened risk perception in the credit market amid COVID-19 outbreak. After that, increase in profitability and reduction in risk perception are expected from rebounding of economic activities at pre-COVID-19 level. This would reflect in the marginal retracement of CRAR from March'21, which may remain steady over the course of projection. CRAR seems to be able to meet the minimum requirement of 10 percent, but may not be adequate enough to cover the Capital Conservation Buffer (CCB) requirement (the aggregate of minimum required CRAR and CCB is 12.50 percent from 2019). In optimistic scenario for medium-term, CRAR may remain below the combined capital requirement (total of CRAR and CCB) until September'21, after which it would be good enough to attain the minimum requirement including CCB. On the other hand, adverse scenario is likely to represent a declining CRAR, which would follow a trajectory below the minimum requirement in most of the projection period.

[19]The deviation from base line is restricted to 1% (annually 4%) from the baseline scenario. This is a minor shock in traditional stress testing exercise. As stressed scenario in FPM incorporates combined shock, only minor shock seems plausible.

CHART 5.12: CRAR OF THE BANKING INDUSTRY



Source: FPM Data; Calculation: FSD.

Despite a jump in CRAR of SCB in September'20, it is expected not to edge down to its March'20 level in the baseline scenario due to proper monitoring to subside risk exposure through large-scale credit expansion to the affected sectors, which may emerge with implementation of refinance scheme. CRAR of SCB is expected to remain stable in the projection period because of proper management of pandemic-induced uncertain and risky credit environment and SCBs long-held issues in NPL management. This bank cluster may create risk in the projected period if it is kept unattended by the government and BB as well.

CRAR of the DFIs is projected to trickle down gradually from its current position as a result of persistent negative income expected in the projected quarters. Again, stressed scenario for this cluster represents that CRAR is expected to reach in dismal position.

CHART 5.13:CRAR OF SCBs

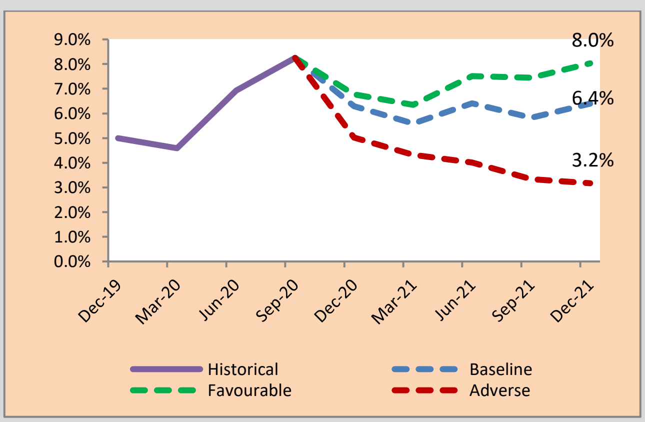
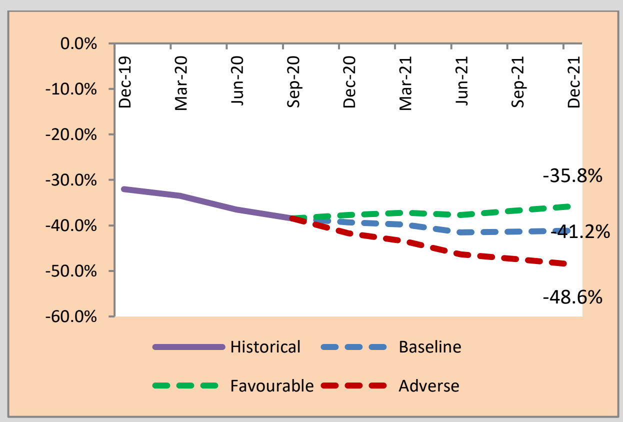


CHART 5.14: CRAR OF DFIs



Source: FPM Data; calculation: FSD.

The baseline projection shows an initial rise in the CRAR for the PCBs until December'20 quarter after which it would remain stable over the course of the projection. The rise in CRAR is assumed to stem from relaxation of loan classification rules whereby banks prompted to stop classifying loan until December'20. Furthermore, PCBs are assumed to follow more risk-averse strategy to ward off further deterioration of asset quality in the medium-term. In the favorable scenario, PCBs are projected to maintain CRAR well above the CRAR and CCB requirement. Capital position of PCBs is projected to lie above the minimum requirement including CCB even in the stressed scenario.

CHART 5.15: CRAR OF PCBs

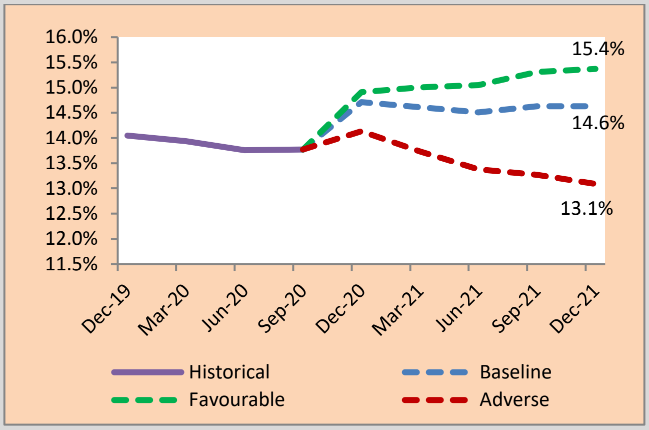
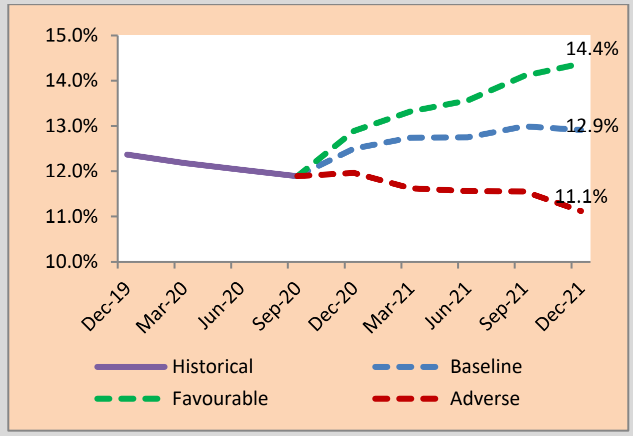


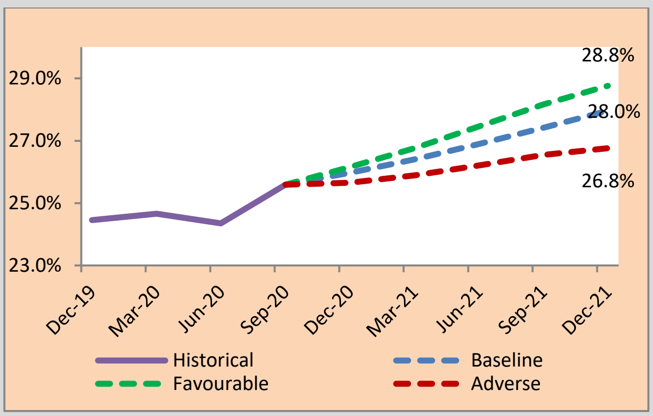
CHART 5.16: CRAR OF ISLAMIC BANKS



Source: FPM Data; Calculation: FSD.

Similar to PCBs, Islamic banks are expected to improve CRAR in the early quarters of the projection period through lowering NPL level backed by flexible classification rule. This would help them achieve the additional CCB over the total capital requirement. In the favorable scenario, capital position of this cluster appears to be stronger while in the medium-term they would be able to maintain only total capital requirement in the stress scenario.

CHART 5.17:CRAR OF FCBs



Source: FPM Data; Calculation: FSD.

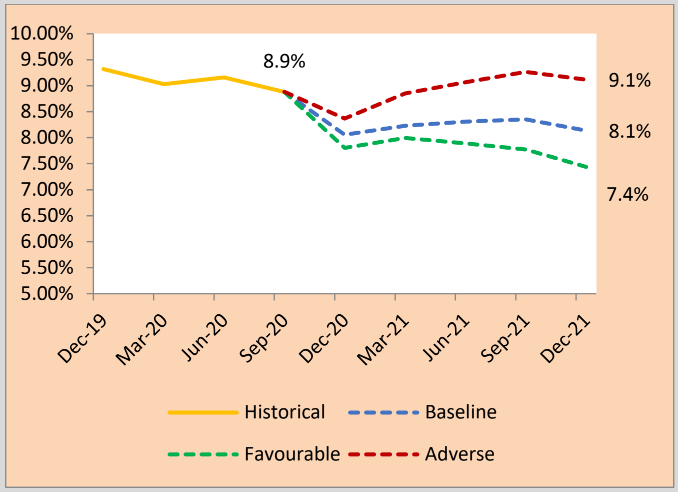
With deep-seated sound historical CRAR, FCBs are expected to boost it further in the medium-term through capitalizing flexible regulatory policies. In all three scenarios, this category of banks is expected to maintain upward trend. The expected CRAR is adequate to maintain both CRAR and CCB requirements even in stressed scenario.

5.2.2.2 Asset Quality of the Banks

In the baseline projection cases, the overall asset quality of the banking industry is expected to experience improvement from September'20 quarter as illustrated in Chart 5.18. In September'20, the NPL ratio of the banking industry was 8.9 percent[20] which decreased in December'20 quarter and is expected to decrease further in the next quarter. NPL ratio is projected to remain stable till September'21 if relaxations continue at the post-COVID-19 period. Finally, in December'21, the ratio may fall again slightly and reach to 8.1 percent. Moreover, in the stressed scenario, the NPL ratio is forecasted to be 9.1 percent in December'21 while in favorable scenario it is forecasted to be 7.4 percent. The overall improvement in NPL ratio in short-and mid-term is expected assuming strong GDP growth, lower interest rate, proper due diligence in loan sanctions by banks and closer supervision by the regulators.

[20] This ratio may slightly differ with other publications of Bangladesh Bank as there are some differences in data definition for FPM. However, some adjustments have been made in FPM data to make the ratio align with other publications.

CHART 5.18: NPL RATIO OF THE INDUSTRY



Source: FPM Data; Calculation: FSD.

Category-wise projection shows that SCBs and DFIs have the major impacts on the industry's aggregate NPL ratio. The recent trend does not suggest that SCBs are still facing difficulties in reducing the default rate from performing loans and also to increasing recovery from due loans and existing NPLs. Based on this assumption, it is expected that despite the probable decline in initial NPL ratio primarily due to continuation of relaxed regulation (to tackle the pandemic effect), the forecasted NPLs for these banks are more likely to rise slowly once the relaxations are withdrawn. The category-wise forecasted NPL ratios are shown through Chart 5.19 to 5.23.

CHART 5.19: NPL RATIO OF SCBs

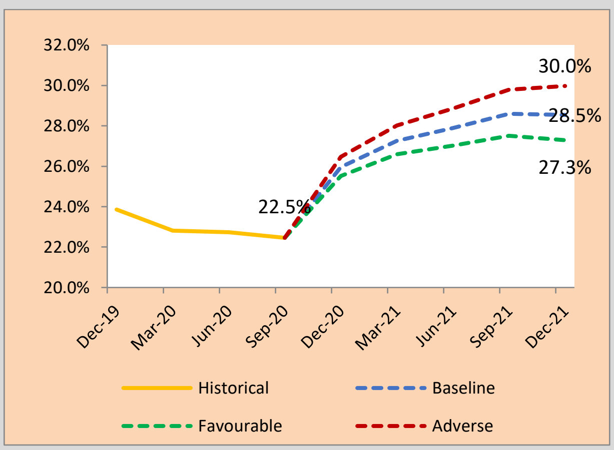
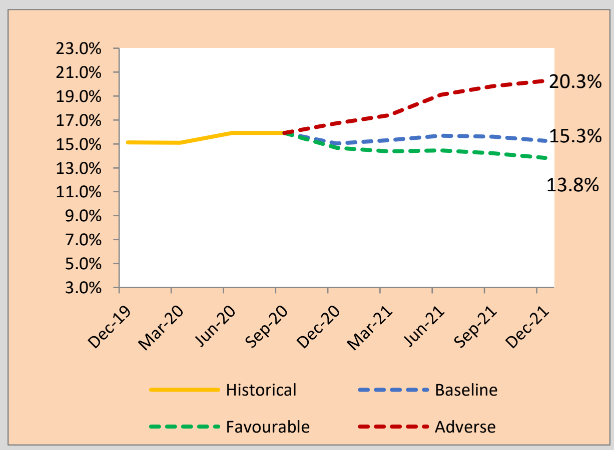


CHART 5.20: NPL RATIO OF DFIs



Source: FPM Data; Calculation: FSD.

In the baseline projection, the NPL ratio in the SCBs is expected to grow gradually from December'20 quarter and eventually expected to reach 28.5 percent in December'21. In the stressed scenario, it may rise up to 30.0 percent in December'21. Baseline NPL projection for DFIs shows that it may remain around 15.3 percent till December'21. However, it may rise up to 20.3 percent in December'21 in extreme cases.

CHART 5.21:NPL RATIO OF PCBs

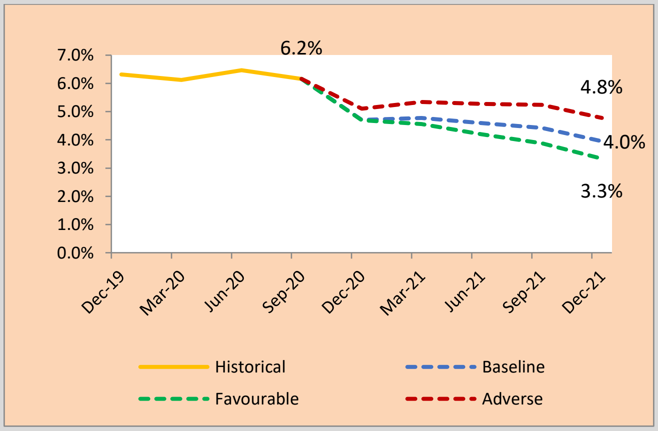
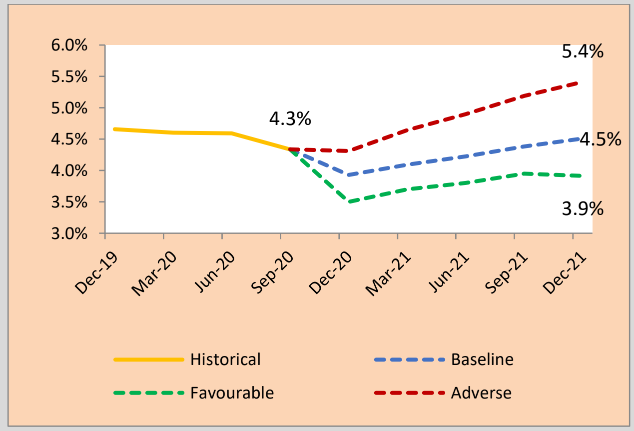


CHART 5.22: NPL RATIO OF ISLAMIC BANKS

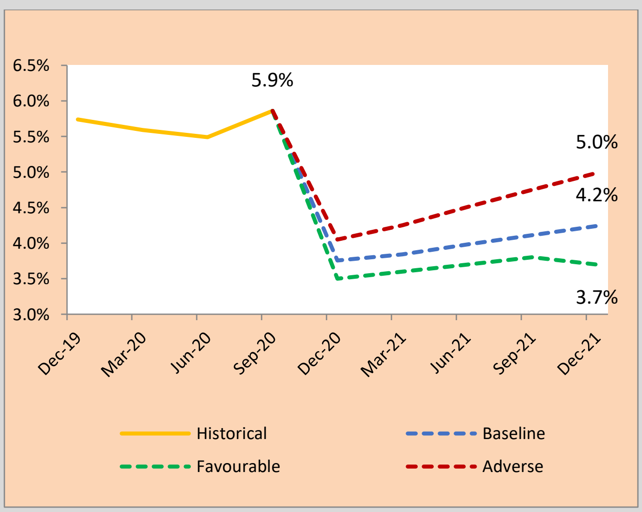


Source: FPM Data; calculation: FSD.

The NPL ratio of PCBs, in the baseline scenario, is expected to improve gradually throughout the projected period and reach at 4.0 percent in December'21. Further, in the stressed scenario, it might reach to 4.8 percent while in the favorable scenario it might be 3.3 percent. However, management of rescheduled loans under special criteria, concentration risk of large borrowers/NFCs, capacity to disburse new loans will remain the key challenges for the PCBs.

Islamic banks' baseline projection shows that NPL ratio, which stood at 4.3 percent in September'20, after immediate decline in next quarter, may gradually rise to 4.5 percent in December'21. However, in stressed situation, their projected NPL ratio might rise to 5.4 percent. Noteworthy, likewise PCBs, Islamic banks are exposed to similar challenges regarding management of rescheduled loans, concentration risk and high ADR.

CHART 5.23: NPL OF FCBs



Source: FPM Data; calculation: FSD

In all three projection scenarios-baseline, favorable and stressed, FCB's asset quality is expected to have improvement during the projection period. In the baseline scenario, NPL ratio of FCBs may decrease to 4.2 percent in December'21 from 5.9 percent of September'20. During the stressed situation it may reach to 5.0 percent by December'21. Like many other banks, the decline in NPL ratio during initial periods is mainly attributable to regulatory relaxation.

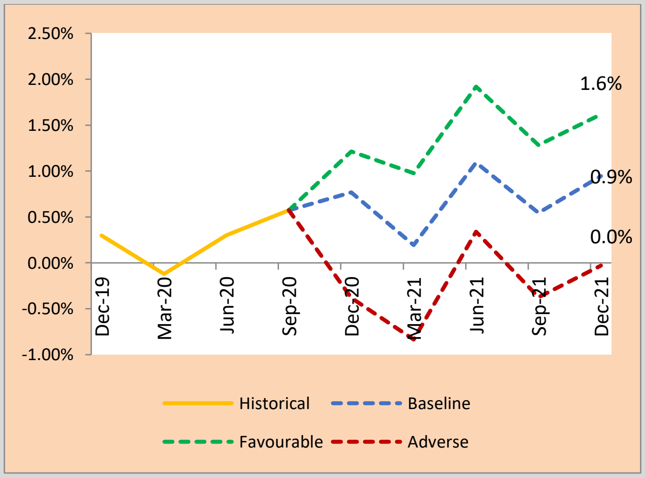
5.2.2.3 PROFITABILITY

Profitability of the banking industry, measured in terms of quarterly return on assets (ROA)[21], is likely to have an overall increasing trend with usual business cycle fluctuations during the projection period. It is expected that, after

[21]This ratio may slightly differ with other publications of Bangladesh Bank as there are some differences in data definition for FPM.

December’20, as the effects of COVID-19 are expected to fade away, increase in fresh loan disbursement may help the banks maintaining a higher level of ROA as shown in Chart 5.24. Despite having downward pressure on lending, because of the above-mentioned reasons, ROA is likely to show an overall positive trend with usual seasonal fluctuations found in the historical data. The ROA of the overall industry is expected to reach 0.90 percent in December’21. Under the adverse scenario, it is projected to be 0.0 percent.

CHART 5.24: ROA OF THE INDUSTRY



Source: FPM Data; calculation: FSD.

Category-wise analysis shows that the bank groups except SCBs and DFIs are projected to maintain positive profitability over the next forecasting period. SCBs are likely to show increasing trend in ROA after December’20 quarter as they are expected to maintain provision for earlier quarters which have been subject to forbearance previously. Despite the pressure for lowering the lending rate, PCBs and Islamic banks may experience increase in ROA as deposit collection cost might gradually fall due to expected rise in bank deposits and receipt of additional interest income from rescheduling of loans.

CHART 5.25: ROA OF SCBs

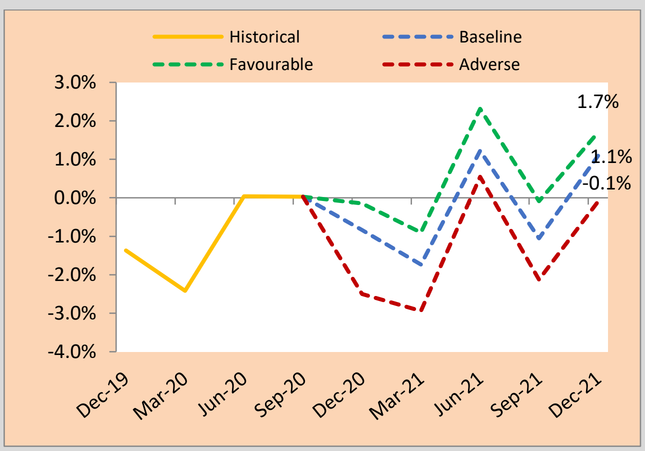
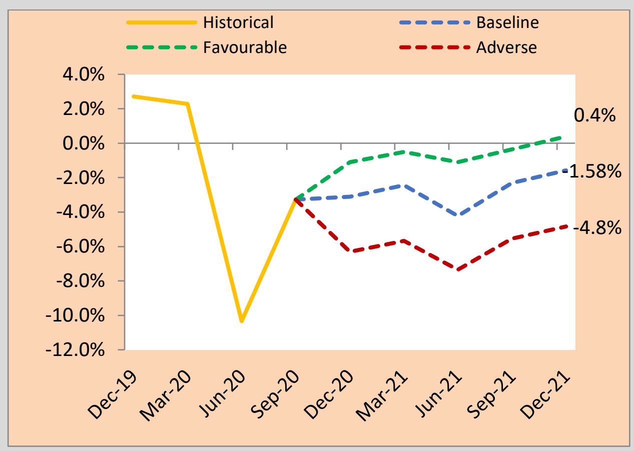


CHART 5.26: ROA OF DFIs



Source: FPM Data; Calculation: FSD.

Under the baseline scenario, ROA of SCBs might reach 1.09 percent at end-December’21 as shown in Chart 5.25. DFIs would continue to experience their current negative trend of ROA mainly due to management issues and their prioritized financing in the primary and relatively vulnerable sectors of the economy as depicted in Chart 5.26. Even in favorable scenario, their ROA is expected to remain negative in most of the times.

CHART 5.27: ROA OF PCBs

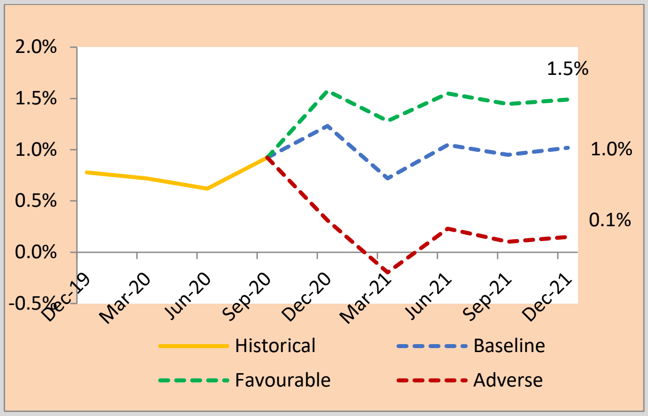
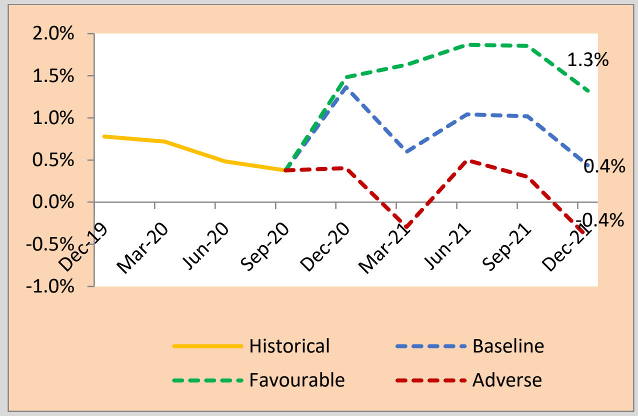


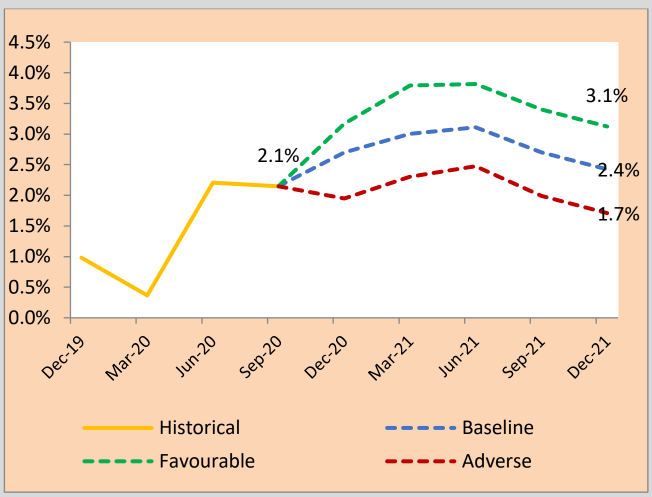
CHART 5.28: ROA OF ISLAMI BANKS



Source: FPM Data; Calculation: FSD.

As shown in Charts 5.27 and 5.28, the ROAs of the PCBs and Islamic Banks are likely to follow a slight increasing trend after the decline in the earlier quarters of 2020. As ROA of these banks will largely depend on loan servicing capacity of the borrowers enjoying special facility, their ROAs might be adversely affected if these loans again turn into classified ones. However, under the baseline scenario both type of banks are likely to show positive profitability throughout the projection period.

CHART 5.29: ROA OF FCBs



Source: FPM Data; calculation: FSD.

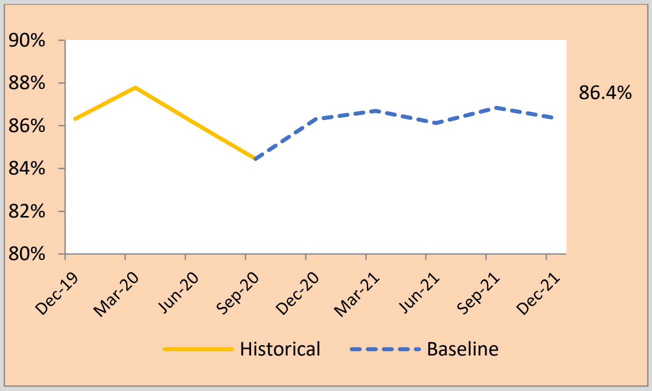
On the other hand, FCBs' ROA may also demonstrate an upward trend assuming that they will continue to generate higher income in the near future. ROA of the FCBs may rise further in 2021 if the impact of COVID-19 fades away and if the non-interest income increases. It is expected in the baseline scenario that the FCBs would still be able to generate high ROA due to their efficient fund management, lower NPLs and likely increase in the non-interest incomes.

5.2.2.4 Liquidity and Advance to Deposit Ratio (ADR)

To increase liquidity position of banks during COVID-19 period, BB as well as the Government have adopted expansionary monetary policy stance and stimulus packages to revive the industries from the adverse impacts of the pandemic. Besides, contraction in import growth, increase in inward remittance during the pandemic also eased the liquidity condition. Therefore, at the baseline projection, it is forecasted that liquidity would be adequate for all banks in the short-term.

In order to estimate projected liquidity position in the banking sector, this report has also considered some recent macroeconomic developments. In particular, it is assumed that due to decrease in minimum required CRR and sizable inflow of inward remittance, banks' investible fund will increase, and they will be able to sanction new loans which should increase private credit growth simultaneously. However, as PCBs and Islamic Banks have already surpassed the existing ADR limits or have been very close to the same, the growth in credit is likely to accelerate at a slower pace. As a combination of all these factors and because of expected pick up in deposit growth, the liquidity scenario is expected to improve.

CHART 5.30:ADR OF THE BANKING INDUSTRY



Source: FPM Data; calculation: FSD.

The ADR of the banking industry which slightly declined during the first two quarters of 2020 is expected to hover around 86 percent over the next few quarters. The expected increase in credit (which also includes the financing through the stimulus package) is the probable reason behind the initial slight increase in ADR in the short-run.

In the projection, ADR is expected to maintain little downward trends for the SCBs, DFIs, and FCBs while trivial upward trends are projected for the PCBs and Islamic banks. However, in aggregate, it can be concluded that liquidity scenario is expected to improve in the projection period.

CHART 5.31: ADR OF THE SCBs

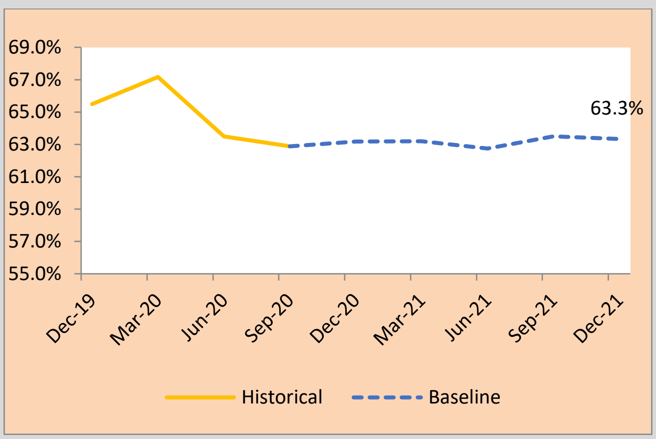
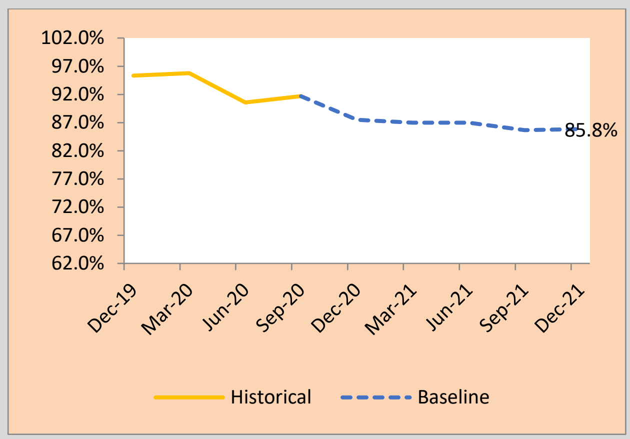


CHART 5.32: ADR OF THE DFIs



Source: FPM Data; Calculation: FSD.

CHART 5.33: ADR OF THE PCBs

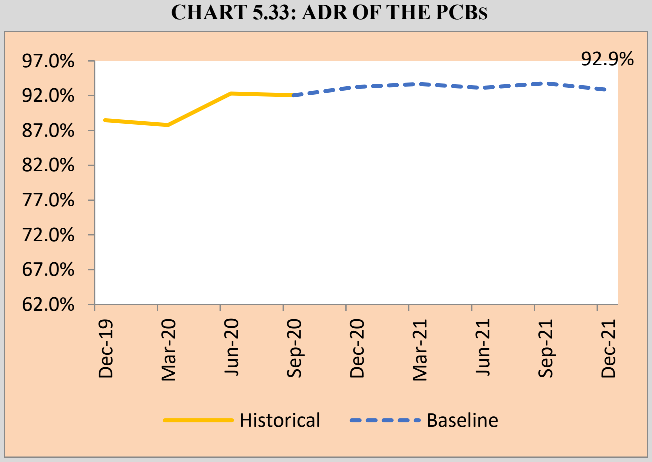
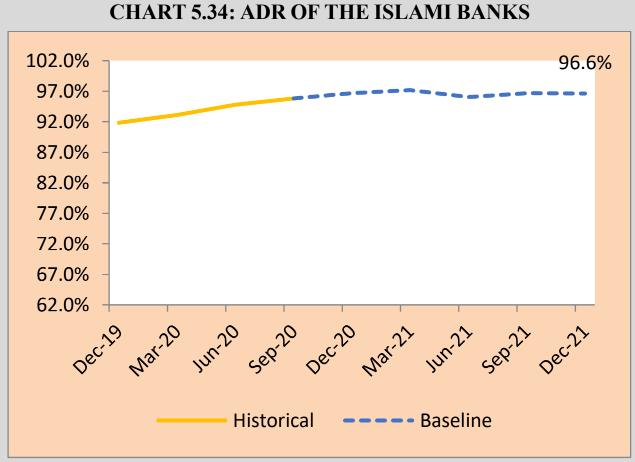
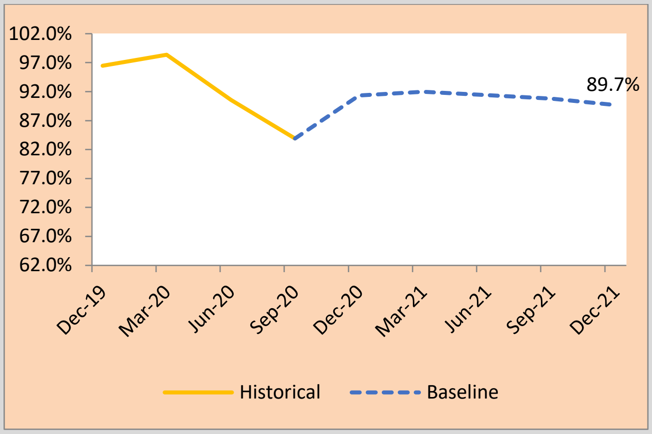


CHART 5.34: ADR OF THE ISLAMI BANKS



Source: FPM Data; Calculation: FSD.

CHART 5.35: ADR OF THE FCBS



Source: FPM Data; Calculation: FSD.

BOX 5.1: MARKET PERCEPTION SURVEY: UNDERSTANDING THE EFFECTS OF COVID-19

A *Market Perception Survey* is conducted among all 59 banks to review the short- and medium-term effects of COVID-19 pandemic on different aspects of the banking sector in Bangladesh.

Banks are categorized as follows:

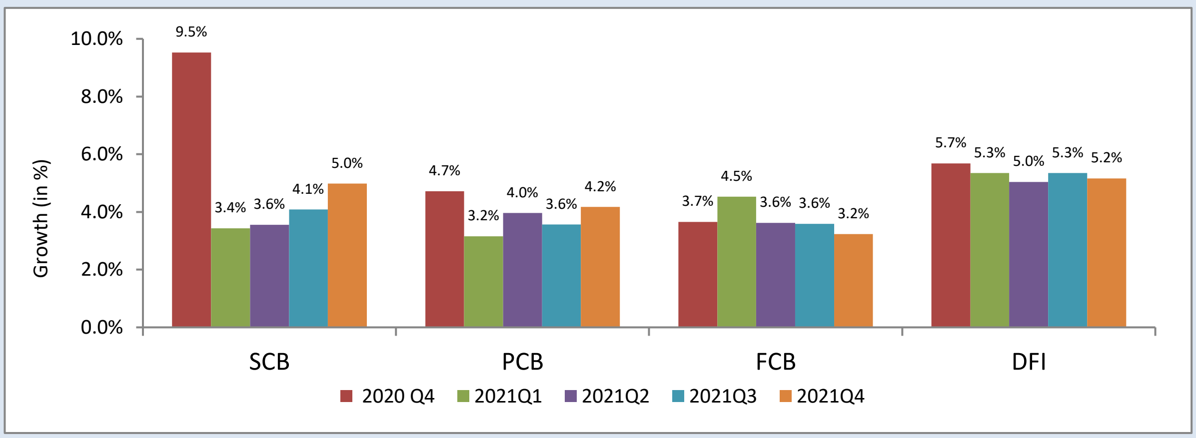
Category	Number of Banks
State-owned Commercial Banks (SCBs)	6
Private Commercial Banks (PCBs)	41
Foreign Commercial Banks (FCBs)	9
Development Financial Institutions (DFIs)	3
Total	**59**

In the FPM model, the survey responses are prepared on the basis of the stakeholders' (i.e., banks') own projections and views on the factors of interest. The major findings of survey are described below:

1. Deposit Growth

Chart B.5.1 shows the weighted average deposit growth projected by different bank categories. Interestingly, most of the banks projected slow deposit growth, especially in 2021. SCBs forecasted their probable deposit growths ranging 3.4 to 5.0 percent- slightly higher than that of the PCBs and FCBs who forecasted their deposit growth between the range of 3.2 to 4.5 percent.

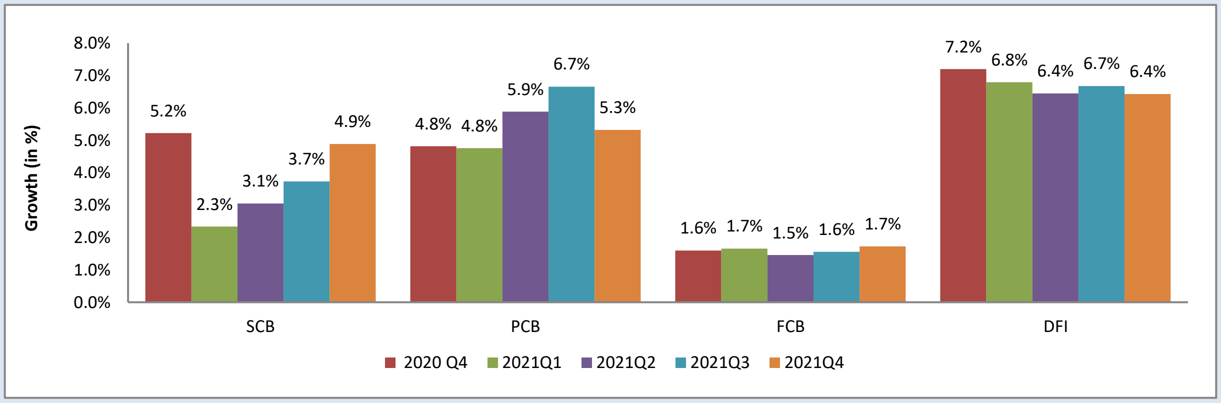
CHART B.5.1: FORECASTED WEIGHTED DEPOSIT GROWTH BY BANK CATEGORY



2. Loan Growth

Chart B.5.2 shows the weighted average loan growth projected by different bank categories. All categories of banks other than the DFIs are expecting a gradual increasing move in their respective loan growths from early 2021. PCBs and DFIs assumed higher annualized loan growths for them as compared to the other categories. Projected loan growths of the PCBs and DFIs lie between five to seven percent, on average, over the projected period. FCBs are careful to project lower growth during the post-COVID period as they show the minimum range of growth in 2021.

CHART B.5.2: FORECASTED WEIGHTED LOAN GROWTH BY BANK CATEGORY



3. LOAN RECOVERY

Table B.5.1 presents the banks' projection of their loan recoveries in the next five quarters. Color of the cell refers to the majority of responses. Responds reveal that overall industry is expecting an upward trend of loan recovery throughout the next five quarters. SCBs and DFIs are predicting slight decline in the short-term but expected to expedite the recovery later on. FCBs remained cautious and expected a steady trend over the next four quarters.

TABLE B.5.1: SUMMARY RESPONSES ON PROBABLE LOAN RECOVERY

	2020-Q4	2021-Q1	2021-Q2	2021-Q3	2021-Q4
SCBs					
PCBs					
FCBs					
DFIs					
Industry					

Note: Green refers to the likelihood of increase in loan recovery; yellow refers to unchanged, while red refers to the likelihood of decline in loan recovery.

4. NPL RATIO

Table B.5.2 depicts the banks' responses on the probable NPL ratios in future. Considering the regulatory relaxation and forbearances, banks are mostly expecting a slight steady or positive NPL situation (i.e., decline of the ratio) at 2020-Q4. However, if the relaxations continue, NPL may become stable in the following two quarters and then the situation is assumed to improve again.

TABLE B.5.2: SUMMARY RESPONSES ON PROBABLE NPL RATIO

	2020-Q4	2021-Q1	2021-Q2	2021-Q3	2021-Q4
SCBs					
PCBs					
FCBs					
DFIs					
Industry					

Note: Green refers to the likelihood of decease in NPL ratio; yellow refers to unchanged, while red refers to the likelihood of increase in NPL ratio.

5. Growth in Income

Banks' responses on the probable growth in interest and non-interest incomes are summarized in Table B.5.3. It reveals that banks are expected to have increasing trend in their income over the projected time period.

Table B.5.3: Summary responses on probable growth in income

	2020-Q4	2021-Q1	2021-Q2	2021-Q3	2021-Q4
SCBs					
PCBs					
FCBs					
DFIs					
Industry					

Note: Green refers to the likelihood of increase in income; yellow refers to unchanged, while red refers to the likelihood of decrease in income.

6. Risk Weighted Assets

As the economic activities are expected to be normal in near future, the Risk-weighted Assets are also assumed to go up throughout the period as presented in Table B.5.4.

Table B.5.4: Summary responses on probable Risk-weighted Assets

	2020-Q4	2021-Q1	2021-Q2	2021-Q3	2021-Q4
SCBs					
PCBs					
FCBs					
DFIs					
Industry					

Note: Green refers to the likelihood of decrease in RWA; yellow to refers unchanged, while red refers to the likelihood of increase in RWA considering the assets growths are in an increasing trend.

7. Capital Base

Table B.5.5 shows that other than SCBs and DFIs, the capital base of other bank categories is assumed to rise. In aggregate, the industry may have a positive trend of capital base over the period.

Table B.5.5: Summary responses on probable Capital Base

	2020-Q4	2021-Q1	2021-Q2	2021-Q3	2021-Q4
SCBs					
PCBs					
FCBs					
DFIs					
Industry					

Note: Green refers to the likelihood of increase in capital base; yellow refers to unchanged, while red refers to the likelihood of decrease in capital base.

5.3 IMPLICATIONS OF THE IMPACTS ON FINANCIAL STABILITY

The banking sector of Bangladesh registered a moderate growth in terms of credit, investment and deposits up to December’20. As a result, the position of capital adequacy, asset quality, return on assets (ROA) and other solvency indicators have increased gradually during the same period. It appears from the projection that profitability of the banking sector may increase due to resumption of economic activities; as a result, CRAR is projected to remain almost stable around 11.5 percent till the end-December’21 under the forecasted baseline scenario. CRARs of the Private, Islamic, and Foreign Commercial Banks are expected to remain high covering both minimum capital requirement (CRAR) and capital conservation buffer (CCB) throughout the projection period whereas CRARs of SCBs and DFIs are projected to remain lower than the minimum regulatory requirement level due to their engagement in diversified welfare programs of the Government, persistent low or negative profitability and their issues of NPL management. In the baseline projection, the gross NPL ratio of the banking sector is expected to move downward assuming that banks would strengthen their efforts in loan recovery at the post-COVID-19 period. The profitability of the banking sector, as measured by ROA, is expected to maintain an overall positive trend up to December’21 in the baseline scenario. Liquidity of the banking sector is projected to be adequate for all banks throughout the projection period at baseline scenario. Overall, baseline projection indicates notable resilience of banking sector throughout December’20 to December’21. Yet, concern will remain over the performance of SCBs and DFIs if their credit management and loan recovery scenarios do not improve considerably. From the above discussion, it can be argued that banking sector has been able to cope with COVID-19 shocks and would largely remain resilient during the forecasted horizon.

CHAPTER 6 : IMPACT ON FINANCIAL INSTITUTIONS (FIs) AND ITS IMPLICATIONS FOR FINANCIAL STABILITY

Financial Institutions (FIs) in Bangladesh are playing a vital role in the economy by providing a variety of financial services in meeting diverse needs of households and businesses. Currently, 33 FIs are operating in Bangladesh, which mainly provide lease financing, term-lending, SME and trade financing, equity financing, merchant banking, and venture capital financing. Despite the smaller asset size and limited range of operation, FIs are highly connected with the banks for their investible fund. They are also connected with capital market as listed companies. Therefore, any disturbance in this industry is likely to have spillover effects on both banks and capital market of the country.

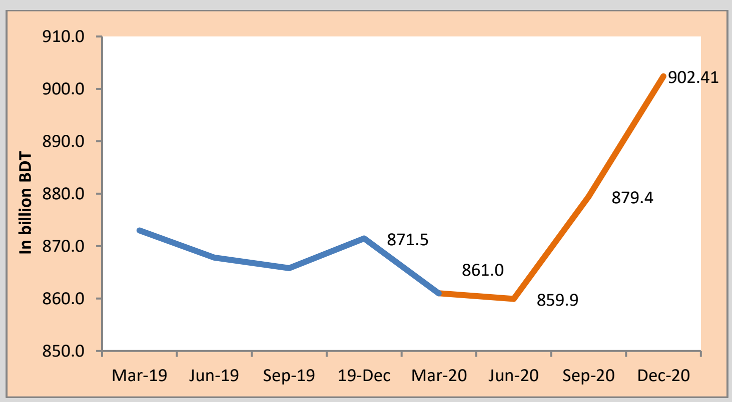
Under this backdrop, this chapter attempts to analyze the impact of the COVID-19 pandemic over the FIs and its implication for financial sector stability. For this purpose, March'20 is considered as the inception of the pandemic period. The quarterly data of this industry from December'18 to September'20 are collected from the FIs. It helped analyzing the pre-pandemic trend and any significant shift due to the pandemic. Besides, to predict the outlook of this industry, a comprehensive market perception survey has been conducted among the FIs. Therefore, along with the realized impacts of COVID-19 on different financial indicators of this industry, a glimpse of future movements of those indicators are also highlighted based on the survey responses.

6.1 IMPACT OF COVID-19 ON THE FIs

6.1.1 IMPACT ON ASSETS

The asset position of this industry has experienced a downward trend since March'19 to till June'20, except in December'19. Thereafter, the industry recovered notably registering high growth of assets. At end-December'20, assets rose to BDT 902.41 billion from BDT 859.9 billion of end-June'20 (Chart 6.1).

CHART 6.1: TOTAL ASSETS



Source: FSD, BB.

6.1.2 IMPACT ON ASSET QUALITY

Chart 6.2 shows a notable rising trend in gross NPL ratio of the FIs since the beginning of the pandemic. The gross NPL ratio, which was 9.5 percent in December'19, rose to 10.51 percent, 13.29 percent, and 15.50 percent respectively in the following three quarters mainly due to regulatory review of asset quality. Similar trend was also observed in the net NPL ratio except in September'20 when net NPL ratio showed a downward trend due to increase in provision maintenance ratio. Besides, the long historical outstanding of Bad/Loss loans has exerted additional pressure. Chart 6.3 shows that at end-December'19, 11 FIs had NPL ratio of more than 10 percent, while the number increased to 13 at end-September'20.

CHART 6.2: CHANGE IN GROSS NPL & NET NPL RATIO

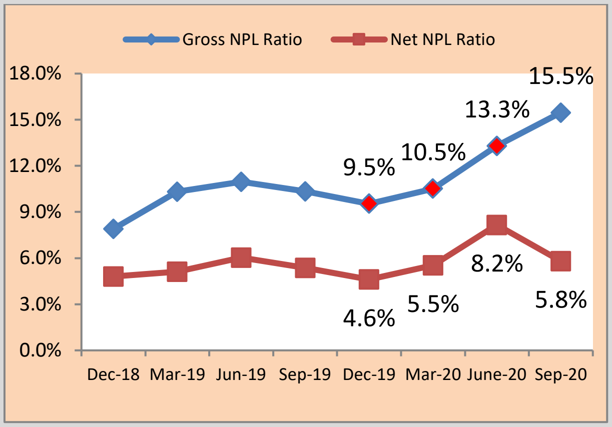
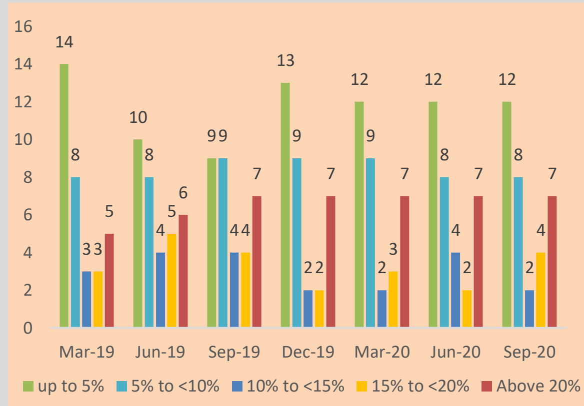


CHART 6.3: DISTRIBUTIONS OF FIS BY GROSS NPL RATIO

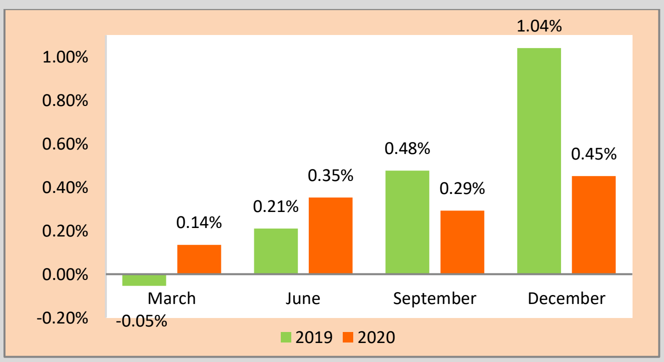


Source: DFIM, BB.

6.1.3 IMPACT ON PROFITABILITY

Return on Asset (ROA) of FIs was 0.14 percent and 0.35 percent at end-March'20 and end-June'20 respectively, which were higher than the figures of corresponding quarters of the previous calendar year. However, quarter-to-quarter comparison shows that ROA declined from 0.35 percent in June'20 to 0.29 percent in September'20 and thereafter rose to 0.45 percent in December'20 (Chart 6.4). Compared to previous year's quarterly performance, the ROA declined both in the third and fourth quarters of 2020, mainly due to rising NPL accompanied by higher provision maintenance ratio.

CHART 6.4: AGGREGATE ROA OF FIs



Source: FSD, BB. Note: Quarterly data are annualized.

6.1.4 IMPACT ON CAPITAL ADEQUACY

According to the *Prudential Guidelines on Capital Adequacy and Market Discipline (CAMD) for Financial Institutions 2011*, minimum required capital adequacy ratio (CAR) is 10 percent. Chart 6.5 shows that the CAR of FIs demonstrated declining trend since December'19 but remained well above the minimum regulatory requirement. In particular, CAR of FIs was 17.2 percent in December'19, which declined to 16.4 percent in June'20 and 14.3 percent in September'20. Chart 6.6 shows that 6 FIs could not maintain the minimum required CAR as of end-September'20. It is noteworthy that the number of CAR compliant FIs remained unchanged during the last three quarters of December'20, though the industry's overall CAR declined.

CHART 6.5: TREND IN CAR OF THE FIs

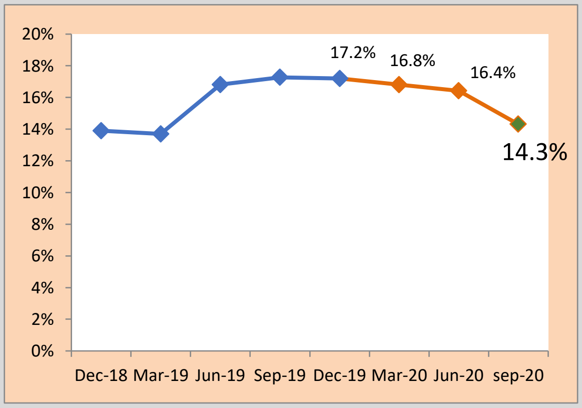
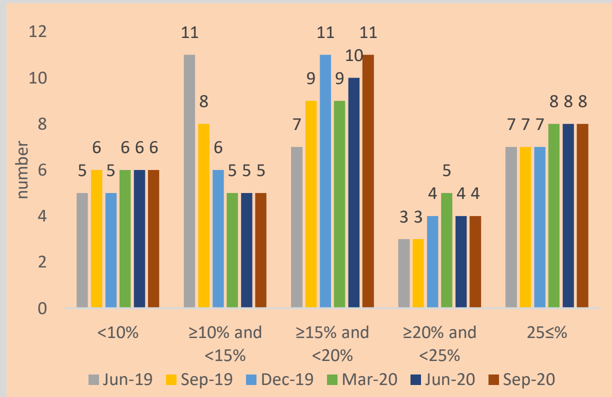


CHART 6.6: DISTRIBUTION OF FIs BY CAR



Source: FSD, BB.

6.1.5 Impact on Liquidity situation

Chart 6.7 shows that FIs were able to maintain minimum cash reserve requirement (CRR) in both pre-COVID-19 (up to December'19) and COVID-19 period (March'20 and onward). However, the overall cash reserve maintained by the FIs decreased in the last three quarters of 2020, mainly attributable to relaxation in regulatory requirement. On the other hand, statutory liquidity requirement depicts quite stable scenario during pre-COVID-19 and COVID-19 period (Chart 6.8). At end-December'19, the statutory liquidity requirement was BDT 21.66 billion and the amount maintained by the FIs was BDT 90.89 billion. At end-December'20, statutory liquidity requirement increased to BDT 22.59 billion and FIs were able to maintain BDT 108.01 billion.

CHART 6.7: Cash Reserve requirement (CRR)

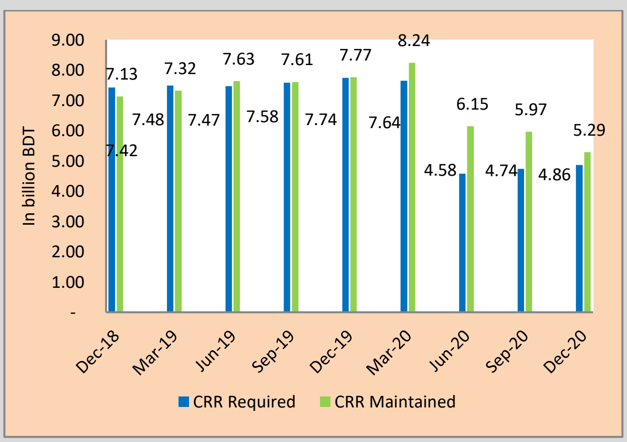
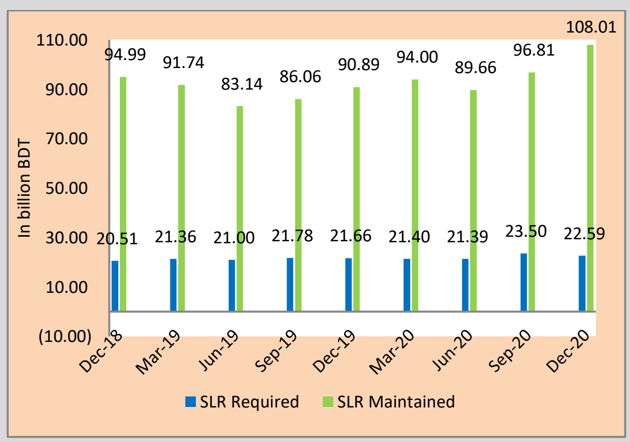


CHART 6.8: Statutory Liquidity reserve requirement (SLR)



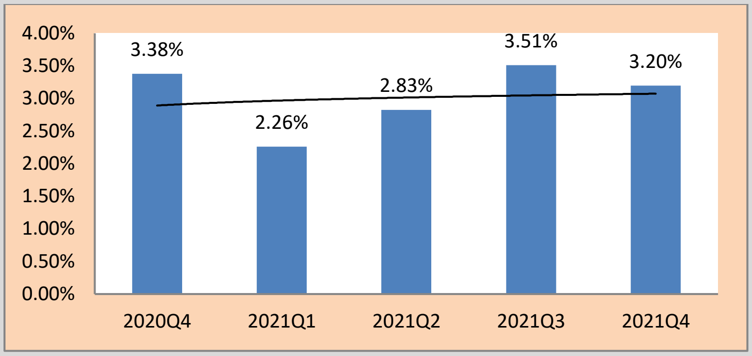
Source: FSD, BB.

6.2 MARKET PERCEPTION OF THE FIs

6.2.1 MARKET PERCEPTION ON LOAN PORTFOLIO

Through the market perception survey, FIs projected that the loan portfolio might experience a moderate upward movement in 2021. The respondents expressed that the loan growth may stand at 2.26 percent in the first quarter of 2021 and then would gradually increase in the following two quarters (June and September'21) with a slight decrease in the last quarter of 2021 (Chart 6.2).

CHART 6.2: TREND OF PERCEIVED LOAN GROWTH



Source: Market Perception Survey, FSD, BB.

6.2.2 MARKET PERCEPTION ON PROFITABILITY

The market perception survey indicates that both interest and non-interest incomes of this industry would increase in 2021, as depicted in Chart 6.6 and 6.7. The survey also indicates that profitability of this industry may improve in the coming quarters through strengthening the business and recovery of NPLs.

CHART 6.3: PERCEPTION ON GROWTH OF INTEREST INCOME

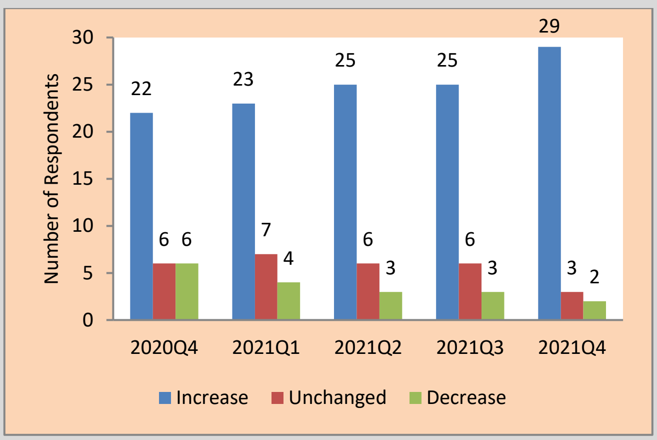
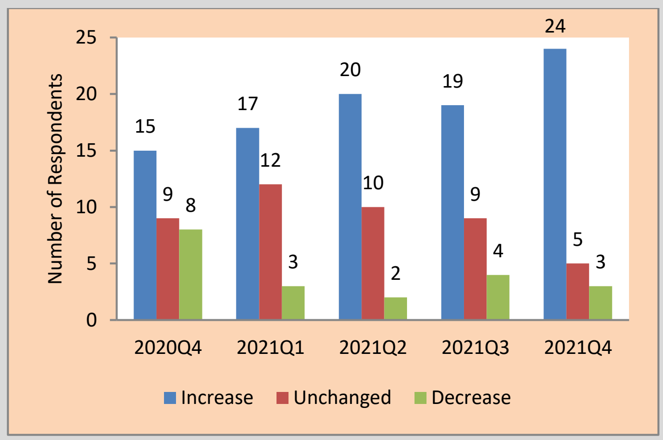


CHART 6.4: PERCEPTION ON GROWTH OF NON-INTEREST INCOME

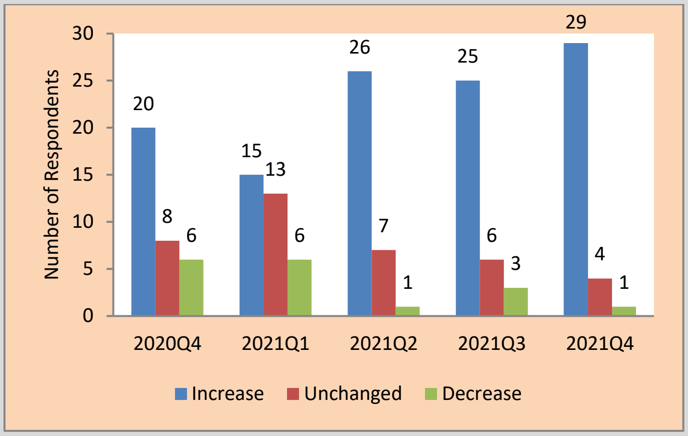


Source: Market Perception Survey, FSD, BB.

6.2.3 MARKET PERCEPTION ON ASSET QUALITY

Despite the prevailing low states, majority of the FIs perceive that the asset quality would improve in the approaching quarters through the accelerated recovery of loans and leases. Pertinently, considering the adverse impact of the pandemic on the overall economy, Bangladesh Bank relaxed the regulatory requirements regarding classification of loans and leases in three phases till 31 December’20 (DFIM Circular No. 01/2020, 05/2020 and 06/2020). FIs expect that these policy initiatives may provide some breathing space for both the borrowers and the lenders which may deter the NPL situation from further deterioration (Chart 6.8).

CHART 6.5: PERCEPTION ON RECOVERY RATE OF LOANS AND LEASES

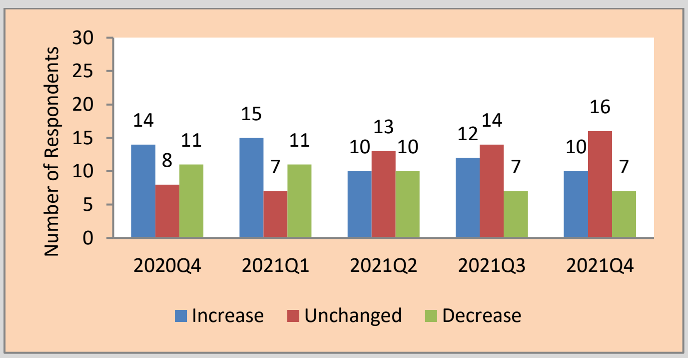


Source: Market Perception Survey, FSD, BB.

6.2.4 Market Perception on Capital Adequacy

Majority of the respondents anticipate that CAR for the industry may increase in the first quarter of 2021 as shown in Chart 6.9. However, as per the survey, the industry's CAR may remain unchanged during the last three quarters of 2021.

CHART 6.6: PERCEPTION ON GROWTH OF CAR (%)

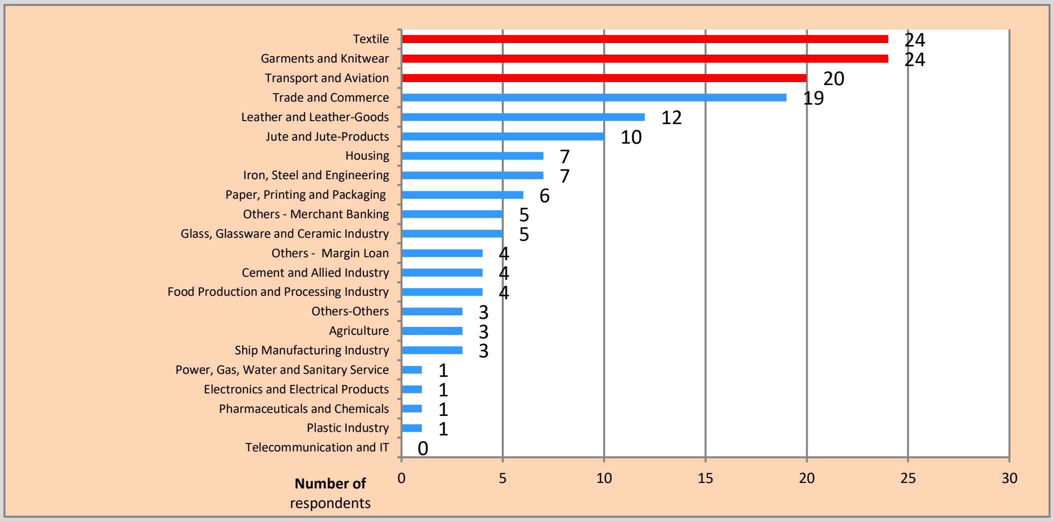


Source: Market Perception Survey, FSD, BB

6.3 IMPLICATIONS OF THE IMPACTS ON FINANCIAL STABILITY

FIs view that some of the major industries such as textiles, garments and knitwear, transport and aviation, and trade and commerce have been severely affected during the pandemic as depicted in Chart 6.7. In contrast, telecommunication and IT, plastic, pharmaceuticals, and electronics and electrical sectors are least affected according to the survey.

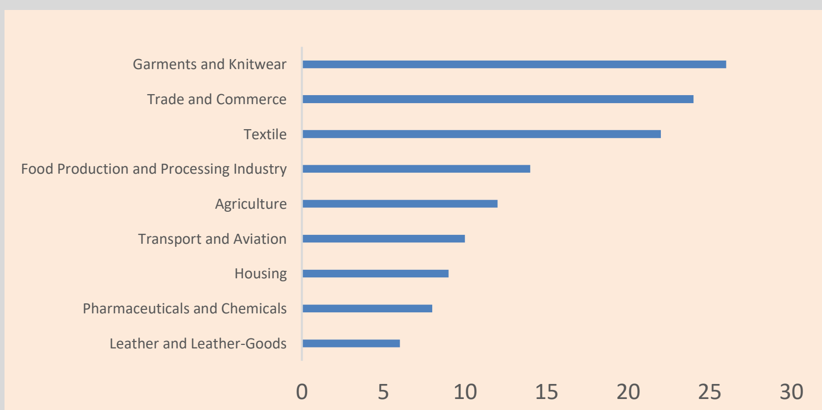
CHART 6.7: SEVERELY AFFECTED SECTORS



Source: Market Perception Survey, FSD, BB

While enquiring the impacts of the pandemic on the industry from the credit demand perspective, the FIs have been requested to rank different sectors in line with credit needs. The survey revealed that garments and knitwear, trade and commerce, textile, food production and processing industry, agriculture, transport and aviation, housing, pharmaceutical and chemicals, and leather and leather goods are the most credit deserving sectors of the economy.

CHART 6.8: SECTORS THAT REQUIRE CREDIT MOST



Source: Market Perception Survey, FSD, BB.

Despite the regulatory relaxation on loan and lease classification, the gross NPL ratio of the FI industry exhibited an upward trend during the pandemic mainly due to its long historical accumulated outstanding of non-performing loans and leases. Yet majority of the FIs projected that their recovery rate of loans and leases would improve in the approaching quarters. High NPLs also caused FIs' CAR to decrease slightly from March'20 to September'20 quarters. As a result, CAR remains at 14.3 percent at end-September'20, higher than the minimum regulatory requirement of 10.0 percent. Overall, though the market perception survey indicates a likely improved performance of FIs in 2021, improving NPL management would remain the key in the coming quarters.

CHAPTER 7 : IMPACT ON MONEY MARKET, CAPITAL MARKET, AND PAYMENT SYSTEM AND THEIR IMPLICATIONS FOR FINANCIAL STABILITY

COVID-19 pandemic has severely affected the money market across many parts of the globe. Depending on the depth of the market and complexity of the instruments, severity of turmoil in money market has varied in different jurisdictions. Central banks and monetary authorities have provided various policy supports to ease liquidity condition in the money market. In Bangladesh, money market activities are mainly dominated by short-term interbank borrowing/lending, primary and secondary trading of short-term government securities and borrowing/lending with BB through Repo, Special Repo, Reverse Repo and Liquidity Support Facility (LSF).

7.1 IMPACT ON MONEY MARKET

During the earliest months of COVID-19 outbreak, money market exhibited some degree of volatility due to uncertainty regarding the severity and duration of the disease and due to some associated factors like moderate deposit growth and slow growth of foreign remittance inflow. Besides, it was assumed that market participants would hold cash or cash equivalents as precaution. Moreover, probable slow pace of cash recovery from loans and advances due to erosion in debt servicing capacity of businesses and households could have aggravated the liquidity scenario. Against the stated backdrop, an overall liquidity tightening in the money market was highly likely, which was evident in March'20. However, BB streamlined its policy tools to stave off potential vulnerabilities in the money market and to cushion the confidence of market participants.

Turnover in the call money decreased significantly by 63.5 percent in March'20 from its previous month and the rate picked up to 5.14 percent from 5.06 percent (Chart 7.1). On the other front, interbank repo volume decreased slightly while the rate edged up in the same month, still it remained to be preferable source of liquidity (Chart 7.2). However, the interbank repo volume saw its substantial decline in April'20, the second month of COVID-19 outbreak. The relatively tighter condition of liquidity in March'20 is also evident from the Chart 7.3 where the total liquidity in the banking system declined by 4.1 percent and excess liquidity squeezed down by 13.5 percent.

CHART 7.1: CALL MONEY BORROWING AND RATE

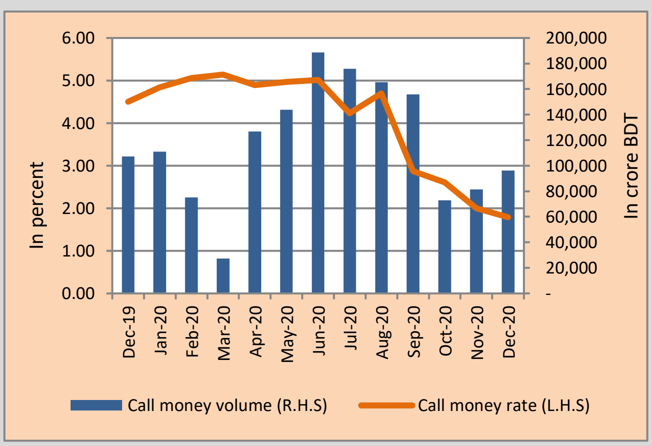
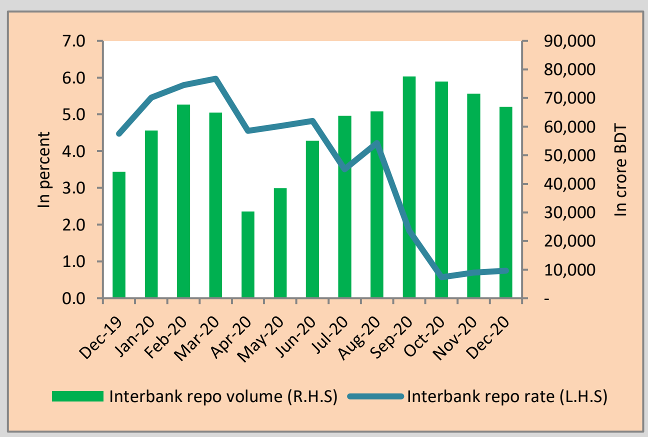
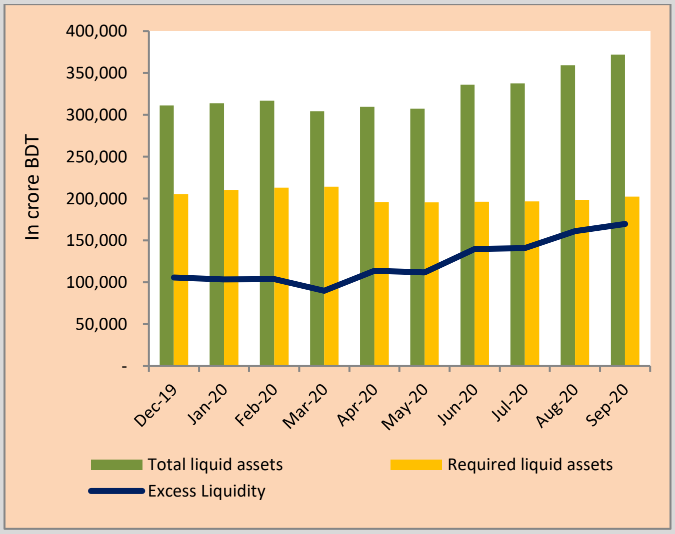


CHART 7.2: INTERBANK REPO VOLUME AND RATE



Source: Debt Management Department, BB.

CHART 7.3: LIQUIDITY IN THE BANKING SYSTEM



Source: Department of Off-site Supervision, BB.

In order to boost up liquidity in the money market, BB proactively reduced CRR by 50 basis points[22] on 23 March'20, which helped accommodate around BDT 64.0 billion for banks to ease the liquidity condition witnessed in March'20. Further, BB reduced CRR by another 100 basis points for banks[23] and Non-Bank Financial Institutions[24]. BB also adopted an 'expansionary and accommodative' monetary policy for the FY21 with an aim to revive the economy from the adversity of the COVID-19 pandemic and to facilitate implementation of stimulus packages for affected sectors. This policy projected domestic credit growth of 19.3 percent for the said fiscal year, setting the private sector credit growth and public sector credit growth at 14.80 percent and 44.4 percent respectively. Moreover, Bank rate was slashed by 100 basis points and Advance-to-Deposit Ratio (ADR) was increased by 200 basis points to make the borrowing environment more relaxed. Bolstered by these policy supports given progressively by BB, call money market and interbank money became resilient substantially soon after the inception of COVID-19 and have remained buoyant until the review period. Interestingly, call money borrowing that was in declining trend before the onset of COVID-19 became vibrant after the onset. With greater excess liquidity, the rate in both call money and interbank market decreased markedly till December'20. In recent months, borrowing from call money market declined significantly while that from interbank market remained buoyant, largely attributable to the lower interbank repo rate than call money rate (Charts 7.1 and 7.2).

In pursuant to easing borrowing rate in the market, BB added further support through trimming repo rate thrice[25] (Chart 7.4) along with the introduction of long-term repo facilities[26] up to 360-days at the onset of COVID-19. With decreased turnover in the call money market and reduction in repo rate, borrowing through BB Repo and Liquidity Support Facility (LSF) increased in March'20. However, their dependence on repo facility and Liquidity Support Facility (LSF) from BB decreased since April'20 (Chart 7.5).

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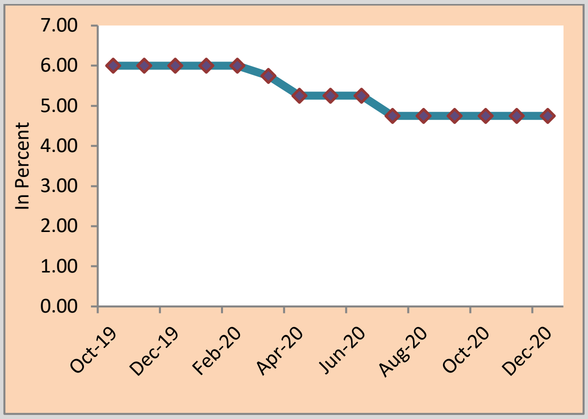
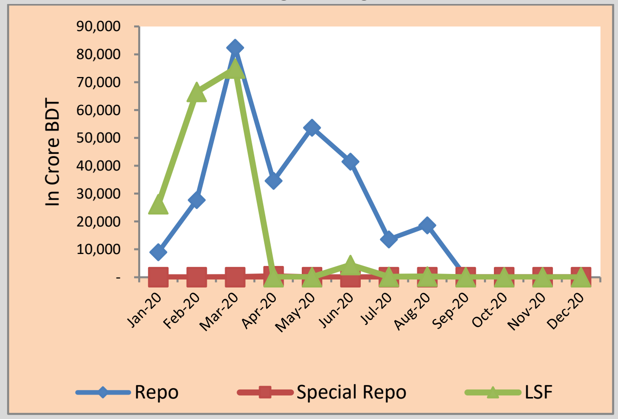
[22] MPD Circular No.01, Dated 23/03/2020.
[23] MPD Circular No.03, Dated 09/04/2020.
[24] DFIM Circular No.03, Dated 21/06/2020.
[25] Repo rate was set to 5.75 percent from 6 percent on 23 March 2020 vide MPD Circular No.02, 5.25 percent from 5.75 percent on 09 April vide MPD Circular No.-4, 2020 and 4.75 percent from 5.75 percent on 29 July 2020 vide MPD Circular No.05.
[26] DMD Circular No.02, Dated-13/05/2020.

CHART 7.4: REPO RATE OF BB



Source: Debt Management Department, BB.

CHART 7.5: REPO, SPECIAL REPO AND LIQUIDITY SUPPORT FACILITY OF BB

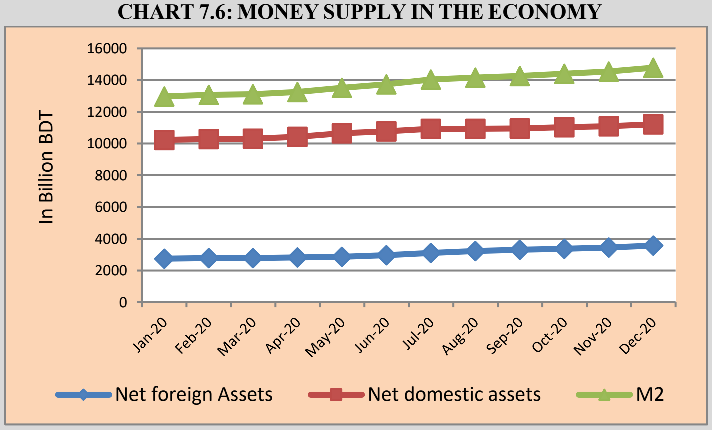


Source: Debt Management Department, BB.

Besides, record high wage earners' remittance along-with substantial inflows of foreign loans and grants since March'20 provided much needed stability in the foreign exchange market in time of export slowdown and also provided liquidity in the money market through BB's net purchase of FX to keep the nominal exchange value of BDT competitive. As a result, steady growth in net foreign assets was observed throughout 2020. Net domestic assets also grew largely due to government borrowing from the banking system to finance various large projects and stimulus packages.

The growth in these two indicators contributed towards increased money supply in the economy (Chart 7.6).

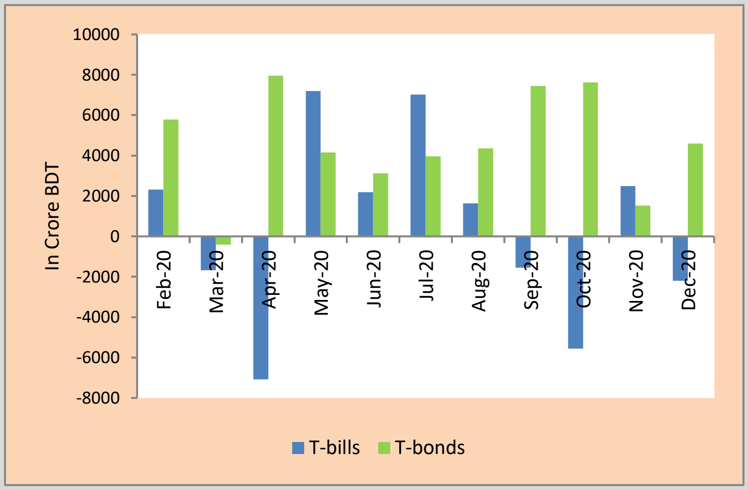
CHART 7.6: MONEY SUPPLY IN THE ECONOMY



Source: Bangladesh Bank Website.

Majority of the banking sector's liquid assets are in the form of unencumbered approved securities. This may be attributable to banks' strategy of reallocating funds from more risky loans and advances to less risky or risk-free government securities during the COVID-19 pandemic. Chart 7.7 shows that banking sector's net investment in treasury instruments was negative during the earlier part of COVID-19 pandemic. Net investments in T-bills were also negative in March'20 and April'20, mainly due to increased demand for cash. Net investment in treasury instruments was positive afterwards owing to significantly large investment in long-term securities e.g., T-bonds. In order to reduce liquidity constraints of banks and FIs to implement sizeable stimulus packages, BB has been providing large-scale refinance facilities to encourage them for extending credit to targeted areas of the economy and help restore the growth momentum to pre-COVID-19 level. All these policy supports have kept the money market liquid enough to withstand probable liquidity shocks in the near-term.

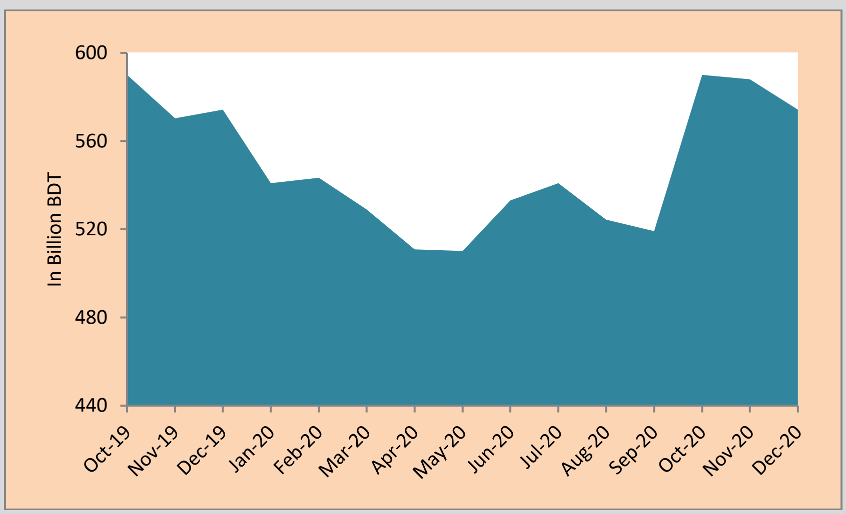
CHART 7.7: BANKING SECTOR'S NET INVESTMENT IN TREASURY INSTRUMENTS



Source: Debt Management Department, BB.

Interbank deposit also plays an important role to supplement the financing needs of banks and FIs. As this type of funding is more stable than conventional money market instruments, it helps reduce temporal risks of market participants. The volume of interbank deposit was in a declining trend, reached at the bottom in May'20, which indicate that banks were coping with COVID-19 shocks by adjusting their deposits with their counterparts. The reversal in volume of inter-bank deposit from June'20 might be due to banks and FIs' piling up of excess liquidity as a consequence of policy supports from various regulators. At the end of 2020, interbank deposit volume regained the level observed in the corresponding period of the previous year.

CHART 7.8: INTERBANK DEPOSIT VOLUME



Source: Financial Stability Department, BB.

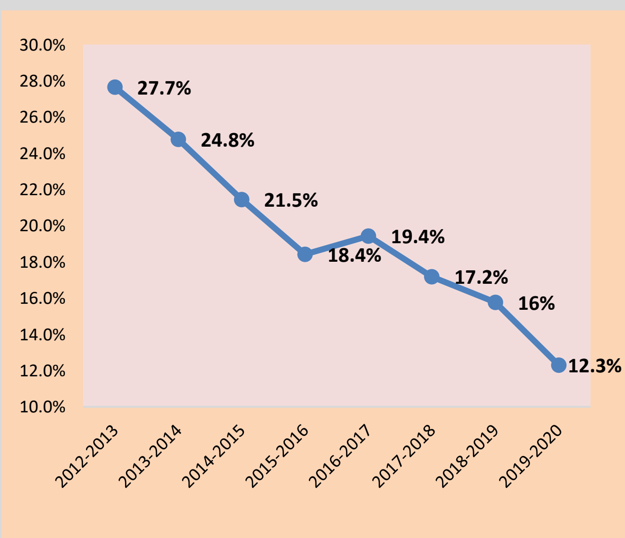
7.2 IMPACT ON CAPITAL MARKET

Capital market directly contributes to the growth paths and development activities of real economy by supplying long-term capital. Like other emerging economies, capital market of Bangladesh has been affected by the COVID-19, but the impact appears to be short-lived due to various policy supports including expansionary monetary policy accompanied by sizeable stimulus packages targeting the corporate sector. It also appears from the analysis of Chapter 2 that output of most of the large manufacturing industries began to increase since June'20 witnessing V-shape recovery. These developments drew the attention of investors and the market regained their confidence and remained buoyant since July'20 onwards. Using various financial market indicators, this section has tried to assess the impact of the pandemic on capital market, particularly Dhaka Stock Exchange (DSE).

7.2.1 IMPACT ON STOCK MARKET CAPITALIZATION

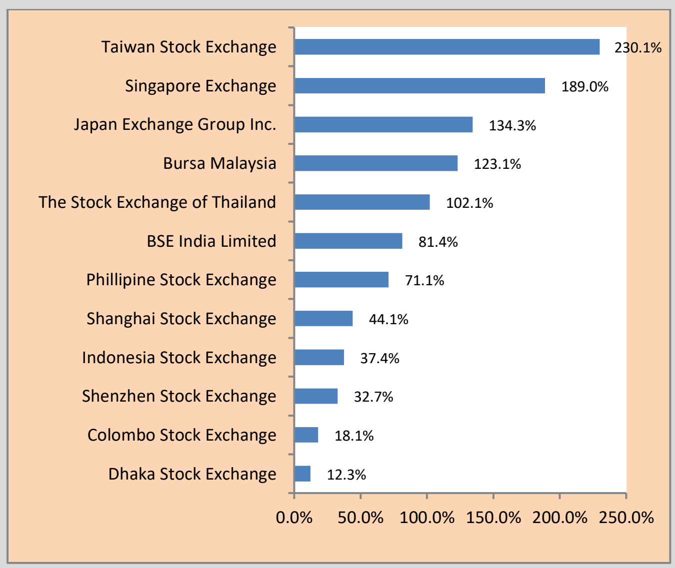
Share of market capitalization in terms of GDP reflects the extent of deepening of a country's stock market. Chart 7.9 shows that the market capitalization-to-GDP ratio of DSE has been continuously decreasing except the FY17 and plunged at 12.3 percent in FY20. This reflects diminishing contribution of the stock market towards the economic growth in Bangladesh. Furthermore, compared to the recent years, the pace of downward trend accelerated in FY20, mainly due to various measures taken to contain the spread of COVID-19 in the second half of the fiscal year. In FY19, the market capitalization-to-GDP ratio declined by 1.2 percentage points while it declined by 3.7 percentage points in FY20. Chart 7.10 provides evidence that market capitalization of DSE to-GDP remains far behind its major Asian peers. Above scenarios suggest that different types of high-quality stocks are necessitated to provide additional depth of the market, ensure asset price and long-term financing needs of the country.

CHART 7.9: TREND IN STOCK MARKET CAPITALIZATION TO GDP RATIO OF BANGLADESH



Source: DSE Monthly Review, December 2020.

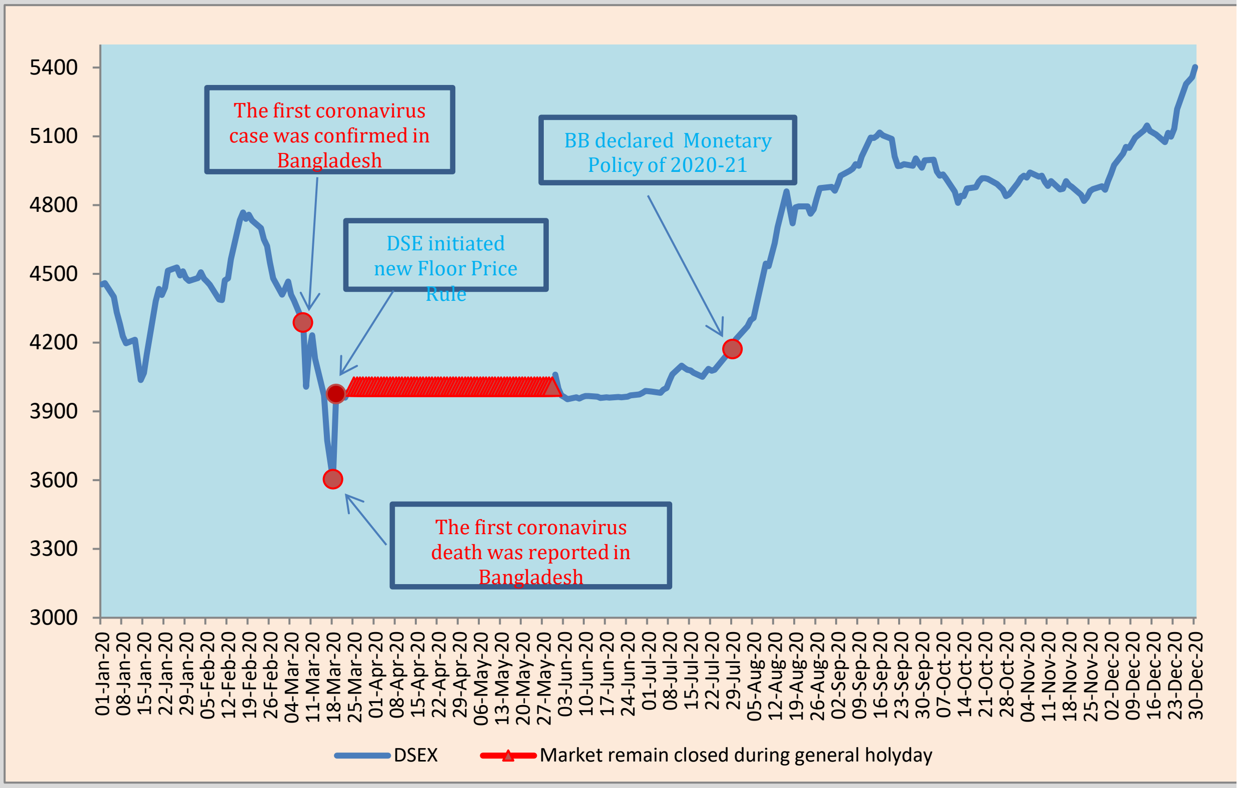
CHART 7.10: COMPARISON OF MARKET CAPITALIZATION TO GDP RATIOS OF PEER GROUP COUNTRIES



Source: DSE Monthly Review, December 2020.

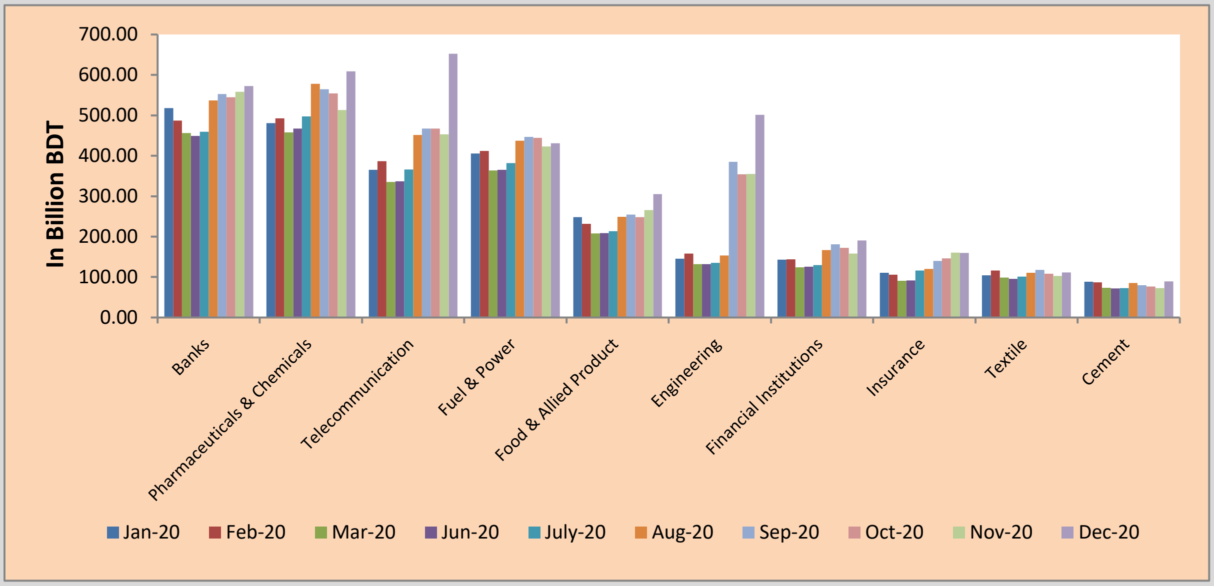
The Chart 7.11 shows the closer view of the impact of COVID-19 on the DSEX, the Broad Index of Dhaka Stock Exchange, which is the main bourse of financial market of Bangladesh. The DSE Index started to fall precipitously just before the first case of COVID-19 was confirmed in Bangladesh. The market remained closed from 25 March'20 to 30 May'20 due to Government declared general holidays to contain the pandemic. However, the market regained its confidence and started to rebound following Government's declaration of sizeable stimulus packages, BB's expansionary monetary policy, robust growth of wage earners' remittance and resumption of major economic activities. The market capitalization of top ten sectors of DSE, which usually comprises more than 90 percent of total DSE market capitalization, also depict continuous uptrend since July'20 (Chart 7.12).

CHART 7.11: COVID-19 IMPACT ON DSEX



Source: DSE Website.

CHART 7.11: MONTH-WISE SECTORAL MARKET CAPITALIZTION OF DSE INDEX IN 2020



Source: DSE Website and DSE Monthly Review.

Chart 7.13 shows the month-wise daily average stock turnover reflecting impact of pandemic on liquidity and activity of the market. The daily average turnover started to decline from March'20 and remained low up to third week of July'20. However, the daily average turnover took a strong revival from the fourth week of July'20 onwards and reached its peak of BDT 101.17 billion in September'20 from the lowest turnover of BDT 14.33 billion in May'20.

CHART 7.12: MONTH-WISE DAILY AVERAGE TURNOVER OF 2020

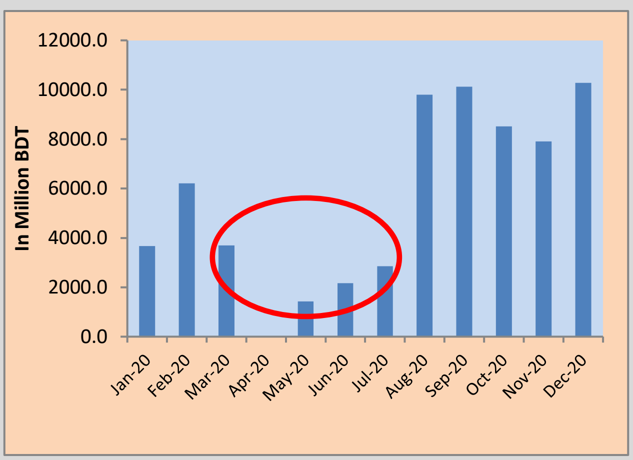
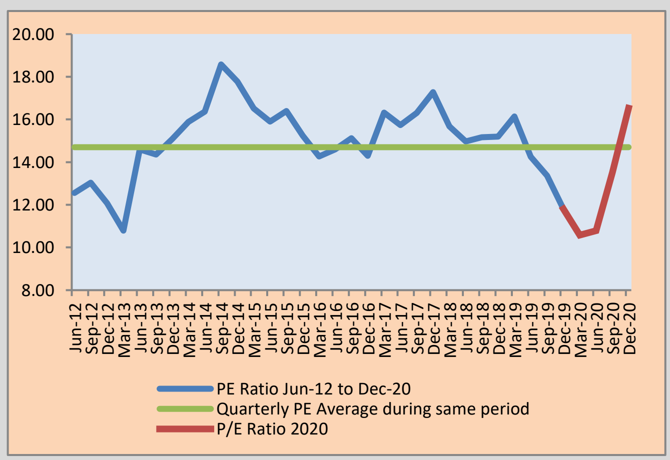


CHART 7.13:TREND OF DSE PRICE-EARNINGS(P/E) RATIO



Source: DSE Monthly Review, December 2020.

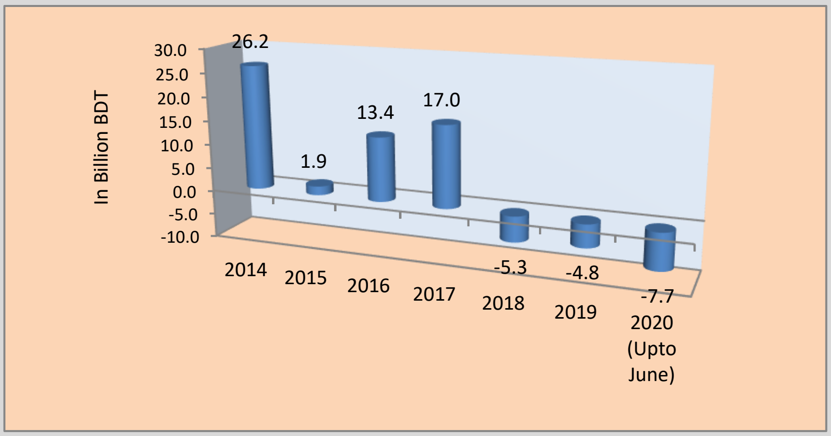
The Chart 7.14 shows the trend of Price Earnings (P/E) ratio of DSE since June'12. The ratio was persistently declining since March'19 and reached to 10.6 in March'20, which was the lowest throughout the presented period. However, it began to rise since June'20 indicating optimism by investors regarding growth prospect of the listed companies.

Chart 7.15 depicts the trend in net foreign portfolio investment in DSE since the year 2014. Indeed, net foreign portfolio investment was negative during 2018-2020. However, the situation worsened during the first half of the year 2020, which can largely be attributed to uncertainty created by the COVID-19 pandemic in addition to the other reasons such as elevated market risk.

7.2.2 Implications for Financial Stability

Capital market in Bangladesh is mainly dominated by banking sector followed by pharmaceuticals and chemical industries, telecommunications, fuel and power. Findings of this study in Chapter 5 show that banking sector's performance in terms of CRAR, NPL and ROA have improved in September'20 quarter and the trend is projected to be continued in December'20 quarter. These data support the argument that improved performance of banking sector would contribute to strengthen not only banking sector's stability, but also stability of the entire financial sector. Findings of Chapter 2 show that COVID-19 has little impact on pharmaceutical industry as output of this industry continuously increased throughout the period of 2020. Impact of COVID-19 on chemical and telecommunication industries were short-lived while outputs of fuel and power sector have strong domestic demand.

CHART 7.14: NET FOREIGN INVESTMENT IN DSE



Source: DSE Monthly Review.

CHART 7.15: TREND IN CAPITAL MARKET EXPOSURES OF BANKS (SOLO BASIS)

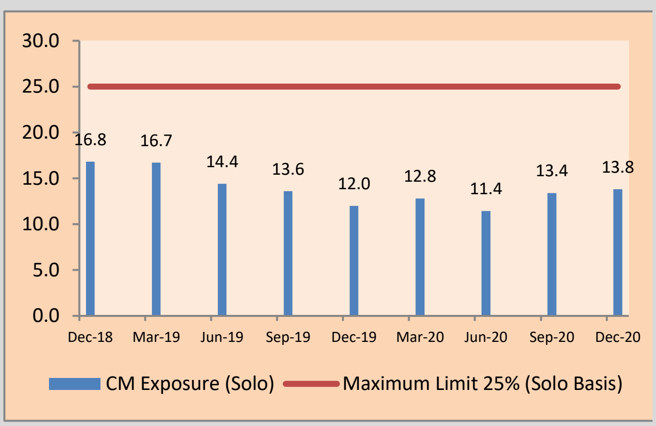
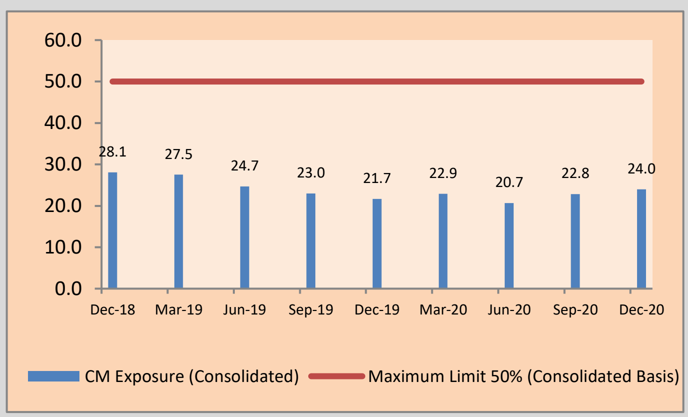


CHART 7.16: TREND IN CAPITAL MARKET EXPOSURES OF BANKS (CONSOLIDATED BASIS)



Source: Department of Off-site Supervision, Bangladesh Bank.

Charts 7.16 and 7.17 show the trend in capital market exposures of banks on both solo and consolidated basis. It appears from the data of these two charts that banks' aggregate exposure in the capital market was much below than the allowable limit of Bangladesh Bank[27] during the period of December'18 to December'20. Furthermore, banking sector's exposure in stock market further declined in June'20 on both solo and consolidated basis. Presumably, any adverse shock on stock price does not tend to pose any stability threat to the financial sector in the near term. Considering all these facts, it is unlikely that stock market may cause any major financial stability threat in the near future.

7.3 IMPACT ON PAYMENT SYSTEM INFRASTRUCTURES

After the onset of COVID-19, Bangladesh Government has adopted various measures such as declaring general holidays, advising to work from home, limiting the movement to markets, shops, hotels, restaurants and encouraging all non-essential businesses to operate their activities through online platform to contain the infection from time to time. Bangladesh Bank has also advised the banks and FIs to operate their business activities on a limited scale and encouraged online banking during the pandemic while maintaining proper cyber security and health directives. Bangladesh Bank continued the service of BACH and BEFTN for smoother transaction even during the general holidays. However, the transaction limit and cost had been rationalized during the COVID-19 exigencies. Banks and MFS providers were advised to open MFS account of the garment's workers and also encouraged other customers to open and transact through mobile banking accounts. The government has distributed its incentive package as salary and allowances to the garment's workers through MFS accounts. The social security fund of government was also distributed among the people during the pandemic through mobile banking accounts. Bangladesh Bank increased its monitoring over online banking and also allowed some non-bank entities to operate ATMs across the country with specific focus on spreading banking network in the rural areas at an affordable cost. The performance of different types of online banking during the onset of COVID-19 are discussed below:

7.3.1 MOBILE FINANCIAL SERVICES (MFS)

During the COVID-19, the transactions through MFS providers increased significantly due to limited branch banking facilities and various containment measures. bKash, Rocket and Nagad routed the major portion of transactions by using mobile phones throughout the country instantly. The transactions of MFS during COVID-19 are shown in Table7.1.

TABLE 7.1:GROWTH OF TRANSACTIONS THROUGH MFS PROVIDERS SINCE ONSET OF COVID-19

Number of Transactions (In Millions)

Period	April-June, 2019	April-June'20	Increase/ Decrease	July-Sept, 2019	July-Sept, 2020	Increase/ Decrease	Oct-Dec, 2019	Oct-Dec, 2020	Increase/ Decrease
Cash In	127.81	93.43	-26.91%	120.47	126.02	4.61%	130.93	149.31	14.04%
Cash Out	122.61	99.88	-18.54%	117.27	128.85	9.87%	126.68	132.36	4.48%
P2P	62.00	102.71	65.66%	69.50	124.45	79.07%	83.03	144.71	74.30%
Merchant Payment	11.64	12.53	7.68%	10.98	22.61	106.02%	14.41	30.56	112.00%
G2P	11.10	14.12	27.15%	10.67	13.07	22.48%	10.74	0.41	-96.19%
Salary Disbursement	5.34	9.60	79.86%	5.10	11.91	133.64%	6.04	9.40	55.59%
Talk time Purchase	294.31	406.82	38.23%	300.64	400.25	33.13%	303.05	378.61	24.93%
Utility Bill Payment	6.66	12.61	89.34%	8.69	21.59	148.39%	9.11	20.04	119.98%

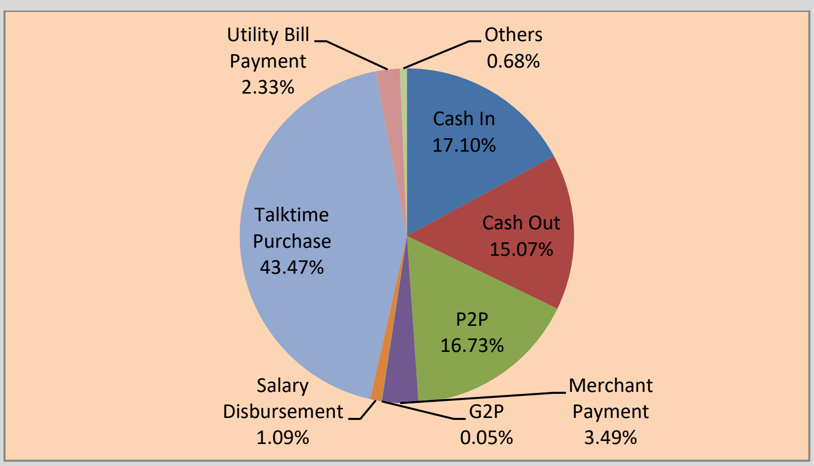
[27]Maximum allowable limit to investment in capital market: 25% and 50% of total prescribed capital components on solo and consolidated basis respectively (DOS Circular No.-02/2013 and DOS Circular Letter No.-07/2014).

Period	April-June, 2019	April-June'20	Increase/ Decrease	July-Sept, 2019	July-Sept, 2020	Increase/ Decrease	Oct-Dec, 2019	Oct-Dec, 2020	Increase/ Decrease
Others	0.78	3.73	378.78%	0.67	4.53	573.88%	1.09	5.58	411.00%
All MFS Transaction	642.26	755.43	**17.62%**	643.99	853.28	**32.50%**	685.09	870.99	**27.14%**

Source: Statistics Department, BB.

Table 7.1 shows that the total number of MFS transactions has increased by 17.62 percent, 32.50 percent and 27.14 percent respectively in the second, third and fourth quarter of 2020 during pandemic, compared to the same period of 2019. Except cash in and cash out related transactions in the second quarter and government-to-person in the fourth quarter of 2020, transactions of all other segments have notably increased in the second, third and fourth quarters of 2020. However, growth of cash in and cash out transactions in the second quarter of 2020 has decreased significantly because of general holidays declared by the government along-with partial shutdown of economic activities such as shortening of business hours of markets/shops, restricting movement, and limiting the agent's activities and banking facilities throughout the country until the end of May'20. As different companies/offices disbursed the salaries and allowances to their employees by using digital platform during pandemic, disbursement of salaries segment showed higher growth of 80 percent, 134 percent and 56 percent in the second, third and fourth quarters of 2020, compared to the same quarters of previous year. Besides, the government has distributed stimulus package of BDT 50 billion as salary to the readymade garment workers through mobile financial services during COVID-19. As the government has distributed BDT 12.5 billion social security fund to the 5 million low-income families through MFS accounts, the transactions of government-to-person have increased significantly in the second and third quarters of 2020. The utility bill payment segment also showed significant growth as mass people used their mobile banking accounts to pay utility bills during the period of general holidays and other containment measures.

CHART 7.178: CATEGORY-WISESHARE OF TRANSACTIONS OF MFS AS ON 31 DECMBER, 2020



Source: Statistics Department, BB.

It appears from the Chart 7.18 that cash in, cash out and person-to-person (P2P) transactions together occupied nearly 49 percent share of total MFS transactions as on 31 December 2020. On the other hand, talk time purchase individually possessed the highest share (43.47 percent) in terms of number of transactions but the amount involved in these transactions was very low compared to other segments.

7.3.2 AGENT BANKING

The activities of Agent Banking have been increasing over time to support financial services to the unbanked, underserved and poor segments of the population, especially those from the geographically dispersed locations. Agent Banking is becoming popular as a part of promoting financial inclusion in Bangladesh. The need for establishment of branch banking is squeezed gradually and marginal and low-income customers are encouraged to get different types of banking services through this cost-effective delivery channel. Up to December 2020, Bangladesh Bank has allowed 28 banks for operating Agent Banking activities in Bangladesh, of which 26 banks are providing agent banking services. Around 9.6 million accounts have been opened through Agent Banking, out of which 4.07 million are female accounts.

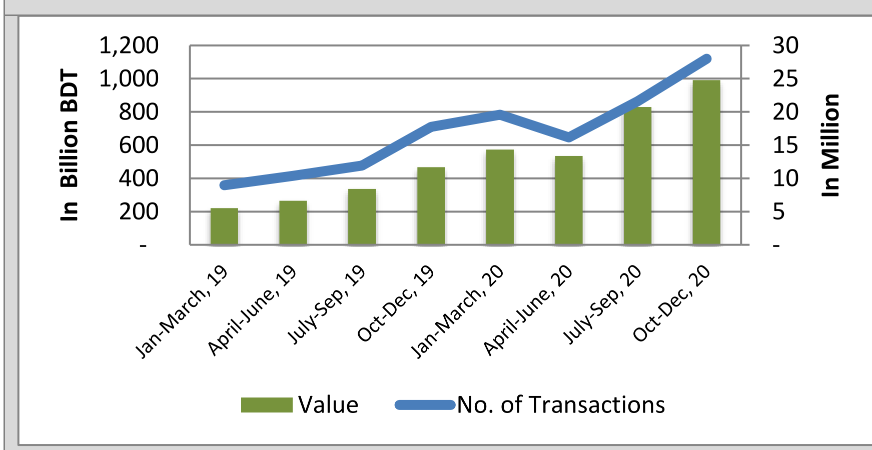
TABLE 7.2:GROWTH OF AGENT BANKING OPERATIONS AS ON 31ST DECEMBER'20

Period	No. of Transactions (In Million)	Amount (In Billion BDT)	Loan Disbursement (In Billion BDT)	Inward Foreign Remittance (In Billion BDT)
April-June, 2019	10.40	265.37	0.57	16.45
April-June'20	16.14	535.64	0.46	53.36
Increase/Decrease	**55.15%**	**101.84%**	**-19.97%**	**224.41%**
July-September, 2019	11.94	336.16	0.76	18.89
July-September'20	21.59	829.29	3.63	91.84
Increase/Decrease	**80.79%**	**146.69%**	**376.92%**	**386.29%**
October-December, 2019	17.73	466.91	1.47	27.34
October-December'20	27.51	990.56	9.18	76.51
Increase/Decrease	**55.16%**	**112.15%**	**525.11%**	**179.82%**

Source: Statistics Department, BB.

Table 7.2 shows that the volume of loan disbursement in the second quarter of 2020 declined due to general holidays and limited economic activities for a certain period due to the pandemic, but the number of agent banking transaction, amount and volume of inward foreign remittances have increased in the second quarter of 2020, compared to the same quarter of 2019. However, higher growth continued in the third and fourth quarters of 2020 as the economic activities kept reviving and the wage earners have remitted significant amount from abroad to their relatives for family maintenance during the pandemic.

CHART 7.19: TRANSACTIONS THROUGHAGENT BANKING DURING THE COVID-19



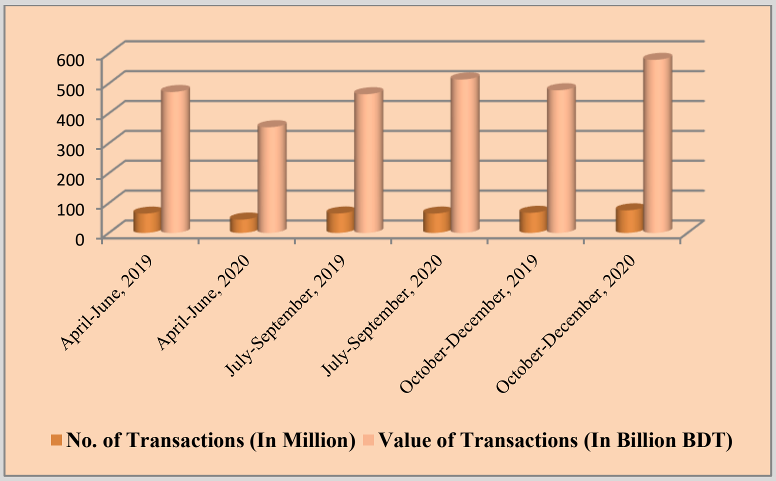
Source: Statistics Department, BB.

Chart 7.19 shows that both the number of agent banking transactions as well as the total value of transactions have been increasing gradually from the first quarter of 2019 to the same quarter of 2020. In the second quarter of 2020, both the number and value of transactions declined due to various containment measures. However, both the number and the value of transactions have moved sharply in the third and fourth quarter of 2020 due to re-opening of economic activities.

7.3.3 National Payment Switch Bangladesh (NPSB)

During the onset of COVID-19, National Payment Switch Bangladesh (NPSB) geared up the card-based payment networks substantially and promoted e-commerce transactions throughout the country through different delivery channels like Automated Teller Machine (ATM), Point of Sales (POS) and Internet Banking Fund Transfer (IBFT). The people engaged in more cash-less transactions due to a psychological factor that cash could spread corona virus. During April-December'20, around 185 million transactions amounting BDT 1446 billion had been settled through NPSB.

CHART 7.20: THE TRANSACTIONS OF ATM, POS, CRM AND E-COMMERCE



Source: Statistics Department, BB.

Chart 7.20 shows that both the number and total value of transactions decreased during April-June'20 compared to the same period of 2019. However, the growth in number of transactions in the third quarter of 2020 was almost stable compared to corresponding period of 2019, while both the number and value of transactions have increased notably during October-December'20.

7.3.3.1 Internet Banking

During COVID-19, the use of internet banking services by the member banks has increased for payment of utility bills, credit card, loan installments, insurance premium, tuition fees etc. Internet Banking Fund Transfer (IBFT) transactions are also processed through NPSB. One of the advantages of IBFT is that the member banks are eligible to process transactions of internet banking among them easily and quickly. Currently 24 banks are offering internet banking and interoperable fund transfer services.

TABLE 7.3:INTERNET BANKING TRANSACTIONS AND VALUE

Period	No. of Transactions (In Million)	Value of Transactions (In Billion BDT)
April-June, 2019	3.31	169.09
April-June'20	6.08	176.17
Increase	**83.95%**	**4.19%**
July-September, 2019	3.93	174.33
July-September'20	6.37	200.62
Increase	**62.14%**	**15.08%**
October-December, 2019	4.63	169.55
October-December'20	6.72	223.74
Increase	**45.27%**	**31.96%**

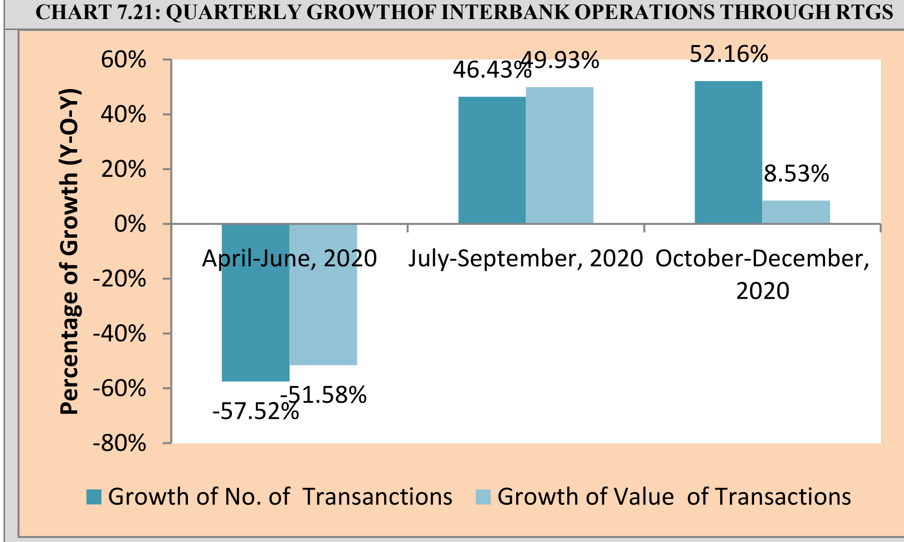
Source: Statistics Department, BB.

Table7.3 shows that both the number and value of transactions through internet banking have increased in the second, third and fourth quarters of 2020 compared to the same quarters of the preceding year. During the second quarter of 2020, the number of internet banking transactions has increased substantially to around 84 percent due to limited movement. However, after resumption of full-fledged banking services, the value of transactions increased significantly in the third and fourth quarters of 2020.

7.3.4 Real Time Gross Settlement System (RTGS)

RTGS is an electronic payment system operated by BB to transfer large volume of funds from one bank to another bank on real-time gross settlement basis. As of December 2020, out of 10,734 bank branches of 59 banks, around 10,500 online branches are connected to RTGS.

CHART 7.21: QUARTERLY GROWTHOF INTERBANK OPERATIONS THROUGH RTGS



Source: Statistics Department, BB.

Chart 7.21 shows that both the number and value of transactions through RTGS have experienced negative growth of nearly 58 percent and 52 percent respectively in April-June 2020, compared to the same quarter of 2019. Particularly, the reason behind the sharp decrease is that the RTGS system remained closed in April'20 due to general holidays. However, after resumption of RTGS operation, both the transactions and value have increased sharply in the third and fourth quarters of 2020.

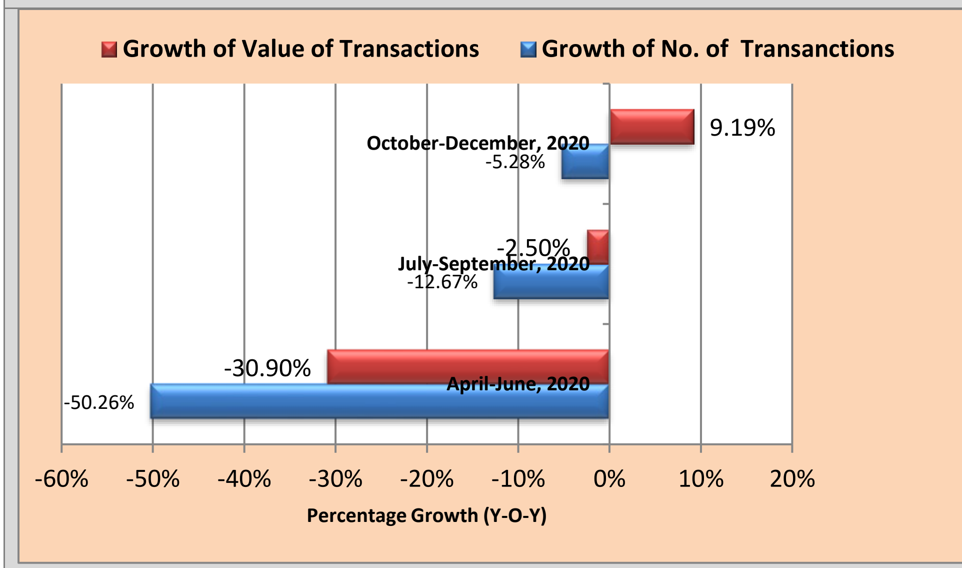
7.3.5 BANGLADESH AUTOMATED CLEARING HOUSE (BACH)

BB continued its automated cheque clearing services and small value fund transfer for retail transactions through BACPS and BEFTN under BACH throughout the COVID-19 pandemic. The performances of BACPS and BEFTN are given below:

7.3.5.1 BANGLADESH AUTOMATED CHEQUE PROCESSING SYSTEM

Bangladesh Automated Cheque Processing System (BACPS) is used to reduce the cheque-clearing time. Through faster reconciliation and fraud prevention, it facilitates banks to provide better and faster customer services with increasing operational efficiency.

CHART 7.22: QUARTERLY GROWTH OF TRANSACTIONS THROUGH BACPS



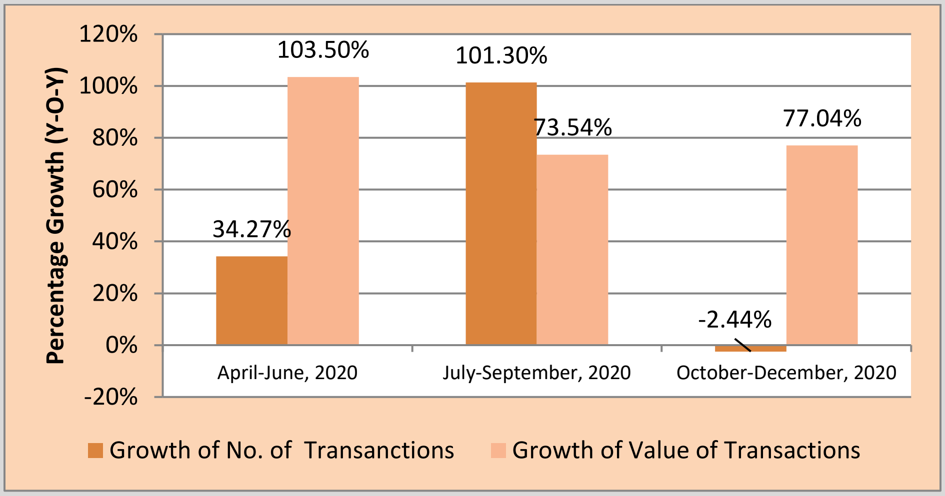
Source: Statistics Department, BB.

Chart 7.22 shows that due to the impact of COVID-19, both the growth of number and value of transactions in the second quarter of 2020 have declined sharply to 50 percent and 31 percent respectively compared to the same quarter of 2019. However, both the growth in number and value of transactions improved gradually in July-September and October-December quarters of 2020 due to resumption of normal banking activities.

7.3.5.2 BANGLADESH ELECTRONIC FUND TRANSFER NETWORK (BEFTN)

After the onset of COVID-19, Bangladesh Electronic Fund Transfer Network (BEFTN) processed credit transactions such as foreign and domestic remittances, social security payments, payrolls, company dividends, bill payments, corporate payments, government tax payments, social security payments, person to person payments etc. and also settled debit transactions such as utility bill payments, insurance premium payments, club/association payments, EMI payments etc. Most of the government payments are processed through BEFTN under batch system.

CHART 7.23: QUARTERLY GROWTH OF BANGLADESH ELECTRONIC FUND TRANSFER OPERATIONS



Source: Statistics Department, BB.

Chart 7.23 depicts that except the fourth quarter of 2020, the growth of number of transactions through BEFTN has increased at a higher rate in the second and third quarters of 2020, compared to the same quarters of the preceding year. On the other hand, the value of transactions has increased significantly during the last three quarters of 2020 compared to the same periods of 2019.

7.3.6 Implication for Financial Stability

After the onset of COVID-19, people mainly relied on cashless and digital transactions for sending and receiving money, online sale, purchase, and other payment obligations due to movement restrictions and limited banking facilities. At the same time, Bangladesh Bank has enhanced its vigilance over cyber security threats and also instructed the banks and FIs to take adequate precautionary measures. Despite such efforts, some sporadic incidences of fraud and forgery occurred through ATM, POS machine and other digital mode of financial transactions. However, they were very negligible in amount to pose any threat to the stability of the financial system.

CHAPTER 8 : IMPACT ON INSURANCE SECTOR AND ITS IMPLICATIONS FOR FINANCIAL STABILITY

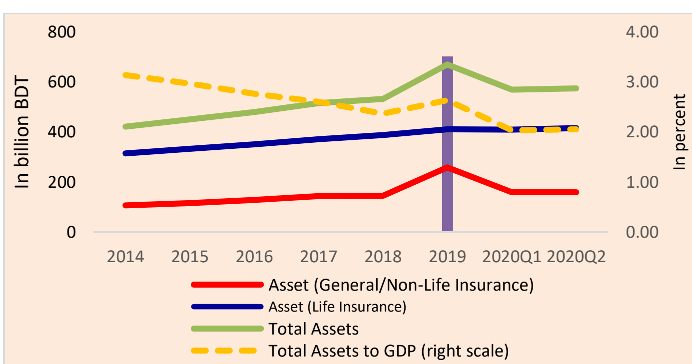
8.1 IMPACT ON INSURANCE SECTOR

The contribution and risk-taking activities towards the real economy by the insurance industry (79 companies -33 life and 46 non-life) have also been hampered by the COVID-19. The pandemic considerably affected insurance industry of the country during the first two quarters of 2020 mainly due to depressed international trade and local business activities as well as ban on local and international transport. As a result, the growth in gross premium collected by both life and non-life insurance companies declined. The total asset of insurance sector to GDP ratio has decreased substantially in March and June quarter-2020 from December quarter-2019. However, the sector is expected to recover from the third quarter of 2020 due to some decisive measures taken so far as mentioned in Chapter 11. The details of pandemic's impact and their implications for financial stability based on data provided by the Insurance Development and Regulatory Authority (IDRA) are discussed below:

8.2 IMPACT ON INSURANCE SECTOR'S ASSETS AND PENETRATION

It appears from the Chart 8.1 that total asset of insurance sector experienced steady growth till December 2019. This growth remained stagnant during the first two quarters of 2020. Total asset of this sector, which was BDT 668.50 billion at end-December'19, declined to BDT 568.10 billion at end-March'20. But it recovered slightly at the end of June'20 and reached to BDT 573.67 billion. Considering both life and general/non-life insurance companies, it is found that general/non-life insurance was largely affected, which caused slowdown of overall asset of insurance sector. In particular, compared to end-December'19, asset of non-life insurance companies declined by BDT 98.73 billion whereas asset of life insurance companies declined by BDT 1.67 billion at end-March'20. Since various containment measures due to COVID-19 in Bangladesh were put in place from the last week of March'20, considerable decline of assets of non-life insurance companies in the first quarter of 2020 did not seem to have any apparent link with those domestic containment measures. Mentionable that economic activities of non-life insurance companies in Bangladesh are heavily influenced by international businesses. It is discussed in Chapters 2 and 4 that both export and import of Bangladesh were deeply depressed during the first quarter of 2020. This implies that as pandemic severely hit major export destination countries of advanced economies and major import countries such as India and China, contagion effect of this incidence transmits into domestic non-life insurance companies through international trade channel. The total asset to GDP ratio also decreased substantially in March and June quarter'20 from 2.63 percent in December 2019 to 2.03 percent and 2.05 percent respectively. The declining trend is similar to that of non-life insurance companies (Chart 8.1).

CHART 8.1: IMPACT ON INSURANCE SECTOR's ASSETS



Note: 2020Q1 and 2020Q2 represent end-March and end-June quarter of 2020 respectively. Figures of 2020Q1 and 2020Q2 are annualized. Source: IDRA, FSD staff calculation.

8.3 IMPACT ON INSURANCE PREMIUM

The premium charged for the insurance policy of the customers is the main source of income for the insurance companies. It transpires from Chart 8.2 that insurance companies suffered a considerable decline in premium collection during the pandemic. However, magnitude of this decrease differs depending on the categories of insurance companies. The life insurance companies suffered more as their premium collection in June'20 decreased by about 42 percent compared to December'19 while non-life insurance companies suffered relatively less as their premium collection declined by about 30 percent during the corresponding period. This might be due to the fact that a large part of the life insurance policyholders either stopped their policy or failed to renew their policies due to income shock, general holidays and social distancing measures during the onset of COVID-19. On the other hand, slow down of export, import and other containment measures such as ban on local and international transport and its consequential effect on travel, tourism and infrastructure related businesses might have adversely impacted premium collection by non-life insurance companies. As a result, insurance penetration ratio also declined from 0.56 percent in end-December'19 to 0.36 percent in end June'20 (Chart 8.3).

CHART 8.2:IMPACT ON PREMIUM COLLECTION

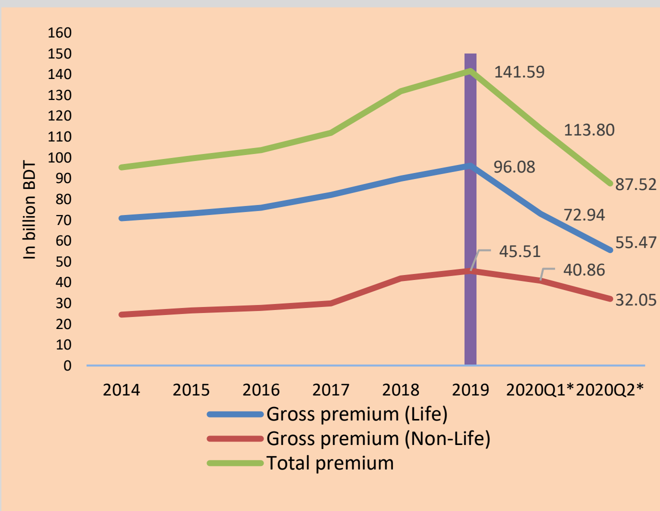
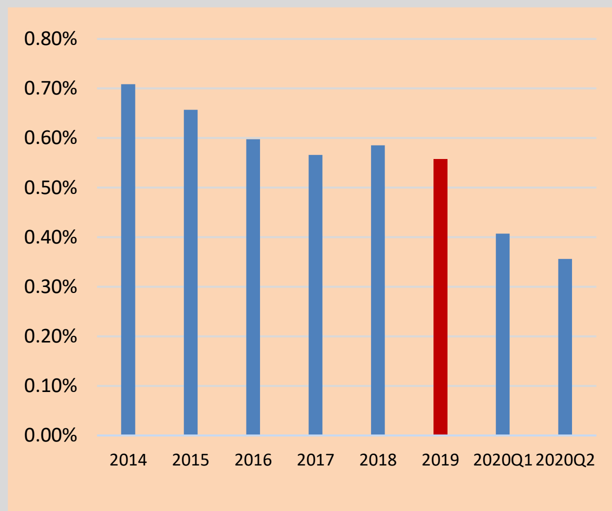


CHART 8.3: IMPACT ON INSURANCE PENETRATION



Source: IDRA, FSD staff calculation; * figures are annualized.

8.4 IMPACT ON INSURANCE SECTOR' TOTAL INCOME

Insurance companies in Bangladesh generally maximize their earnings by employing their fund in medium and long-term investment. It appears from the Chart 8.4 that insurance companies mainly invest their funds in government bonds, shares, securities, real estate and fixed deposit, which are medium and long-term in nature. This behavior is mainly driven by their obligation to meet usual claim settlement through ensuring regular inflow of income stream. However, their investment decisions seem to have been impacted by the pandemic as they moved away their investment from fixed deposit market and shifted towards investment in government securities. It might be due to the fact that as the Government and Bangladesh Bank have adopted various policy measures for ensuring smooth supply of liquidity to revitalize the economy during the COVID-19, the resulted lower interest rate in banking sector accompanied by searching for risk-free fixed return might have induced the insurance companies to shift their investment from money market to government's bond market. As a result, except for investment in the government bond, the other segments of assets i.e., fixed deposits, investment in capital market, investment in real estate and sundry debtors remained steady or declined during the first and the second quarters of 2020.

Chart 8.5 demonstrates that aggregate income of insurance companies has been largely affected by lower collection of premiums during the pandemic. Consequently, the total income of insurance companies declined during both in March'20 and June'20 quarters. Other major factors which affected aggregate income are declining trend in interest income and earnings from dividend during the COVID-19 situation. There are some exceptions that some of the insurance companies are extending their businesses by using digital technology and recover their businesses with profitability.

CHART 8.4: EARNING ASSETS OF INSURANCE COMPANIES

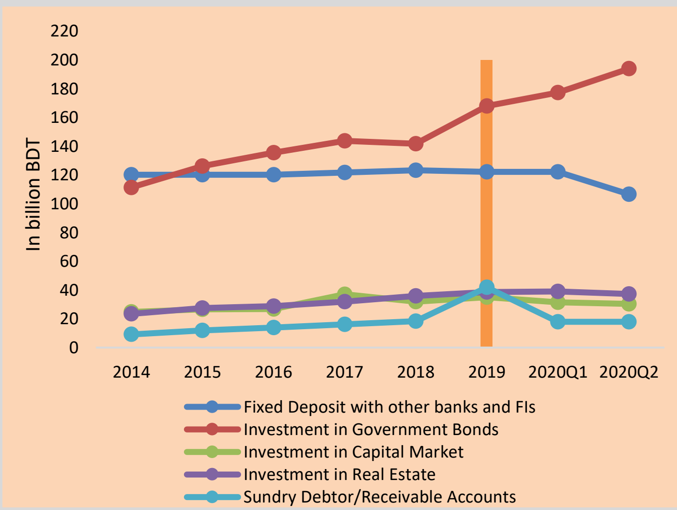
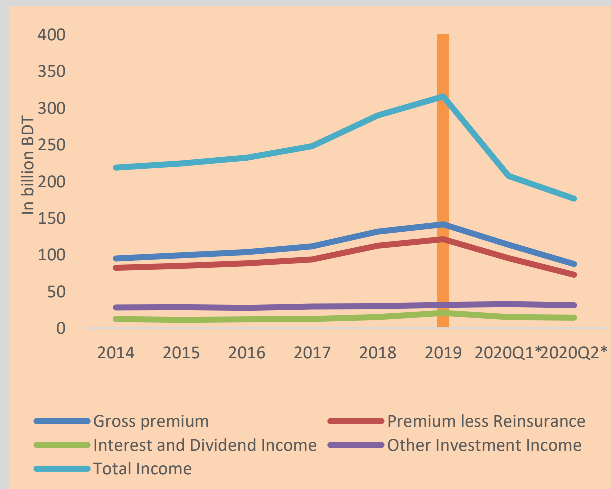


CHART 8.5: MAJOR SOURCES OF EARNINGS BY INSURANCE COMPANIES



Source: IDRA, FSD staff calculation

8.5 IMPLICATIONS FOR FINANCIAL STABILITY

It is pertinent to mention that the fixed deposit maintained by insurance companies with the banking sector was BDT 106.61 billion, which covered about 19 percent of the total assets of the insurance sector but occupied less than 1percentof total banking sector's deposits as on 30 June 2020. Significant deposit withdrawal pressure during the pandemic by the insurance companies would unlikely to pose any major threat for banking sector stability. In case of price volatility in the capital market, the insurance industry itself may face some mismatch problems in their assets-liability arrangements but this effect is unlikely to create any concern for financial stability through their influence on overall market capitalization, as their share is less than 5 percent in total market capitalization of the DSE. It is already mentioned that during the pandemic, insurance companies changed their investment risk appetite and shifted their investment in more secured risk-free government bonds. As they invested lion part of their portfolio in Government securities, it applies that major part of their investment portfolio has no or little stability threat. Their investment in real estate seems to have some moderate level risk for the industry as the real estate sector begun to recover from the third quarter of 2020. Given the size of insurance sector's exposure to real estate sector and its recent positive outlook, likelihood of stability threat from this segment seems to be marginal. However, regulatory reforms; better corporate governance and widening of insurance market and products for supporting the growth of the industry may eventually promote financial stability.

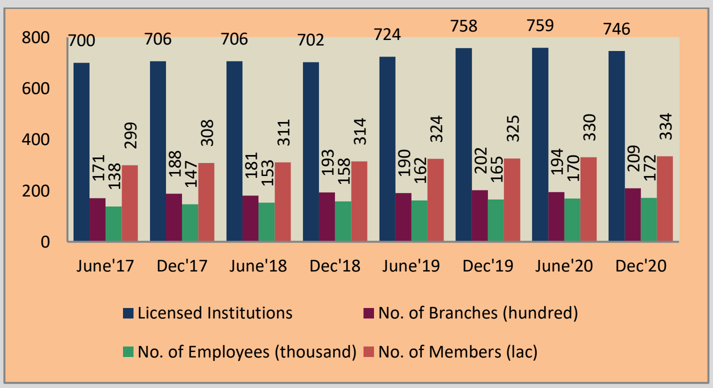
CHAPTER 9 : IMPACT ON MFIs AND ITSIMPLICATIONS FOR FINANCIAL STABILITY

Like most other sectors, microfinance sector has also been exposed to sudden shock of COVID-19 pandemic. During countrywide general holidays, microfinance activities were temporarily suspended, which adversely affected the income-expenditure, loan disbursement, loan recovery and savings collection of Micro Finance Institutions (MFIs). In order to understand magnitude of impact, the trends in major indicators of MFIs are analyzed during the pre-COVID-19 period (from June'17 to December'19) and then compared those to the COVID-19 period (December'20) based on the half yearly data. The details are as follows.

9.1 IMPACT ON INSTITUTIONAL STRUCTURE

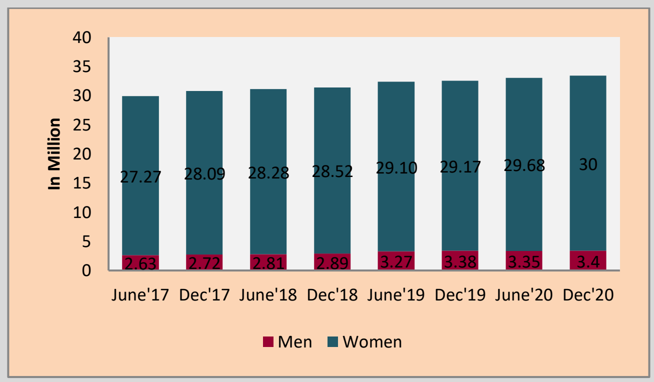
Chart 9.1 demonstrates that the number of licensed institutions, employees and members remained mostly stable from June'17 to December'20 without any notable downward change due to the COVID-19 pandemic. Compared to end-December'19, number of branches of MFIs has decreased by 3.96 percent in June'20. However, the branches increased by 3.46 percent from December'19 to December'20. Chart 9.2 shows that MFIs sector is mostly dominated by female members. COVID-19 has little impact on this composition. As of December'19, female members were 29.17 million (89.62 percent), which marginally increased to 30.00 million (89.82 percent of total members) at the end of December'20.

CHART 9.1: NUMBER OF LICENSED INSTITUTIONS, BRANCHES, EMPLOYEES AND MEMBERS



Source: MRA, FSD Staff Calculation

CHART 9.2: IMPACT ON STRUCTURE OF MEMBERSHIP

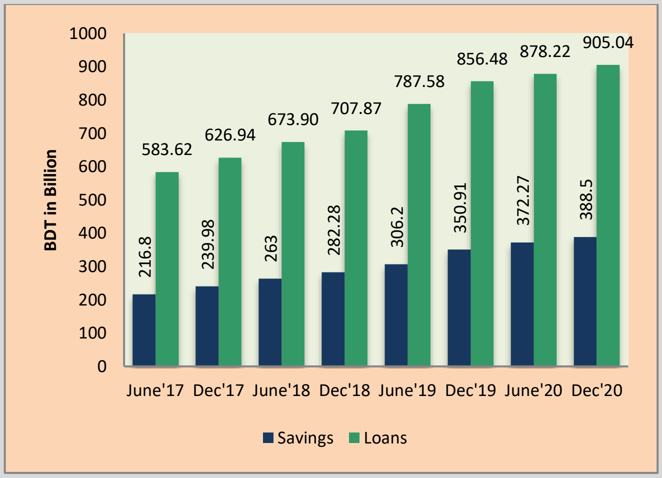


Source: MRA, FSD Staff Calculation

9.2 IMPACT ON LOANS AND SAVINGS

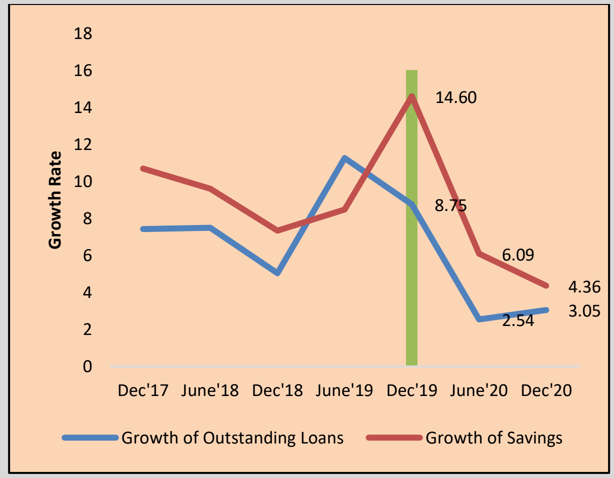
Chart 9.3 demonstrates that both outstanding loans and savings have increased during the first and second half of 2020. Compared to end-December'19, outstanding loans have increased by BDT 21.74 billion and BDT 48.92 billion at end-June'20 and end-December'20 respectively while outstanding savings have increased by BDT 21.36 and BDT 37.59 billion respectively during the period. These increasing trends apparently show that pandemic has no impact on loans and savings of MFIs. However, growth figures of these indicators exhibit different scenario. From Chart 9.4, it appears that outstanding loan growth observed regular fluctuations during the whole period, but it sharply declined during the first half of 2020. Outstanding loan growth in December'19 was 14.60 percent, which declined to 6.09 percent in June'20. Growth of savings balance held in licensed institutions also observed the similar scenario. In December'19, growth of savings was 8.75 percent, which recorded a decline to 2.54 percent in June'20 and thereafter increased to 3.05 percent in December'20. These sharp downward trends during the first half of 2020 can be attributed to containment measures of pandemic, i.e., the closure of MFIs' activities during countrywide general holidays.

CHART 9.3: TREND OF LOANS AND SAVINGS



Source: MRA, FSD Staff Calculation

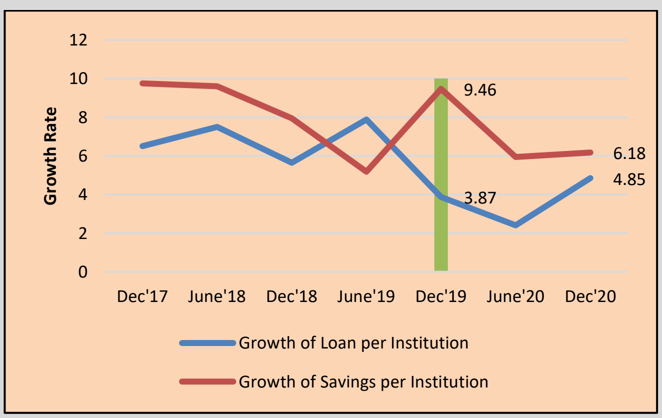
CHART 9.4: GROWTH TREND OF LOANS AND SAVINGS



Source: MRA, FSD Staff Calculation

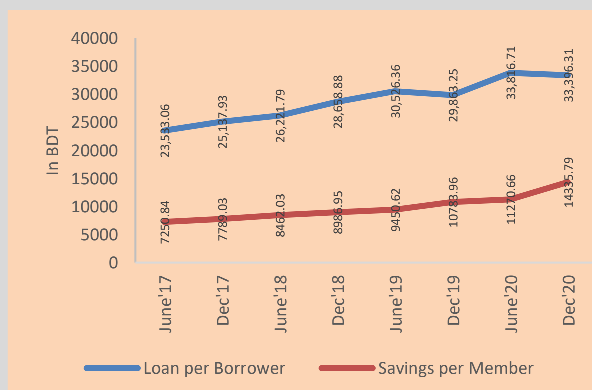
Considering the period of December'17 to December'19, the lowest growth of loans per institution was 3.87 percent. This further declined considerably to 2.40 percent in June'20 and thereafter increased to 4.85 percent (Chart 9.5). Similar trend was witnessed for growth of savings per institution. In particular, growth of average savings per institution was 9.46 percent in December'19, which sharply declined to 5.95 percent in June'20 and thereafter increased to 6.18 percent in December'20.

CHART 9.5: IMPACT ON GROWTH OF AVERAGE LOANS AND SAVINGS PER INSTITUTION



Source: MRA, FSD Staff Calculation

CHART 9.6: IMPACT ON AVERAGE LOANS PER BORROWER AND SAVINGS PER MEMBER



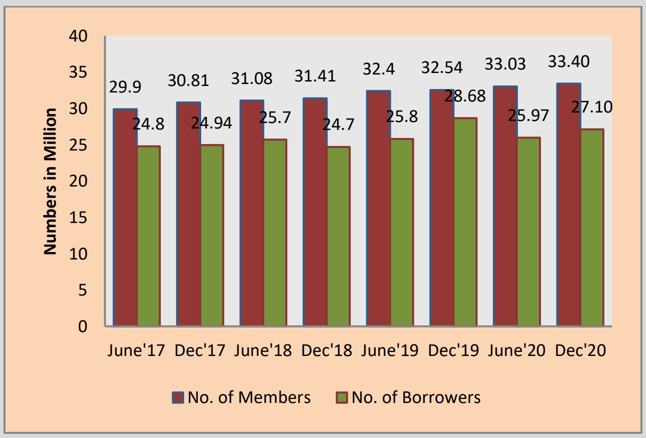
Source: MRA, FSD Staff Calculation

Chart 9.6 portrays an overall upward trend in average loans and savings size in terms of per borrower and member from June'17 to December'20. In December'20, the average loan per borrower was BDT 33,396.31, which is 1.24 percent lower and 11.83 percent higher than those of June'20 and December'19 respectively. Pandemic had considerable impact on average savings per member. During the first-half of 2020, growth of average savings per member was 4.51 percent, which is much lower than the growth of 14.11 percent during the pre-pandemic period, i.e., the second half of 2019. However, the growth picked upto 27.20 percent in the second half of 2020.

9.3 IMPACT ON OUTREACH

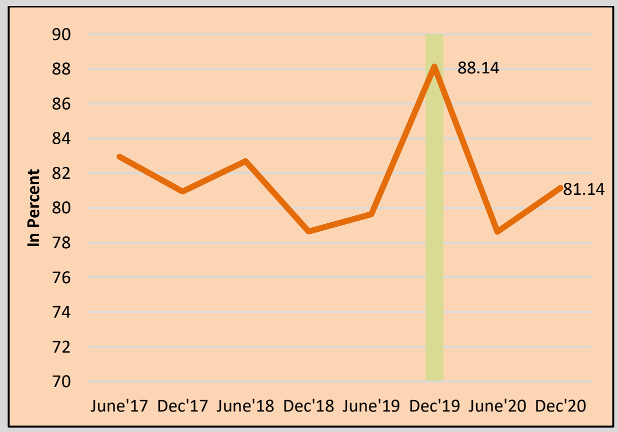
Chart 9.7 demonstrates that the number of members of MFIs have been steadily increasing over time. However, the number of borrowers declined by 5.50 percent in June'20 compared to December'19. Also, the number of borrowers increased by 4.35 percent during the period from June'20 to December'20. In particular, the number of members has increased by 0.49 million, but the number of borrowers declined considerably by 2.71 million from December'19 to June'20; however, compared to end-June'20, number of members increased by 1.12 percent while the number of borrowers increased by 4.35 percent. Because of these two forces, i.e., increase in small number of members accompanied by increase in higher number of borrowers, the borrowers-to-members ratio increased markedly in the second half of 2020 (Chart 9.8). The decline in borrowers-to-members ratio in the first half of 2020 can be partly attributed to temporary closure of business activities of MFIs as an effort of containing the spread of COVID-19.

CHART 9.7: TREND OF SECTOR OUTREACH



Source: MRA, FSD Staff Calculation.

CHART 9.8: IMPACT ON BORROWERS-TO-MEMBERS RATIO

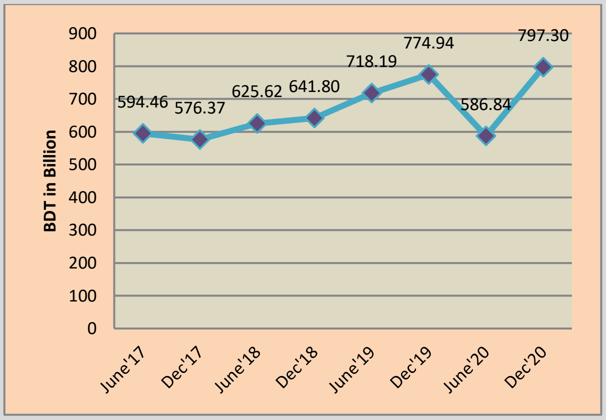


Source: MRA, FSD Staff Calculation.

9.4 IMPACT ON LOAN DISBURSEMENT AND LOAN RECOVERY

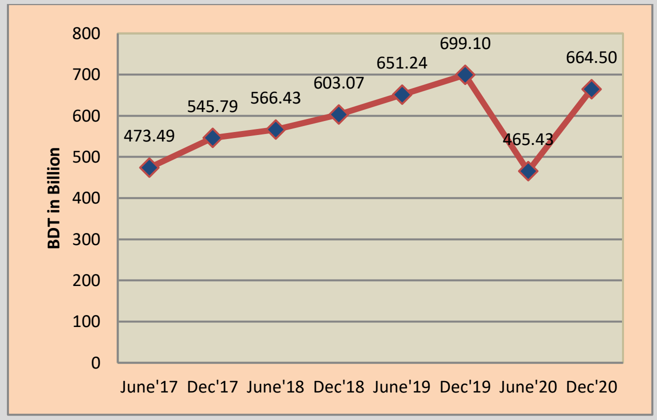
The COVID-19 pandemic results in a sharp decrease in loan disbursement of MFIs sector due to closure of loan disbursement activities during the early stage of the pandemic. However, during the second-half of 2020, loan disbursement recorded notable increase (Chart 9.9). The disbursed amount of loans decreased by BDT 188.10 billion from December'19 to June'20 due to closure of business operation during the general holidays to contain the pandemic. However, after resumption of economic activities, it increased by BDT 210.46 billion.

CHART 9.9: IMPACT ON LOAN DISBURSEMENT



Source: MRA, FSD Staff Calculation

CHART 9.10: IMPACT ON LOAN RECOVERY



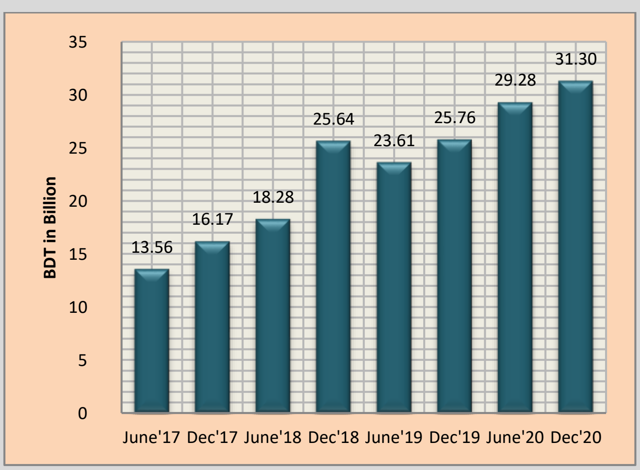
Source: MRA, FSD Staff Calculation

MFIs also faced similar experience in loan recovery. Chart 9.10 demonstrates that loan recovery followed an increasing trend from June’17 to December’19 but it declined sharply in June’20. Thereafter, its recovery followed an increasing trend again. The recovery amount of the MFIs decreased by BDT 233.67 billion from December’19 to June’20 period due to postponement of loan recovery activities during the pandemic. However, recovery figure increased by BDT 199.07 billion from June’20 to December’20.

9.5 IMPACT ON ASSET QUALITY

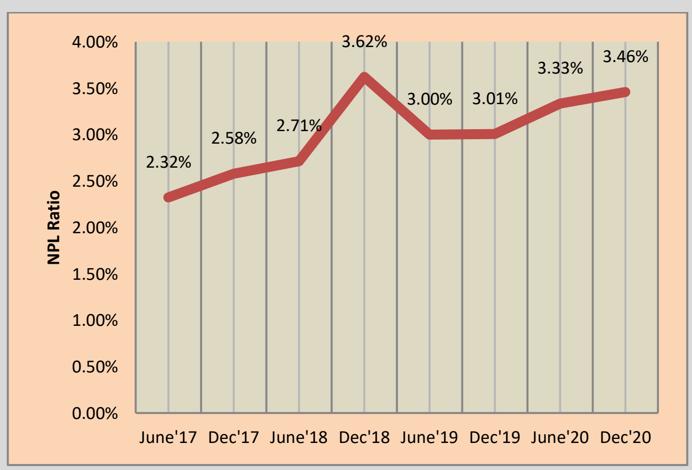
COVID-19 pandemic results an increase in NPL ratio of the MFI sector. Compared to December’19, the amount of NPL increased by BDT 3.52 billion in June’20. Besides, during the second half of 2020, the increase in NPL amount was BDT 3.01 billion (Chart 9.11). Chart 9.12 depicts that NPL ratio had an increasing trend from June’17 to December’18 period and it declined sharply in June’19 and remained almost stable till December’19. The ratio again increased in June’20 by 0.32 percentage point compared to December’19 and by 0.13 percentage point in December’20 compared to June’20. As mentioned earlier, loan recovery activities were heavily interrupted during general holidays, declared in the wake of COVID-19 pandemic.

CHART 9.11: IMPACT ON NON-PERFORMING LOAN (NPL) AMOUNT



Source: MRA, FSD Staff Calculation

CHART 9.12: IMPACT ON NON-PERFORMING LOAN (NPL) RATIO

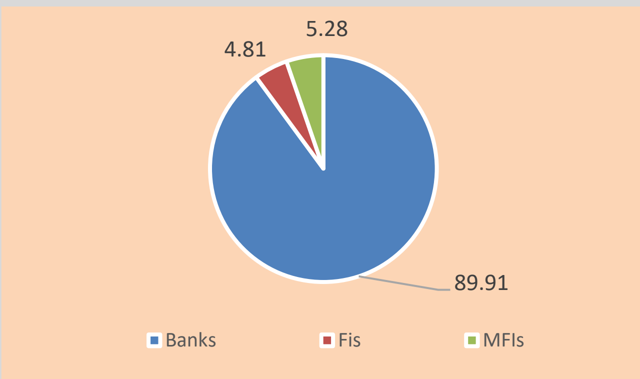


Source: MRA, FSD Staff Calculation

9.6 IMPLICATIONS FOR FINANCIAL STABILITY

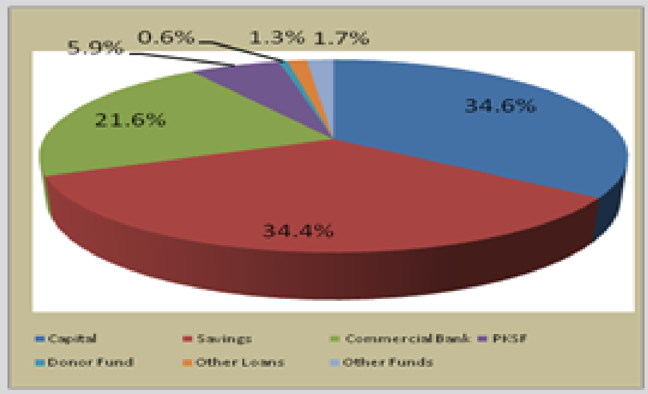
Findings of this study show that MFIs have been affected by COVID-19 shock due to disruption of their business activities during country-wide general holidays. During the first half of the calendar year 2020, their loan disbursement, loan recovery and savings decreased. However, these indicators recorded notable increase in the second half of the year. Pertinently, findings of the preceding chapters show that though Bangladesh economy experienced slowdown in the second quarter of 2020, almost all sectors such as real sector, bank and FIs sector as well as capital market began to recover quickly from the third quarter. For MFIs, it is difficult to assess resilience of this industry as quarterly data are not available. Still analyses based on half-yearly data shows sign of reasonable level of resilience and prospect of recovery of this sector in the near-term.

CHART 9.13: SHARE OF LOANS BY DIFFERENT CATEGORIES OF INSTITUTIONS



Source: MRA, FSD Staff Calculation

CHART 9.13: MFIS' SOURCES OF FUND



Source: MRA, FSD Staff Calculation

MFIs play a significant role in the financial system by serving a large number of borrowers. However, their stake in the lending market is relatively small. They share only 5.28 percent of total assets held by all lending institutions, i.e., banks, financial institutions and microfinance institutions. Given their small contribution in the financial system, their exposure to COVID-19 shock seems to have little bearing on the financial sector stability. This validation has been strengthened by other factors as well. Almost 35 percent of MFIs' loan portfolio are financed from their own capital. It implies that their capital position is not only higher from that of banks and FIs in Bangladesh, but also much higher than any international standard including Basel III. Furthermore, 34.4 percent of their loanable fund are collected from members' own savings. Since members themselves are borrowers, more than one-third of MFIs loan portfolio are secured by members' savings. This is because, borrowers' outstanding loans may be adjusted with their corresponding savings. Analyzing historical trend of MFIs' loan portfolio from MRA database, it is found that their loans are mainly concentrated in agriculture sector. On average, 40 percent of their loans are disbursed in this sector. Since agriculture sector remains almost insulated from COVID-19 shock, presumably this large segment of their loan portfolio has little exposure to this exogenous shock. However, the second largest segment of their loan portfolio is microenterprise financing, which has been considerably exposed to COVID-19 shock. Loan recovery from this segment is supposed to be affected and borrowers may face liquidity stress. However, BDT30.00 billion re-finance scheme unveiled by BB for low-income professionals, marginal farmers and micro-enterprises may help to keep them afloat. Furthermore, they can easily address this issue, if any, by getting access to liquidity surplus banking sector through Bank-MFI linkage program. In sum, it is highly unlikely that the sector would be a threat for financial stability.

CHAPTER 10 : BANGLADESH BANK AND GOVERNMENT'S POLICY MEASURES

10.1 INTRODUCTION

As COVID-19 has posed unprecedented shocks to human life, livelihood, stability of financial markets and institutions, both Government and Bangladesh Bank have taken a broad range of policy measures in different fronts to recover the economy from downside risk and maintain its current growth trajectory. Some of these policy measures are financial in nature while others are non-financial. Up to November'20, the Government as well as Bangladesh Bank has declared the financial support for the amount of BDT 1213.53 billion under different packages and re-finance/loan programs, which is about 4.34 percent[28] of the GDP. Focus of this chapter is to briefly summarize the policy measures taken by both Government and Bangladesh Bank and implementation status of stimulus packages.

10.1.1 STIMULUS PACKAGES AND POLICY MEASURES FOR EXTERNAL SECTOR

The external sector, mainly exports and imports of Bangladesh, have been affected largely during the pandemic due to widespread closure, limited business operations and supply chain disruption globally, especially at the times of state-led control measures. Apart from this, the economic stagnation in the United States and Europe, the major export destinations of Bangladesh, prompted the cancellation of purchase orders from these two destinations, which slowed down the amount of RMG exports in Bangladesh significantly. Other merchandise exports have also dropped down. The lowering trend of oil price affects the income of 10 million expatriates working in gulf countries which is also a concern for decreasing remittance. Global uncertainties also hampered inward FDI, portfolio investment and official development assistance. To fight the adverse impact of corona virus, the government so far taken following measures:

- Honorable Prime Minister, in her speech to the nation on 25th March 2020, first announced BDT 50 billion (approx. USD595 million) emergency incentive package for payment of salaries and allowances of export-oriented industry workers and employees. Fund of this stimulus package was created through national budget allocation. Entrepreneurs would get credit/investment facility from this fund without any interest, but they have to pay onetime 2 percent service charge to respective scheduled banks as part of their administrative expenses. Repayment of this loan/investment facility would have to be made within 2 years in 18 installments including six-month grace period.
- Export sector has been directly exposed to exogenous shock due to COVID-19. In order to overcome this problem by facilitating export business, Export Development Fund (EDF) maintained with Bangladesh Bank has been enhanced from USD 3.5 billion to USD 5.0 billion equivalent to BDT 127.50 billion. The enhanced fund would be used to facilitate import of raw materials under back-to-back letter of credit. Furthermore, interest rate on EDF loans has been lowered to 1 percent while ADs will charge interest rate to manufacturer-exporters at 2 percent per annum.
- In order to boost up export earnings and bring dynamism in the economy through continuation of export-oriented activities against the backdrop of pandemic, Bangladesh Bank, from its own source, has established a fund of BDT 50.0 billion titled as 'Pre-shipment Credit Refinance Scheme'. Main purpose of this scheme is to provide pre-shipment export credit to locally produced export-oriented industries.

[28]Source: Socio –Economic Development in Bangladesh & Stimulus Packages to combat COVID-19, a supplement of Ministry of Finance, GOB.

Bangladesh Bank (BB) has also taken different policy measures to bolster and rejuvenate the country's foreign exchange market for smooth liquidity and to support in the field of import, export and remittance etc. These policies are as follows:

- **Advance payment against imports of life saving drugs/medical items:** In order to facilitate urgent requirement of medical imports for containment of COVID-19, ADs are allowed to send, without repayment guarantee, advance payment up to USD 500,000 or equivalent other foreign currency for import of corona virus related lifesaving drugs, medical kits/equipment and other essential medical items vide FEPD circular 15/2020.
- **Import of industrial raw materials-extension of usance period:** With a view to minimizing COVID-19 pandemic related disruptions to import input by industrial importers, ADs are allowed to extend the usance periods up to a maximum of 360 days instead of current 180 days depending on the actual needs of their concerned clients vide FE circular 16/2020.
- **Import of life saving drug-extension of usance period:** With a view to minimizing COVID-19 pandemic related disruptions to imports of life saving drugs, ADs are allowed to extend the usance periods up to maximum of 180 days instead of existing 90 days depending on the actual needs of their concerned clients vide FE circular 17/2020.
- **Release of foreign exchange on account of private travel and treatment abroad:** In order to facilitate the expenses of Bangladeshi nationals visiting abroad are facing problems for returning home due to travel disruptions arising out of COVID-19 pandemic, ADs are allowed to release foreign exchange within the permissible limit of travel and/or medical entitlement in their international cards vide FE circular letter 10/2020. Alternatively, ADs are allowed to remit to the designated accounts abroad by way of bank transfer or make fund available to them through exchange houses by credit in the concerned Taka Accounts maintained under drawing arrangements. In case of excess fund required due to unavoidable situation, ADs can release reasonable amount for subsistence of the concerned travelers to cope up with the situation, subject to post-facto approval of Bangladesh Bank.
- **Interest rate on borrowing from Export Development Fund (EDF):** To facilitate export trade due to COVID-19, it has been informed vide FE circular 18/2020 that interest rates on EDF loan facilities to ADs will be charged by Bangladesh Bank at 1.00 percent per annum, while ADs will charge interest to manufacturer-exporters at 2.00 percent per annum for disbursements until further instructions.
- **Refinancing for imports against usance back-to-back LCs:** To facilitate exporters in minimizing COVID-19 pandemic related disruptions, ADs, vide FE circular 19/2020, are allowed to seek refinancing facilities from Export Development Fund (EDF) for settlement of import payments against back-to-back LCs under supplier's/buyer's credit depending on the actual situation for which extension of usance period/refinancing for extendable tenure is not available. The tenure of refinancing facilities shall not exceed 180 days (maximum). Interest rate and other formalities will be applicable for the refinancing facilities as usual.
- **Relaxation of quarterly repayment for imports under supplier's/buyer's credit:** To facilitate importers in minimizing COVID-19 pandemic related disruptions, BB, vide FE circular letter 11/2020, has allowed bullet repayment for other usance imports under supplier's/buyer's credit admissible in accordance with paragraph 33(a), chapter 7 of GFET. The circular letter had been effective till September 30, 2020.

- **Remittance against documents received directly by importers:** Authorized Dealers (ADs) are allowed vide FE circular letter 12/2020 to execute import payments against documents received directly by importers provided that the goods have been cleared from the customs, supported by authenticated copy of the customs bill of entry. The prevailing regulatory instructions allow ADs to facilitate the release of goods against documents received directly by importers.
- **Necessary arrangement for continuation of production, transport and supply chain of essential commodities during COVID-19 epidemic:** ADs are requested vide FE circular letter 13/2020 to take proper actions under existing guideline to maintain uninterrupted production, transportation and supply chain of daily essential products, consumer goods, medical equipment and electronics products.
- **Settlement of payment against inland LCs in foreign exchange:** To facilitate settlement of inland LCs amid COVID-19 related disruptions, ADs are allowed vide FE circular letter no. 14/2020 and 25/2020 to settle the payments through their NOSTRO accounts. Considering the small volume of transactions, ADs are instructed to establish suitable arrangements with their correspondents abroad for the transactions with minimum charges.
- **Import of raw materials on 360 days usance basis for Power Generating Enterprises:** 360 days usance period has been allowed vide FE circular letter 16/2020 to import Heavy Furnace Oil (HFO)/ High Sulphur Fuel Oil (HSFO) as raw materials for own use of power generating enterprises by their nominated entities against specific approval from Ministry of Power, Energy and Mineral Resources.
- **Import of agricultural implements and chemical fertilizers-extension of usance period:** ADs are allowed vide FE circular letter 18/2020 to extend the usance periods up to a maximum of 360 days against imports of agricultural implements and chemical fertilizers from 180 days under existing formalities.
- **Release of foreign exchange on account of academic studies abroad:** BB has allowed ADs vide FE circular letter 15/2020 to provide remittance on account of academic fees including boarding and lodging, health insurance, incidental expenses, etc. To facilitate health insurance for students having no coverage or limited coverage, ADs are permitted to remit medical expenses to concerned students requiring emergency treatment. In this context, ADs are allowed to release foreign exchange based on the estimates supported by certificate of medical professionals from the country where the students reside. The facilities remained valid till June 30, 2020.
- **Working capital loans from abroad by foreign owned/controlled companies:** Given the prevailing COVID-19 pandemic related disruptions, foreign owned/controlled companies operating in Bangladesh irrespective of sectors are allowed vide FE circular letter no. 19/2020 and 28/2020 to access short term working capital loans for the tenure of one year extendable to another one year from their parent companies/shareholders abroad to meet actual needs for payments of 3-month wages and salaries to staff regardless of their length of engagement in manufacturing or services output activities. The facility is not applicable for those companies availing loans/advances from domestic banking system. This facility remains valid up to 31 December 2020.
- **Cash incentives against remittance sent in legitimate way:** Previously, beneficiary of foreign remittance for BDT 1.5 lacs and above had to submit all relevant papers to enjoy 2 percent cash incentive. Now, as per FE circular letter no. 20/2020, beneficiaries of foreign remittance are entitled to enjoy 2 percent cash incentive on inward remittance up to USD 5000 (or BDT 5.00 lac) without showing any documents. In case of receiving remittance more than USD 5000, the timeline for submission of documents was extended up to two months.

- **Enhancement of individual loan limit from Export Development Fund (EDF):** Authorized Dealers (ADs), vide FE circular no. 21/2020, are entitled to borrow maximum USD 30.00 million loan from EDF against their foreign currency financing to member factories/mills of BGMEA and BTMA for input procurement. ADs consider this limit on case-to-case basis, depending on the actual needs of concerned factories/mills.

- **Issuance of letters of credit (LCs) with realization clause:** With a view to facilitating export trade during COVID-19 pandemic, BB has allowed the input procurements under back-to-back LCs/usance LCs vide FE Circular Letter No. 22/2020 with realization clause on behalf of exporters operating outside specialized zones subject to observance of due diligence with KYC and AML/CFT standards.

- **Issuance of International Debit Cards (IDCs) against annual travel entitlements:** ADs are allowed to issue IDCs vide FE Circular No. 22/2020 in favor of eligible persons against their annual travel entitlements.

- **Transactions against local deliveries in foreign exchange:** BB has allowed Authorized Dealers (ADs)vide Circular Letter No. 23/2020 to provide acceptance of the delivery documents within stipulated time without any delay for compliant documents and arrange payment on the due date of maturity regardless of availability of export proceeds. In case of sight inland BB LC under EDF/sight LC against advance export proceeds, ADs exercise best practices to effect payments within the stipulated time against compliant documents without showing unnecessary excuses.

- **Discounting of direct and deemed export bills in foreign exchange out of own sources:** Previously, Authorized Dealers (ADs) were allowed to arrange fund for discounting usance export bills in foreign exchange through their correspondent banks, financial institutions abroad or international financing institutions. Now, to facilitate these transactions, ADs are allowed vide FE Circular No. 23/2020 to discount usance export (direct and deemed) bills in foreign exchange out of their own sources provided that the fund is not committed for otherwise use.

- **Statutory business target for licensed Money Changers (MCs):** Considering the business situation due to outbreak of COVID-19, the renewal of MC licenses is permitted without maintaining the requirement to achieve the statutory business target vide FE Circular Letter No. 24/2020.

- **Transfer of remunerations to Foreign Currency (FC) accounts in the names of foreign nationals employed in admissible companies in Bangladesh:** Up to 75 percent of net monthly income in equivalent foreign currency is allowed vide FE Circular No. 24/2020 to credit to FC accounts of the expatriate employees maintained and operated from FC accounts of their employers.

- **Export under open account credit terms against payment undertaking/payment risk coverage with option of early payment arrangement on non-recourse basis:** To bring easy access to finance by exporters, Authorized Dealers (ADs) are permitted vide FE Circular No. 25/2020 to allow exporters to ship goods on sales contracts under open account credit terms within the statutory period, if otherwise not extended, from the date of shipment.

- **Transactions relating to foreign direct investment in Bangladesh:** To bring smooth operations relating to foreign investment in Bangladesh, dividend payable to foreign shareholders may be credited to their FC accounts maintained in Bangladesh under the terms and conditions stipulated in FE Circular No. 26/2020.

- **Export subsidy against the export of light engineering products in advance TT:** BB vide FE Circular No. 27/2020 has allowed Light Engineering Industry to get subsidy against export proceeds through advance TT.
- **Disposal of IMP Form after matching with bill of entry (B/E) electronically:** To bring simplification in import transactions, it has been decided that ADs may accept B/E accessible to them through the customs automated system to dispose IMP Form on completion of matching formalities under existing process.
- **Remittances of dividend to non-resident shareholders:** As a part of ongoing liberalization to bring uniformity between regulations for enterprises of specialized zones and those of non-specialized zones regarding remittances on account of dividend, ADs are exempted to forward documents to Bangladesh Bank vide FE Circular No.29/2020.
- **Access to finance from domestic sources against overseas guarantees:** Given the ongoing situation due to COVID-19 pandemic, banks/NBFIs are allowed vide FE Circular Letter No. 26/2020 to extend admissible Taka finance against overseas guarantees (preferable bank guarantee/standby letters of credit) to resident companies irrespective of ownership/controlling status; subject to adherence to all applicable credit norms and prudential parameters, and observance under existing formalities.
- **Relaxation of foreign exchange regulations for trade transactions-extended facilities:** Given the ongoing situation due to COVID-19, BB vide FE Circular No. 30/2020 has extended the tenure of realization of export proceeds up to 90 days, as additional time from the statutory period of 4 months. These facilities for the extended period are applicable only for exports of readymade garments and textile goods.
- **Outward remittances on account of shipment tracking charges:** ADs are allowed to send remittances FE Circular No. 31/2020 on account of shipment tracking charges; subject to observance of necessary due diligence.
- **Deposit products for Non-Resident Bangladeshis (NRBs) working abroad:** To encourage NRBs in saving their hard-earned income in Bangladesh, ADs are advised vide FE Circular No. 32/2020 to introduce deposit products in BDT for NRBs.
- **Investment in 'Open-End Mutual Fund' by Non-resident Investors (Foreigners and NRBs) through Non-Resident Investor's Taka Accounts (NITAs):** To enhance the scope for foreign portfolio investment in stock market, BB has allowed vide FE Circular No. 33/2020 to purchase units of open-end mutual funds as 'over the counter (OTC) products' using the balances held in NITAs of non-residents.
- **Payment of fees for webinar solution services to conduct virtual meetings:** Due to ongoing COVID-19 pandemic situation, official meetings of Government and corporate sectors are being held virtually through webinar solutions. To facilitate payment for availing webinar solution services, BB has allowed vide FE Circular No. 34/2020 to send remittances on account of actual payments against relevant invoices of webinar solution services.
- **Release of foreign exchange for online study abroad:** Given the ongoing situation due to COVID-19 pandemic, ADs are allowed vide FE Circular Letter No.30/2020 to send outward remittances on account of study abroad under online teaching arrangements.
- **Additional facility for SMEs under RMG Sector:** Export-oriented SMEs, which use both local and foreign fabric/textile in their exported products, are allowed vide FE Circular No. 35/2020 to get cash subsidy on local value addition subject to addition of minimum 30 percent local value.

10.1.2 Stimulus Packages and Policy measures for Real sector

The following packages and policy supports were provided for reviving the country's production and service sectors and also creating employment for both formal and informal sectors:

- On 5th April'20, honorable Prime Minister announced four stimulus packages of BDT 677.50 billion (approx. USD 8 billion) to reach desired economic growth by overcoming the possible economic loss due to COVID-19. Under the first stimulus package, BDT 300 billion would be provided as working capital to the affected business enterprises in industry and service sectors, except the CMSME. Subsequently, the amount of stimulus package has been enhanced to BDT 400 billion including BDT 30 billion for wages and allowances for the workers of export-oriented industries and BDT 700 billion for affected industries in BEZA, BEPZA and Hi-Tech Park. Beneficiaries of this package include domestic enterprises, joint venture companies and foreign-owned companies working in Bangladesh. Bangladesh Bank vide BRPD Circular No. 08/2020, BRPD Circular Letter No. 50/2020 and 53/2020 has spelled out implementation details of this stimulus package. Under this package, affected enterprises would get loan/investment facility up to 30 percent of their existing working capital limit. However, any loan/investment defaulter would not qualify for the facility. The commercial banks will provide this loan/investment facility from their own sources on the basis of banker-customer relationship. Interest/investment rate on such facility would be 9 percent, where 4.5 percent interest/profit would be borne by borrowers/investors and the rest 4.5 percent interest/profit will be reimbursed from government sources. However, in order to ensure supply of liquidity of this scheme, Bangladesh Bank has established a Refinance Scheme of BDT 150 billion from its own source. The banks and NBFIs would get 50 per cent as refinance at 4 percent interest from BB against the loans they would disburse to the affected entities in the large industry and service sectors. BB vide BRPD Circular No. 10/2020 has explained detailed criteria in getting access to this refinance scheme.
- The second package consists of working capital loan for BDT 200 billion fixed for cottage, micro, small and medium enterprises (CMSMEs). Bangladesh Bank vide SMESPD Circular No. 01/2020 has spelled out implementation details of this stimulus package. This loan will be financed by the commercial banks at 9 percent interest to the respective borrowers. The borrowers will pay interest at 4 percent while rest 5 percent will be subsidized by the government.
- To ensure smooth liquidity for implementing the Government directed stimulus package for BDT 200 billion in the form of working capital finance to the CMSME sector, Bangladesh Bank vide SMESP Circular No. 02/2020 has formed a Revolving Refinance Scheme of BDT 100.00 billion from its own source to refinance half of the above-mentioned scheme from BB at 4 percent interest.
- Bangladesh Bank, vide ACD Circular No. 01/2020, has formed re-finance scheme of BDT 50 billion from its own fund for horticulture, fisheries, poultry, dairy and livestock. This loan will be provided to the farmers/farms at 4 percent interest by the banks and the banks will get refinance at 1 percent from BB. The existing loan for import substitute crops (pulses, oil seeds, spices and maize) at 4 percent interest will be expected to continue and can include paddy, wheat and other grains, profitable crops, vegetable etc. This financial support will facilitate access to finance to run the supply chain and help the generation of output for the farmers.
- To generate sufficient income for lower income professionals, farmers and marginal/small businesses during COVID-19 pandemic, BB, vide FID Circular No. 01/2020, has launched a refinance scheme of BDT 30 billion for giving loan to these affected groups through Microfinance Institutions (MFIs). The banks will

get fund from BB at 1 percent interest, but they will lend to MFIs at 3.5 percent interest and finally, MFIs will disburse loan to the affected groups at maximum 9 percent interest.

- Bangladesh Bank, vide SFD Circular No. 03/2020, has launched the Green Transformation Fund (GTF) of EURO 200.00 million (about BDT 18.60 billion) with a borrowing cost within 1.00~2.00 percent range to provide financing of all manufacturing industrial enterprises for importing of environment friendly and energy efficient (including solar energy and renewable energy under power sector)/green capital machinery and accessories (including Buyer's Credit). This GTF in Euro is also used to import (only Buyer's Credit) industrial raw materials used in all manufacturing enterprises including both export oriented and deem exporters.
- Bangladesh Bank has doubled the fund of three refinancing schemes to increase financing for reviving the activities of Cottage, Micro, Small and Medium Enterprises (CMSMEs) affected by the COVID-19 pandemic from its own sources. The small enterprise refinance scheme has increased from BDT 8.50 billion to BDT 15.00 billion, the refinance scheme for setting up agro-based product processing industries in rural areas have increased from BDT 7.00 billion to BDT 14.00 billion and the refinance scheme for new entrepreneurs in cottage, micro and small enterprise sector to support CMSME has increased from BDT 0.50 billion to BDT 1.00 billion. The banks and financial institutions can take loans from these three schemes from BB at 3 percent interest and disburse them to the borrowers at 7 percent interest rate.
- Bangladesh Bank, vide SMESPD Circular No. 03/2020, has launched for the first time a credit guarantee scheme (CGS) of BDT 20 billion for the entrepreneurs in the Cottage, Micro and Small (CMS) sector to help them tackle the ongoing crisis brought on by the corona virus pandemic. The disbursed amount from the stimulus package of BDT 200 billion for the SME sector will be covered under this scheme. The fund of this scheme will be provided by the government and Bangladesh Bank time to time. 1 percent guarantees fee will be charged from the respective bank during contract signing for CGS.
- Considering the growing demand of eco-friendly products/initiatives/projects, Bangladesh Bank vide SFD Circular No. 02/2020 has doubled the size of the fund of the respective refinancing scheme from BDT 2 billion to BDT 4 billion for the banks. The fund of this re-finance scheme will be disbursed only against term loan provided by the banks to above fields.
- Bangladesh Bank, vide ACD Circular No. 03/2020, has announced its agriculture and rural credit program of BDT 262.92 billion for the FY21 in order to alleviate poverty, revitalizing the rural economy and hunger-free Bangladesh. The target is fixed at 8.99 percent higher than the previous fiscal year's credit program. The credit disbursement program was designed in line with the government's agricultural policy and also to deal with the impacts of corona virus on the rural economy.

10.1.3 Stimulus Packages and Policy measures for Fiscal sector

The government itself discouraged luxury expenditures and scaled up various social protection programs and emergency healthcare services. The packages and policy support regarding fiscal sectors were as follows:

- The government has distributed BDT 12.58 billion to give BDT 2,500 to each of 5 million households amid corona virus crisis. The beneficiaries will include rickshaw pullers, daily-wage workers, construction workers, farm labourers, salespersons, employees of small businesses, poultry workers, transport workers, and hawkers. They will get the money via mobile financing service providers Nagad, bKash, Rocket and Sure Cash. The government bears the transaction fees. The total fund allocated for BDT 7.50 billion (approx. USD 89 million) and BDT 1.00 billion (approx. USD12 million) as special honorarium paid to doctors, nurses, health workers and others and also to compensate against their deaths. The government has allocated for BDT 95.00 billion subsidy for agriculture sector as part of efforts to ensure enough supply of food during the corona virus crisis. The money has been allocated for fertilizer, irrigation, mechanization, marketing of products and other things necessary in agriculture. The government will continue giving allowances to freedom fighters, senior citizens, widows, students and people with disabilities. For doing this smoothly, the government additionally allocated BDT 8.15 billion as an expansion of cash allowance programs for the poor; free food distribution of BDT 25.00 billion; BDT 7.70 billion for OMS of rice at 10 taka/kg; BDT 21.30 billion for construction of home for homeless people; BDT 8.60 billion for additional procurement of paddy/rice (2.0 lac ton); incentives for farm mechanization for BDT 32.20 billion;

- Subsidize the bank loan interest whose payment was postponed during the April-May period for BDT 20.00 billion.; Credit for self-employment venture (through Palli-Sanchay Bank, Probashi Kallyan Bank, Karmasangsthan Bank and PKSF) for BDT 32.00 billion to assist migrant workers, unemployed youth and rural population during the economic crisis caused by the corona virus pandemic. As a part of government's social protection program, the government has allocated a fund for BDT 15 billion to assist unemployed and distressed workers in the RMG, leather goods and footwear industries.

Cutting of import taxes on medical and protective items: NBR waives of 12 types of safety products and test kits from import duties and taxes. VAT exempted at import, manufacturing and trading stage for 17 types of medical equipment including soapy alcohol, COVID-19 testing kits, PPE, 3-ply surgical masks, protective spectacles/goggles, and raw materials for hand sanitizers, surgical masks, and disinfectants. VAT reduced from 15 percent to 5 percent for manufacturing of potato flakes made of locally produced potatoes. Reduction of VAT from 15 percent to 5 percent for manufacturing maize and VAT exemption on locally produced mustard oil. VAT exempted on agricultural machineries such as Power Ripper, Power Tiller operated Seeder, Combined Harvester, Rotary Tiller etc. at the trading.

Filing/Payment Deadline Extension: The government approved draft legislation to extend the time for taxpayers to file their tax returns and to pay their taxes as relief measures in response to the Corona virus (COVID-19) pandemic. Separate draft legislation to amend the Value Added Tax (VAT) rules has been approved allowing the National Board of Revenue (NBR) to extend the time limit for submission of VAT returns. Taxpayers that comply with the filing and payment deadlines, as extended under the relief measures, will not be subject to penalty or interest assessments.

10.1.5 OTHER SOCIAL MEASURES BY THE GOVERNMENT

- The government has evacuated close to 300 Bangladeshi citizens from China. Bangladesh also suspended all flights from Europe and other countries during lock down period.
- The government also installed screening devices across its international airports and land-ports and screened more than 650,000 passengers during lock down period and sent 37,000 people for immediate quarantine.
- The government also limited the movement to religious centers and market/open places.
- In addition, after the first case was detected, the government closed education institutions and encouraged all non-essential businesses to move their activities online.
- The government initially declared a nationwide public holiday until April 4 which has been subsequently extended time to time.

- Despite limitations Bangladesh is doing better to contain COVID. The government has launched aggressive campaign via different platforms and media, including mobile phone operators.
- The government has taken support from the international development agencies and donors. International Monetary Fund, World Bank, Asian Development Bank, Asian Infrastructure Investment Bank, Islamic Development Bank and other agencies to tackle crisis quickly. The government has also changed the main macroeconomic structure of the 8th Five Year Plan to protect people amid COVID-19. The 8th Five-year plan mainly aims at restoring health, employment, income and economic activities from the effects of COVID-19.

10.1.6 Policy measures for Financial sector

The policy measures by the BB to wake up monetary and credit sectors are given below:

- **Cash Reserve Requirement (CRR):** The Cash Reserve Requirement (CRR) of banks has been reduced 50 basis points to 5 percent on 23 March'20 vide MPD Circular No. 01/2020. BB has accommodated money around BDT 64.00 billion for banks at the first phase by way of cutting the CRR. BB further reduced banks' CRR by 100 basis points to 4 percent vide MPD Circular No.03/2020 with effective from April 15, 2020 in the 2nd phase. This easing process would additionally supply about BDT128.00 billion in the form of liquidity and helps the banks to implement the bailout packages declared by the honourable prime minister. BB has also reduced the CRR of Non-Bank Financial Institutions by one percentage point. The NBFIs are allowed vide DFIM Circular No.03/2020 to maintain 1.50 percent on bi-weekly basis and at least 1.00 percent daily on their demand and time liabilities as CRR. The NBFIs would utilize additional amount of around BDT 3.50 billion for income generating investment purpose due to this policy relaxation.
- **Repurchase Agreement (REPO):** The Repurchase agreement (REPO) rate has been reduced three times during the period March-July, 2020 to make funds cheaper for banks. Initially, REPO rate has been reduced to 5.75 percent from the existing 6 percent on 23 March 2020. It was further reduced to 5.25percenton 09 April 2020 and 4.75 percent on 29 July, 2020 respectively. Now banks can get more access to central bank funds if needed at a lower cost and commercial banks will increase its excess capacity to tackle the impending financial recession as efficiently as possible.
- **Reverse REPO:** Reverse REPO rate has also been reduced to 4 percent from 4.75 percent with a view to rationalize the policy rates' corridor (the gap between the REPO and reverse REPO rates).
- **Special REPO:** A special REPO with tenure of 360 days has been introduced to boost cash flow and help the banks release the corona virus bailout funds. Banks and NBFIs can borrow funds by submitting their extra securities of Statutorily Liquidity Reserve (SLR) to the Bangladesh Bank under this scheme.
- **Bank Rate:** The Bank rate has been reduced by 100 basis points to 4 percent for the first time in 17 years vide MPD Circular No. 06/2020 to rationalize this rate with the current interest rate regime. Banks now borrow funds from BB against implementation of stimulus packages of the government at lower cost.
- **ADR/IDR:** BB, vide DOS Circular No. 02/2020, has increased the ADR (advance-deposit ratio) for conventional banks to 87 percent from 85 percent and IDR (investment-deposit ratio) for Islamic banks to 92 percent from 90 percent effective from April 15, 2020. This 2 percent increased amount would elevate credit supply and boost investment in the economy hard hit by the steady and surging Corona virus cases.
- **Monetary Policy Statement FY21 (July 2020 - June 2021):** BB in the meantime unveiled an 'expansionary and accommodative' monetary policy with a projection of domestic credit growth of 19.3 percent in the fiscal year 2020-21 (FY21). Of which, targets for private sector credit growth and public

sector credit growth are 14.80 percent and 44.4 percent respectively. This statement has been prepared to keep an eye of the recovery of the economy from the adversity of the COVID-19 pandemic and rehabilitation of the production capacity of the economy including the restoration of the normal livelihoods of the people along with maintaining dual goals of price stability and quality growth during 2021. To make it effective, BB will use its different monetary instruments under rationalized rate (discussed above). BB also considers different risk factors mainly arising from the ongoing COVID-19 pandemic, seasonal floods, and international sluggish economic and volatile price situations resulting in slower than expected economic activities, formation of unexpected commodity price bubbles, and building-up of undue bad assets of banks. To overcome these risks, BB will increase its capacity to monitor the implementation of ongoing activities.

- **Loan Classification Policy:** The loan classification policies for banks and FIs have been relaxed by extending moratorium on loan payments until 31 December 2020 and during the period, the respective borrowers will not be considered as default.
- **Loan Rescheduling and One Time Exit Policy:** The loan under rescheduled and one time exit policy is classified as SMA and only 50 percent of the provision requirement will be maintained as general provision. Unless any recovery, no provision will not be transferred in the income account.
- **Cash Supply:** Scheduled banks are advised to ensure adequate cash supply in their branches to facilitate uninterrupted financial transactions by taking assistances of the local administration and law enforcing agencies during locked down.
- **Waiver of Interest:** The interest amounts accrued between April and May'2020 from all loan accounts was transferred to interest free blocked account considering the business situation due to breakout of corona virus. As per directives, the entire amount of accrued interest on BDT 0.01 million loan during the period of April and May 2020 has to be waived. Besides, 2.0 per cent of the accrued interest during the period on the amount of loan, which is in the range of more than BDT 0.01 million to BDT 1.0 million shall have to be waived by the bank. On the other hand, 1.0 per cent of the accrued interest during the period under review on the amount of a loans above BDT 1.0 million shall have be to be waived by the bank but the amount of such waiver in this category should not exceed BDT 1.2 million. The waived amounts of interest will be reimbursed as interest subsidy by the Government.
- **Providing agricultural loan at 4percentconcessional interest rate:** Earlier, agriculture credit was distributed at 4 percent subsidized interest rate only for import of alternative crops like pulses, oil seeds, spices and maize. However, in order to maintain regular production and supply of agriculture against the backdrop of the shock caused by outbreak of Novel Corona Virus, BB vide ACD Circular No. 02/2020 has advised all banks to provide agricultural credit at 4 percent subsidized interest rate to production of all agricultural outputs, which are included in the Agricultural and Rural Credit Policy and Programs. Bangladesh Bank would provide 5 percent subsidy as interest loss to the scheduled banks against the disbursed agricultural credit.
- **Agricultural and Rural Credit Policy and Program for the FY 21:** As per policy disclosed by BB, the target for agriculture and rural credit for the current fiscal year has been increased by 15 percent compared to last fiscal year's disbursed amount. The central bank set the target at BDT262.92 billion for the current FY21, which was BTD241.24 billion for the concluding fiscal year. In the current fiscal year, banks would set target to disburse 60 percent of the targeted agricultural credit in crop sector, 10 percent in fishery sector and 10 percent in livestock sector and the remaining portion to be disbursed to other sectors linked to the

rural economy. This policy has also given priority to women and high-valued crop sector in getting access to farm credit.

- **Reduction of risk weight on alternative investment:** BB has reduced the risk weight on alternative investment from 150 percent to 100 percent by changing the Risk based Capital Adequacy framework in line with Basel III. This will encourage banks to expand their investment in venture capital i.e., private equities and impact funds.
- **Other Policy Measures:**

i. **Lower Margin for Baby Food and Other Policy Incentives:** Due to the ongoing pandemic, there was possibility of disruption of supply essential baby foods. In this regard banks are advised to keep margin not exceeding 5 percent against opening of LC for importing baby foods.

ii. **Late Payment of Installment against DPS and other Savings Schemes:** As Government declared general holidays from 26 March to 30 May and public transport and financial services were limited during this period, many customers faced difficulty to continue their regular savings services. Subsequently, BB advised banks to accept installment of DPS and other savings schemes of those customers without charging any penal interest.

iii. **Loan Classification and Provisioning Policy for Cottage, Micro and Small Credits under CMSME:** The loan classification and provisioning policy for the Cottage, Micro, Small and Medium Enterprise (CMSME) sector has been relaxed to encourage bank lending in the sector.

10.1.7 POLICY MEASURES FOR SMOOTH FUNCTIONING OF PAYMENT INFRASTRUCTURES

- All banks are advised to prepare business continuity plan immediately to ensure that operations are not interrupted in the aftermath of pandemic exigencies. Financial service providers are instructed to ready a list of key persons, who are involved in critical service management, including the information and communications technology infrastructure. The banks ensure round-the-clock operations of alternative delivery channels in order to facilitate smooth transactions. The alternative channels include ATMs (automated teller machines), POS (point of sale), e-payment gateway and Mobile Financial Services (MFS) through which a customer can get financial services. The banks encourage electronic payments for reducing the use of bank notes by ensuring proper monitoring and cyber security and health issues.
- Transaction between P-2-P has been encouraged by maintaining social distancing. The monthly transaction limit has been elevated up to BDT 2.00 lac[29]. Cash out up to BDT 1000/- is kept charge free. For purchasing essential goods and medicines within the country using debit and credit cards, Merchant Discount Rate (MDR) and Interchange Reimbursement Fee (IRF) are not applicable. In this case, maximum transaction limit per day is BDT 15,000 and maximum transaction limit per month is BDT1,00,000. The charges for Merchant Discount Rate (MDR) and Interchange Reimbursement Fee (IRF) have been waived.
- Uninterrupted services of ATM, POS, internet, app and USSD-based transactions have been ensured.
- Banks and MFS providers were advised to open Mobile Financial Service (MFS) accounts for all workers and employees of export-oriented industries and factories by 20 April’20so as to facilitate direct payment of their wages and allowances from government’s financial stimulus package. For cash out of salaries and allowances of said workers, the mobile banking charge per BDT 1,000 has been fixed at BDT 4.

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[29] 1 Lac = 0.10 million

- MFS providers were advised to maintain uninterrupted services so that the workers and employees of export-oriented industries could get their wages from the government stimulus package through their MFS accounts. They were also advised to ensure enough cast at agent points.
- The government authorities and law enforcing agencies were also requested to extend their support to facilitate the movement of the MFS providers' employees, distributors, employees of the distributors and agents so that the agent points could be kept functional during the pandemic period.
- Bangladesh Bank has allowed non-bank entities to operate automated teller machines across the country with specific focus on spreading banking network in the rural areas at an affordable cost through issuing Guidelines on White Label ATM and Merchant Acquiring Services (WLAMA).
- Due to general holidays and subsequent limited transport and banking facilities, banks waived late payment fee/charge/penal interest or any other fee/charges on the customers in case of inability to pay credit card dues. Banks did not charge compound interest rate in that period. Furthermore, banks which charged late payment fee/charge/penal interest returned the same to respective customers' accounts.

10.1.8 Policy Measures For Ensuring Safety Environment In Banks/Branches And Effective Use Of CSR Funds

- **Take necessary steps to prevent the risk of the country's Corona virus infection as well as to provide necessary assistance to the victims:** BB, vide SFD Circular Letter No. 01/2020, has advised all banks to ensure health safety for all of their employees including security guards and temporary workers. To this end, they were required to set up thermal scanner at the entrance of Head Office and branches, ensure supply of hand sanitizers/hand wash/soap, mask, hand-gloves to their employees. Banks take effective measures to disinfect the branches and ATM booths. They supply infection resistant attires, hand gloves, mask, hand sanitizers, hand wash, soap, medicines and other medical equipment to hospitals and health complexes as part of their CSR activities.
- **Special incentives for the bankers' working at bank premises during the general holidays for COVID-19 Pandemic declared by the Government:** As per BRPD Circular Letter No. 17/2020, during the general holidays declared by the government, the bankers who worked being physically present in their offices received special incentive. In that case, they received one month's salary as a special incentive for working minimum 10 days and those who worked less than 10 days got incentive proportionately. Temporary or contractual workers who did not have separate basic salary received 65 percent of their aggregate salary as special incentive. In all cases, minimum incentive per month was fixed at BDT30,000 and maximum at BDT100,000.
- **Special Health Insurance as well as Special Grant for the Bankers' working at Bank premises during the General Holidays for COVID-19 Pandemic declared by the Government:** As per instructions contained in BRPD Circular Letter No. 18/2020, bankers who would get infected by COVID-19 while discharging their official duties would get minimum BDT 5.0 lacs and maximum BDT 10.0 lacs depending on their official status. If any bank employee unfortunately dies from such infection, victim's family would get a special grant, which would be 5 times of respective employee's amount of health insurance.
- **Maximum allocation of CSR budget to fight against health crisis generated from spread of Corona virus in the country:** Banks are also advised to spend 60 percent of their CSR fund for health sector this year. In addition to carrying out regular CSR activities in the health sector, they were advised vide SFD Circular Letter No.03/2020 to extend cooperation by donating important medical equipment such as PCR

machines, ventilators and oxygen cylinders as well as personal protective gears for health professionals and also take necessary steps to extend this cooperation at district level.

- **Responsibilities of banks to prevent spread of Corona Virus:** BB vide BRPD Circular No. 05/2020 has provided specific instructions to the banks to contain the spread of COVID-19. As a part of this compliance, each bank has formed 'Quick Response Team' to prevent community level transmission of the disease. Banks have increased their online services so that customers can avail banking services without being physically present at the bank branches. Banks rationed /rostered duties of their employees until 30 May. If any employee was infected with the virus or was in contact with a COVID patient, they were allowed 14 days special quarantine leave, which cannot be debited from their regular earned leaves. Organizing any kind of unnecessary seminar/meetings was prohibited in this situation. Banks acted promptly following the WHO guidelines in day-to-day activities. Banks discontinued evening and weekend banking activities.
- **Starting Normal Banking Business:** Banks were advised vide DOS Circular Letter No.18/2020 to restore normal banking activities from 31 May 2020. However, while performing official duties, they are required to comply with COVID-19 related health instructions provided by both BRPD and Directorate of Health, Government of Bangladesh.
- **Others measures so far taken during COVID:** The meetings of Board of Directors, Executive Committee, Audit Committee and Risk Management Committee were allowed to conduct through video conferencing until the COVID-19 situation normalizes. Training programs with more than 10 participants were postponed vide BRPD Circular Letter No. 10/2020 while training programs with 10 or fewer number of participants were allowed to conduct maintaining minimum distance in sitting arrangements complying with the WHO guidelines.

10.2 IMPLEMENTATION STATUS OF STIMULUS PACKAGES THROUGH BANKS AND FIs

It has already been discussed that in order to contain the deadly effects of the pandemic and to revive the economy, both Government and Bangladesh Bank came up with various stimulus packages for affected cottage, micro, small, medium and large industries and services sectors. Packages were also targeted for export sector, farmers and low-income professionals. The declared amount of these packages stood at BDT 1213.53 billion[30], or 4.34 percent of GDP. However, the packages that are being implemented by banks amount to BDT 907.5 billion[31]. As on December'20, banks disbursed BDT 941.5 billion from the stimulus packages[32]. Bangladesh Bank has complemented these packages by providing liquidity support from its various refinance schemes at reduced interest rates. Apart from these, Bangladesh Bank released BDT 1.30 billion provided by the Government as subsidy against blocked interest/profit on loan/investment for the month of April and May'20. The latest status of these stimulus packages has been furnished below:

10.2.1 MONTH-WISE DISBURSEMENT OF LOANS UNDER STIMULUS PACKAGES

It appears from Chart 10.1 that at the inception, disbursement from stimulus packages was slow but it steadily increased over the period. Various factors such as slow demand for goods and services due to households and corporates' income shocks, constraints of production due to lack of sufficient raw materials, disruption in local and

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[30] as of November 2020.

[31] As of end-December'20.

[32] Including the amount disbursed through EDF on a revolving basis.

international supply chain, sluggish demand for exports due to spread of Corona virus in export destination countries, providing credit from banks' own sources, among others, might have caused slow disbursement of credit during April'20. Observing this situation, BB responded quickly by taking a number of measures. BB introduced various refinance schemes to resolve liquidity constraint. Furthermore, BB rationalized various conditions of the stimulus packages, which helped smooth disbursement of credit from the packages. From demand side, due to easier terms, lower interest rates and other benefits, borrowers got interested in those packages. As a result, disbursement under stimulus packages gradually speeded up and reached the highest level in July'20. From April-December'20, a considerable amount (BDT 941.50 billion) was disbursed under various stimulus packages, which is 19.5 percent of the overall disbursement during the same period (Charts 10.1-10.3).

CHART 10.1: MONTH-WISE DISBURSEMENT OF CREDIT UNDER STIMULUS PACKAGES

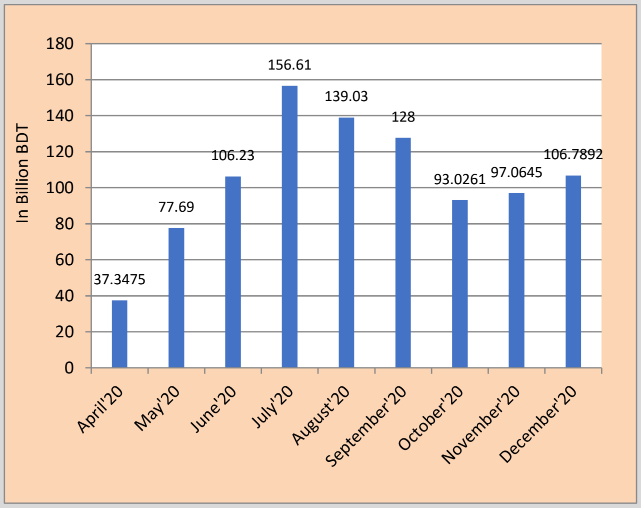
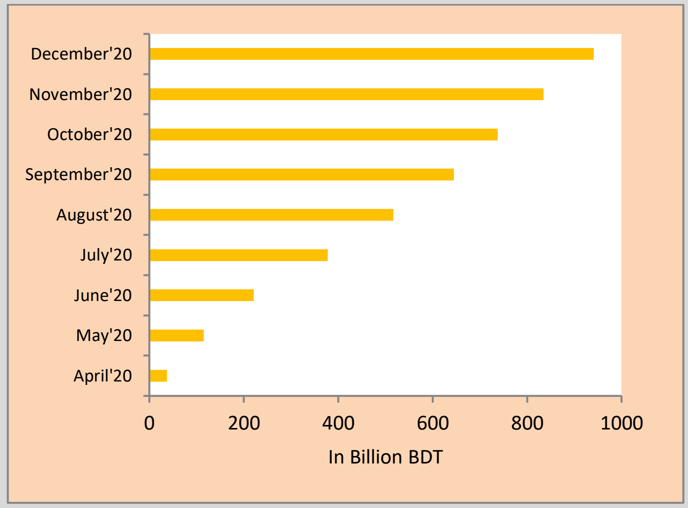


CHART 10.2: CUMULATIVE DISBURSEMENT OF CREDIT UNDER STIMULUS PACKAGES

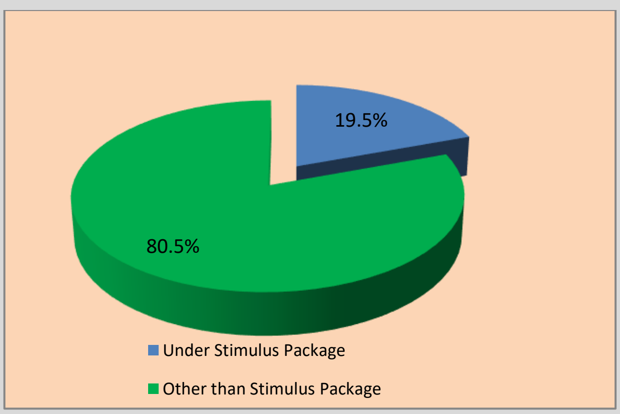


Source: Various Departments of BB.

10.2.2 Share of Loan Disbursed Under Stimulus and Other Than Stimulus Packages

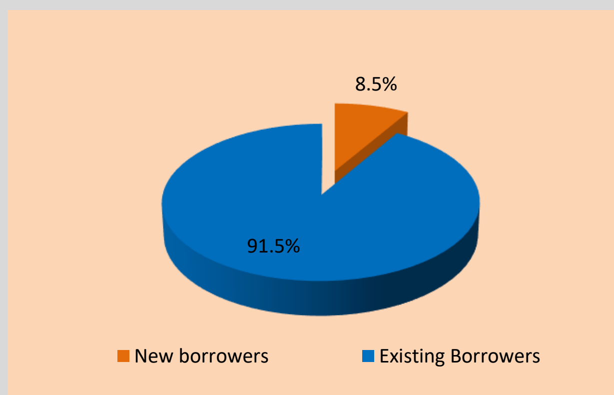
It is evident from Chart 10.3 that banks responded graciously in disbursement of credit under stimulus packages. They disbursed 19.5 percent of their loan portfolio under this package while about four-fifth of loan portfolio was disbursed under the regular loan window. Banks' easier access to low-cost fund from central bank's various refinance and other schemes accompanied by customer-end lower-level interest rate provided huge incentives to the call of stimulus packages.

CHART 10.3: SHARE OF LOAN DISBURSEMENT UNDER STIMULUS AND OTHER THAN STIMULUS PACKAGES



Source: Various Departments of BB.

CHART 10.4: LOAN DISBURSEMENT UNDER STIMULUS PACKAGES TO NEW AND EXISTING BORROWERS

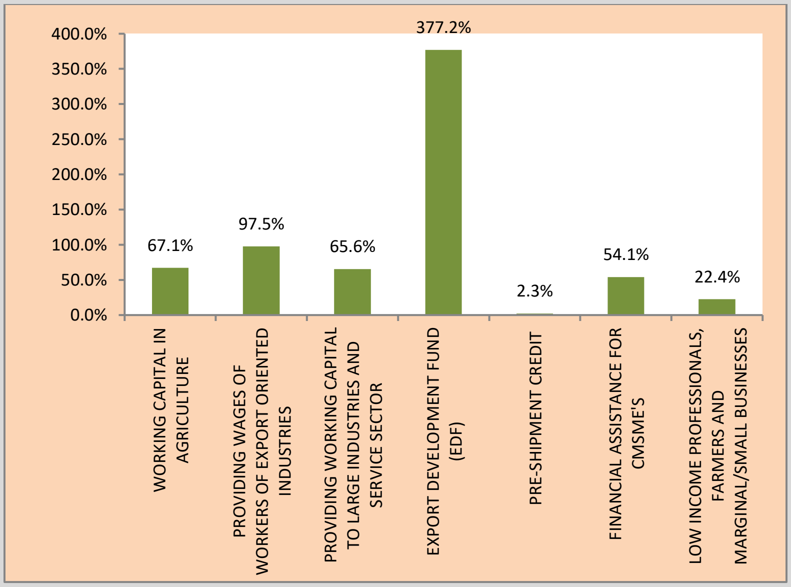


Source: FSD, BB.

10.2.3 Loan Disbursed Under Stimulus Packages To New And Existing borrowers

Considering the data available from April-September'20 it appears that a small part of loans (8.5 percent) under stimulus packages was disbursed to new customers (Chart 10.4). Furthermore, most of the loans from agricultural and CMSME sector went to new borrowers, as the average loan size is small, and the number of existing borrowers is not sufficient to disburse all the allocated amount. For disbursing large amounts, banks preferred existing borrowers with good reputation and good repayment capabilities. For this reason, major part of the loan amount under stimulus packages went to existing borrowers.

CHART 10.5: PROGRESS OF CREDIT DISBURSEMENT UNDER STIMULUS PACKAGES



Note: This chart is based on data as of December 17, 2020.
Source: Data-Various Departments of BB, FSD Staff Compilation.

Chart 10.5 shows that responses of stimulus packages were not uniform. The stimulus package of BDT 50 billion to provide wages of the export-oriented industries and Export Development Fund (EDF) got maximum response. A total of BDT 48.74 billion was disbursed for providing wages of the export-oriented industries between April-June'20. The size of EDF was enhanced from USD 3.5 billion to USD 5 billion for supporting the exporters badly hit by the pandemic. USD 5.67 billion was refinanced from the fund during April-December'20. As the fund is revolving in nature, total disbursement exceeds more than 372.2 percent of the base amount. Stimulus package to finance working capital for the affected large enterprises in industry and service sectors got considerable response as 65.6 percent of the sizeable stimulus package has already been disbursed by December'20. It is mentioned earlier that agriculture sector has been relatively less affected and it has also seasonal demand for loan. Considering these facts, 67.1 percent disbursement of working capital finance for agriculture sectors seems to be reasonable. Despite substantial exposure to COVID-19 shock, CMSME sector did not considerably respond to stimulus packages at the initial periods. It might be due to the fact that a significant part of CMSME sector buyers faced income shock due to various measures taken to contain the spread of the virus. However, the sector responded gradually as the economic activities have begun to move towards normalcy. As of December 31, 2020, credit disbursement under stimulus package reached about 54.1 percent of target fixed for this sector. Bangladesh Bank continuously remains vigilance to achieve the targets through various guidelines and policy amendments.

CHAPTER 11: MEASURES TAKEN BY OTHER FINANCIAL REGULATORS

11.1 MEASURES TAKEN BY BANGLADESH SECURITIES AND EXCHANGE COMMISSION (BSEC)

Capital market is mainly driven by the investors' confidence and expectation about the future outlook of the economy including listed corporates. COVID-19 has stirred the economic sentiment of investors and entrepreneurs. Uncertainty about the ending of pandemic, supply-chain disruption, income shock and supply shock might have resulted volatility in the capital market. Considering these issues along with restoration of the investors' confidence, the BSEC came up with some immediate measures. Notable of them are as follows:

- In an attempt to maintain adequate liquidity in the capital market and also to support its sustainable development under the long-term comprehensive planning, Bangladesh Bank has instructed each scheduled bank, on February 10, 2020, to form a special fund with a maximum amount of BDT 2.00 billion for investing in the stock market through their own portfolio or stock market subsidiaries (merchant banks and dealer licensed brokerage houses) and also through other merchant banks and brokerage houses (dealer). The cumulative size of this potential fund would be about BDT 120 billion. In this regard, Chairman of the BSEC sought for Governor's kind intervention on June 01, 2020 to expedite the formation of this fund. Accordingly, BB made a slight amendment in its previous circular dated Feb 10, 2020 and issued a revised instruction to the banks vide DOS Circular No. 27 dated September 24, 2020.
- An instruction has been issued on March 19, 2020 regarding fixation of floor price and the lowest limit of circuit breaker of any listed security in the stock market. It has been mentioned that floor price and the lowest limit of circuit breaker would be the average of the closing prices of five preceding trading days from March 19, 2020 for that security.
- On March 24, 2020, the BSEC issued an order providing temporary relaxations regarding compliance with the provisions of listing regulations and other Securities Laws relating to conducting of Annual General Meeting (AGM)/Extraordinary General Meeting (EGM), Board of Directors' Meeting, publication and dissemination of price sensitive information and submissions of monthly/quarterly reports to the Commission and the Stock Exchanges. Besides, all the listed companies were instructed to avoid large gathering and hold AGM/EGM, board meetings using digital platform aimed to maintain social distancing.
- Stock Exchanges were instructed vide a letter dated 28 May'20, to re-open trading and settlement activities taking adequate protective and safety measures in conformity with the COVID-19 Pandemic Guideline (including13 points health directives) issued by the Ministry of Health and Family Welfare.
- On 02 June 20, an instruction has been issued for all stock exchange-related institutions to exclude the period from 26 March'20 to 30 May'20 - due to general holidays, in calculating the days for the securities related compliance requirement, except price-sensitive information.
- Dhaka and Chittagong stock exchanges were instructed on 11 June'20, to conduct AGM/ EGM, Board meeting and other meetings using digital platform till 31 December'20.
- In order to cope with the philosophy of "Digital Bangladesh", the Bangladesh Securities and Exchange Commission directed both the Stock Exchanges on 22 June'20 to launch an integrated on-line data-gathering, information submission and dissemination platform. Moreover, with the same philosophy, listing and continuous listing requirements such as applications, shareholding report/unit holding report, declarations, corporate actions, financial disclosures, publication, dissemination of Price Sensitive Information (PSI) and material information,

complaint settlement, and submissions by the issuer companies/issuer of securities will be ensured by using the digital platform.

- An initiative has been taken to appoint an experienced "Digital Transformation Consultant" for modern digital transformation in the stock market.
- After general holidays, both the Stock Exchanges commenced trading since 31 May'20.
- With an aim to submit monthly reports by merchant banker, institutional broker, asset manager, custodian and credit rating companies to the BSEC through their websites, the BSEC has introduced an online report submission platform, which would facilitate easy and quick report submission.
- Due to the initiatives of the BSEC, Bangladesh Bank has withdrawn the restrictions on distribution of dividend of the listed companies. Now general investors will get dividend in due time.
- For BSEC's initiatives, Bangladesh Bank has taken decision to waive interest for the month of March and April'20 on loan extended to capital market intermediaries.
- A decision has been taken to organize promotional campaign in different countries, when situation would be normal after the COVID- 19 pandemic with a view to attract foreign and non-resident Bangladeshi investors to the stock market of Bangladesh.
- Measures, such as video conferencing, cloud-based data storage, have been taken to keep up all official activities of the BSEC maintaining health instructions.
- On May 02, 2019, the Government of Bangladesh has sanctioned a refinance scheme of BDT 8.56 billion for the affected retail investors, which is being implemented under the joint supervision of BSEC, Bangladesh Bank and Investment Corporation of Bangladesh (ICB). It is expected that this scheme would improve stability in the market.
- In 2019, the BSEC has introduced "Online Report Submission Platform" for market intermediaries, "Customer Complaint Address Module (CCAM)" for the settlement of investors' complaint and "External Data Request Processing (EDRP)" for quick submission of information requested by different Government Agencies.
- On 01 September 2020, the BSEC has issued directive stipulating some restrictions on "Z" category companies listed in the Stock Exchange regarding buy, sell, transfer and transmission of directors' share, reconstruction of Board, appointment or selection of Observer, appointment of Auditor, etc.
- With an aim to enhance transparency in the disclosure of financial reports of mutual fund and asset management companies, the BSEC has issued a directive on 06 September 2020.
- A directive has been issued determining maximum limit of margin loan on 21 September'20.
- On 10 December'20 a decision has been taken to appoint 02 (two) independent directors in the Board of Directors of a listed company, which would fail to comply with the directives of maintaining minimum 30 percent of joint shareholding by sponsor(s)/director(s).
- With an aim to encourage the opening of digital BO account up to Union Parishad within the country and establishing digital booth outside the country, a directive has been issued on 13 December'20.
- On 28 December 2020, the BSEC has issued a directive on an exit plan for de-listing companies from the stock exchanges, which would fail to pay dividend due to weak financial base or is not in commercial operation, subject to payment of dues to general investors by those companies.

- A directive has been issued on 14 January 2021 to form “Market Stabilization Fund” by accumulating the unpaid/unclaimed dividend declared by the listed companies, which would remain idle for a long time wherein shareholder’s claim on their due dividend will not be hampered.
- On 14 January 2021, a directive has been issued by fixing the maximum interest/profit rate to be charged on margin loan disbursed/to be disbursed to their clients by merchant bankers and stockbrokers operating in the capital market.
- The BSEC has issued a directive on 20 January 2021 regarding the allotment of shares to the applicants on pro-rata basis instead of lottery of application in the Initial Public Offer (IPO).

11.2 MEASURES TAKEN BY INSURANCE DEVELOPMENT AND REGULATORY AUTHORITY (IDRA)

It has already been mentioned that COVID-19 has seriously affected local and international economic and business activities. It also appears as corporate as well as households’ income shock. As a result, ready cash flow of customers and thereby their capability to purchase insurance seemed to have been severely declined. Furthermore, Tourism, Transport and Aviation industries have been the worst victim due to restriction on local and international transport communication to contain the risk of COVID-19. Since all these activities and affairs have direct connection with insurance industry, these shocks have been propagated on the balance sheet of insurance industry. However, as a regulator, IDRA remains utmost sincere to minimize the crippling impact of COVID-19and the initiatives taken by the Authority are as follows:

11.2.1 SHORT TERM PLANNING

- Life insurance policy to get 30 days grace period for the payment of renewal premium.
- Considering COVID-19 situation, the insurer is advised to extend grace period of re-newer premium payment date so that the policy does not become obsolete.
- Due to limited operation of private and public transport, most of the vehicles literally lie inoperative. Therefore, existing motor car insurance period to be extended without taking extra premium.
- For health insurance policy, insurers are advised to allow customer to avail re-insurance facility without charging late fee as well as not closing their policy. In order to avoid the closure of the policy, the insurers are requested to contact with the policy holders beforehand.
- Steps have been put in place to settle the issue of matured insurance policy with 30 days instead of 90 days through using lists generated from company’s own data base without waiting for customers’ submission of application in this regard.
- Time limit for the reports and returns, which the insurance companies submit in compliance with the insurance law and practices, may be extended.
- In case of holding board meeting of insurers, the meeting might be conducted either through video conferencing or any other means of audio-visual communication.
- Importance has to be given on strict enforcement of law (out of insurer’s investable fund: 30percentfor life insurance and 5percentfor non-life insurance) obliging the insuring company and corporation to invest in government securities. This would support Government to maintain cash liquidity and enable Government to adopt investment plan not only in treasury but also in other sectors.

11.2.2 Mid-term Plans

- In the wake of IMF's expression of concern about global food scarcity and famine, a good number of measures have been initiated in the agricultural sector to stave off the looming food crisis in line with the Prime Minister's instructions. Adoption of plant insurance is the key to fighting the adverse impact of climate change to protect agriculture from free fall.
- IDRA may facilitate VAT exemption on plant insurance premium for the sake of risk management.
- In the interest of industrialization, insurance premium can be reduced through gradual minimization of tariff. Recently, IDRA has reduced tax rate in some sectors including BGMEA, BKMEA, and BTMA.
- Introduction of effective health insurance policy for the people of the country is required to build up a financial security system to tackle various health risks including COVID-19. Initially efforts have been taken to bring the Government employees under health insurance coverage. Soon after the completion of the job of bringing them under health insurance coverage, the steps will be taken at a large scale to ensure health insurance for people from all walks of life. It is worth noting that IDRA and Life Insurance Corporation have almost finished their task of implementing health insurance project for Government employees.
- Insurance companies may diversify their distribution channels in order to enlarge their business capacity. Subsequently, insurance driven savings instantaneously add value to the economy and that lead to play an effective role in economic development. Insurance companies invest their savings/money in banks/financial institutions and banks/FI invest that savings /money for promotion of industrialization. This type of rational capital flow escalates the pace of industrialization and multifaceted development works. Industrialization and development activities are also the keys to creating employments for the un-employed people and would result in the establishment of economic stability and sustainable economy.
- In tune with the customers' requirements, the insurance companies may add variations in their policies.
- As the insurance sector works under Financial Institutions Department, the Honorable Prime Minister has instructed all the financial institutions to strengthen all kinds of corporate social responsibility (CSR) fund and speed up other related activities. During any crisis moment of society, particularly ongoing COVID-19 like catastrophic situation, a significant share of this CSR fund might be utilized for the betterment of people.
- The desired goal of achieving 4percentpenetration target by 2021 might be possible through multiplication of distribution channel as well as bringing about diversification in insurance policies. IDRA is persistently and tirelessly working on the inclusion of insurance with the economy.
- Formulate a plan to bring health risk of the autistics and Neuro Developmental Disabilities (NDD)and death risks of their guardians under insurance coverage.
- With a view to ensuring country's economic development, insurance facilities are prevalent at grass root levels. ''Micro Insurance'', the maiden innovation for Bangladesh in insurance sector, has been performing an impressive job in promoting economic development and reducing poverty through providing compensation to lower income people. Efforts have been in the air to adopt one or more micro insurance along with 'Agricultural Insurance for Farmers of Haor Region' to combat the adverse impact of climate change. Implementation of these schemes would support 'natural disaster hit lower income people' and

ultimately it could play a pivotal role in building up Father of the Nation's long cherished dream of Golden Bangla.

- In a bid to safeguard bank and financial institutions and depositors, introduction of mandatory deposit insurance alongside the existing credit shield insurance has been remained under active consideration.
- Having insurance policy prior to availing Government services such as trade license, fire license, building plan approval, factory plan approval etc. should be made obligatory for creating financial defense shield against the risks associated with business and for achieving desired penetration target of insurance industry.
- All insurers might be advised to lawfully invest in long-term bond associated with infrastructure development projects. This would boost investment in bond and thus help to grow our economy.

11. 3 MEASURES TAKEN BY MICROFINANCE REGULATORY AGENCY (MRA)

As like as Banks and FIs, MFIs have been severely affected due to outbreak of COVID-19 pandemic. In response to countrywide general holiday to contain the outbreak, microfinance activities were hampered. As a result, loan disbursement, loan recovery, savings and outstanding loan amount have decreased substantially. Although the microfinance activities were postponed, the employees of the microfinance institutions (MFIs) kept working from the front in various social awareness programs and other activities like distribution of food and medicine. Moreover, the MFIs distributed cash assistance and other materials including masks, hand-sanitizers etc. to the customers during the pandemic at their own expense.

It is to be noted that, 759 MFIs licensed from Microcredit Regulatory Authority (MRA) with almost 20,000 branches nationwide and 1.6 lac[33] employees are providing services to more than 30million customers (of which 90percent is woman) and disbursed BDT 1600.00 billion in the FY19. Almost 68percentloans went to agricultural sector and almost half the amount was disbursed to small entrepreneurs including agri-entrepreneurs. Like the medium and large sectors, country's microfinance sector was also adversely affected in the COVID-19 pandemic. To save the MFIs from the losses incurred due to the pandemic and to create a passage for recovery, MRA has taken the following measures.

11.3.1 Steps Taken To Ensure Stability In The Microcredit Sector

In order to start full scale operation of MFIs and to increase loan disbursement, strengthen supervision and monitoring, providing refinance to affected customers, regularization of the overdue loans, reduction of operating cost, normalization of loan activities, maintaining health guidelines and social distancing and to maintain stability in this sector, the following steps were taken:

- In order to prevent the poor borrowers from the adverse situations caused by the pandemic, MRA directed the MFIs not to collect any installment/outstanding amount/overdue amount till 30 June'20[34].
- During the pandemic period, no borrower would be forced to pay any installment/outstanding amount. MFIs were also advised to provide fresh loans in this emergency situation[35].
- MRA formed a Monitoring Cell to oversee the overall situation and to solve the problems of the borrowers and MFIs during the pandemic period. The cell is headed by a Director of MRA and consists of 8 Deputy Directors.

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[33] 1 lac = 0.1 million.
[34] MRA Circular Letter No. 53, dated 22/03/2020.
[35] MRA Circular Letter No. 54, dated 25/03/2020.

- Through coordination with the related departments of the Government, MFIs distributed awareness leaflets, installation of hand-wash facilities, distribution of disinfectants, establishment of quarantine centers/treatment facilities and providing destitute with emergency foods and medicines.
- MFIs were instructed to continue providing the employees with salaries and allowances based on respective salary scale.[36]
- MFIs still continue distribution of emergency health materials from their own sources and foreign funds or under different schemes.
- The Monitoring Cell is advising MFIs to continue their activities maintaining proper coordination with the related government agencies.
- A 3-member quick response team was formed to provide necessary assistance to the infected COVID-19 patients of the Authority.

11.3.2 Future Plan To Deal With The Impact Of COVID-19

To ensure the rising trend of loan disbursement of MFIs, enhancing technical assistance for income generating activities of the members, taking initiatives for implementing different tasks by grading the branches of the MFIs, continuation of refinance schemes for the affected borrowers, strengthening the loan disbursement activities, maintaining health directives and social distancing and for the betterment of the microfinance sector, the following plans have been undertaken:

- Bangladesh Bank has formed a refinance scheme of BDT 30.00 billion to provide loans at 9 percent interest rate for the affected borrower of the MFIs.
- 68 percent of the total loans disbursed by the MFIs goes to agricultural sector. MFIs are disbursing 20 percent or BDT 220.00 billion to the farmers and poor borrowers through Bank-MFI linkages as per Agricultural and Rural Credit Policy and Program of Bangladesh Bank and other programs. In these circumstances, to achieve self-sufficiency in food production along with transforming agriculture into an export earning sector and to supply the marginal entrepreneurs with adequate funds, proper steps will be taken to double the funds from banks to MFIs i.e., to raise the funds to BDT 420.00 billion along with incorporating the MFIs into the government declared stimulus package for the agricultural sector by the Bangladesh Bank.
- 40-45 percent of the total loans disbursed through the MFIs are going to the small entrepreneurs and this rate is going higher day by day. Now-a-days MFIs are providing cluster financing under value chains, which ensures sustainable development of the country along with creating employment and graduates the ME borrowers to create ideal SME customers for the Banks and NBFIs. In this regard, MRA would take initiative so that Bangladesh Bank would include the MFIs like the Banks and NBFIs in the government declared stimulus package for the SME Sector.
- Taking initiatives so that MFIs can borrow from foreign sources to lend to micro and small entrepreneurs through easing of existing rules of Bangladesh Bank.
- Allowing the MFIs to collect more fund from own sources through amendment of the existing rules and regulations and take necessary steps for ensuring salaries for employees of the MFIs suffering from cash problems.

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[36]MRA Circular Letter No. 56, dated 05/05/2020.

- Disbursing fresh loans to farmers for continuous production of crops and other products and providing working capital to small entrepreneurs along with providing refinance and allowing additional time for repayment of existing loans.
- Taking necessary initiatives for repayment of principal by MFIs against loans taken from banks and NBFIs between 01 March'20 to 30 June'20 through providing additional time and interest rebate applicable from 01 March to 30 June 2020.
- New product design and necessary policy adoption through time bound research activity and market survey.
- Encouraging the microcredit customers by providing subjective training and adopting various motivational steps in order to overcome the ongoing crisis and to involve them afresh in economic activities.
- Monitoring the overall situation through continuation of activities of the Special Monitoring Cell for the required time period.

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CHAPTER 12: CONCLUSION AND THE WAY FORWARD

COVID-19 has brought up unpredictable challenges to the global financial system. The economy of Bangladesh was also overwhelmed by many domestic and external challenges stemmed from this pandemic. In this connection, this report attempts to identify and illustrate the transmission channels through which shock waves of COVID-19 have propagated into various segments of the real economy. The report also highlights on the impacts of the pandemic on real sector, fiscal sector, external sector, monetary and financial sector of the economy by analyzing their implications for the financial system of Bangladesh in the light of a financial stability framework. The study also incorporates Government's befitting measures, Bangladesh Bank and other financial sector regulators' policy responses to mitigate the adverse impacts and move forward the economy towards its normalcy. While discussing the impact of the pandemic, the report also considers FSD's own projections, findings of perception survey conducted on the banks and FIs.

COVID-19 has affected both demand and supply-side of the real sector of Bangladesh economy considerably, which was partly reflected in slow growth of GDP in FY20. Though the agricultural sector shows some resilience despite the pandemic and other natural calamities, the real economy has experienced major slowdowns in the manufacturing and service sectors. The manufacturing sector has been affected not only due to the demand-side shocks but also through the import channel as the pandemic has restricted the import of necessary raw materials for production from the major import partners like China and India. Likewise, the service sector has been heavily interrupted by various containment measures. Evidences also indicate that each sector has been gaining their momentum and in the process of getting back in track for recovery. Moreover, the initial rise in price level (point-to-point general inflation) in April'20 has been subdued in May'20 by government's better supply-chain management of food, though a small hike is observed during the latter months due to price rise in international market. In addition to this price stability, financial stability implications from real sector does not appear so grave as impacted manufacturing sector is gaining a quick upturn while both service and agriculture sector have lower exposure to bank's credit. Still, the government and Bangladesh Bank need to keep focusing on real sector's progress to ensure the economic and financial stability, by smooth implementation of the declared stimulus package while furnishing other policy and supervisory supports.

External sector has been impacted by the ongoing pandemic immediately after the COVID-19's outbreak in China, the largest import partner of Bangladesh. On the other hand, COVID-19's severe impact on USA and Europe dampened our exports as many export orders had been cancelled and demand was slashing due to continuous spread of the virus in advanced economies. However, both export and import rebounded in the latest quarters as the initial panics of pandemic are gradually being phased out. Foreign remittance, despite all odds, observed substantial growth and played a crucial role in accumulating foreign exchange reserve during pandemic. The growing foreign exchange reserve is giving the economy a solid confidence against the unwanted shocks. External debt, though increasing, still remains within the safe territory. However, FDI should get more attention of the authorities as it may partially alleviate the external debt burden and may further strengthen the external sector's stability. Besides, market and product diversifications of exports are vital to absorb the demand-side shock more smoothly. Despite current satisfying situation in external front and upcoming optimistic future, the management of external sector has to be meticulous as instability in any part of the world can quickly transmit in our economy through external exposures.

On the fiscal front, growth of revenue collection was positive amid the interruption of pandemic. However, this growth could have been more in the absence of economic fallout due to COVID-19. Lower income, lower consumption and restricted foreign trade due to widespread economic shutdowns, among others, have directly impacted the targeted revenue collection. Though both domestic and external financing are in rising trend to finance the fiscal balance, the gap is still in comfort zone considering different fiscal sustainability parameters. Again, despite increased government's borrowing from the banking sector in FY20, banking system, as a whole, seems to be capable of accommodating the private sector credit demand without any crowding out.

Banking sector, until now, has well-absorbed the shocks of COVID-19 pandemic propagated from real, external and fiscal sectors as evidenced by the major indicators such as CRAR, NPL and ROA. Besides, policy relaxation along with refinance facilities provided by the central bank and fiscal support as well as other measures taken by the Government partially helped the banking system to withstand this unprecedented shock. Credit growth has got the momentum as indicated by 12.5 percent higher loan growth as of December'20 compared to December'19. Sizeable stimulus package of BDT 1213.53 billion supported by central bank's refinance schemes, prudent monetary policy and other proactive policy measures give the positive signals to the market and facilitate the economy to turnaround. Up to December'20, significant part of the stated stimulus package has been disbursed and implementation of the rest seems to give further impetus to the economy. While quality of the credits has to be ensured, agricultural and CMSME sector should be given proper focus during implementation of rest of the stimulus package. However, projections of banking sector indicate that the current manageable situation may not persist as weaknesses may prevail in some specific category of banks. Particularly, SCBs' and DFIs' non-performing loans might be higher once the regulatory relaxation is phased out unless their credit management and recovery practice are tightened.

Money market was mostly stable due to the proactive policy initiatives by the central bank. Bangladesh Bank steered the CRR, Repo Rate, ADR and other policies, which helped the money market to remain stable. On the other hand, capital market's initial reaction to the COVID-19 was overly pessimistic. However, the impact appears to be short-lived, and the market regained its confidence and started to rebound following Government's declaration of sizeable stimulus packages, BB's expansionary monetary policy, robust growth of wage earners' remittance and resumption of major economic activities.

Despite the regulatory relaxation on loan and lease classification, the gross NPL ratio of the FI industry exhibited an upward trend mainly due to its long historical accumulated outstanding of non-performing *Bad/Loss* loans. Yet the majority of the FIs projected that their recovery rate of loans and leases would improve in the approaching quarters. High NPLs resulted decrease in FIs' CAR slightly since March'20; however, the CAR remains at 14.3 percent at end-September'20, higher than the minimum regulatory requirement of 10.0 percent. Overall, though the market perception survey indicates a likely improved performance of FIs in 2021, improvement in NPL management would remain the key challenge for this industry in the coming quarters.

Asset size, premium and total income of the insurance sector were stricken by the pandemic heavily due to depressed international trade and local business activities as well as ban on local and international transport. Consequently, the growth in gross premium collected by both life and non-life insurance companies declined. The total asset of insurance sector to GDP ratio has decreased substantially in March and June quarter-2020 from December quarter-2019. However, the sector is expected to recover in the following quarters due to resumption of economic activities related to insurance business.

The COVID-19 pandemic also did not spare the MFIs of Bangladesh. MFIs' income-expenditure, loan disbursement, recovery and savings collection were considerably affected. Their asset quality also deteriorated slightly. However, Bangladesh Bank has facilitated an exclusive refinance scheme for MFIs amounting BDT 30 billion with a maximum interest rate of 9 percent at borrower level. Quick implementation of the stimulus package along-with close monitoring would facilitate speedy recovery of the sector.

In sum, the intensity of the economic damage due to shock waves of the pandemic does not seem to be as traumatizing as many other countries. The economy and financial system of Bangladesh appear to be resilient and recovery is really promising. Nevertheless, the authorities may exercise the following policy options to restore the accelerated growth trajectory of the economy while strengthening the financial system's stability:

a) Rationalization of Banks' Dividend Payout Policy

Dividend regularization is one of the pre-requisites for continuous development of a healthy and vibrant financial market. On the other hand, banking sector's sound health is essential for smooth functioning of financial market as well as continuation of high growth profile of the country. However, the sector's post-COVID-19 resilience is yet to be understood. Globally, it is assumed that gradual withdrawal of regulatory relaxation and excess liquidity, post-COVID-19 period would be challenging for banks and financial institutions and they are therefore making appropriate adjustment in their balance sheet to meet the upcoming challenges. To make a balance between a healthy capital market and a sound banking sector for the sake of maintaining pre-COVID-19 high growth trajectory of the economy, dividend payout policy needs to be revisited and rationalized. This initiative may enhance banking sector's capital to absorb any unexpected losses, support the financial market with adequate liquidity and stability and flow of funding to the overall economy.

b) Introduction of Bangabandhu Centenary Bond (BCB)

Government of Bangladesh may float a special bond to mark the *100th Birth Anniversary* of Bangabandhu Sheikh Mujibur Rahman, the Father of the Nation to materialize his long-term vision. To make Bangladesh a prosperous and developed nation, as Bangabandhu envisaged, this bond's fund can be used for Bangladesh's transition towards a developed economy by 2041. Fund of this special purpose bond may assist in financing the country's structural changes for generating mass-scaled employments, socioeconomic advancement and empowerment, advancement in digitization and upcoming mega projects if required. Besides, fund of this bond might be useful for reviving the economy from the COVID-19 shock as well.

BCB can be a 30-year development bond. It might be issued both in local and foreign currency to attract the local and non-resident Bangladeshi investors. Tax exemption, inflation linkage, quarterly coupon, small denominations and put options can be the special features of this bond to attract the investors.

c) Introduction of COVID-19 Pro-poor Bond (PPB) for offering Informal Sector Job Losing Workers to participate in Public-Works Projects

Bangladesh Government can issue a special social safety bond to address short-term socio-economic setback due to COVID-19 pandemic. The proceeds of this bond could be used for the people who have lost their jobs and whose livelihoods have been severely affected during this pandemic, pulling them again out of the poverty line through ensuring employment security. Particularly, this bond can fund projects to tackle unemployment emanated from the pandemic. In particular, government could announce some public work projects for the jobless informal sector workers for a limited time period as a number of countries already took such initiatives.

PPB can be tax-exempted; can contain put options and other facilities (small denominations and monthly coupon) to attract investors. Moreover, the socio-economic goals and positive social impact of this bond could be publicized widely. The maturity of this bond could be 5 to 10 years. General public including Non-resident Bangladeshi, banks, NBFIs and other financial institutions might be eligible to invest in this bond. As worldwide many social bonds are increasingly getting popular, PPB in Bangladesh might be promising one.

d) Temporary Tax Rationalization for SMEs

Healthy growth of SME sector is vital from employment perspective. However, as this sector has suffered heavily from COVID-19, Bangladesh Bank has provided refinancing facility to support the sector along-with Government's stimulus packages after the onset of COVID-19. In addition, Government could rationalize tax for SME sector for the time being for their quick recovery. Several countries also rationalized tax for this sector for a short tenure.