IOSR Journal of Economics and Finance (IOSR-JEF)
e-ISSN: 2321-5933, p-ISSN: 2321-5925. Volume 12, Issue 1 Ser. IV (Jan. – Feb. 2021), PP 24-29
www.iosrjournals.org

Macroeconomic Impact of Covid-19: A case study on Bangladesh

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Date of Submission: 20-01-2021 Date of Acceptance: 04-02-2021

I. Introduction

The global arena is currently facing a highly contagious disease named Coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Over 200 countries and territories around the world have been affected by this infectious disease. Originated in Wuhan, China, in December 2019 and soon spread rapidly worldwide to create one of the biggest health and economic crises in humankind's history. So far, around 90 million people have been affected by Covid-19, and around 1.9 million people died worldwide. (World Health Organization, 2020). Experts suggested following strict social distancing, restrictions on mobility, and isolation procedures to contain the spread of this disease. Numerous countries enforced lockdown and stopped the normal functioning of the economy to prevent the disease. This pandemic has created a prolonged financial and economic crisis that affects the lives of almost every human being on the earth.

The shutdown of the economy and restrictions imposed on the social movement forced the economic activities to operate on a limited scale. This unprecedented event can have a substantial impact on economic growth and prosperity. The unemployment rate has skyrocketed, and businesses were forced to shut down due to a liquidity crisis. The livelihood of people has been affected on a massive scale.

The first confirmed case of Covid-19 was detected in Bangladesh on March 08, 2020. The government took steps to lockdown the country for about almost two months. Except for the emergency services, the government halted all the services and restricted social gathering. Bangladesh Army was deployed to assist the civil administration and contain the spread of the virus. Major cities were divided and marked in green, yellow, and red zones to reflect low risk, moderate risk, and high-risk zones. Traveling, spiritual activities, educational institutions, and other business activities were closed during the period. The pandemic mostly affected lower, lower-middle-class, and middle-class people throughout the country. Relocation from major cities to rural areas took place in large numbers due to unemployment and economic hardships.

In 2018, the country's total health expenditure was around 2.34% of the total GDP. (World Bank Data, n.d). Due to this low investment in healthcare, the country was very much under-prepared to deal with this pandemic. This health crisis revealed the weak public health system and demanded more investments in the sector. The lockdown granted the government some time to prepare and distribute the essential equipment around the country. The health department and some private organizations constructed temporary hospitals throughout the country, and the government allocated special funds to combat the situation. Protective gears, masks, hand sanitizers, etc., were imported, produced and dispersed on a massive scale. The administration undertook massive testing work, and the testing kit developed locally to identify and isolate the Covid affected persons.

Figure: Covid Cases and Confirmed Deaths

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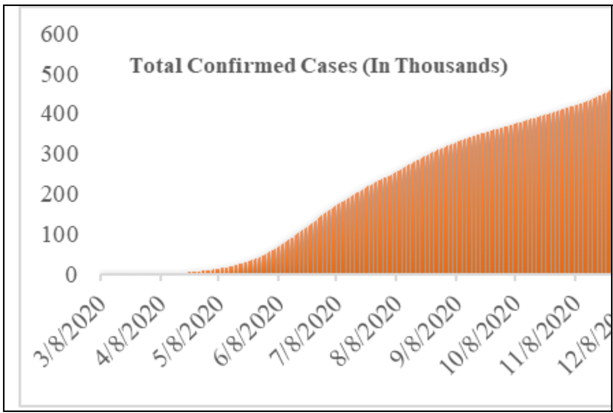

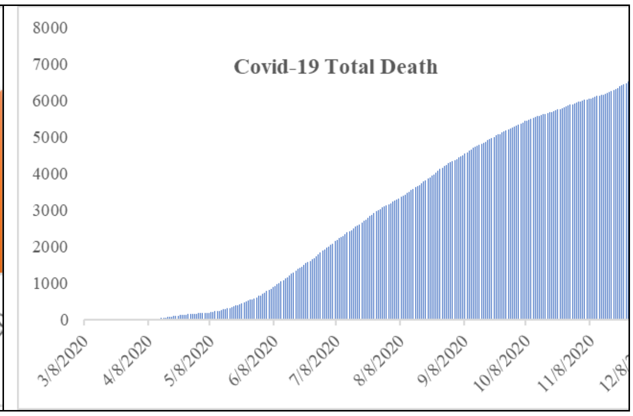

Data Source: World Health Organization

The paper discusses Bangladesh's economy's performance in both the pre-Covid era and within the Covid period. Before Covid, all the economic indicators were performing well, and the economy was achieving exponential growth throughout the last decade. The covid-19 shock intervened in the development of the economic sectors, and the magnitude of the shock is hard to determine.

Pre-Covid Economy

Bangladesh's economy was one of the fastest-growing economies worldwide, with an average Gross Domestic Product (GDP) growth of 7.41% in the last five years and 8.2% in 2019 (World Bank Data, n.d). Due to government policy changes and relaxation in investment regulations, the country achieves higher than expected growth. Domestic demand, comprising consumption and investment, increased by 11%, and export and remittance rose by 10.5% and 9.6%, respectively, in 2019. Industry and service sectors are the significant contributors to the GDP in the country. During the period, agriculture, industry, and service sectors grew by 3.9%, 12.7%, and 6.8%, respectively, on an individual basis (Bangladesh Bank, 2020b). The average per capita income reached $1855.74 in 2019 from $702.26 in 2009, with an average growth rate of 16.42% each year. The unemployment rate was 4.15% in 2019, which is one of the lowest in the world. The foreign direct investments (FDI) have observed enormous growth of 50.27% to reach $3889 million in 2019 compared to $2588 million in 2018 (Bangladesh Bank, 2020b). The portfolio investment, intra-company loans, and equity investment increased to $18.7 billion in 2019. The annual average consumer price index inflation rate was 5.59% in 2019, rising by 0.05 percentage points from 5.54% in 2018, primarily attributed to the rise in non-food inflation. (Bangladesh Bank, 2020a).

Credit growth is one of the critical drivers of GDP for the country. The Private sector credit growth witnessed a downtrend in 2019, whereas the public sector credit growth was substantial. The public sector credit rose by 54.3% instead of the 9.8% growth recorded in private sector credit. Funding requirements of the megaprojects and budget deficit mainly drive the public sector credit growth. In 2019 the deposit growth rate of 12.4% exceeded the credit growth rate, which depicts an increasing amount of financial institutions' liquidity. (Bangladesh Bank, 2020b).

Non-performing loans (NPL) are major concerns for the banking industry in the country. In March 2020, the state-owned commercial banks and specialized banks had an NPL ratio of 22.8% and 15.1%, respectively, which are the highest in the banking sector. Private commercial banks and foreign commercial banks both had an NPL ratio of 5.6% below the gross NPL ratio of the banking industry. At the end of the March quarter, the gross NPL ratio was 9%, slightly lower than the previous quarter. (Bangladesh Bank, 2020d)

Policy changes in the last ten years provided a strong boost in the arena of international trade. The aggregate export of the country grew by 7.5% on average in the last ten years. Export to GDP ratio reached 13.4% in 2019 though it was 15.4% in 2018. (Bangladesh Bank, 2020b). The country exports diversified products globally, but Ready-Made Garments (RMG), which comprises woven garments and knitwear garments, dominates the total export. (84.2% in 2019). Due to the rise in domestic consumption and capital investments, its imports are also growing considerably. In the import category, intermediate goods and capital goods dominate the volume to support GDP's rapid growth. The country's imports rose by an average of 10.71% each year for the last ten years, impacting the balance of trade massively. The balance of trade was negative for the last ten years, but the current account remained positive due to the strong remittance flow.

Despite weak global growth, the country witnessed an increased volume of remittance last year, which was around 18% higher than the preceding year. This increased flow of remittance is one reason why Bangladeshi Taka remains strong and resilient against USD and other global currencies. In contrast, neighboring countries' currencies depreciated in substantial percentage. The external debt to GDP ratio was around 20% for the country in 2019, below the ratio level of the neighboring countries and far below the alarming level. The vulnerability of financial instability remains low from foreign debt. The forex reserve reached $32.7 billion in 2019 which was enough to provide seven months of import coverage. (Bangladesh Bank, 2020b)

Impact of Covid-19

The global economy is hard hit, and almost all the countries felt the negative shock of Covid-19. The global economic growth in the first half of 2020 has been severely affected, and the global economic growth projection was at -4.9% in 2020. (World Economic Outlook, 2020). With the vaccine, the world economy can see a faster recovery than expected but may still face challenges soon.

Movements of Macro-Economic Indicators

Asian Development Bank (ADB) forecasted that Bangladesh's economic growth would be 5.2% in 2020 and 6.8% in 2021. The International Monetary Fund (IMF) projected that the country's GDP would grow at 3.8% in 2020 and 4.4% in 2021. World Bank forecasted the projected GDP growth of 2.0% and 1.6% for 2020 and 2021 respectively. All the projections are far below the usual level. The pandemic lowered the purchasing power of the consumers, and aggregate demand decreased significantly. Two and half months' lockdown puts the economy in a halted position and distorts the supply chain throughout the country. According to the South Asian Network on Economic Modeling (SANEM), Bangladesh's poverty rate may double to 40.9% from that prior to the onset of the pandemic. Informal sector which accounts for almost 80-90% of the jobs hurt the most. Between March and May, the average family income subsided by as much as 74%. (Welle, 2020).

According Mottaleb, Khondoker Abdul,et.al. “In Bangladesh out of a 60.8 million employed labor force, 24.7 million (40.6%) are directly engaged in the farm sector, of which 44.4% are paid on daily basis, and 36.1 million are engaged in the nonfarm sector, of which 18.4% are paid on daily basis”. Daily wage-based workers both farm and nonfarm sectors are severely affected by the lockdown and economic crisis as they don’t have adequate resources to live in. A study on national food security by BRAC revealed that during the 45-day lockdown period between March and May, the country's farmers faced a loss worth $6.66 billion. (Welle, 2020).

The inflation rate remains stable almost all over the years. A drop in purchasing power led to a reduction in demand for consumer goods and services. The consumer price index depicted that the twelve-month average basis inflation rate was 5.59% in December 2019, within 15 basis points range of that value throughout the year. The point to point basis calculation shows that the rate was 5.75% in December 2019, increased to 6.02%, and then drop back to 5.52% in November 2020. The non-food items' price fluctuations mainly influence the inflation rate. (Bangladesh Bank, 2020a)

In March 2020, inward remittance flow dropped by 12% to $1276.26 million and in April by 25% to $1092.96 million. Over 1.4 million migrant workers lost their jobs or returned to the country due to unemployment. Inward remittances to South Asia might fall by around 22.1% in 2020 due to the pandemic. (World Bank, 2020).

The exchange rate of Bangladeshi Taka against the US Dollars has dropped very slightly over the last few years (depreciation of 1.8% in 2019). However, the currency remains in a steady position in recent times. The country's exchange rate was in a competing position comparing to its neighboring country's currencies. The Real Effective Exchange Rate index remains elevated, which provides the currency's scope for depreciation to boost exports.

International Trade

In the first six months of 2020, exports have been dropped by 25.55% compared to the last six months of 2019. Exports were dropped to just $520.01 million in April 2020, which is the lowest in a decade and 80.97% lower than the preceding month. In the first 11 months of 2020, the total export value was $30,295.52 million, 15.40% less than $35,812.27 million in 2019. (Bangladesh Bank, 2020a). Due to strict lockdown by the government, reduction in orders from developed countries, shipping restrictions, etc., negatively affected the country's exports.

The country's import is heavily concentrated in China and India, which forced to have higher switching costs and less bargain power. In the first ten months of 2020, total imports reduced by 19.77% compared to the first ten months of 2019. The custom-based import data shows that in the first six months of 2020, total imports were $25534.8 million, which is 12.70% less than $29249.9 million in 2019. (Bangladesh Bank, 2020c) Although there existed a lower demand for consumer goods, the import of medical equipment, intermediate goods, and industrial raw materials drove the trade balance.

Although the country's balance of trade is negative for many years, the country entered the current account balance's negative territory in 2017. In July 18-June'19, the current account balance was -$4490 million, which further increased to -$4723 million in July'19-June'20. Despite the strong remittance flow, the rise in imports and a reduction in exports force the negative current account balance to increase by 5.19%. (Bangladesh

Bank, 2020c). The deficit in the current account balance may not be troublesome as this will boost future export capacity or substitute the import, which may ease the balance in the future.

Banking Sector

The banking sector is enjoying a modest growth in both time and demand deposits. In the first ten months of 2020, demand and time deposits grew by 13.70% and 11.96%, respectively, compared to the same period of 2019. Reduction in consumption and future uncertainty increased the deposits as consumers are more likely to hold money to combat the uncertainty. Total deposits are found to be significant in banking sector profitability and in explaining the variation in the Return on Asset for the banks. (Hossain and Ahamed, 2015)

The disbursement of agricultural and non-farm rural credit decreased by 2.27% and 8.43%, respectively, during July’19-June’20 period compared to July’18-June’19. For the July-November’2020 period, agricultural credit increased by 11.28%, and non-farm rural credit decreased by 6.25% compared to the same period of the previous year. Disbursement and recovery of industrial term loans in the July-September’2020 period was 29.65% and 45.53%, respectively, compared to the same period of the preceding year. Cottage, Micro, Small & Medium Enterprises loan disbursement decreased by 27.60% in the July-September’2020 period equated to the prior period. (Bangladesh Bank, 2020c).

The interest rate followed a decreasing trend throughout the year. At the beginning of 2020, the weighted average deposit interest rate was 5.69%, whereas, at the end of October, it decreased by 96 basis points to reach 4.73%. The interest rate spread dropped by 103 basis points to reach 2.94 in October 2020. Weighted average advance interest rate decreased by 199 basis points to reach 7.67% in October 2020 compared to 9.66% in January 2020. (Bangladesh Bank, 2020) The plummeted demand for loans and advances shrinks the interest rate spread in the second half of 2020. The gross NPL of the banking sector of June 2020 increased slightly to 9.16%. Private commercial banks witnessed a rise in .26% of NPL in that time period. (Bangladesh Bank, 2020d)

Capital Market

Capital markets all over the world were very resilient during the pandemic period. The Broad Index of Dhaka Stock Exchange (DSEX) rose by 21.31% to 5402.07 points in 2020 year-end compared to 4452.93 points in 2019. The DS30 index, also known as the blue-chip index, also increased by 36.41% to 2078.95 points in 2020. Market Capitalization of Dhaka Stock Exchange went up by 32% as of December 2020 compare to the same period in 2019 (Dhaka Stock Exchange, 2020). Market turnover increased almost four folds during the period.

The change in the country's capital market regulatory body also transformed the investors' confidence and attracted new investments. The trading volume in both stock exchanges increased substantially. The portfolio investment in foreign currencies in the July-November'2021 period was -$164 million (approx.), which demonstrates foreign investors are willing to keep liquidity in the pandemic period.

Public Finance

Covid-19 affected public finance by reducing government revenues and an increase in government expenditure to counter the pandemic. Tax revenue collections in the July’19-June’20 were 3.29% less than the July’18-June’19. Revenue collections plummeted in the first six months of 2020. Due to pandemic in the first ten months of 2020, total revenue collections were $21.65 billion (approx.), 7.08% less than the $23.30 billion (approx.) of the first ten months of 2019. (Bangladesh Bank, 2020c)

National Savings Certificate (NSC) is one the primary source of financing for the government. Higher NSC sale implies that the government is borrowing money at higher costs. In July-November'2020, NSC's total sale was 61.95% higher than in the same period the previous year. In the same period, the net sale of NSC was increased by 226.02% compared to the same period of the preceding year. Government net borrowing from the banking system lowered to $1.13 billion (approx.) in July-October'2020 from $4.00 billion (approx.) in July-October'2019. However, net borrowing from non-banking sources was $1.64 billion (approx.) in July-October'2020, which is 150.37% higher than $667 million (approx.) in the same period of the preceding year. (Bangladesh Bank, 2020c)

Actions by the Government and Central Bank

This pandemic has sent shock waves to every corner affecting all the lives and livelihood of the country. The pandemic has already damaged the economic and business activities in almost all jurisdictions and disrupted the global supply chain of international trade and industry. The adverse effects of the deep economic recession in the developed and neighboring countries have spillover effects in the country’s economy through various channels. To combat the economic recession and support economic growth, the government and the central bank have taken a multi-dimensional program and initiated a collective approach.

The government has declared stimulus packages with a combined monetary value of $12.20 billion, which is around 3.7% of the GDP, to stimulate various economic sectors. (KPMG, 2020). Bangladesh Bank-The Central Bank of Bangladesh is responsible for monitoring and guiding these stimulus packages' distribution.

For the export-oriented industries, $595 million (approx..) stimulus packages that consist of financing facilities for salaries payment for three months have been declared. The financing facilities will be available just at a 2% interest rate with a six-month grace period and need to be repaid in two years.

The government announced a $3.54 billion (approx.) working capital assistance fund for the Covid-19 affected industries. The interest rate is 9%, half of which the government will bear 4.5% as a subsidy, and the borrower will pay the rest. Small and Medium Enterprises (SME) will receive around $2.36 billion (approx.) working capital loan facilities from the government. The interest rate will be 9%, which is 4% borne by the borrower and 5% by the government as a subsidy. Bangladesh Bank (BB) established a Revolving Refinance Scheme of $2.95 billion (approx.) to support the finance where banks can borrow 50% of loan disbursed from BB at a 4% interest rate. (KPMG, 2020)

The Export Development Fund (EDF) has been increased to $5 billion from the existing $3.5 billion with just a 2% interest rate for facilitating the further import of raw materials. BB has announced a $590 million pre-shipment credit refinance scheme with a 6% interest rate where banks can borrow the central banks' funds at just a 3% interest rate.

The Central Bank has declared a $595 million (approx.) refinancing scheme for the agricultural sector. Agricultural sector credit holders can avail of 20% extra of the existing loan facilities under the scheme with a 4% interest rate from the Banks, which must be repaid within 18 months, including six months grace period. BB will provide the financing from its fund and refinance the bank with just a 1% interest rate. (KPMG, 2020).

There is also a $357 million (approx.) refinance scheme for low-income professionals, farmers, micro-business, which will also be financed from BB's own sources. The financing limit ranges from $1,000 to $35,200 (approx.) with 9% interest for two years, where BB will refinance it with a 1% interest rate. (KPMG, 2020).

The central bank announces a moratorium on loan payments until 31 December 2020 and that such borrowers will not be in default. The interest rate of Repo was reduced to 5.25% from 6% to facilitate easy financing. Required Cash Reserve Requirement (CRR) of the banks reduced from 5.5% to 4% on a bi-weekly average basis and 5% to 3.5% on a daily basis. Advances to deposits ratio rate increased to 87% from the existing 85% for conventional banks and 92% from the existing 90% for the Islamic bank. (KPMG, 2020). Banks and financial institutions can sell government securities to BB to enhance the liquidity position.

II. Policy Recommendation

This health crisis creates temporary shock, which can be responded through deliver financing to both households and firms. The banking system can be an effective channel to mobilize funds to households and businesses. Government and Bangladesh Bank should work together to combat the economic shock of the country.

Fiscal Policy

The government should undertake extensive fiscal measures to support the economy and minimize the impact in long term. The government already declared a stimulus to support the business and industries. Considering the long-term consequences, the government should formulate expansionary fiscal policy and provide subsidies for the economy's smooth functioning. Cash transfer to households and firms, interest payment subsidy and different tax concession revives the economy quickly. The small and Medium Enterprises (SME) sector is mostly affected by the pandemic. Special consideration is essential to keep this sector vibrant and contribute to economic recovery. An extraordinary increase in budgetary allocations in the healthcare and education sector is crucial to combat future crises. The unexpected collapse in the global oil price also creates an opportunity for the government to combat inflation and enhance economic growth.

The government should provide tax benefits/breaks and increase expenditure for both households and firms to increase consumption. Creating employment opportunities and shifting the aggregate demand curve is the most challenging tasks ahead. The rise in aggregate demand is substantial to move the IS curve rightward and boost the economy. On the other hand, the widening budget deficit may impact the sovereign country rating and exhibit an uncertain economic outlook of the country. The government should provide a credit guarantee for the firms to borrow financing from foreign sources. It will ease foreign funding for the firms and eradicate liquidity constraints.

Monetary Policy

The monetary policy framework should also focus on economic growth and keep inflation at a certain level. Expansionary monetary policy can create room for businesses to access liquidity and support economic downturn costs. The lower interest rate encourages new investments, international trade, and expand the business window. Positive monetary shock allocates more resources to the economy and boost economic activities. An effective transmission mechanism has positive significant impact in the real domestic output in both short and long run.

The central bank should extend the grace period and provide extra time to repay the existing credit lines. Forward planning will help to deal with the consequences of the inevitable surge in loan defaults. Banks and non-bank financial institutions may face capital shortage due to a rise in non-performing loans and demand for forbearance from the central bank. The constant supply of the broad money is crucial to increase the velocity and keep the system rolling to a growth level. Injecting liquidity in the financial system will relieve the banking system from balance sheet stress. The central bank should keep the policy rates at the current level for some period ahead. An active and vibrant bond market is required to ease the liquidity problem for both financial institutions and other business firms. The central bank should be vigilant in forecasting and addressing the spill over effect from the global financial crisis.

III. Conclusion

There are significant challenges in monetary, fiscal, and financial policies to stabilize the macroeconomic and financial environment. To excel the economy towards growth and prosperity, synthesis of government institutions and foresight of policymakers are the key drivers. Although the current economic shock of Covid-19 didn't put the economy in a precarious position, still long-term shockwave from global uncertainty can be highly disruptive. The shock in the informal sectors is hard to understand, so a combined macroeconomic framework architecture is vital for the economy. Policymakers should be aware of the situation and calculate the move decisively.

References

[1]. Bangladesh: Economy | Asian Development Bank. (2020, September 15). Asian Development Bank. https://www.adb.org/countries/bangladesh/economy

[2]. Bangladesh- Measures in response to COVID-19 - KPMG Global. (2020, April 13). KPMG; https://home.kpmg/xx/en/home/insights/2020/04/bangladesh-government-and-institution-measures-in-response-to-covid.html

[3]. Coronavirus Disease (COVID-19) Situation Reports. (2020). World Health Organization. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/

[4]. Current health expenditure (% of GDP) - Bangladesh | Data. (n.d.). World Bank Open Data | Data. from https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=BD

[5]. Financial Stability Report 2019. (2020).

[6]. GDP growth- Bangladesh | Data. (n.d.). World Bank Open Data. from https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=BD

[7]. Bangladesh Bank. (2020a). Bangladesh Bank Quarterly. https://www.bb.org.bd/pub/quaterly/bbquarterly/july-sept2020/bbquarterly.php

[8]. Bangladesh Bank. (2020b). Financial Stability Report 2019. https://www.bb.org.bd//pub/annual/fsr/final_stability_report2019.pdf

[9]. Bangladesh Bank. (2020c). Major Economic Indicators. https://www.bb.org.bd//pub/monthly/selectedecooind/magecoinddec2020.pdf

[10]. Bangladesh Bank. (2020d). Bangladesh Bank Quarterly. https://www.bb.org.bd/pub/quaterly/bbquarterly/july-sept2020/bbquarterly.php

[11]. Mottaleb, K. A., Mainuddin, M., & Sonobe, T. (2020). COVID-19 induced economic loss and ensuring food security for vulnerable groups: Policy implications from Bangladesh. PLOS ONE, 10, e0240709. https://doi.org/10.1371/journal.pone.0240709

[12]. Weighted Average Interest Rate. (2020). Bangladesh Bank; Bangladesh Bank. https://www.bb.org.bd/econdata/intrate.php

[13]. Welle, D. (2020). Coronavirus: Economy down, poverty up in Bangladesh | Asia| An in-depth look at news from across the continent | https://www.dw.com/en/coronavirus-economy-down-poverty-up-in-bangladesh/a-53759686

[14]. Hossain, M. S., & Ahamed, F. (2015). Determinants of bank profitability: A study on the banking sector of Bangladesh. Journal of Finance and Banking, 13(1), 43-57.

[15]. World Economic Outlook, October 2020: A Long and Difficult Ascent. (2020). IMF; International Monetary Fund. https://www.imf.org/en/Publications/WEO/Issues/2020/09/30/world-economic-outlook-october-2020

[16]. S. Mahendra Dev & Rajeswari Sengupta, 2020. "Covid-19: Impact on the Indian economy," Indira Gandhi Institute of Development Research, Mumbai Working Papers 2020-013, Indira Gandhi Institute of Development Research, Mumbai, India.

[17]. Dhaka Stock Exchange. (2020). Recent Market Information. Dhaka Stock Exchange; https://dsebd.org/recent_market_information.php

Faruque Ahame. "Macroeconomic Impact of Covid-19: A case study on Bangladesh." *IOSR Journal of Economics and Finance (IOSR-JEF),* 12(1), 2021, pp. 24-29.