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THE IMPLICATIONS OF COVID-19 ON MONETARY POLICY IN LIBERIA

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OVERVIEW

The conduct of analysis on the economic effects of the corona virus serves as an initial mechanism towards post COVID-19 economic recovery strategy. The objective of this work is to analyze the prognosis of COVID-19 on monetary policy with emphasis on the real, monetary and external sectors. The conceptual framework considers the effect of shock on productivity and aggregate demand, while the methodology for the analysis considers previous shocks and descriptive forecast, taking cue from the current economic dynamics. The data used for the analysis captured the real, the monetary and external sectors. The expansion of literature on country specific analysis of the implications of COVID-19 on monetary policy and effects on other economic indicators are the core contributions of this work.

The assessment shows that the pandemic is an involuntary shock, which induces an unpredictable magnitude of macroeconomic uncertainty and general pandemonium in the world. The shock is anticipated to reinforce contraction in real GDP growth to 2.5 percent, from the earlier forecast of 0.5 percent in 2020. The pass-through effect of COVID-19 is expected to widen real GDP loss of about US\$42.2 million (excluding informal, financial sector, unemployment losses). Inflation is projected to moderate to about 18.8 percent largely due to weak demand in the non-food components in the consumer price index (CPI) basket, but it is expected to vary on account of supply shock dynamics in the post COVID-19 era.

Constraints on monetary policy have further accentuated on account of increasing cash withdrawals in the financial sector triggered by 'panic buying' of basic consumables. Default payments on loans remain high at 21.7 percent, but expected to further worsen to about 30.0 percent, arising from the economic slowdown and unanticipated loss of jobs. This situation would inhibit capital and liquidity positions of banks for effective financial intermediation. However, it is important to note that since the outbreak of COVID-19 at the beginning of 2020, the banking sector has witnessed mixed, but relative stability in deposits from March to May 2020. Liberian dollar deposit decreased by 3.1 percent to L\$18.353 billion, while USD deposits increased by 1.8 percent to US\$455.883 million. Nevertheless, Government's commitment to deepen the financial markets through redemption of treasury instruments is expected to boost confidence for increased investment and development of the financial markets.

On the other hand, the external sector developments will depend on the capital inflows to support the government during the period of the fight against COVID-19. The international reserves position of the country, in terms of month of import cover, has increased marginally, but anticipated to remain low at 2.7. The Liberian dollar (based on end of period (EoP) and average exchange rates) are projected to depreciate largely driven by speculative decision of major vendors to restock. Due to weak global economic activities, personal remittance inflow has been declining as migrant workers are experiencing layoff.

As policy prescriptions to ease the effects and ensure trajectory of rapid economic recovery, the paper recommends for prioritizing stimulus supports to businesses and agricultural production, local procurement preference as well as strengthening of collaborative efforts to encourage wider acceptability of electronic modes of payments for transactions. Other efforts in support of the fight against the virus are contained in the recommendations of this paper.

1.0 Background

Corona virus (COVID-19) is an endemic disease that causes 15–30 percent severe incidence of respiratory tract infections in humans, especially the elderly and individuals with underlying illnesses (Fehr & Perlman, 2016). The slow recognition of the adverse effects of the pandemic has engendered unprecedented spread across the world. Prior to the COVID-19 outbreak, there has been several other outbreaks of pandemics in the recent decade. In 2002-2003, Sudden Acute Respiratory Syndrome (SARS), 2012, Middle East Respiratory Syndrome (MERS) and 2013-2015 Ebola. But none appeared to have equaled the consequences of COVID-19. Given the enormous socioeconomic drawbacks of the pandemic, actions to contain the spread demand concerted global efforts, including other complementary actions. One of such critical actions is the economic implications in respect to how policy can be adopted to absorb the impacts and pursue rapid economic recovery measures, hence the motivation of the assessment.

Every pandemic outbreak is inimical to economic development and macroeconomic stability. The socioeconomic effects are often severe, especially in countries with weak social protections or limited buffers to intervene (Ozili, 2020). Goodell (2020) argues that it is important to examine COVID-19 in relation to other past events that are somehow similar. Taking note from the previous experience, the outbreak of the Ebola virus resulted to economic and health challenges in West Africa from 2014 to 2015 (ECA, 2015; Dukuly, 2015). Out of the four countries in the Mano River Union Basin of West Africa, Liberia experienced the most death tolls of 3,508 out of the total positive cases of 8,157. In Guinea and Sierra Leone, the numbers stood at 1,781 out of 2,775 and 2,943 out of 9,780, respectively. The average mortality in the three countries was 40.0 percent (ECA, 2015). The Ebola pandemic outbreak also triggered contraction in economic activity and induced pressure on fiscal operations.

Efforts to contain transmission of the COVID-19 in Liberia are not only critical, but also contingent on assessing the adverse economic implications. The Government has facilitated some level of preparedness by identifying and equipping quarantine centers, instituting call for social distancing, ordering closure of entertainment and recreational centers, including schools, as well as avoidance of over crowdedness in banks and other public facilities. In support of the Government, the Central

Bank also took measures, including relaxation of credit rules, suspension of charges on mobile money and payments system facilities, and adjustment in banking hours.

The concern for further assessment is how policy response should be pursued to mitigate the impacts on the economy. It is therefore imperative to deepen economic discussions in order to ascertain the appropriate policy prescriptions to engender the right mechanism for easing the burden and accelerating post COVID-19 economic recovery.

Ramelli and Wagner (2020) elicit how the health crisis transformed into an economic crisis with amplified effects through financial channels. This paper specifically attempts to analyze the implications of health pandemic on monetary policy, including financial sector indicators such as deposits, loans and other portfolios as well as external sector developments. The contributions of this work are to expand literature on country specific analysis of the monetary policy implications of COVID-19 and explore how other economic indicators are impacted (Chinazzi et al, 2020; Chen et al, 2020; Fornaro and Wolf, 2020, Ozili, 2020).

The remaining parts of the paper are organized as follow. Section 2 gives conceptual analysis with emphasis on productivity and aggregate demand as well as sectoral perspectives. Section 3 provides the methodology for the assessment, while section 4 gives observations about the effects of COVID-19 on selected economic indicators in Liberia. The paper concludes with policy implications and recommendations in section 5.

2.0 Conceptual Framework

Fornaro and Wolf (2020), using a simple model, indicate that COVID-19 reflects a supply shock. The shock would inevitably generate some effects that constrain monetary policy and the economy at large. It is critical to elicit and understand the potential economic implications in order to inform the direction of monetary policy response.

In Figures 1, 2 and 3 below, we present a conceptual framework to analyze the economic impacts of the COVID-19. The conceptual framework relating to the effects of negative shock on output can be analyzed from the model of neo-Keynesian theory of employment, money and aggregate demand. As described by Fornaro and Wolf, 2020, Lorenzoni 2009, which this framework is built upon, it is notable that aggregate demand depends on productivity growth trajectory.

In Figure 1, the analysis shows that productivity can adversely be impacted as a result of shock. In this case, the health epidemic may lead to new equilibrium with downward shift in productivity from P to P'. As productivity lowers owing to the shock, the output reduces from Q to Q'. To restore equilibrium, a stronger intervention through stimulus fund or reduction in cost of capital in the financial sector would boost aggregate demand resulting to shift from AD to AD'. This framework is indicative of the need for monetary authority to respond to the effects of this health pandemic.

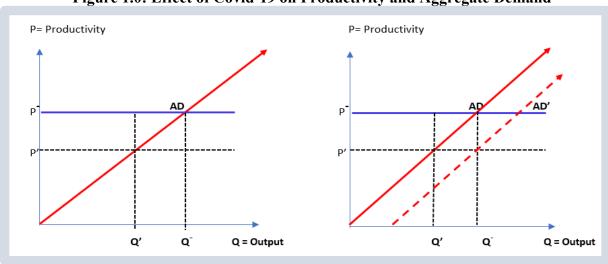


Figure 1.0: Effect of Covid-19 on Productivity and Aggregate Demand

Source: Fornaro and Wolf, 2020

In Figure 2.0, we display intersection of two upward slopping curves to explain the link between productivity growth and aggregate demand induced by investment. In other words, there is a relationship between the magnitude of aggregate demand and returns on investment, which has implication on the incentive to further invest. Again, with the assumption that the health epidemic is persistent to engender an initial supply-side effect, productivity will further slowdown as reflective by the downward shift in the productivity curve. This situation may affect income and lower demand, thereby adversely affecting investment and creating a vicious spiral. In response to this effect, an expansionary monetary policy is necessary for reversing the supply-side effect and further increasing aggregate demand.

Figure 2.0: Supply-side Effect

Source: Fornaro and Wolf, 2020

A shock may involuntarily cause an economy to experience both low economic activity and decreased output. This phenomenon sometimes leads to liquidity trap where conventional monetary policy is unable to absorb the shock. The aggregate demand (AD) curve in Figure 3.0 now exhibits a kink, which defines a zero lower bound and an economy in a liquidity trap. Here, the impact of the health epidemic results to lower productivity that creates two equilibria (Q''' and Q'). The equilibrium corresponding to Q''' defines the liquidity trap or stagnation trap suggesting expectation about low productivity in the future has the propensity of generating further reduction in output (Q). As a result of this liquidity trap, monetary policy instrument is ineffective in reversing the contraction in aggregate demand, thereby further causing a decline in productivity and investment. This is suggestive of the capability of the looming health pandemic that can further paralyze the fundamental drivers of growth through various channels. Given that monetary policy is inadequate to address the problem of stagnation, intervention of government through subsidies to firms as well as public investment initiatives is critical for boosting productivity and raising aggregate demand to ensure disappearance of stagnation and reduction of unemployment.

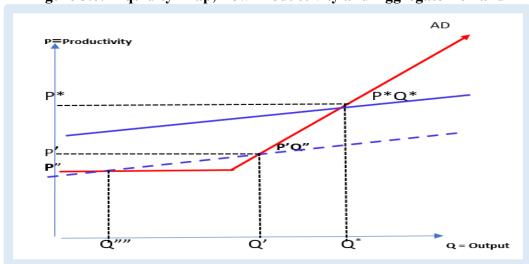


Figure 3.0: Liquidity Trap, Low Productivity and Aggregate Demand

Source: Fornaro and Wolf, 2020

2.1 Literature on Sectoral Effects

Ozili (2020) analyses the Covid-19 and argues that structural weaknesses can make the crisis more severe. Health pandemic has direct effect on productivity and by extension aggregate demand. The aggregate effect of change in international income or consumption pattern has impact on domestic aggregate demand, as domestic consumption is likely to reduce. Slowdown in trade may likely occur reflecting suspension of flights, trains, ships or other means of transportation.

These factors are transmitted into adverse effects on critical sectors, including primary (agriculture, mining, forestry), secondary (manufacturing and construction) and tertiary (accommodation, restaurant, transport, tourism, education). The exception from the sectoral perspective is most likely communication, which may increase with the intention of fast-tracking job-related tasks from home. In view of these factors, the market therefore responds with rising prices, fueled by speculation, lack of supply of goods and currency fluctuations, affecting regular domestic production patterns (ECA, 2015).

Regarding the public finance, the health pandemic goes with increasing expenditure demand, which crowds out expenditure in other critical non-health sectors. The slowdown in economic activity affects revenue mobilization of the government. Consequently, the burden of debt

servicing increases and the budget implementation further result to more widening of the budget deficit.

On the monetary policy front, which is the focus of this paper, the pandemic triggers most economic agents to withdraw money from banks for precautionary and speculative motives to maintain consumption. Currency in circulation tends to increase in response to the rise in prices, thereby potentially reinforcing inflation. Continued health pandemic results to increasing macroeconomic uncertainty that affects effectiveness of monetary policy instruments and financial sector stability (Zhang et al, 2020). As a result, non-performing loans rise, credit to private sector shrinks, and profitability is threatened.

3.0 Method of Analysis

This paper draws on lessons learned from the Ebola outbreak in relation to its macroeconomic impact (Goodell, 2020). Therefore, the paper assesses performances of key macroeconomic indicators during the immediate Pre-COVID-19 period (2018 -2019) and COVID-19 period (2020). Though the analysis assesses the impact of COVID-19 on economic incidence through real sector, the analysis mainly looks at the implications of coronavirus on monetary policy variables because of the direct or indirect link to monetary policy operations. The dataset used on key sectors of the economy mentioned in chapter 4 span from 2012 to 2020, in some cases, projections were made for to 2023. Analysis on the real sector data was from 2017 to 2023; monetary was from 2012 to 2020; the financial sector information was up to the first five months of this year and while the external sector information hovers from 2012 to 2020. The duration of the impact on Liberia is too short to use long series data; therefore, this analysis utilizes simple non-parametric method such as simple descriptive and forecast analysis. It is also important to note that a retrospective assessment of the impact of Ebola virus and perception analysis is used to analyze the expected impacts. The analysis applied in this work does not capture fiscal indicators due to the limited time.

4.0 Observations of the Monetary Policy Impacts of COVID-19

4.1 Real Sector (NON-COVID-19)

Following the effect of Ebola on the economy from 2014-2016 when economic growth averaged less than 1 percent, the economy registered a growth of 2.4 percent in 2017, while in 2018, growth

moderated to 1.2 percent. Recovery in the economy has been difficult with real GDP growth hovering in contraction on account of diverse structural constraints and departure of United Nations Mission in Liberia (UNMIL). In 2019, real GDP growth was revised downwards to negative 2.5 percent, from an earlier negative 1.6 percent projection. On the other hand, average headline inflation increased to about 23.4 percent and 26.9 percent, respectively, in 2018 and 2019. The inflationary developments were mainly on account of the depreciation of the Liberian dollar and government policy on administered prices.

4.1.1 Real Sector (COVID-19)

COVID-19 is having a toll on economic productivity, and the economic loss as proxy by real GDP is anticipated to widen. In a steady state atmosphere without COVID-19, the economy was earlier projected to moderate to 0.5 percent in 2020, but the pass-through effect of COVID-19 is expected to widen the contraction in growth to 2.5 percent in 2020, which would reflect a real GDP loss of about US\$42.2 million. Although, the primary sector is expected to improve marginally, the continual contraction in the secondary and tertiary sectors arising from the impact of COVID-19 will heavily weigh down on expected gains in the primary sector. Inflation is projected to moderate to 18.75 percent largely due to weak demand in the non-food components in the CPI basket. However, the continued disruption in supply chain from the main import sources could potentially reduce production and trigger sharp upward prices for commodities, especially food. This situation necessitates support of agriculture by the Government and the Central Bank.

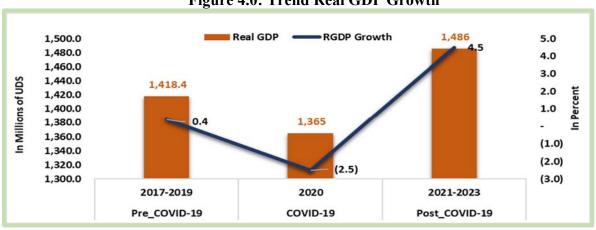


Figure 4.0: Trend Real GDP Growth

Sources: CBL and IMF Staff

4.2 Monetary Sector

COVID-19 will exacerbate the constraint on implementation of monetary policy as a result of the impending difficulty for the financial instruments to smoothly work, commercial banks's adherence to regulatory requirements and potential rise in demand for cash. Broad money supply (M2) expanded by over hundred percent to L\$121,006.3 million at the end of the non-COVID-19 era (2019), and now projected to expand by 1.7 percent to L\$123,091.0 million for the expected COVID-19 period (2020). M2 (COVID-19) is expected to be driven mainly by NDA. On the liability side, currency in circulation and demand deposits are also expected to increase M2.

At end-2019, NFA declined by 52.8 percent, while NDA more than doubled, when compared with 2015 during the Ebola period. For the expected COVID-19 period, NFA is projected to grow by 9.0 percent to L\$13,761.1 million, while NDA is expected to rise by 0.9 percent to L\$109,329.9 million, when matched against Non-COVID year of 2019. Deposits closely followed the movement in broad money supply throughout the reporting period.

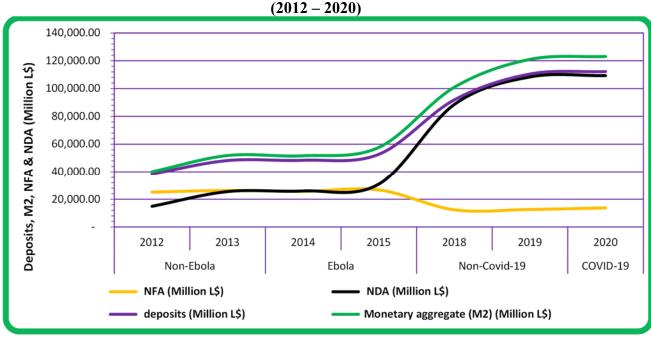


Figure 5.0: Movement in NFA, NDA, M2 & Deposits (2012 – 2020)

4.2.1 Financial sector

COVID-19 is adversely impacting the financial sector causing slowdown in economic activity. Cash withdrawals have continued to overwhelm the sector as a result of "panic buying" of essential items such as antiseptic products, assorted food items and petroleum products to guide against any form of uncertainty. However, the current movement in the banks' liquid assets (cash and balances at banks) shows some level of stability following the pronouncement of COVID-19 at the beginning of 2020. Loan repayment by sectors highly affected by the pandemic is likely to decline due to anticipated economic slowdown largely arising from policies and measures aimed at curbing the spread of the virus.

Since the outbreak of COVID-19 at the beginning of 2020, the banking sector has witnessed mixed, but relative stability in deposits from March to May 2020. Liberian dollar deposit decreased by 3.1 percent to L\$18.353 billion, while USD deposits increased by 1.8 percent to US\$455.883 million. Government deposits declined by 5.4 percent, while private deposits increased by 3.9 percent. However, aggregate deposits grew by 3.6 percent to L\$111.161 billion during the period under review. Figures 6, 7 & 8 show trend in private sector deposits in different currencies and Liquidity Ratio.

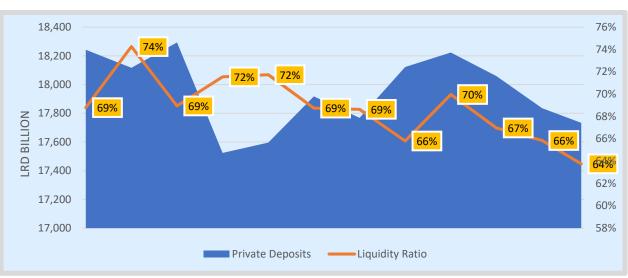
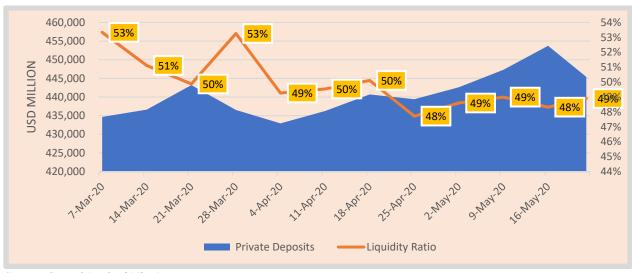


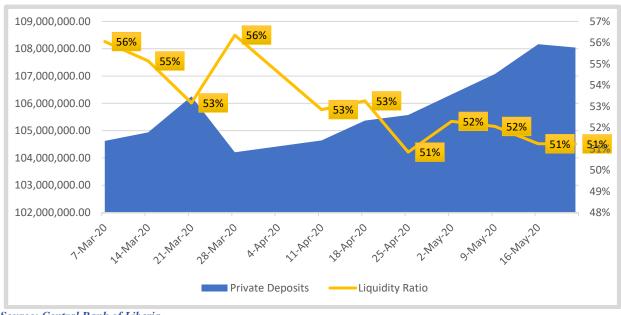
Figure 6.0: Weekly Deposits Trend-LRD (March-May 2020)

Figure 7.0: Weekly Deposits Trend-USD (March-May 2020)



Source: Central Bank of Liberia

Figure 8.0: Aggregate Deposits Trend-LRD (March-May 2020)



To assess the financial preparedness and resilience of the commercial banks in meeting the liquidity demand of the economy, the CBL conducted stress tests to evaluate the solvency of the banking sector based on capital, liquidity and non-performing loans (NPLs). The analysis accommodated some level of bias as it considers examiners' perceptions about the severity and the unpredictability of the duration of the crisis.

The test results on loans and other advances show that NPLs would increase to 30.0 percent, from about 21.7 percent (current NPLs ratio), which is likely to be driven by the sectors at high risk. On capital adequacy, the stress test results showed that the profitability of few banks is expected to be affected. The second test conducted on banks' liquidity shows that liquidity in the banking sector would reduce by about 13.5 percentage points to 24.0 percent but expected to remain above the minimum liquidity ratio of 15 percent. In term of individual bank, less than half of the banks will fall short of prudential liquidity ratio of 15 percent. The results from these shocks reflect financial stability concerns—which are being closely monitored by the CBL.

4.2.2 Financial Market Instruments

Financial market viability is being threatened by delay in redemption of treasury instruments due to COVID-19. Most (about 99 percent) of the financial instruments traded in the sector are purchased by commercial banks and the lingering pandemic would likely delay redemption of the instruments. At the moment, the total monetary value of instruments issued amount to about (L\$4.3 billion), which is yet to be redeemed. As at May 6, 2020, the unredeemed instruments totaled about L\$4.1 billion. As at May 28, 2020, if redemption is not actualized, the depth of the settlement would further expand by additional L\$2.2 million. This delay in redemption, which is partly exacerbated by COVID-19, may lower the anticipated future yield on bonds.

4.3 External Sector

4.3.1 Non-COVID - 19 Period (2018 – 2019)

During the period 2018-2019, prior to COVID-19 pandemic, Liberia's external sector performance remained challenged, however, towards the end it exhibited relative improvement. The deficit in trade balance improved with declines in payments for goods during the period, but receipts from

services and incomes against hike in payments for those accounts deteriorated. It was reported that, in 2019, the deficit in the current account narrowed mainly due to improvement in services and trade balance, despite the declines in receipts from secondary income and remittance inflows.

4.3.2 COVID - 19 Period (2020)

In 2020, the current account deficit (CAD) is expected to narrow to US\$594.55 million, from US\$674.42 million reported at end-2019. The improvement in the current account deficit is expected to be driven by increase in grants to the government for both COVID-19 initiative and budget support, followed by declines in trade deficit owing to reduction in mainly payments for imports. However, the reserve position of the country, in terms of month of import cover, is expected to increase marginally, but anticipated to remain low at 2.7, which is below the ECOWAS regional threshold of at least 3 months of import cover.

Table 1.0: Liberia External Sector Developments
(In Millions of US Dollar)¹
(2012 - 2020)

Epidemic/Pandemic	Non-Ebola		Ebola		Non-Covid-19		COVID -19
Years	2012	2013	2014	2015	2018	2019	2020
Current Accounts	(1,674.89)	(1,042.90)	(735.38)	(520.24)	(819.85)	(674.42)	(594.55)
Exports	255.57	552.54	509.74	290.83	516.96	539.33	453.04
Imports	1,322.17	1,188.14	1,816.72	1,551.40	1,041.14	933.83	831.27
Services net	(459.03)	(540.08)	(300.13)	(111.56)	(339.72)	(298.88)	(272.60)
Primary Income net	(862.60)	(562.49)	116.87	97.03	(109.33)	(96.35)	(86.43)
Secondary Income net	713.33	695.28	754.86	754.86	153.39	115.32	142.72
Months of import cover	2.0	2.0	1.1	1.7	2.3	2.2	2.7
End-of-period Exchange rate	72.50	82.50	82.50	88.50	157.56	187.93	72.50
Average Exchange Rate	73.52	77.41	84.84	86.19	144.10	186.43	73.52
CAB % nominal GDP	61.5	34.0	23.4	16.4	25.1	22.3	20.8
Nominal GDP	2,721.5	3,064.7	3,137.5	3,163.1	3,263.9	3,024.3	2,858.4

¹/Except for the Exchange Rates, and the months of import cover

4.3.3 Exchange Rates

The volatility in the End-of-Period (EoP) exchange rate and the Average (AVE) exchange rate is expected to be relatively smooth with no largely anticipated movement, similar to the exchange rate developments during the Ebola era. Restriction in travels and other quarantine measures are likely to reduce demand for foreign currency to facilitate imports, while expected foreign exchange inflows through donor support may ease foreign exchange pressure during the COVID-19.

For the expected COVID-19 period (2020), the EoP and AVE exchange rates are projected to depreciate by 14.5 percent and 9.6 percent to L\$219.85/US\$1 and L\$206.19/US\$1, respectively, compared with the rates reported in 2019. This depreciation will significantly be driven by speculative decision of major vendors to seek foreign currency in anticipation of inventory buildup to restock upon resumption of normal activity.

30.00 250.00 Von-Performing Loan (%) 25.00 200.00 20.00 150.00 15.00 100.00 10.00 50.00 5.00 2012 2013 2014 2015 2018 2019 2020 Non-Ebola Ebola Non-Covid-19 COVID-19 **End of period Exchange Rate** Average Exchange Rate non-performing loans (%)

Figure 9.0: Movement in Exchange Rates & Non-Performing Loans (2012 – 2020)

Source: Central Bank of Liberia

4.3.4 Remittances

Remittances (especially from the U.S.A.) play a major role in the Liberian economy. The massive inflow of capital has presented Liberia with the ability to improve its financial sector and increase inclusion of the poor by allowing them to have access to financial services including, savings accounts, credits, and insurance products.

Prior to Q4 2018, remittances inflow averaged about US\$118.0 million with net inflow averaging about US\$47.6 million. Consistent with weak global economic activity in 2019, remittance inflow was somehow low compared to the previous year. However, remittance outflow, in the same period rose when compared with 2018. Thus, resulting to a decline of net inflows of remittances.

As at Q3 2019, the trend in net flow begun to improve, reaching 2018 level in Q1 2020 and accounted for 1.7 percent of GDP. Though this level is significantly high and would have otherwise been reversed if COVID-19 impact was triggered faster in Q1, net inflow is expected to take a nosedive on account of the various lockdown and quarantine measures that have caused significant rise in unemployment rates for migrant workers abroad.

Looking ahead, the impact of COVID-19 is expected to have adverse effects on remittances. Inflow and outflow of personal remittances are expected to slow in the second quarter of 2020. Projections show that net inflow of personal remittances will settle at US\$43.1 million with inward and outward remittances projected to stand at US\$68.0 million and US\$24.9 million, respectively.

In Millions of US Dollar \$43.1 \$150.0 Outflow Netflow \$48.9 \$100.0 \$74.7 \$40.0 \$80.0 68.0 \$50.0 \$50.0 \$0.0 \$0.0 \$50.0 \$50.0 -\$100.0 \$20.0 Q1 Q2 Q2 Q1 Q_3 Q4 Q₃ Q4 Q1 -\$24.9 -\$47.2 \$0.0 2019 2020 2018 -\$20.0

Figure 10.0: Inflow, Outflow and Net flow of Remittances
Q1 2018-Q2* 2020
In Millians of US Dallar

Source: Central Bank of Liberia, *= Projections.

5.0 Policy implications

The inception of the economic take-off of Liberia, following the twin-shock effects of Ebola and global commodity price fall, is being dampened by the emerging shock of COVID-19 pandemic. Both the policy measures to contain the virus and health effect are eroding productivity and transmitting loss of output. The anticipated contractions in the manufacturing and services

subsectors as well as slowdown in mining and agriculture outputs are expected to translate into a total loss in real GDP of about US\$42.2 million (excluding job loss, informal activities) and decline in real GDP growth in 2020 to negative 2.5 percent, revised from earlier forecast of 0.5 percent at the beginning of the year. COVID-19 is expected to induce inflationary risks on account of continued disruption in supply chains of essential commodities and increasing demand for cash outside the banking sector. Monetary policy implementation will be constrained by neutrality of policy instruments to control liquidity, possibility of declining financial conditions and delay in redemption of bonds. In the external sector, the foreign reserve buffers are expected to remain low, relative to the 3 months of import covers benchmark, despite expectation of improvements in the current account.

5.1 Recommendations

Fornaro and Wolf (2020) suggest that drastic economic policy interventions are imperative to prevent negative supply shock. These developments from this assessment will require the following policy interventions, not only to contain the effects of the virus, but also to support post COVID-19 economic recovery:

Real Sector

- 1. The economic competitiveness of businesses, especially SMEs in hospitality industry, trade, agriculture and construction and other services subsectors, should be supported with consideration on provisions for loan restructuring and stimulus package;
- 2. Authorities should establish a national post-COVID-19 Economic Recovery Credit Facility through the support of multilateral development partners, and funded by the Liberian Government to provide loans to businesses critically affected by the COVID-19. Such businesses should include, among others, hospitality industry, trade, agriculture, construction and other services subsectors;
- 3. Authorities should enforce implementation of public sector policy of procuring at least 25.0 percent of goods and services locally, and establish trust fund for the provision of funding for the acquisition of the necessary infrastructure and equipment as a measure to promote domestic production; and
- 4. Monetary and fiscal Authorities should strengthen policy coordination especially in the areas of data/information sharing and policy harmonization to counteract inflationary pressure expected to be induced by supply disruption and exchange rate pass-through effect.

Monetary and Financial

 In order to support financial sector stability, the Monetary Authority should tighten supervisory regulation on financial institutions to strengthen loan assessment procedures, review additional risks metrics of new loan applicants and streamline the pace of new product development;

- The CBL should be empowered to ensure sufficient liquidity in the financial system by printing more Liberian dollar banknotes, of course being mindful of not undermining its inflation objective;
- 3. In the face of the expected impact of COVID-19 on banks' profitability, banks should be encouraged to finance their capital after the COVID-19 to deepen financial intermediation;
- 4. Authorities (MFDP, CBL, MOCI, LRA, etc) should muster collaborative efforts towards a national electronic payment policy for the wider acceptability of electronic payments, transfer of funds and mobile money transactions with the aim of achieving a significantly cashless economy; and
- 5. Authorities should institute measures aimed at building confidence in the financial instruments (CBL Bills and Treasury Bills), including timely redemption of all instruments.

External Sector

- 1. Authorities should endeavor to support the CBL in order to lift its suspension on the remittance surrendered policy with the aim of foreign exchange accretion to the Bank;
- 2. In the medium to long term, Authorities should re-track on the activation of tourism sector to attract foreign capital inflows and remain supportive of the appropriate "economic diversification in cash crops" to raise foreign exchange and strengthen the Country's Balance-of-Payments position

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Appendix

Tab	Table 2: Policy measures that African Countries have already taken (from March-May)							
S/N	Measures	African Countries						
1	State loans or credit guarantees for companies	Nigeria, South Africa						
2	Income subsidies for affected workers	None, no African country						
3	Tax deferrals	None, no African country						
4	Regulatory forbearance to banks and corporate debtors	Nigeria, Liberia						
5	Social security deferrals or subsidies	None, no African country						
6	Central banks grants debt repayment holidays such as loan moratoriums	Egypt, Nigeria						
7	Salary donation or pay-cut by top public officials to contribute to corona virus relief funding	Rwanda, Kenya, Malawi, Nigeria, South Africa						
8	President takes a pay-cut, donates salary	Mali, Algeria, South Africa, Rwanda, Malawi						
9	Provision of free water supply, food with government bearing the cost during the pandemic	Ghana, Rwanda						
10	Tax holiday	Ghana						
11	Countries that received support from foreign billionaires ¹¹	Nigeria, Zimbabwe, Ethiopia, Rwanda, Cameroon						
12	Countries that sought and received support from local billionaires	Nigeria, South Africa ¹²						
13	Cash payment to all citizens to help them cope with financial difficulty during the pandemic	Malawi, Nigeria						
14	Corporate bailouts	Nigeria						
15	Seeking debt forgiveness and other debt relief to reduce the economic impact of corona virus	Sub-Saharan Africa countries						
16	Adopting accommodative monetary policies by central banks such as reducing interest rate	Congo, Nigeria, Egypt, Kenya, Liberia						
17	Good Samaritans and philanthropists donating food supplies	Nigeria, South Africa						
18	Countries that received UN & UNESCO support	Angola						
19	Releasing prisoners	Nigeria, South Africa, Cameroon						

Source: Ozili, 2020

¹¹Billionaires that provided financial and non-financial support such as protective gear and test kits to some African countries are Jack Ma of Ali Baba Conglomerates, Mike Bloomberg.

¹²Billionaires such as Patrice Motsepe, the Oppenheimer and Rupert families in South Africa; Aliko Dangote & Folorunsho Alakija of Nigeria

Table 3: Foreign Aid (March-May)							
S/N	African Country	Amount (Millions of US\$)					
1	Egypt	World Bank	7.90				
2	The Gambia	The World Bank's IDA	10.00				
3	Sao Tome and Principe	The World Bank's IDA	2.5 ^g				
4	Congo	World bank (\$47m) and US Government (\$6m)	53.00				
5	Libya	US Government	6.00				
6	Rwanda	World Bank	14.25				
7	Malawi	UK's DFID	2.24				
8	Kenya	World Bank	60.00				
9	Senegal	World Bank	20.00				
10	Djibouti	World Bank	5.00				
11	South Sudan	World Bank	7.60				
12	Somalia	US Government	7.00				
13	Sierra Leone	World Bank	7.50				
14	Liberia	World bank	7.5				
		Total	210.49				

Source: Ozili, 2020

Table 4: Covid-19 Opportunities						
Country	Opportunities					
South Africa	(i) make private health care affordable to poor citizens					
Sub-Sahara African countries	(i) use legislation to pass an economic relief bill into law					
Mauritius	(i) preserve the existing social welfare system (ii) expand the capacity of the country's health system					
Guinea	(i) preserve the social welfare system					
Sierra Leone	(i) create a well-functioning distance learning education system					
Kenya	(i) improve self-sufficient food production (ii) improve the health care system					
Nigeria	(i) repair the public health system (ii) create a well-functioning digital economy (iii) establish a digital learning platform					

Covid-19 Update for Africa as of May 2020

S/N	Country	Covid-19		Total	New	Total	A ativo	Serious
5/1	Country	Total Cases	New Cases	Deaths	Deaths	Recovered	Active Cases	(Critical)
		Cases	Cases	Deaths	Deaths	Recovered	Cases	(Critical)
	Total:5	93444	216	2926	2	36971	53547	287
1	South Africa	17200		312		7960	8928	119
2	Egypt	13484		659		3742	9083	41
3	Algeria	7377		561		3746	3070	22
4	Morocco	7048	25	194	1	4037	2817	1
5	Nigeria	6401		192		1734	4475	7
6	Ghana	6096		31		1773	4292	8
7	Cameroon	3529		140		1567	1822	28
8	Guinea	2863		18		1525	1320	18
9	Sudan	2728		111		286	2331	
10	Senegal	2617		30		1133	1454	6
11	Ivory Coast	2153		28		1050	1075	
12	DRC	1731	102	61		302	1368	
13	Djibouti	1618		7		1033	578	
14	Somalia	1502		59		178	1265	2
15	Gabon	1502		12		318	1172	9
16	Mayotte	1370		18		627	725	9
17	Tunisia	1044	1	47	1	826	171	3
18	Guinea-Bissau	1038		6		42	990	
19	Kenya	963		50		358	555	1
20	Niger	914		55		734	125	
21	Mali	901		53		529	319	
22	Zambia	832	60	7		197	628	1
23	Equatorial Guinea	825		7		22	796	
24	Burkina Faso	796		51		652	93	
25	Chad	545		56		139	350	
26	Sierra Leone	534		33		167	334	
27	Tanzania	509		21		183	305	7
28	Réunion	446				354	92	4
29	Congo	420		15		132	273	
30	Ethiopia	389	24	5		122	262	
31	CAR	366				18	348	
32	Togo	338		12		107	219	
33	Cabo Verde	335		3		85	247	
34	Mauritius	332		10		322	0	
35	Madagascar	326		2		119	205	
36	Rwanda	308				209	99	

37	South Sudan	290		4	4	282	
38	Uganda	264	4		65	199	
39	Sao Tome and Principe	251		8	4	239	
40	Liberia	233		23	125	85	
41	Eswatini	208		2	87	119	
42	Mozambique	146			48	98	
43	Mauritania	131		4	7	120	
44	Benin	130		2	83	45	
45	Malawi	70		3	27	40	1
46	Libya	68		3	35	30	
47	Angola	52		3	17	32	
48	Zimbabwe	46		4	18	24	
49	Burundi	42		1	20	21	
50	Eritrea	39			39	0	
51	Botswana	25		1	17	7	
52	Gambia	24		1	13	10	
53	Namibia	16			14	2	
54	Comoros	11		1	3	7	
55	Seychelles	11			11	0	
56	Western Sahara	6			6	0	
57	Lesotho	1				1	

Source: https://www.worldometers.info/coronavirus