Bank of Ghana
Monetary Policy Report

Banking Sector Developments

Vol. 5 No. 4/2020 July 2020

1.0 Overview

The slowdown in the growth of key balance sheet indicators observed in Q1-2020 seems to have picked up somewhat during Q2-2020 in response to the various policy measures announced by the Bank of Ghana in March and May 2020. Banking sector data as at June 2020 shows total assets at GH¢139.0 billion at end-June 2020, representing a year-to-date growth of 7.8 percent for HY-2020, higher than the 3.5 percent growth recorded in Q1-2020. Total deposits as at end-June was GH¢90.0 billion, recording a year-to-date growth of 7.9 percent during HY-2020, a much better outturn than the 0.7 percent growth in Q1-2020. There are also indications of a gradual rebound in credit growth in response to the previously announced policy measures aimed at supporting credit extension, with new advances for HY-2020 totaling GH¢15.8 billion, a growth of 30.4 percent from the GH¢12.1 billion recorded during HY-2019.

The industry remains profitable although profitability continues to be adversely impacted by higher operational costs due to measures put in place to limit the impact of the pandemic on banks' operations to ensure business continuity and higher loan provisions due to repayment challenges by clients who have been severely affected by the pandemic.

That notwithstanding, the Financial Soundness Indicators (FSIs) of the sector remain strong. The industry's Capital Adequacy Ratio (CAR) remains well above the revised regulatory limit, while the NPL ratio remains lower than what was recorded last year, despite the marginal increases during the first half of 2020 due to the COVID-19 impact on credit growth and higher loan provisioning. Further, the industry remains sufficiently liquid while efficiency ratios remain appreciable.

The banking sector is expected to remain strong and resilient, and the policy measures introduced by the Bank of Ghana so far are adequate in supporting the sector to play its intermediation role while maintaining financial stability. The outlook remains positive as banks are also well-positioned to withstand mild to moderate liquidity and credit shocks due to strong capital and liquidity buffers.

2.0 Bank's Balance Sheet

The banking industry registered a strong annual growth in total assets during the first half of 2020 compared with same period last year. Total assets increased by 23.2 percent year-on-year to GH¢139.0 billion as at June-end 2020, higher than the 12.4 percent growth recorded a year ago. The increase in asset size was driven mainly by domestic assets, which recorded a higher growth of 25.3

percent at June-end 2020 compared to the 10.3 percent growth recorded in June-2019. Accordingly, the share of domestic assets increased to 92.8 percent from 91.2 percent over the period (See Table 1 below).

Gross loans and advances grew by 16.3 percent to GH¢45.0 billion in June 2020 from a virtually unchanged growth position a year earlier. Net loans and advances (gross advances adjusted for provisions and interest in suspense), grew by 14.7 percent to GH¢38.9 billion against a 4.0 percent growth in June 2019. Credit growth however slowed in Q1-2020 due to the tight credit stance by banks and low credit demand at the onset of COVID-19 but has witnessed some rebound in Q2-2020.

Investments in bills, securities, and equity as at end-June 2020 stood at GH¢58.8 billion, reflecting a higher year-on-year growth of 35.0 percent compared with the 21.5 percent growth at end-June 2019. The increase in investments growth was due in part to the special resolution bonds issued to Consolidated Bank Ghana (CBG) for the settlement of customers of the defunct Specialised Deposit-taking Institutions (SDIs) in Q1-2020, as well as additional build-up of investments in both short term bills and securities in Q2-2020. Consequently, the share of investments in total assets increased to 42.3 percent from 38.6 percent during the period under review.

Total deposits grew by 19.1 percent year-on-year to GH¢90.0 billion as at end-June 2020, reflecting continuous confidence in the sector, although it was marginally below the 22.3 percent increase recorded a year earlier. Deposits growth during Q1-2020 was marginal but picked up strongly in Q2-2020 as evidenced in the year-to-date growth rates. Deposits continue to be mobilised mainly from the domestic economy, with domestic deposits accounting for a share of 99.4 percent of total deposits. Foreign currency deposits (FCD) saw a sharp decline in growth to 13.6 percent from 37.9 percent a year earlier, suggesting lower holdings of FCD due to the relative stability of the local currency (See Table 1).

Table 1: Key Developments in DMBs' Balance Sheet

				Y-on-Y Growth (%)		year-to-date growth (%)			Shares (%)	
	Jun-19	Mar-20	Jun-20	Jun-19	Jun-20	Jun-19	Mar-20	Jun-20	Jun-19	Jun-20
TOTAL ASSETS	**112,817**	**133,538**	**138,977**	**12.4**	***23.2***	**7.3**	***3.5***	***7.8***	***100.0***	***100.0***
A. Foreign Assets	9,914	8,215	10,019	40.4	*1.1*	14.4	*(20.8)*	*(3.4)*	*8.8*	*7.2*
B. Domestic Assets	102,903	125,323	128,958	10.3	*25.3*	6.7	*5.7*	*8.7*	*91.2*	*92.8*
Investments	43,523	51,961	58,777	21.5	*35.0*	14.0	*7.6*	*21.7*	*38.6*	*42.3*
i. Bills	15,885	14,691	17,193	(18.0)	*8.2*	28.4	*(1.9)*	*14.8*	*14.1*	*12.4*
ii. Securities	27,214	36,817	41,359	69.8	*52.0*	7.2	*12.0*	*25.8*	*24.1*	*29.8*
Advances (Net)	33,942	39,283	38,940	4.0	*14.7*	6.8	*(1.7)*	*(2.6)*	*30.1*	*28.0*
of which Foreign Currency	11,813	11,524	12,268	25.5	*3.9*	18.5	*(4.9)*	*1.2*	*10.5*	*8.8*
Gross Advances	**38,667**	**44,818**	**44,970**	**(0.0)**	***16.3***	**5.9**	***(0.8)***	***(0.4)***	***34.3***	***32.4***
Other Assets	4,214	5,864	6,331	7.7	*50.2*	15.7	*14.4*	*23.5*	*3.7*	*4.6*
Fixed Assets	4,073	4,502	4,722	(6.7)	*16.0*	0.1	*(3.2)*	*1.5*	*3.6*	*3.4*
TOTAL LIABILITIES AND CAPITAL	**112,817**	**133,538**	**138,977**	**12.4**	***23.2***	**7.3**	***3.5***	***7.8***	***100.0***	***100.0***
Total Deposits	**75,572**	**84,048**	**90,041**	**22.3**	***19.1***	**10.7**	***0.7***	***7.9***	***67.0***	***64.8***
of which Foreign Currency	21,626	21,600	24,562	37.9	*13.6*	28.8	*(10.0)*	*2.3*	*19.2*	*17.7*
Total Borrowings	14,730	18,686	16,339	(17.9)	*10.9*	(0.7)	*(8.6)*	*(20.1)*	*13.1*	*11.8*
Foreign Liabilities	8,240	9,480	8,842	25.2	*7.3*	9.1	*(4.5)*	*(10.9)*	*7.3*	*6.4*
i. Short-term borrowings	5,045	5,925	4,481	33.8	*(11.2)*	16.5	*(11.7)*	*(33.2)*	*4.5*	*3.2*
ii. Long-term borrowings	2,825	3,154	3,850	17.8	*36.3*	(1.0)	*10.4*	*34.8*	*2.5*	*2.8*
iii. Deposits of non-residents	370	400	511	(10.5)	*38.1*	(0.6)	*12.4*	*43.4*	*0.3*	*0.4*
Domestic Liabilities	88,616	105,623	110,454	11.6	*24.6*	7.1	*4.1*	*8.9*	*78.5*	*79.5*
i. Short-term borrowing	6,444	8,592	6,931	(38.4)	*7.6*	(4.7)	*(12.0)*	*(29.0)*	*5.7*	*5.0*
ii. Long-term Borrowings	415	1,014	1,077	(68.4)	*159.3*	(52.7)	*(9.4)*	*(3.8)*	*0.4*	*0.8*
iii. Domestic Deposits	75,202	83,648	89,530	22.5	*19.1*	10.7	*0.7*	*7.7*	*66.7*	*64.4*
Other Liabilities	6,555	12,389	12,916	(1.2)	*97.0*	(10.1)	*65.6*	*72.7*	*5.8*	*9.3*
Paid-up capital	9,004	9,763	9,738	58.4	*8.1*	4.2	*1.3*	*1.1*	*8.0*	*7.0*
Shareholders' Funds	15,961	18,415	19,681	14.2	*23.3*	8.6	*4.7*	*4.7*	*14.1*	*14.2*

Source: Bank of Ghana

On a year-on-year basis, banks increased borrowings to support asset growth, as total borrowings grew by 10.9 percent in June 2020 compared with the contraction of 17.9 percent in the prior year. However, against the slowdown in credits during Q1-2020 and higher deposits mobilised in Q2-2020, banks have scaled back on borrowings with a year-to-date decline of 20.1 percent. However, long-term foreign borrowings, mostly from parent companies, recorded sustained increases during HY-2020.

The industry's shareholders' funds position remains strong, as higher capital levels have been enhanced by profit retention. Retained profits increased the reserves of banks and contributed to the growth in shareholders' funds by 23.3 percent to GH¢19.7 billion as at end-June 2020, much higher than the prior year's growth of 14.2 percent. The strong capital base and level of shareholders' funds continue to support the stability and resilience of the banking sector.

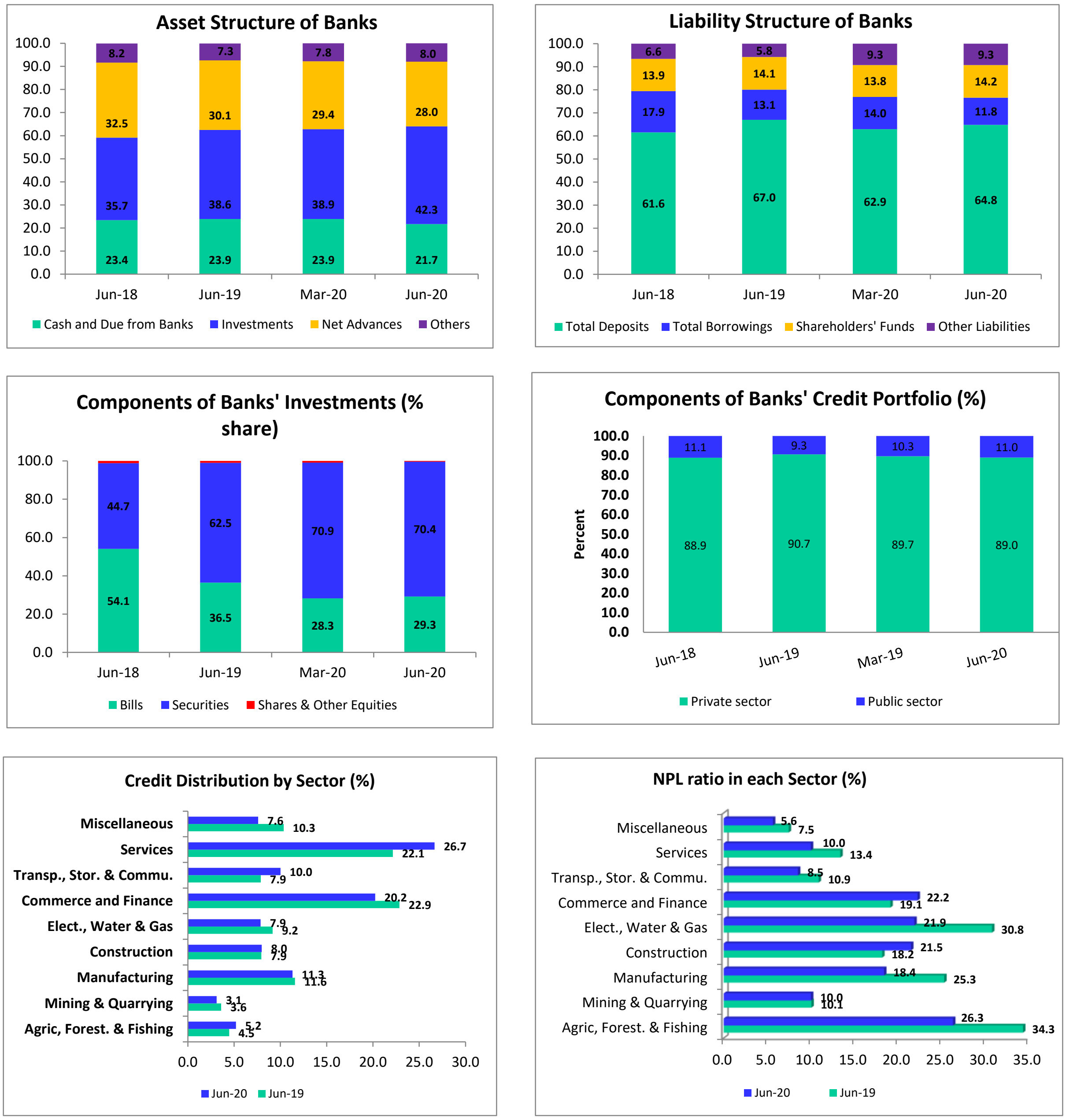
On the whole, the industry's balance sheet growth year-on-year continues to be stronger, while HY-2020 performance was quite robust as the pandemic-induced weaknesses in the growth rates observed in Q1-2020 seem to have improved somewhat in Q2-2020 in response to the various policy measures announced by the Bank of Ghana in March and May 2020. For instance, total assets year-to-date growth of 3.5 percent at end-March 2020 improved to 7.8 percent at end-June 2020 and was higher than the 7.3 percent recorded during the first half of last year. Similarly, Deposits, which grew year-to-date by only 0.7 percent at end-March 2020, recorded a stronger growth of 7.9 percent at end-June 2020, although lower than the 10.7 percent recorded for HY-2019. The initial pandemic-induced contraction in credit growth that characterised the first quarter of 2020 also moderated somewhat during the second quarter as demand for credit picked up and banks' stance on loans to enterprises eased. Credit growth is expected to further improve in line with banks' ease in credit stance, albeit moderately, in view of the economic slowdown and increased risk aversion that have characterised the COVID-19 pandemic.

2.1 Asset and Liability Structure

The asset and liability structure of the industry was broadly unchanged. Investments continue to dominate the assets side, with a share of 42.3 percent in June 2020, higher than the 38.6 percent share in June 2019. Loans and advances (net) followed with a share of 28.0 percent, lower than the 30.1 percent recorded at same period last year. The share of "Cash and Due from Banks" declined during the period to 21.7 percent from 23.9 percent, contributed in part by the release of the 2% primary reserves. Non-earning assets (fixed assets and other assets) however inched up to 8.0 percent from 7.3 percent (See Annexes Table 1).

On the liability mix, the share of deposits declined to 64.8 percent in June 2020 from 67.0 percent in June 2019, following the slowdown in the annual growth of deposits. Similarly, the share of borrowed funds, declined from 13.1 percent in June 2019 to 11.8 percent in June 2020. Shareholders' funds' relative share inched up marginally to 14.2 percent in June 2020 from 14.1 percent in June 2019. The share of "other liabilities" however increased to 9.3 percent from 5.8 percent due mainly to depositor funds from the Receiver to CBG in respect of repayment of funds locked up with defunct Savings and Loans companies and Finance Houses (See Annexes Table 1).

Figure 1: Developments in Banks' Balance Sheet & Asset Quality



Source: Bank of Ghana Staff Calculations

2.2 Share of Banks' Investments

Banks' investments in long-term debt securities increased during half year of 2020 compared with the same period in the prior year. The share of securities in banks' investment portfolio increased from 62.5 percent at end-June 2019 to 70.4 percent at end-June 2020, largely due to the bonds from the Receiver to CBG on behalf of depositors during first quarter of 2020 as mentioned above and increased investments during the second quarter of 2020. The share of short-term bills accordingly declined from 36.5 percent to 29.3 percent over the same comparative periods. Investments in shares and other equities, recorded a marginal decline in share to 0.4 percent from 1.0 percent during the period under review (See Figure 1).

3.0 Credit Risk

The industry's exposure to credit risk as at June 2020 showed broad improvement on a year-on-year basis on account of high loan recoveries, write-offs, and the rebound in credits between the two periods. However, the year-to-date assessment shows that the non-performing loans ratio inched up due largely to the COVID-19 pandemic-induced slowdown in credit growth and higher loan loss provisions arising from repayment challenges during the first half of 2020.

3.1 Credit Portfolio Analysis

The industry's stock of gross loans and advances (excluding the loans under receivership) increased to GH¢45 billion at end-June 2020, representing a 16.2 percent annual growth, after remaining somewhat flat between June 2018 and June 2019. The year-to-date growth in gross loans and advances recorded a moderate contraction of 0.4 percent in HY-2020 compared with the 5.9 percent growth recorded during the same period in 2019, partly due to repayment of considerably high short-term public sector loans and a weak demand for credit from the pandemic-induced slowdown in economic activity during the first quarter of 2020. However, the stock of loans and advances as at June 2020 shows a marginal increase over the GH¢44.8 billion recorded as at March 2020 reflecting the ease in credit stance and gradual rebound in credit demand following the lifting of the partial lockdown as well as the emerging positive impact of Bank of Ghana's policy measures announced in March and May 2020 to help stimulate credit expansion. New advances amounted to GH¢15.8 billion during the first half of 2020 compared with GH¢12.1 billion during the same period in 2019, with Q2-2020 witnessing a stronger performance after a dip in March 2020, reflecting the positive effects of the policy measures so far.

The stronger annual growth in credits and the weaker year-to-date growths at June 2020 reflected in similar growth rates in both private sector credit and public sector credit. Private sector and public sector credits recorded respective annual growth of 14.1 percent and 36.4 percent as at June 2020, significantly higher than the prior year's growth. The market share of private sector credit continued to dominate at 89.0 percent, a dip from the 90.7 percent share a year earlier, while the share of public sector credit inched up to 11.0 percent from 9.3 percent (see Annexes Tables 2 & 4).

Similarly, the year-to-date growth in private sector and public sector credits during HY-2020 were 1.7 percent and -15.0 percent respectively, much lower than the prior year's growth of 5.0 and 15.0. The sharp contraction in public sector credit as indicated above was due to repayment in Q1-2020 of a one-off short-term public sector loan contracted by government during Q4-2019. The modest growth in private sector credit reflected the weak private sector credit demand which characterised Q1-2020. Similar growth rates were seen in the components of private sector credit (See Annexes Table 2).

In terms of sector distribution of credits, the services sector received 26.7 percent of total industry credit as at end-June 2020, followed by the commerce and finance sector with a share of 20.2 percent and manufacturing sector with 11.3 percent (Figure 1). The sector with the lowest share of industry credit as at June 2020 was mining and quarrying with 3.1 percent, followed by the agriculture, forestry, and fishing sector with 5.2 percent and then electricity, water & gas with 7.9 percent. The combined share of the top three recipients of industry credit was 58.2 percent while that of the three lowest recipients was 16.2 percent.

3.2 Off-Balance Sheet Activities

Banks' off-balance sheet activities mirrored developments in core banking business. Accordingly, off-balance sheet transactions (largely comprising trade finance and guarantees) amounted to GH¢11.5 billion as at end-June 2020, representing a 12.2 percent annual growth, compared to the 9.7 percent growth a year ago. In year-to-date terms, growth in off-balance sheet liabilities remained broadly unchanged between 2019 and 2020. Banks' contingent liabilities as a percentage of total liabilities however declined to 9.6 percent from 10.3 percent during the comparable periods (See Annexes Table 3).

3.3 Asset Quality

Asset quality improved year-on-year with the NPL ratio declining from 18.1% in June 2019 to 15.7% in June 2020 on account of the marginal increase in the stock of NPLs by 0.7 percent against the 16% growth in credits over the period. However, the 15.7 percent NPL ratio as at end-Q2 2020 represents an uptick of 1.2 percentage above the end-Q1 2020 position, reflecting higher increase in the stock of NPLs during Q2-2020 due to loan repayment challenges by clients who have been severely impacted by the pandemic. The gradual inch-up in the NPL ratio which began in Q1-2020 largely reflected the slowdown in gross advances growth and increasing NPLs during HY-2020. Similarly, the adjusted NPL ratio (excluding the fully provisioned loan loss category) declined from 9.0 percent in June 2019 to 6.4 percent in June 2020 but was marginally up from 5.7 percent in March 2020.

Across the major borrower groups, the private sector NPL ratio declined from 19.5 percent to 16.8 percent over the year, but public sector NPL ratio marginally increased from 4.6 percent to 6.3 percent during the period.

In line with the observed NPL ratio decline year-on-year, all sectors recorded declines in their NPL ratios except the construction and commerce and finance sectors. Sectors with relatively high NPL ratios such as agriculture, forestry, and fishing, recorded a sharp decline from 34.3 percent to 26.3 percent; electricity, water and gas sector also saw a steep decline from 30.8 percent to 21.9 percent; while that of manufacturing improved from 25.3 percent to 18.4 percent. The services sector also saw its NPL ratio declining from 13.4 percent to 10.0 percent. Commerce and finance, on the other hand, saw its NPL ratio inching up from 19.1 percent to 22.2 percent during the period (See Figure 1).

In summary, the asset quality assessment shows that while NPL ratio declined on year-on-year basis, its continuous uptick during Q2-2020 on account of the emerging challenging credit environment from the COVID-19 pandemic will require **p**rudent risk management measures by banks to address it going forward.

4.0 Financial Soundness Indicators

The financial soundness indicators (FSIs) of the banking sector as at June 2020 remained strong. However, the inch-up in NPLs with its attendant higher loan provisions as well as higher operational costs due to safety protocol measures are impacting on profitability. Other key FSIs such as liquidity, solvency and efficiency remained broadly positive and healthy during HY-2020 compared with HY-2019.

4.1 Liquidity Indicators

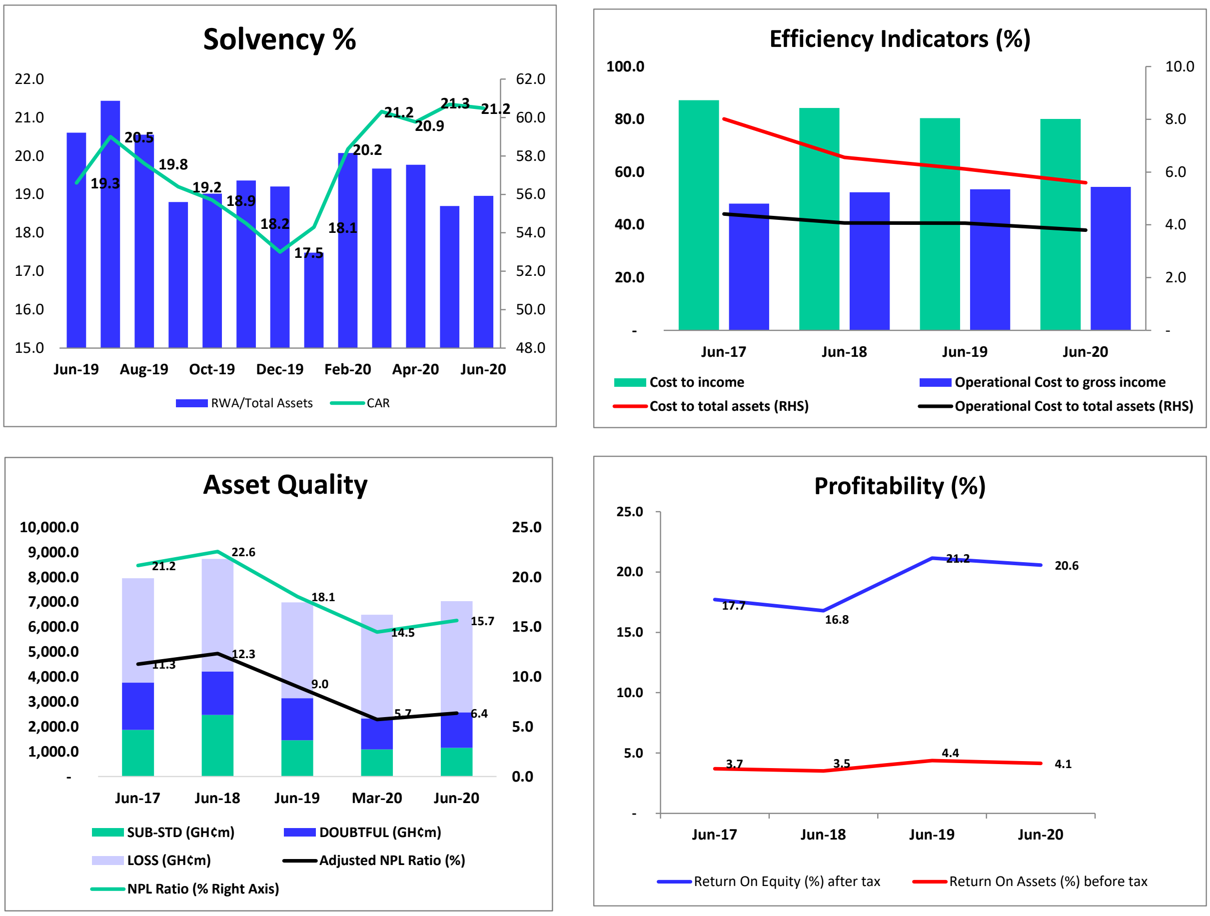
The ratio of core liquid assets (mainly cash and due from banks and short-term Bills) to total deposits declined marginally to 33.5 percent in June 2020 from 35.7 percent at same period last year. The softening in this core liquidity measure was partly attributable to the increase in banks' long term investments relative to short-term Bills. Core liquid assets to total assets also declined marginally to 21.7 percent from 23.9 percent a year ago (See Annexes Table 5).

The broad measures of liquidity however recorded significant improvements with broad liquid assets to total deposits increasing to 98.5 percent from 92.7 percent in June 2019, while broad liquid assets to total assets improved to 63.8 percent in June 2020 from 62.1 percent in June 2019.

4.2 Capital Adequacy Ratio (CAR)

Solvency remains strong with the industry CAR of 21.2 percent well above the revised regulatory minimum of 11.5 percent under Basel II/III. The enhanced solvency and capital release from the reduction in the prudential limit from 13 percent to 11.5 percent strengthens the ability of banks to support lending activities, including to critical sectors of the economy as well as absorb losses especially during this challenging operating environment associated with COVID-19.

Figure 2: Key Financial Soundness Indicators (FSIs)



Source: Bank of Ghana Staff Calculations

4.3 Profitability

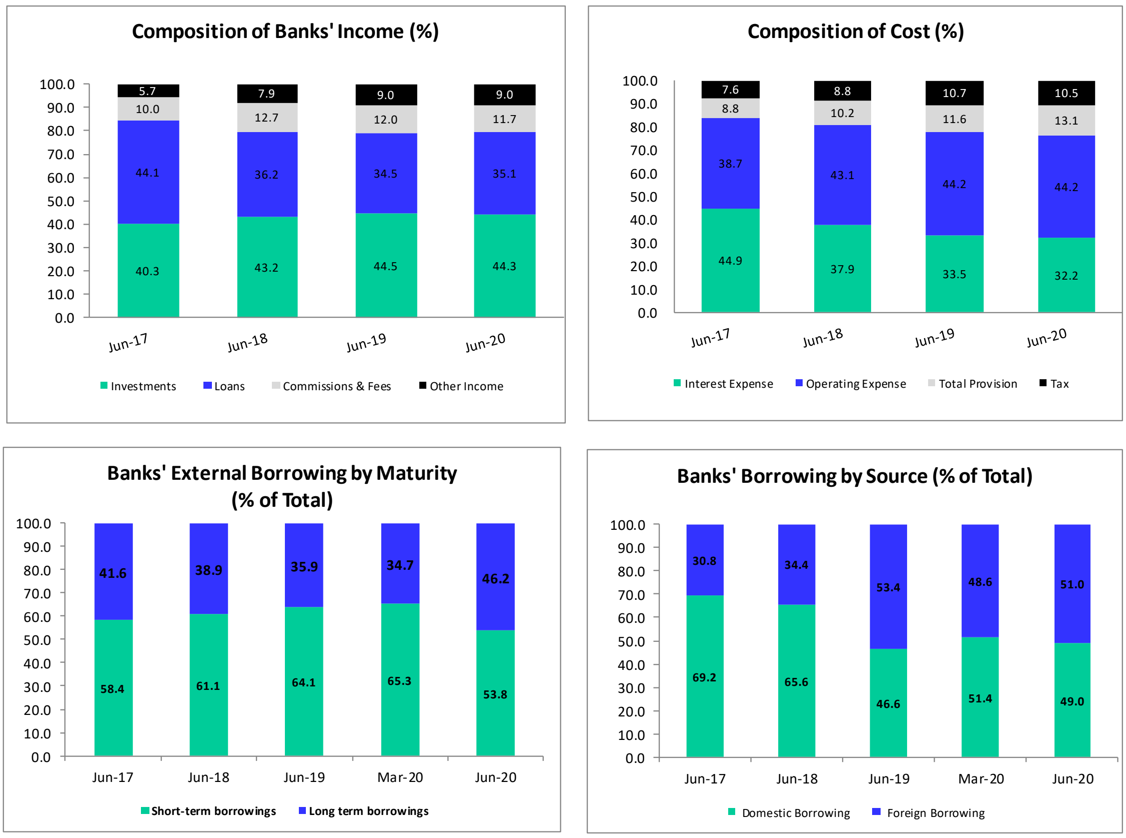
The industry remained sufficiently profitable during the first half of 2020 although increases in interest expenses, operational costs and higher loan loss provisions constrained profitability growth. The profit-after-tax outturn of GH¢1,926 million during HY-2020 accordingly represented a growth of 15.5 percent, compared with the 36.3 percent growth recorded during HY-2019 due mainly to sharp increases in the three cost elements mentioned above.

Growth in net interest income marginally declined to 16.5 percent in HY-2020 from 20.7 percent a year earlier. This was due to a much higher increase in interest expenses from a growth of -7.4 percent in HY-2019 to the 8.3 percent growth in HY-2020 on the back of increased term deposits and relatively more expensive borrowings. Interest income, on the other hand, grew by 13.7 percent, a much lower incremental change than the 9.4 percent a year ago, to partially offset the increase in interest expenses. Despite the slowdown in credit growth during the period which affected interest income from loans, increases in investments sustained the overall interest income of banks.

Net fees and commissions grew strongly at 10.3 percent from 3.7 percent over the period due in part to more usage of electronic banking products and services in the wake of the COVID-19 pandemic. This contributed to lift gross income growth to 13.2 percent during HY-2020, from the 9.9 percent growth during the same period in 2019.

Operating expenses shot up by 12.9 percent during the first half of 2020 from 7.6 percent a year ago. This was due to the sharp 17.3 percent increase in banks' other operational costs attributed largely to costs associated with the safety protocols and containment measures of COVID-19 as well as activation of Business Continuity Plans (BCPs) during the period. Growth in staff costs however normalised at 9.3 percent from the 30.8 percent growth a year ago. (See Annexes Table 7 and Figure 3).

Figure 3: Composition of Income, Cost and Borrowings



Source: Bank of Ghana Staff Calculations *(a) Return on Assets and Return on Equity*

Return on Equity (ROE) moderated to 20.6 percent at end-June 2020 from 21.2 percent at end-June 2019, largely due to the slowdown in profit growth during HY-2020. Similarly, Return on Assets (ROA) also dipped marginally during the period to 4.1 percent from 4.4 percent. The profitability indicators however remain strong despite the dip, so we conclude that the broadly, the industry remained profitable despite the pandemic-induced increases in costs (See Figure 2 and Annexes Table 6).

(b) Interest Margin and Spread

Banks' interest spreads remained broadly unchanged within the review period following the stable changes in both gross yields and interest payable. The industry's gross yield was unchanged at 8.5 percent during the two periods, while the ratio of interest expenses to interest bearing liabilities (interest payable) also remained stable. This resulted in the interest spread remaining virtually flat at 5.7 percent in June 2020 from 5.6 percent a year ago. The interest margin to gross income ratio however edged up to 53.6 percent from 52.1 percent, while interest margin to total assets declined marginally to 3.7 percent from 4.0 percent during the same comparative period.

The ratio of gross income to total assets (asset utilisation) marginally declined to 7.0 percent from 7.6 percent over the period. The industry's profitability ratio, however, went up marginally to 19.8 percent in June 2020 from 19.4 percent a year earlier (See Annexes Table 6).

(c) Composition of Banks' Income

The composition of banks' income continues to reflect the relative shares of the components of banks' assets. Income from investments remained the largest source of banks' income at 44.3 percent at end-June 2020, compared with 44.5 percent share a year earlier. Interest income from loans, the second largest source of banks' incomes, inched up to 35.1 percent from 34.5 percent. The share of fees and commissions in total income marginally declined to 11.7 percent from 12.0 percent while the share of other income was unchanged at 9.0 percent during the period under review (See Figure 3).

4.4 Operational Efficiency

Key efficiency indicators showed broad improvements during HY-2020. The industry's cost-to-income ratio marginally improved to 80.2 percent in June 2020 from 80.4 percent in June 2019, while cost-to-total assets improved to 5.6 percent from 6.1 percent during the same comparative period. Due to the higher growth in operational costs in June 2020, the ratio of operational cost to gross income weakened marginally to 54.4 percent from 53.5 percent. The ratio of operational cost to total assets however improved to 5.6 percent from 6.1 percent due to the stronger growth in total assets during the review period (See Figure 2).

4.5 Banks' Counterparty Relationships

Growth in offshore balances remained virtually unchanged in June 2020 on the back of growth in nostro balances which was offset by a corresponding contraction in placements. Nostro balances grew by 12.3 percent as at end-June 2020 while placements contracted by 11.4 percent, reflecting developments in offshore counterparty activities due to the COVID-19 pandemic. Accordingly, offshore balances represented a lower share of 46.8 percent of the industry's net worth in June 2020 compared with 57.8 percent during the same period a year ago (See Annexes Table 8).

The share of banks' external borrowings in total borrowings declined to 51.0 percent in June 2020 from 53.4 percent in June 2019 while that of domestic borrowing increased to 49.0 percent from 46.6 percent during the period. Banks' external borrowings were mainly short-term in nature, though the share of short-term funds in total external borrowing declined to 53.8 percent from 64.1 percent, while the share of long term external borrowing increased to 46.2 percent from 35.9 percent during over the review period (See Figure 3).

5.0 Stress Tests of Banks – July 2020 Update

The COVID-19 pandemic is still unfolding and while there has been some partial easing of restrictions, other measures to contain the pandemic including border closures, and social distancing remain. The attendant disruption in the supply chains, dampened economic activities, rising inflation, among others, pose two main risks to Ghana's banking sector – liquidity risk (increasing withdrawals against low deposits) and credit risk (high rate of default). The Bank of Ghana as part of its financial sector surveillance continuously assesses the resilience of the system to these shocks. So far two rounds have been conducted using January and March 2020 financial data. The analysis was updated with the latest June 2020 data to evaluate the level of resilience of the system to stress over time.

The findings revealed that, on the whole, the banking sector's robustness to liquidity and credit risk shocks emanating from the pandemic has somewhat improved supported by strong capital accumulation and liquidity buffers contributed in part by prompt COVID-19 policy responses from the Bank of Ghana.

5.1 *Assumptions of the Credit Risk[1] and Liquidity Risk Stress Tests*

The credit risk stress test focuses on the effect of deterioration in asset quality on the banks' solvency and utilizes the loan migration approach. Under this framework, existing banks' loan portfolios are reclassified by migrating a proportion of a loan in a high-quality category to the next low-quality category based on BOG prudential norms.

The liquidity stress testing assesses the impact of a panic withdrawal on the liquidity positions of banks. Specifically, it assesses the effect on liquid positions of banks after an assumed run continues for up to ten (10) working days (two weeks). An institution with sufficient liquidity to meet the withdrawal needs is deemed to have survived the shock. See Annexes Tables 9 and 10 for the major assumptions underpinning the assessment.

5.2 *Results of Credit and Liquidity Stress Tests – Banks*

The stress tests show that the banking sector remains liquid and well-positioned to absorb liquidity shocks. The development reflects the gains from the recent banking sector reforms and the COVID-19 policy responses. The survival rate of the sector to liquidity runs remains high in the first five working days across the various scenarios in all the stress periods as presented in Figure 4 below. Thus, the sector on its own can correct for such liquidity imbalances resulting from mild to moderate shocks through interbank activities.

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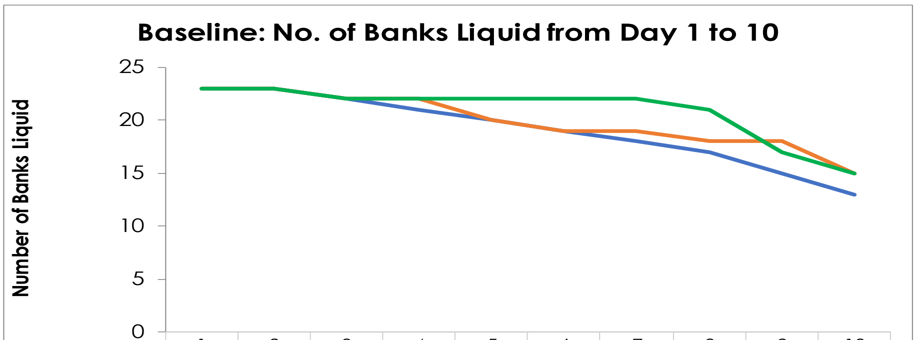
[1] The baseline scenario assumes 1 standard deviation of the annual migration rates experienced over the past decade. It therefore represents the upper limits of the expected rates of migration for the next one year under normal conditions.

[1]The rates under the moderate scenario represent 3 standard deviation of the annual migration rates experienced over the past decade. It therefore represents the upper limits of the expected rates of migration for the next one year under extreme conditions.

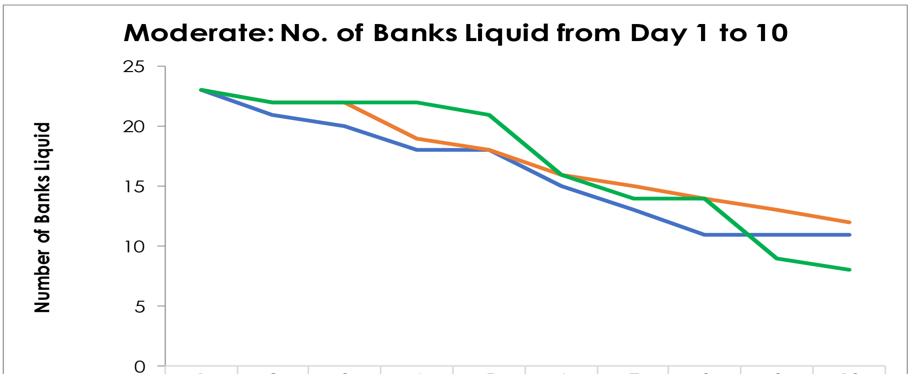
[1] The assumptions under the severe scenario are largely based on judgment, except for the growth rate of total loans. The growth of total loan was the worst case experienced in the past decade.

Further, supported by strong capital build-up resulting from profit retention, the resilience of the banking industry to credit risk shocks improved in the June 2020 assessment period (see Figure 5). The prompt policy response to the COVID-19 pandemic including the freeze on dividend pay-out, reduction in the Cash Reserve Requirement and the Policy Rate supported the sector to build-up reserves to withstand the shocks.

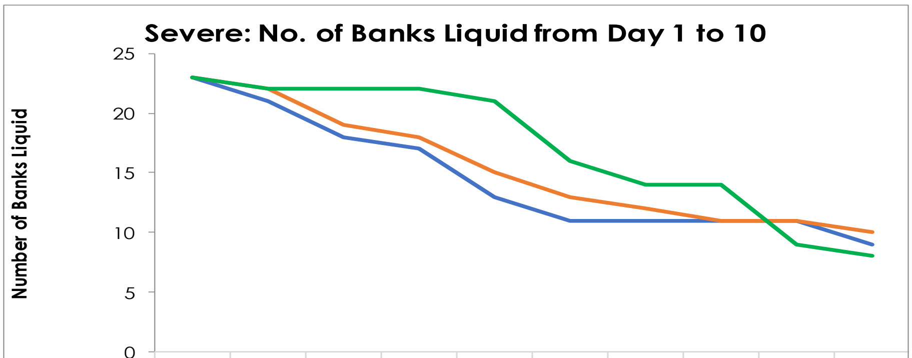
Figure 4: Results of the Liquidity Stress Testing – Banks



Days since stress	1	2	3	4	5	6	7	8	9	10
Jan-20	23	23	22	21	20	19	18	17	15	13
Mar-20	23	23	22	22	20	19	19	18	18	15
Jun-20	23	23	22	22	22	22	22	21	17	15



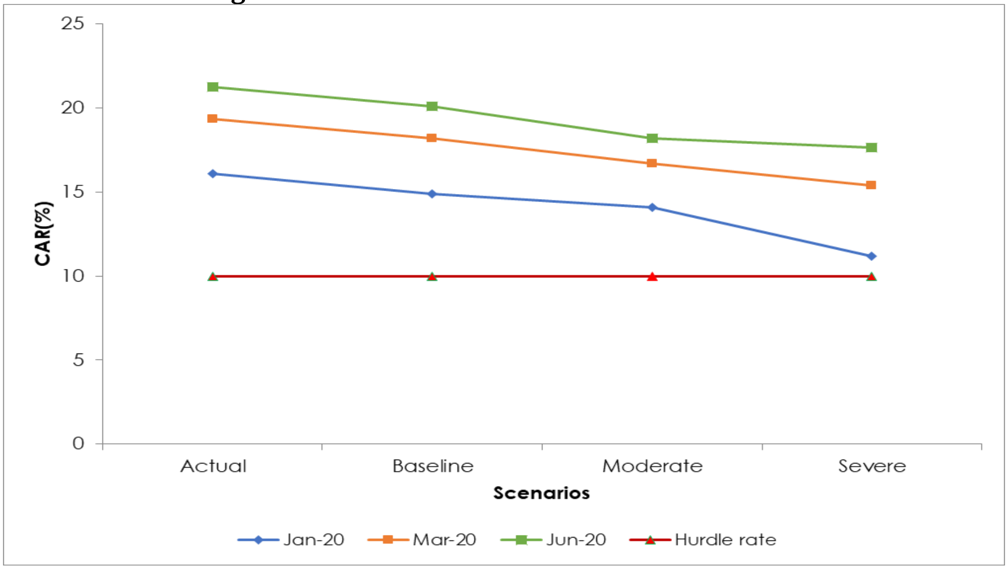
Days since stress	1	2	3	4	5	6	7	8	9	10
Jan-20	23	21	20	18	18	15	13	11	11	11
Mar-20	23	22	22	19	18	16	15	14	13	12
Jun-20	23	22	22	22	21	16	14	14	9	8



Days since stress	1	2	3	4	5	6	7	8	9	10
Jan-20	23	21	18	17	13	11	11	11	11	9
Mar-20	23	22	19	18	15	13	12	11	11	10
Jun-20	23	22	22	22	21	16	14	14	9	8

Source: Bank of Ghana (Financial Stability Department)

Figure 5: Results of credit risk stress test –Banks



Source: Bank of Ghana (Financial Stability Department)

5.4 Conclusion of Stress Tests

The updated stress test on the banking sector shows that the sector is well-positioned to withstand mild to moderate liquidity and credit shocks on account of the strong capital buffers and high liquidity. Further, the sector's robustness to liquidity and credit risk shocks emanating from the pandemic has somewhat improved over time. The Bank of Ghana will continue to monitor emerging but plausible shocks to the Ghanaian banking system and would respond appropriately.

6.0 Credit Conditions Survey

The latest update of the credit conditions survey with June 2020 as the reference period revealed a net ease in overall credit stance on loans to enterprises. This eased credit stance reflected the impact of the regulatory reliefs introduced by the Bank of Ghana to support lending as well as the gradual pick-up in economic activity following the lifting of the lockdown and gradual easing of restrictions. Except for short-term enterprise loans which recorded some marginal tightening, all components of corporate loans recorded net eases in their stances during May and June 2020.

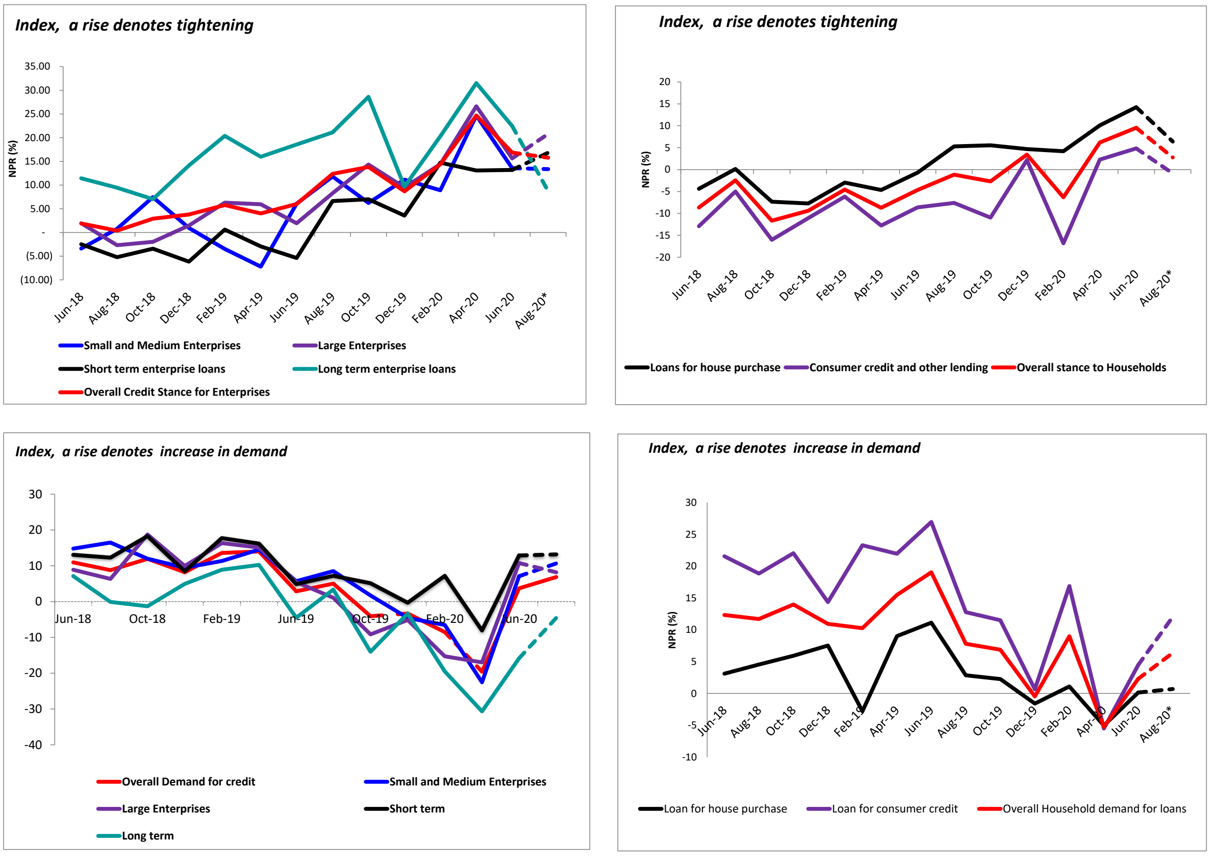
Banks further projected a net ease in overall credit stance on loans to enterprises over the next two months as economic activity increases following the phased easing of the COVID-19 restrictions The projected net ease in the overall credit stance to enterprises is expected to reflect largely in long term enterprise loans as well as loans to SMEs, while stances on large enterprise loans and short term enterprise loans are projected to tighten during the same period (see Figure 6).

The overall credit stance on household loans however tightened during the survey period, a likely response to developments in the job markets with respect to job losses, delayed salary payments and suspended salaries due to the impact of the pandemic on businesses. Banks however indicated a net ease in the stance on loans to households two months on, as the impact of the earlier measures announced by the Bank of Ghana continue to feed through the economy and credit growth rebounds. The net tightening in the credit stance to households in June 2020 reflected in both loans for house purchases and consumer credit, while the projected net ease is also expected to reflect in both categories of household loans.

Demand for loans rebounded during the current survey round, consistent with the projection during the April 2020 survey round. The rebound in the demand for credit comes after consecutive declines during the past two surveys in February and April 2020 respectively following the slowdown in economic activity due to the coronavirus pandemic. The pick-up in the demand for credit by both households and enterprises during the June 2020 survey round point to the gradual rebound in economic activity as the pandemic-related restrictions are eased. Banks projected a further increase in demand for corporate and household loans in the subsequent two months, driven by increases in demand for all subcomponents' household and corporate loans except for large enterprise loans (Figure 6).

Banks' expectations on the inflation rate six months on went up to 11.1 percent during the June 2020 survey from 9.0 percent in April 2020 on the back of the spike in the actual inflation rate between March 2020 and May 2020 as a result of the panic buying that preceded the partial lockdown. Banks' expectations on lending rates was however virtually flat during the current survey period compared with the previous survey. Actual average lending rates have declined during the second quarter following the 150 basis points reduction in the monetary policy rate in March 2020.

Figure 6: Credit Conditions Survey Results



Source: Bank of Ghana Staff Calculations

7.0 Conclusion and Outlook

The banking sector remained sound, solvent and resilient during the first half of 2020 despite the adverse impact of COVID-19 on some of the industry's performance indicators, particularly asset quality and profitability. The update of the stress tests conducted by the Bank of Ghana in July 2020 reaffirms the resilience of the industry and the capacity of banks to withstand mild to moderate liquidity and credit shocks due to the strong capital and liquidity buffers. The policy measures announced by the MPC in March and May 2020 are working their way through the economy. They are expected to boost credit activity, help sustain operational and financial performance of banks, and ameliorate the adverse impact of the pandemic on the sector. These policy measures have also helped reduce any adverse spillback effects that the banking sector may have had on the macro-financial landscape as discussed in Box 1**.** The outlook for the banking industry therefore remains positive with strong prospects for growth and financial stability.

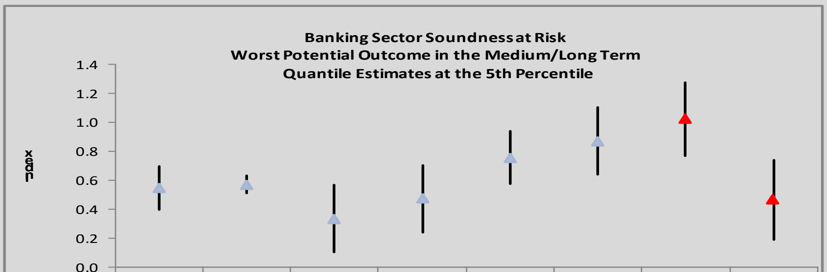
Box 1. Spillover and Spillback Effects of the COVID-19 Pandemic on Tail Risks within the Banking Sector

Heightened uncertainty arising from the pandemic and its containment measures have disrupted supply-side chains and depressed aggregate demand. The pandemic has adversely affected all sectors within the macro-financial landscape. Consequently, the 2020 projections for key macro-financial variables for the Ghanaian economy have changed significantly, in line with the changing global macro-financial landscape. Amidst the COVID-19 pandemic, economic activity is projected to slow down significantly, while the fiscal deficit has widened. Given these significant changes to the macro-financial environment, it is important to assess the spillover and spillback effects on the banking sector.

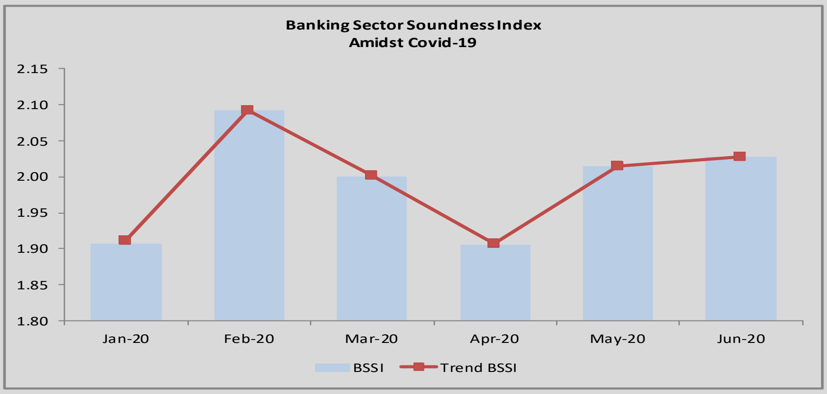
The changing macro-financial landscape is increasing tail risks within the Ghanaian banking sector. Preceding COVID-19, the worst potential outcome for banking sector resilience in the medium term (2-year horizon), as proxied by the Banking Sector Soundness Index (BSSI), was 1.02; a 17 percent increase at end-December 2020 from the previous year. Amid COVID-19, the worst potential outcome was estimated at 0.47; a 46 percent decline in resilience by end-December 2020, from the previous year. Increasing tail risks observed within the banking sector, imply that in the worst-case scenario the average profit of banks may decline substantially over the medium-term horizon, alongside rising NPL levels.

Increased inflationary pressures and a decline in projected GDP growth constituted the main drivers of increasing tail risks within the banking sector. Due to panic buying resulting from COVID-19 and sticky prices within the domestic economy, inflationary pressures became the primary driver for increased tail risks immediately after the pandemic hit. In the medium-term, the slower GDP growth projection coupled with dampened private sector credit growth could further increase tail risks within the banking sector.

In response to the findings of increased tail risks within the banking sector, the Bank of Ghana issued several policy measures in the second quarter of the year to increase liquidity, improve credit delivery and capital buffers within the banking sector. These policy interventions have helped contain tail risks within the banking sector as evidenced by a reversal in the declining trend in the BSSI in May 2020. Thus, the rebound in the BSSI was occasioned by the BOG policy interventions, which aimed at improving the resilience of the banking sector amidst COVID-19. These interventions have also reduced potential adverse spillback effects that the banking sector may have had on the macro-financial landscape.



	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20 (Pre Covid)	Dec-20 (Amidst Covid)
Upper CI	0.70	0.63	0.57	0.71	0.94	1.10	1.28	0.74
Lower CI	0.40	0.51	0.10	0.24	0.57	0.64	0.77	0.19
Estimate	0.55	0.57	0.34	0.47	0.76	0.87	1.02	0.47



Source: Bank of Ghana (Financial Stability Department)

ANNEXES

Table 1: Asset and Liability Structure of the Banking Sector

	Jun-17	Jun-18	Jun-19	Mar-20	Jun-20
Components of Assets (% of Total)					
Cash and Due from Banks	25.4	23.4	23.9	23.9	21.7
Investments	29.3	35.7	38.6	38.9	42.3
Net Advances	36.4	32.5	30.1	29.4	28.0
Others	8.0	8.4	7.0	7.5	7.8
Components of Liabilities and Shareholders' Funds (% of Total)					
Total Deposits	62.8	61.6	67.0	62.9	64.8
Total Borrowings	18.1	17.9	13.1	14.0	11.8
Shareholders' Funds	13.9	13.9	13.9	13.6	13.8
Other Liabilities	6.1	7.3	6.7	5.9	9.3

Table 2: Credit Growth

Economic Sector	GH¢million				y/y growth (%)		year-to-date growth(%)		
	Jun-18	Jun-19	Mar-20	Jun-20	Jun-19	Jun-20	Jun-19	Mar-20	Jun-20
Public Sector	4,290.2	3,617.5	4,598.6	4,932.8	-15.7	36.4	15.0	-20.8	-15.0
Private Sector	34,423.6	35,082.3	40,219.2	40,036.8	1.9	14.1	5.0	2.2	1.7
- Private Enterprises	26,161.1	25,703.4	28,286.2	29,254.7	-1.7	13.8	6.1	-1.8	1.5
o/w Foreign	3,059.4	3,999.8	3,300.5	3,720.6	30.7	-7.0	10.0	-12.6	-1.5
Indigeneous	23,101.8	21,703.6	24,985.8	25,534.1	-6.1	17.6	5.3	-0.2	2.0
- Households	7,604.3	8,405.8	10,897.4	9,447.8	10.5	12.4	0.5	15.8	0.4
Gross Loans	38,713.8	38,699.8	44,817.8	44,969.6	(0.04)	16.2	5.9	-0.8	-0.4

Table 3: Contingent Liability

	Jun-17	Jun-18	Jun-19	Mar-20	Jun-20
Contingent Liabilities (GH¢)	7,339.3	8,919.9	9,961.2	11,095.3	11,455.4
Growth (y-o-y)	12.6	20.0	9.7	22.8	12.2
% of Total Liabilities	9.7	10.3	10.3	9.6	9.6

Table 4: Distribution of Loans and NPLs By Economic Sector (Percent)

	Jun-18		Jun-19		Mar-20		Jun-20	
	Share in Total Credit	Share in NPLs	Share in Total Credit	Share in NPLs	Share in Tota Credit	Share in NPLs	Share in Total Credit	Share in NPLs
a. Public Sector	11.1	10.1	9.3	2.4	10.3	2.3	11.0	4.4
i. Government	2.6	1.0	3.9	0.6	4.2	0.4	4.3	0.4
ii. Public Institutions	1.0	0.3	1.7	0.3	2.6	0.0	2.8	0.3
iii. Public Enterprises	7.5	8.8	3.8	1.5	3.5	1.8	3.8	3.7
b. Private Sector	88.9	89.9	90.7	97.6	89.7	97.7	89.0	95.6
i. Private Enterprises	67.6	82.9	66.4	83.6	63.1	75.6	65.1	82.7
o/w Foreign	7.9	7.5	10.3	9.0	7.4	8.5	8.3	9.3
Indigeneous	59.7	75.4	56.1	74.6	55.7	67.2	56.8	73.4
ii. Households	19.6	6.3	21.7	11.7	24.3	18.9	21.0	7.3
iii. Others	1.7	0.6	2.5	2.3	2.3	3.2	3.0	5.6

Source: Bank of Ghana Staff Calculations

Table 5: Liquidity Ratios

	Jun-17	Jun-18	Jun-19	Mar-20	Jun-20
Liquid Assets (Core) - (GH¢'million)	22,014.6	23,520.43	26,983.0	31,899.99	30,177.40
Liquid Assets (Broad) -(GH¢'million)	46,980.1	58,912.65	70,082.1	83,407.90	88,729.25
Liquid Assets to total deposits (Core)-%	40.4	38.1	35.7	38.0	33.5
Liquid Assets to total deposits (Broad)- %	86.2	95.4	92.7	99.2	98.5
Liquid assets to total assets (Core)- %	25.4	23.4	23.9	23.9	21.7
Liquid assets to total assets (Broad)- %	54.2	58.7	62.1	62.5	63.8

Table 6: Profitability Indicators (%)

	Jun-17	Jun-18	Jun-19	Jun-20
Gross Yield	11.8	8.8	8.5	8.5
Interest Payable	5.5	3.6	2.9	2.8
Spread	6.3	5.3	5.6	5.7
Asset Utilitisation	9.2	8.8	7.6	7.0
Interest Margin to Total Assets	4.1	3.7	4.0	3.7
Interest Margin to Gross income	45.2	47.5	52.1	53.6
Profitability Ratio	12.6	15.7	19.4	19.8
Return On Equity (%) after tax	17.7	16.8	21.2	20.6
Return On Assets (%) before tax	3.7	3.5	4.4	4.1

Table 7: DMBs' Income Statement Highlights

	Jun-17	Jun-18	Jun-19	Jun-20	Jun-18	Jun-19	Jun-20
	(GH ¢'million)				Y-on-y Growth (%)		
Interest Income	6,722.1	6,198.0	6,780.4	7,708.4	(7.8)	9.4	13.7
Interest Expenses	3,125.23	2,494.88	2,311.23	2,502.91	(20.2)	(7.4)	8.3
Net Interest Income	**3,596.9**	**3,703.1**	**4,469.2**	**5,205.4**	**3.0**	**20.7**	**16.5**
Fees and Commissions (Net)	792.6	988.6	1,025.7	1,131.3	24.7	3.7	10.3
Other Income	450.7	616.5	771.8	869.4	36.8	25.2	12.7
Operating Income	4,840.3	5,308.3	6,266.6	7,206.2	9.7	18.1	15.0
Operating Expenses	2,690.30	2,833.79	3,048.73	3,442.31	5.3	7.6	12.9
Staff Cost (deduct)	1,349.96	1,274.42	1,667.50	1,822.70	(5.6)	30.8	9.3
Other operating Expenses	1,340.34	1,559.37	1,381.23	1,619.61	16.3	(11.4)	17.3
Net Operating Income	**2,150.0**	**2,474.5**	**3,217.9**	**3,763.9**	**15.1**	**30.0**	**17.0**
Total Provision (Loan losses, Depreciation & others)	616.62	672.38	810.47	1,019.44	9.0	20.5	25.8
Income Before Tax	**1,533.4**	**1,802.1**	**2,407.5**	**2,744.5**	**17.5**	**33.6**	**14.0**
Tax	528.60	579.06	740.34	818.29	9.5	27.9	10.5
Net Income	**1,004.7**	**1,223.1**	**1,667.1**	**1,926.2**	**21.7**	**36.3**	**15.5**
Gross Income	7,965.5	7,803.2	8,577.9	9,709.1	(2.0)	9.9	13.2

Table 8: Developments in Offshore Balances

	Jun-17	Jun-18	Jun-19	Mar-20	Jun-20
Offshore balances as % to Networth	57.6	46.5	57.8	40.8	46.8
Annual Growth in Offshore balances (%)	24.1	2.0	41.7	-16.1	-0.1
Annual Growth in Nostro Balances (%)	-19.8	47.2	13.8	-21.1	12.3
Annual Growth in Placement (%)	100.6	-29.5	82.8	-12.0	-11.4

Source: Bank of Ghana Staff Calculations

Table 9: Key Assumptions of the Liquidity Stress Testing of Banks

Liquidity risk	*Baseline*	*Moderate*	*Severe*
Number of days after start of systemic event	10	10	10
Domestic currency			
Demand and savings deposits withdrawn per day (dom. curr.) (%)	20.0%	20.0%	20.0%
Time deposits withdrawn per day (dom. curr.) (%)	20.0%	20.0%	20.0%
Liquid assets: available in a day (dom. curr.) (%)	95.0%	95.0%	95.0%
Other assets: available in a day (dom. curr.) (%)	0.0%	0.0%	0.0%
Government bonds illiquid (%)	0.0%	0.0%	0.0%
Haircut (%)	10.0%	10.0%	10.0%
Foreign currency			
Demand and savings deposits withdrawn per day (for. curr.) (%)	20.0%	20.0%	20.0%
Time deposits withdrawn per day (for. curr.) (%)	20.0%	20.0%	20.0%
Liquid assets: available in a day (for. curr.) (%)	95.0%	95.0%	95.0%
Other assets: available in a day (for. curr.) (%)	0.0%	0.0%	0.0%
Claims on foreign banks (for. curr.) Illiquid (%)	0%	0%	0%

Table 10: Migration Rates and Growth of Total Loan of banks

Migration	One-year Migration Rate		
	Baseline[2]	Moderate[3]	Severe[4]
Current to OLEM	3.8%	-	-
OLEM to Substandard	53.7%	100%	100%
Substandard to Doubtful	75.8%	100%	100%
Doubtful to Loss	100.0%	100%	100%
Current to Substandard	-	10%	-
Current to Doubtful	-	-	20%
Growth of total loans	-	-5%	- 13.77%

Source: Bank of Ghana Staff Calculations

[2] *The baseline scenario assumes 1 standard deviation of the annual migration rates experienced over the past decade. It therefore represents the upper limits of the expected rates of migration for the next one year under normal conditions.*

[3] *The rates under the moderate scenario represent 3 standard deviation of the annual migration rates experienced over the past decade. It therefore represents the upper limits of the expected rates of migration for the next one year under extreme conditions.*

[4] *The assumptions under the severe scenario are largely based on judgment except the growth rate of total loans. The growth of total loans was the worst case experienced in the past decade.*