



Bank of Ghana Monetary Policy Report

Banking Sector Developments

Vol. 5 No. 5/2020

September 2020

1.0 Overview

The banking sector remains strong, well-capitalised and profitable. The latest banking sector data as of August 2020 suggests that the sector has responded positively to the policy and regulatory measures announced by the Bank of Ghana to help cushion the adverse impact of COVID-19.

Asset growth was stronger, and new advances have increased from the beginning of the year to August 2020. Growth in Shareholders' Funds and Deposits also remained strong, while profitability growth improved as banks focused on cost control measures amid marginal declines in revenue streams. The latest COVID-19 impact assessment survey conducted by the Bank of Ghana revealed that although the pandemic has increased cost of operations, banks have not passed on the associated costs to consumers through higher interest margins. The financial soundness indicators remain strong and were further strengthened by the Bank's policy measures, which facilitated the provision of reliefs to clients severely impacted by the pandemic.

In the outlook, banks are well-positioned to contain short-term liquidity pressures, and manage credit and liquidity risks on the back of the strong buffers built during the reforms and the recent policy measures.

2.0 Banks' Balance Sheet

Banks' total assets increased by 23.8 percent year-on-year to GH¢142.6 billion as at end-August 2020, compared to a growth of 10.1 percent a year earlier. The growth was broad-based and reflected in both domestic and foreign assets, which went up by 24.5 percent and 15.6 percent, respectively. The relatively higher domestic asset growth pushed its share in total assets to 92.4 percent, up from 91.8 percent over the period (Table 1).

Investments in bills, securities, and equity remained the largest component of total assets as at end-August 2020. The share of investments in total assets increased to 44.0 percent from 39.9 percent, reflecting year-on-year growth of 36.7 percent in August 2020 compared with the 13.2 percent growth recorded in the previous year. The higher investment growth was due in part to the bonds initially issued to Consolidated Bank Ghana (CBG) for the settlement of customers of the defunct Specialised Deposit-taking Institutions (SDIs) in the first quarter of 2020, which has since been monetized.

Gross loans and advances recorded an annual growth of 15.7 percent to GH¢45.0 billion in August 2020, almost unchanged from last year. Adjusting gross loans for provisions and interest in suspense, net loans and advances went up by 14.5 percent to GH¢39.0 billion compared with 18.2 percent growth in August 2019. Marginal changes were recorded in gross and net loans and advances on a year-to-date basis due to increased repayments, which was more than new loans advanced during the period. New loans and advances during the period totalled GH¢20.9 billion, compared with GH¢15.8 billion recorded in the same period last year.

Total deposits grew by 20.5 percent to GH¢91.6 billion as at end-August 2020, compared with 12.2 percent deposit growth recorded a year earlier (see Table 1). The contribution of non-residents to total deposits remained negligible at 0.5 percent. Total borrowings contracted further by 2.1 percent in August 2020 as banks scaled back borrowings. This compares with a 5.0 percent contraction a year earlier. The reduced level of borrowings was on the back of stronger deposits growth, higher loan repayments, and the liquidity release from the reduction in the reserve requirement of banks, which supported asset growth against the backdrop of weak credit demand from some sectors. The decline in borrowings reflected mainly in short-term borrowings while long-term borrowings picked up during the year.

The industry's shareholders' funds position remained strong, indicative of adequate capital buffers within the banking sector to withstand shocks. Retained profits increased the reserves of banks and contributed to the growth in shareholders' funds by 21.3 percent to GH¢20.3 billion as at end-August 2020, albeit marginally lower than the 22.8 percent growth a year earlier. The strong capital and shareholders' funds position continued to strengthen the stability and resilience of the banking sector.

Table 1: Key Developments in DMBs' Balance Sheet

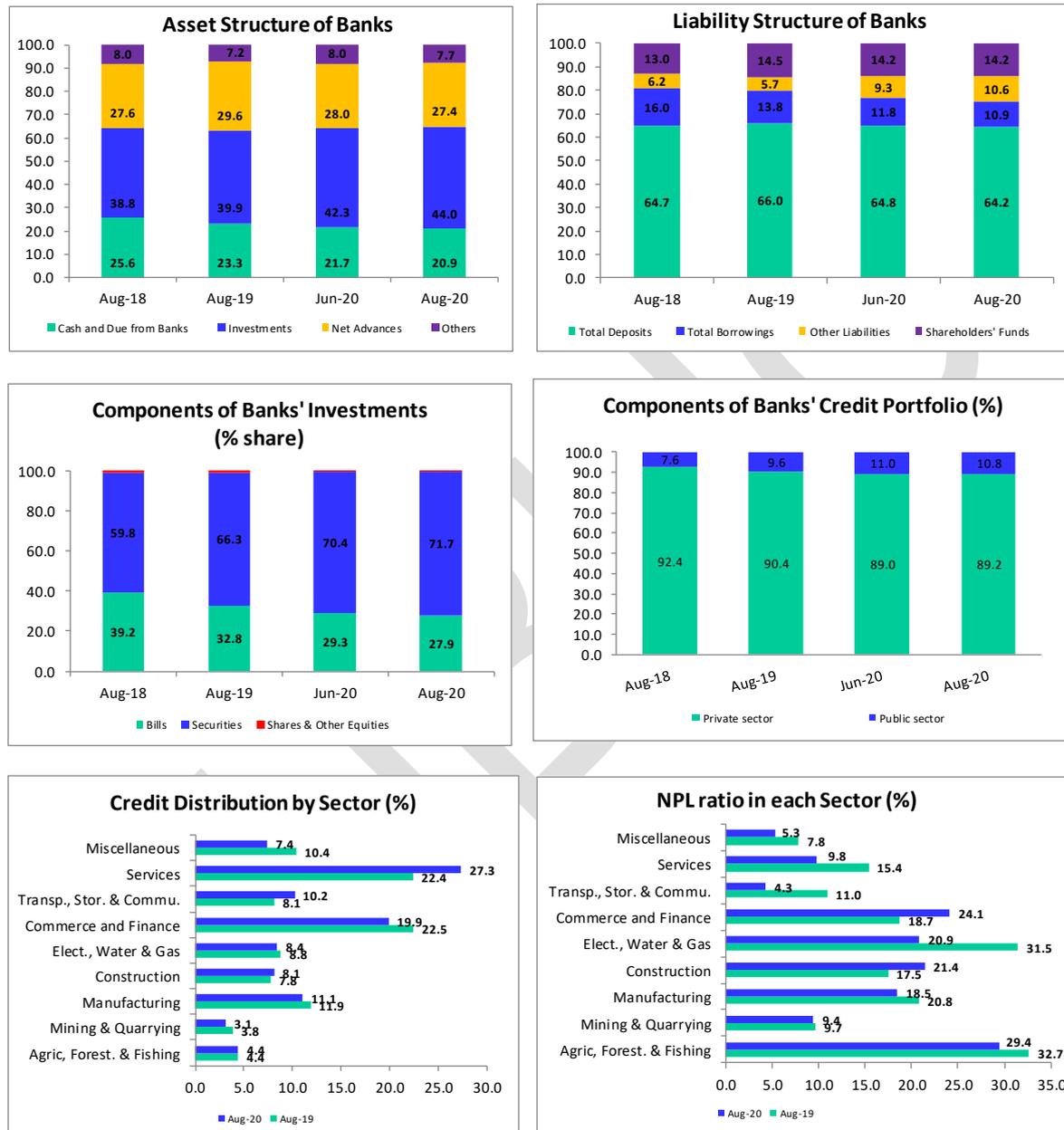
| | Aug-20 | | | Y-on-Y Growth (%) | | Year-to-date growth (%) | | | Shares (%) | |
|--------------------------------------|----------------|----------------|----------------|-------------------|-------------|-------------------------|--------------|--------------|--------------|--------------|
| | Aug-19 | Jun-20 | Aug-20 | Aug-19 | Aug-20 | Aug-19 | Jun-20 | Aug-20 | Aug-19 | Aug-20 |
| TOTAL ASSETS | 115,182 | 138,977 | 142,616 | 10.1 | 23.8 | 9.6 | 7.8 | 10.6 | 100.0 | 100.0 |
| A. Foreign Assets | 9,418 | 10,019 | 10,888 | (14.0) | 15.6 | 8.7 | (3.4) | 4.9 | 8.2 | 7.6 |
| B. Domestic Assets | 105,764 | 128,958 | 131,728 | 12.9 | 24.5 | 9.7 | 8.7 | 11.1 | 91.8 | 92.4 |
| Investments | 45,922 | 58,777 | 62,774 | 13.2 | 36.7 | 20.3 | 21.7 | 29.9 | 39.9 | 44.0 |
| i. Bills | 15,064 | 17,193 | 17,529 | (5.2) | 16.4 | 21.8 | 14.8 | 17.1 | 13.1 | 12.3 |
| ii. Securities | 30,432 | 41,359 | 45,016 | 25.6 | 47.9 | 19.9 | 25.8 | 36.9 | 26.4 | 31.6 |
| Advances (Net) | 34,086 | 38,940 | 39,024 | 18.2 | 14.5 | 7.2 | (2.6) | (2.3) | 29.6 | 27.4 |
| of which Foreign Currency | 11,944 | 12,268 | 11,653 | 28.8 | (2.4) | 19.8 | 1.2 | (3.8) | 10.4 | 8.2 |
| Gross Advances | 38,852 | 44,970 | 44,971 | 15.0 | 15.7 | 6.5 | (0.4) | (0.4) | 33.7 | 31.5 |
| Other Assets | 4,162 | 6,331 | 6,234 | (6.3) | 49.8 | 14.3 | 23.5 | 21.7 | 3.6 | 4.4 |
| Fixed Assets | 4,075 | 4,722 | 4,734 | 3.4 | 16.2 | 0.1 | 1.5 | 1.8 | 3.5 | 3.3 |
| TOTAL LIABILITIES AND CAPITAL | 115,182 | 138,977 | 142,616 | 10.1 | 23.8 | 9.6 | 7.8 | 10.6 | 100.0 | 100.0 |
| Total Deposits | 76,023 | 90,041 | 91,623 | 12.2 | 20.5 | 11.3 | 7.9 | 9.8 | 66.0 | 64.2 |
| of which Foreign Currency | 21,210 | 24,562 | 24,916 | 21.2 | 17.5 | 26.3 | 2.3 | 3.8 | 18.4 | 17.5 |
| Total Borrowings | 15,932 | 16,339 | 15,601 | (5.0) | (2.1) | 7.4 | (20.1) | (23.7) | 13.8 | 10.9 |
| Foreign Liabilities | 9,087 | 8,842 | 7,853 | 10.3 | (13.6) | 20.3 | (10.9) | (20.9) | 7.9 | 5.5 |
| i. Short-term borrowings | 6,088 | 4,481 | 3,000 | 24.4 | (50.7) | 40.6 | (33.2) | (55.3) | 5.3 | 2.1 |
| ii. Long-term borrowings | 2,668 | 3,850 | 4,405 | (5.8) | 65.1 | (6.5) | 34.8 | 54.2 | 2.3 | 3.1 |
| iii. Deposits of non-residents | 331 | 511 | 448 | (35.6) | 35.5 | (11.2) | 43.4 | 25.7 | 0.3 | 0.3 |
| Domestic Liabilities | 89,377 | 110,454 | 114,485 | 8.1 | 28.1 | 8.0 | 8.9 | 12.8 | 77.6 | 80.3 |
| i. Short-term borrowing | 5,891 | 6,931 | 6,715 | (23.0) | 14.0 | (12.9) | (29.0) | (31.2) | 5.1 | 4.7 |
| ii. Long-term Borrowings | 1,285 | 1,077 | 1,481 | (8.2) | 15.3 | 46.3 | (3.8) | 32.2 | 1.1 | 1.0 |
| iii. Domestic Deposits | 75,692 | 89,530 | 91,175 | 12.6 | 20.5 | 11.4 | 7.7 | 9.7 | 65.7 | 63.9 |
| Other Liabilities | 6,509 | 12,916 | 15,115 | 0.4 | 132.2 | (10.7) | 72.7 | 102.1 | 5.7 | 10.6 |
| Paid-up capital | 9,258 | 9,738 | 9,738 | 39.5 | 5.2 | 7.0 | 1.1 | 1.1 | 8.0 | 6.8 |
| Shareholders' Funds | 16,718 | 19,681 | 20,278 | 22.8 | 21.3 | 13.7 | 11.9 | 4.7 | 14.5 | 14.2 |

Source: Bank of Ghana

Broadly, the industry's balance sheet growth remained strong through the third quarter as the initial pandemic-induced slowdown observed in the first quarter abated. Although low demand and tight credit stance weighed down on overall credit growth in the first half year, it is expected to pick-up as

banks signal net easing stance in the coming months coupled with the faster than projected economic recovery.

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



Source: Bank of Ghana Staff Calculations

2.1 Asset and Liability Structure

The asset and liability structure of the banking industry's balance sheet did not record substantial changes during the review period. Investments continued to dominate the asset mix, with a share of 44.0 percent in August 2020, compared with 39.9 percent share recorded in August 2019. Loans and advances (net) followed with a share of 27.4 percent in August 2020 from 29.6 percent recorded in the previous year. The share of "Cash and Due from Banks" also declined during the period from 23.3 percent to 20.9 percent, due in part to the reduction in the primary reserve requirement by 2

percentage points. Non-earning assets (fixed assets and other assets) however inched up to 7.7 percent from 7.2 percent (Annexes Table 1).

On the liability side, deposits remain the main source of funding of banks. The share of deposits however dipped marginally to 64.2 percent from 66.0 percent over the two corresponding periods. Similarly, the share of borrowed funds declined from 13.8 percent in August 2019 to 10.9 percent in August 2020 following a contraction in total borrowings during the period. The Shareholders' Funds component also dipped marginally from 14.5 percent to 14.2 percent. The share of "Other liabilities" however increased to 10.6 percent from 5.7 percent due mainly to receipt of depositor funds by CBG from the Receiver in respect of funds locked up with the defunct Savings and Loans companies and Finance Houses (Annexes Table 1).

2.2 Share of Banks' Investments

Banks' investment portfolio as at end-August 2020 was still in favour of long-term debt instruments (securities). The share of securities increased to 71.7 percent in August 2020 from 66.3 percent in August 2019. The share of short-term bills in total investments accordingly declined to 27.9 percent from 32.8 percent between the two periods. The share of equity investments remained negligible, at 0.4 percent at end-August 2020 (Figure 1).

3.0 Credit Risk

The industry's exposure to credit risk moderated in August 2020 relative to August 2019. However, the year-to-date assessment shows that the non-performing loans (NPL) ratio continued to inch up for most part of this year due largely to the COVID-19 pandemic-induced slowdown in credit growth and higher loan loss provisions arising from repayment challenges. A marginal reduction was however, recorded in the NPL ratio in August 2020 from the June 2020 position.

3.1 Credit Portfolio Analysis

The stock of gross loans and advances (excluding the loans under receivership) increased to GH¢45.0 billion at end-August 2020, representing a 15.6 percent annual growth, compared to 15.0 percent growth in August 2019. Private sector credit went up by 14.1 percent to GH¢40.1 billion at end-August 2020 compared with 12.4 percent growth in the previous year. Growth in public sector credit however moderated, declining from 46.6 percent in August 2019 to 29.8 percent in August 2020. In terms of market share, private sector credit continued to dominate at 89.2 percent, from 90.4 percent share a year earlier, while the share of public sector credit inched up to 10.8 percent from 9.6 percent (see Annexes Tables 2 & 4).

Gross loans and advances recorded a measured contraction of 0.4 percent in the year to August 2020 against a 6.5 percent growth for the same period in 2019, due partly to the repayment of considerably high short-term public sector loans and a weak demand for credit from the pandemic-induced slowdown in economic activity. Similarly, the year-to-date growth in private and public sector credit during the first eight months of the year were 1.9 percent and -16.2 percent, respectively, much lower than the previous year's growth of 5.3 percent and 19.2 percent, respectively. The sharp contraction in public sector credit as indicated above was due to repayment of a one-off short-term public sector loan in the first quarter of 2020, which was borrowed during the fourth quarter of 2019. The modest growth in private sector credit reflected weak demand (see Annexes Table 2). It is worth stating that the marginal slowdown in year-to-date growth in total credits reflected significant repayments and reduced borrowings by clients who have experienced downturn in business activity due to COVID-19.

New advances in 2020 was however higher, amounting to GH¢20.9 billion, compared with GH¢15.8 billion advanced during the same period in 2019.

In terms of classification, the services sector continued to have the highest share of credit, followed by the commerce and finance sector (Figure 1). Together with the manufacturing sector, these three sectors accounted for 58.3 percent of total credit with respective shares of 27.3 percent, 19.9 percent, and 11.1 percent as at end-August 2020. The other economic sectors accounted for the remaining 41.7 percent in various proportions (see Figure 1). The mining and quarrying sector remained the lowest recipient of industry credit with a share of 3.1 percent at end-August 2020.

3.2 Off-Balance Sheet Activities

Off-balance sheet transactions (largely comprising trade finance and guarantees) amounted to GH¢10.8 billion as at end-August 2020, representing a 7.9 percent annual growth, compared to the 14.9 percent growth a year ago. Banks' contingent liabilities as a percentage of total liabilities accordingly declined from 10.2 percent to 8.8 percent during the comparable periods. On a year-to-date basis, off-balance sheet transactions contracted by 5.7 percent in line with the slowdown in economic activity and reduction in cross-border activities (Annexes Table 3).

3.3 Asset Quality

Asset quality improved year-on-year with the NPL ratio declining from 17.8 percent in August 2019 to 15.5 percent in August 2020. The decline was on the back of an increase in the stock of loans by 15.6 percent while the stock of NPLs recorded only a marginal uptick of 0.7 percent to GH¢7.0 billion over the period. The adjusted NPL ratio (excluding the fully provisioned loan loss category), similarly declined from 8.9 percent to 6.6 percent over the review period.

The lower NPL ratio was driven mainly by the decline in the private sector NPL ratio from 19.2 percent to 16.6 percent, as the public sector NPL ratio inched up from 4.4 percent to 5.9 percent during the period. The decline in the industry NPL ratio, reflected in all sectors except the construction and commerce and finance sectors which have somewhat been severely impacted by COVID-19. The NPL ratio for agriculture, forestry, and fishing declined from 32.7 percent to 29.4 percent; electricity, water and gas dipped from 31.5 percent to 20.9 percent, while manufacturing also improved from 20.8 percent to 18.5 percent. The services sector also saw its NPL ratio declining from 7.8 percent to 5.3 percent (Figure 1).

4.0 Financial Soundness Indicators

The banking sector remains sound as evidenced by the strong financial soundness indicators (FSIs) of the sector as of August 2020. Key FSIs such as liquidity, solvency and efficiency remained broadly positive while profitability indicators continue to show signs of resilience.

4.1 Liquidity Indicators

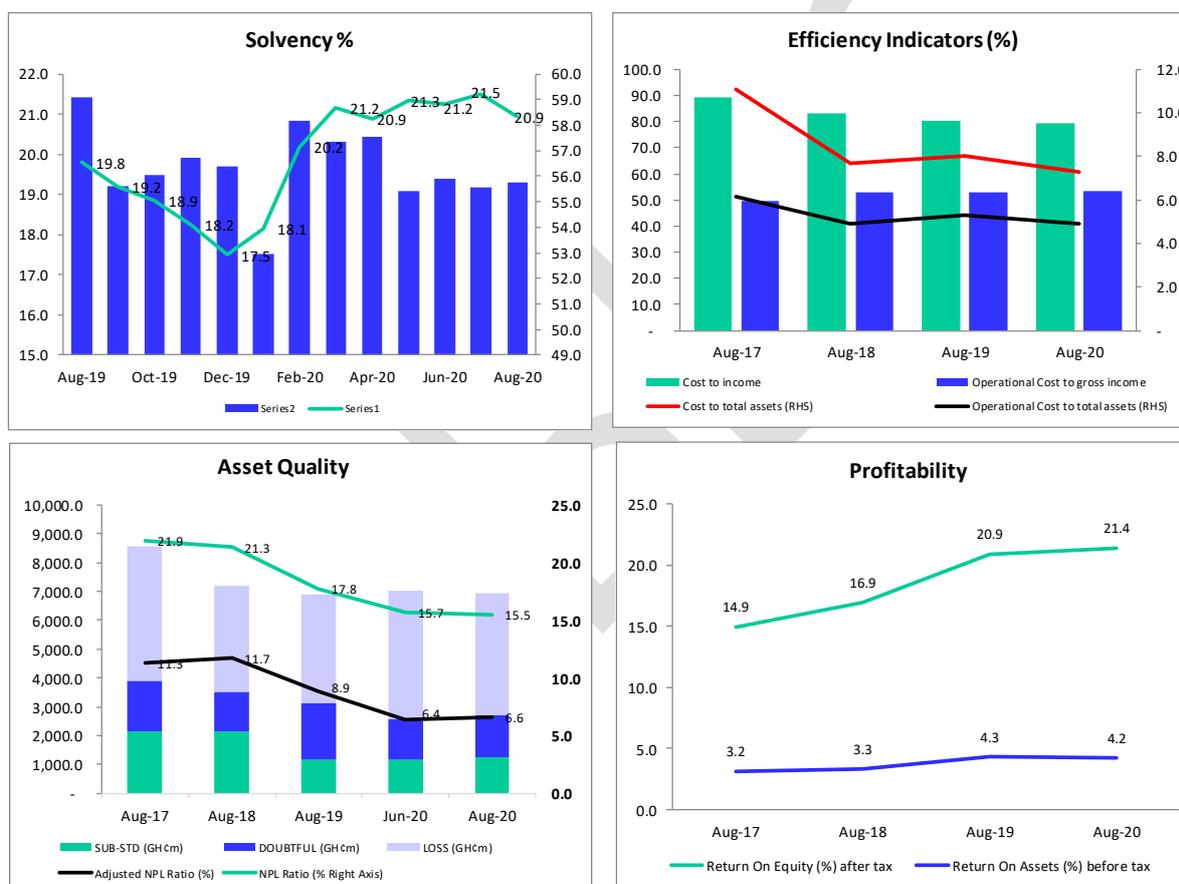
The ratio of core liquid assets (mainly cash and due from banks) to total deposits declined marginally to 32.5 percent in August 2020 from 35.3 percent at same period last year. The softening in this core liquidity measure was partly attributable to the 2-percentage point reduction in the primary reserve requirement by the Bank of Ghana to help support credit extension during this COVID-19 pandemic period. Core liquid assets to total assets also accordingly declined marginally to 20.9 percent from 23.3 percent a year ago (Annexes Table 5).

With some of these additional funds initially invested in liquid assets while assessing credit opportunities, the broad measures of liquidity recorded improvements. Broad liquid assets to total deposits increased to 100.8 percent from 95.2 percent while broad liquid assets to total assets edged up to 64.8 percent from 62.8 percent over the period.

4.2 Capital Adequacy Ratio (CAR)

Solvency continues to remain strong with the industry CAR of 20.9 percent well above the regulatory minimum of 11.5 percent under Basel II/III. The higher capital adequacy more than the regulatory threshold indicates that banks have more scope for lending, as well as enough capital buffers to absorb any potential losses from increased lending and/or from the current uncertain operating environment.

Figure 2: Key Financial Soundness Indicators (FSIs)



Source: Bank of Ghana Staff Calculations

4.3 Profitability

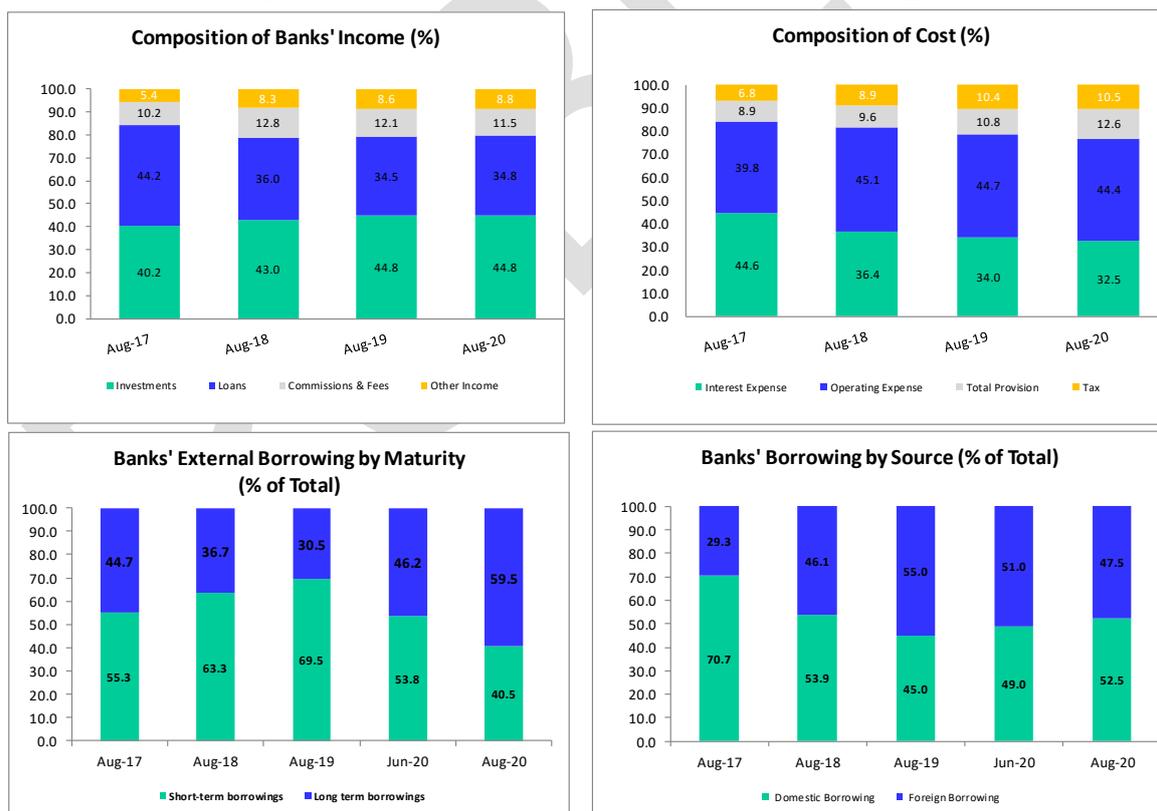
The drag on profit growth from higher operating costs and loan loss provisions observed in the H1-2020 performance, has somewhat softened into the third quarter. Accordingly, the annual growth in profit-after-tax went up from 15.5 percent in June 2020 to 21.5 percent in August 2020. Although the growth is below the 36.3 percent recorded during the same comparative period in 2019, the pick-up in growth nonetheless shows that the industry is sufficiently profitable.

Slowdown in revenue growth during the period contributed to the profit growth out-turn. Growth in net interest income slowed to 18.7 percent in August 2020 from 26.3 percent a year earlier. This was

due to a moderation in the growth of interest income and a pick-up in growth of interest expense during the review period. Growth in interest income moderated from 18.9 percent in August 2019 to 14.9 percent in August 2020 while interest expense growth inched up from 6.8 percent to 7.8 percent during the same comparative period. The increase in interest expense was on the back of increased term deposits and relatively more expensive borrowings. Despite the contraction in borrowings, interest expense on borrowings was higher during the year to August 2020 compared with the previous year. Like the trend in net interest income, growth in net fees and commissions and other income sources for banks also slowed, culminating in a decline in growth of gross income from 18.3 percent to 14.4 percent during the review period.

Growth in operating expenses moderated from 13.4 percent during the first eight months of 2019 to 12.1 percent for the same period in 2020. The slower growth in operating expenses reflected a similar slowdown in growth of staff costs, which normalised to 8.3 percent in August 2020. Banks' other operating expenses, generally related to administrative costs, on the other hand, increased by 16.7 percent compared to a contraction of 6.0 percent a year earlier. Part of the increase in other operating expenses was the cost associated with keeping the safety protocols and containment measures of COVID-19 as well as activation of Business Continuity Plans (BCPs) during the year (see Annexes Table 7 and Figure 3). It is worth noting that while the pandemic has increased the industry's cost of operations, banks have not passed on these costs to consumers through higher interest margins.

Figure 3: Composition of Income, Cost and Borrowings



Source: Bank of Ghana Staff Calculations

(a) Return on Assets and Return on Equity

Profitability indicators remained strong in August 2020 even though a marginal dip was recorded in the industry's Return on Assets (ROA) between August 2019 and August 2020. The sectors' Return on Assets (ROA) declined marginally from 4.3 percent to 4.2 percent during the comparative period, in line with the slower growth in profit-after-tax. The Return on Equity (ROE) however increased marginally from 20.9 percent to 21.4 percent between the two periods (Figure 2 and Annexes Table 6).

(b) Interest Margin and Spread

Banks' interest spreads tightened marginally from 9.0 percent to 7.6 percent between August 2019 and August 2020 on account of a larger decline in gross yields compared to interest payable. The industry's gross yield declined from 12.0 percent to 11.3 percent during the review period, offsetting the decline in interest payable from 4.1 percent to 3.6 percent. The sector's interest margin to total assets also declined marginally from 5.2 percent to 5.0 percent over the period, while the interest margin to gross income ratio edged up to 53.9 percent from 51.9 percent.

The ratio of gross income to total assets (asset utilisation) marginally declined to 5.0 percent from 5.2 percent over the period implying that for each asset in use, the income generated was less in August 2020 than August 2019. The industry's profitability ratio went up marginally to 20.8 percent in August 2020 from 19.5 percent a year earlier (Annexes Table 6).

(c) Composition of Banks' Income

Income from investments remained the largest source of banks' income at 44.8 percent at end-August 2020, unchanged from the previous year's share. Interest income from loans, the second largest source of banks' income, inched up to 34.8 percent from 34.5 percent. Similarly, the share of other income increased marginally from 8.6 percent to 8.8 percent. The portion of banks' income from fees and commissions however declined to 11.5 percent from 12.1 percent, in line with the decline in the growth of fees and commissions within the review period (See Figure 3).

4.4 Operational Efficiency

Key efficiency indicators continued to show broad improvements. The cost-to-income ratio of the industry improved marginally from 80.4 percent in August 2019 to 79.3 percent in August 2020, while cost-to-total assets improved to 7.3 percent from 8.0 percent during the same comparative period. The ratio of operational cost to total assets similarly improved from 5.3 percent to 4.9 percent. The ratio of operational cost to gross income on the other hand increased marginally to 53.5 percent from 53.0 percent between the two periods, on account of the slower growth in gross income in August 2020 (See Figure 2).

4.5 Banks' Counterparty Relationships

Growth in offshore balances picked up in August 2020 relative to August 2019. The sharp contraction in placements in August 2019 contracted by 6.3 percent in August 2020, accounting for the pick-up in growth in offshore balances to 13.9 percent from 2.9 percent growth during the period. Nostro balances on the other hand grew by 33.8 percent as at end-August 2020 from 49.8 percent in August 2019. Offshore balances represented a lower share of 49.3 percent of the industry's net worth in August 2020 compared with 56.6 percent a year ago (See Annexes Table 8).

The share of banks' external borrowings in total borrowings declined to 47.5 percent in August 2020 from 55.0 percent in August 2019 while that of domestic borrowing increased to 52.5 percent from

45.0 percent during the period. Banks' external borrowings were mainly long-term in nature. The share of long-term funds in total external borrowing increased to 59.5 percent from 30.5 percent, while the share of short-term external borrowing declined from 69.5 percent to 40.5 percent over the review period (Figure 3).

5.0 Stress Tests of the Banking Sector

The COVID-19 pandemic continues to adversely impact the supply chain system and economic activities. These developments pose potential risks to Ghana's financial industry ranging from liquidity (increasing withdrawals against low deposits), credit (high rate of default) and market risks. As part of its financial sector surveillance, the Bank updated assessment of the banking sector resilience to these shocks using the industry's position as of July 2020. The exercise also covered a multi-factor shock involving credit, interest, and exchange rate shocks. The results suggest that, on the whole, the banking sector remains robust and largely resilient to shocks emanating from the pandemic owing to the improvements in earnings, strong liquidity and capital buffers, and the prompt COVID-19 policy measures introduced by Bank of Ghana.

5.1 Assumptions of the Credit¹, Liquidity and Market Risks Stress Tests

The credit risk stress testing assesses the effect of deterioration in banks' loan portfolio on solvency using the loan migration approach. Under this framework, existing banks' loan portfolios are reclassified by migrating a proportion of the loan in a high-quality category to the next low-quality category based on BOG prudential norms. The liquidity stress testing model evaluates the impact of a panic withdrawal on liquidity positions of banks. Specifically, it assesses the effect on the liquidity of banks after an assumed run continues for up to thirty (30) days. An institution with sufficient liquidity to meet the withdrawal needs is deemed to have survived the shock.

Under market risk, exchange rate and interest rate risks were assessed. The exchange rate scenario stressed the direct impact of exchange rate volatilities on banks' net open position and subsequently the industry's capital adequacy. The model assumes that a change in the exchange rate leads to a proportional change in the domestic currency value of the institution's net open position. The assessment of the interest rate shocks utilizes the repricing gap model that estimates changes in interest income and interest expenses resulting from the "gap" between the flow of interest on the holdings of assets and liabilities in each bucket. The "gap" in each time-to-repricing bucket shows how net interest income will be affected by a given change in interest rates. The model is simulated under the assumption that the shock takes the form of a parallel shift of the yield curve for all instruments and currencies and the time-to-repricing is up to one year. See Annexes Tables 9, 10 and 11 for the major assumptions underpinning the assessments.

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.

¹The 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.

5.2 Results of Credit, Liquidity and Market Risk Stress Tests

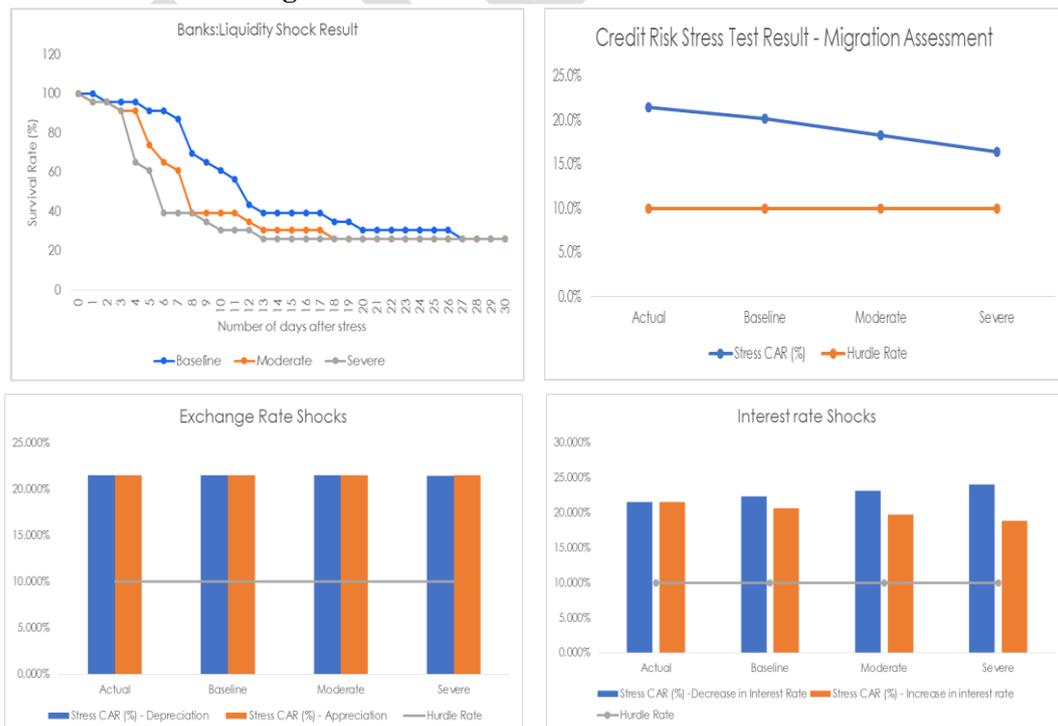
The banking sector is liquid and well-positioned to absorb liquidity shocks. The development reflects the gains from the recent banking sector reforms and the COVID-19 policy responses. The survival rate of the sector to liquidity runs remains high in the first five working days across the baseline and the moderate scenarios as shown 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.

Supported by strong capital build-up from profit retention and the recent capital injection (recapitalisation), the resilience of the banking sector to credit risk shocks remain strong (see Figure 4). The prompt policy response to the COVID-19 pandemic including the freeze on dividend pay-out, reduction in the Cash Reserve Requirement and the reduction in policy rate supported the sector to build-up reserves to withstand credit shocks.

Broadly, the impact of exchange rate shocks on the banking system is muted. The result indicates that, an unexpected significant depreciation or appreciation of the Ghana Cedi against the US Dollar would not have any significant impact on the solvency position of institutions, reflecting the existing tight limits on net open positions. The industry also remains resilient to interest rate shocks implying that maturity of assets is well aligned with liabilities. However, the industry appears to be more vulnerable to upward adjustment in interest rate than in a situation where rates generally decline (see Figure 4).

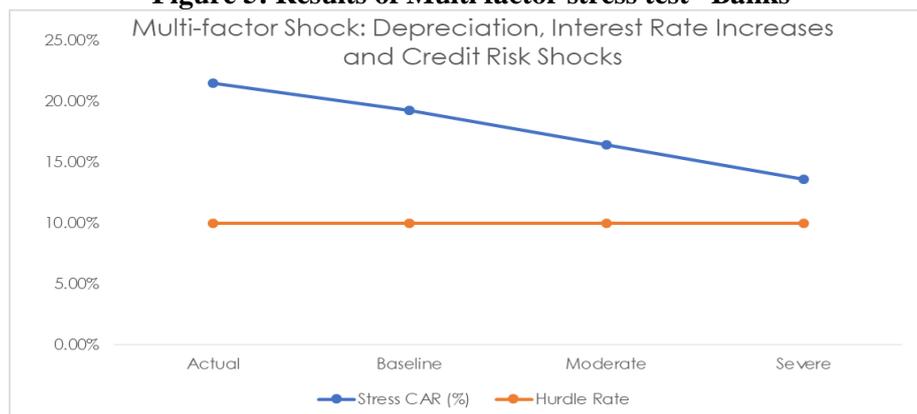
The multi-factor scenario combines credit (loan migration model), exchange rate (depreciation) and upward adjustment in interest rate shocks. The results show that, the banking sector continues to be resilient to concurrent asset quality downgrade, extreme interest rate increases and depreciation of the Cedi against the US Dollar. Following the multifactor shock, stressed capital adequacy ratio (CAR) of the industry under the extreme scenario stood at 13.6 percent well above the minimum statutory CAR required under such extreme adverse conditions (Figure 5).

Figure 4: Results of the Stress Tests – Banks



Source: Financial Stability Department, Bank of Ghana

Figure 5: Results of Multi factor stress test –Banks



Source: Financial Stability Department, Bank of Ghana

5.4 Conclusion on Stress Tests

The updated stress test on the banking sector showed 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. In addition, the banking sector industry is resilient to exchange rate and interest rate shocks. The Bank of Ghana will continue to monitor any potential shocks to the banking sector and respond appropriately.

6.0 Credit Conditions Survey

Results from the August 2020 credit conditions survey pointed to a net tightening in overall credit stance on loans to enterprises. Except for short-term enterprise loans, all components of corporate loans recorded net tightening in credit stance between June and August 2020. The tight credit stance continues to reflect the uncertainty surrounding the duration, scale, and impact of the pandemic on banks' operations. Banks have however signalled a net easing in overall credit stance on loans to enterprises over the next two months, to be reflected in long-term enterprise loans and loans to large enterprises in line with the anticipated higher demand for credit from the projected pick-up in economic activity. However, stance on loans to SMEs are projected to tighten further as repayment challenges faced by these SMEs due to the pandemic persists. Short-term enterprise loans are also projected to tighten two months on, after easing during the current survey period.

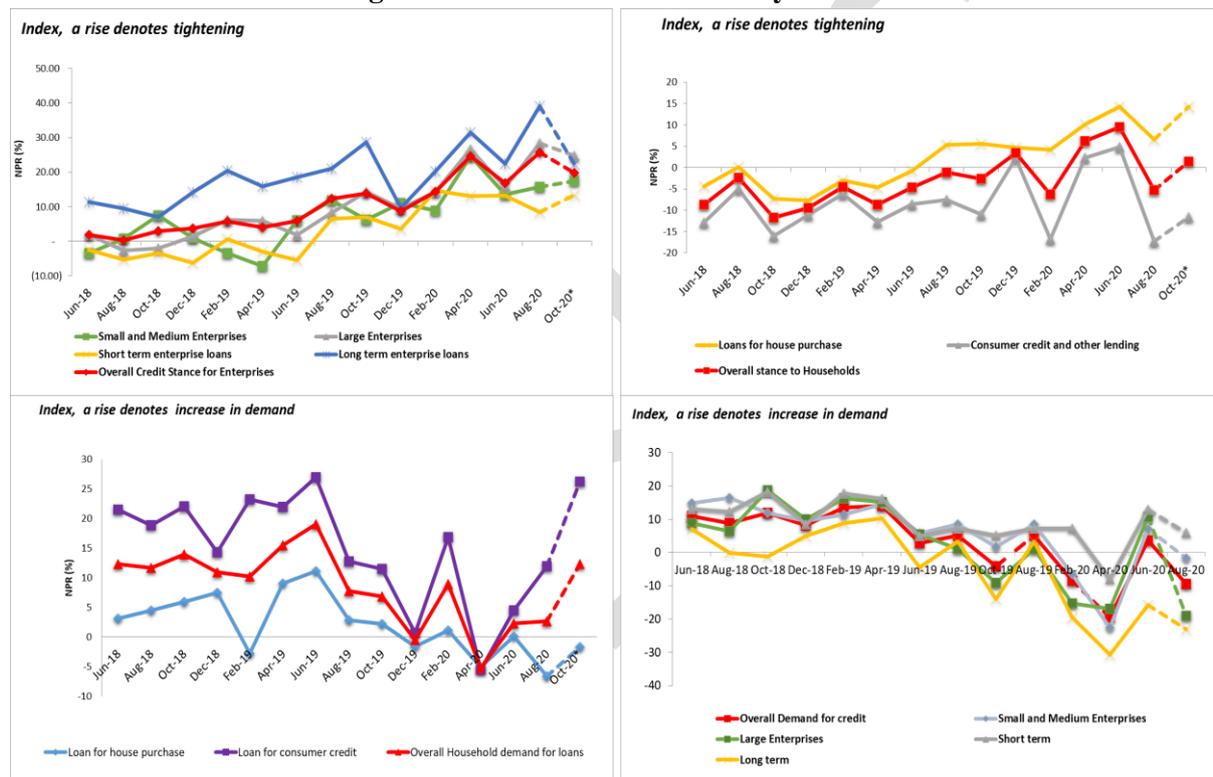
The overall credit stance on household loans, on the other hand, recorded a net ease between June and August 2020. Banks however project their stance on loans to households to tighten two months on, to be reflected in both loans for house purchase and consumer credit and other lending. The observed swings in the credit stance of banks seem to reflect the lingering uncertainties in the credit market and operational environment occasioned by COVID-19.

Demand for loans by enterprises eased during this survey period from declines in the demand for all the sub-components of enterprise credit, with the decline most pronounced in the demand for loans by large enterprises. Banks however project the demand for loans by enterprises to increase between August and October 2020 with the projected pickup in economic activity as the COVID-19 infection rate slows down. Similarly, demand for loans by households is projected to increase after moderating during the current survey period from a sharp decline in the demand for mortgages, while the demand for other consumer loans remained elevated. Overall demand for credit by households is projected to

increase between August and October 2020 from increases in both sub-components of household loans as shown in Figure 6.

Banks' inflation expectations for six months ahead recorded a marginal uptick during the current survey period, attributable to the uncertainties regarding general economic activity and rise in headline inflation rate attributable to the COVID-19 pandemic. On the other hand, the 150-basis points reduction in the Monetary Policy Rate (MPR) announced during the March 2020 MPC has passed through into a 200-basis points reduction in the average lending rates of banks between March 2020 and August 2020. Lending rates expectations of banks are projected to remain broadly unchanged over the next six months, in line with current economic trends.

Figure 6: Credit Conditions Survey Results



Source: Bank of Ghana Staff Calculations

7.0 Conclusion and Outlook

The banking sector continues to show resilience and robustness amid the COVID-19 pandemic. The comprehensive clean-up and recapitalization reforms have prepared and positioned the sector to weather the storm from the COVID-19 pandemic. Recent policy and regulatory reforms have also enhanced the sector's capacity in supporting the real sector and providing reliefs for customers severely impacted by the pandemic. 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. The outlook for the banking industry therefore remains positive, and supportive of growth in the medium-term.

ANNEXES

Table 1: Asset and Liability Structure of the Banking Sector

| | <u>Aug-17</u> | <u>Aug-18</u> | <u>Aug-19</u> | <u>Jun-20</u> | <u>Aug-20</u> |
|---|---------------|---------------|---------------|---------------|---------------|
| Components of Assets (% of Total) | | | | | |
| Cash and Due from Banks | 25.9 | 25.6 | 23.3 | 21.7 | 20.9 |
| Investments | 28.5 | 38.8 | 39.9 | 42.3 | 44.0 |
| Net Advances | 36.3 | 27.6 | 29.6 | 28.0 | 27.4 |
| Others | 8.0 | 8.4 | 7.0 | 7.5 | 7.8 |
| Components of Liabilities and Shareholders' Funds (% of Total) | | | | | |
| Total Deposits | 62.4 | 64.7 | 66.0 | 64.8 | 64.2 |
| Total Borrowings | 17.7 | 16.0 | 13.8 | 11.8 | 10.9 |
| Shareholders' Funds | 13.9 | 13.9 | 13.9 | 13.6 | 13.8 |
| Other Liabilities | 6.1 | 7.3 | 6.7 | 5.9 | 9.3 |

Bank of Ghana Staff Calculations

Table 2: Credit Growth

| Economic Sector | Ghcmillion | | | | y/y growth (%) | | year-to-date growth(%) | | |
|-----------------------|------------|--------|--------|--------|----------------|--------|------------------------|--------|--------|
| | Aug-18 | Aug-19 | Jun-20 | Aug-20 | Aug-19 | Aug-20 | Aug-19 | Jun-20 | Aug-20 |
| Public Sector | 2,556 | 3,747 | 4,933 | 4,864 | 46.6 | 29.8 | 19.2 | -15.0 | -16.2 |
| Private Sector | 31,267 | 35,155 | 40,037 | 40,107 | 12.4 | 14.1 | 5.3 | 1.7 | 1.9 |
| - Private Enterprises | 23,168 | 25,920 | 29,255 | 29,322 | 11.9 | 13.1 | 6.9 | 1.5 | 1.8 |
| o/w Foreign | 3,219 | 4,052 | 3,721 | 3,332 | 25.9 | -17.8 | 11.5 | -1.5 | -11.8 |
| Indigeneous | 19,949 | 21,868 | 25,534 | 25,990 | 9.6 | 18.9 | 6.1 | 2.0 | 3.8 |
| - Households | 7,511 | 8,048 | 9,448 | 9,653 | 7.2 | 19.9 | -3.7 | 0.4 | 2.6 |
| Gross Loans | 33,823 | 38,903 | 44,970 | 44,971 | 15.0 | 15.6 | 6.5 | -0.4 | -0.4 |

Bank of Ghana Staff Calculations

Table 3: Contingent Liability

| GHCM | <u>Aug-17</u> | <u>Aug-18</u> | <u>Aug-19</u> | <u>Jun-20</u> | <u>Aug-20</u> |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Contingent Liabilities (GHcM) | 8,075.9 | 8,806.6 | 10,001.4 | 11,455.4 | 10,784.4 |
| Growth (y-o-y) | 38.5 | 12.4 | 14.9 | 12.2 | 7.9 |
| % of Total Liabilities | 10.8 | 9.7 | 10.2 | 9.6 | 8.8 |

Bank of Ghana Staff Calculations

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

| | Aug-18 | | Aug-19 | | Jun-20 | | Aug-20 | |
|--------------------------|-----------------------|---------------|-----------------------|---------------|-----------------------|---------------|-----------------------|---------------|
| | Share in Total Credit | Share in NPLs | Share in Total Credit | Share in NPLs | Share in Total Credit | Share in NPLs | Share in Total Credit | Share in NPLs |
| a. Public Sector | 7.6 | 5.6 | 9.6 | 2.4 | 11.0 | 4.4 | 10.8 | 4.2 |
| i. Government | 2.7 | 1.1 | 3.7 | 0.3 | 4.3 | 0.4 | 4.1 | 0.3 |
| ii. Public Institutions | 0.9 | 0.3 | 1.5 | 0.3 | 2.8 | 0.3 | 2.8 | 0.3 |
| iii. Public Enterprises | 4.0 | 4.2 | 4.4 | 1.8 | 3.8 | 3.7 | 4.0 | 3.5 |
| b. Private Sector | 92.4 | 94.4 | 90.4 | 97.6 | 89.0 | 95.6 | 89.2 | 95.8 |
| i. Private Enterprises | 68.5 | 85.0 | 66.6 | 82.2 | 65.1 | 82.7 | 65.2 | 84.5 |
| o/w Foreign | 9.5 | 10.3 | 10.4 | 8.5 | 8.3 | 9.3 | 7.4 | 7.3 |
| Indigeneous | 59.0 | 74.6 | 56.2 | 73.7 | 56.8 | 73.4 | 57.8 | 77.2 |
| ii. Households | 22.2 | 8.8 | 20.7 | 10.9 | 21.0 | 7.3 | 21.5 | 8.7 |
| iii. Others | 1.7 | 0.7 | 3.1 | 4.5 | 3.0 | 5.6 | 2.5 | 2.7 |

Bank of Ghana Staff Calculations

Table 5: Liquidity Ratios

| | <u>Aug-17</u> | <u>Aug-18</u> | <u>Aug-19</u> | <u>Jun-20</u> | <u>Aug-20</u> |
|---|---------------|---------------|---------------|---------------|---------------|
| Liquid Assets (Core) - (GH¢'million) | 22,264.8 | 26,764.45 | 26,853.9 | 30,177.40 | 29,819.46 |
| Liquid Assets (Broad) -(GH¢'million) | 46,430.9 | 66,890.29 | 72,350.0 | 88,729.25 | 92,364.29 |
| Liquid Assets to total deposits (Core)-% | 41.5 | 39.5 | 35.3 | 33.5 | 32.5 |
| Liquid Assets to total deposits (Broad)- % | 86.5 | 98.7 | 95.2 | 98.5 | 100.8 |
| Liquid assets to total assets (Core)- % | 25.9 | 25.6 | 23.3 | 21.7 | 20.9 |
| Liquid assets to total assets (Broad)- % | 53.9 | 63.9 | 62.8 | 63.8 | 64.8 |

Bank of Ghana Staff Calculations

Table 6: Profitability Indicators (%)

| | <u>Aug-17</u> | <u>Aug-18</u> | <u>Aug-19</u> | <u>Aug-20</u> |
|--|---------------|---------------|---------------|---------------|
| Gross Yield | 14.3 | 10.3 | 12.0 | 11.3 |
| Interest Payable | 6.7 | 4.0 | 4.1 | 3.6 |
| Spread | 7.5 | 6.3 | 7.9 | 7.6 |
| Asset Utilitisation | 12.4 | 9.3 | 10.0 | 9.2 |
| Interest Margin to Total Assets | 5.5 | 4.5 | 5.2 | 5.0 |
| Interest Margin to Gross income | 44.6 | 48.6 | 51.9 | 53.9 |
| Profitability Ratio | 10.5 | 16.7 | 19.5 | 20.8 |
| Return On Equity (%) after tax | 14.9 | 16.9 | 20.9 | 21.4 |
| Return On Assets (%) before tax | 3.2 | 3.3 | 4.3 | 4.2 |

Source: Bank of Ghana Staff Calculations

Table 7: DMBs' Income Statement Highlights

| | (GH c' million) | | | | Y-on-y Growth (%) | | |
|--|-----------------|--------------|--------------|--------------|-------------------|-------------|-------------|
| | Aug-17 | Aug-18 | Aug-19 | Aug-20 | Aug-18 | Aug-19 | Aug-20 |
| Interest Income | 9,008 | 7,647 | 9,089 | 10,448 | (15.1) | 18.9 | 14.9 |
| Interest Expenses | -4,251 | -2,934 | -3,134 | -3,377 | (31.0) | 6.8 | 7.8 |
| Net Interest Income | 4,757 | 4,714 | 5,955 | 7,070 | (0.9) | 26.3 | 18.7 |
| Fees and Commissions (Net) | 1,084 | 1,243 | 1,392 | 1,515 | 14.6 | 12.0 | 8.9 |
| Other Income | 581 | 801 | 985 | 1,159 | 37.8 | 23.0 | 17.7 |
| Operating Income | 6,423 | 6,757 | 8,332 | 9,745 | 5.2 | 23.3 | 17.0 |
| Operating Expenses | -3,795 | -3,632 | -4,120 | -4,619 | (4.3) | 13.4 | 12.1 |
| Staff Cost (deduct) | -1,865 | -1,639 | -2,247 | -2,433 | (12.1) | 37.1 | 8.3 |
| Other operating Expenses | -1,930 | -1,993 | -1,873 | -2,186 | 3.3 | (6.0) | 16.7 |
| Net Operating Income | 2,628 | 3,125 | 4,212 | 5,126 | 18.9 | 34.8 | 21.7 |
| Total Provision (Loan losses, Depreciation & others) | -856 | -788 | -1,009 | -1,307 | (7.9) | 28.1 | 29.5 |
| Income Before Tax | 1,772 | 2,337 | 3,203 | 3,819 | 31.9 | 37.0 | 19.2 |
| Tax | -647 | -719 | -963 | -1,096 | 11.0 | 33.9 | 13.8 |
| Net Income | 1,125 | 1,618 | 2,240 | 2,723 | 43.9 | 38.4 | 21.5 |
| Gross Income | 10,674 | 9,691 | 11,466 | 13,122 | (9.2) | 18.3 | 14.4 |

Bank of Ghana Staff Calculations

Table 8: Developments in Offshore Balances

| | <u>Aug-17</u> | <u>Aug-18</u> | <u>Aug-19</u> | <u>Jun-20</u> | <u>Aug-20</u> |
|---|---------------|---------------|---------------|---------------|---------------|
| Offshore balances as % to Networth | 63.3 | 75.9 | 56.6 | 46.8 | 49.3 |
| Annual Growth in Offshore balances (%) | 18.2 | 45.4 | 2.9 | -0.1 | 13.9 |
| Annual Growth in Nostro Balances (%) | 1.9 | 52.9 | 49.8 | 12.3 | 33.8 |
| Annual Growth in Placement (%) | 39.0 | 39.0 | -23.8 | -11.4 | -6.3 |

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 | 10.00 | 10.00 | 10.00 |
| Domestic currency | | | |
| Demand and savings deposits withdrawn per day (dom. curr.) (%) | 0.20 | 0.20 | 0.20 |
| Time deposits withdrawn per day (dom. curr.) (%) | 0.20 | 0.20 | 0.20 |
| Liquid assets: available in a day (dom. curr.) (%) | 0.95 | 0.95 | 0.95 |
| Other assets: available in a day (dom. curr.) (%) | - | - | - |
| Government bonds illiquid (%) | - | - | - |
| Haircut (%) | 0.10 | 0.10 | 0.10 |
| Foreign currency | | | |
| Demand and savings deposits withdrawn per day (for. curr.) (%) | 0.20 | 0.20 | 0.20 |
| Time deposits withdrawn per day (for. curr.) (%) | 0.20 | 0.20 | 0.20 |
| Liquid assets: available in a day (for. curr.) (%) | 0.95 | 0.95 | 0.95 |
| Other assets: available in a day (for. curr.) (%) | - | - | - |
| Claims on foreign banks (for. curr.) illiquid (%) | - | - | - |

Source: Bank of Ghana Staff Calculations

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 | 0.04 | - | - |
| OLEM to Substandard | 0.54 | 1.00 | 1.00 |
| Substandard to Doubtful | 0.76 | 1.00 | 1.00 |
| Doubtful to Loss | 1.00 | 1.00 | 1.00 |
| Current to Doubtful | - | 0.10 | 0.20 |
| Growth of total loans | 0.01 | 0.01 | 0.01 |
| Estimated NPL Ratio | 0.20 | 0.30 | 0.37 |

Source: Bank of Ghana Staff Calculations

Table 11 Assumptions Underpinning the Market Risk Stress Testing of Banks

| Interest Rate Shocks | Baseline | Moderate | Severe |
|---|----------|----------|--------|
| +1, 2 and 3 standard deviation from the average benchmark interest rate- Treasury Bill over the past decade | 7.4% | 14.3% | 21.3% |
| -1, 2 and 3 standard deviation from the average benchmark interest rate- Treasury Bill over the past decade | -6.5% | -13.5% | -20.4% |
| Exchange Rate Shocks | Baseline | Moderate | Severe |
| +1, 2 and 3 standard deviation from the mean depreciation of the Cedi/Dollar Exchange Rate over the past decade | 23% | 32.9% | 42.8% |
| -1, 2 and 3 standard deviation from the mean depreciation of the Cedi/Dollar Exchange Rate over the past decade | 3.1% | 6.8% | 16.7% |

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.