FINANCIAL STABILITY REVIEW

DECEMBER 2019

Preface

The Financial Stability Review assesses developments in the financial system and the broader macroeconomy, with a focus on emerging threats to financial stability. The report specifically covers macro-financial developments, and the four broad sectors of the financial system; banking, insurance, pension and securities sectors. In the special feature section, the report also highlights recent policy reforms in the financial sector, the establishment of the Financial Stability Advisory Council, and emerging issues related to the promotion of financial integrity in the banking sector. The publication of this report is targeted at promoting market transparency and public awareness on financial stability issues in Ghana. The report was compiled by the Bank of Ghana in consultation with the National Pensions Regulatory Authority, National Insurance Commission, and the Securities and Exchange Commission.

Contents

Executive Summary

Global macro-financial vulnerabilities remained broadly subdued in spite of a slowdown in global economic growth. In 2019, heightened uncertainties emerging from geopolitical factors including the US-China trade tensions and prolonged Brexit negotiations slowed down economic activities and dampened global economic growth. Improvement in global financing conditions induced by an accommodative monetary policy stance, in most advanced economies, moderated downside risks to global growth and financial stability.

On the domestic front, favourable macrofinancial developments reduced vulnerabilities stemming from the domestic economy. Domestic output remained strong at 6.5 percent in 2019, while headline inflation continued to decline. In the review period, a balance of payments surplus was also observed as a result of a narrowing of the current account deficit. This is expected to support stability of the local currency – the Cedi – and lead to improvements in the Gross International Reserves. On credit developments, the Credit-to-GDP gap was below its potential level, indicating that the economy has the capacity to absorb more credit without a significant build-up of risks.

The banking sector remained sound and robust to severe stress test scenarios, featuring significant increases in credit impairments, extreme movement in interest and exchange rates, and liquidity pressures. Also risk emanating from cross-border exposures remained contained. The broad level of risk containment in the banking sector was underpinned by strong capital and liquidity positions, placement of offshore funds with stable institutions and improvement in asset quality, earnings and efficiency. Going forward, favourable economic prospects in the near term and the gradual phase in of Basel II/III are expected to firm up gains achieved through the banking sector reforms.

The performance of the insurance sector broadly improved in 2019, with the outlook for premium growth, risk retention and insurance penetration remaining positive. Policy reforms and a favourable operational environment improved premium income, assets and capital positions. Despite these improvements, persistent underwriting losses and declining investment yields continued to drag on profitability. In the near to medium term, the introduction of the new minimum capital regime is expected to improve efficiencies through consolidation. In addition, insurance penetration is expected to improve on the back of a broad-based introduction of innovative insurance products and comprehensive policy reforms aimed at strengthening the insurance industry.

Driven by strong growth in private pension funds, the pensions sector continued to expand in spite of emerging vulnerabilities from weak investment outturns, weakened contribution growth and rising benefit payout. Notwithstanding these vulnerabilities, the pensions sector exhibits a strong potential for growth in the medium to long term as policy measures are targeted at increasing contributions flows and inclusion.

In the capital market, the performance of the stock exchange declined in the period under review posing a risk to large equity holders such as the public pension fund. The declining performance reflects the reductions in the size, access, and efficiency dimensions of the stock market. Despite these developments, capital flight remained low as foreign investors increased their presence on the domestic capital market, partly due to restored banking sector stability and favourable macroeconomic prospects.

The financial sector also continued to witness policy reforms aimed at safeguarding financial and macroeconomic stability. The reforms included the resolution of insolvent institutions, increase in minimum capital requirements, enhancement of supervisory regimes, establishment of a regulatory forum for Anti-Money Laundering and Combatting the Financing of Terrorism, establishment of a Financial Stability Advisory Council, and operationalisation of the Ghana Deposit Protection Corporation, among others.

1 Macro-financial Developments

Overview

Global economic activities slowed in 2019 due partly to geopolitical tensions. Developments within the global economy in 2019 were characterised by a synchronised slowdown in real sector activities primarily due to heightened uncertainty from geopolitical factors such as the US-China trade tensions and the fear of a no-deal Brexit. Consistent with growth moderation, global consumer price inflation remained muted across advanced economies with a marginal increase among emerging market economies. In response to the mounting downside risks to expected weak growth in 2019, central banks in advanced and some emerging market economies eased their monetary policy stance.

Domestic macroeconomic environment remained favourable. Domestic output remained strong in 2019, reflecting the high performance in the oil, agricultural and industrial sectors. Headline inflation, in the year under review continued to decline on the back of lower food prices amidst stable non-food prices. The various measures of underlying inflation remained well-contained and the Bank's (Bank of Ghana's) core inflation (defined to exclude energy and utility prices) declined in the year under review, supported by well-anchored inflation expectations.

Global Developments

Global growth in 2019 declined to 2.9 percent from 3.6 percent in 2018. Prolonged US-China trade tensions, Brexit, other pockets of geopolitical tensions and uncertainties, and weaker-than-expected global manufacturing activity explain the decline in global growth. The weaker growth observed in 2019 also reflects underperformance and stressed market conditions in some Emerging Market and Developing Economies (EMDEs). These developments informed a myriad of policies across the globe - including a broad-based shift towards an accommodative monetary policy.

In line with weaker growth, global trade volumes have subdued but are expected to recover in the medium term. Global trade is estimated to dampen to 1.0 percent in 2019, down from 3.7 percent in 2018. In the medium term, however, world trade volume of goods and services is expected to rebound, increasing to 2.9 percent and 3.7 percent in 2020 and 2021 respectively. Global growth outlook, in line with the expected trade rebound, remains strong. Global growth is projected to increase to 3.3 percent in 2020 inching up further to 3.4 percent in 2021. The projected increase follows recent positive market sentiments showing that declines in manufacturing activities and global trade tensions, are bottoming out.

International commodity prices remained buoyant in 2019 despite some observed periodic volatilities. Spot gold price closed the year at an average price of US$1,405.61 per fine ounce, an increase of 10.7 percent as compared to the previous year. The surge in price was triggered by the dovish monetary policy stance of most central banks which pushed investors to the safe-haven bullion. Cocoa futures opened trading with an average price of US$2,325.07 per tonne in January 2019, up 3.1 percent, from end-December 2018. The price gain was predominantly triggered by news of dry weather conditions in the two top producing countries, Ivory Coast and Ghana. Average crude oil price in 2019 was US$64.15 per barrel, down by 10.3 percent, as compared to the previous year. The decline in crude oil price was as a result of protracted US-China trade tensions, and increased US shale crude oil production. Deeper production cuts by the Organisation of Petroleum Exporting Countries (OPEC) and its allies moderated the decline in crude oil price in the period under review.

Consumer price inflation has remained muted across advanced economies but elevated amongst emerging market economies. Global inflation in 2019 was 3.6 percent, the same as the figure in 2018. In advanced economies, inflation declined to 1.4 percent in 2019, from 2.0 percent in 2018. In contrast, in EMDEs, inflation picked up slightly to 5.0 percent in 2019, from 4.8 percent in 2018.

Global funding conditions continue to ease. In

Table 1.1: Overview of the World Economic Outlook (WEO) Projections

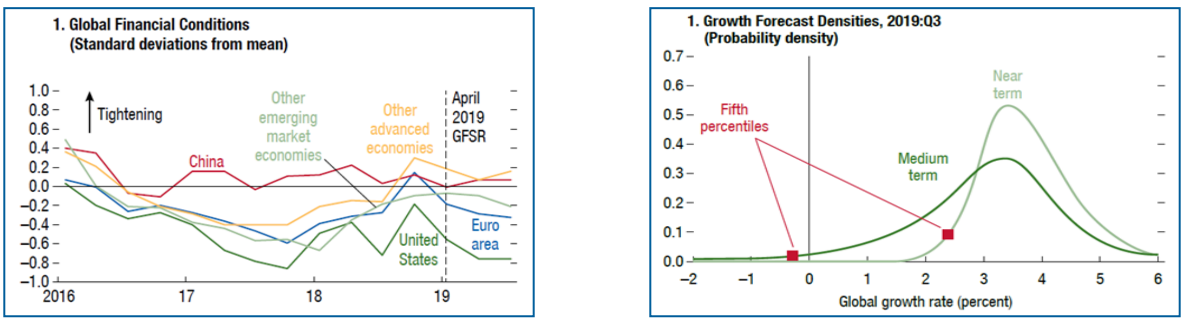
	2018	2019	2020	2021
World Output	**3.6**	**2.9**	**3.3**	**3.4**
Advanced Economies	**2.2**	**1.7**	**1.6**	**1.6**
United States	2.9	2.3	2.0	1.7
Euro Area	1.9	1.2	1.3	1.4
Japan	0.3	1.0	0.7	0.5
United Kingdom	1.3	1.3	1.4	1.5
Canada	1.9	1.5	1.8	1.8
Other Advanced Economies	2.6	1.5	1.9	2.4
Emerging Market and Developing Economies	**4.5**	**3.7**	**4.4**	**4.6**
Emerging and Developing Asia	6.4	5.6	5.8	5.9
Emerging and Developing Europe	3.1	1.8	2.6	2.5
Latin America and the Caribbean	1.1	0.1	1.6	2.3
Middle East and Central Asia	1.9	0.8	2.8	3.2
Sub-Saharan Africa	**3.2**	**3.3**	**3.5**	**3.5**
Ghana	6.3	7.5	5.6	4.2
Nigeria	1.9	2.3	2.5	2.5
South Africa	0.8	0.4	0.8	1.0
World Trade Volume (goods and Services)	**3.7**	**1.0**	**2.9**	**3.7**
Advanced Economies	3.2	1.3	2.2	3.1
EMDEs	4.6	0.4	4.2	4.7
Commodity Prices (US dollars)				
Oil	29.4	-11.3	-4.3	-4.7
Nonfuel	1.6	0.9	1.7	0.6
Consumer Prices				
Advanced Economies	2.0	1.4	1.7	1.9
EMDEs	4.8	5.1	4.6	4.5

Source: WEO Update, January 2020. EMDEs denote Emerging Market and Developing Economies.
Values for nonfuel is the average based on world commodity import weights

response to the mounting downside risks to expected weak growth in 2019, central banks in advanced and some emerging market economies have eased their monetary policy stance[1] thereby easing yields on government bonds. This easing policy stance has become possible as a result of muted inflation. The ease in financial conditions continues to moderate downside risks to growth and financial stability in the near term. The IMF Global Financial Stability Review[2] (GFSR) near-term growth-at-risk (GaR) has remained broadly unchanged with medium-term risks skewed leftwards[3]. These results indicate that while easing financial conditions have supported demand, it has also created an avenue for enhanced risk-taking behaviour of non-financial corporates in their search for yields. The risk-taking behaviour, from a financial stability perspective, is of concern, since it is potentially conducive for the build-up of vulnerabilities as investors participate and purchase more of riskier and illiquid assets.

Domestic Developments

Figure 1.1: Global Financial Conditions (left panel) and Growth Forecast Densities (right panel)



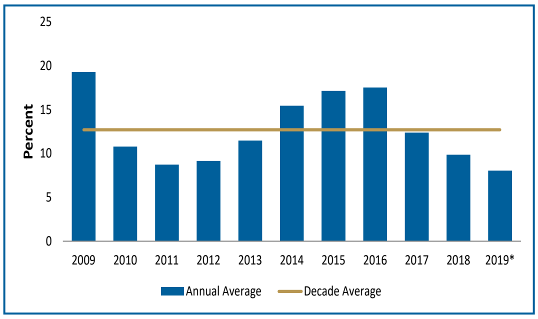
Source: IMF Global Financial Stability Review

[1]The Fed has cut rates by 25 bps since the second half of 2019. Australia and Russia also reduced policy rates by 75 bps each. While Brazil cut rates by 100 bps, Turkey reduced rates by 4.5 bps. The Peoples Bank of China also reduced its medium term lending rates by 5 bps. Financial conditions in the Euro area have also eased.
[2]IMF, Global Financial Stability Review, October 2019.
[3]Growth-at-Risk (GaR) is defined as the 5th percentile of the one-year-ahead forecast distribution. The GaR framework measures downside risks to financial stability by determining how a range of severely adverse growth outcomes shifts in response to changes in financial conditions and vulnerabilities.

Real GDP growth remained strong at 6.5 percent in 2019, as compared with the outturn of 6.3 percent in 2018. The estimated increase of 0.2 percent in 2019 is attributable to growth in the oil, agricultural and industrial sectors. The improvement in growth is expected to boost household and corporate sector performance, and induce fiscal stability as government revenues increase over the medium to long term. Consequently, the growth outlook remains positive with the IMFs World Economic Outlook projecting a domestic growth of 5.6 and 4.2 percent in 2020 and 2021 respectively. This optimism in growth has shaped consumer confidence in recent times.

Inflation continues to remain subdued around its central path of 8 percent in 2019. Average inflation recorded in 2019 is below its decade average of 12.7 percent. Following the Ghana Statistical Service's rebasing of the price indices, Ghana ended the year with headline inflation of 7.9 percent in December 2019, on the back of lower food prices and relatively stable non-food inflation.

Figure 1.2: Average annual inflation



Source: Ghana Statistical Service and BOG Computations.
**2019 figure reflects the rebased CPI in 2018*

The general increase in commodity prices and volumes of export significantly impacted the trade balance. On the whole, Ghana's exports increased by 4.6 percent to US$15.6 billion in 2019. This improvement in exports was driven largely by a 14.6 percent and 8.6 percent growth in gold and cocoa exports respectively. On the other hand, imports generally recorded a slower pace of growth in 2019, mainly as a result of a 9.2 percent contraction in oil and gas imports. These developments occasioned a trade surplus of US$2.3 billion (3.4 percent of GDP) in 2019, compared with US$1.8 billion (2.8 percent of GDP) in 2018.

The trade surplus and improvements in current transfers reduced the current account deficits by 2.5 percent of GDP in 2019. A current account deficit of US$1.7 billion was recorded in 2019 as compared to US$2.0 billion in 2018. The overall balance of payments account recorded a surplus of US$1.3 billion in 2019, compared with a deficit of US$671.5 million in 2018. These developments translated into further improvements in the Gross International Reserves to US$8.4 billion, providing 4 months of import cover of goods and services in 2019.

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Table 1:2 Selected Macroeconomic Data for Ghana

	2014	2015	2016	2017	2018	2019
GDP: Aggregate						
GDP, Current (GH₵"M)	155,433	180,399	215,077	256,671	300,596	349,480
Non-Oil GDP, Current (GH₵"M)	146,432	175,707	214,050	248,226	289,988	334,632
Per Capita GDP (GH₵"M)	5,748	6,520	7,597	8,863	10,150	11,541
GDP, Constant 2013 Prices (GH₵"M)	127,233	130,004	134,486	145,438	154,548	164,560
Non-Oil GDP, Constant 2013 Prices (GH₵"M)	119,966	122,592	128,232	134,160	142,867	151,113
GDP, Current Prices (%)	25.7	16.1	19.2	19.3	17.1	16.3
GDP, Constant 2013 Prices (%)	2.9	2.2	3.4	8.1	6.3	6.5
Non-Oil GDP, Constant 2013 Prices (%)	2.7	2.2	4.6	4.6	6.5	5.8
GDP Sectoral						
Agriculture, Current Prices (GH₵"M)	31,086	36,526	45,116	50,554	54,924	60,482
Agriculture, Constant 2013 Prices (GH₵"M)	25,528	26,103	26,862	28,503	29,878	31,266
Agriculture, Constant 2013 Prices (%)	0.9	2.3	2.9	6.1	4.8	4.6
Industry, Current Prices (GH₵"M)	53,767	57,155	60,709	78,015	94,770	111,810
Industry, Constant 2013 Prices (GH₵"M)	43,599	44,081	45,990	53,191	58,809	62,560
Industry, Constant 2013 Prices (%)	1.1	1.1	4.3	15.7	10.6	6.4
Services, Current Prices (GH₵"M)	56,132	71,334	92,680	109,698	129,279	154,270
Services, Constant 2013 Prices (GH₵"M)	51,017	52,547	54,014	55,776	57,295	61,644
Services, Constant 2013 Prices (%)	5.4	3	2.8	3.3	2.7	7.6

Source: Ghana Statistical Service.

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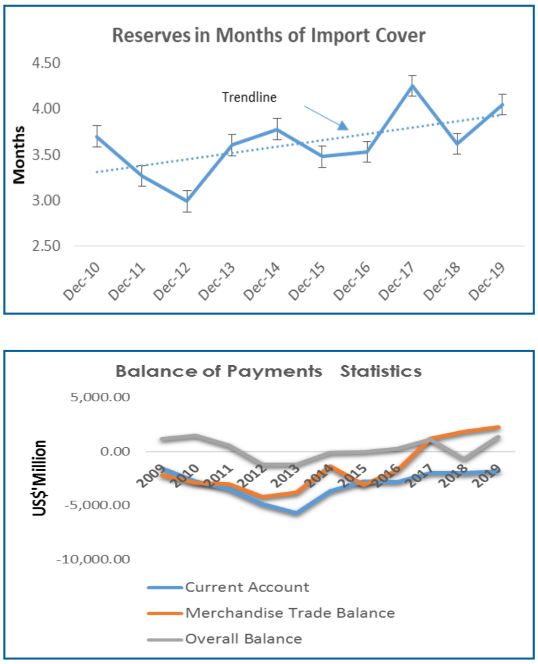
The local currency depreciated against the major international currencies. In 2019, the Ghana Cedi depreciated by 12.9 percent against the US dollar as compared to 8.4 percent in 2018. Against the British pound and Euro, the Ghana Cedi cumulatively depreciated by 15.7 percent and 11.2 percent respectively, compared with 3.3 percent and 3.9 percent in 2018.

Figure 1.3: Import Cover (top panel) and BOP (bottom panel)

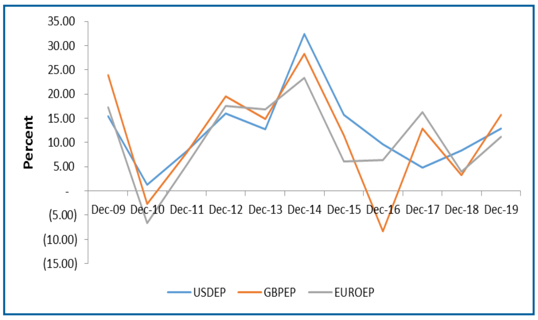


Source: Bank of Ghana

The positive development in the trade surplus, in the period under review, is expected to support stability in the foreign exchange market.

On the money market, interest rates increased marginally across the various maturity profiles of the yield curve. Rates on the 91-day Treasury bill and the 182-day Treasury bill increased to 14.69 percent and 15.15 percent in 2019, from 14.56 percent and 15.02 percent in 2018 respectively. The interbank weighted average lending rate, however, declined from 25.26 percent in December 2016 to 15.20 percent in December 2019, reflecting the continuous easing of the monetary policy stance over the period. The increasing rate on government instruments may increase patronage of investors and banks in government instruments, potentially reducing private sector credit.

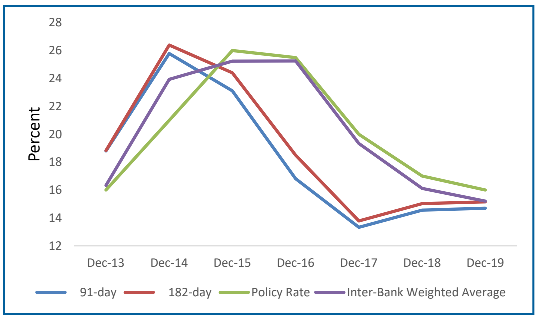
Figure 1.4: Average Y-o-Y Depreciation Rate



Source: Bank of Ghana

Yields on government instruments remained attractive on the secondary market. The 3-year bond rate increased from 19.50 percent in December 2018 to 19.70 percent in December 2019. Similarly, the 5 and 10-year bond rates increased in 2019 by 2.0 percentage points and 2.30 percentage points respectively to close the year at 19.50 percent and 19.80 percent. Yields on both the 7-year and the 15-year bonds remained unchanged over the review period at 16.25 percent and 19.75 percent.

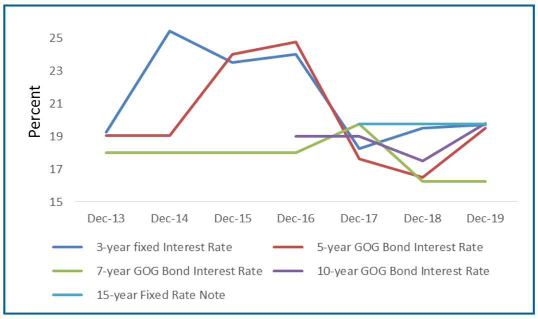
Figure 1.5: Selected Interest Rates in Ghana



Source: Bank of Ghana

The stock of public debt increased by 4.79 percent in

Figure 1.6: Yields on Government Bonds

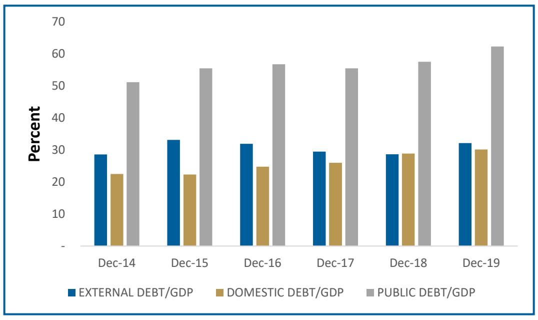


Source: Bank of Ghana

2019. Ghana's public debt stock increased in 2019 to 62.38 percent of GDP (GH₵214.87 billion) from 57.58 percent of GDP (GH₵173.1 billion) in 2018. Of the total outstanding debt stock, GH₵98.79 billion (28.68 percent of GDP) remains domestic while GH₵110.88 billion (32.19 percent of GDP) is external.

Credit-to-GDP Gap[4] is below its potential level,

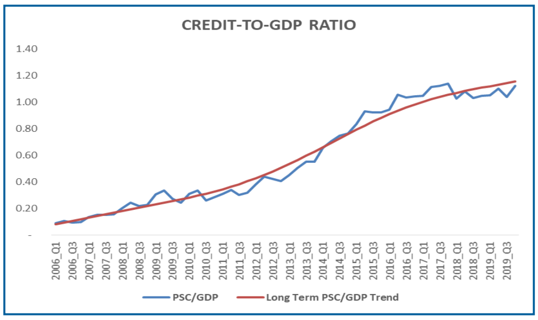
Figure 1.7: Public Debt RatiosFigure

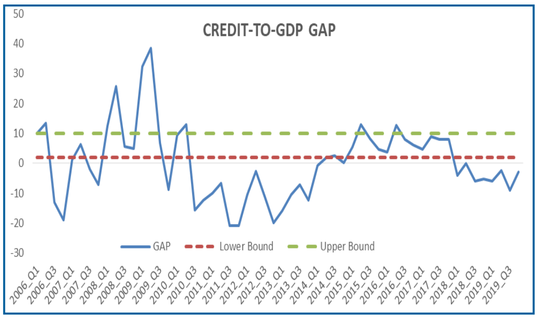


Source: Bank of Ghana

indicating that the economy has the capacity to absorb more credit without a significant buildup of risks. Between the third quarter of 2018 and 2019, the credit-to-GDP ratio was below its long term trend. Subsequently, as at end-December 2019, the credit-to-GDP gap was below the level that requires supervisory concern — 2 percent. In this regard, policies geared towards credit extension to the private sector could be adopted without a significant buildup of risks within the financial system.

Figure 1.8: Credit-To-GDP Ratio and Gap

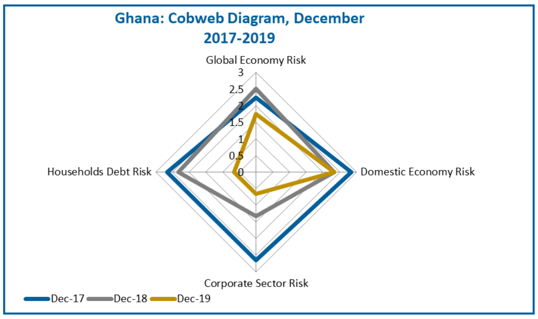




Source: Bank of Ghana

Risks to the Ghanaian financial system from the macroeconomic indicators, as presented by the cobweb framework, have reduced in the review period. The reduction of risks emanating from the global economy were on the back of strong trading partners' growth and easing funding conditions for emerging markets. The reduction of risks emanating from the debt stock of households and the corporate sector was in line with increased earnings as proxied by deposits.

Figure 1.9: Cobweb Framework for Macro-Financial Risk Assessment



Source: Bank of Ghana

[4]Credit-to-GDP gap measures the difference between the ratio of Credit-to-GDP and its long term trend. The Credit-to-GDP gap provides a robust single indicator for the buildup of financial vulnerabilities.

2 Assessment of Risks from Financial System Interconnectedness

Overview

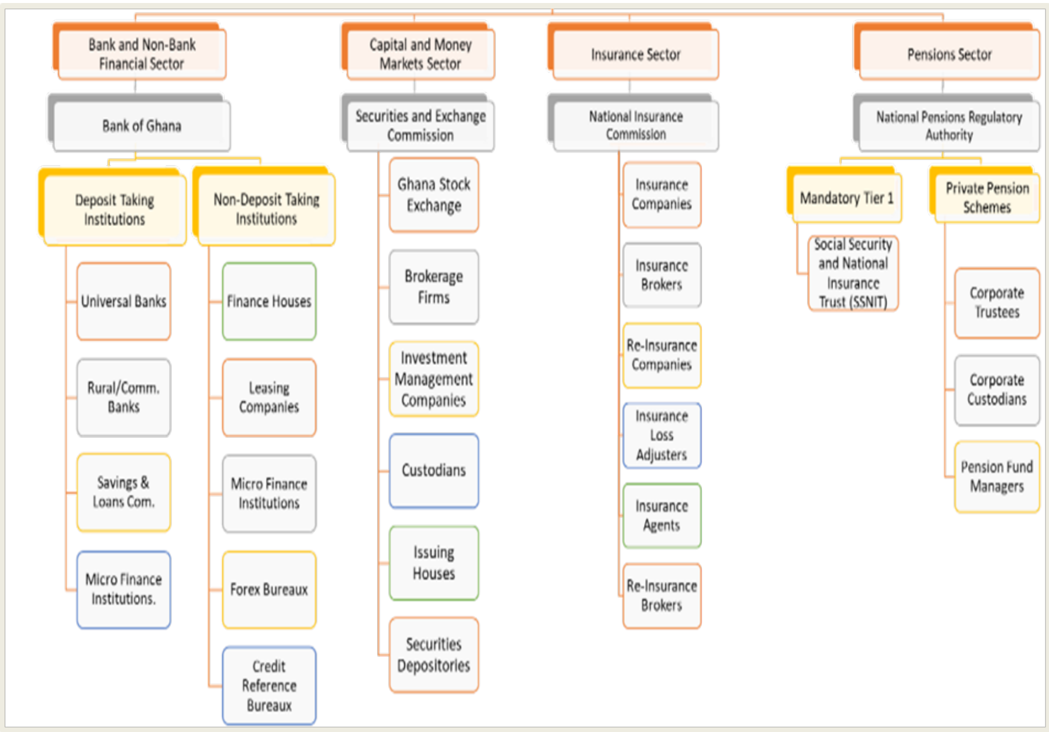
In the year under review, the total assets of the Ghanaian financial system expanded. The assets of the financial system increased to GH₵ 186.11 billion at end-December, 2019 from GH₵ 168.42 billion at end-December, 2018, in-spite of the broad-based clean-up of the banking and the securities sectors. The improvement in the asset of the financial system was on the back of expansions in the banking, insurance, and pension sectors.

The exposure levels of financial institutions to each other reinforce the need to maintain strong prudential standards with effective supervisory coordination and collaboration. In the period under review, total exposures of banks to other financial institutions[5] were approximately GH₵1.5 billion as at end-December 2019, while total exposure of other financial institutions to banks for the same year-end position, was approximately GH₵3.73 billion.

Structure of the Financial System

Ghana's financial system is regulated and supervised by four distinct authorities. The authorities are the Bank of Ghana (BoG), National Pensions Regulatory Authority (NPRA), the Securities and Exchange Commission (SEC) and the National Insurance Commission (NIC). The Banking sector is regulated by BoG, while the pensions, securities and insurance industry are regulated by NPRA, SEC, and NIC respectively. To help curb the risks of coordination gaps associated with this financial supervisory model, Ghana has established a number of advisory committees such as the Financial Stability Advisory Council (FSC), Committee for Cooperation Between Law Enforcement Agencies and Banking Community (COCLAB), Regulators Forum for AML/CFT, and the Law Enforce Committee of Banks (LECOB) to promote and enhance coordination within the sectors.

Figure 2.1: Structure of the financial system in Ghana



Source: Bank of Ghana

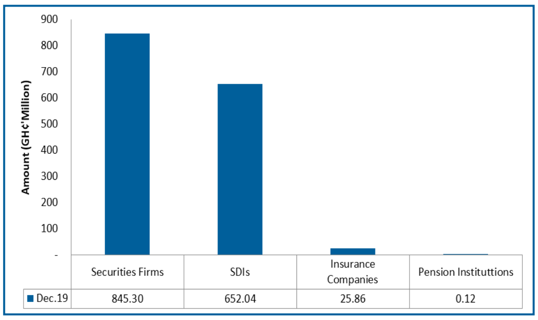
[5]Other financial institutions include specialised deposit-taking institutions and institutions regulated by National Insurance Commission, National Pensions Regulatory Authority and Securities and Exchange Commission.

Total financial system assets expanded in the period under review. The assets of the financial system increased to GH₵186.11 billion at end-December, 2019 from GH₵168.42 billion at end-December, 2018. The improvement in the asset of the financial system was on the back of expansions in the banking, insurance, and pension sectors. In the securities sector, a ban on guaranteed investment products and resolutions targeted at sanitising the sector, led to a drop in managed funds (excluding pension funds). In the medium-to-long term however, these initiatives together with plans to recapitalise the securities sector are expected to bolster growth. As at end-December 2019, the banking sector had the greatest share of total financial sector assets constituting approximately 76.78 percent, followed by the pensions (14.13 percent), securities (5.57 percent) and insurance (3.51 percent) sectors. Broadly, the financial sector remained well-positioned to support economic growth and financial stability.

Interconnectedness of the Financial System

Total exposures of banks to the other financial institutions[6] approximately amounted to GH₵1.5 billion as at end-December 2019. Exposures of banks to the other financial institutions were mainly in the form of loans and investment placements with the other financial institutions. In the year under review, universal banks were largely exposed to securities firms (GH₵845.30 million), specialised deposit-taking institutions (SDIs) (GH₵652.04 million), insurance companies (GH₵25.86 million) and pension institutions (GH₵0.12 million).

Figure 2.2: Banks exposure to other financial institutions



Source: Bank of Ghana

Total exposure of the other financial institutions to banks as at end-December, 2019 was approximately GH₵3.73 billion. Majority of these exposures were in the form of deposits and investments. In the year under review, pension institutions were the most exposed (GH₵1.03 billion), followed by SDIs (GH₵998.87 million), securities industry (GH₵932.09 million) and insurance companies (GH₵768.16 million). These exposures suggest that, banking sector reforms did not only strengthen the banking sector but also minimised contagion risk.

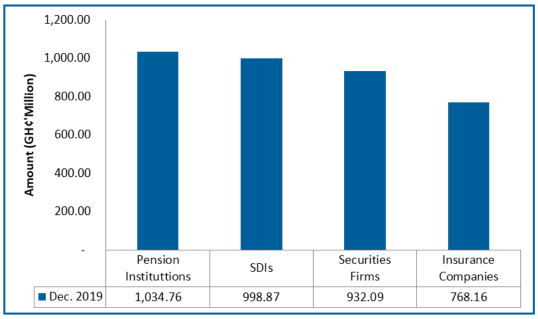
Table 2.1: Assets of the Ghanaian Financial System

INSTITUTIONS	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19
Banking Sector						
Total Banking Sector Assets (GH₵' M)	60,366.99	74,459.36	94,642.64	110,717.97	123,751.17	142,902.72
Share of Financial System Assets	**75.60**	**72.95**	**72.95**	**69.20**	**73.48**	**76.78**
Securities Sector						
Assets Under Management (excluding Pension Funds)- GH₵' M	7,258.24	11,103.82	15,735.70	23,854.26	16,978.01	10,370.81
Assets Under Management (including Pension Funds)- GH₵' M	8,388.43	13,671.76	20,158.88	31,062.12	25,570.88	26,249.08
Share of Financial System Assets	9.09	10.88	12.13	14.91	10.08	5.57
Insurance Sector						
Total Assets (GH₵' M)	2,212.00	3,026.92	3,667.38	4,653.33	5,489.64	6,540.27
o/w Life Insurance	1,322.87	1,718.37	2,182.67	2,842.49	3,155.41	3,821.79
Share of Financial System Assets	2.77	2.97	2.83	2.91	3.26	3.51
Pensions Sector						
Total Assets (GH₵' M)	10,008.83	13,482.19	15,682.94	20,769.23	22,201.19	26,295.20
o/w Public Pension Fund	7,427.32	8,810.08	8,889.99	9,771.14	9,187.58	8,931.93
Share of Financial System Assets	12.54	13.21	12.09	12.98	13.18	14.13
Financial System						
Total Financial System Assets	79,846.06	102,072.29	129,728.66	159,994.79	168,420.01	186,109.00

Source: Bank of Ghana, Securities and Exchange Commission, National Insurance Commission, National Pensions Regulatory Authority

[6]Other financial institutions include specialised deposit-taking institutions and institutions regulated by National Insurance Commission, National Pensions Regulatory Authority and Securities and Exchange Commission.

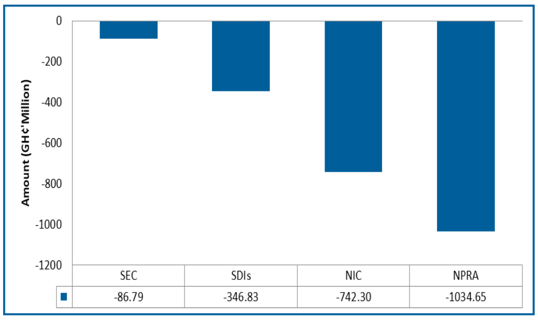
Figure 2.3: Other financial institutions exposure to Banks



Source: Bank of Ghana

The exposure of other financial institutions to banks is comparatively higher than banks' exposure to the Other Financial Institutions. On net basis, banks had a negative claim of GH₵2.21 billion on the other financial institutions, implying that on net basis, the other financial institutions have more money with the universal banks. These are disaggregated as follows: pensions' institutions (-GH₵1.03 billion); insurance institutions (-GH₵742.30 million); SDIs (-GH₵346.83 million); and the securities' institutions (-GH₵86.79 million).

Figure 2.4: Net claims on Banks



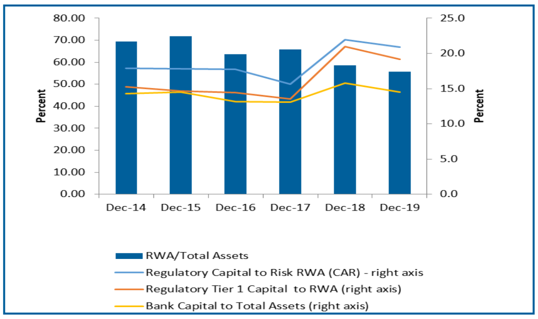
Source: Bank of Ghana

3 Assessment of Risks in the Banking Sector

Overview

The banking sector assets expanded in 2019 due mainly to increased capitalisation and deposit mobilisation[7]. Total assets of banks increased by 22.8 percent to GH₵129.06 billion at end-December 2019, from the end-December 2018 position. The ratio of total earning assets (Loans & Advances and Investments) to total assets increased to 68.5 percent in 2019, from 65.2 percent in 2018. The funding sources of total assets were mainly from deposits (64.7 percent of total assets).

Figure 3.1: Solvency Condition



Source: Bank of Ghana

The banking sector remained sound and robust in 2019. The Banking Sector Soundness Index (BSSI)[8], developed to capture the resilience and the soundness of the banking sector, showed that the banking sector soundness index in 2019 was the highest over the past two decades. The increase in the BSSI during the review period was driven by strong capital and liquidity positions, and improvement in asset quality, earnings and efficiency.

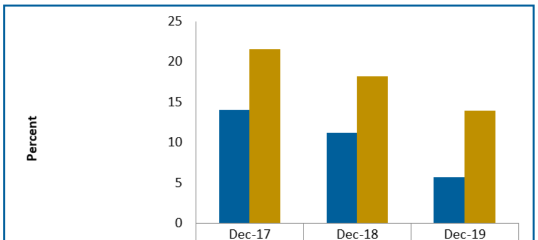
Assessment of Core Financial Sector Indicators

The banking sector solvency indicators were well above their regulatory minimum in 2019. Regulatory capital to risk-weighted assets (CAR) and Regulatory Tier 1 capital to risk-weighted assets (Tier1 CAR) at end-December 2019, stood at 20.92 percent and 19.14 percent respectively. These positions remained broadly unchanged from the 2018 position, but were significantly higher than those observed at end-December 2017. The significant improvement in the CAR and the quality of capital in the review year is mainly attributed to the upward revision of the minimum paid-up capital for banks by the Bank of Ghana from GH₵120 million to GH₵400 million, the resolution of distressed banks, as well as the increased diversification of resources by banks to less risky assets

Asset quality of the banking sector has improved remarkably on the back of a significant reduction in the credit default rate.

Non-performing loans (NPLs) to gross loans decreased from 18.19 percent at end-December 2018 to settle at 13.94 percent at end-December 2019. Similarly, NPLs net of loan-loss provision to capital fell to 5.74 percent at end-December 2019 from 11.19 percent at end-December 2018. The reductions in NPLs in the banking industry were primarily as a result of a decline in the stock of NPLs, strong pickup in credit growth, loan-loss write-offs, and loan recoveries. To further drive down NPLs in the banking sector, the Bank of Ghana is focused on strengthening the corporate governance and risk management systems of banks through the enforcement of the Corporate Governance Directive (issued by the Bank in 2018), enhancements of the Bank's risk-based supervision framework and improvements in financial infrastructures such as credit reference bureaus and the collateral registry. These reforms have helped reduce the credit default rate and the credit-loss burden on the sector.

Figure 3.2: Non-Performing Loans



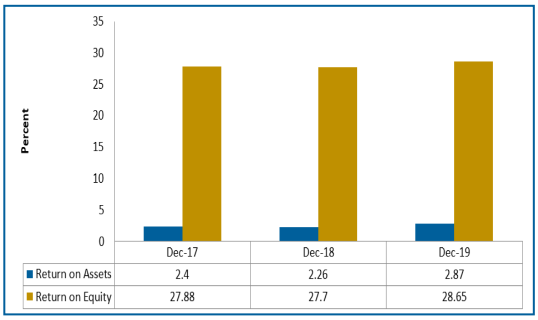
	Dec-17	Dec-18	Dec-19
NPLs net of loan-loss provision to capital	14.02	11.19	5.74
NPLs to total gross loans	21.59	18.19	13.94

Source: Bank of Ghana

[7] Assets of universal banks constitutes 90.1 percent of total assets within the banking sector. This section therefore concentrates on emerging risks and developments emanating from the universal banking sector.
[8] The BSSI is developed from the core Financial Soundness Indicators (FSIs) namely capital adequacy, asset quality, management efficiency, earnings and liquidity. An upward trending BSSI connotes a general improvement in the performance of the banking system. The data used is subject to revision.

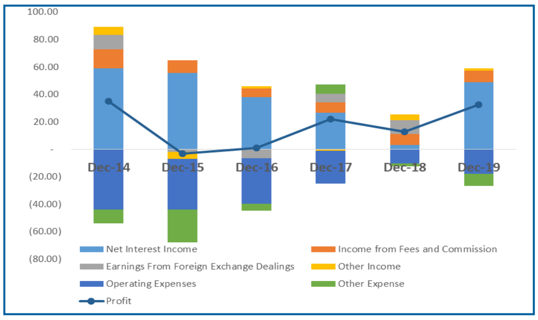
Profitability within the banking sector improved during the year under review. Return-on-Equity (ROE) increased to 28.65 percent at end-December 2019 from 27.70 percent at end-December 2018. Similarly, Return-on-Assets (ROA) increased to 2.87 percent at end-December 2019 from 2.26 percent at end-December 2018. The positive growth in profits was mainly as a result of increasing net interest income. Improvement in the earnings of banks is expected to reinforce capital accumulation efforts of banks and banking sector soundness.

Figure 3.3: Profitability



Source: Bank of Ghana

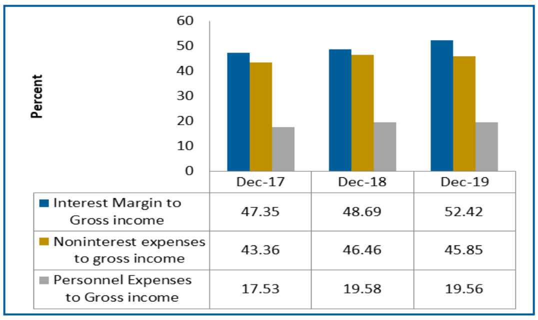
Figure 3.4: Drivers of Profitability



Source: Bank of Ghana

Measures of operational efficiency improved in 2019. Interest margin to gross income, non-interest expenses to gross income and personnel expenses to gross income all improved over the period under review.

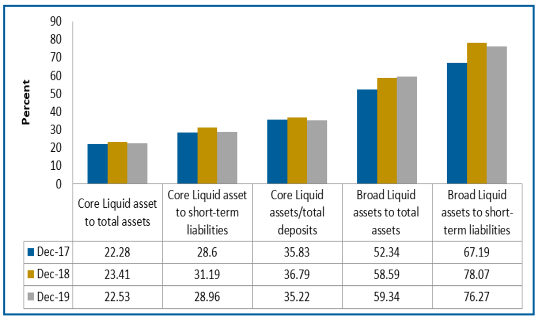
Figure 3.5: Efficiency Measures



Source: Bank of Ghana

Liquidity risk is well contained in the banking sector. Liquidity measures generally remained unchanged during the period under review. These measures indicated that the banking sector was in the position to cover its immediate and short-term debts and obligations. The improved liquidity stance, was mainly driven by the increase in cash and balances due banks mainly as a result of the recapitalisation exercise and subsequent increase in long-term deposits after the clean-up of the banking sector.

Figure 3.6: Liquidity Profile of Banks



Source: Bank of Ghana

In line with the improvement observed in the BSSI, the heat-map of the Financial Soundness Indicators showed a much resilient banking sector in recent times. To monitor banking sector resilience, the core Financial Soundness Indicators (FSIs) are transformed into a quartile Heat Map. The map showed an improvement in the general stability and soundness of the banking sector as at December 2019. The solvency and liquidity conditions were among the best performing indicators over the past two decades while efficiency, earnings and asset quality levels improved from December 2017 values.

[9] The heat map is a quartile based analysis that reflects the performance of the banking system over a period of time. Green represents the first best performing period, blue the second best, yellow the third best and orange the fourth best. The December 2019 map was derived from a 12 year monthly data series starting from January 2007 to December 2019.

Table 3.1: Quartile Based Heat Map of Core FSIs

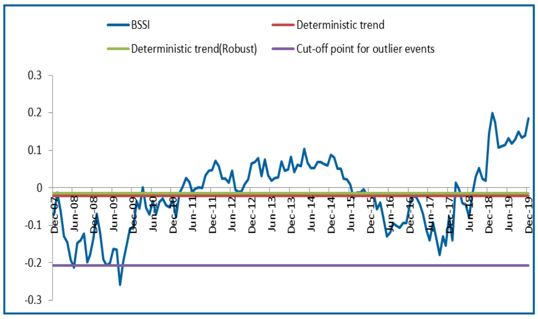
CORE FSIs	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19
Capital Adequacy									
Regulatory capital to risk weighted assets	15.63	19.30	18.92	20.22	21.95	20.96	21.09	21.70	20.92
Regulatory Tier I capital to risk-weighted assets	13.52	16.62	16.38	17.44	20.98	19.18	19.21	19.82	19.14
Asset Quality									
Nonperforming loans net of loan-loss provision to capital	14.02	19.75	19.43	15.11	11.19	15.05	13.87	11.79	5.74
Nonperforming loans to total gross loans	21.59	22.58	22.56	20.03	18.19	18.76	18.05	17.27	13.94
Earnings									
Return on assets	2.40	2.59	2.35	2.22	2.26	3.05	3.03	3.00	2.87
Return on equity	27.88	25.68	24.53	25.34	27.70	30.51	30.55	29.04	28.65
Liquidity									
Core Liquid asset to total assets	22.28	21.44	19.77	21.61	23.41	19.55	21.65	21.17	22.53
Core Liquid asset to short-term liabilities	28.60	28.19	25.74	28.05	31.19	25.27	27.66	27.44	28.96
Core Liquid assets/total deposits	35.83	34.72	32.11	33.61	36.79	29.76	32.31	31.97	35.22
Broad Liquid assets to total assets	52.34	56.90	55.04	60.32	58.59	59.58	59.85	59.18	59.34
Broad Liquid assets to short-term liabilities	67.19	74.84	71.68	78.29	78.07	77.01	76.46	76.70	76.27
Efficiency									
Interest margin to Gross income	47.35	46.89	47.18	49.11	48.69	52.04	52.10	52.00	52.42
Noninterest expenses to gross income	43.36	44.40	45.22	46.86	46.46	44.18	44.86	45.45	45.85
Personnel Expenses to Gross income	17.53	18.86	16.52	19.87	19.58	19.75	19.44	19.66	19.56

1st Best Performing Period · 2nd Best Performing Period · 3rd Best Performing Period · 4th Best Performing Period

Source: Bank of Ghana

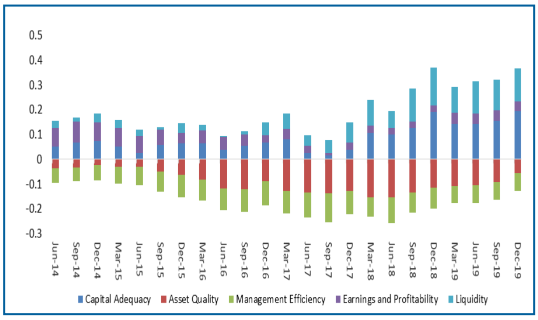
The banking system remains sound and robust. To monitor developments in banking sector resilience, the Bank of Ghana has developed a composite indicator known as the Banking Sector Soundness Index (BSSI). The indicator is constructed from the core Financial Soundness Indicators (FSIs) and broadly measures the soundness of the banking sector. The index showed that, the general stability and soundness observed in the banking sector in 2019 is the highest over the past two decades. The observed developments were mainly driven by an expansion in capital buffers, an enhanced liquidity stance and an improvement in asset quality and earnings.

Figure 3.7: Banking Sector Soundness Index (BSSI)



Source: Bank of Ghana

Figure 3.8: Drivers of the BSSI

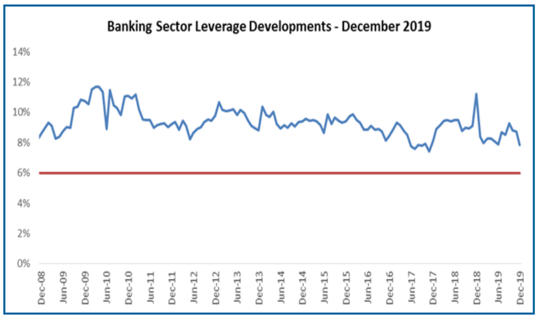


Source: Bank of Ghana

The banking sector leverage remains above the statutory minimum of 6 percent. The banking sector leverage ratio stood at 7.84 percent at end-December 2019, significantly higher than the statutory floor of 6 percent. The current level implies that the industry has the potential to expand its asset base through leveraging. The leverage ratio is calculated by dividing Tier 1 capital by total exposure (on and off-balance sheet items).

[10] The BSSI is developed from the core FSI including capital adequacy, asset quality, management efficiency, earning and liquidity indicators. An upward trending BSSI connotes a general improvement in the performance of the banking system. The data used is subject to revision.

Figure 3.9: Banking Sector Leverage Conditions

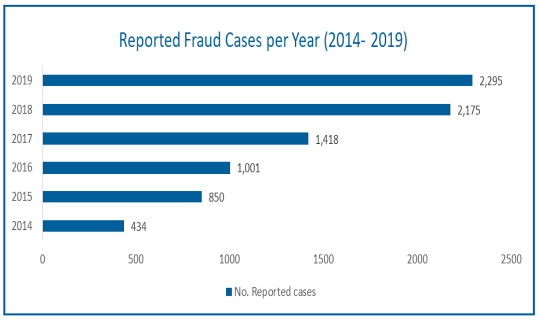


Source: Bank of Ghana

Assessment of Operational Risks

Reported fraud cases increased within the banking industry in the period under review. In the period under review, the number of reported fraud cases increased to 2,295 from 2,175 in 2018. Of the total losses from fraud, cyber and electronic banking contributed most to losses (42.79 percent), followed by manipulation and forgery or alteration of Document (17.20 percent) and suppression (12.9 percent). Bank of Ghana's issuance of the Cyber and Information Security Directive and the Corporate Governance Directive is expected to boost confidence in the financial system by reducing operational fraud within the banking industry.

Figure 3.10: Reported Fraud Cases



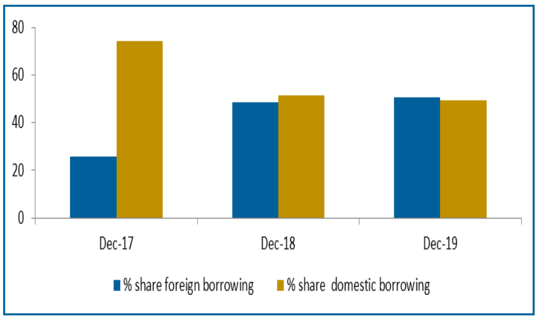
Source: Bank of Ghana

Developments in Banks' Offshore Activities

Offshore placements are largely with stable institutions. The banking sector's top 5 correspondent banks held about 90.17 percent of the industry's offshore funds as at end-December, 2019. These institutions were largely rated as stable at end-December, 2019, suggesting that potential vulnerabilities that could emanate from cross-border exposures were muted.

Banks continued to access funds from foreign sources to support fund mobilisation from domestic sources. The share of foreign borrowings in total borrowings as at end-December 2019 was 50.49 percent as compared to 48.44 percent at end-December 2018. The appreciation in banks foreign borrowing represents an increase in the sectors exposure to foreign exchange risk. That notwithstanding, foreign exchange risk remains broadly contained.

Figure 3.11: Composition of Borrowings



Source: Bank of Ghana

4 Assessment of Risks in the Pensions and Insurance Sectors

Overview

The performance of the insurance sector broadly improved in 2019 compared to 2018, with the outlook for premium growth in the near to medium term remaining positive. On the back of policy reforms, and an improved operational environment, premiums increased by 22 percent at end-December 2019, as compared to 18 percent at end-December 2018. In addition, solvency risk within the insurance industry has remained broadly contained. In the medium term, the outlook remains positive on the back of an enhanced risk based solvency regime, broad-based introduction of innovative insurance products, and new minimum capital requirements.

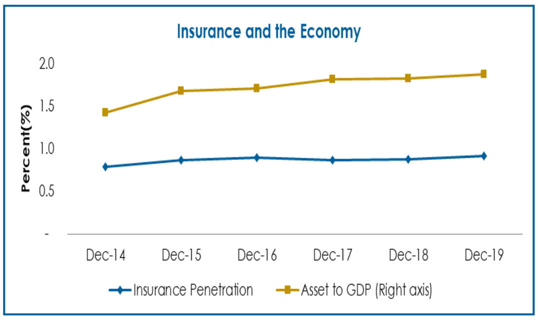
The pensions sector continued to expand in spite of emerging vulnerabilities from weak investment outturns. Total pension funds grew by 18 percent year-on-year to GH₵26.29 billion (7.5 percent of GDP) at end-December 2019. The strong growth was mainly driven by private pension funds. Broadly, the pensions sector exhibits strong potential for growth in the medium to long term as policy measures are targeted at increasing contributions flows, improving sustainability of the public pension fund and broadening the third tier scheme via the inclusion of the informal sector. However, in the period under review, the sustainability ratio, (measured as investment income to total expenditure) and the fund ratio (fund size to its liabilities) of the public pension fund declined to 0.09 and 2.60 respectively. The consistent rise in benefit payouts from the public pension scheme amidst a stable dependency ratio (pensioners to active contributors) suggests that enforcement of mandatory contributions and optimisation of investment returns remain critical in ensuring the sustainability of the public pension fund.

Insurance Sector Assessment

The insurance sector grew significantly in 2019 on account of policy reforms and an improved operational environment. Growth in premium income increased from 18 percent at end-December 2018 to 22 percent at end-December 2019. Total assets of the insurance industry also grew at an annual rate of 19 percent to GH₵6.54 billion at end-December 2019. The improved growth can be attributed to improvement in the operational environment of the insurance sector and policy reforms. In the year under review, National Insurance Commission (NIC) continued to work closely with industry players to address issues on underpricing, underwriting capacity, enforcement of compulsory insurance, market conduct practices and claims management. Going forward, risks associated with premium income growth is expected to remain subdued given favourable economic prospects, the broad-based introduction of innovative insurance products (micro-insurance etc), the recapitalisation exercise, implementation of the Motor Insurance Database (MID), and the expected passage of the draft insurance bill, among others.

Despite increases in premium income, the insurance penetration remains unchanged. From December 2014 to December 2019, the insurance penetration, which is defined as premium income to GDP has remained relatively stable at about 1 percent. The low level of insurance penetration suggests that the insurance industry has significant room to grow.

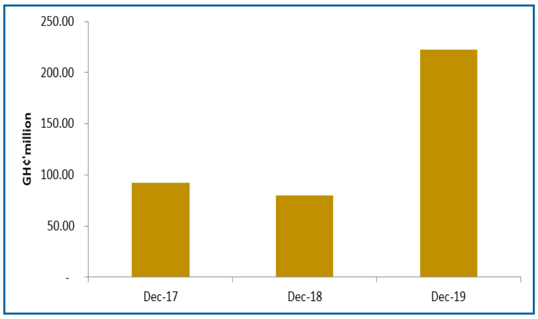
Figure 4.1: Insurance Penetration and Insurance Sector Asset/GDP



Source: National Insurance Commission

Overseas reinsurance premium transfers generally increased in 2019. NIC, during the period under review, granted approval for the transfer of reinsurance premiums amounting to approximately GH₵222.5 million. This is an increase from the GH₵79.74 million recorded in 2018. The government's objective of driving private sector growth and industrialisation is expected to increase overseas reinsurance premium transfers in the short-term. In the medium term, however, the recapitalisation effort of insurers and reinsurers is likely to significantly drive the overseas reinsurance premium transfers downward.

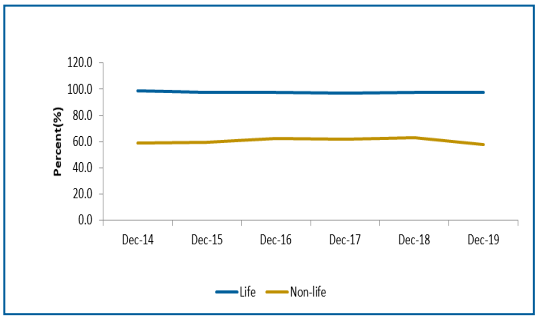
Figure 4.2: Reinsurance Transfers Abroad



Source: National Insurance Commission

Retention ratio continues to remain high in the industry. On average, about 79 percent of the premium received by insurers was retained in 2019. A more granular analysis indicates that non-life insurers retained 68 percent of their premium while life insurers retained 98 percent. The low retention ratio of premium by non-life insurers is partly due to the nature of risks underwritten and high gross premium to capital ratio. On the other hand, the high retention ratio among life insurers is mainly due to the increased purchasing of savings-linked insurance products and the long-term nature of their actuarial liabilities. The implementation of the recapitalisation exercise by the NIC is expected to drive risk retention in the non-life insurance segments and also drive the underwritting of pure risks insurance products for Life insurers.

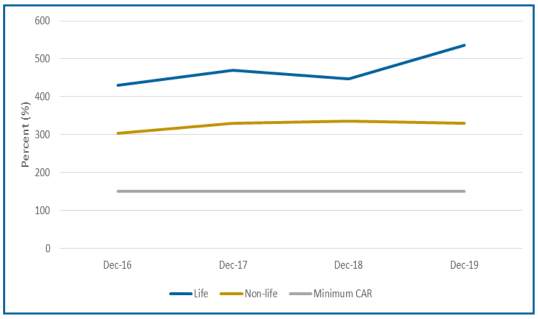
Figure 4.3: Retention Ratio



Source: National Insurance Commission

The high retention ratio is broadly supported by a strong capital base, dampening solvency risk. The capital base of the insurance sector grew at an annual rate of 22 percent to settle at GH₵2.53 billion at end-December 2019, improving the CAR position of insurers. At end-December 2019, the CAR of the life and non-life insurance segment of the insurance sector respectively stood at 535 percent and 330 percent, well above the regulatory minimum CAR of 150 percent. The improvement in capital is underpinned by the entry of new firms and recent regulatory reforms introduced by the NIC to strengthen the financial position of insurers through the introduction of a risk-based solvency regime, implementation of sound corporate governance practices, risk management frameworks and the ongoing recapitalisation exercise.

Figure 4.4: Capital Adequacy Ratio of the Insurance Sector



Source: National Insurance Commission

Underwriting losses and declining investment yields are risks to the profitability within the insurance industry. For both life insurance and non-life insurance companies, the combination of weak underwriting performance and declining investment income has led to a reduction in Return on Equity. Given the general decline in investment income and underwriting losses, there is the need for insurers to strengthen their cost control measures, deal with underpricing issues and adjust business models to address underwriting losses. It is expected that the introduction of the new minimum capital regime will help improve efficiencies through consolidation.

Figure 4.5: Insurance Sector Profitability

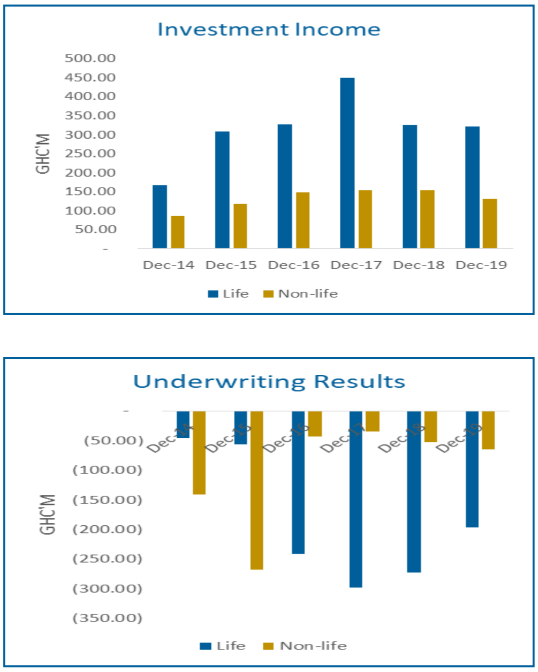
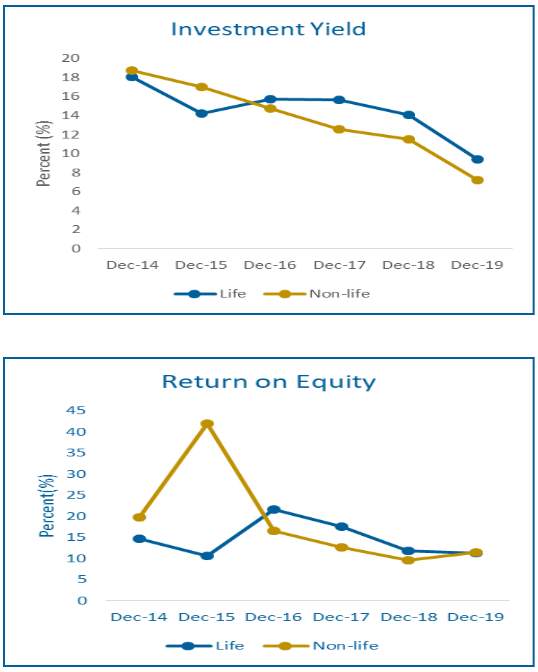


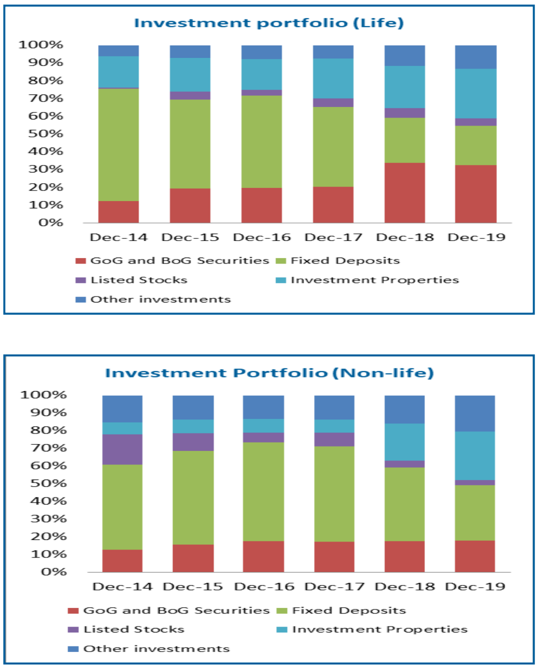
Figure 4.5: Insurance Sector Profitability



Source: National Insurance Commission

Declining investment yields in the presence of weak underwriting performance is gradually reinforcing an investment strategy shift towards investment properties. The assets of the insurance sector continues to be concentrated in fixed income securities particularly fixed income instruments such as fixed deposits, treasury instruments and Bank of Ghana securities. Amidst persistent underwriting losses, investment income continues to play a pivotal role in the near to medium term sustainability of the insurance sector. To optimise returns on investment and maintain profit margins, insurers in response to investment losses are gradually readjusting their investment portfolio in favour of investment properties. A rapid change in the prices of investment properties can therefore impact the profitability of the insurance sector. In addition, to preserve investment income, there is the need for Government to enhance policy in order to expand the bond market as an alternative investment option to investors, including insurers.

Figure 4.6: Investment Portfolio of Insurers (Life and Non-Life)

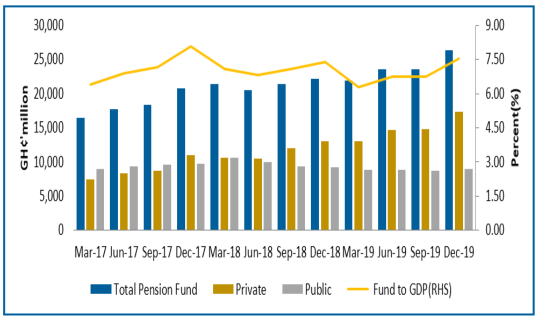


Source: National Insurance Commission

Pensions Sector Assessment

The pension sector continues to expand. Total pension funds grew by 18 percent year-on-year to GH₵26.29 billion (7.5 percent of GDP) at end- December 2019. Over the past year, expansion in the size of the pension sector has mainly been driven by private pension funds. Private pension funds increased from GH₵13.01 billion at end-December 2018 to GH₵17.36 billion at end-December 2019, while public pension funds decreased from GH₵9.19 billion at end-December 2018 to GH₵8.93 billion at end-December 2019. The strong growth recorded by the private pension fund over the years has been partly driven by virtue of it being in the accumulation phase since 2010. In the public pension space, negative expansions have been driven mainly by declines in investment yields and weakened contributions growth amidst rising benefit payments.

Figure 4.7: Pension Funds

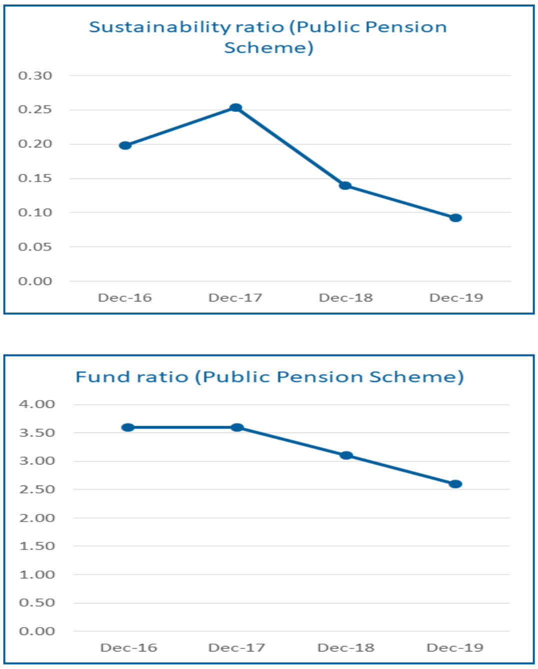


Source: National Pensions Regulatory Authority, and Social Security and National Insurance Trust (SSNIT)

The sustainability and fund ratio of the public pension fund reduced marginally in 2019. In the period under review, the sustainability ratio, (measured as investment income to total expenditure) and the fund ratio (fund size to its liabilities) of the public pension fund declined to 0.09 and 2.60 respectively. The decline was largely on the back of decreased investment income and highlights the importance of enforcing mandatory contributions and the payment of contribution arrears. NPRA is currently closely working with SSNIT and the government to reposition the public pension scheme on a sustainable growth path.

[11] De-accumulation phase would kick-in 2020.

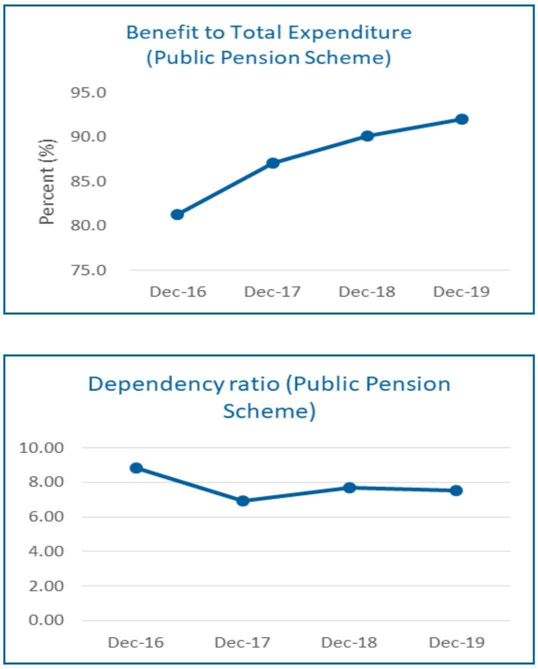
Figure 4.8: Sustainability and Fund Ratios



Source: National Pensions Regulatory Authority

Benefit payments continue to drive total expenditure. In the period under review, benefit payments increased by 18 percent to GH₵ 2.95 billion and accounted for 92 percent of total expenditure, up from the 87.1 percent and 90.2 percent recorded in 2017 and 2018 respectively.

Figure 4.9: Benefits to Total Expenditure and Dependency ratio

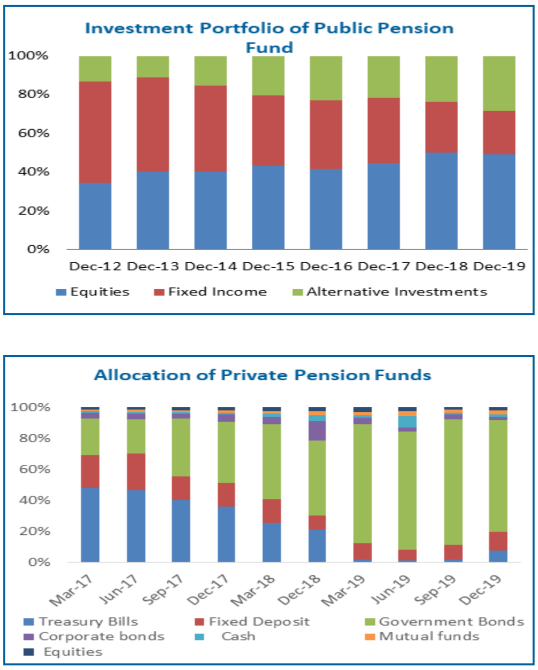


Source: National Pensions Regulatory Authority

The consistent rise in benefit payouts from the public pension scheme amidst a stable dependency ratio (pensioners to active contributors) suggests that enforcement of mandatory contributions and optimisation of investment returns remain critical to ensure the sustainability of the public pension fund.

The investment portfolio of pension funds continues to undergo readjustment. The assets of the pension sector remain concentrated in the equities and fixed income markets. However, the investment portfolio of the public pension scheme is being readjusted in favour of equities and alternative investments (largely investment properties) at the expense of fixed income securities. The declining level of fixed income securities in the public pension scheme may have been reinforced by the need to liquidate these investments to cater for increasing outflows in the midst of weakened core income. On the contrary, private pension funds remain exposed to the fixed income market which accounts for 94 percent of their investment portfolio (increasingly shifting towards long term products in the fixed income market)[12]. Due to the large value of holdings in equities and fixed income assets by the pension sector, there is the need to monitor developments in the capital market since increased volatilities may threaten the pension sector and create financial stability concerns.

Figure 4.10: Investment Allocation of Pension Funds



Source: National Pensions Regulatory Authority

[12] The heavy concentration of private pension funds in long term fixed income securities particularly government securities is largely driven by the need for private licensed trustees to comply with the regulator's (National Pension Regulatory Authority) investment guidelines that broadly favour government securities.

5 Securities Industry: Assessment of Risks in the Capital Market

Overview

The assessment of the capital market focused on the performance of the Ghana Stock Exchange (GSE) and the risk of capital flight. The risk of capital flight was measured by foreign investor participation in the market, while the performance of the bourse was captured by the Stock Market Performance Indices (SMPI). The SMPI captures four dimensions of the GSE performance: – access, size, efficiency, and stability of the market. These indices provide a broader view of the status of the bourse and helps identify potential risks that may arise on the market. Broadly, the GSE was assessed to be bearish in the period under review, with the risk of capital flight reducing.

Risk Assessment using the SMPI framework

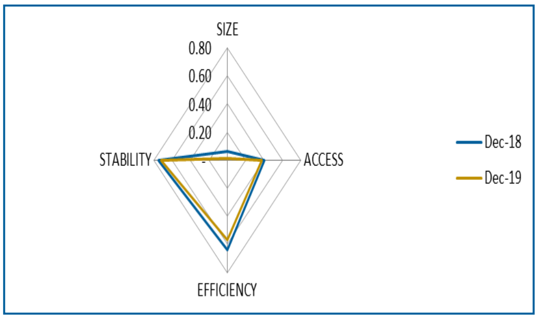
The size dimension of the SMPI declined in the year under consideration. The size dimension of the stock market captures resource mobilisation potentials of the stock market. At end-December 2019, the index for the size dimension declined to 0.02 from 0.06 at end-December 2018. The size of the bourse reduced as total market capitalisation to GDP and total value of stocks traded to GDP declined year-on-year by 6.3 percentage points and 0.002 percentage points to GH₵56.7 billion and GH₵16.8 million at end-December 2019 respectively. The fall in trading activities is fueled by the fall in demand for equities that could partly be attributed to the rise in Treasury bill rates which caused investors to move to the fixed income market.

The access dimension of the bourse also declined marginally. The access dimension captures market concentration and is measured by the Herfindahl-Hirschman index (HHI), the share of the largest ten firms in terms of total market capitalisation and trading volumes. The decrease in the access dimension of the bourse, in the year under review, can be attributed to an increase in all sub indicators; The Herfindahl index increased by 4.8 percent to 1,867.40 at end December 2019 from 1.789.87 at end December 2018. The shares of total volume traded and the total market capitalisation by the largest ten firms increased by 1.78 and 0.97 percentage points to 91.42 percent and 99.38 percent respectively. The results show that a significant part of the GSE performance is driven by the largest ten firms.

The efficiency index of the stock market reduced. A well-developed stock market should provide the opportunity for investors and participants to allocate capital to productive investments to earn a return without incurring high transaction costs. On the GSE, the percentage of shares with zero returns increased year-on-year by 3.53 percentage points and resulted in the decline of the index. The increase in the percentage of shares with zero returns on the bourse is an indication that there is some obscurity on the market in terms of information accessibility since prices are not responding in tandem with firm specific developments.

The stability index on the stock market improved. Stability on the bourse measures the ability of the market to contain volatility in price movement of stocks. The variables considered under the stability dimension are the price to earnings ratio, price volatility index and the percentage of stock with negative returns. The improvement in the stability was driven by the reduction in the volatility of stock prices.

Figure 5.1: Stock Market Performance Indices



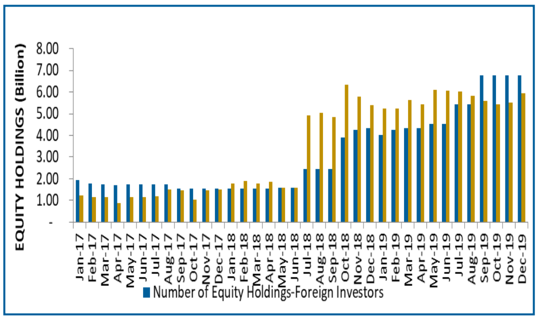
Source: Ghana Stock Exchange

Risk of Capital Flight

Total Foreign investors value of equity and debt security holdings increased during the period under review. Foreign investors debt holdings increased by 5.3 percent at end-December 2019 to GH₵29.1 billion, as compared to GH₵27.6 billion at end-December 2018. Similarly, foreign investors equity holdings increased by 13 percent at end-December 2019 to

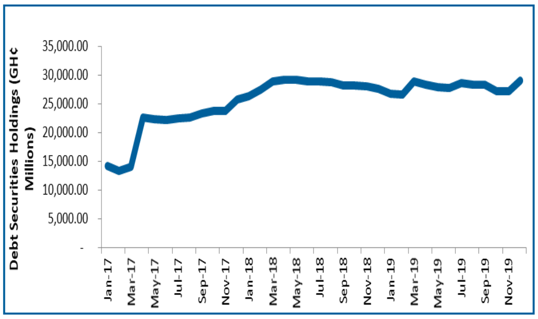
GH₵5.994 billion as compared to GH₵5.38 billion. The increase in foreign investors' equity and total debt security holdings at end-December 2019 suggests increased investor confidence in the Ghanaian economy. This may help to further strengthen the local currency.

Figure 5.2: Foreign Investors' Equity Holdings



Source: Central Securities Depository

Figure 5.3: Foreign Investors' Total Debt Securities Holdings



Source: Central Securities Depository

6 Assessment of the Resilience of the Financial System

Overview

To evaluate the resilience of the financial system, various tail events/shocks were applied to the banking sector using financial and economic data. As a proxy for the financial system, the exercise stressed universal banks' balance sheets and profit and loss accounts to extreme but plausible shocks covering credit, market and liquidity risks. The scenarios were model driven, anchored on historical simulations and expert judgment.

The results of the December 2019 exercise indicated that the banking sector as a whole is quite resilient to shocks and the capacity of the sector to withstand tail risks significantly improved in 2019 compared to 2018. Specifically, the banking sector appeared more robust to credit, market (interest and exchange rates) and liquidity risks shocks. The improvement in the overall performance of the banking sector in the stress test is largely due to positive domestic macroeconomic environment experienced in 2019 and broad gains from the holistic clean-up and recapitalisation exercise in the banking sector. Ongoing reforms and favourable economic prospects are expected to firm up gains.

Credit Risk Stress Testing

The banking system was found to be generally resilient to credit risk based on the Loan Migration Model stress testing. The loan migration analysis stressed banks' loan portfolio through reclassification of existing loans to indicate a higher degree of loan impairment under the following assumptions:

i. The current quarterly growth rate in gross loans persists into the short-term (next one year).
ii. The highest quarterly growth rate recorded under each of the non-performing loan categories (substandard, doubtful and loss) since the year 2008 occurs concurrently.
iii. The current provisioning norm is maintained.
iv. No loan collateral is considered or deductible from the loan except for cash collateral.

The outcome revealed that the banking industry is generally resilient to credit risk due to its large capital buffer. The proportion of banks that had their CAR below 10 percent reduced from 17 percent in December 2018 to 4 percent in December 2019. In addition, the observed resilience in December 2019 (20.1 percent CAR) was above the levels realised in December 2018 (16.8 percent CAR).

Table 6.1: Stress Test Results of Credit Risk Stress Tests: Loan Migration Model

Credit Risk	Period	Baseline CAR (%)	Stressed CAR(%)
Loan	Dec-18	19.3	16.8
Migration	Jun-18	19.1	17.3
Model	Dec-19	23.2	20.1

Source: Bank of Ghana

The banking system was also found to be resilient to credit risk based on the Loan Concentration Stress Testing Model. The concentration shock assesses the impact of a failure of a bank's single largest borrower. The scenario evaluates the solvency of banks should their single largest borrower fail to honour their obligation with the exposure migrating to the loss category. The December 2019 test revealed that should the single largest borrower of each bank default concurrently, the stressed CAR of the banking industry will stand at 18.6 percent as compared to 13.3 percent in December 2018.

Table 6.2: Stress Test Results of Credit Risk Stress Tests: Loan Concentration Model

Credit Risk	Period	Baseline CAR (%)	Stressed CAR(%)
Loan	Dec-18	19.3	13.3
Migration	Jun-18	19.1	14.6
Model	Dec-19	23.2	18.6

Source: Bank of Ghana

Exchange Rate Risk Stress Testing

The banking system was robust to exchange rate shocks. Exchange rate risk focuses on shocks to assets and liabilities emanating from foreign exchange market volatilities. The scenario assessed the direct impact of variations in exchange rate on institution's net open position. The main assumptions include;

i. A change in the exchange rate leads to a proportional change in the domestic currency value of the institutions' net open position.
ii. A worst case scenario of +/- 2 standard deviation of the mean depreciation/ appreciation of the Cedi/Dollar exchange rate from the year 2008 to the fourth quarter of 2019.

The result indicates that, an unexpected depreciation and appreciation of the Ghana Cedi against the US Dollar would not have any significant impact on the solvency of institutions, reflecting the existing tight limit on net open position.

Table 6.3: Stress Test Results from an Exchange Rate Shock

Exchange Rate Shock	Period	Baseline CAR (%)	Stressed CAR(%)
Depreciation (2 standard deviation)	Dec-2018	19.3	19.2
	Jun-2018	19.1	19.1
	Dec-2019	23.2	23.2
Appreciation (2 standard deviation)	Dec-2018	19.3	19.3
	Jun-2018	19.1	19.1
	Dec-2019	23.2	23.2

Source: Bank of Ghana

Interest Rate Risk Stress Testing

Impact of interest rate shocks have muted. The interest rate shock tests for direct interest rate risk, which is the risk incurred by a financial institution when the interest rate sensitivities of its assets and liabilities are mismatched. The scenario utilises the repricing gap model which calculates the 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 following assumptions:

i. The Treasury Bill Rate is the benchmark for setting the interest rate.
ii. Interest rate shock amounting to +/- 1.2 standard deviations of the average 91-Day Treasury bill rate from 2008 to 2019.
iii. The shock takes the form of a parallel shift of the yield curve for all instruments and currencies.
iv. The time-to-reprising is up to one year.

Table 2.2.5: Results for Interest Rate Risk Stress Tests

Interest Rate Shock	Period	Baseline CAR (%)	Stressed CAR(%)
Repricing gap (-1.2 standard deviation)	Dec-2018	19.3	20.0
	Jun-2018	19.1	20.0
	Dec-2019	23.2	24.1
Repricing gap (+1.2 standard deviation)	Dec-2018	19.3	18.5
	Jun-2018	19.1	18.1
	Dec-2019	23.2	22.2

Source: Bank of Ghana

The results of the exercise showed that unanticipated changes (amounting to +/-1.2 standard deviation) in the 91-day Treasury bill rate in either direction may not significantly affect the solvency condition of the entire system.

Liquidity Risk Stress Testing

Liquidity shocks are generally subdued. The liquidity stressing exercise assesses how the withdrawal of all funds by the single largest depositor will impact on the solvency position of banks. The key assumptions are presented below:

- Haircut for assets to be disposed of to settle withdrawal needs:
  - Assets less than 1 month – 10%
  - Assets less than 3 months – 15%
  - Assets less than 6 months – 25%
  - Assets less than 1 year – 25%
  - Assets less than 3 years – 100%
- Assumed average risk-weight of liquidated assets – 0%.

The result of the liquidity risk assessment indicates that shocks emanating from a single largest depositor on solvency are well contained in the banking industry.

Table 6.5: Stress Test Results from Liquidity Stress Tests

Liquidity Shock	Period	Baseline CAR (%)	Stressed CAR(%)
Single Largest Depositor Withdrawal Funds	Dec-2018	19.3	18.4
	Jun-2018	19.1	18.2
	Dec-2019	23.2	22.3

Source: Bank of Ghana

Multi-Factor Shock Analysis

The multi–factor scenario combines credit (loan migration model) and exchange rate (depreciation) shocks. The results indicate that, the banking sector continues to be resilient against concurrent asset quality downgrade and extreme depreciation. Following the multifactor shock, stressed CAR of the industry stood at 20.1 percent in December 2019, up from 16.7 percent recorded in the December, 2018 exercise.

Table 6.6: Multi-Factor Shocks

Multifactor Shock	Period	Baseline CAR (%)	Stressed CAR(%)
Depreciation and Credit Risk Shock (Loan) Migration Model)	Dec-2018	19.3	16.7
	Jun-2018	19.1	17.3
	Dec-2019	23.2	20.1

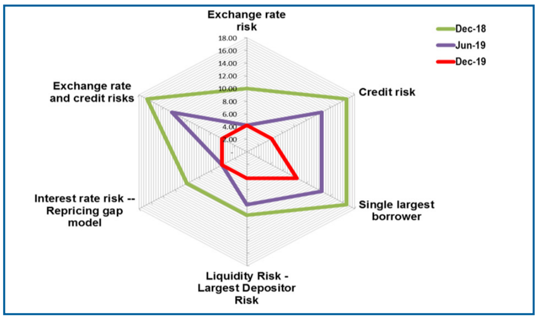
Source: Bank of Ghana

The Resilience Assessment Map[13]

Generally, the resilience of the banking industry to shocks improved in December 2019 relative to December 2018. Particularly, the banking sector's capacity to withstand credit, interest rate, and exchange rate shocks improved in December 2019, as compared to December 2018. The result of the December 2019 exercise indicated that the industry as a whole appears to be quite resilient to shocks though fragilities exist at few individual banks' level. The improvement in the overall performance of the banking sector in the stress test is largely due to positive domestic macroeconomic environment experienced in 2018 and 2019 and the holistic clean-up and recapitalisation exercise of the banking sector by the Bank of Ghana.

The positive macroeconomic outlook in the near term and the introduction of the Basel II/III framework in 2019 are expected to firm up gains.

Figure 6.1: Resilience Assessment Map



Source: Bank of Ghana

[13] The Risk Assessment Map is derived from the result of the stress testing and constructed such that movements away from the origin pointed to increased vulnerability.

7 Special Features

The Financial Stability Advisory Council

On December 28, 2018, the Financial Stability Advisory Council was established as an inter-institutional advisory coordination body responsible for advising the financial sector stakeholders and the President of Ghana. Following its inauguration on February 12, 2019, the Council held its maiden meeting on April 30, 2019. At the meeting, members of the Council signed a Memorandum of Understanding (MoU) which outlined the mutually accepted expectations of all the member institutions within the Advisory Council. To ensure that the Financial Stability Advisory Council effectively identifies risks to financial stability as they emerge and proffer adequate policy responses to get them resolved, the Council, in its first year, recommended six (6) initiatives to reduce information gaps within the financial system.

In particular, the Council resolved to:

1. Gather accurate data on the exposure of financial institutions to each other (Interconnectedness Initiative);
2. Ascertain how performance of the real sector, including the real estate market could affect financial stability (Real Sector Assessment Initiative);
3. Ascertain factors that determine foreign investor participation in the stock market and how changes in market sentiments by foreign investors impact the stability of the financial system (Foreign Investors Participation Initiative);
4. Determine the extent to which the financial system is exposed to government securities, government debt and the energy sector (Financial System Government Exposure Initiative);
5. Identify and agree on what constitutes leading indicators of risks within the Ghanaian economy (Leading Risk Indicators Initiative); and
6. Develop a risks indicator data hub to monitor developments within the financial system (Data Hub Initiative).

In 2019, the Financial Stability Council held four (4) Council meetings, five (5) Technical Committee meetings and eight (8) Working Group meetings to work on the initiatives outlined above.

These meetings culminated in the presentation of study findings on five of the Council initiatives (Interconnectedness, Financial System Government Exposure, Leading Risk Indicators, Real Sector Assessment and Data Hub Initiative) with work in progress on the Foreign Investors participation Initiative.

The members of the Financial Stability Advisory Council are the Bank of Ghana (BoG), Ghana Deposit Protection Corporation (GDPC), the Ministry of Finance (MoF), the National Insurance Commission (NIC), the National Pensions Regulatory Authority (NPRA), and the Securities and Exchange Commission (SEC).

Recent Reforms in the Financial Sector[14]

The financial sector has witnessed massive reforms in recent years aimed at strengthening the resilience of the sector to support the economic growth agenda. Supported by the agenda to position the country as a global financial sector hub, the Ghanaian Financial subsectors have seen a number of reforms ranging from resolution of insolvent institutions, increases in capital requirement, establishment of institutions/ bodies, supervisory measures and improvements in legislation. The comprehensive reforms have reinforced the efficiency and effectiveness of the sector.

To eliminate inefficiencies, regulators have embarked on clean-up exercises to resolve insolvent institutions over the past two years. In the banking sector, the licenses of four hundred and twenty (420) financial institutions were revoked; nine (9) universal banks, fifteen (15) savings and loans companies, eight (8) finance houses, three-hundred and forty-seven (347) microfinance institutions, thirty-nine (39) microcredit institutions, one (1) leasing company and one (1) remittance company. Similarly, the SEC in November, 2019 revoked the licenses of 53 fund management companies with assets under management estimated at GH₵8.1billion. The revocation was pursuant to Section 122 (2) (b) of Act 929. These revocations were done to safeguard financial stability and to promote market confidence.

[14] The Reforms focus on policies initiated in the past three years.

To situate the industry for 'deep-pockets' to support 'big-ticket' transactions in line with macroeconomic development, the minimum operating capital was revised upward in the banking and insurance sectors. The banking sector minimum capital was revised upward to GH₵400 million in 2017 with the aim of strengthening the sector. In the insurance sector, a new Minimum Capital Requirement (MCR) was announced in June 2019 to mainly ensure that insurance companies have enough capacity to absorb and retain risks in the country. The new minimum capital requirements for the different arms within the industry are as set out below:

Table 7.1: New Capital Requirement for the Insurance Sector

Entity	Current Minimun Capital Requirement	New Minimum Capital Requirement
Life insurance companies	GH₵15 million	GH₵50 million
Non-Life insurance companies	GH₵15 million	GH₵50 million
Reinsurance companies	GH₵40 million	GH₵125 million
Insurance Broking companies	GH₵300,000	GH₵500,000
Reinsurance Broking companies	GH₵1 million	GH₵1 million

Source: National Insurance Commission

In the securities industry, MCR for Capital Market Operators (CMO) established in law in 2003 was also repealed by Parliament in 2019 to give way for the implementation of a new MCR. The upward revision of the minimum capital requirements would lead to a more resilient financial system.

The sector has also benefited from institutions created to promote coordination among regulators and the effective implementation of reforms. The Financial Stability Advisory Council (FSC), Committee for Cooperation Between Law Enforcement Agencies and Banking Community (COCLAB), Regulators Forum of AML/CFT, and the Law Enforcement Committee of Banks (LECOB) are all examples of inter-institutional bodies established to promote coordination among regulators. In addition, to bolster safety nets within the financial system, the Ghana Deposit Protection Corporation was established as required by Act 931 to provide a safety net for small depositors from losses incurred by failure of licensed deposit-taking institutions.

Various legislations and directives have been passed/ issued to further strengthen the financial system. In the banking sector, a new regulatory capital directive based on Basel II/III has been issued. In addition, to address specific risks from high NPLs, poor corporate governance and poor risk management systems, a number of directives and laws have been passed/ issued in the last three years. This includes the Corporate Governance Directive, Fit and Proper Persons Guideline, Cyber and Information Security Directive and Payment Systems and Services Act, (Act 987).

In the securities sector, a regulatory framework for Commodity Exchange and associated Warehouse Receipts System were promulgated in 2019 to promote farmer income security and food security in the country. In addition, a regulatory framework for Real Estate Investment Trusts (REITs) was established to enable the setting up and operation of Funds dedicated to investments in the real estate sector.

In the pensions sector, a guideline on the investment of pension funds has been passed to regulate the investment behavior of pension fund managers and trustees. The sector has also witnessed the issuance of a consumer protection policy and the passage of an executive instrument to allow for the prosecution of non-compliant employers.

The insurance sector has also witnessed substantial regulatory reforms. The National Insurance Commission completed work on a draft insurance bill and is now ready to be laid in parliament. The Bill when passed will among other things, enhance the regulatory powers of the Commission. Upon the implementation of the new MCR in the insurance sector, a Risk Based Capital Framework will be rolled out to comprehensively link capital requirement to the nature and levels of risk inherent in the businesses and the activities of all insurance and reinsurance companies. In addition, a market conduct framework for micro insurance has been developed to ensure that companies act in a fair and transparent manner towards policyholders and the public. In a bid to curb the proliferation of fake motor insurance stickers, the NIC, implemented a Motor Insurance Database in December 2019. This initiative is expected to significantly improve the volume of written premiums and claims payment in the motor insurance industry. To promote professionalism, the NIC has also engaged the Ghana Insurance College to offer free training to nearly ten thousand (10,000) after school leavers and graduates. A number of them have since gained employment with insurance companies and intermediaries.

Improved reporting systems and data gathering processes were implemented in 2019. The BOG, in 2019, acquired new surveillance software to improve supervisory processes associated with the submission of returns, maintenance of data integrity, data analysis and the Implementation of IFRS 9 by banks, among others. Reporting requirements for the Asset Management Industry were equally revised to include quarterly placement reports on funds under management and Collective Investment Schemes (CIS) to improve transparency and accountability with regard to clients' funds under management. A moratorium was also placed on licensing new Fund Managers to enable SEC review the current licensing regime for a stronger and more resilient market and to pave way for the introduction of new licensing Guidelines. SEC also halted guaranteed investments in June 2018 and asked fund managers to unwind such investments by December 2018. The NIC has also continued to improve its regulatory Software (Vizor Software) to enhance the quality of analysis of reports submitted quarterly and annually by regulated entities.

Promoting Financial Integrity in the Banking Sector[15]

Money laundering undermines the integrity of businesses and the financial sector as a whole. Strengthening Ghana's AML/CFT systems has become a major subject for financial sector regulators and the Government of Ghana due to its possible adverse impact on financial stability and economic growth. Money laundering and terrorism financing have negative macroeconomic consequences arising from unexpected withdrawals and movement of financial resources. It also limits financial transactions and increases volatility of international capital flows leading to exchange rate fluctuations. Promoting financial integrity within the Ghanaian financial system involves the enforcement of statutes on Anti-Money Laundering and the Combatting of the Financing of Terrorism and the Proliferation of Weapons of Mass Destruction (AML/CFT&P).

For effective supervision, an AML policy for the Bank of Ghana has been developed. This policy mandates the BoG to conduct AML/CFT supervision mainly through risk-based assessments of the adequacy and effectiveness of policies with procedures and internal controls set up by financial institutions to mitigate ML/TF risks. The Bank carries out this function through, inter alia, offsite monitoring activities and the conduct of on-site examinations in close coordination with other BoG functions – licensing, prudential supervision, and enforcement. The objective of the policy is therefore to apply a proportional approach to AML/CFT supervision that establishes the intensity, frequency and scope of supervision activities based on ML/TF risks.

The Bank of Ghana has intensified AML/CFT awareness for accountable institutions to engender greater compliance. To foster awareness of AML/CFT issues in the financial sector, the department conducted a series of sensitisation workshops on trending issues and AML/CFT regulatory matters. These workshops were based on events and emerging issues identified during regular offsite and on-site activities. The training covered:

- Cost Effective "Know Your Customer/Customer Due Diligence/Enhanced Due Diligence" Implementation measures;
- Risk Assessment and Customer Risk Profiling;
- Emerging AML/CFT trends and typologies;
- Getting off the Financial Action Task Force Grey List - The Role of Financial Institutions;
- Strengthening AML Compliance forum for each sector; and
- Cost of AML/CFT compliance for Accountable Institutions

To increase compliance, the Bank of Ghana has issued administrative penalties and sanctions. The Bank issued an administrative sanctions directive in July 2018, to punish all accountable institutions that breached the AML/CFT laws in Ghana. The sanctions were designated in accordance with the Anti-Money Laundering Act, 2008 (Act 749) as amended, Anti-Terrorism Act 2008 (Act 762) as amended, Anti-Money Laundering/Combating of Terrorism Guideline for Banks and Non-Bank Financial Institutions (AML/CFT Guideline) and Banks and Specialised Deposit-Taking Institutions Act 2016 (Act 930).

A regulators forum for AML/CFT was established to enhance information sharing and policy co-ordination. The regulators forum, involving the various apex bodies in the financial sectors, has been established and continues to meet to discuss emerging AML/CFT issues aimed at finding common solutions to these matters. The membership comprises Bank of Ghana (BoG), Securities and Exchange Commission (SEC), National Insurance Commission (NIC), Ghana Revenue Authority (GRA), the Gaming Commission and the Financial Intelligence Centre (FIC). The forum's main objective is to enhance the partnership among the stakeholders in ensuring AML/CFT compliance among their licensed institutions. Some of the emerging issues discussed over the period includes:

- The proliferation of fintech products involving non-face to face transactions;
- Reliance on intermediaries and third parties on Customer Due Diligence (CDD);
- Effective implementation of the sanctions guidelines developed by BOG, SEC and NIC;
- Risk Assessment for new products;
- Implementing a culture of AML/CFT compliance among Accountable Institutions; and
- Finding common grounds for CDD.

[15] The Reforms focus on policies initiated in the past three years.

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