

Bank of Uganda

FINANCIAL STABILITY REPORT

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GLOSSARY

BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BOU	Bank of Uganda
CAMEL	Capital adequacy, Asset quality, Management, Earnings and Liquidity
CAR	Capital adequacy ratio
CBR	Central bank rate
CI	Credit institution
EAC	East African Community
ECS	Electronic clearing system
EFT	Electronic funds transfer
EMDEs	Emerging markets and developing economies
EMEs	Emerging market economies
EUR	European Union euro
FIA	Financial Institutions Act
FSR	Financial Stability Report
GBP	Great British pound
GDP	Gross domestic product
GWP	Gross written premium
HHI	Herfindahl-Hirschman Index
HMO	Health management organisation
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IRA	Insurance Regulatory Authority of Uganda
KES/KSh	Kenyan shilling
KYC	Know Your Customer
LCR	Liquidity coverage ratio
MDI	Microfinance deposit-taking institution
MNO	Mobile network operator
NPLs	Non-performing loans
RHS	Right-hand side
ROA	Return on assets
ROE	Return on equity
RTGS	Real-time gross settlement
RWF	Rwandan franc
SSA	Sub-Saharan Africa
TZS/TSh	Tanzanian shilling
UNISS	Uganda National Interbank Settlement System
URBRA	Uganda Retirement Benefits Regulatory Authority
USD	US dollar
UGX/US\$	Uganda shilling
WEO	World Economic Outlook

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A NOTE ON FINANCIAL STABILITY

The Bank of Uganda's mandate is to foster macroeconomic and financial system stability. A stable financial system is one in which financial institutions carry out their normal function of intermediating funds between savers and investors, and facilitating payments. By extension, financial instability is a systemic disruption to the intermediation and payments processes, which has damaging consequences for the real economy.

The financial stability function involves a continuous assessment of potential risks to the financial system and the development of policies to mitigate these risks. The early detection of risks to the financial system is necessary to give policy makers sufficient lead-time to take pre-emptive action to avert a systemic crisis.

The Financial Stability Report (FSR) is intended to enhance the understanding of financial system vulnerabilities among policymakers, financial market participants and the general public. By making the FSR available to the public, the Bank of Uganda aims to stimulate debate on policies necessary to manage and mitigate risks to the financial system while at the same time increasing public awareness. Better public awareness of financial system vulnerabilities may itself serve to encourage financial institutions to curb activities which might exacerbate systemic risks and also help to promote policy reforms to strengthen the resilience of the financial sector.

FOREWORD AND ASSESSMENT OF FINANCIAL STABILITY

The Bank of Uganda (BOU) Financial Stability Report (FSR) provides an assessment of the global and domestic macro-financial environment, while focussing particularly on the performance and condition of Uganda's financial system stability.

During the year to June 2019, risks to Uganda's macro-financial environment were minimal. The economy has remained on its growth trajectory, the shilling was stable and interest rates held steady supported mainly by accommodative monetary policy and expansionary fiscal policy. These developments led to a sustained reduction in risks to Uganda's financial system stability through the year ended June 2019, and fostered balance sheet growth and improvement in asset quality for the banking sector. The banking sector's resilience to credit risk shocks over the year ended June 2019 improved as banks built substantial capital and liquidity buffers. In addition, real estate prices – which fundamentally underpin lending – were relatively stable through FY2018/19.

However, the risks to financial stability are tilted on the downside mainly due to the rising public debt, prospects of a market downturn faced by key advanced economies, and the deepening trade conflict between the US and China which could result in higher interest rates and lower export demand weighing down on financial flows.

Nonetheless, Uganda's positive economic growth and accommodative monetary policy are expected to support financial stability and boost private sector lending and improvement in asset quality.



GOVERNOR

EXECUTIVE SUMMARY

The global economy witnessed weaker growth and muted inflationary pressures during the year to June 2019. However, interest rates started to rise amidst rising levels of public debt in the first half of 2019. The combined effects of rising interest rates and surging equity and commodity market volatility could lead to a tightening of financial conditions. Considering that high indebtedness has become a critical feature of the global economy, a faster-than-expected increase in interest rates and a sudden rise in global financing costs pose risks to debt and financial stability in the form of constrained fiscal policy administration, hindered policy response, and potentially delayed recovery.

On the domestic scene, the macro-financial environment faced minimal risks during the year to June 2019. GDP growth was strong at 6.1 percent and is projected at 6.0 percent in the year to June 2020 supported by accommodative monetary policy, expansionary fiscal policy and increased public infrastructure investment. However, there are downside risks to this outlook which include potential shocks from the external sector in the form of lower export demand which could cause volatility in the domestic foreign exchange market.

Uganda's financial system stability faced moderate risks through the year ended June 2019. Better domestic economic growth, stable domestic financing conditions and foreign exchange rate stability, in spite of a sluggish global economic performance, fostered balance sheet growth and improvement in asset quality for the banking sector. The banking sector held sufficient capital buffers and registered improvement in resilience to credit risk. Going forward, continued robust economic growth and accommodative monetary policy are expected to support financial stability and boost private sector lending and improvement in asset quality.

A continuing trend of the rising role of technology enabled innovations in the provision of financial services was observed during the year to June 2019. Overall, there are foreseen potential benefits for the financial sector from technological innovations in the financial space including improved efficiency and financial inclusion. Evidently, the technological innovations are being driven by mobile money payments technology enabling greater financial access and use, facilitation of remittances, and trade. As banks benefit from the increased access and use of financial services through access to more retail deposits, funding concentration pressures should ease enabling greater intermediation. Financial technology (FinTech) also promises solutions for improvements in financial system supervision towards improved retrieval of real-time granular data and speedy reporting.

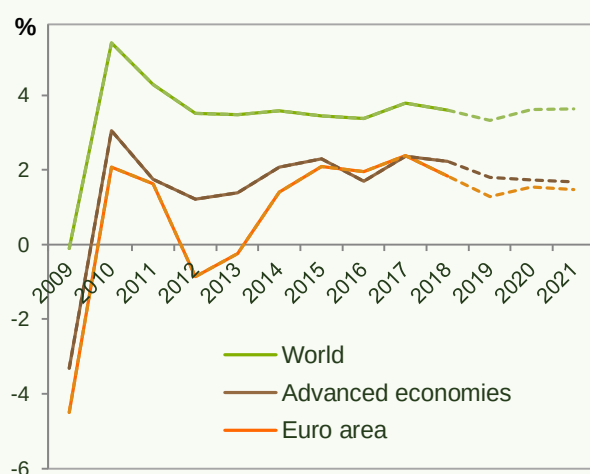
1. GLOBAL MACRO-FINANCIAL DEVELOPMENTS

The global economy experienced slower-than-projected growth in the year to June 2019, as the momentum gained from the fast growth registered between 2016 and 2018, waned and growth trends started to diverge. Global economic growth was hampered by a number of factors including, slowing growth in China and emerging markets, rising interest rates in advanced economies, and increasing global trade tensions. With these challenges, projections have been adjusted to reflect the weakened prospects.

1.1. Developed economies

More than a decade since the global financial crisis, several of the key advanced economies are faced with the prospect of a market downturn. The deepening of the trade conflict between the US and China, and challenges in Europe have created significant risks, dampened consumer demand, and have transformed sentiment among investors and policymakers. Persistent global trade tensions have resulted in lower projected growth in trade volume, estimated to fall to 2.6 percent in 2019, from 3.0 percent in 2018, and then rebound to 3.0 percent in 2020, depending on whether or not these tensions subside¹.

Chart 1: Annual GDP growth (percent)

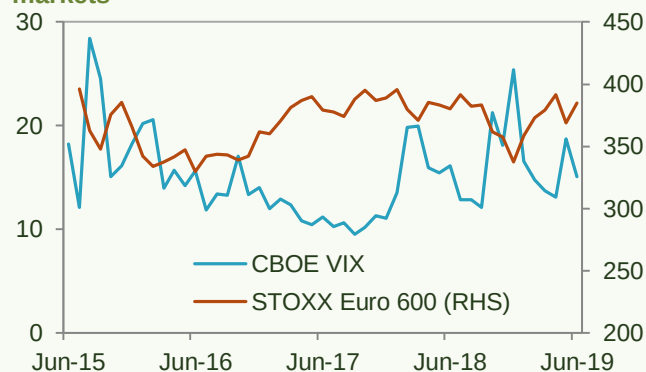


Source: IMF WEO database April 2019

In the Euro area, there was a slowdown in economic growth in the year to June 2019, mirroring the weakening of growth prospects around the globe. The economic performance of the region was hampered by weaker external demand, subdued inflation, geo-political factors presented by the potential of a disorderly no-deal

Brexit, and country-specific factors relating to fragile public debt sustainability. These uncertainties also contributed to increased volatility in the region's financial markets. Nonetheless, domestic demand and consumption were underpinned by the European Central Bank (ECB)'s accommodative monetary policy, as well as favourable labour and housing market trends². Looking ahead, the ECB foresees real GDP growth in the region strengthening in the medium term, from 1.1 percent in 2019, to 1.6 percent in 2020, with the most prominent downside risk to growth being any further weaknesses in the global economy spilling over to the external sector.

Chart 2: Price indices for U.S and Euro area stock markets

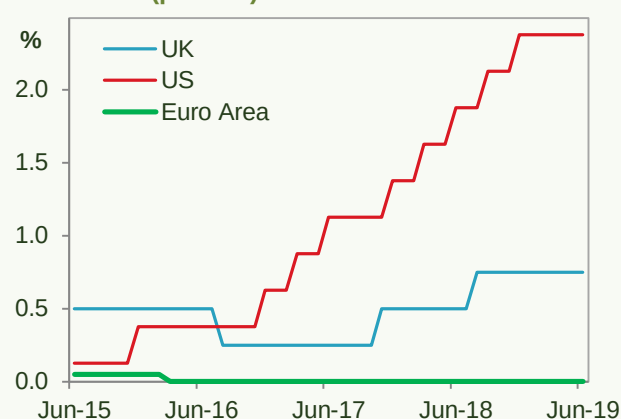


Source: Yahoo Finance and Investing.com

¹ World Trade Organisation, Press Release, April 2019

² ECB Financial Stability Review, May 2019

Chart 3: Monthly policy rates for key advanced economies (percent)



Source: Bank for International Settlements

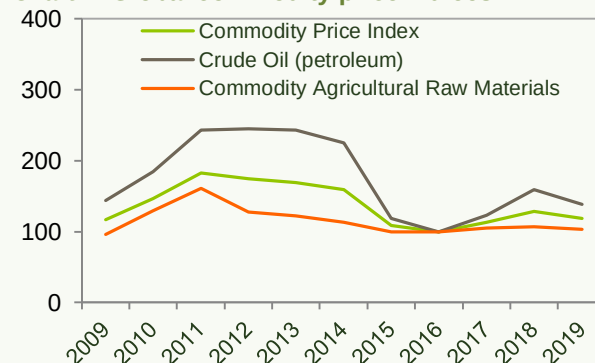
Meanwhile, growth in the United States (U.S.) accelerated during the period under review, driven by fiscal stimulus, reduced unemployment levels, and strong consumption growth. However, since the beginning of 2019, household spending, export growth, and business investment have slowed down, signalling an end to the growth spurt that started in 2018. Hence, following a three-year drive of consistent interest rate hikes to tighten monetary policy, the U.S. Federal Reserve elected to halt any further hikes amid signs of an economic slowdown³. New economic projections reveal heightened risks from the external environment, further increases in trade restrictions, and unresolved policy issues, all of which could hinder activity significantly.

1.2. Emerging and developing economies

Activity in the emerging market economies moderated in line with the deteriorating global macro-financial conditions in the year to June 2019. While inflation pressures eased with the drop in commodity prices, for some economies, currency depreciations passed through to higher domestic prices, partially offsetting downward pressure from lower commodity prices. For Brazil, India and Russia, growth in 2018 picked up only mildly, while others, such as Argentina, South Africa and Turkey, came under intense financial pressure and

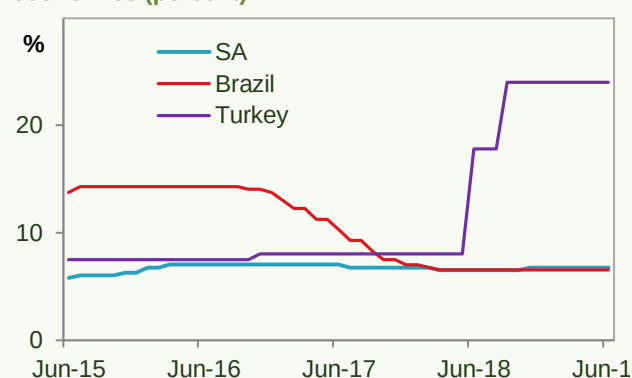
suffered economic downturns. For commodity exporters, slower-than-expected mining and oil production, combined with domestic policy uncertainties, delayed the recovery in activity⁴.

Chart 4: Global commodity price indices



Source: IMF WEO database April 2019

Chart 5: Monthly policy rates for selected emerging economies (percent)



Source: Bank for International Settlements

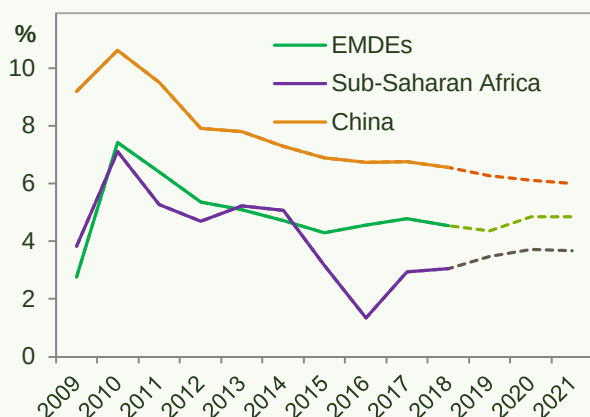
In China, economic growth has been steadily edging down since the beginning of 2017, hitting its lowest level in 10 years in the third quarter of 2018; according to the IMF, China's growth declined from 6.8 percent in the first half of 2018 to 6.0 percent in the second half of the year⁵. The slowdown in the Chinese economy was mainly due to weakened growth in the real estate and trade subsectors, as well as strong domestic and external headwinds which included the ongoing trade tensions with the U.S. In response to these shocks, a series of monetary and fiscal measures were implemented to help support growth and stabilise

³ U.S. Federal Reserve Federal Open Market Committee Statement, May 2019

⁴ The World Bank Global Economic Prospects Report, June 2019
⁵ IMF World Economic Outlook, April 2019

financial markets, including providing liquidity support and reducing reserve requirements for all banks.

Chart 6: Annual GDP growth (percent)



Source: IMF WEO database April 2019

Changes in economic activity in the sub-Saharan Africa region were broad and varied due to country-specific economic fundamentals and political factors. Rising commodity prices through 2018 helped to lift investment and private consumption in some major commodity-exporting countries. However, this growth may have been insufficient to address the structural challenges of persistent current and fiscal deficits and debt vulnerability in several countries, especially with the level of external debt in the region surging during the period under review. In 2018, eight African countries raised US\$28 billion in total through external bond issuances⁶. Although external borrowing continues to support African economies in acquiring funding for public investment projects, the rise in bond issuances raises concerns about the sustainability of this debt. Nonetheless, growth in the region is expected to pick up from 3.0 percent in 2018 to 3.5 percent in 2019 and 3.7 percent in 2020 (*IMF World Economic Outlook, April 2019*). The positive growth outlook is clouded by downside risks, including external risks from uncertainty in escalating global trade tensions, and the normalisation of interest rates in advanced economies.

⁶ *World Economic Situation and Prospects Monthly Briefing, March 2019, United Nations' Department of Economic and Social Affairs*

1.3. Economic performance of the East African Community

Economic growth in the East African Community (EAC)⁷ region was robust during the year to June 2019, with a notable improvement in Burundi's performance compared to the last three years. On average, the EAC region's GDP grew by 5.5 percent during 2018, up from 4.4 percent in 2017. However, growth is estimated to slow down to 4.9 percent in 2019⁸. The region's strong performance was underpinned by improvements in agricultural production despite disruptions in weather patterns, and sustained infrastructure investment. Inflation in the region remained subdued during the year, while the local currencies rallied against major foreign currencies. In addition, there was minimal impact on the region's performance of the adversities created by the ongoing global trade tensions.

Table 1: Annual GDP growth and headline inflation for EAC partner states

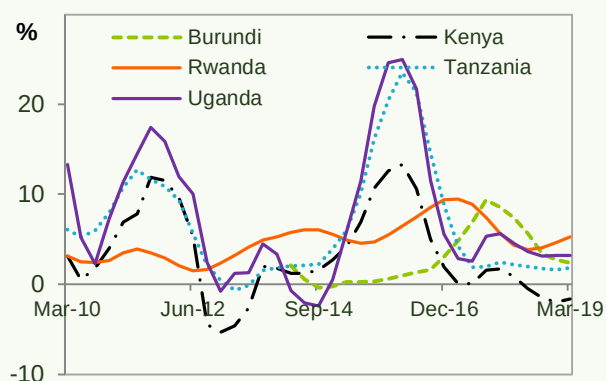
YEAR	2015	2016	2017	2018	2019
Real GDP growth rates (percent)					
Burundi	-4.0	-1.0	0.0	1.4	0.4
Kenya	5.7	5.9	4.9	6.0	5.8
Rwanda	8.9	6.0	6.2	8.6	7.8
Tanzania	6.2	6.9	6.8	6.6	4.0
Uganda	5.7	2.3	5.0	6.2	6.3
Inflation (Annual average, percent change)					
Burundi	5.6	5.5	16.6	1.2	7.3
Kenya	6.6	6.3	8.0	4.7	4.4
Rwanda	2.5	5.7	4.8	1.4	3.5
Tanzania	5.6	5.2	5.3	3.5	3.5
Uganda	5.4	5.5	5.6	2.6	3.6

Source: IMF WEO database April 2019

⁷ The East African Community is comprised of Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda.

⁸ *IMF World Economic Outlook, April 2019*

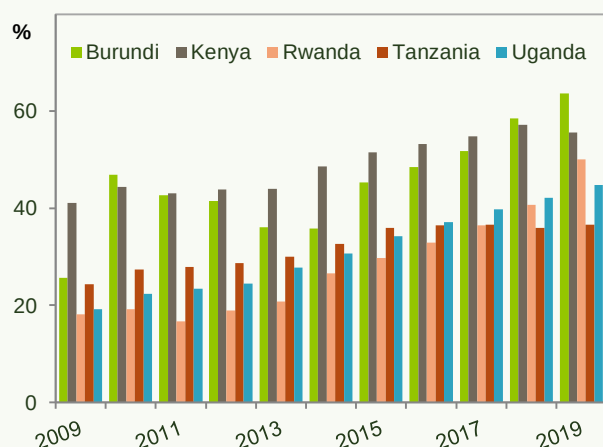
Chart 7: Annual changes in EAC local currencies against the US dollar (percent)



Source: EAC partner state Central Banks

The bulk of the infrastructure investments in the EAC region continue to be predominantly funded by public debt. As a share of GDP, general government debt amounted to an average of 46.9 percent in 2018, up from 43.9 percent in 2017. Specifically, Burundi and Kenya registered the highest debt-to-GDP ratios in 2018, at 58.4 percent and 57.2 percent respectively. For Burundi, the sharp rise in the ratio was due to weakened economic activity, slow resource mobilisation, and a less attractive business environment. Meanwhile, Kenya mobilised US\$2.1 billion worth of debt in May 2019 by issuing a dual-tranche⁹ Eurobond.

Chart 8: Ratio of government debt to GDP for EAC partner states (percent)



Source: IMF WEO database April 2019

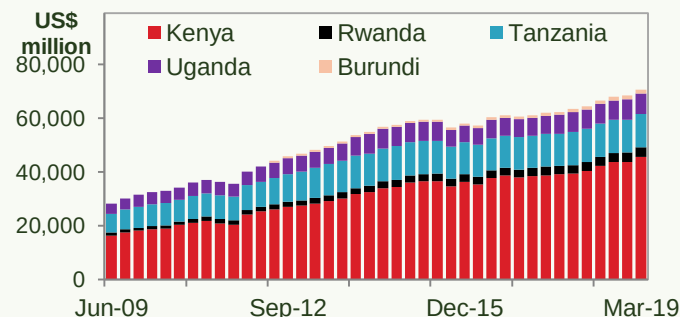
⁹ The Eurobond consists of two portions: One US\$900 million portion consists of seven-year bonds priced at 7 percent, and the other US\$1.2 billion portion, consists of 12-year bonds priced at 8 percent (The Brookings Institution, Africa in Focus Report, May 2019).

While the medium-term growth outlook for the EAC region is stable, risks from increasing vulnerability to debt distress, weather-related shocks, security and migration concerns, and uncertainties associated with elections and political transition could drag down growth. Looking forward, the heightened external risks, coupled with uncertainty about global financial conditions, may increase the risk of capital outflows and even exchange rate crises.

Highlights of the EAC region's banking sector

The improvements in the EAC region's macroeconomic environment were supported by the performance of the financial sector, which continues to be dominated by commercial banks. The banking sector in the EAC region registered strong growth during the period under review. As at end March 2019, total assets for commercial banks in the region had grown by 9.7 percent to US\$70.6 billion, compared to an increase of 5.4 percent in the year to March 2018. The growth was attributed to improved macroeconomic performance and accommodative monetary policy in the region.

Chart 9: Total banking sector assets of EAC partner states (US\$ million)

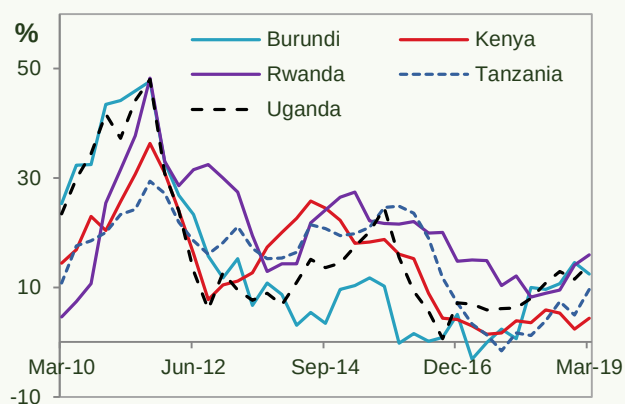


Source: EAC Monetary Affairs Committee

The regional banking sector was profitable on the whole, owing mostly to increased lending activity. The average return-on-assets ratio rose from 2.1 percent to 2.5 percent between March 2018 and March 2019. In addition to boosting profit buffers, the sector remained well capitalised during this period, supported by robust Macroprudential regulation and supervision. As at end-March 2019, the average core capital adequacy ratio for

the region stood at 18.6 percent, which is well above the regulatory minimum requirement of 10 percent.

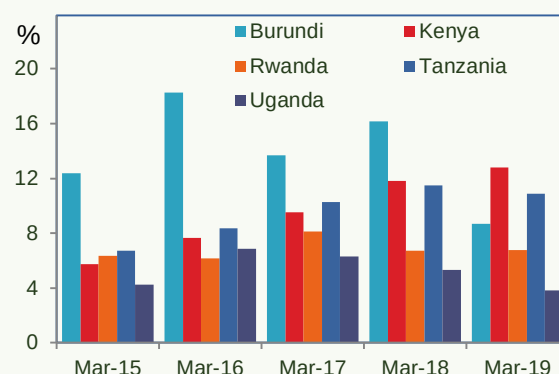
Chart 10: Annual growth of private sector credit in EAC partner states (percent)



Source: EAC Monetary Affairs Committee

Credit growth improved across the region, mainly on account of eased supply-side constraints and increased aggregate demand. On average, credit to the private sector grew by 11.3 percent in the year to March 2019, compared to 6.2 percent in the previous year. Credit risk, as measured by the ratio of non-performing loans to gross loans (NPL ratio), was moderate in the region during the period under review. Changes in the sector's asset quality were mainly attributable to delayed government payments to suppliers and inadequate credit underwriting. The average NPL ratio for the region reduced from 10.3 percent in March 2018 to 8.6 percent in March 2019. However, Kenya's banking system registered a significant rise in credit risk as the NPL ratio increased from 11.8 percent to 12.8 percent, despite the low interest rate environment and recovery in lending activity.

Chart 11: Banking sector NPL ratios of EAC partner states (percent)



Source: EAC Monetary Affairs Committee

The EAC Partner states undertook a number of measures to deal with high NPLs including; settlement of government arrears, restructuring of loans, write-offs of bad loans, improvement of credit underwriting standards and establishment of credit recovery units. In view of these measures and enhanced supervision undertaken by the central banks, NPLs are likely to continue reducing in the near term.

1.4. Conclusion

The global economy witnessed weaker growth and muted inflationary pressures during the year to June 2019. Interest rates started to rise in the first half of 2019 amidst rising levels of public debt. The combined effects of rising interest rates and surging equity and commodity market volatility could lead to a sharp tightening of financial conditions. Considering that high indebtedness has become a critical feature of the global economy, a faster-than-expected increase in interest rates and a sudden rise in global financing costs poses risks to debt and financial stability in the form of constrained fiscal policy administration, hindered policy response, and potentially delayed recovery. As such, emerging market economies should ensure resilience against foreign portfolio outflows by reducing excessive external liabilities, lengthening external debt maturities, and maintaining adequate fiscal and foreign exchange reserve buffers.

Going forward, global economic growth is projected to reach 3.6 percent in 2020, of which growth in advanced economies is projected to slow from 2.2 percent in 2018 to 1.8 percent in 2019 and 1.7 percent in 2020. Although the outlook for US–China trade tensions has improved at the prospect of a potential trade agreement, any further escalation in this and other trade conflicts could lead to a contraction in world trade, which could drag down the global economy further.

Growth in emerging market and developing economies is expected to stabilise at around 5 percent, shaped by the interaction between country-specific fundamentals and the slowdown in advanced economies, trade tensions, and the expected gradual tightening of financial conditions. A reduction in global demand could trigger a shock to commodity prices, adversely affecting trade and fiscal balances for low-income commodity exporters

2. DOMESTIC MACRO-FINANCIAL ENVIRONMENT

This chapter presents an overview of Uganda's macro-financial environment, with focus on the real economy, the external sector, financial markets and their respective infrastructure.

2.1. Key developments in Uganda's macro-economy

2.1.1. The Real Sector

The Ugandan domestic economy expanded by 6.1 percent in the year to June 2019, faster than the EAC regional growth of 5.4 percent. Growth of Uganda's economy was driven by increased domestic demand and a rebound in agricultural production. The agriculture sector grew by 3.8 percent during this period, the highest rate recorded in the last 10 years. The services sector continued to dominate economic activity, registering the highest growth of 7.2 percent. The performance of the industry sector declined slightly, from 6.1 percent as at June 2018 to 5.8 percent as at end-June 2019. The composite index of economic activity also shows a rebound in overall economic output since 2016; the indicator rose by 9.0 percentage points in the year to June 2019, up from a growth rate of 6.8 percent in the year to June 2018.

Chart 12: Annual growth of Uganda's GDP (percent)

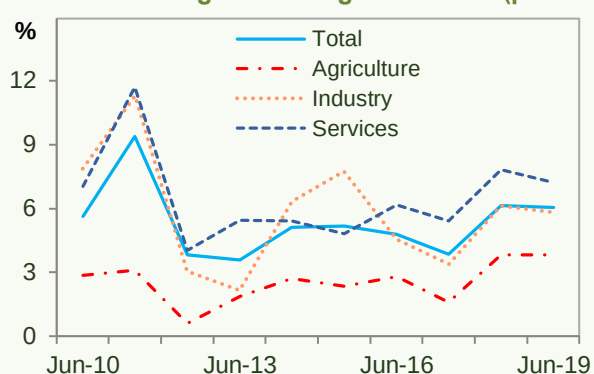
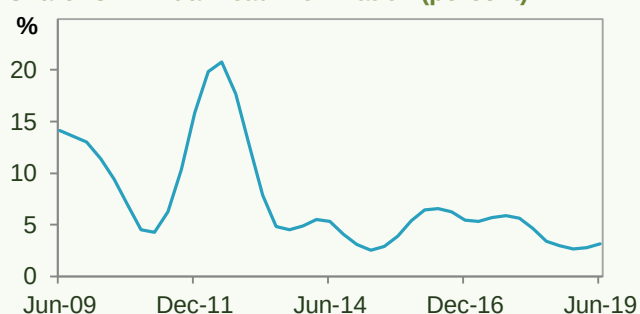
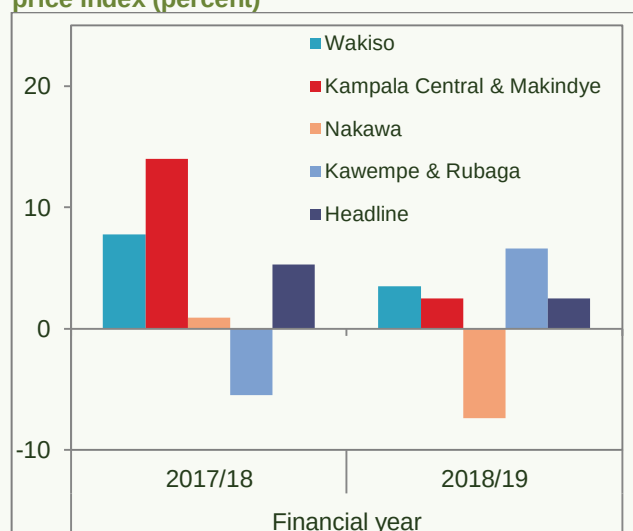


Chart 13: Annual headline inflation (percent)



Inflation was subdued in the year to June 2019, with the average annual headline inflation falling to 3.1 percent from 3.4 percent in June 2018. The lower inflation was driven mainly by improved crop production due to favourable weather conditions, along with reduced fuel costs. The dampened inflationary pressures motivated the accommodative monetary policy stance taken by Bank of Uganda during the year to June 2019. The relatively low interest rate environment boosted private sector credit growth from 10.8 percent to 13.4 percent during this period. Furthermore, the Residential Property Price Index (RPPI) for GKMA is registered a moderate increase of 2.5 percent during 2018/19 FY, compared to the 5.3 percent rise recorded during the 2017/18 FY.

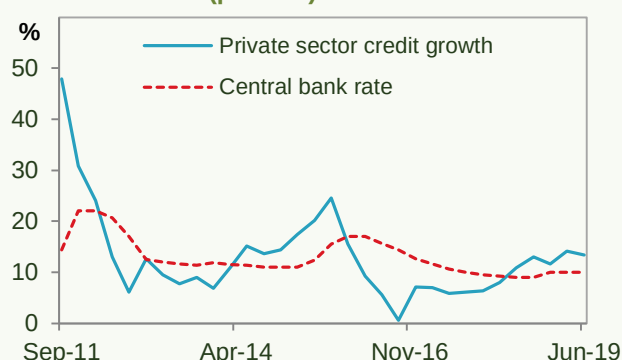
Chart 14: Annual changes in the residential property price index (percent)¹⁰



Source: UBOS

¹⁰ The geographical coverage of the index is the Greater Kampala Metropolitan Area (GKMA), covering Kampala district and urban areas of Wakiso district.

Chart 15: Private sector credit growth and the central bank rate (percent)



2.1.2. The External Sector

The domestic economy has so far been unscathed by the ongoing tensions in the global trade environment. Uganda's exports to the world grew by 17.7 percent in the year to June 2019, up from 5.5 percent in the year to June 2018, driven by a sharp increase in trade activity with the Middle East.

Chart 16: Components of Uganda's balance of payments as a share of GDP (Percent)

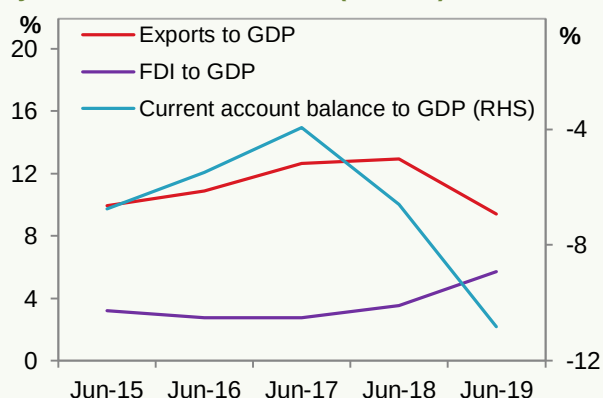
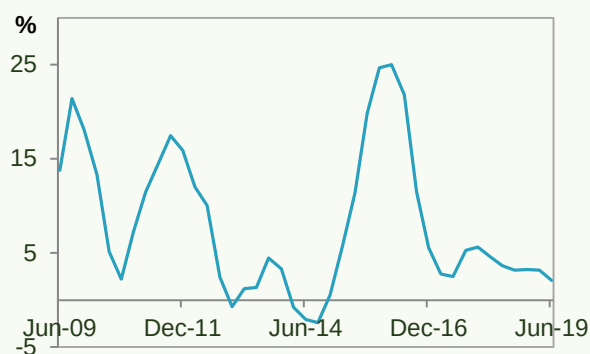


Chart 17: Annual changes in the exchange rate of the shilling against the U.S. dollar (percent)



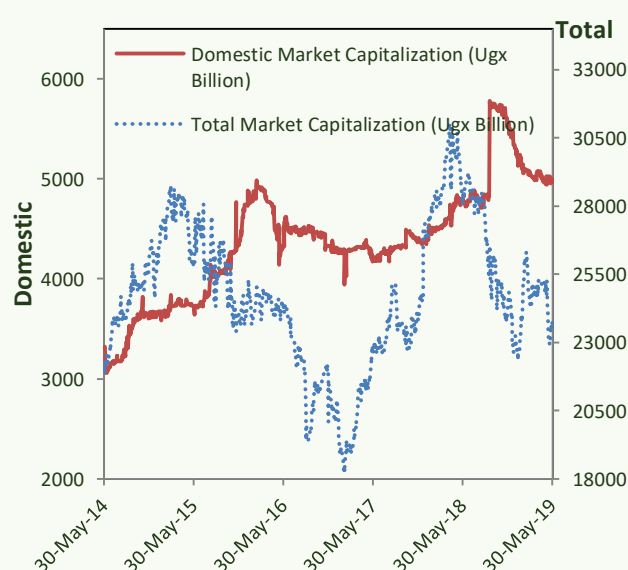
Overall, risks arising from movements in the exchange were diminished during the year to June 2019. The shilling depreciated against the U.S. dollar by 2.1 percent during this period, compared to a rate of 3.7 percent in the year to June 2018. The stronger shilling during the year reflected the strengthening of balance of payments with most of the deterioration in the current account offset by higher foreign direct investment.

2.2. The domestic financial markets

2.2.1. Capital markets

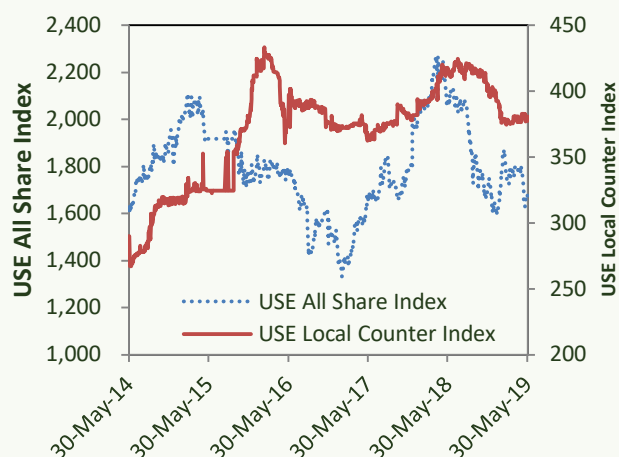
Despite the thriving economic conditions, activity in the domestic equities market remained subdued. Total market capitalization reduced by 17.2 percent, from USh.28.4 trillion to USh.23.5 trillion as at end-June 2019, on account of significant price reductions on ten listed companies. On the other hand, domestic market capitalization increased by 3.3 percent due to the listing of Cipla Quality Chemicals (CQCIL). The slowdown in capital markets activity was reflected in the All Share Index which declined by approximately 19.7 percent during the period under review, implying that the listed companies may have experienced performance challenges, most likely related to their business sectors.

Chart 18: Market capitalization of the Uganda Securities Exchange



Source: Uganda Securities Exchange

Chart 19: Index levels over the last five years

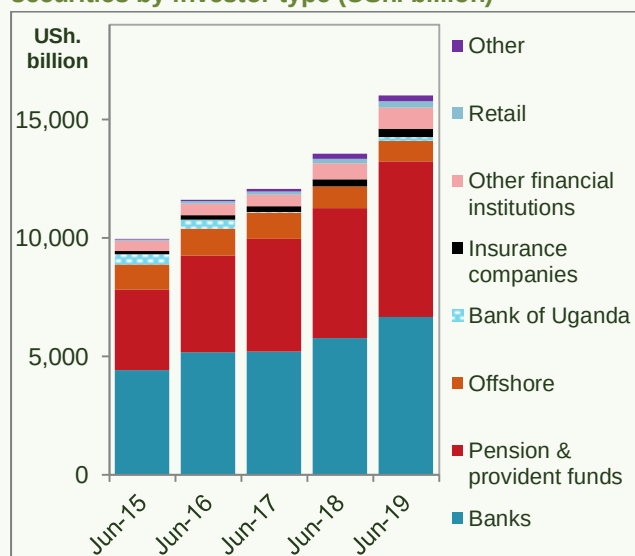


Source: Uganda Securities Exchange

2.2.2. Money markets

Activity in Uganda's domestic financial markets is dominated by government securities. In the year to June 2019, domestic financial institutions continued to be the largest lenders to the government, accounting for 91.4 percent of holdings in treasury securities. The level of government borrowing from the domestic market increased by 18.2 percent between June 2018 and June 2019, which was higher than the change of 12.4 percent in the financial year 2017/18, and also outstripped growth in credit to the private sector by 4.8 percentage points.

Chart 20: Institutional holdings of government securities by investor type (USh. billion)



The accommodative monetary policy measures taken by the central bank during the year to June 2019 resulted in reduced volatility in short-term interest rates. The average interest rate on 91-day treasury bills rose by 1.2 percentage points to 10.3 percent between June 2018 and June 2019. The yield curve as at end-June 2019, compared to the period ending-June 2018, signalled an increase in the demand for shorter-term securities.

Chart 21: Yield curve for Uganda's government securities (percent)

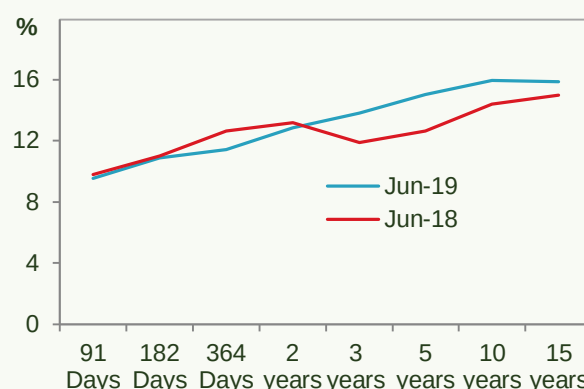
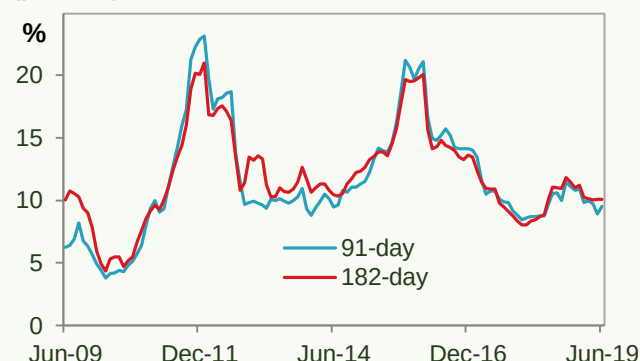


Chart 22: Interest rates on government treasury bills (percent)



2.3. Financial Market Infrastructure

Financial Market Infrastructure (FMI) can be referred to as a network of systems that make payments possible. They are systemically important due to the large value of transactions they process lack of substitutability and strong connections with financial institutions. Therefore, they require sound design, prudent operation and financial resilience.

2.3.1. Performance of Financial Market Infrastructure

At the end of June 2019, Uganda's key FMI included: the Uganda National Interbank Settlement System (UNISS) – Uganda's Real Time Gross Settlement system; the Automated Clearing House (ACH) – for cheques, direct debit and credit transfers; and an electronic Central Securities Depository (CSD) – for government securities. Others included FMI supplied by the private sector players such as mobile money services.

In the period under review, all FMI (UNISS, Automated Clearing House (Cheques, EFTs) with the exception of mobile money registered growth in value of the transactions. The value of UNISS transactions represented 77 percent of the total value of all payments systems and rose to US\$353 trillion. On the other hand, mobile money registered the highest number of transactions equivalent to 99.5 percent of the total volume of payments systems.

Table 2: Number and Value of payments systems

Year ended	Jun-16	Jun-17	Jun-18	Jun-19
UNISS				
Number (millions)	0.69	0.75	0.80	0.73
Change (%)	9.7	8.5	6.5	-9.4
Value (US\$ trillions)	234.0	275.4	315.0	352.6
Change (%)	-9.4	25.1	12.6	15.0
Cheques				
Number (millions)	1.1	1.2	1.1	1.5
Change (%)	-16.6	8.6	-11.0	36.7
Value (US\$ trillions)	5.6	6.1	5.8	8.0
Change (%)	-12.2	8.3	-4.1	37.4
Electronic Fund Transfers				
Number (millions)	7.1	8.6	9.4	9.9
Change (%)	-13.2	21.1	9.3	5.0
Value (US\$ trillions)	15.3	19.1	23.3	27.9
Change (%)	-4.7	25.1	21.7	19.9
Mobile money				

Number (billions)	0.8	1.1	1.3	2.5
Change (%)	42.8	37.3	21.1	85.3
Value (US\$ trillions)	37.4	52.8	73.1	66.9
Change (%)	41.0	41.0	38.5	-8.5

Source: Bank of Uganda

2.3.2. Performance of digital Payments

The use of digital payments significantly increased in the year to June 2019 following efforts from the government, commercial banks and Bank of Uganda to promote digital payments as an alternative to cash; and customers demand for fast, convenient and efficient payments.

The total number of active debit cards issued by banks as at June 2019 grew by 19.3 percent to 2.4 million. The volume of payments made by debit cards stood at 2.8 million an equivalent in value of US\$650.4 billion. The number of credit cards continued to increase but their use remains relatively low in comparison to debit cards partly attributed to the limited number of merchants and outlets that accept credit cards

Table 3: Card transaction volumes and values

		June 2018	June 2019	% Change
Debit cards	Active number of cards (millions)	2.0	2.4	19.3
	Volume of payments (millions)	2.2	2.8	27.3
	Value of payments (US\$ billion)	455.9	650.4	42.6
Credit cards	Active number of cards	7,104	9,247	30.1
	Volume of payments (000's)	123.0	144.3	17.3
	Value of payments (US\$ billion)	39.8	49.2	23.7
POS	Volume (millions)	1.4	1.9	35.2
	Value (US\$ billion)	418.6	469.8	12.2

Source: Bank of Uganda

2.4. Conclusion

Risks to Uganda's macro-financial environment were minimal during the year to June 2019. As such, GDP growth is projected at 6 percent in the year to June 2020, supported by accommodative monetary policy, expansionary fiscal policy and increased public infrastructure investment. The downside risks to this outlook include potential shocks from the external sector in the form of lower export demand weighing down on financial flows and possibly igniting volatility in the domestic foreign exchange market. In addition, trends in the global financial markets could result in higher interest rates and increase the costs for external financing.

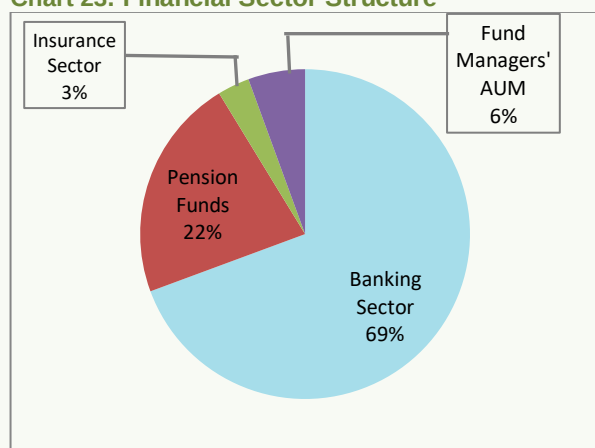
3. UGANDA'S FINANCIAL SECTOR

Uganda's financial sector remains sound and resilient. Overall, risks to financial stability have eased since the last FSR, with the main concern being the likely impact of potential external shocks in the short- to medium-term. However, the banking system continues to hold sufficient buffers of capital and liquidity. This section presents an assessment of the performance of the financial sector, a summary of the risks to the financial sector and the outlook for financial stability.

3.1. Structure of Uganda's Financial Sector

The financial sector total assets amounted to US\$45.81 trillion, or 44.3 percent of Uganda's GDP, as at end December 2018. As illustrated below (Chart 23), the financial sector is dominated by the banking sector, which is regulated by Bank of Uganda.

Chart 23: Financial Sector Structure



Source: BOU, CMA, IRA, URBRA

3.2. Commercial Banking Sector

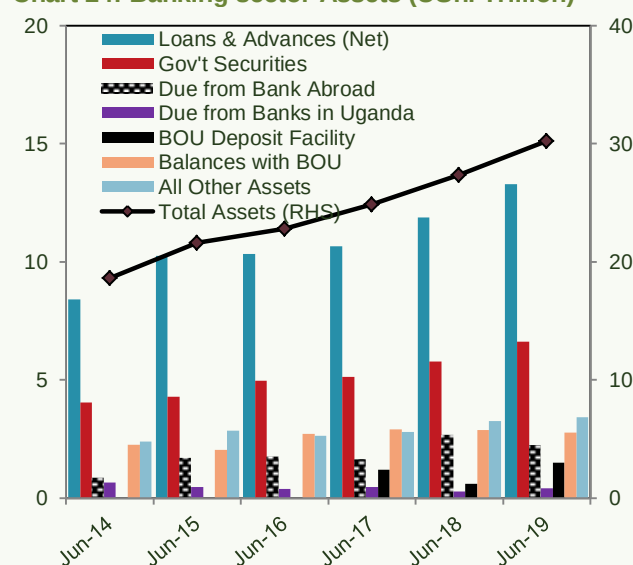
Uganda's banking sector is tiered into commercial banks, credit institutions and microfinance deposit-taking institutions, by the legal framework. As at end June 2019, commercial banks accounted for 95.2 percent of the banking sector total assets of US\$31.8 trillion.

3.2.1. Asset Growth and Concentration

The banking industry aggregate assets increased by 10.5 percent, from US\$27.4 trillion in June 2018 to US\$30.3 trillion as at end June 2019. Loans and advances, investment in government securities, balances with Bank of Uganda (BOU), and placements with non-resident banks respectively accounted for the largest proportions of the industry total assets.

Gross loans and advances increased by 11.2 percent, which was higher than the 11.0 percent increase in the year ended June 2018. As banks sought to diversify risk exposure associated with private sector credit, they increased investment in government securities more rapidly, by 14.7 percent, up from 12.2 percent growth in the year to June 2018. As the shilling remained stable against the major foreign currencies, banks' deposits with non-resident banks reduced by US\$439.0 billion to US\$2,243.3 billion, which had increased by US\$1,017.9 billion in the year ended June 2018; hence minimizing the banks' assets exposure to foreign shocks.

Chart 24: Banking sector Assets (US\$ Trillion)

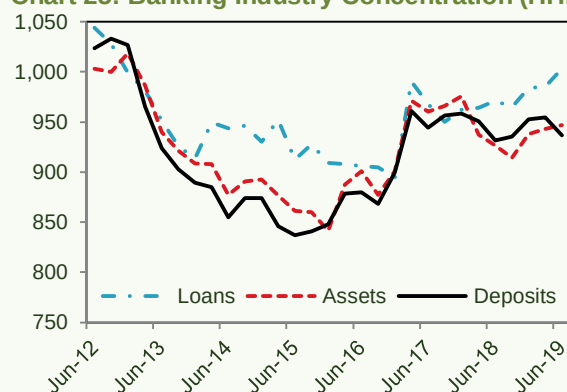


Source: Bank of Uganda

The foreign currency denominated proportion of total assets reduced from 33.1 percent to 29.4 percent over the year ended June 2019, reducing susceptibility of the balance sheet to foreign exchange rate risk, in spite of the concurrent marginal increase in proportion of foreign currency denominated liabilities to total liabilities, from 39.9 percent to 40.2 percent.

The commercial banking industry remains highly concentrated, in spite of continued growth. The five largest banks out of twenty four (24) banks that comprise the commercial banking domain, accounted for 60.4 percent of the aggregate assets as at end June 2019, up from 60.3 percent in June 2018¹¹. The individual market share of the other 19 banks ranged from 0.2 percent to 5.9 percent. Indeed, the Herfindhal-Hirschman index (HHI) also exhibited increased concentration (Chart 25). However, the trend in the HHI for assets (and loans, as a sub-category) moved in tandem with the HHI for deposits, the main funding source, suggesting matched concentration on both the assets and liabilities side of the balance sheets.

Chart 25: Banking Industry Concentration (HHI)



Source: Bank of Uganda

While this trend in concentration is suggestive of lower competition, some previous cross-country empirical research, including Thorsten B. et al. (2005)¹², found a positive link between banking sector concentration and financial stability; by reducing the probability of systemic banking crises.

3.2.2. Credit Growth, Risk, and Sectoral allocation

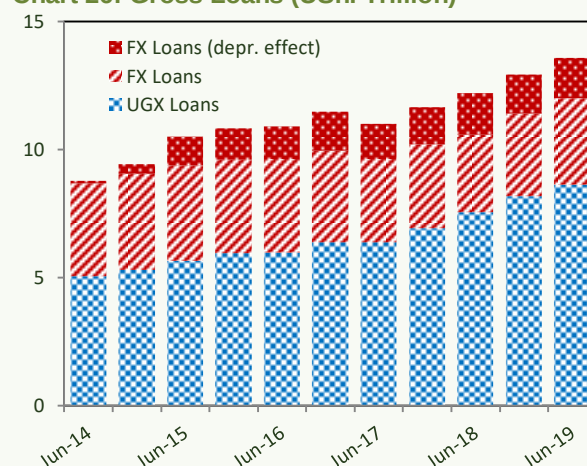
Credit continued to expand, but generally remained below its historical average growth rate of 16 percent during the last ten years. However, a pickup in exposure

¹¹ Four of these banks, (Stanbic Bank, Standard Chartered Bank, Centenary Bank & Barclays Bank), were designated as Domestic Systemically Important Banks, based on data as at 31st December 2018.

¹² Thorsten B. et al. (2005), "Bank Concentration and Fragility: Impact and Mechanics", NBER working paper 11500

to foreign currency denominated loans was noted which raises potential credit risk in the event of subsequent depreciation of the shilling. Over the year ended June 2019, total loans grew by 11.2 percent to USh.13.6 trillion, up from 11.0 percent growth over the year ended June 2018. Foreign currency loans increased by 6.3 percent to the equivalent of USh.4,949.2 billion, over the year, up from 0.5 percent growth in the year ended June 2018. Discounting foreign exchange valuation effects, foreign currency denominated loans increased by 11.6 percent over the year, significantly reversing a 7.0 percent drop over the earlier year. On the other hand, shilling loans increased at a slower rate, 14.2 percent, as compared to the 18.6 percent increase in the year ended June 2018.

Chart 26: Gross Loans (USh. Trillion)



Source: Bank of Uganda

In terms of composition, the proportion of foreign currency denominated loans to total loans reduced from 38.1 percent (June 2018) to 36.4 percent (June 2019), consequently reducing exposure of banks' balance sheets to credit and market risk that can potentially be propagated by foreign exchange rate risk.

Credit risk in the banking sector reduced, with asset quality improving further. Credit risk within the banking sector eased, as measured by the two core financial soundness indicators (FSIs) – ratio of non-performing loans to gross loans and sectoral distribution of loans to total loans – as detailed below. In addition, banks considerably provided for non-performing loans, with the

ratio of specific provisions to non-performing loans closing at 49.4 percent.

Sectoral concentration of loans eased marginally.

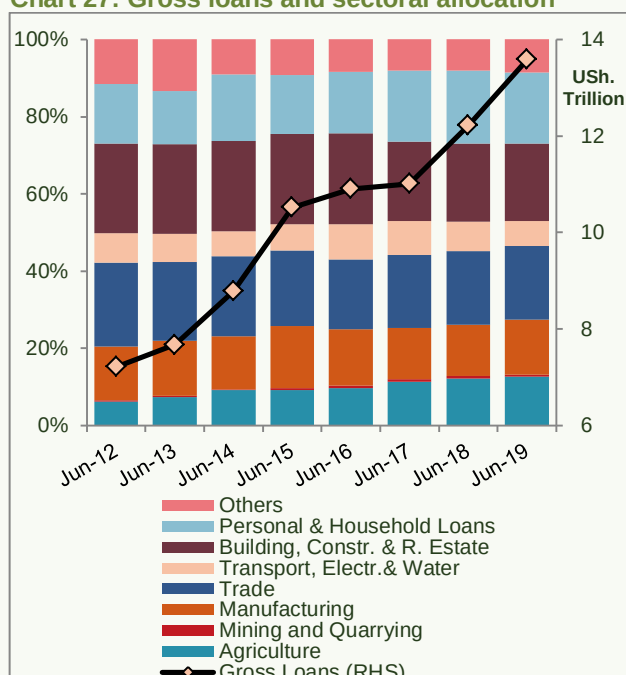
Sectoral allocation of credit remained consistent with past trends, with no extraordinary shift in the sectoral distribution of banks' stock of loans over the year to June 2019. The three largest sectors – building, construction & real estate; trade & commerce; and personal & household – jointly accounted for 57.5 percent of banks' gross loans and advances, down from 58.2 percent as at end June 2018. Given that the 10-year quarterly average share of the largest three sectors in gross loans was 58.4 percent, the sectoral distribution of credit remained largely consistent with the recently observed distribution, allaying financial stability concerns of extraordinary growth or concentration in particular sectors.

Lending to building, mortgages, construction and real estate sector, which accounted for the largest proportion (20.1 percent) of banks' lending, increased by 11.0 percent (US\$270.5 billion), a more rapid growth compared to 8.7 percent growth in the prior year ended June 2018; with shilling denominated loans accounting for 99.4 percent of the increase. Over the year ended June 2019, credit expansion to this sector was in line with the observed improvement in property prices. For instance, the Residential Property Price Index (RPPI) indicates that property prices in the Greater Kampala Metropolitan Area generally increased by 2.5 percent over the year ended June 2019. In terms of currency composition, the proportion of foreign currency denominated loans to building, mortgages, construction and real estate reduced further from 50.2 percent to 45.2 percent over the year ended June 2019, partly a consequence of the macro-prudential policy intervention that set a ceiling for the loan to value ratio (LTV). While the loans extended for land purchase account for a mere 0.6 percent of gross banks' loans, the macro-prudential policy, of a 70 percent cap on LTV for foreign currency denominated lending for land purchase, has been effective. The proportion of foreign currency

denominated loans in total loans for land purchase has reduced to 18.7 percent as at end June 2019, from 43.0 percent as at end of April 2016 – prior to the policy coming into effect.

Trade and commerce sector, which accounted for 20.1 percent of gross loans, grew at 10.7 percent, a slower pace relative to 12.5 percent growth registered in FY2017/18. Similarly, growth in personal and household loans slowed to just 7.7 percent, slower than the 13.8 percent rise in FY2017/18.

Chart 27: Gross loans and sectoral allocation



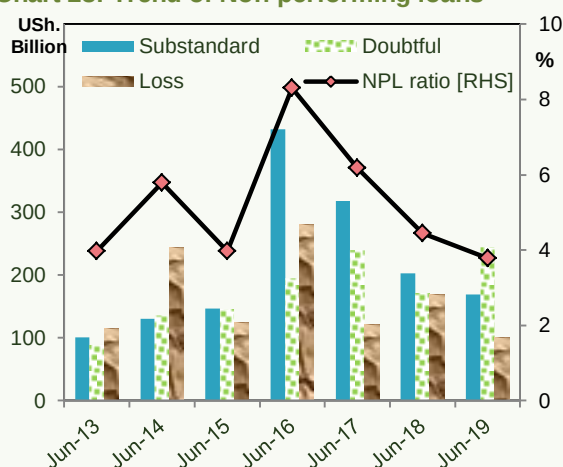
Source: Bank of Uganda

Analysis of the sectoral distribution of foreign currency lending shows that the major tradable sectors – manufacturing, trade and commerce – accounted for 43.8 percent of the industry foreign currency loans, up from 39.3 percent share as at end of June 2018; with the largest proportion of the increase in foreign currency lending associated with these sectors. Conversely, the share of the building, mortgages, construction and real estate sector in foreign currency lending dropped from 26.5 percent to 24.9 percent over the same period. Also consistent with prudential regulation, the stock of foreign currency denominated loans to households reduced by

4.3 percent, and accounted for only 2.7 percent of the gross lending to households.

The ratio of non-performing loans to gross loans reduced over the year ended June 2019. Asset quality, as measured by the ratio of non-performing loans to total gross loans and advances (NPL ratio) improved from 4.4 percent (June 2018) to 3.8 percent (June 2019). While the gross loans, the denominator in the NPL ratio indicator, increased by 11.2 percent, the improvement in asset quality was largely attributed to the significant reduction, of 5.2 percent, in the industry's stock of non-performing loans from USh.542.8 billion to USh.514.9 billion during the period under review.

Chart 28: Trend of Non-performing loans



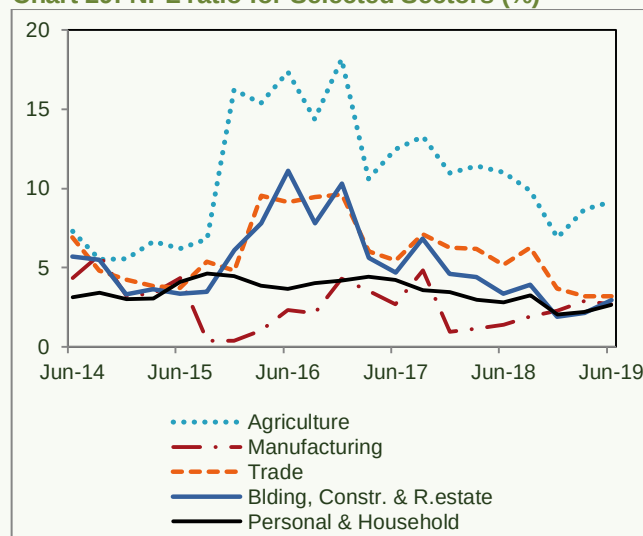
Source: Bank of Uganda

The “big five” sectors – agriculture; manufacturing; trade; building, construction and real estate; and personal and household – accounted for 85.1 percent of total NPLs (and 84.4 percent of the banking industry gross loans) as at end June 2019, up from 83.9 percent of NPLs (and 83.6 percent of gross loans) as at end June 2018. However, the asset quality under the agriculture sector remains a concern, in spite of the sector accounting for just 12.6 percent of the banking industry gross loans. Notwithstanding the improvement in the sector's NPL ratio from 11.0 percent to 9.1 percent over the year, the sector still accounted for the highest proportion of the banking industry NPLs, at 30.4 percent, similar to June 2018 contribution (30.3 percent).

Also, the manufacturing sector's deteriorating asset quality trend persisted, having started in December 2017. The sector registered a 20.5 percent increase in NPLs over the year ended June 2019, deterioration from the 9.8 percent growth over the prior year ended June 2018. Indeed, its contribution to the banking industry total NPLs rose from 4.1 percent to 10.1 percent over the year.

As a positive for financial stability, asset quality under the main beneficiary sectors of credit – building, construction and real estate; and trade and commerce – improved, with their NPL ratio reducing from 3.4 percent and 5.2 percent to 3.0 percent and 3.2 percent respectively. Furthermore, there was improvement in asset quality attributed to personal and household lending, indicating lower distress and improving capacity for households to service credit obligations.

Chart 29: NPL ratio for Selected Sectors (%)



Source: Bank of Uganda

Consistent with the reduction in the proportion of foreign currency denominated loans, the share of foreign currency denominated NPLs in total NPLs reduced from 39.8 percent to 27.0 percent over the year, with foreign currency NPLs estimated at USh.139.0 billion as at end June 2019. Consequently, the aggregate foreign currency NPL ratio decreased from 4.6 percent to 2.8 percent over the year, with the improvement reflected across most of the sectors. Notable though was the high

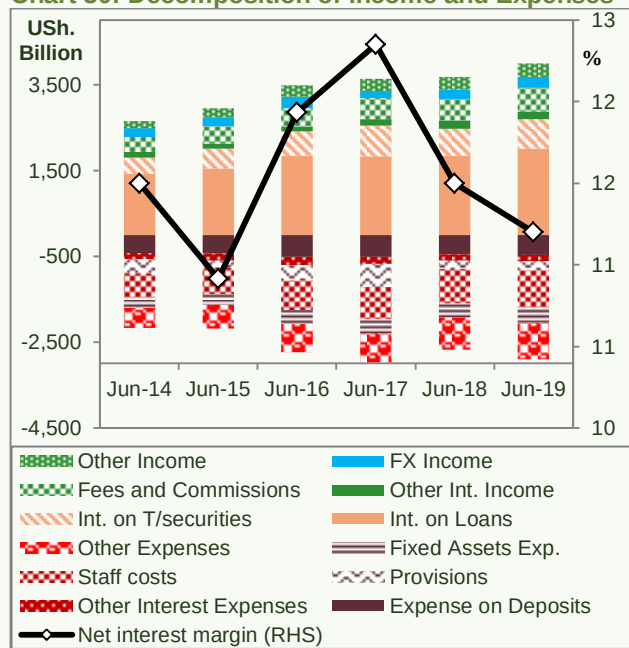
share of NPLs of 51.1 percent attributed to the agriculture sector, inspite of its 15.1 percent share in gross foreign currency loans, representing the highest sectoral foreign currency NPL ratio of 9.5 percent.

Fundamentally, the stable and accommodative interest rates regime, improvement in the performance of the economy and Government's settlement of domestic arrears supported improvement in asset quality. Through FY2018/19, the monthly lending rates on shilling and foreign currency loans averaged 20.0 percent and 7.5 percent, down from 20.3 percent and 7.7 percent in FY2017/18, respectively.

3.2.3. Earnings and Profitability

The aggregate profitability of the banking industry improved. However, the persistently loss-making trend of the smaller banks remains a concern¹³. The banking sector's aggregate net-after-tax profit increased by 5.3 percent from US\$737.7 billion (FY2017/18) to US\$776.7 billion (FY2018/19), largely driven by interest income on advances and treasury securities that increased by 9.3 percent and 8.3 percent respectively.

Chart 30: Decomposition of Income and Expenses

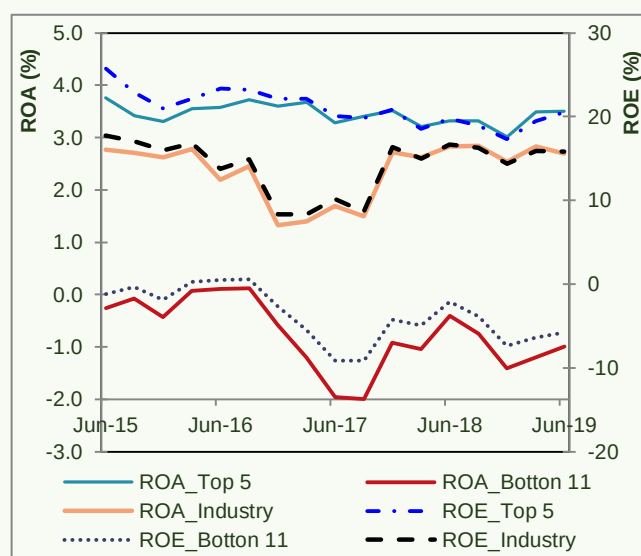


¹³ For the analysis in this section of this report, a bank has been deemed small if its total (net) assets account for less than 2.0 percent of the banking industry total (net) assets, as at 30th June 2019

The improvement in asset quality also contributed to improved profitability through a lower increase in provisions of 5.6 percent in spite of the 11.2 percent growth in lending. However, the aggregate net interest margin (NIM) declined, as highlighted in the figure above, due to a lower growth in net interest income, by 9.6 percent, in spite of the earning assets registering a greater increase, of 16.1 percent. The lower growth in net interest income was attributed to the mostly muted interest rate regime, relative to the prior year. The year ended June 2019 saw a marginal reduction in interest rates on shillings loans, which constitute most of the earning assets, while interest rates on treasury securities only increased marginally.

Also, the industry's return on assets (ROA) and return on Equity (ROE) reduced from 2.8 percent and 16.7 percent in June 2018 to 2.7 percent and 15.9 percent respectively, in June 2019 (Chart 31). This was attributed to a higher increase in total assets, of 10.5 percent, and shareholders' equity, of 10.8 percent, compared to the 5.3 percent increase in net-after-tax profits.

Chart 31: Aggregate Profitability of: ALL, Top 5, Smallest 11; Banks



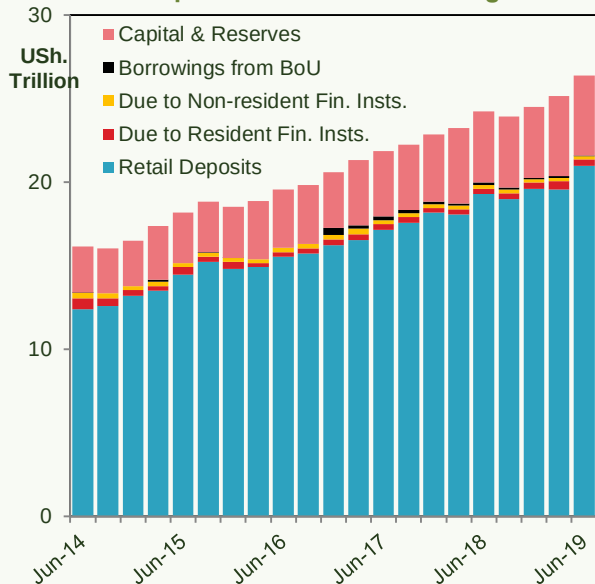
However, the aggregate industry profitability masks the persisting poor performance of some small banks, as illustrated in the figure above. While the industry's

profitability is largely boosted by the largest banks, the persistent loss-making trend of some small banks is a drag on the industry position. On the contrary, the profitability of the larger banks has been more resilient, due to their greater access to cheaper funding, diversified earning assets, and often sizeable alternative income streams.

3.2.4. Funding

The banking sector's funding structure improved and the cost of funding reduced, over the year ended June 2019. To fund the asset side of their balance sheet, banks use deposits, borrowings, capital and reserves. Retail funding tends to be more stable than wholesale funding, particularly when protected by deposit guarantee schemes¹⁴. Uganda has a growing Deposit Protection Fund (DPF), providing a prudential safety net for retail depositors. As illustrated in the Chart 32, retail deposits are the main funding source, and constituted 83.6 percent of the total liabilities as at end June 2019.

Chart 32: Composition of Banks' Funding

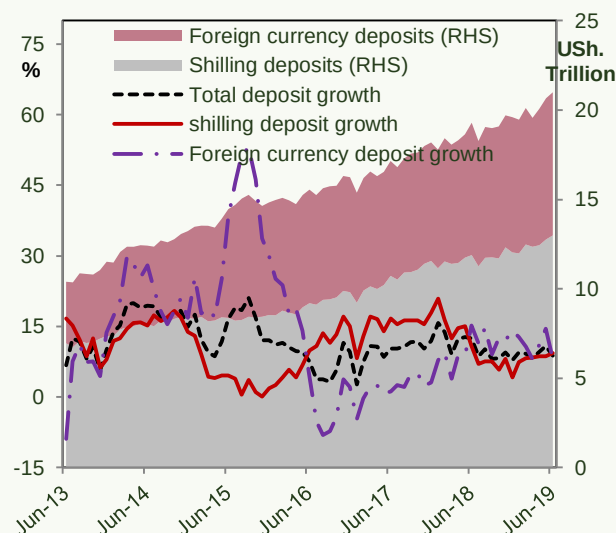


Source: Bank of Uganda

¹⁴ For a discussion on the relative stability of retail deposits, see for example: Huang, R. and Ratnovski, L., "The dark side of bank wholesale funding", Working Paper Series, No 1223, ECB, July 2010

The aggregate industry retail deposits increased by 8.8 percent over the year ended June 2019, to Ushs.21.0 trillion. However, this growth was slower compared to a 12.5 percent increase registered over the prior year ended June 2018. Shilling deposits grew at a faster rate of 13.0 percent, than foreign currency deposits, at 8.0 percent, over the year under review.

Chart 33: Retail Deposits and Growth Rate



Source: Bank of Uganda

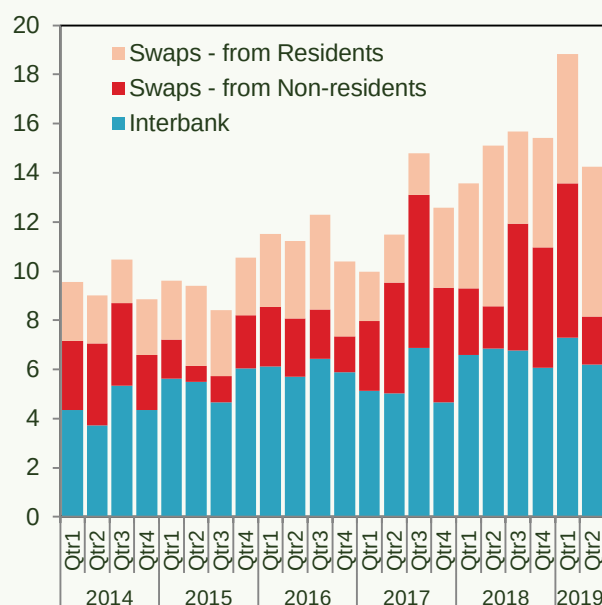
Consequently, the proportion of foreign currency deposits to total deposits reduced from 38.4 percent to 38.2 percent. With the proportion of foreign currency denominated loans in total loans similarly falling and reducing banks' exposure to foreign exchange rate risk. Furthermore, the ratio of foreign currency loans to foreign currency deposits reduced from 62.9 percent (June 2018) to 61.8 percent (June 2019). This indicates increased funding for foreign currency loans, and points to a reduction in the associated liquidity risk in the event of increased credit and foreign exchange risk.

The cost of deposits to banks reduced from 2.5 percent FY2017/18 to 2.3 percent for FY2018/19.

Banks' access to wholesale funding improved, amidst stable interest rates in the money markets, with the main sources being the domestic interbank market and the foreign currency swaps market (Chart 34). While the overnight and 7-day interbank rates averaged 8.6

percent and 10.2 percent in FY2018/19, up from 7.9 percent and 9.7 percent in FY2017/18, respectively, the interbank transacted amount increased from US\$25.0 trillion to US\$26.3 trillion. Turnover in the swaps market also increased, to US\$37.9 trillion in FY2018/19 from US\$31.1 trillion in FY2017/18, with banks transacting with both resident and non-resident financial institutions.

Chart 34: Wholesale Funds Borrowings (US\$ Trillion)



Source: Bank of Uganda

3.2.5. Liquidity

Liquidity risk in the banking system remained low, as banks maintained liquidity buffers well above the prudential minimum requirements. However, stress tests indicated that banks' resilience to liquidity shocks somewhat waned as their excess liquidity buffers reduced. While deposits increased by 8.8 percent, liquid assets increased at a slower pace of 6.3 percent due to a shift towards both longer-term and less liquid assets. Notably, the stronger growth in banks' lending to the private sector, of 11.2 percent, claimed an increasing proportion of deposits, of 64.7 percent as at end of June 2019. Furthermore, the faster growth, of 14.7 percent, in banks' investment in government securities was skewed to more long-term government securities, which are less liquid. Consequently, the liquid assets-to-total deposits

ratio declined from 46.6 percent in June 2018 to 45.5 percent in June 2019. However, this is more than double the regulatory minimum requirement of 20 percent. Similarly, the liquid assets ratio dropped to 31.6 percent. Table 4 highlights some liquidity indicators.

Table 4: Select bank liquidity indicators (percent)

Indicator	June 2016	June 2017	June 2018	June 2019
Total loans to total deposits	70.2	64.2	63.4	64.7
Liquid assets to total deposits	43.4	50.1	46.6	45.5
Liquid assets to total assets	29.6	34.6	32.8	31.6
Industry LCR	188.3	252.9	372.4	211.4

Source: Bank of Uganda

The Liquidity coverage ratio (LCR)¹⁵ for the aggregate industry balance sheet reduced from 372.4 percent to 211.4 percent over the year, but remained well above the prudential minimum, of 100 percent. All banks, but one, held sufficient high quality liquid assets (HQLA) to sustain them through a 30-day stress scenario, for all currencies.

Consequently, stress tests conducted on the banking system's resilience to liquidity shocks, indicated reduced banks' capacity to withstand shocks, over the year ended June 2019.

3.2.6. Capital adequacy

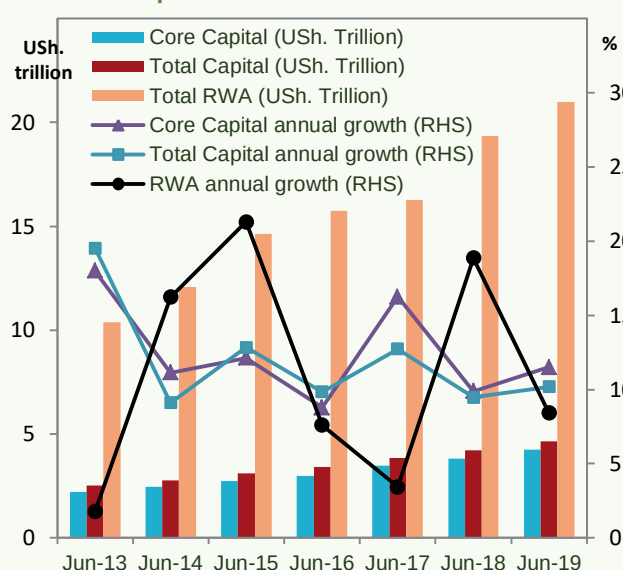
Capital buffers and adequacy improved, reinforcing the banking system's resilience to shocks. During FY2018/19, all commercial banks maintained capital adequacy ratios (CAR) well above the minimum requirement of 10 percent for core capital to total risk weighted assets and 12 percent for total capital to total risk weighted assets.

The aggregate industry core capital and total capital increased by 11.5 percent and 10.2 percent respectively

¹⁵ LCR is a Basel III measure that requires banks to hold sufficient high quality liquid assets over a 30-day period

to US\$4.3 trillion and US\$4.6 trillion, over the year to June 2019, largely attributed to an increase in retained earnings and share premium. As illustrated in the Chart 35, this represented relatively superior growth in capital buffers compared to the growth in banks' exposure to risky assets – which the buffers are meant to cushion. While total assets and off-balance sheet items grew by 10.5 percent and 14.3 percent respectively, the associated risk was lower, leading to lower growth in associated Risk-weighted Assets (RWA), by 8.4 percent.

Chart 35: Capital Buffers and RWA Trends



Source: Bank of Uganda

Core capital-to-RWA and Total capital-to-RWA ratios improved from 19.7 percent and 21.8 percent as at end June 2018 to 20.3 percent and 22.1 percent as at end June 2019 respectively. The leverage ratio (ratio of regulatory tier one capital to total assets plus off-balance sheet items), which is another indicator of banks' capital adequacy, remained stable at 11.1 percent.

Noteworthy, the Financial Institutions (Capital Adequacy Requirements) Regulation, 2018 took effect in September 2018. This enhanced regulation requires banks to hold additional capital to cushion their market risk exposure. Overall, advancement has been made in implementing the Basel I international standards, issued by the Basel Committee on Banking Supervision

(BSBS), aimed at strengthening banking system stability.

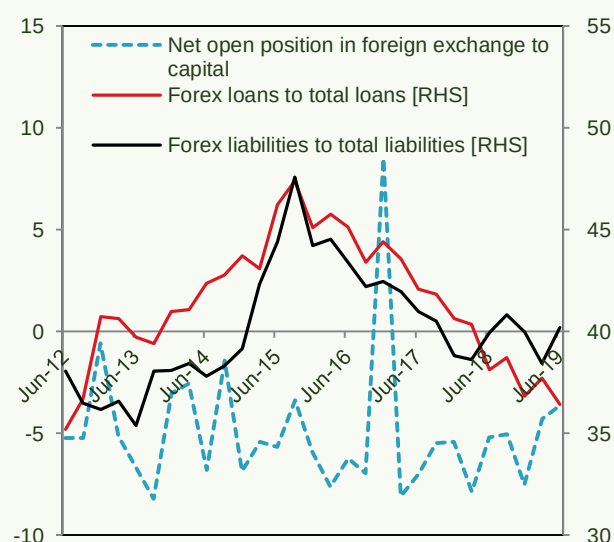
Stress tests conducted on the banking sector to determine the adequacy of capital buffers showed that on aggregate, most banks including all domestic systemically important banks (D-SIBs) had sufficient capital buffers to withstand credit risk shocks.

3.2.7. Exposure to foreign exchange rate risk

On aggregate, the industry's vulnerability to exchange rate movements improved, as highlighted in Chart 36. The core financial soundness indicator for sensitivity to market risk comprised of the net open position in foreign exchange to capital ratio, shows that the net mismatch between foreign currency asset and liability positions relative to capital oscillated safely within the regulatory limits of +/- 25 percent during the year ended June 2019.

Chart 36 further highlights the decreasing exposure, to foreign exchange rate risk, of the industry balance sheet. For instance, the proportion of foreign currency denominated loans and deposits reduced.

Chart 36: Sensitivity to Market Risk Indicators (percent)



Source: Bank of Uganda

Moreover, the ratio of foreign currency loans to foreign currency deposits reduced from 62.9 percent to 61.8

percent over the year under review, well below the 80 percent limit stipulated by the BOU Foreign Currency Business Guidelines (2010).

3.2.8. Performance of Domestic Systemically Important Banks (D-SIBs)

Four commercial banks were identified as Domestic Systemically Important Banks (D-SIBs) as at the end of December 2018; **Stanbic Bank, Standard Chartered Bank, Centenary Bank and Barclays Bank.**

The four banks constituted 50.8 percent of the commercial banking total assets at the end June 2019, a marginal gain in share from 49.3 percent as at end of June 2018. They also jointly held 49.7 percent of the industry aggregate deposits. D-SIBs face enhanced supervisory oversight, cognizant of their systemic importance.

The performance of D-SIBs improved, as shown by selected financial soundness indicators in the table below. The D-SIBs' exposure to credit risk reduced, demonstrated in the improving asset quality, with the proportion of non-performing loans relative to their gross loans consistently reducing, to a level lower than the industry median. Further, D-SIBs profitability outperformed the industry's median fostering their organic accumulation of capital. Notably, the indicators also showed that DSIBs held adequate capital and liquidity buffers that exceeded the industry's median ratios.

All stress tests conducted indicated that the D-SIBs were resilient to shocks emanating from both credit and liquidity risks.

Table 5: Comparison of selected financial soundness indicators of D-SIBs to industry indicators (percent)

	June 2017		June 2018		June 2019	
	D-SIBs	Industry Median	D-SIBs	Industry Median	D-SIBs	Industry Median
Number of D-SIBs	3	N/A	3	N/A	4	N/A
Total D-SIBS assets to total industry assets	42.8	N/A	40.4	N/A	50.8	N/A
Total capital/ RWA	20.8	23.3	18.0	22.2	22.3	20.1
Core capital/ RWA	18.3	21.0	15.9	20.7	20.3	18.0
Liquid assets/ Total deposits	49.4	48.2	41.9	46.6	48.6	43.2
NPL ratio	5.9	5.7	5.1	4.1	3.1	3.5
Return on assets	3.2	1.5	3.1	1.5	3.8	1.8
Return on equity	21.0	9.4	19.4	9.4	21.8	12.6

Source: Bank of Uganda

3.3. Credit Institutions (CIs)

As at end June 2019, all credit institutions remained adequately capitalized and held strong liquidity buffers. The sub-sector registered significant growth in total assets from US\$624.5 billion as at end June 2018 to US\$963.0 billion as at end June 2019. This was largely attributed to a new entrant in the subsector. Net loans and advances for the sub-sector increased from US\$337.7 billion to US\$596.4 billion over the period under review, while total deposits rose from US\$437.8 billion to US\$463.1 billion.

Capital Adequacy

As at end June 2019, the Credit Institutions sub-sector's core and total capital adequacy ratios stood at 21.9 percent and 23.5 percent respectively, an improvement compared to 20.9 percent and 22.5 percent as at end June 2018.

Asset Quality

The sub-sector's NPL ratio stood at 4.2 percent as at end June 2019, up from 4.1 percent in the previous year. Non-performing loans in the sub-sector increased from US\$13.7 billion as at end June 2018 to US\$25.6 billion as at end June 2019, largely due to one institution, whose

asset quality deteriorated, accounting for 85.3 percent of the sub-sector's total non-performing loans.

Profitability

On aggregate, Credit institutions registered a net profit of US\$7.5 billion in the year to June 2019. The aggregate ROA and ROE stood at 0.5 percent and 2.5 percent respectively while the cost-to-income ratio was 89.8 percent as at end June 2019. The cost-to-income ratio remained high and was in part attributed to high costs of deposits. Interest income was the main source of income for credit institutions, rising to 83.6 percent of total income during the second quarter of the year 2019.

Liquidity

The Credit Institutions' aggregate ratio of liquid assets to total deposits stood at 52.9 percent as at end June 2019, well above the minimum prudential requirement of 20.0 percent. Liquid assets increased from US\$208.7 billion to US\$244.7 billion in the year to June 2019. The sub-sectors total loans to deposits ratio was 126.3 percent mainly due to one institution which had a high ratio, as its loans were largely financed by borrowings.

Table 6: Key Financial Soundness Indicators of Credit Institutions

	June 2015	June 2016	June 2017	June 2018	June 2019
Capital Adequacy					
Core capital to risk-weighted assets (percent)	20.3	22.4	24.3	20.9	21.9
Total capital to risk-weighted assets (percent)	24.8	24.2	25.9	22.5	23.5
Provisions (specific) to core capital (percent)	11.2	6.1	5.7	7.9	7.6
Asset Quality					
Non-performing loans (US\$ billion)	8.7	12.8	10.3	13.7	25.6
Non-performing loans to total loans (percent)	4.4	5.3	4.0	4.1	4.2
Profitability					
Profit/loss (year-to-date) (US\$ billion)	1.0	(1.3)	(0.1)	4.7	7.5
Quarterly return on assets (percent)	(0.2)	(0.3)	(0.1)	0.5	0.5
Liquidity					
Liquid assets to deposits (percent)	49.0	51.8	53.1	47.7	52.9
Loans to deposits (percent)	72.5	69.6	67.7	69.1	126.3

Source: Bank of Uganda

3.4. Microfinance Deposit-taking Institutions (MDIs)

All five licensed MDIs remained adequately capitalized and complied with the minimum statutory liquidity requirement in the year to June 2019. Total assets held by MDIs increased to US\$642.3 billion from US\$562.2 billion largely due to growth in gross loans by US\$55.2 billion and fixed assets by US\$14.9 billion.

Capital Adequacy

On aggregate, the sub-sector's core and total capital to risk-weighted assets ratios stood at 41.8 percent and 45.0 percent, compared to 44.4 percent and 48.0 percent as at end June 2018, respectively. Both ratios were above the statutory minimum requirements of 15 percent and 20 percent, respectively.

Asset Quality

The MDIs portfolio-at-risk ratio improved to 3.9 percent from 4.4 percent due to an increase in gross loans by US\$55.2 billion. The ratio of provisions to non-performing loans stood at 88.3 percent, indicating adequate provisions to cover potential credit losses.

Earnings

Aggregate net profit after-tax was up by US\$1.7 billion and amounted to US\$9.1 billion as at end June 2019. This was due to a more than proportionate increase in total income of US\$10.0 billion, compared to an increase in total expenses of US\$8.1 billion. The annualized ROA and ROE stood at 3.5 percent and 10.1 percent up from 3.1 percent and 9.2 percent, respectively as at June 2018. Four of the five licensed MDIs were profitable during the period under review.

Liquidity

All MDIs maintained liquid asset ratios in excess of the statutory minimum requirement of 15 percent of total deposit liabilities. Total liquid assets held increased by US\$7.4 billion to US\$156.3 billion largely due to an increase in investment in government securities. However, the liquid assets-to-deposits ratio declined to 63.4 percent as at June 2019 compared to 68.9 percent as at end June 2018 while the ratio of total loans to total deposits stood at 77.4 percent, below the 85 percent prudential limit.

Table 7: Key Financial Soundness Indicators of MDIs

	June 2016	June 2017	June 2018	June 2019
Capital Adequacy				
Core capital to risk-weighted assets (percent)	35.9	38.9	44.4	41.8
Total capital to risk-weighted assets (percent)	39.1	42.3	48.0	45.0
(NPL – Provisions) to core capital (percent)	0.2	0.76	0.4	0.8
Asset Quality				
Non-performing loans to total loans (percent)	3.5	5.0	4.4	3.9
Provisions to Non-performing loans (percent)	97.5	92.5	94.6	88.3
Profitability				
Profit/loss (YTD) (US\$ billion)	7.2	6.6	7.3	9.1
Return on Assets (YTD, Annualized) (percent)	3.8	3.1	3.1	3.5
Return on Equity (YTD, Annualized) (percent)	11.2	9.2	9.2	10.1
Liquidity				
Liquid assets to deposits (percent)	52.0	66.3	68.9	63.4
Liquid assets to total assets (percent)	26.7	28.3	30.9	27.8
Loans to deposits (percent)	79.9	74.1	80.5	77.4

Source: Bank of Uganda

3.5. The Retirement Benefits Sector

The sector comprises 63 licensed retirement benefits schemes with a total of US\$ 13.0 trillion assets under management (AUM) as at end June 2019. Assets in the retirement benefits sector rose by 4.1 percent over the past four quarters to June 2019. The sector posted a 1 year median return of -11.8 percent, 15.6 percent and 9.8 percent compared to -8.8 percent, 10.9 percent and 9.6 percent for quoted equities, fixed income and money markets respectively

Table 8: Retirement Benefits Sector Portfolio

Asset Class	June 2018	June 2019
Total investments (billions)	11,448	13,015
Asset class	Proportion (%)	Proportion (%)
Cash and demand	0.3	0.5
Fixed deposit	1.5	1.9
Other fixed income*	1.1	0.8
Government securities	72.4	74.6
Quoted equities	17.2	13.5
Unquoted equities	2.1	2.6
Immovable property	5.4	6.1
Other investments	0.01	0.1

"Other Fixed income" asset class represents (Commercial Paper, Corporate bonds, ABS, CIS), "Other investments" represent guaranteed funds and other approved assets structures

Source: URBRA

Concentration

The Uganda Retirement Benefits Regulatory Authority requires all scheme fund managers to report and classify quoted equities using the guiding principle of the Russell Global Sector Classification (RGS) defined under a three tier system with 9 Sectors. Financial and Technology sectors continued to dominate accounting for 54.3 percent and 25.6 percent respectively as at end June 2019.

Systemic market assessment

Asset allocation for retirement benefits schemes continues to depict a heavy bias towards fixed income securities with government securities accounting for 74.6 percent.

Investments in quoted securities are the second largest accounting for 13.5 percent of the total sector investment. The performance of equities largely mirrored that of the Kenyan stock market due to the large proportion (70 percent) of quoted equities held in Kenya.

3.6. The insurance sector

The insurance industry registered 9.1 percent growth in total assets at the end of June 2019. Similarly, total industry gross written premiums (GWP) increased by 12.2 percent to US\$495 billion in June 2019, from US\$442 billion in June 2018. Particularly, non-life GWP increased by 8.4 percent from US\$310 billion to US\$336 billion while life GWP increased by 24.7 percent from US\$99 billion to US\$124 billion during the same reference period. In addition, health maintenance organization (HMO) GWP increased by 9.0 percent from US\$28.5 billion to US\$35.6 billion while specialist Micro insurer GWP amounted to US\$29 million in June 2019.

Between June 2018 and June 2019, the industry's net incurred claims increased by 5 percent, from US\$131.2 billion to US\$137.7 billion. This was attributed to a rise in the non-life net incurred claims and HMO which rose by 17.2 percent and 27.6 percent over the same period. On the other hand, the life net incurred claims declined by 22.2 percent from US\$46.4 billion to US\$36 billion.

Overall, management expenses for the sector stood at US\$121.2 billion, with the specialist micro insurer accounting for the largest proportion of these expenses.

3.7. Overview of systemic risk in the banking sector

On the whole, risks to the financial stability of Uganda's banking sector were subdued in the year to June 2019. This is as highlighted in Table 9, which provides a summary of the assessment of vulnerabilities within the

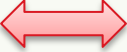
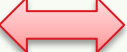
financial system, drawn from BOU's systemic risk dashboard.

In the year to June 2019, the overall risk to the sector edging up slightly from 0.38 to 0.41. The main risk factors during the year included Macroeconomic risk, as a result of the continued increase in Government debt levels, Market risk that was mainly due to the increased holding

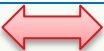
of trading securities as a share of total assets especially between Mar 19 and June 19 and liquidity risk due to deterioration of banks' liquidity coverage ratio during the year under review.

Nevertheless, credit risk, contagion and structural risks as well as risks to bank profitability & solvency remained downcast which supported the sector's resilience.

Table 9: Overall assessment of systemic risk for the year ending June 2019

Risk category	Risk direction from previous year	Risk drivers and contributing factors
Overall risk		- Overall financial stability risk was subdued.
Macro risk		- Increase in government debt, annual headline inflation and slowdown in real GDP growth worsened macro risk.
Credit risk		- Credit growth registered improvement during the year. - Improved NPL ratio as non-performing loans reduced.
Liquidity risk		- Drop in banks' Liquidity Coverage Ratios (LCR).
Market risk		- Rose due to banks' increased holding of trading securities as a share of total assets.
Profitability & solvency		- Increase in the capital adequacy ratios improved solvency
Structural risk		- Marginal increase in asset concentration in the banking industry.
Contagion risk		- Reduced exposure to non-resident banks through nostro deposits.

Key:

	Reduced		Marginal/unchanged		Increased
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Overall credit risk remained unchanged during the year to June 2019, despite the increase in credit concentration mainly in form of foreign currency denominated loans. Low credit risk was aided by total credit growth which held steady plus improved credit quality, as the ratio of non-performing loans to total gross loans improved.

Similarly, risks to profitability and solvency of the banking sector remained subdued, as interest rates held steady and economic performance improved during the reference period. However, a greater rise in total assets and equity

compared to the increase in net-after-tax profit resulted in lower profitability ratios.

Going forward, risks that may materialize in the short to medium-term with the potential to negatively impact banking sector resilience include increasing government debt which could worsen macroeconomic risk and a deterioration of Uganda's external position which could negatively impact asset quality particularly for foreign currency denominated loans.

3.8. Stress test results for the banking sector

Bank of Uganda conducts micro-stress tests that are aimed at assessing the resilience of the banking sector to systemic risks. The stress tests are performed using sensitivity analysis in order to determine the impact of individual risk factors on the performance and stability of the banking system. This section presents results of the micro-stress tests which were conducted at end June 2019 for the following risk factors;

- Credit risk, that would materialize from an increase in loan default, and
- Liquidity risk, shown as the tightening of funding conditions in the banking sector.

Table 10: Summary of stress test scenarios

RISK-TYPE	SHOCK
Credit	Assesses the effect of deterioration in banks' total performing loans , on tier 1 capital adequacy ratio.
	Default of each bank's largest five borrowers.
Liquidity	A simulated bank run test on each bank for a 5-day period of stress, which determines if banks would be able to survive a liquidity drain without resorting to funds from external sources.
	The impact of a sudden withdrawal of all deposits held for non-resident financial institutions on the sector's liquidity buffers.
	Sudden withdrawal of funds by the 3 largest non-bank depositors in each bank.

3.8.1. Credit risk

The credit risk stress tests are aimed at assessing the effect of a decline in loan quality, on banks' capital for the next year. A bank is considered to have failed the credit risk stress tests once its tier 1 capital adequacy ratio drops

below the minimum regulatory requirement of 10 percent, following the impact of the shock. The stress tests focus on the impact of an increase in non-performing loans (NPLs) on banks' solvency and not the origin of the shock. Taking the ratio of non-performing loans to total loans (NPL ratio) as the main measure of credit risk, the credit risk stress tests included a shock that examined a uniform deterioration in each bank's aggregate performing loans. The aim of this shock is to derive the share of each bank's performing loans that would have to become non-performing for the bank to breach the minimum regulatory tier 1 capital adequacy ratio (CAR) requirement. The test assumes constant credit growth over a six month forecast horizon, and all new and existing NPLs are provisioned for, according to the regulatory requirements¹⁶.

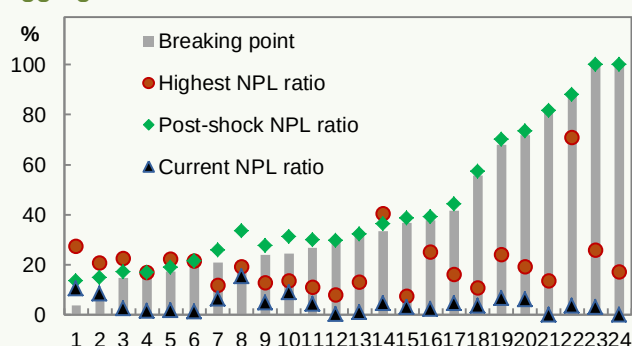
The results of the first credit risk scenario show that the least resilient bank (bank 1) breaches the minimum tier 1 CAR when only 3.6 percent (USh.5.7 billion) of its performing loans become non-performing. The bank's NPL ratio would increase from 10.4 percent to 13.6 percent post-shock. Bank 2 is also vulnerable to this test as it would fail if 6.9 percent of its performing loans became non-performing. As a result, its NPL ratio would rise from the current 8.4 percent to 14.7 percent.

As earlier noted, adverse credit portfolio concentration within the smaller banks poses potential vulnerability. This is particularly depicted by the second credit risk scenario entailing default of the respective banks' largest five borrowers. Results of this stress tests indicated that the capital buffers of ten (10), albeit small, banks would be significantly eroded by such an event.

¹⁶ The following provisioning rates are required for the respective loan categories: 20 percent for substandard loans, 50 percent for doubtful loans, and 100 percent for loss loans. Banks are expected to fully adopt the provisioning requirements under the new IFRS 9 regulation by the end of 2018

Although the tests do not aim at determining the likelihood of the stated shocks and do not give an indication of the probability of default on loans, they do reveal that, as at the end of June 2019, the aggregate impact of a further deterioration in the banking system's credit portfolio would be mild for the system as a whole despite having adverse effects on a few small banks. The resilience of the banking sector at the aggregate level to these shocks is attributed to the high levels of capital held.

Chart 37: Stress test results of shock to banks' aggregate credit



Source: Bank of Uganda

3.8.2. Liquidity risk

The liquidity risk stress tests assess each bank's resilience to sudden adverse liquidity drawdowns without resorting to external liquidity support. For the liquidity risk stress tests, three scenarios were considered for the period ending June 2019:

- a simulated bank run on each bank for a 5-day period of stress,
- a sudden withdrawal of all deposits held for other financial institutions and,
- Sudden withdrawal of funds by the 3 largest non-bank depositors in each bank.

A bank fails any of these tests if its liquidity ratio (liquid assets to total deposits) falls below the regulatory minimum requirement of 20 percent. In both scenarios, no assumptions were made about rollovers, increases in borrowings or maturity extensions.

For the simulated bank run scenario, daily withdrawal rates of 5 percent for demand and savings deposits and 3 percent for term deposits are assumed. The results revealed that six banks (of which 1 is a D-SIB), would not be able to sustain their liquidity buffers over a 5-day period of distress. This shows an overall deterioration in banks' resilience, compared to the previous period (June 2018), mainly due to low growth in liquid assets. Nonetheless, majority of the banks were able to withstand this liquidity shock, implying that they can ably meet a sudden short-term debt obligation.

For the sudden withdrawal of all deposits held for other financial institutions (these include deposits held for other commercial banks, credit institutions, MDIs and other financial institutions such as NSSF), the outcome of the shock shows that all banks except one, would be able to withstand the loss of other financial institution funds.

As such the banking sector's liquidity ratio would reduce from 45.5 percent to 42 percent, remaining well above the minimum requirement. This result shows that the banking system is robust to this type of shock because it holds adequate liquidity buffers.

In another test related to the concentration of deposits in commercial banks, simulated by a drawdown of funds by each bank's respective top three largest non-bank depositors, results indicated that five (5) banks would not have adequate liquidity buffers to absorb this shock. The results point to decreased resilience to this liquidity shock, relative to the previous year where only two (2) banks did not hold sufficient liquidity buffers to withstand the shock.

3.9. Outlook for short to medium term

Through the year ended June 2019, risks to Uganda's financial system stability were moderate. Better domestic economic growth, stable domestic financing conditions, and foreign exchange rate stability, in spite of a sluggish global economic performance, fostered balance sheet

growth and improvement in asset quality for the banking sector. The banking sector held sufficient capital buffers and registered improvement in resilience to credit risk. Also, prices of real estate – which fundamentally underpin lending – were relatively stable through FY2018/19. Going forward, continued high economic growth and accommodative monetary policy are expected to support financial stability and boost private sector lending and improvement in asset quality. However, potential risks to Uganda's financial stability include:

- Rising exposure of banks to public debt which could pose some risks to financial stability, including crowding out of private sector lending and increasing banks' exposure to market risk, as they hold significant investment in treasury securities.
- Depreciation of the Uganda shilling, which could undermine asset quality on foreign currency denominated loans, and thereby negate profitability.
- Deterioration in Uganda's external position as global economic growth wavers which may affect the financial system in form of foreign exchange rate risk and diminished earnings to meet loan obligations.

4. REGULATION AND POLICY DEVELOPMENTS

This chapter presents an overview of key regulation and policy developments on the global scene as well as those that have been implemented domestically or are in the process of being finalised.

4.1. Introduction

In principal, financial regulation and supervisory policies interact with other prudential policies to ensure safety and soundness of the financial system. Financial regulation is necessary because it ensures the efficiency of financial institutions. It ensures that the financial institutions operate in an honest and fair way and also make profits as successful business entities. Regulation also ensures the protection of companies and consumers. In a wider perspective; the financial sector should enhance growth, stability and equity for the health of the macro economy.

4.2. Global developments

The Basel Committee on Banking Supervision (BCBS) is the premier global standard setter for prudential regulation of banks and provides a forum for regular cooperation on banking supervisory matters. Its membership comprises of central banks. Its mandate is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability. The Group of Governors and Heads of Supervision (GHOS) is the oversight body of the BCBS. The BCBS reports to the GHOS and seeks its endorsement on major decisions.

4.2.1. Market Risk Capital Framework

GHOS endorsed a finalized market risk capital framework and Basel Committee work Programme at a January 2019 Basel Committee meeting (BIS, 2019c).

The revisions to the market risk framework endorsed by the GHOS enhance its design and calibration by:

- ❖ Introducing a simplified standardized approach for banks with small or non-complex trading portfolios;
- ❖ Clarifying the scope of exposures that are subject to market risk capital requirements;

- ❖ Enhancing the risk sensitivity of the standardized approach by revising the treatment of foreign exchange risk, index instruments and options;
- ❖ Revising the standardized approach risk weights applicable to general interest rate risk, foreign exchange risk and selected credit spread risk exposures;
- ❖ Revamping the assessment process to determine whether a bank's internal risk management models appropriately reflect the risks of individual trading desks (the so-called profit and loss attribution test); and
- ❖ Revising the requirements for identifying risk factors that are eligible for internal modelling and the capital requirement applicable to risk factors that are deemed non modellable.

The revised market risk framework will take effect as of 1 January 2022.

4.2.2. Liquidity Risk Management

The Basel Committee on Banking Supervision also completed a review of its 2008 Principles for sound liquidity risk management and supervision. The review confirmed that the Sound Principles remain fit for purpose, and advised banks and supervisors to remain vigilant on liquidity risks in financial markets (BIS, 2019a). The Sound Principles underscore the importance for banks establishing a robust liquidity risk management framework. The review also covered liquidity risk-related developments in financial markets since 2008.

Based on information provided by each Basel Committee-member jurisdiction, the review concluded that:

- ❖ All Committee member jurisdictions have implemented the Sound Principles through

regulation, published guidance or supervisory practice;

- ❖ The global liquidity standards introduced under Basel III - the Liquidity Coverage Ratio and Net Stable Funding Ratio - are important complements to the Sound Principles. As such, banks and supervisors should continue to heed the broader liquidity risk management considerations set out in the Principles; and
- ❖ Significant developments in financial markets since the Sound Principles were published in 2008 are likely to have an important bearing on a bank's liquidity risk management considerations. These developments include the increasing digitization of finance and payment systems and the broader growth of financial technology; a greater use of central clearing of derivatives and margining; and the increasing risk and magnitude of cyber-attacks.

4.2.3. Other recent Trends

Other international policy and regulatory developments include;

Emergence of Virtual or Digital Banking: The concept of virtual banking is widely practiced in Asia. Some countries like Singapore refer to virtual banks as Digital Banks. Operations performed in virtual banking include, submission of a loan application, opening bank accounts, editing data accounts via video, uploading photos of signed documents or remotely authorizing and authenticating. Although the concept of virtual banking is not yet in Uganda, with rampant financial technology innovations in the region, the idea of digital banking could soon be introduced. Collaborations with existing and virtual banks are likely to happen and regulators are preparing regulatory changes to embrace this change. In particular, regulatory measures to deal with cyber-related risk for both institutions and their clients are taking centre-stage among regulators.

Climate and Financial Technology stress-testing:

Leading central bankers and supervisors attending a Network for Greening the Financial System (NGFS) event at the Banque de France called for immediate action to be taken to tackle climate risks. In addition at the Spring Meetings of the World Bank Group and International Monetary Fund in April 2019, Finance Ministers from more than twenty countries launched a new coalition aimed at driving stronger collective action on climate change and its impacts. Uganda was among the 3 African countries that participated in this coalition.

Climate-related financial risks include physical risks that may arise from impact of natural disasters. These may prompt a reassessment of value of financial assets that may originate from climate-related events that damage property or disrupt trade. Added to these are transition risks that arise from changes in climate policy, technology and physical risks. Taken together, these risks could influence financial stability due to the abruptness with which repricing may occur.

4.3. Domestic Financial Regulatory Developments in 2018/19

Some financial regulatory developments occurred during the year aimed at strengthening or enhancing the financial regulatory scope and framework. These included;

4.3.1. IFRS9 and IFRS16 Financial Reporting Rules

IFRS 9 was fully implemented in the banking sector as at January 01, 2018 with some impact albeit minimal on the capital and profitability of financial institutions. Bank of Uganda issued Guidelines for implementation of the Standard, aimed at addressing inconsistencies in the interpretation of different aspects of the Standard. Going forward, the supervised financial Institutions will continue to refine their models for expected credit losses and this will inform the central bank's policy with regard

to changes to the regulatory requirements for loan loss provisioning.

IFRS 16: In January 2019 a new standard for reporting on leases in financial statements referred to as International Financial Reporting Standards 16 (IFRS16) was introduced. IFRS 16 requires banks to record all leases which were previously reported off balance-sheet to be reported on the balance-sheet of banks. This change in reporting creates a right of use asset (ROU) from the lease and a corresponding lease liability in the financial statements of banks.

The possible effect of IFRS16 on domestic banks is that the introduction of a ROU asset and corresponding liability will result in higher assets and higher liabilities on the balance sheet. Further, because the ROU asset will be depreciated over the lease life and the lease liability will attract an interest expense, it is expected that banks will have higher depreciation and interest expenses that will impact profitability and equity. As a result banks could face challenges in meeting some of their short term obligations with a significant decline in profitability. In addition ratios like Return on Assets (ROA) and Return on Equity (ROE) could decline ultimately having implications on banks' financial soundness.

A few banks had an early adoption of IFRS16 but overall all banks are expected to implement IFRS16 effective June 2019. Guidelines for implementation of the Standard, aimed at addressing inconsistencies in the interpretation of different aspects of the Standard have been issued by BOU.

4.3.2. Implementation of BASEL II & III in Uganda

Bank of Uganda has undertaken studies on Basel II and Basel III frameworks in order to implement the aspects considered relevant. As of end June 2019, Bank of Uganda had implemented the following:

Basel II: The key changes to the capital framework proposed by Basel II are:

- ❖ Introducing 3 pillars: Pillar 1_Minimum capital requirement, Pillar 2_Supervisory Review Process and Pillar 3_Market Discipline.
- ❖ The inclusion of operational risk in computing capital adequacy.
- ❖ The presentation of a range of options for determining capital requirements for credit risk, market risk and operational risk.

In regard to Pillar 1, Bank of Uganda continues to measure capital based on the Basel I capital framework which covers capital for credit risk and market risk. The inclusion of operational risk in computing capital adequacy is yet to be done.

Bank of Uganda implemented Pillar 2 by introducing a risk based supervision (RBS) approach which is a forward-looking process designed to identify, assess, measure, monitor and mitigate key risk factors to which individual banks and the entire financial industry are exposed. Under the Supervisory Review Process, bank supervisors are expected to evaluate how well banks are assessing their capital needs relative to their risks and to intervene where appropriate. Further, regulations covering the minimum disclosure requirements to enable market participants better understand banks' risk profiles were introduced in 2010. The regulations also prescribed the formats to be used in the presentation of audited accounts addressing Pillar 3 that encourages banks to avail the general public details of their capital, risk exposures, risk assessment processes, and hence the capital adequacy of the institution.

Basel III: Basel III that builds onto Basel II recommends;

- ❖ **Supplementing the risk-based capital requirement with a leverage ratio.** The leverage ratio constrains leverage in the banking sector; and introduces additional safeguards against model risk and measurement error by using a simple, transparent, independent measure of risk.
- ❖ **Introducing global liquidity standards** i.e. Liquidity Coverage Ratio and Net Stable Funding Ratio. The LCR ensures that institutions have sufficient

unencumbered, high quality liquid assets to offset the net cash outflows it could encounter under an acute short-term stress scenario. It promotes resilience to potential liquidity disruptions over a thirty day horizon.

❖ **Raising quality and level of regulatory capital and addressing systemically important financial Institutions.**

Bank of Uganda monitors the Liquidity Coverage Ratio of banks and uses the results in assessing liquidity risk of banks and as an input in the bank's rating. The Net Stable Funding Ratio is yet to be utilised.

Bank of Uganda together with the First Parliamentary Counsel is finalizing the draft for the Financial Institutions (Capital Buffers) Regulations 2019 aimed at raising the quality and level of regulatory capital and addressing systemically important financial institutions. The regulations propose a capital conservation buffer and a countercyclical buffer capital buffers which apply to all commercial banks and capital buffers for domestic systemically important banks.

4.4. Other regulatory developments

National Payments System Act: Work is underway to develop a National Payments System Act, which will provide a legal basis for BOU to adequately supervise and the payments system including the mobile money

sector. The draft NPS Bill was approved by Cabinet on June 2019.

Chartered Institute of Securities and Investments Market Certification Programme: In order to cultivate a culture of professionalism, ensure minimum competencies and boost industry standards, CMA in partnership with the Chartered Institute of Securities and Investments (CISI) introduced a market certification program in 2018. CMA in July 2018 issued a regulatory notice that makes it mandatory for target employees to be certified at the end of an 18 months' transition period. Starting January 2020, the market certification will be linked directly to the licensing process for market intermediaries. The launch of the market certification was part of the implementation process for the Capital Markets Master Plan whose successful implementation requires skilled market players.

4.5. Conclusion

It is recommended to follow international regulatory standards in regulating the financial sector. However, the level of financial development in advanced and less developed countries may significantly differ in some aspects. This necessitates striking a balance between pragmatism and compliance with international standards. Overall, efforts by different regulators are underway to ensure that the regulatory framework is strengthened to address new and emerging challenges. Some of these are discussed in the next chapter.

5. TECHNOLOGY-ENABLED INNOVATIONS IN FINANCIAL SERVICES AND IMPLICATIONS FOR FINANCIAL STABILITY IN UGANDA

This chapter reviews the progress of technology-enabled innovations in financial services, also highlighting potential benefits and risks, in Uganda. It also reviews the regulatory and supervisory environment.

5.1. Introduction

Globally, the financial industry is experiencing remarkable evolution in the delivery of services, owing to increasing digitization. Digitization is the capacity to convert, store, transfer and process information in computer readable formats. Digitization has played a fundamental role in the financial industry, enhancing information processing capacity, speed and connectivity, consequently improving efficiency both for the customer and the back-office processing in the delivery of financial services.

The digitization of finance has been propelled by the financial technology (FinTech) innovations. The Financial Stability Board (FSB 2017) defines FinTech as technology-enabled innovation in financial services, and classifies the broad range of FinTech by the main economic functions they support, that is: payments, clearing and settlements; deposits, lending and capital raising; investment management and services; insurance; and market support. This categorization enables focus on the financial stability implications of FinTech on the existing financial markets and on the analysis of the activities and outcomes rather than on the FinTech service providers or underlying technologies.

The development of FinTech is being driven by a number of factors. First, there is increasing consumers' preference and demand for convenience, speed, and lower cost of financial services, as these consumers get increasingly technology-savvy. Second, advances in the enabling technology, particularly the proliferation of the internet, mobile technology, biometrics identification, computer processing power and data capacity, has also facilitated FinTech application; by allowing greater efficiency, convenience and access to financial services. Finally, some FinTech sought to capitalize on regulatory

arbitrage and the shortcomings of the conventional financial institutions. As the financial regulatory environment tightens, aiming to avert financial system instability and financial crime, traditional financial institutions de-risk variously, especially from intermediation and remittance services. Consequently, the demand and prospect to fill the gaps in such financial services entice non-conventional financial services providers, which are still able to circumvent the regulatory ambit, leveraging more efficient technology and cost effective models, especially as regulators grapple to catch-up with the FinTechs.

5.2. Technology underlying FinTech

Various technologies underpin innovations in financial services, most of which complement or reinforce each other. Dong et al (2017) highlights mobile access and the internet; distributed computing; artificial intelligence and big data; cryptography and biometrics technology as some of the fundamental technologies driving FinTech.

The internet and mobile technology: The proliferation of the internet, with better access fostered by mobile devices, has been fundamental and transformational in the development, efficient access to, and usage of FinTech solutions, furthering financial inclusion.

Distributed ledger technologies (DLT) enhance transparency and verifiability, as the transactions in the distributed ledger are immutable. DLT is a combination of components, including peer-to-peer networking, distributed data storage, and cryptography that, among other things, facilitates data storage, secure record keeping and update, electronic transactions, and transfer of digital assets¹⁷. DLTs have the potential to transform payments and securities settlement as well as

¹⁷ David M. et al. (2016).

back-office functions by substantially cutting costs, allowing direct business-to-business (B2B) transactions bypassing intermediaries, and efficiently offering digital verification.

Artificial intelligence and big data capture enable financial institutions to compile extensive transaction and informative unstructured data from a multitude of economic agents. This data is subjected to advanced algorithms, which derive patterns that ascertain customer preferences and predict behaviour, in order to inform on, or make, human-like judgement in financial services such as lending, fraud detection, and investment advisory.

Cryptography has facilitated a variety of applications including virtual currencies¹⁸ (preferably referred to as crypto assets) and smart contracts. The Toronto Centre (2017) defines cryptography as the science of protecting information by transforming it into a secure (encrypted) format. Due to cryptography, ownership of virtual currencies can be precisely assigned, and smart contracts can trigger financial flows or changes of ownership if specific events occur.

Biometrics technology is used by financial services providers to especially improve precision in identification of customers. The digital capture and processing of customers' unique identification characteristics, such as fingerprint, face and iris, enhances convenience in financial transactions and risk management for instance in averting financial crime.

5.3. Financial technology innovations in Uganda

Much like the rest of the world, Uganda is experiencing a surge in technology innovations in financial services. FinTech is improving and creating new business models, applications, processes or products, with an

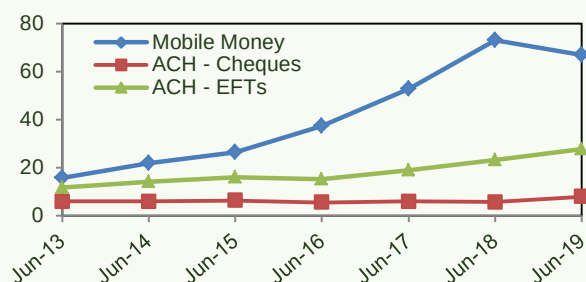
associated material effect on the existing financial system structure and delivery of financial services. These technology innovations are more vivid in the payments, remittances and banking intermediation space, with insurance slowly picking up. Investment and wealth management FinTech has also taken root in Uganda.

Banks are utilizing their distributed network of computer terminals and internet connectivity to extend services beyond brick and mortar branches, with internet banking over personal computers, point of sale terminals, agency banking, credit card services and stand-alone Automated Teller Machines (ATMs) - some of which are owned by their competitors. Banks also connect to systemically important payments infrastructure: the Uganda National Interbank Settlement System (UNISS) which is a high value real-time gross settlement system; and the Automated Clearing House (ACH) through which cheques and high volume electronic funds transfers (EFTs) are cleared.

Mobile money technology has revolutionized the payments and remittances domain, enabled by the proliferation and access to mobile telephones. Basically, a mobile money account holder exchanges at an agent fiat currency for an equivalent electronic value credited to their mobile money account (or digital wallet). This electronic value can then be conveniently remitted, used to pay and settle bills and transactions, or subsequently redeemed as fiat currency. Notably, this mobile money payments infrastructure is dominated and primarily operated by mobile network operators (MNOs), which are not conventional financial services providers. As shown in the figure below, usage of the mobile money infrastructure in Uganda has steadily increased. The figure below compares the value (US\$. Trillion) of mobile money transactions with cheques and electronic funds transfers (EFTs), through banks, processed through the automated clearing house (ACH).

¹⁸ A virtual currency is defined as a digital representation of value that can be digitally traded and functions as a medium of exchange; and/or a unit of account; and/or a store of value, but does not have legal tender status in any jurisdiction

Chart 38: Value (USh. Trillion) of transactions processed, for year ended



Currently, remittances over mobile money platforms transcend the MNO's primary jurisdictions, with international remittances now possible, enabled by bilateral cross-border partnerships and cooperation. Though mobile money is still limited to smaller value transactions, it is evidently fostering greater financial inclusion, especially where the conventional payments infrastructure cannot efficiently and conveniently provide the services.

Mobile money technology is also spurring innovations among the conventional financial institutions. In the banking realm, institutions are developing applications and installing systems to link their customers' bank accounts with their mobile money accounts, enabling remote and convenient access – for deposit (push) to or withdraw (pull) from their bank accounts through their mobile phones. Furthermore, some banks are already venturing into lending to their customers, over their mobile phones, by leveraging artificial intelligence over the customers' mobile transactions behaviour to assess the prospective borrowers' creditworthiness.

The insurance industry is also capitalizing on the mobile money platform to enhance access to insurance uptake. For instance, besides enabling the purchase of motor third party insurance using mobile phones, some mobile money operators are conduits for some repackaged life insurance products, with premiums basically contributed as one uses the mobile money platforms for normal remittances.

The deployment of artificial intelligence and big data in Uganda is most illustrated in the credit reference

system. First, the credit reference bureaus (CRB) leverage unique, biometrics-fostered, identification to collate customer credit data from various banking institutions and accredited credit providers. Then, the CRBs apply algorithms to this massive data to assess creditworthiness of borrowers, summarized in credit scores, and accordingly inform risk management by credit providers. Some credit providers are venturing into lending informed by the creditworthiness assessment derived from the customers' social media activity

Banks are increasingly leveraging artificial intelligence, machine learning and big data to process and match customers' biometrics, national identification and other information. This application of FinTech is enhancing risk management, easing the update of customers' identity – synonymous with know-your-customer on-going customer due diligence (CDD), thereby helping to avert fraud, money laundering and financing of terrorism.

Also, there have been attempts to promote some crypto-assets – which are founded on cryptography and DLTs – within Uganda, in spite of the absence of an enabling legal and regulatory framework. While these are promoted as 'crypto-currencies', they lack legal tender status that would otherwise qualify them as currencies. Therefore, unlike the Uganda shillings, a fiat currency of notes and coins, which is legal tender and a medium of exchange in Uganda, the crypto assets are not yet authorized virtual currencies.

5.4. Potential benefits for financial stability

Financial inclusion and efficiency: By capitalizing on greater efficiency – faster speed and lower cost, FinTech is facilitating more access to financial services, essentially allowing the unbanked population to participate in, and utilise, the financial system. Evidently, the proliferation of mobile money payments technology is enabling greater financial inclusion, facilitating remittances, trade and remote access to the traditional bank services. This is benefiting banks with access to more retail deposits, easing concentration in funding,

and thereby enabling greater intermediation. DLT is envisaged to: improve transparency and processing speed while reducing complexity and cost in multiparty, cross-border transactions; reduce the need for costly reconciliation across multiple record-keeping infrastructures; and improve immutability in transaction record-keeping through distributed data management. In intermediation, the use of artificial intelligence in FinTech lending solutions is contributing towards streamlining assessment of, and decision-making on, creditworthiness of credit customers. Furthermore, smart contracts may be incorporated in DLT arrangements to automate certain transfers of value, conditional on pre-specified events agreed to by transacting parties.

Decentralization and diversification: The FinTech enabled participation of non-conventional financial services firms alongside traditional financial institutions, is essentially enabling diversification and decentralization of financial services and their delivery. For instance, DLT has been recognised as a means for fostering greater decentralization of payments, clearing and settlements services, beyond the traditional banking institutions, thereby reducing the risk of concentration in payments services. Decentralization and diversification may reduce the systemic importance of, and inherent financial stability risks from, the traditionally dominant financial services providers and/or concentrated financial services, within the financial system.

Transparency: FinTech innovations can potentially reduce information asymmetries in the provision of financial services, and thus support financial stability. For instance, DLT can enable real-time validation of ownership of financial assets or instruments, thus improve integrity in the financial system. Better data processing and artificial intelligence can minimize information asymmetry, enabling better risk assessment in lending and/or investment decisions. However, these potential benefits need to be carefully scrutinised, to ascertain if they can materialise and persist. For

instance, efficiency gains could be eroded when FinTech is eventually subjected to similar regulatory requirements and oversight as the conventional financial services providers are subjected to.

Enhanced Supervision: With FinTech advancing the financial system, traditional entity-based regulation and supervision which relies on past and periodic data reporting, with delayed supervisory action in some instances, will no longer be sufficient. Conveniently though, FinTech promises solutions to revamp financial system supervision, towards more forward-looking approaches and activity-based regulation. FinTech can facilitate real-time and granular data collection and reporting; more refined analysis, including intelligence from unstructured data; greater computing and storage capacity; dynamic and predictive supervision; and automated and more prompt implementation of supervisory action.

5.5. Potential risks to financial stability

While FinTech has potential benefits, it can pose risks to the financial system, although there is currently no evidence of such systemic risks materializing. FinTech can prompt vulnerabilities, some of which are reviewed below, that could affect individual financial services and/or financial services providers, and potentially escalate into systemic disruptions.

Volatility and herding behaviour: FinTech solutions can exacerbate volatility in financial assets or instruments, and aggravate procyclicality in financial services, destabilising the financial system. As FinTech solutions operate over conveniently accessible technology platforms, they can consequently ease customers' herding behaviour between service providers and/or services, even over a minor incident or unfounded rumour; fuelling destabilizing rapid reversals on the financial firm's balance sheet. In the case of the banking system, such unfettered access can worsen runs on bank deposits, resulting in rapid and severe

liquidity or maturity mismatches, and potentially compromise financial system stability. This is unlike traditional financial services where intermediaries may ably manage mismatches and stabilize adverse movements on their balance sheet.

Relatedly, FinTech based lending that relaxes creditworthiness assessment and underwriting standards can lead to a build-up in loans with higher credit risk, and thus expose the financial firm and/or financial sector to greater potential credit losses, especially if such loans constitute a material proportion of the firms' or industry balance sheet.

Furthermore, in the recent past, virtual currencies have exhibited price volatility, especially due to their lack of a transparent price formation mechanism. Such potential loss in value of the virtual currencies can erode households' wealth, and value in the case of financial institutions if at all they are allowed to hold such investments, to the detriment of financial system stability.

Financial system integrity: FinTech that fosters greater anonymity in the payments ecosystem threatens financial system integrity. With anonymity of participants and transactions, such FinTech solutions may be rendered conduits for proceeds of illegal activities, such as fraud, money laundering and financing of terrorism. As such, this can potentially prompt disruption to their use as payments infrastructure and medium of value transfer, potentially disrupting the financial system.

Concentration and contagion: While it is envisaged that FinTech may foster more decentralization and diversification, it is however possible that eventually consolidation may happen, with dominant firms emerging. Also, DLT payments infrastructure could merge the different traditional payment systems, compounding the ramifications of systemic risks in the system. This has the implication that risks may no longer be contained within the previously disaggregated respective payment systems, to avert systemic contagion. Increased interconnectedness of systems,

due to FinTech, could lead to the propagation of vulnerabilities through the entire financial system.

Operational risk: FinTech can potentially accentuate operational vulnerabilities, arising from failure of systems, internal controls and human error, threatening the provision of financial services and/or stability of the providers. Also, the increased use and integration of information systems and digital access may exacerbate vulnerability to cyber-attacks, risking customer data confidentiality. Furthermore, as the provision of FinTech is increasingly dependent on third-parties, such as telecommunication companies, cloud-computing entities, and data providers, a disruption at key third-party could pose far-reaching systemic disruption to the financial system. The mitigation of third-party risks is hindered by the fact that legislation, legal and regulatory frameworks still lag the evolving FinTech. Moreover, there is a lack of adequate or clear recovery and/or resolution framework for the FinTech firms or infrastructure, especially as their systemic importance advances.

5.6. Supervision and regulation of FinTech in Uganda

Technology innovations in financial services will continue, as firms and consumers seek to capitalize on the benefits that accrue from the FinTech. However, the potential inherent macro- and micro-risks from FinTech remain a concern, and accordingly necessitate appropriate regulatory framework, to avert the risks, without stifling the productive innovation.

To a considerable extent, most financial sector regulatory frameworks in place are still applicable to FinTech. The Financial Stability Board (FSB) framework for systemically important financial institutions (SIFIs) recommends that FinTech firms should be similarly subjected to the enhanced supervisory oversight, higher loss absorbency, and recovery and resolution plans. The Basel Committee on Banking Supervision (BCBS) core principles for effective banking supervision remain relevant for assessing FinTech innovations and third-

party interactions in banking sector, as is the FSB's policy framework for strengthening oversight and regulation of shadow banking. For FinTech innovations in the financial market infrastructure, such as payments, clearing and settlements, the Committee on Payments and Settlement Systems and the International Organization of Securities Commissions Principles for Financial Market Infrastructures are still instrumental. Similarly, the International Association of Insurance Supervisors' core principles are relevant for the FinTech applications in insurance.¹⁹

However, financial sector authorities are faced with challenges in further developing the existing regulatory frameworks, especially as data on FinTech activity remains a challenge compounded by the limited obligation, on the part of FinTech firms, to sufficiently report on their activities. These data deficiencies limit understanding of risks and incentives. This notwithstanding, research on FinTechs activity and their implication for Financial Stability, is on-going. In fact, some jurisdictions have set up regulatory sandboxes or FinTech innovation hubs, to facilitate the study on FinTech. Ivo and Lauer (2017) define a regulatory sandbox as a framework set up by a financial sector regulator or supervisor to allow small scale, live testing of innovations by private firms in a controlled environment.

Furthermore, inevitably, effort is underway to commensurately enhance consumer protection amidst the increasing digitization of financial services. The Organisation for Economic Co-operation and Development (OECD (2018)) notes that the G20/OECD Task Force on Financial Consumer Protection has committed to develop policy guidance, especially focusing on the role of oversight bodies, disclosure and transparency in a digital environment, to help avert predatory tendencies. This will further effort towards

responsible finance, especially lending (see for instance (Tomáš Prouza (2013))).

In Uganda, the National Payments Bill is expected to provide clarity on the regulation and oversight over payments activities, including aspects of FinTech. Uganda has a legal and regulatory framework for anti-money laundering and countering financing of terrorism (AML/CFT), which covers FinTech activities and services provided in the financial system. The banking sector's legal and regulatory framework is also considerably cognizant of FinTech developments, including on-going review of banks' interactions with third-parties and shared computing infrastructure. However, some FinTechs, such as crypto assets (or 'virtual currencies'), are still outside the regulatory purview and can expose investors to risk of loss without recourse. Indeed, against this background, the Bank of Uganda has often warned the public against engaging in such unregulated financial space.²⁰

5.7. Conclusion

Technology innovations in financial services can enable broader access to financial services for households and businesses. Moreover, in some aspects like payments, clearing and settlements, FinTech promises to enhance processing, efficiency and safety. However, FinTech can also potentially compromise the stability of the financial system.

In Uganda, some FinTech services, such as mobile banking savings and loans, are regulated under the applicable regulatory and supervisory framework. On the other hand, the operations of other FinTech outside regulatory purview pose challenges. Financial sector regulators should continue to monitor FinTech developments and consider appropriate regulatory and supervisory framework.

¹⁹ IAIS (2015)

²⁰ <https://www.bou.or.ug/bou/media/statements/One-Coin-Digital-Money-operations-in-Uganda.html>

Going forward, the proliferation of FinTech necessitates enhancing risk management, reporting, analysis and supervision procedures, particularly by appropriately automating these processes; in order to ensure prudent operation of, and adequate oversight over, the financial system.

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6. STATISTICAL APPENDICES

Table 6.1: Selected quarterly financial soundness indicators for East African countries (percentage ratios)

		June 2017	Sept. 2017	Dec. 2017	Mar. 2018	June 2018	Sept. 2018	Dec. 2018	Mar. 2019	June 2019
Regulatory Capital to Risk-Weighted Assets	Uganda	23.6	23.8	23.2	23.8	21.8	21.6	21.6	22.3	22.1
	Kenya	19.6	18.8	18.5	18.7	18	17.5	18.7	18.4	18.2
	Tanzania	20.3	20.9	20.5	20.8	20.2	18.3	18.2	17.8	18.1
	Rwanda	20.8	22.3	21.4	21.1	21.4	22.6	25.5	24.1	23.3
	Burundi	21.8	21.8	23.5	24	24.4	25.8	23.7	25.4	27
NPLS to Total Gross Loans	Uganda	6.2	7.2	5.6	5.3	4.4	4.7	3.4	3.8	3.8
	Kenya	9.9	10.4	10.6	11.8	12	12.5	12.0	12.8	12.7
	Tanzania	11	10.6	12.5	11.5	10.3	9.7	10.5	10.9	10.7
	Rwanda	8.2	7.7	7.6	6.8	6.9	7.2	6.4	6.3	5.6
	Burundi	19.2	14.2	14.6	14.1	13.3	12.5	9	8.6	9.3
Return on Assets (ROA)	Uganda	1.7	1.5	2.7	2.6	2.8	2.8	2.5	2.8	2.7
	Kenya	2.8	2.6	2.7	2.9	2.8	2.7	2.7	3.0	2.8
	Tanzania	2.2	2	1.4	2	1.6	1.6	1.0	1.7	2.0
	Rwanda	1.7	1.6	2.0	2.4	2.6	2.8	3.0	3.1	2.6
	Burundi	0.8	1.9	2	0.8	1.29	2.1	2.5	0.9	1.9
Return on Equity (ROE)	Uganda	10.2	8.7	16.4	15	16.7	16.3	14.4	15.9	15.8
	Kenya	22.3	20.6	20.8	22.9	23.7	22.9	22.5	24.6	23.8
	Tanzania	10.3	8.7	5.9	8.5	6.7	6.6	2.8	7.4	8.8
	Rwanda	9.6	8.9	6.2	7.5	9.6	10.2	11.2	12.0	9.3
	Burundi	5.2	14.5	14.9	5.8	10.35	16.9	20.8	8.2	17.2
Net open position in FX to Total capital	Uganda	-7	-5.5	-5.4	-7.9	-7.3	-5.0	-7.5	-4.3	-3.6
	Kenya	3.8	2.7	4.5	2.6	3.1	3.2	2.5	2.2	2.9
	Tanzania	1.5	2.1	2	0.8	3.3	5.0	6.2	5.4	6.6
	Rwanda	-6.1	-7.2	-7.8	-4.5	-5.6	-20.9	-15.9	-17.6	-18.4
	Burundi	12.1	0.5	1.5	7.8	6.2	6.6	5.5	17.6	4.6
Liquid assets to total deposits	Uganda	50.1	48.3	54.6	52.9	46.6	43.9	45.5	44.1	45.5
	Kenya	44.7	49.6	47.4	49.7	50.5	52.6	46.6	49.8	48.7
	Tanzania	45.1	47	48.6	47.6	45.4	41.9	42.7	42.1	45.7
	Rwanda	44	43.7	43.7	38.2	32.7	33.5	35.3	35.5	36.1
	Burundi	18.4	19.8	24.4	21.7	86.4	84.6	82	86.8	89.1

Source: EAC Central Banks

Table 6.2: Commercial banks' quarterly financial soundness indicators (percentage ratios)

	June 2017	Sept. 2017	Dec. 2017	Mar. 2018	June 2018	Sept. 2018	Dec. 2018	Mar. 2019	June 2019
Capital adequacy									
Regulatory capital to risk-weighted assets	23.6	23.8	23.2	23.8	21.8	21.6	21.6	22.3	22.1
Regulatory tier 1 capital to risk-weighted assets	21.4	21.5	20.9	21.5	19.7	19.8	19.8	20.4	20.3
Leverage ratio	11.4	11.3	11.2	11.7	11.1	11.4	11.1	11.5	11.1
Asset quality									
NPLs to total gross loans	6.2	7.2	5.6	5.3	4.4	4.7	3.4	3.8	3.8
NPLs to total deposits	4.0	4.6	3.6	3.4	2.8	3.1	2.3	2.6	2.5
Sectoral distribution of gross loans (%)									
Agriculture	11.3	11.6	12.4	12.5	12.2	12.9	13.5	13.3	14.0
Mining and quarrying	0.6	0.7	0.7	0.5	0.7	0.9	0.8	0.9	0.6
Manufacturing	13.3	13.1	12.6	12.6	13.2	13.6	13.7	14.8	15.9
Trade	18.9	19.5	18.7	18.0	19.2	19.8	20.0	19.8	21.2
Transport and comm.	6.8	6.0	6.0	6.3	5.4	5.7	6.6	5.5	4.9
Building and construction	20.5	20.3	20.5	20.6	20.1	21.0	20.9	21.6	22.3
Personal loans	18.5	19.0	18.6	18.7	18.9	18.8	18.7	18.7	18.3
Others	10.0	9.9	10.4	10.9	10.3	7.4	5.8	5.4	2.7
Large exposures to total capital	97.5	95.2	94.8	90.6	113.7	116.9	112.5	110.5	116.7
Earnings & profitability									
Return on assets	1.7	1.5	2.7	2.6	2.8	2.8	2.5	2.8	2.7
Return on equity	10.2	8.7	16.4	15.0	16.7	16.3	14.4	15.9	15.8
Net interest margin	12.3	11.8	11.6	11.6	11.5	11.3	11.1	11.0	11.2
Cost of deposits	3.1	3.0	2.8	2.7	2.5	2.4	2.3	2.4	2.3
Cost to income	81.6	82.9	74.0	74.8	72.8	72.6	73.9	72.1	72.9
Overhead to income	48.4	49.1	48.9	50.3	51.2	52.3	53.7	53.0	52.2
Liquidity									
Liquid assets to total deposits	50.1	48.3	54.6	52.9	46.6	43.9	45.5	44.1	45.5
Total loans to total deposits	64.2	63.9	64.1	64.6	63.4	66.7	66.0	66.7	64.7
Market sensitivity									
Foreign currency exposure to regulatory tier 1 capital	- 7.0	- 5.5	- 5.4	- 7.9	- 5.2	-5.2	-7.5	-4.3	-3.6
Foreign currency loans to foreign currency deposits	72.1	70.8	71.5	70.6	62.9	67.8	63.0	68.3	21.8
Foreign currency assets to foreign currency liabilities	91.8	90.6	92.4	98.3	99.9	98.5	94.1	91.3	88.2

Source: Bank of Uganda

Table 6.3: Commercial banks' quarterly balance sheet (USh. billion)

	June 2017	Sept. 2017	Dec. 2017	Mar. 2018	June 2018	Sept. 2018	Dec. 2018	Mar. 2019	June 2019
ASSETS (USh. Billion)									
Cash & cash assets	809.4	835.2	1109.0	841.5	902.8	944.0	1293.4	884.3	949.5
Balances with BOU	2917.3	2790.4	2544.5	2219.2	2880.1	2920.5	2784.0	2101.0	2771.6
Due from financial institutions	2170.0	2124.1	2049.0	2365.9	3354.4	3064.7	2958.4	2794.4	2905.3
Government securities	5141.8	5435.1	5570.0	5232.1	5768.7	5538.6	6031.9	6774.3	6615.2
Total gross loans & advances	11,009.1	11,220.7	11,661.6	11,669.5	12,216.4	12,662.2	12,935.7	13,051.9	13,583.4
LESS: Provisions	-351.6	-432.3	-410.5	-377.2	-325.0	-355.5	-273.8	-274.0	-298.0
Net loans & advances	10,657.5	10,788.4	11,251.1	11,292.3	11,891.5	12,306.7	12,661.9	12,777.9	13,285.4
Net fixed assets	818.6	809.6	819.0	840.9	852.0	846.2	854.4	974.3	989.3
Other assets	2,332.3	2,812.8	3,185.4	3,213.3	1,723.1	1,643.5	1,536.9	2,320.1	2,760.0
TOTAL ASSETS	24,846.9	25,595.7	26,528.1	26,005.3	27,372.6	27,264.3	28,120.8	28,626.4	30,276.3
LIABILITIES (USh. Billion)									
Deposits	17,141.8	17,554.8	18,181.1	18,056.6	19,282.7	18,980.1	19,595.7	19,555.8	20,988.8
Due to financial institutions	594.2	607.6	499.4	560.9	565.8	582.2	574.1	714.2	553.6
Administered funds	1,108.6	12,95.88	1,283.9	896.0	895.9	983.7	1,023.5	1,093.5	1,038.0
Other liabilities	1,782.7	1,741.5	1,890.4	1,807.7	1,982.5	1,895.8	1,990.5	2,233.6	2,545.7
TOTAL LIABILITIES	20,627.4	21,199.7	21,854.8	21,321.2	22,726.9	22,441.7	23,183.8	23,597.0	25,126.1
CAPITAL (USh. Billion)									
Paid-up capital	1,255.8	1,296.2	1,326.5	1,326.5	1,332.8	1,332.8	1,332.8	1,335.8	1,358.7
Share premium	317.4	317.4	347.8	347.8	347.8	347.8	347.8	347.8	1,177.7
Retained reserves	2,109.8	2050.3	2,053.5	2,578.0	2,400.6	2,375.4	2,358.8	2,817.2	1,959.3
Other reserves/subordinated debt	229.9	248.2	272.7	270.9	192.1	208.0	209.1	300.6	278.3
Profit – Loss (current year)	306.6	483.9	672.8	160.9	372.4	558.6	688.5	228.0	376.1
TOTAL SHAREHOLDERS' FUNDS	4,219.5	4,395.9	4,673.3	4,684.1	4,645.7	4,822.6	4,937.0	5,029.4	5,150.3
OFF BALANCE SHEET ITEMS (USh. Billion)									
Letters of Credit	336.3	359.3	348.6	380.7	483.2	469.1	383.4	451.2	493.5
Guarantees & performance bonds	2,874.1	2,979.0	3,176.4	3,161.1	3,627.9	3,472.9	3,561.0	3,647.5	4,015.9
Unused loans/overdrafts commitment	1,838.6	1,906.1	2,407.2	2,139.5	2,725.6	2,387.9	2,687.4	2,991.0	2,879.2
Other off balance sheet items	466.2	550.3	362.9	390.0	359.7	312.9	416.7	479.4	839.9
TOTAL OFF BALANCE SHEET ITEMS	5,515.3	5,794.6	6,295.0	6,071.3	7,196.3	6,642.8	7,048.5	7,569.1	8,228.5

Source: Bank of Uganda

Table 6.4: Commercial banks' quarterly income statement, year-on-year figures

	June 2017	Sept. 2017	Dec. 2017	Mar. 2018	June 2018	Sept. 2018	Dec. 2018	Mar. 2019	June 2019
INCOME (USh. Billion)									
Interest income									
Advances	1,826.3	1,809.2	1,808.0	1,823.4	1,843.8	1,859.9	1,903.0	1,955.2	2,011.3
Government securities	722.9	700.6	681.9	655.5	625.6	607.5	609.0	636.7	676.8
Deposits abroad	19.2	20.2	22.2	24.2	28.8	31.5	34.9	39.1	46.2
Other	125.6	137.5	151.7	163.7	163.3	172.6	161.4	149.5	139.6
Charges, fees & commissions	493.1	511.7	533.8	541.2	500.0	509.2	518.0	524.7	551.4
Foreign exchange income	171.7	169.4	170.6	188.0	225.8	246.8	252.9	262.9	253.6
Other income	274.5	296.9	323.7	296.7	293.2	270.9	264.3	282.5	303.5
TOTAL INCOME	3,633.3	3,645.6	3,691.9	3,692.6	3,679.9	3,698.3	3,743.6	3,850.5	3,982.4
EXPENSES (USh. Billion)									
Interest expense on deposits	513.5	499.5	480.3	465.5	449.4	431.3	426.2	442.8	463.5
Other interest expenses	162.1	158.9	157.7	156.5	149.6	143.9	144.5	144.0	152.4
Provisions for bad debts	531.1	571.5	285.4	280.4	195.3	174.6	186.6	146.1	206.2
Salaries, wages, staff costs	748.4	768.6	773.9	786.1	800.6	815.1	834.4	857.8	870.5
Premises, depreciation, transport	325.8	326.3	328.9	332.3	338.5	345.9	349.6	535.6	356.1
Other expenses	683.6	695.7	704.1	740.6	744.5	773.6	824.0	828.9	850.9
TOTAL EXPENSES	2,964.4	3,020.5	2,730.2	2,761.4	2,677.9	2,684.3	2,765.3	2,773.1	2,899.6
ADD: Extraordinary credits/charges	0.0	0.0	0.0	0.0	0.0	1,303.8	2,202.0	2,202.0	2,202.0
Net profit before tax	667.8	625.1	961.7	931.1	1,002.0	1,012.7	976.1	1,075.2	1,080.6
LESS: Corporation tax	263.3	262.9	278.7	272.2	263.3	261.6	284.3	303.0	305.4
NET PROFIT AFTER TAX	404.5	362.2	683.0	658.9	738.7	751.2	691.8	772.2	775.1

Source: Bank of Uganda