

National Bank of Rwanda Banki Nkuru y'u Rwanda

ANNUAL FINANCIAL STABILITY REPORT June 2015 – June 2016



BNR IDENTITY STATEMENT

The National Bank of Rwanda strives to become a world class Central Bank that contributes to the economic growth and development by using robust monetary policy tools to maintain stable market prices. The bank embraces innovation, diversity and inclusiveness, economic integration and ensures financial stability in a free market economy.

VISION, MISSION AND VALUES

Vision of the Bank

The Vision of the Bank is to become a World-Class Central Bank

Mission of the Bank

The mission of the Bank is to ensure price stability and a sound financial system

The Bank's Core Values

Integrity

We uphold high moral, ethical and professional standards for our people, systems and data

Accountability

We are results-focused and transparent, and we reward according to performance

Mutual-respect and Team-work

We keep ourselves in high spirit, committed to each other for success

Efficiency

We are mindful of our risks and we optimize our resources to achieve more with less cost: time, money, environmental and otherwise

Effectiveness

We take more interest in the impact of our actions

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Foreword

Fostering financial stability is one of the main mandates of the National Bank of Rwanda. The bank achieves this objective through regularly monitoring performance of the financial system (i.e the banking system, insurance sector, the pension, the micro-finance institutions and; the payment system) and adopting appropriate policy measures. Financial Stability Reports (FSR) are among key financial sector policy guiding analytical tools. They synthesize recent developments in Rwanda's financial system, analyze both exogenous and endogenous risks to the sector; assess resilience of the sector to adverse shocks, and unveil key constraints to development of the financial sector. The current report contains an assessment of the stability of the financial system using economic and financial data up to the end of June 2016.

The Rwandan financial system remains sound, resilient and continues to perform its functions effectively. Banks and MFIs capital and liquidity buffers are strong relative to current regulatory minimums. The asset quality of Rwanda's banking system remains healthy, despite a slight increase in NPLs in June 2016. Banks' loan loss provisioning level has significantly increased compared to last year. Results from BNR's stress test done in June 2016 suggest that banks in Rwanda would to a large extent be able to withstand adverse external and domestic shock, thanks to significant capital buffers it holds.

A weak global economic outlook remains among key risks to Rwanda's economy and financial sector in particular. Economic growth is projected to slowdown in a number developed and emerging trading partners. Further slowdown of the global economy will weaken demand for commodity exports and this may dampen foreign exchange receipts of commodity exporting countries, which consequently pose exchange rate pressures and call for further policy adjustment. The risk to Rwanda's financial sector is not a direct one though, as Rwandan banks lending to commodity exporting companies is still a small percentage and portfolio flows are still a small portion of Rwanda's balance of payment structure. Nevertheless, the impact would be felt through slowdown of expansion of domestic economic activities, as both public and private spending adjust to cope with external account realities. The other key risk to Rwanda's financial sector identified in this report is the concentrated lending that rise the credit risk in both banks and MFIs

To safeguard stability of the financial sector and provide room for its growth, the BNR has undergone a review process of its regulatory frameworks and created new legal instruments that comply with international standards like Basel 2& 3. Progressively the bank has put in place financial crisis preparedness frameworks and interagency coordination structures to be able to deal with unforeseeable financial stress or crisis. Going forward, the bank aims to continue strengthening both micro and macro prudential oversight of the financial sector. Risks from the global and regional economy shall be monitored, quantified and dealt with in a proactive approach.

RWANGOMBWA John Governor

14/01/2017

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ACCRONYMS

APR : Annual Percentage Rate **ATMs** : Automated Teller Machines

BCBS: Basel Committee on Banking Supervision

BNR: National Bank of Rwanda
CAR: Capital Adequacy Ratios

CPFL: Consumer Protection and Financial Literacy

CRB : Credit Reference BureauCSD : Central Securities DepositoryDGF : Deposits Guarantee Fund

D-SIBs: Domestic-Systemically Important Bank

EAC: East African Community **ELF**: Emergency Liquidity Facility

FOREX : Foreign Exchange
FRW : Rwandan Francs

FSCC: Financial Stability Coordination Committee

FSR : Financial Stability Report
GDP : Gross Domestic Product
ILF : Intraday Liquidity facility
IMF : International Monetary Fund

KFS: Key Facts Statement

KRR: Key Repo Rate

LCR: Liquidity Coverage Ratio

MFIs: Microfinance Institutions

NBFIs: Non-Bank Financial Institutions

NPLs: Non-Performing Loans

POS: Point Of Sales

PPE: Property, Plant and Equipment

RIPPS: Rwanda Integrated Payment Processing Systems

ROA : Return on AssetROE : Return on EquitySACCOS : Saving Cooperatives

SIB : Systemically Important Bank

SSA : Sub-Saharan Africa

USA: United States of America

USD : US Dollar

wbG: World Bank Group

WEO: World Economic Outlook

YoY : Year on Year

Global Economic and Financial Development

Global economic activity remains weak, with widening differences across the world. According to the IMF World Economic Outlook (October 2016), the Global growth slowed further, from 2.6 percent in 2014 to 2.4 percent in 2015. The slowing of growth in emerging market economies was an important contributing factor, with output contracting in Brazil and the Russian Federation, and rebalancing leading to a deceleration of growth in China. The deceleration of activity in emerging markets and developing economies overshadowed a modest recovery in advanced economies (Figure 1).

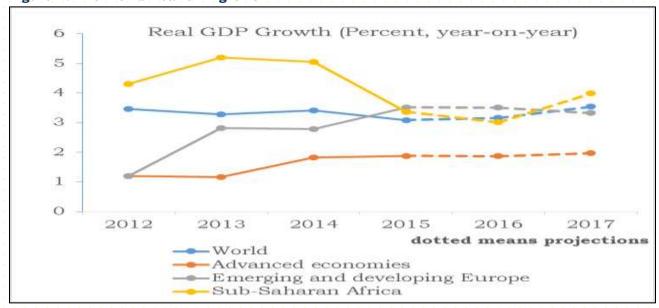


Figure 1: The World Real GDP growth

Source, BNR staff calculations based on WEO data

The global economic outlook has also deteriorated with the IMF downgrading its global growth forecasts for 2016 and 2017. Global growth is projected to slow to 3.1 percent in 2016 before recovering to 3.4 percent in 2017. The forecast, revised down by 0.1 percentage point for 2016 and 2017 relative to April, reflects a more subdued outlook for advanced economies following the June U.K. vote in favor of leaving the European Union (Brexit) and weaker-than-expected growth in the United States. Although the growth forecast for China remain stable, downside risks to the outlook have increased.

Prevailing low commodity prices is among key risks to growth and financial stability in emerging economies and developing countries. Commodity prices have remained low in 2016, in part due to sluggish economic growth dampening demand. Some commodity producers have attempted to maintain revenues by holding output steady which has contributed to over-supply in a range of markets. Nevertheless, some producers have come under pressure, as their costs of production exceed current prices. This is

particularly apparent in the US oil sector, where a number of producers have shut down and prospective investment has been pared back significantly.

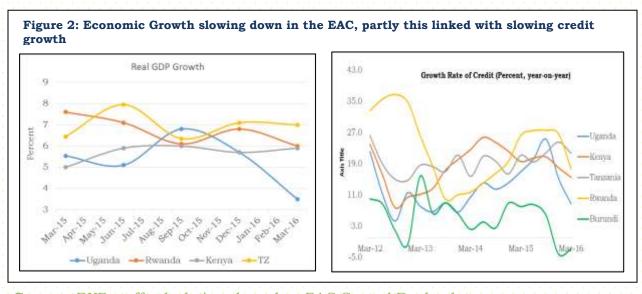
Global financial markets have experienced periods of volatility. Financial market sentiment deteriorated between December and February, leading to heightened market volatility. Financial market sentiment deteriorated mainly because of the following reasons: concerns about Chinese growth, global financial sector health, and the outlook for the European economy, uncertainty about the pace of Federal Reserve interest rate tightening, and sustained low commodity prices. Volatility has been evident in a range of markets. Equity prices have fluctuated significantly since the last FSR of June 2015, dropping sharply until February.

Regional Economic and Financial Sector Development: Sub-Saharan Africa (SSA) and East African Community

Economic activity in SSA slowed in 2015, with GDP growth averaging 3.4 percent, down from 5.1 percent in 2014. The deceleration in growth was driven by low commodity prices, weak growth in major trading partners, rising borrowing costs, and adverse domestic developments in many countries. The fall in commodity prices represented a significant shock for the region because of the large share of commodities in exports: fuels, ore, and metals account for more than 60 percent of the region's exports compared with 16 percent for manufactured goods and 10 percent for agricultural products. Despite, the average slowdown, there were some bright spots, such as Côte d'Ivoire, Kenya and Rwanda that continued to experience robust, broad-based growth, supported by rising investment, and growth in services.

Risk to SSA outlook remain tilted to the downside, including a sharper than expected slowdown in China (SSA main trading partner) and further decline in commodity prices. Commodity prices are expected to remain low, amid a gradual pickup in global activity, especially in emerging markets and developing economies, and external financing conditions are expected to tighten. Against this backdrop, average growth in SSA is projected to remain subdued at 1.4 percent in 2016.

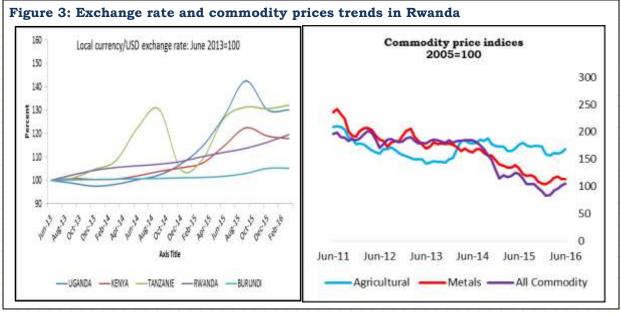
The East African Community (EAC) remains the fastest growing regions in Africa, despite growth slowing down in first quarter of 2016. Economic growth in the EAC averaged around 4.1 percent in 2015, higher that SSA average at 3.4 percent, and World growth estimated at 3.2 percent. Based on quarterly GDP data, however, economic growth in the EAC is likely to slowdown in 2016 (Figure 2). For countries that publish quarterly national accounts (Uganda, Tanzania, Rwanda and Kenya), growth in Quarter 1, 2016, was lower than 2015 for all countries.



Source: BNR staff calculations based on EAC Central Banks data

Slower growth in the EAC in 2016 is partly attributable to credit tightening declining growth of credit growth in 2016 (Figure 2). Overall credit growth slowed down in the EAC region, with Burundi recording the lowest growth rate. In some countries, the decline in credit growth is partly attributed to credit providers' preference to invest in less risky assets for example government securities and tightened credit conditions through increased interest rates. In some countries, it was due to tighter monetary policy stance aimed at controlling exchange rate pressures, related to falling commodity prices.

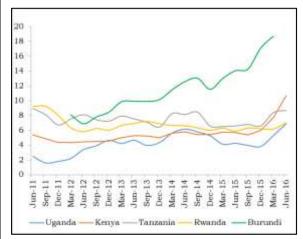
Like other developing countries and emerging countries, the other macroeconomic challenge facing the EAC region is related to increasing depreciation of regional currencies against the US dollar (Figure 3). This depreciation is mainly linked to declining commodity prices that account for a significant size of regional exports. Protracted falling commodity prices have kept risks elevated in EAC economies, and tightened financial conditions, reduced risk appetite, raised credit risks, and continues to undermine financial stability.



Source: BNR staff calculation based on EAC and World Commodity Report, October 2016

Credit risk as measured by total non-performing loans to gross loans recorded an increasing trend across the region (Figure 4). The increased NPL ratio reflects the slowdown in credit growth throughout the EAC region and slower growth of economic activities in EAC, especially in the first half of 2016. Generally, credit risk in the EAC increased in construction, trade and agriculture sectors.

Figure 4: EAC Banks' NPLs (left hand figure) and CAR (right hand figure)



CAR in EAC	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16
Rwanda	24.3%	24.2%	22.5%	25.3%	23.3%
Uganda	21.2%	20.1%	21.0%	21.8%	22.2%
Kenya	18.9%	18.7%	18.6%	18.8%	18.1%
Tanzania	17.3%	18.0%	18.9%	20.2%	20.0%
Burundi	19.5%	19.2%	18.1%	22.3%	

Source: BNR calculation based on EAC Central Banks data

Implication of global economic slowdown on Rwandan economy and financial system

As mentioned in section 1 above, the global economic growth is slowing down and growth is even projected to remain muted in near-term. Emerging countries, like China, with more trade links with Africa are the most affected. Along with this muted global growth, global financial market sentiments continue to deteriorate. Given these facts on the global economy, it is worth assessing their potential impacts on the Rwandan economy and on the Rwandan financial system in particular.

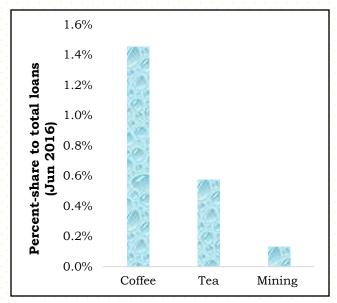
The Rwandan economy is mainly linked to the global economy through trade and foreign direct investments and hardly through financial markets. Rwandan economy is greatly getting open to foreign trade —the level of exports and imports relative to GDP, a measure of openness, increased from 12.2 percent in 2010 to 14.4 percent in 2015 and from 28.9 percent in 2010 to 30.9 percent in 2015 respectively. A slowdown of the global economy can therefore affect Rwandan economy through reduced demand for its commodity exports, which would ultimately exert downward pressure on commodity prices, but also curtail the flow of remittances from abroad. The impact would also be through lower foreign direct investment flows. In the end, both trade and investment slowdown, would affect Rwanda's balance of payment and exert pressure on exchange rate.

The spillover from the global economy to Rwanda's financial system would be through either direct or indirect channels. Direct channels would be through impacting the balance sheet of banks and this would depend on (1) the size of banks' loan portfolio to affected commodity exports and; (2) credit risk related to size of foreign currency denominated loans. Indirect channel is when global economic slowdown triggers a slowdown of domestic economic activities as countries adjust their fiscal and monetary policy stance to contain external shocks, in the end domestic aggregate reduces, which ultimately hampers the debt servicing capacity of households and firms.

So far, the direct impact of declining commodity prices on Rwandan banks' balance sheet is negligible. Recent situation of falling commodity prices have not posed any significant negative impact on Rwanda's financial sector. Rwandan financial institutions are marginally exposed to commodity exporting companies. For example, the share of lending to mining was less than 1% as at June 2016 and that of coffee at 1.5 percent (Figure 5).

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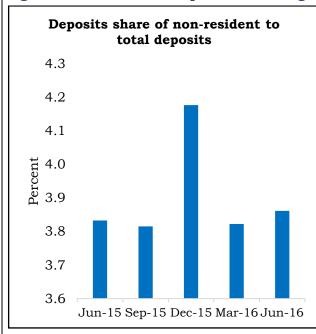
Figure 4: Share of loans to export oriented products

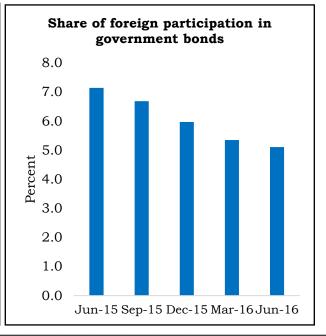


Like many other Sub-Saharan economies, Rwanda is less integrated in global financial markets and the direct impact of global financial turmoil is likely to be less severe than in the advanced and emerging economies (Figure 5). Rwandan banks are generally not exposed to risks arising from complex derivative instruments and have not relied substantially on foreign borrowing to finance their operations. As a result, financial institutions in Rwanda have by and large remained unaffected and domestic money markets are generally functioning normally.

Source: BNR, Financial Stability Directorate

Figure 5: Non-residents deposits and foreign participation to Government Bonds

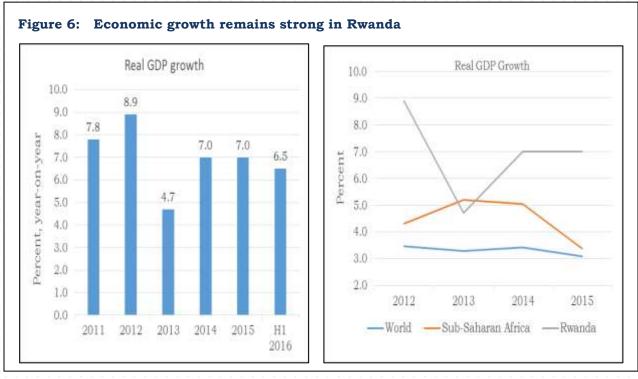




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Domestic macroeconomic environment

Rwandan economy registered an annual growth rate of 7 percent in 2015 and is expected to grow by 6 percent in 2016. Growth of Rwandan economy in 2015 more than doubled the 3.4 percent average growth for SSA and 3.2 percent for world economy. The recently concluded IMF PSI review projected the Rwandan economy could grow by 6 percent in 2016, which significantly higher than the projected growth for SSA, estimated at 1.4 percent in 2016. Already, national accounts numbers show that Rwandan economy grew by 6.5 percent in the first half of 2016. The service sector, which accounts for 49 percent of Rwanda's GDP, grew by 8.5 percent (year-on-year) in the first half of 2016 and remains the main driver of growth. In the same period, the industry sector, mainly dominated by mining expanded by 4 percent, while agriculture expanded by 5 percent.

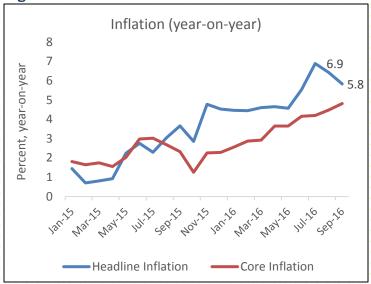


Source: BNR, Financial Stability Directorate

In 2016, inflation picked up, reaching a peak of 6.9 percent in July 2016 (y-o-y) before moderating to 5.8 percent in September (Figure 7). This increase in inflation mostly reflects higher food prices, particularly vegetables. Though the exchange rate pass through is low in Rwanda, recent pressure on the FRW/US\$ exchange rate also led to increase in imported inflation. The BNR forecasts inflation to stabilize during the last

quarter of 2016 and the first quarter of 2017—key consideration for this projection is that food prices will lower when agriculture harvest for season A gets on the market¹.

Figure 7: Rwanda's inflation



Like other developing countries and some emerging countries, Rwanda experienced exchange rate pressures in 2016, although these pressures slowly are declining since September 2016. Foreign currency receipts declined in line with lower commodity priced, this together with higher demand for foreign currency for imports caused pressures on the Rwandan Francs. Since September 2016, however, these pressures have gradually declined (**Figure 8**).

Source: BNR, Financial Stability Directorate

Figure 8: Foreign Exchange Rate and the Net Open Position Daily Exchange rate (Dollar -FRW): Normalised at NOP/Core capital 100 in December 2015 0.0% 110 -2.0% 108 -4.0% 106 -6.0% 104 -8.0% -10.0% 100 -12.0% -14.0%

Source: BNR, Financial Stability Directorate

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¹ Rwanda's agriculture season A starts from September to February of the following year.

Rwanda's Financial Sector Landscape

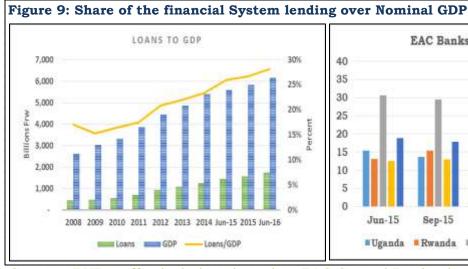
Rwanda's financial sector is composed of a wide and growing array of institutions, and is becoming increasingly diversified, which is a positive development. The banking system continues to hold the largest combined share of financial sector assets at 66.3 percent as at June 2016. Overtime, this ratio has declined, showing increased diversification in recent years. For example, in 2011, the banks' combined share was 70.8 percent and has gradually declined to 66.5 percent in June 2016. The main contribution to diversification came from increased share of pension, MFIs and SACCOs – the MFIs and SACCOs combined share of financial sector assets increased to 6.7 percent, up from 5.1 percent in 2011, while the share of assets for the pension sector increased from 13.8 percent to 17.1 percent (**Table 1**).

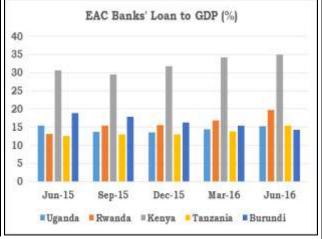
Table 1: Structure of Rwanda's Financial System

	2011			Jun- 15			Jun- 16		
	Number	Assets	% of	Number	Assets	% of	Number	Assets	% of total
		(billion	total		(billion	total		(billion	assets of
		Frw)	assets		Frw)	assets		Frw)	FS*
			of FS*			of FS*			
Banks	15	1,084	70.8%	17	2,000	66.4%	17	2,278	66.5%
Insurance	8	158	10.3%	14	295	9.8%	15	329	9.6%
Pension	1::::::::	212	13.8%	1	530	17.6%	1::::::::	585	17.1%
Microfinance	11::::::	77:::::	5.1%	493	188	6.2%	493	230	6.7%
TOTAL	35	1,531	100%	525	3,013	100%	526	3,422	100%
*FS: Financia	al Sector								

Source: BNR, Financial Stability Directorate

This positive development in Rwanda's financial sector is also evidenced by increased development of financial sector deepening indicators (Figure 9). Combined banks and MFIs credit to the private sector relative to GDP stood at 28 percent as at June 2016 (26.1% for banks and 1.9% for MFIs), compared to 17 percent in June 2011. Apart from Kenya, Rwanda's deepening is growing faster than other EAC states. Rwanda targets improving banks' credit to private sector (as percent of GDP) to 30 percent by 2020.





Source: BNR staff calculations based on EAC Central Banks data

Increase in diversification has however come along with increased interconnectivity between different parts of the financial sector, calling for systemwide supervision to mitigate systemic risks. As at June 2016, the pension sector held 24 percent (Frw 134.5 billion) of its assets in form of deposits in banks. The Pension also held 12 percent of its assets (66.5 billion) as equity investment in banks. This means 36 percent of pension assets are linked to banks. The Insurance sector also holds 43 percent (Frw 139.2 billion) of its assets in form of deposits in banks. The microfinance sector holds 32 percent (Frw 63.7 billion) of its assets as deposits in banks. Systemic risks related to this interconnectivity is among key things monitored by the BNR Financial Stability Committee (FSC). To mitigate systemic risks arising from this increased interconnectivity, in 2016, the BNR adopted a Basel framework to define Systemically Important Banks (SIBs) and a policy that SIBs will be subjected to a capital surcharge. Implementation of this policy is expected to start in 2017.

The financial sector is supported by a robust and well-functioning payment system infrastructure. The BNR operationalized the Automatic Transfer System (ATS) in 2011. The system is comprised of the Real Time Gross Settlement system (RTGS) function for large value and time critical payments and the Automated Clearing House (ACH) which provides clearing and netting facilities for a range of low value electronic instruments including direct debits, direct credits and cheques. The payment system has been upgraded to enable linkage to regional cross border Payment Systems, namely the COMESA Regional Payments and Settlement System (REPSS) and the East Africa Payment Systems (EAPS). On a quarterly basis, through financial stability committee meetings, the BNR assess liquidity of participants in the RTGS as well as assess the completeness and adequacy of the business continuity plan for the payments system technology. Overall, there has been sufficient liquidity in the payment system as participants in RTGS hold sufficient liquidity to settle their payments.

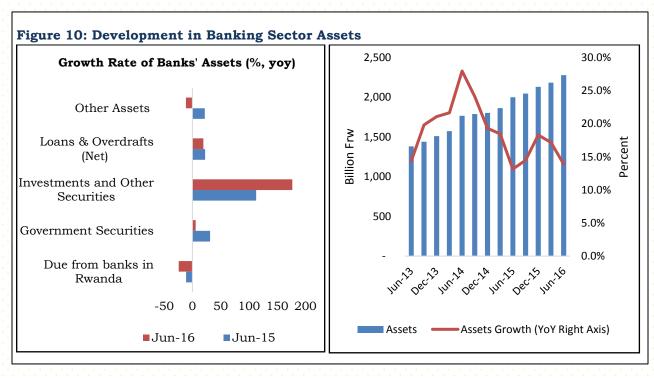
Performance of the Banking Sector

The banking sector remains the largest and most systemically important sector of Rwanda's financial system. As at end June 2016, its share in total financial system assets stood at 66.5 percent. Since the publication of the last FSR, the banking system continued to expand in both assets and liabilities, mainly deposits. Capital and liquidity levels of banks remain above the current regulatory requirements. To bolster solvency of the banking system, the BNR issued a directive on additional capital requirements, requiring banks to hold a conservation buffers and additional buffers for systemically important banks. The asset quality of Rwanda's banking system remains healthy, despite a slight increase in NPLs in June 2016 related to improved loan classification in banks. Banks' loan loss provisions picked-up which mitigates credit risk. Amidst exchanged rate pressures, banks maintained their foreign exchange exposure within prudential limit. The BNR stress-test on banks revealed that banks have adequate capital and liquidity buffers to absorb adverse shocks.

Assets of the banking system

The banking sector assets continued to expand in 2016, but at a slower pace compared to recent previous years. In June 2016, banking system assets grew by 13.9 percent (y-o-y) to Frw 2.2 trillion. This growth is low compared to 21 percent average growth of assets registered in the last five years.

Slower growth of banks' assets is attributable to deceleration of growth of loans to the private sector. Loans and advances, which account for over 60 percent of total assets increased by 19.3 percent in the year to June 2016, lower than 22.1 percent average growth in previous 4 quarters. The deceleration of growth of loans is mainly attributable to lower demand for credit and not lack of liquidity in banks- for example, the value of loan applied for declined from Frw 451 billion in first half of 2015 to Frw 434 billion in first half of 2016. Growth in investment in government securities, which accounts for 10 percent of total assets of banks also decelerated to 5.8 percent in June 2016 (year-on-year) against an average of 33.7 percent in previous four quarters. Banks' investment portfolio in bonds and equities, which accounts for 6.5 of total assets of banks, strongly grew by 177 percent to Frw 148 billion, while cash and reserves increased by 20.4 percent to Frw 198 billion.



Banks appetite in off balance sheet financing declined. From a financial stability perspective, developments in off-balance sheet is a risk to the financial sector, as Loan commitments obligates a bank to issue future loans under terms that it might otherwise refuse. Aggregated off-balance Sheet items of the banking sector declined by 12 percent in June 2016 (year-on-year) from Frw 1,129 billion to Frw 990 billion. Due to this decline, the percentage share of off-balance sheet items in total assets of the banking system declined from 56 percent in June 2015 to 43 percent in June 2016. The major components of off balance sheet items held by Rwandan banks include guarantees (performance Bonds) (65%) and other financing commitments (22%).

Banks' sectorial Lending

Similar to what was observed in the last FSR, Banks' lending is mainly concentrated in mortgage, hotels and trade sectors (Table 2). The share of mortgage loans in total loans was 36.6 percent in June 2016, up from 33.9 percent in June 2015. This shows that banks increased their lending to mortgage sector. In second place, trade and hotels loans accounted for 30.8 percent of total loans in June 2016, down from 31.4 percent in June 2015. Together, "mortgage loans" and "loans to trade and hotels" accounted for 67.4 percent of total banking system loans. Lending to mining is less than 1 percent of total loan portfolio of banks.

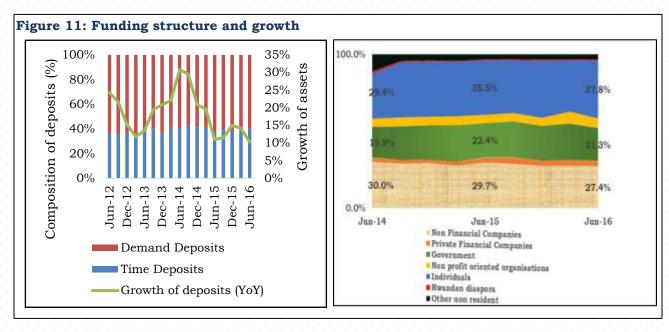
Table 2: Developments in Sectoral loans

Activity Sectors	_	e share of loans	Annual growth rate		
	Jun-15	Jun-16	Jun-15	Jun-16	
Non-classified activities	9.8%	7.7%	2.3%	0.6%	
Agricultural, fisheries& livestock	2.3%	2.1%	12.0%	18.1%	
Mining activities	0.0%	0.1%	811.8%	304.9%	
Manufacturing activities	9.4%	9.1%	25.7%	24.7%	
Water & energy activities	2.3%	2.2%	2.0%	21.2%	
Mortgage industries	33.9%	36.6%	33.7%	38.4%	
Commercial & hotel	31.4%	30.8%	24.4%	25.8%	
Transport & warehousing	6.1%	6.7%	37.3%	42.4%	
OFI &Insurance	1.7%	1.5%	117.9%	14.0%	
Service sector	3.1%	3.2%	19.2%	35.9%	

Banks' funding development

Banking sector deposits grew by 10.3 percent at end-June 2016 (year on-year) compared to 18.8 percent average growth in the last four years. Out of the outstanding deposits of banks, 37.8 percent originated from individuals, about 21.3 percent from governmental institutions and about 30.8 per cent from corporates. FX deposits rose by 30 percent in June 2016 (year-on-year) compared to 15 percent in corresponding period in 2015. Despite this strong increase in FX deposits, they make-up 23.7 percent of total deposits of banks.

Banks' deposits are largely demand deposits, although term deposits registered a strong increase in the year to end June 2016 (Figure 11). As at June 2016, demand deposits represented 59.8 percent of total deposits while term deposits constituted of 40.2 percent. Term deposit, despite remaining small, strongly increased by 17.5 percent in June 2016 (year-on-year), against 2.4 in corresponding period in 2015. In the same period, demand deposits increased less, by 7 percent, against 14.4 percent in 2015. Overdependence on short term deposits remains a structural challenge to Rwandan financial system, as short-term funds held by banks constrain their capacity to finance long-term projects.



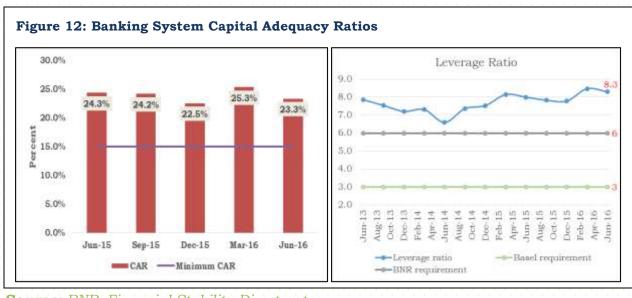
Banks' capital position

Capital levels of banks remain above the current regulatory requirements. The system-wide Capital Adequacy Ratio (CAR) was 23.3 percent at end June 2016, significantly above minimum regulatory requirement of 15 percent. In the same period, Tier 1² capital stood at 20.7 percent, way above the current 10 percent prudential requirement (**Figure 12**). Capital in excess of regulatory requirement increased to Frw 134.8 billion, up from 122.8 billion registered in June 2015. The leverage ratio³, another indicator of the banking system exposure, also increased from 9 percent in June 2015 to 10 percent in June 2016— significantly above Basel II/III threshold of 3 percent and well above the BNR proposed minimum of 6 percent. High capital provides a buffer against the risks outlined in this Report.

² Tier 1 capital requirement if defined as core capital/risk weighted assets

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³ Leverage ratio is the relationship between a banking system's <u>core capital</u> and its total assets.



Increase in capital position of banks has happened in-form of both increased paid-up capital and retained earnings. Between June 2015 and June 2016, total equity increased by 16.4 percent to Frw 419 billion. This growth is attributable to the "Paid up capital" which increased by 18.2 percent to Frw 189 billion, reflecting capital injections made by new investors in the banking sector. Retained earnings also increased by 14.7 percent to Frw 28 billion.

In-terms of quality of capital, Rwandan banks hold high quality capital, capable of absorbing losses (Figure 13). By end June 2016, shareholders equity and retained earnings, accounted for 52 percent of total capital of the banking system. Both "shareholders equity and retained earnings" are quality capital in a sense that they can be relied on in periods of stress. Between June 2015 and June 2016, the banking system issued Frw 29 billion of new equity. The share of subordinated debt (here defined as less quality capital) accounts for only 34.8 percent banks total capital.

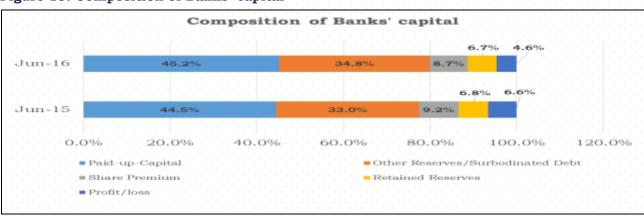


Figure 13: Composition of Banks' capital

To strengthen solvency of the banking system, the BNR adopted Basel II and III capital standards by issuing a directive on additional capital requirements for banks. This directive endorsed in November 2015 requires banks to hold a minimum total capital of 12.5 percent of total risk weighted assets and to hold 10 percent of core capital to risks weighted assets. In addition to minimum capital adequacy ratio, banks are supposed to hold a capital conservation buffer⁴ of 2.5 percent. Further to that, the directive obliges systemically important banks to keep an additional systemic capital buffer that will be administered in the range of 1–3.5 percent defined for different brackets. Banks were given a preparation phase of one year (parallel running period) and full implementation of this capital requirement is planned start in the first quarter of 2017.

Banks' assets quality

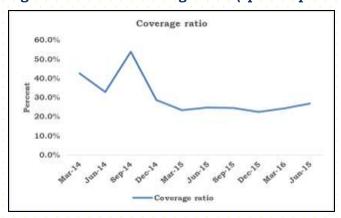
The asset quality of Rwanda's banking system remains healthy, despite a slight increase in NPLs in June 2016 (Figure 14). NPLs ratio increased from 5.9 percent in June 2015 to 7 percent in June 2016. Despite this uptick in first half of 2016, NPLs have steadily declined from historically high levels of 25 percent in 2006 and 2007. The NPLs ratio edged up on account of slowdown of growth of credit to private sector, improved loan classification among banks following a round of loan classification review exercise done by the BNR in some larger banks and; slowdown of economic activities in the first half of 2016 which subsequently affected the debt servicing capacity of some borrowers. The BNR targets reducing NPLs ratio to 5 percent in the medium-term.



⁴ Conservation buffer is a requirement for banks to hold common tier capital in relation to risk weighted assets over and above their minimum capital ratios as a buffer for losses during periods of financial and economic stress.

To contain risks related to increase in NPLs, Banks' increased their loan loss provisioning level (Figure 15). Between June 2015 and June 2016, the level of loan loss provisions (specific provisions coverage ratio) increased from 24 percent to 27 percent. Increased provisions portray the increased readiness and capacity of banks to absorb losses linked to bad debts. The increase in the coverage ratio shows that banks have increased their buffers against credit default and have hedged against risks from large credit exposures. Another credit risk mitigating trend is captured in form of increased level of secured loans—the level of secured loans increased from 58.7 percent in June 2015 to 66.8 percent in June 2016.

Figure 15: Banks' coverage ratio (specific provisions over NPLs)



Source: BNR, Financial Stability Directorate

Similar to what was reported in the previous FSR, the agriculture sector holds the highest level of NPLs, followed by trade and hotels. The NPLs ratio in agriculture sector stood at 16.9 percent in June 2016, more than double of average NPLs ratio for all sectors—7 percent. Despite this bad performance of agriculture loans, exposure of Rwandan banks to this sector remains minimal as loans to this sector make-up only 2.1 percent of total outstanding loans. NPLs in

the mortgage sector, the highly financed sector, was 5.1 percent in June 2016, lower that 7 percent average for all sectors. NPLs in trade and hotels, another highly financed sector, increased from 7 percent to 8.5 percent (**Table 3**). Performance of trade and hotels is highly dependent on domestic demand in the economy and capacity of households to spend. In the first half of 2016, NPLs in trade were pushed up by the slowdown of domestic demand, as growth of credit to private sector declined.

Table 3: NPLs Ratio for Selected Sectors (Percent)

Activity Sectors	Sector NPLs (NPLs of sector/Sector gross loans)					
Activity Sectors	Jun-15 (A)	Jun-16 (B)	B-A			
Non-classified activities	7%	6.4%	-0.8%			
Agricultural, fisheries& livestock	15%	16.9%	1.9%			
Mining activities	3%	0.9%	-1.9%			
Manufacturing	1%	6.0%	4.8%			
Water & energy	3%	0.2%	-2.4%			
Mortgage industries	4%	5.1%	0.6%			
Trade & hotel	7%	8.5%	1.9%			
Transport & warehousing	4%	3.1%	-0.9%			
OFI &Insurance	4%	4.2%	0.1%			
Service sector	7%	4.5%	-2.0%			

Results from BNR's stress test done in June 2016 suggest that banks in Rwanda would be able to withstand adverse external and domestic shocks, thanks to significant capital buffers they hold: On a quarterly basis, the BNR conducts stress-tests of the entire banking sector and on every bank, simply to test the resilience capacity of banks when faced with different adverse shocks. The 2 credit risk shocks applied were: (1) if absolute level of NPLs increased by 11 percent (this was picked from historical data, the highest NPLs experienced by Rwandan banks in past 10 years) and (2) if one largest borrower defaulted in each bank (see section on stress test). To summarize results, Rwandan banks hold strong capital buffers capable of withstanding adverse shocks. Out of 17 banks, 14 banks including big and medium-sized banks still meet the regulatory capital requirements after adjusting for the applied credit risk shock. Only two small banks failed to meet the post shock capital adequacy ratio. Stress test findings have been discussed with banks— especially those that fail the tests and have been basis for discussions for capital improvements. Once of the banks had subsequently, at the time of this report already recapitalized.

The BNR's priorities to safeguard asset quality of banks have been three fold: One: ensuring proper reporting and loan classification is done by all lending financial institutions; Two: advising and encouraging banks to practice prudent underwriting standards with clear credit policies and; Three: making sure that banks set aside adequate provisions to withstand any hike in NPLs that may be linked to un expected shock(s)

Banking sector's profitability

The pre-tax profit of the banking system declined by 7 percent to Frw 29 billion mainly due to a combined effect of lower non-interest income and higher increase of non-interest expenses Return on Assets (ROA) and Return on Equity (ROE) declined respectively from 2.4 percent and 13.1 percent to 1.7 percent and 9.2 percent (Table 4). The strong decline of non-operating incomes by 34.9 percent was a major cause for this drop in profits and reflected the significant drop of income from recovery. Strong increase in operating expenses also played part to push down banks' profits. As at end June 2016, salaries and wages increased by 13.7 percent (year-on-year), up from 7.8 percent in June 2015. Other operating expenses increased by 14.8 percent, from 9.3 percent registered in the same period of 2015. This strong growth of operating expenses pushed up the "cost to income ratio" from 49 percent to 56 percent and reflected the Banks' outreach costs and other capital investments.

The banking system's core deposit and lending business continues to be profitable as reflected by strong growth of interest margins (Table 4). Rwandan Banking system Net Interest Income (NII) grew by 11 percent in June 2016 (year-on-year), up from 1.4 percent registered in the same period last year. While volume effects have been marginal, most of the increase came from higher interest margins, as average interest paid on

liabilities increased less compared to higher growth of yield on assets. Net Interest Margin⁵ (NIM) increased from 8.9 percent in June 2015 to 9.2 percent in June 2016.

Table 4: Banking Profitability Indicators

	Jun-15	Sept-15	Dec-15	Mar-16	Jun-16
Net Profit before tax (FRW billions)	31	43	57	15	29
ROA (%)	2.4	2.2	2.1	1.9	1.7
ROE (%)	13.1	12.0	11.2	9.8	9.2
NIM (%)	8.9	8.7	8.5	9.3	9.2
Cost to Income Ratio (%)	78.6	80.5	81.1	80.9	82.0

Source: BNR, Financial Stability Directorate

Banks' Liquidity Condition

Similar to what was observed in the previous FSR, the banking sector maintained liquidity buffers and liquidity risk remains minimal. As at end June 2016, the liquidity ratio, the main indicator of liquidity position of banks stood at 42.8 percent, twice the 20 percent prudential requirement (Figure 16), while the ratio of liquid assets to short-term liabilities stood at 112 percent. Liquid assets in the banking sector comprise of: cash in vault and deposits with BNR; treasury bills with less than 1 year maturity, interbank placements and; banks placements abroad.

Rwanda's banking system is self-sufficient in supporting domestic lending as banks have more domestic non-bank deposits relative to the outstanding credit to non-bank private sector. The banking system loan to deposit ratio stood at 87.6 percent in June 2016. This simply shows that core deposits of banks remained more than sufficient to finance lending activities of banks.

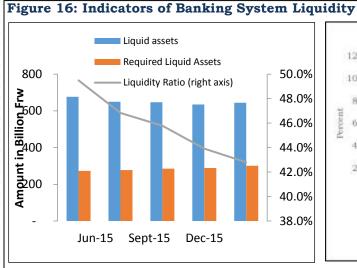
Banks continue to depend on domestic funding sources which limits risks related to capital reversals. Similar to what was observed in the previous FSR, Rwandan banks mainly source their funds from within the country, especially in form of resident non-bank deposits. Most of these deposits 96 percent are resident deposits (Figure 11). The second source of funds is interbank at 14.3 percent of total liabilities —interbank is entirely with local banks. The high and growing share of domestically sourced funds (deposits from residents and interbank within local banks) contributes to the funding resilience of the banking system.

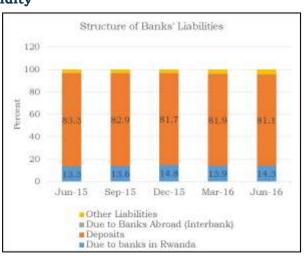
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⁵ Net interest margin (NIM) is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders (for example, deposits), relative to the amount of their (interest-earning) assets.

Liquidity stress-tests performed by BNR show that banks meet prudential liquidity requirements even when faced with adverse liquidity shocks. In addition to monitoring compliance with liquidity requirements, the BNR performs quarterly stress tests— mainly to test resilience of banks when faced with liquidity shocks. Two main liquidity shocks were applied in the stress-test of June 2016: 1) reverse stress test, which tested the level of deposit withdrawals that can cause the first bank to become illiquid; 2) if 20 largest depositors withdrew their holdings at 50 percent. The test showed that, the first banks would become illiquid when 27 percent of deposits are withdrawn and 14 out of 17 banks met minimum liquidity requirements when 20 largest depositors pulled out 50 percent of their deposits. From these results, it appeared that banks were liquid enough to the extent that it would require acute and very adverse shocks for banks to be illiquid.

Deposit concentration in the banking sector, as measured by the ratio of deposits of 20 largest depositors to total deposits of banks, declined to 33.1 percent at end June 2016, from 41.5 percent at end June 2015. Deposit concentration offers concerns of liquidity risk and it is therefore a positive development to see banks diversifying their source of funds. The pension scheme (RSSB), also regulated by BNR, and remains the largest depositor with 9 percent of total deposits of banks. The BNR has and will continue engaging RSSB on its investment plans, mainly to avoid unnecessary distortions on banking system liquidity.





Banks' Foreign Exchange Open Position

The foreign exchange exposure of Rwandan banks remains in check and within the regulatory prudential boundaries. Rwandan banks are required by regulation to maintain their foreign exchange exposure (net open position) within limits of +/- 20 percent of Tier 1 capital. As at end-June 2016, the NOP ratio of banks stood at -1.8 percent.

Foreign currency deposits increased strongly compared to foreign exchange assets in the year to end June 2016. As at June 2016, foreign currency assets of banks increased by 22 percent (year on year), up from negative 10 percent in the year before. In the same period, foreign currency deposits, increased by 29.8 percent

Table 5: Indicators of Foreign Exchange Exposure (Percent)

	Jun-15	Sept-15	Dec -15	Mar-16	Jun-16
Forex exposure to core capital	-7.1%	-7.9%	-5.7%	-6.7%	-1.8%
Forex deposits to total deposits	20.1%	24.1%	20.2%	23.4%	23.7%
Forex loans to total loans	8.1%	11.1%	11.1%	13.4%	15.0%
Forex assets to total assets	15.7%	20.0%	15.6%	15.2%	16.8%

Resiliency of the Banking System

Box 1: Stress Testing

As part of macro prudential analysis, the National Bank of Rwanda (BNR) conducts the stress tests on the banks' balance sheet against adverse but plausible shocks using the Cihak model. The purpose of this stress test is to examine what would happen to the banking system or individual banks in case difficult times happen. The stress testing involves examining the impact of key risks, namely: credit, exchange rate, and the liquidity risk on individual bank and the entire banking system (data from 17 banks). The methodology captures the sensitivity analysis of different shocks on one hand and reverse stress testing to uncover shocks likely to generate maximum distress for the banking system. Shocks were calibrated based on historical movements of the existing data, while in other cases calibration was based on deviations from the means (baseline) and the standard deviation.

Credit risk (shocks applied and results)

In the exercise of shocking the credit risk, two shocks were conducted to assess the effect of a deterioration in asset quality banks' capital, and the effect of large borrowers' default (concentration risk). The exercise assumes: Banks are adequately provisioned (both specific and general provisions); a 62 percent haircut on collaterals. The haircut on collaterals was obtained basing on the aggregated final quotes of forced sold securities in the previous year 2015. The first shock involved an increase of existing NPLs by 11 percent (considered as a mild case scenarios: historical mean of the NPLs from 2008: 3 percent plus the standard deviation: 8). The second test involved the calibration of one big borrower defaulting at 100 percent with a 100 percent haircut on collaterals. The method used in the credit sensitivity analysis consisted of estimating the additional provisions that would be required to cover the estimated loss and charging it to capital, and in both cases, the new provisioning ratio was estimated at 60 percent. Consequently, the provisioning shortfall was deducted from risk weighted assets and net assets as well as capital. The two shocks aim at determining the impact on the level of banks' capitalization.

According to stress-test results, the banking system would meet the regulatory capital requirement even if NPLs increased by 11 percent (the first credit shock applied) — the capital adequacy ratio of banks would reduce from 23.3 percent to 21.7, still above the 15 percent prudential requirement. Only 2 small sized banks would have capital that is slightly below the prudential requirement of 15 percent. With regard to the credit concentration risk, banks would still maintain capital levels far above the prudential requirement if the 1 big borrower defaulted in each bank. Results further showed that instance of largest borrower in each bank defaulting would cause capital adequacy ratio (CAR) of banks to drop from 23.3 percent (baseline) to 19.0 percent, which remains above the 15 percent prudential requirement.

Exchange rate risk (Shocks applied and results)

The risks for banks from a change in the forex movement is tested through direct exposure. The test simulated the effect on capitalization resulting from the depreciation of Rwandan Francs against USD and the effect of forex rate on NOP. The test found that depreciation of 8 percent in FX would have negligible impact on the banks capitalization. The regulatory capitalization would reduce by 0.1 percentage points from 23.3 percent to 23.2 percent, and the NOP would be -5.1 percent.

Liquidity risk (shocks applied and results)

For liquidity risk, we considered the following shocks: (i) what level of deposit withdraw would make the first bank to become illiquid drop in deposit (reverse stress test) and (ii) what would happen if 20 largest depositors withdraw their funds in the banking system. According to stress-test results, it would require 27 percent drop in deposits of banks for the first bank to become illiquid (liquidity ratio ≤0), in that case, five (5) banks would fall below the liquidity requirements level (liquidity ratio of less than 20 percent). The highest drop in deposits ever faced by Rwandan banks was 4 percent decline in September 2009. This implicitly means that Rwandan banks are adequately liquid. Results showed that no single bank would fail to meet the regulator liquidity ratio requirement of 20 percent if the largest borrowers withdrew their money in banks. Again, this lends credence to the idea that Rwandan banks are adequately liquid.

Stress testing results

Since the previous FSR, the stress testing results show that the Rwandan Banking System is still resilient with higher capital buffers, liquidity covers, and highly shielded as regards to foreign exchange operations. The loan defaults, lending concentration, exchange rate movements was proved to have a moderate impact on the overall solvency of the banking system despite few individual institutions falling below the regulatory capital (15 percent) and the tests of the impact of withdrawal of deposits suggested minimal impact of the banking system liquidity position as well.

Micro finance Institutions development and performance

In the period under review (June 2015/June 2016), the microfinance sector assets continued to expand, albeit at a slower pace compared to recent performance. Similar to what was observed in the previous FSR, the sector remains adequately capitalized, and with sufficient liquidity. For the entire MFI sector, credit risk, as measured by NPLs remained unchanged, although it picked up in UMURENGE SACCOs (U-SACCOs). Sufficient capital and liquidity buffers provide strength for the sector to deal with credit shocks or any other shock. The two challenges underlying the microfinance sector identified in this FSR are (1) credit is concentration, where credit concentrated in some sectors and the short-term nature of MFI deposits, which limit their capacity to finance medium-term and long-term viable projects.

Structure of Microfinance Institutions

Microfinance institutions are widely spread across Rwanda and have increased significantly in number over the last 5 years and continue to play a significant role in accelerating financial inclusion. As at June 2016, the Rwandan microfinance system comprised of 15 microfinance institutions (under the legal status of limited company); 479 savings and credits cooperatives (SACCOs): These include 416 U-SACCOs SACCOs and 63 non U-SACCOs. All these institutions are regulated and supervised by BNR. The microfinance sector, and especially U-SACCOs continue to play a significant role in accelerating financial inclusion in Rwanda- bringing financial services to the unbanked population. According to Finscope Survey (2016), around 33 percent of adult Rwandans (2 million) used U-SACCO services in 2016, up from 22.3% in 2012. Umurenge SACCOs played a significant role in pushing out the boundaries of formal financial access. According to Finscope 2016, it takes an average of 45 minutes for adult Rwandans to reach U-SACCOs premises.

The microfinance sector is greatly linked to the banking sector. As at June 2016, the total placements of MFIs within the banking system stood at 37 percent of their total assets from 38 percent in June 2015 and 15 percent in June 2008. The U-SACCOs deposits within the banking system account for 56 percent of their total assets.

Performance of Microfinance Institutions

Assets and assets quality in MFIs

Total microfinance assets went up by 22.8 percent in the year ended June 2016, compared to 27.2 percent in the corresponding period of 2015 (Figure 17). The growth of assets components was uneven. Loans, which constitute 52 percent of total assets of MFIs grew by 27.6 percent. Other elements of MFIs' assets are: cash in vault and in Banks (39 percent), investments in T-bills and other placement (less than 1 percent) and other assets (9 percent). The causes of lower growth of loans in MFIs are two fold and are similar to causes outlined for slower lending by banks in earlier sections of this report. First, credit demand declined, especially in the first half of 2016, which is also related to moderate economic growth observed in the first half of 2016. Second, the uptick in credit risk also caused some MFIs to slow down their lending pace.

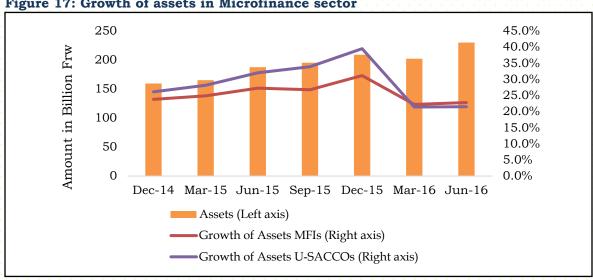


Figure 17: Growth of assets in Microfinance sector

Source: BNR, Financial Stability Directorate

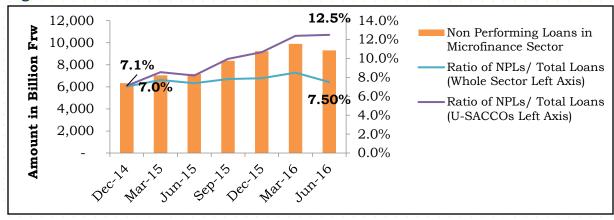
MFI Loans are concentrated in two sectors (Agriculture and commerce, hotels and restaurants). As at June 2016, MFIs loans to mortgage; Trade, restaurant and Hotels accounted for over 64 percent of total MFIs loan portfolio (Table 6). The annual growth of sectorial loans reflected that agriculture financing is attracting more appetite (grown by 47 percent), followed by transport, warehouses and telecommunications sector (27 percent). Loan concentration increases the credit risk and shocks to these sector would weigh much of MFIs performance.

Table 6: Outstanding loans by activity sector

Economic Sectors	U-SACCOs		Other MF	`Is	TOTAL	
Economic Sectors	Amount ⁶	% share	Amount	% share	Amount	% share
Agriculture, Livestock, Fishing	10.5	30.6%	10.0608	11.2%	20.6	16.5%
Mortgages	3.8	10.9%	33.7292	37.4%	37.5	30.1%
Commerce, Restaurants, Hotels	15.3	44.6%	26.8802	29.8%	42.2	33.9%
Transport, Warehouses, Communications	1.8	5.1%	3.32951	3.7%	5.1	4.1%
Others	3.0	8.7%	16.1	17.9%	19.1	15.3%
TOTAL	34.4	100.0%	90.1	100.0%	124.5	100.0%

Asset quality of microfinance institutions generally saw no major change since the last FSR. The NPLs ratio of MFIs was 7.5 in June 2016, only 0.1 percentage point increase compared to 7.4 percent registered in June 2015 (Figure 18). Although industry wide NPLs saw no major increase, a pick-up of NPLs was observed in U-SACCOs, where NPLs increased to 12.5 percent in June 2016, up from 8.2 percent in corresponding period in 2015. The pick-up of U-SACCOs NPLs can be mainly attributed to improved loan classification by MFIs, following a tour of BNR inspection of all SACCOs on loan classification. In addition to improved classification, slower economic growth in the first half of 2016 also contributed to increased credit risk in U-SACCOs.

Figure 18: NPLs in Microfinance Sector and U-SACCOs



Source: BNR, Financial Stability Directorate

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⁶ Amount are in Billion Frw

Funding in MFIs

On the liabilities side, deposits constituted 79 percent of the total liabilities of MFIs and grew by 20 percent as at end-June 2016 (year-on-year) compared with 28 percent in the corresponding period in 2015. This means deposits remain the main source of funds for the microfinance sector, despite decelerated growth in June 2016. Similar to what was observed in banks, MFIs deposits are mainly short term in nature (demand deposits) which again limits capacity of these institutions to finance long-term viable projects. In June 2016, demand deposits accounted for 75 percent of total MFIs' deposits, while this number went up to 89 percent in U-SACCOs.

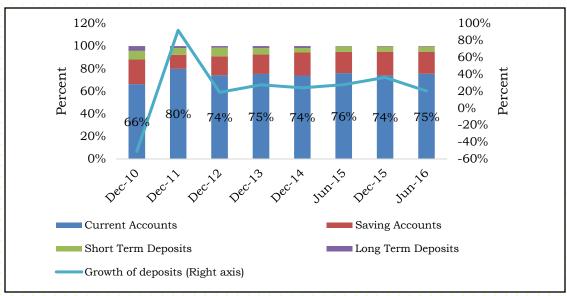


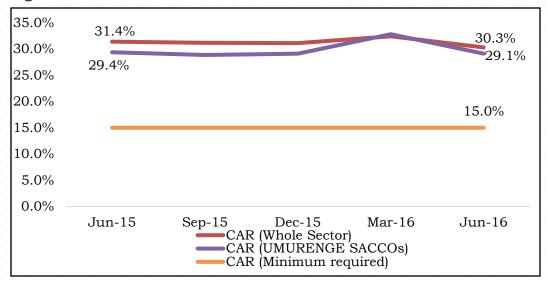
Figure 19: Composition and growth of deposits in MFIs

Source: BNR, Financial Stability Directorate

Capital adequacy in Microfinance Sector

The microfinance sector remains well capitalized, with aggregate capital adequacy ratio (CAR) of 30.3 percent as at end June 2016 compared to the 15 percent prudential requirement (Figure 20). Between June 2015 and June 2016, the microfinance sector's capital increased by 18.5 percent (from Frw 59 billion to 70 billion). The increase of MFIs equity reflects the capital injection in the sector as paid up capital, which constituted of over 38 percent, increased by 13.2 percent between June 2015 and June 2016. Further, the increase has also been fueled by earnings retained which increased by 31.8 percent. This level of capitalization is high enough to enable MFIs to weather moderate shocks to their balance sheets and absorb losses that may result from NPLs.

Figure 20: CAR for MFIs



Source: BNR, Financial Stability Directorate

Profitability in MFIs

Profits of MFIs increased in the period under review (Table 7). Between June 2015 and June 2016, total profits of MFIs (after tax) increased by 57.4 percent (from Frw 1.2) billion to 1.9 billion). In the same period, U-SACCOs' profit increased by 54.5 percent (from Frw 0.9 billion 1.4 billion). Return on Assets (ROA) and Return on Equity (ROE) of all MFIs increased from 3.6 percent and 11.6 percent respectively to 3.8 percent and 12.4 percent. The profitability of MFIs is largely driven by the interest income. Between June 2015 and June 2016, the share of interest income in total income of limited MFIs and other non U-SACCOs increased from 65.6 percent to 69.5 percent, while the share of interest expense on deposits to total expenses reduced from 2.5 percent to 1 percent.

Table 7: ROA and ROE

Overall Microfinance Sector	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16
ROA	3.6%	3.5%	3.3%	3.8%	3.8%
ROE	11.6%	11.2%	10.5%	11.7%	12.4%
UMURENGE SACCOs	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16
ROA	5.2%	4.7%	4.5%	5.9%	4.7%
ROE	17.6%	16.2%	15.3%	18.1%	16.2%

Source: BNR, Financial Stability Directorate

The total costs declined on account of declining staff costs (Table 8). As at June 2016, staff costs in limited MFIs and non-U-SACCOs, which shared 36.5 percent of total costs, grew annually at 9.8 percent compared to the growth of 13.4 percent in June 2015. Similarly, in U-SACCOs, the growth was 17.6 percent in June 2016 slightly lower than the growth observed in June 2015 (18.6 percent) and the share of staff costs declined from 42.9 percent to 36.4 percent. However, loan loss provisioning increased for both limited MFIs and U-SACCOs. In both categories of institutions, provisions for loan loss increased from 23.9 percent to 30.5 percent and from 18.1 percent to 19.6 percent of the total cost of U-SACCOs and other MFIs (U-SACCOs excluded) respectively from June 2015 to June 2016. This increase of provisions reflects the increasing NPLs in MFIs sector.

Table 8: MFIs income statement comparison

Particulars	U-SA	CCOs	Other MFIs		
INCOME	Jun-15	Jun-16	Jun-15	Jun-16	
Interest Income/ Advances	51.5%	46.9%	65.6%	69.5%	
Interest Income/ Financial instruments	0.1%	0.2%	0.0%	0.1%	
Interest Income on placement	17.1%	15.0%	-	-	
Commissions	5.4%	4.4%	7.5%	8.1%	
Other Income	25.9%	33.6%	26.9%	22.4%	
Total Income	100.0%	100.0%	100.0%	100.0%	
EXPENSES					
Interest Expense – Deposits	0.6%	0.6%	2.5%	1.0%	
Other Interest Expenses	0.5%	0.4%	9.5%	12.1%	
Provisions for Bad Debts	23.9%	30.5%	18.1%	19.6%	
Salaries, Wages, staff costs	42.9%	36.4%	38.2%	36.5%	
Other Expenses	32.0%	32.1%	31.5%	30.8%	
Total Expenses	100.0%	100.0%	100.0%	100.0%	

Source: Financial Stability Directorate

Liquidity conditions in MFIs

MFIs remained adequately liquid during the period under review, with liquidity ratios above the statutory minimum of 30 per cent. The ratio of liquid assets to total deposits stood at 95 percent in all MFIs in June 2016, significantly above the 30 percent prudential requirement. Liquid assets compose of 39 percent of total assets of MFIs and registered an annual growth of 18.8 percent in June 2016 (from Frw 76.0 billion to Frw 90.3 billion). Liquid assets of MFIs are mainly cash in vault; placements or deposits in banks and government securities with less than 1 year maturity (Figure 21)

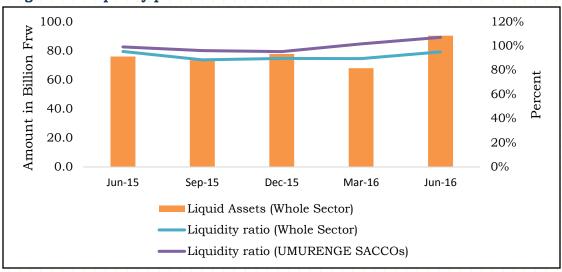


Figure 21: Liquidity position in MFIs

Source: BNR, Financial Stability Directorate

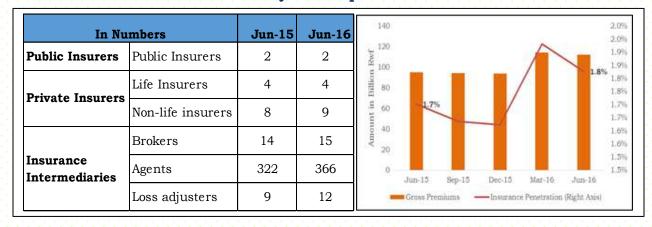
Insurance and Pension sectors structure and performance

Since the previous FSR, the insurance sector and the pension funds' structure expanded further but their share to the overall financial sector's assets reduced by few percentage points. As at June 2016, the insurance sector share of total financial sector assets decreased to 9.7 percent from 9.9 percent in June 2015 while pension funds share reduced to 16.7 percent against 17.1 percent in June 2015. Overall, the insurance system solvency remains above the prudential limit, assets quality improved through prudent investments, and liquidity conditions also improved. In private insurers, however, the performance was weak during the period under review. Further, since the previous FSR, the pension funds continued to perform well, improving in assets and in investment income while received and paid contributions increased.

Insurance sector structure

During the period under review, the Insurance sector continued to expand both in number of institutions and penetration picked-up. Between June 2015 and June 2016, the number of insurance agents expanded by 17 percent (from 322 to 366), and the number of brokers increased from 10 to 15 (**Table 9**). In the same period, insurance penetration, measured as total premium relative to GDP slightly increased from 1.7 percent to 1.8 percent. According to KPMG report, 2015 on insurance market in Africa, Kenya ranks among the top insurance markets on the continent, behind South Africa, Namibia and Mauritius, despite backdrop in the year 2015. Its penetration was 2.79 percent in the year ended 2015 while the penetration rate was 0.76 percent for Uganda in the same year⁷. This increase reflects increase of written premiums compared to an increase of national output. Generally, Rwanda's insurance sector is dominated by short term insurance businesses (i.e. non-life), whose share is 83.2 percent of total insurance assets and 89.8 percent of total gross premiums.

Table 9: Evolution of Insurance Players and penetration in Rwanda



Source: BNR, Financial Stability Directorate

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⁷ See IRA report, 2015

Insurance sector performance

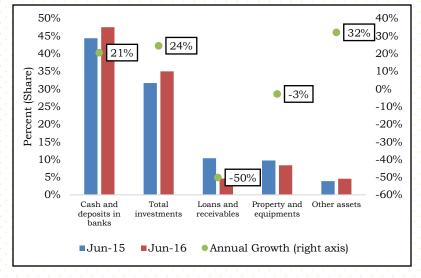
Assets of Insurance sector

During the period under review, the Insurance sector assets continued to expand and penetration picked-up. Between June 2015 and June 2016, the sector's total assets increased by 12.8 percent to reach Frw 323 billion of which 62.2 percent belonged to the two public insurers (i.e., RAMA and MMI) while 37.8 percent were for private insurers. Compared to the previous 4 quarters, the assets growth for all categories of private insurers has been decelerating. Between June 2015 and June 2016, the assets of private insurers grew by 6 percent against the average growth of 9 percent (year-on-year) that happened during the previous 4 quarter.

Insurance sector has increased the share of its total investments. The share of total investments as a percentage of total assets increased from 32 percent in June 2015 to 35 percent in June 2016 and this investment portfolio expanded by 24 percent (Figure 22). Cash and deposits within banks as a percentage of total assets have steadily increased from 44 percent to 47 percent as at June 2015 to June 2016.

Loans and other receivables declined by half between June 2015 and June 2016 to Frw 15 billion and constitute 5 percent of total assets as at June 2016 (Figure 22). This followed the move by the BNR to stop selling insurance on credit by insurers as well as push for recovery of the outstanding receivables, while improving their liquidity and solvency position.

Figure 22: Composition and growth of insurance assets



Source: BNR, Financial Stability Directorate

As at June 2016, technical provisions constitute of 79 percent of total liabilities, this, in consistency with its business.

Technical provisions growth

has been driving the move of

insurance sector's liabilities.

Liabilities of the Insurance

sector

Technical provisions continued to increase year on year at an average rate of 15 percent

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during the last five years from

2011 up to June 2016. In June 2016, technical provisions, which constituted of over 11.2

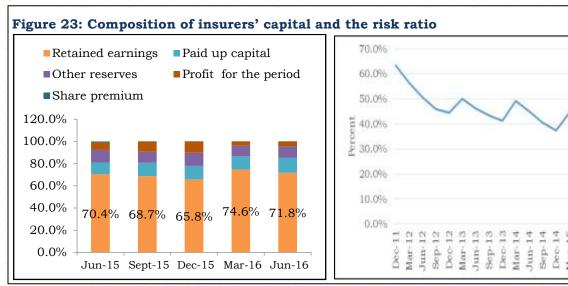
percent of insurers' capital, increased by 25.8 percent. This increase reflects the significant rise of claims outstanding by 59 percent as at June 2016.

Insurance capitalization

The capital of insurance companies grew moderately. In absolute terms, capital and reserves grew by 9 percent (from Frw 218 billion in June 2015 to Frw 238 billion in June 2016). More than 72 percent of insurance sector's capital is composed of retained earnings (Figure 23). This reflects that insurance shareholders are keen to increase capital of their institutions by retaining their earnings. However, the paid up capital which constituted 13 percent of total capital, grew by 38% from June 2015 to June 2016. This increase partly reflected the move by some insurers to recapitalize the business in order to meet the regulatory requirements.

Generally, the insurance sector was adequately capitalized and in good position to mitigate risks. As at end June 2016, the consolidated solvency margin ratio stood at 1,071 percent against the minimum prudential requirement ratio of 100 percent (Figure 23). This implies the sector has more room to take risks, increase products expansion. The adequate solvency coverage ratio demonstrates insurers' capital strength to withstand shocks.

The insurance risk ratio (net premiums/capital) stood at 23 percent in June 2016, up from 22 percent in June 2015, and significantly lower than maximum prudential limit of 300 percent (Figure 24). Low insurance risk ratio implies that the capital is sufficient enough to cover all the insurance risks, but also signals the low aggressiveness of the insurance to collect more premiums.



Source: BNR, Financial Stability Directorate

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The solvency strength in the insurance sector is mainly within public insurers. Between June 2015 and June 2016, the solvency coverage for private insurers declined further from 111 percent to -44 percent between June 2015 and June 2016. This reduction reflects partly the increased claims incurred (especially from June 2015) compared to provisions made, implying risks of price undercutting and other malpractices in the insurance sector. To safeguard stability of the insurance sector, the BNR issued a directive on conduct of insurance business. The directive aims to stop inappropriate practices observed in the sector. These include: Selling of insurance policies on credit and unsustainable price undercutting. In addition to this, and in order to address the solvency problem, shareholders' meetings of companies with critical solvency margins were convened and shareholders were required to inject additional capital by end of June 2016 to ensure that solvency and other prudential requirements are complied with.

Asset quality of Insurers

Insurance investments are well diversified and remained within the prudential limit. Between June 2015 and June 2016, the ratio of real estate investments to total assets in private insurers remained unchanged at 26 percent, and still below the maximum prudential requirement of 30 percent. In the same period, the ratio of equity investments to total assets decreased from 18 percent in June 2015 to 17 percent as at June 2016. On the other hand, investment mix in the public insurers is bent on cash and deposits within the banking system (59 percent), while investment in equities also increased from 16 percent to 24 percent as at June 2015 and June 2016 respectively, and well below the maximum benchmark of 30 percent (**Table 10**).

Table 10: Asset quality ratios for Insurance sector (in percent)

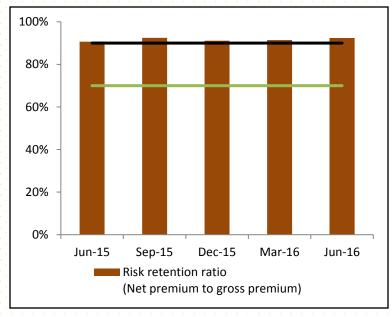
Indicators	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16
Private Insurance sector					
Real estate investments to total assets	26%	26%	30%	27%	26%
Equity & Securities to total assets	18%	16%	15%	17%	17%
PPE to Capital	18%	18%	17%	16%	12%
Cash and deposits/total assets	26%	27%	26%	27%	28%
Loans & receivables/total assets	14%	14%	13%	13%	12%
Public Insurance sector					
Real estate investments to total assets	7%	7%	7%	7%	6%
Equity & Securities to total assets	16%	15%	16%	20%	24%
PPE to Capital	12%	12%	11%	11%	10%
Cash and deposits/total assets	44%	45%	43%	44%	59%
Loans & receivables/total assets	10%	12%	12%	10%	0.3%

Source: BNR, Financial Stability Directorate

Reinsurance and actuarial liabilities

Rwanda's insurance sector's risk retention slightly increased during the period under review. Between June 2015 and June 2016, the risk retention ratio slightly increased to 92 percent from 91 percent. BNR is committed to bringing the ratio within the required bands of 70 percent (minimum) and 90 percent (maximum) (Figure 24). As mentioned above, Rwandan ceded premiums to foreign market were reducing, thus limiting risks connected to foreign markets. The ceded premium to foreign markets links the Rwanda's insurance sector to foreign markets and ultimately to foreign shocks. For instance, if reinsurance companies' face challenges, e.g., in terms of low profitability, low capital, strategic risks, etc., it is likely to spill over to local insurers through claim settlement.

Figure 24: Retention ratio for insurance sector



Source: BNR, Financial Stability Directorate

Earning and profitability of **Insurers**

The insurance sector continues to make profits, although profits declined in the period under review. Between June 2015 and June 2016, net profit declined by 29% from Frw 14.6 billion to Frw 10.4 billion. Private insurers poorly performed and affected the overall position of the insurance sector. **Profits** of private insurers significantly decreased from a profit of Frw 289 million to a loss

Frw 4.1 billion. ROA for private

insurers was -5.6% in June 2016, while ROE was -20.5% (Table 11). Private insurers' losses are attributable to an increase in claims and other management costs. In June 2016, claims incurred increased by 35% (year-on-year) to Frw 18.5 billion against a growth of 9.7 percent in June 2016. However, public insurers' profits rose by 0.9% (from a profit of Frw 14.4 billion to 14.5 million). ROA for public insurers was 22.6% in June 2016, while ROE was 22.8%.

Table 11: Selected indicators of earnings and profitability

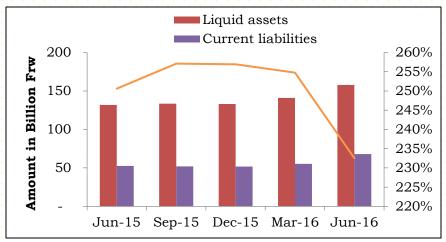
	Jun-15			Jun-16		
Ratios	Priv. Ins	Pub. Ins	Sector	Priv. Ins	Pub. Ins	Sector
Return on assets	0.5%	16.1%	9.9%	-5.6%	22.6%	12%
Return on Equity	1.4%	16.3%	13.5%	-20.5%	22.8%	16.6%

Source: BNR, Financial Stability Directorate

Insurance sector liquidity

The liquidity of the insurance sector was satisfactory and capable of supporting business growth and paying-off liabilities. Between June 2015 and June 2016, overall liquid assets to current liabilities—an indicator of liquidity—decreased from 266 percent to

Figure 25: Liquidity ratio



236 percent, due to significant increase of current liabilities (Figure 25). Nevertheless, this liquidity position in the insurance sector was still far above the regulatory limit of 120 percent. BNR will continue to monitor and ensure that insurers have quality liquid assets needed to meet unexpected but plausible claims.

Source: BNR, Financial Stability Directorate

Pension Sector performance

The pension sector's assets continued to grow in the year ended June 2016, thanks to increased contributions and investment returns. Between June 2015 and June 2016, total assets increased by 7% from Frw 529 billion in June 2015 to Frw 567 billion in June 2016. The increase is mainly attributed to increased contributions and investment income. The total contributions and investment income also continued to expand (Table 12). Between June 2015 and June 2016, total contributions increased by 11% from FRW 61 billion to FRW 68 billion. Similarly, between June 2015 and June 2016, the investment income increased by 36% from FRW 25 billion to FRW 34 billion due to some quoted equities, government securities and term deposits that performed well.

Table 12: Pension sub-sector performance

Description	June 2015	June 2016	% change
Total assets	529	567	7
Total contributions	61	68	11
Total benefits paid	15	15.9	6
Total investment income	25	34	36

Source: BNR, Financial Stability Directorate

The investment allocation of pension funds has broadly changed in June 2016 (Table 13). Fixed income securities and debt account for the highest share in the portfolio investment allocation of pension funds. The total exposure to banks and to sovereign added up to 41 per cent in June 2016 from 40 percent in June 2015. In addition, due to the long-term horizon of pension funds, equity investments generally represents a higher share of investment portfolio (38 percent).

Table 13: Pension Fund investment mix, percentage share

Particular (% share)	June, 2015	June, 2016	Change (Jun- 16/Jun-15
Fixed income investments			
Deposits	24%	24%	17%
T. Bonds / T.Bills	16%	17%	21%
Property investments	23%	21%	4%
Variable income investments			
Equities	37%	38%	19%
Corporates Bonds	1%	0%	0%

Source: BNR, Financial Stability Directorate

Payment Systems Infrastructure

The BNR operates the "Rwanda Integrated Payment Processing System (RIPPS). The RIPPS The Automated Transfer System (ATS) and the Central Securities Depository (CSD). The ATS also comprises of the Real Time Gross Settlement system (RTGS) function, mainly for large value and time critical payments and the Automated Clearing House (ACH) which provides clearing and netting facilities for a range of low value electronic instruments including direct debits, direct credits and cheques. To facilitate trade within the region, Rwanda Integrated Payment Processing System (RIPPS) was upgraded to enable linkage to Regional cross border Payment Systems, namely the COMESA Regional Payments and Settlement System (REPSS) and the East Africa Payment Systems (EAPS).

During the period under review (June 2015-June 2016), the BNR managed the Automatic transfer system (RTGS and CSD) and settled transactions smoothly without any major disruptions. Both RTGS and CSD operated in accordance to their design. In terms of volume of instructions, customer transfers have increased by 19%, from 2,088,607 end June 2015 to 2,495,712 end June 2016 while interbank transfers have increased by 53% from 11,546 to 17,708. In-terms of value, interbank transfers increased by 30% from Frw 1,976.3 billion end June 2015 to Frw 2,576.8 billion end June 2016.

In addition to this Automatic Transfer Payment system managed by BNR, the national payment system also comprises of card based payment instruments like ATM debit and credit cards. Between June 2015 and June 2016, the number of ATMs and POS increased by 10 percent from 361 to 398 and by 27 percent 1,339 to 1,707 respectively. This strong increase in POS reflects increased demand of POS by merchants and their introduction by two new banks. The number of cards slightly increased by 4 percent from 658,024 to 685,385. The transactions on ATMs and POS also increased. Between June 2015 and 2016, the value transacted through ATMs increased by 10 percent to Frw 188 billion while the volume transacted increased by 1 percent to 3,719,152. Through POS, the volume and value increased by 39 percent and by 84 percent respectively to 269,241 and Frw 16 billion during the period under review.

Generally, overtime participants in RTGS have held sufficient funds to settle their transactions, which limits liquidity risk related to the payment system. The turnover ratio of banks has oscillated between 5 and 2. The turnover ratio (TOR) is a comparison between outgoing transactions and opening balances of RTGS participants. It simply shows the financial capacity of participants to settle their transactions without delay. A turnover of 2, means a participant has twice as much of the funds required to settle his payments in the system. For period ended June 2016, all participants together

have a turnover of over 2.5 percent (Table 14) meaning that participants have enough liquidity in the payment system and that liquidity risk emanating from the payment system is moderate.

Table 14: RTGS Turnover rate

	End June 2016
Opening Balance of RTGS	121,182,577,698
D. 11 M	Debit
Daily Transactions	48,558,448,356
Turnover ratio (%)	2.5

Source: BNR, Financial Stability Directorate

Arrangements to handle liquidity risk are in place: In March 2016, the BNR introduced the Intra Day Liquidity Facility (ILF) in order to mitigate liquidity risk. The ILF is meant to provide liquidity support for any RTGS participating institutions that may encounter short-term liquidity shortage, but solvent. Given the long-liquidity position held by RTGS participant, the ILF facility has not been utilized since its adoption.

Financial crisis resolution framework

Substantial progress on strengthening Rwanda's resolution and crisis management framework has taken place over the past year. The first step involved enhancing the legal and regulatory framework to a foundation for crisis prevention. In regard to this, the central bank law, the banking law and insurance law are under review. The second step involved strengthening the supervision function (both on-site and off-site) and the development of the implementing regulations as well. The third element involved establishing of crisis preparedness frameworks— mainly putting in place tools/institutional arrangements to prevent and deal with financial stress or crisis. Below are some of the crisis preparedness frameworks put in place during the last one year.

The Emergency Liquidity Facility (ELF) is available since November 2015 to support banks that may face a rapidly evolving liquidity crisis (high demand of deposits). The facility is meant to prevent any crisis that may be related to liquidity shortage. So far, no bank has applied for ELF as all banks continue to hold long liquidity positions. The ELF framework spells out four conditions for a bank to be eligible to access the facility: A bank should be adequately capitalized as required by the capital adequacy regulation; should have no more eligible collateral admitted for the Standing Liquidity Facility; a bank should prove that it is experiencing transitory liquidity distress; and; a bank should be below the liquidity ratio as determined in the liquidity ratio regulation.

To ensure safety of depositors' funds in the event of bank failure, the Deposit Guarantee Fund framework was established and will start operations in the first quarter of 2017. Following the Deposit Guarantee Fund (DGF) Law, enacted earlier in 2015, the regulation implementing it was gazetted in July 2016. This regulation set contributions at 0.1% of eligible deposits by contributing banks and microfinance institutions. The regulation provides also that the Fund shall cover Frw 500,000 per insured depositor in case a contributing bank or microfinance is declared bankrupt. Under this regulation, Banks and MFIs are supposed to start contribution from the first quarter of 2017.

Further to the implementation of the Law on Deposit Guarantee Fund for banks and microfinance institutions, the Ministerial Order establishing the Advisory Committee of the Deposit Guarantee Fund has been gazetted. This Order appoints members of the Advisory Committee of the fund: 1° the Director General of Financial Sector Development at the Ministry of Finance and Economic Planning, Chairperson; 2° the Executive Secretary of the Rwanda Bankers Association, Vice Chairperson; 3° the Director General of the Financial Stability at the National Bank of Rwanda; 4° the Director General of the Rwanda Cooperative Agency; 5° the Executive Secretary of the Association of Microfinance

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⁸ Contributions shall be invested in TB and Bonds or in any other investment determined by the National Bank of Rwanda

Institutions in Rwanda; 6° the Head of the Fund at the National Bank of Rwanda, Secretary.

The Financial Stability Committee of BNR continues to be a decision making committee on financial stability matters. This committee convenes every end of a quarter to assess stability of the sector, discuss vulnerabilities and risks underlying the financial sector and taking proactive decisions to mitigate these risks. Going forward, a Prime Ministers Order establishing a National Financial Sector Coordination Committee (FSCC) is underway to improve coordination among different regulators and government on financial stability matters, especially in-times of crisis or financial sector stress. The Permanent Members of the Committee are expected to be the Governor of the BNR, Chief Executive of the CMA, and the Minister of Economic Development and Finance.

Conclusion

The Rwandan financial system remains sound, resilient and continues to perform its functions effectively. Banks and MFIs capital and liquidity buffers are strong relative to current regulatory minimums. The asset quality of Rwanda's banking system remains healthy, despite a slight increase in NPLs in June 2016. Banks' loan loss provisioning level has significantly increased compared to last year. The foreign exchange exposure of Rwandan banks remain in check and within the regulatory prudential boundaries. Results from BNR's stress test done in June 2016 suggest that banks in Rwanda would to a large extent be able to withstand adverse external and domestic shock, thanks to significant capital buffers it holds. However, as mentioned, the Non-banking financial sector remains strong, but requires monitoring due to slow down in their growth and their important linkages to banks and capital market. The consolidated balance sheet of insurance sector and pension funds still reflect that they are financially stable as the comparative levels of premiums written, claims paid and expenses at sector level, there were no major risk factors identified as immediate threat to liquidity.

The financial sector is supported by a robust and vibrant payment system. The payment system infrastructure continue to operate smoothly with moderate liquidity and operational risks. Generally, overtime participants in RTGS have held sufficient funds to settle their transactions, which limits liquidity risk related to payment system. The BNR's introduction of the Intraday Liquidity Facility (ILF) minimizes further the liquidity risks from the payment system.

Apart from the financial infrastructure development, the sustained economic growth will continue to be the foundation of the development and stability of the financial system amidst the exchange rate volatility and lower commodity prices prospects which have minimal direct impact on the stability of the financial system as mentioned.

However, a weak global economic outlook remains a key risk to Rwanda's economy and financial system. In October 2016, the IMF revised downwards the Global growth projection for 2016 by 0.1 percentage point to 3.1 percent. A subdued outlook for advanced economies is projected as the impact of Brexit is unclear and related trade arrangements between the United Kingdom and the European Union is uncertain. The slowdown of the global economy is likely to further suppress commodity prices and consequently pose foreign exchange pressures for emerging and developing countries. Amidst a weaker global economy, BNR will continue pursuing financial stability through regular monitoring and measuring external shocks and adopting optimal mitigating measures in form of supervision and policy.

END