



**National Bank of Rwanda**

## **2011 FINANCIAL STABILITY REPORT**



**JUNE 2012**

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## Acronyms

|              |  |              |   |
|--------------|--|--------------|---|
| <b>ACH</b>   | : Automated Clearing House               | <b>POS</b>   | : Point of Sale                               |
| <b>AFF</b>   | : Access to Finance Forum                | <b>RAMA</b>  | : La Rwandaise d'Assurance Maladie            |
| <b>ASEAN</b> | : Association of Southeast Asian Nations | <b>RIPPS</b> | : Rwanda Integrated Payment Processing System |
| <b>ATM</b>   | : Automatic Teller Machine               | <b>ROA</b>   | : Return on Assets                            |
| <b>ATS</b>   | : Automated Transfer System              | <b>ROE</b>   | : Return on Equity                            |
| <b>BCP</b>   | : Basel Core Principles                  | <b>RSE</b>   | : Rwanda Stock Exchange                       |
| <b>BNR</b>   | : National Bank of Rwanda                | <b>RSSB</b>  | : Rwanda Social Security Board                |
| <b>CAR</b>   | : Capital Adequacy Ratio                 | <b>RSSP</b>  | : Rural Sector Support Program                |
| <b>CDS</b>   | : Credit Default Swap                    | <b>RTGS</b>  | : Real Time Gross Settlement System           |
| <b>CRB</b>   | : Credit Reference Bureau                | <b>RWA</b>   | : Risk Weighted Assets                        |
| <b>CSD</b>   | : Central Security Depository            | <b>SACCO</b> | : Savings And Credit Co-operative             |
| <b>CSR</b>   | : Caisse Sociale du Rwanda               | <b>SME</b>   | : Small and Medium Enterprise                 |
| <b>EAC</b>   | : East African Community                 | <b>SMP</b>   | : Security Market Program                     |
| <b>EBA</b>   | : European Banking Authority             | <b>STP</b>   | : Straight-Through Processing                 |
| <b>ECB</b>   | : European Central Bank                  | <b>USA</b>   | : United States of America                    |
| <b>FSAP</b>  | : Financial Sector Assessment Program    | <b>WEO</b>   | : World Economic Outlook                      |
| <b>FX</b>    | : Foreign Exchange                       |              |   |
| <b>GDP</b>   | : Gross Domestic Product                 |              |   |
| <b>GFSR</b>  | : Global Financial Stability Report      |              |   |
| <b>ICP</b>   | : Insurance Core Principles              |              |   |
| <b>IMF</b>   | : International Monetary Fund            |              |   |
| <b>NOP</b>   | : Net Open Position                      |              |   |
| <b>NPL</b>   | : Non-Performing Loan                    |              |   |
| <b>NSSF</b>  | : National Social Security Fund          |              |   |

## Foreword

The National Bank of Rwanda (BNR) proudly introduces the first edition of the Financial Stability Report (FSR). One of the mandates of BNR is to maintain financial system stability with a view to encouraging and promoting the development of the productive resources of Rwanda. A stable financial system is one which creates a favourable environment for savers and investors, encourages efficient financial intermediation and the effective functioning of markets, and hence, promotes investment and economic growth. The financial stability analysis carried out by BNR involves continuous assessment of potential systemic risks to the Rwandan financial system and the development of policies to mitigate those risks.

This Financial Stability Report (FSR) is the first of its annual series to be released around June each year. The report which focuses mainly on the three years period ending December 2011, analyses the performance and condition of the Rwandan financial system comprising of banks, insurance and pension companies, and Microfinance institutions including SACCOs. In so doing, the report presents a scan of the environment, discusses sector achievements vis-à-vis keys indicators, and provides updates on financial markets, payment system and regulatory frameworks. The data used for the analysis are companies' audited financial statements for the year ended, which by law are released by 30<sup>th</sup> April of the following year.

During the last three years, Rwanda has achieved high growth and macroeconomic stability despite a challenging international and regional economic environment. The banking system registered continuous growth in assets and was in a financially sound condition with a capital adequacy ratio of 25% percent as of December 2011, far higher than the statutory minimum of 15 percent. Bank profitability improved with returns on both assets and equity rising since 2009. Profitability was enhanced by an improvement in asset quality manifested by the decline of non-performing loans ratio.

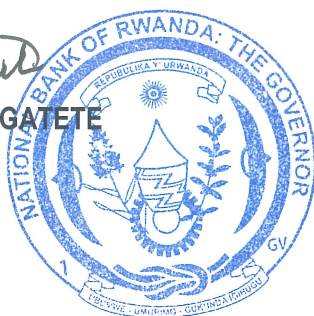
The microfinance industry recorded a positive performance during the last three years with an increase of 37.6% of assets in 2011 compared to 2010. The significant improvement in microfinance sector is mainly a result of the introduction of UMURENGE SACCOs in 2009 which contributed to the expansion of the industry's balance sheet and financial inclusion.

Over the last three years, the insurance sector performance improved progressively. The total assets increased by 8 percent in 2011 compared to 2010 and total capital increased by 6 percent for the same period. The gross premiums, net profit, and liquidity position also recorded a positive growth due to the supervisory reforms undertaken over the last three years.

The pension sector assets (excluding private pension funds) continued to grow with a positive trend of 27 percent in 2011 compared to 2010. Positive prospects are expected after the enactment of the new pension law that will give rise to the establishment of private pension schemes.

Overall, the Rwandan financial system continued to be sustained and resilient to different shocks due to the strong regulatory framework followed by prudential policies and regular supervision. The prudential indicators and stress testing results suggest that the Rwandan financial system is sound and stable, and the outlook is positive. Nevertheless, the risks remain with a relatively high non-performing loans level and credit concentration beside rough global environment. The National Bank of Rwanda is committed to continue monitoring potential systemic risks which may rise from the aforementioned sources and to foster competition, efficiency and growth of the financial system. Furthermore, the BNR will ensure that cost effective services are provided and financial inclusion promoted as an important success factor to poverty reduction.

  
**Amb. Claver GATETE**  
Governor



## Macroeconomic and financial environment in 2011

Despite various policy steps to contain the euro area debt crisis and banking problems, the global financial stability was still threatened by intensifying strains in the euro area and fragilities elsewhere during the year 2011. In advanced economies, financial conditions have deteriorated, growth prospects have dimmed, and downside risks have escalated. However, in sub-Saharan Africa, especially in East African region, the economic growth remains relatively robust though risks to regional economic stability may arise from rapid exchange rate depreciation, rising inflation and uncertainties surrounding the Euro sovereign debt.

### Global economic conditions

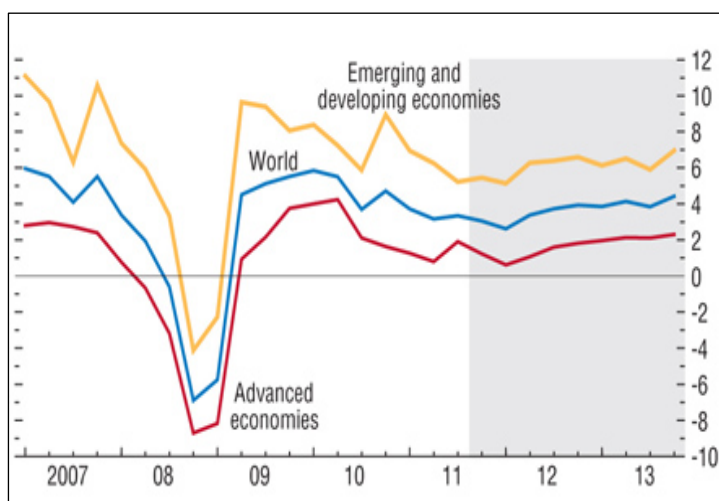
The prospects for the global economic growth dimmed and risks sharply escalated during the year 2011, as the euro area crisis entered an unsafe new phase. Global GDP growth stood at an annualized rate of 3.8 percent decelerating from 5.2 percent in 2010. According to the IMF World Economic Outlook (WEO), global output is projected to further slow to

3.3 percent in 2012 (**Table 1 and Figure 1**). This is largely because the euro area economy is expected to go into a mild recession in 2012 as a result of the rise in sovereign yields and the impact of additional fiscal consolidation.

According to the IMF (WEO Updates, January 2012), the GDP growth in advanced economies reduced from 3.2 percent in 2010

to 1.6 percent in 2011 and it is expected to expand by 1.2 percent in 2012. In the USA, it fell to 1.8 percent in 2011 from 3.0 percent in 2010 and is expected to remain unchanged at 1.8 percent in 2012. The Euro

**Figure 1 Global GDP Growth**



Source: IMF, WEO Updates, January 2012



zone economic growth slowed to 1.6 percent in 2011 against 1.9 percent in 2010 and is expected to downgrade to -0.5 percent in 2012.

Growth in emerging and developing economies slowed more than forecast due to a greater-than-expected effect of macroeconomic policy tightening or weaker underlying growth. The GDP growth declined to 6.2 percent in 2011 from 7.3 percent in 2010 and is expected to slow to 5.4 percent in 2012 because of the worsening external environment and weakening of internal demand.

For the African continent, the economic growth was relatively robust in 2011 and the year 2012 looks set to be another encouraging one especially for most Sub-Saharan African economies. The economic growth in Sub-Saharan Africa was estimated at 4.9 percent in 2011 from 5.3 in 2010 reflecting mainly strong domestic demand but also elevated commodity prices. The growth is projected to be higher for 2012 with 5.5 percent growth owing to one-off boosts to production in a number of countries, favorable commodities prices, large scale infrastructure development, improvement in services and industries, and improved economic policies. However, the increase in global food and fuel prices amplified by serious drought in some parts and inflation rose in a number of countries. Beyond this, uncertainties in the global recovery threaten to weaken export and growth prospects.

According to the IMF (WEO Updates, January 2012), the most immediate policy challenge for global economic growth is to restore confidence and put an end to the crisis in the euro area by supporting growth, while sustaining adjustment, containing deleveraging, and providing more liquidity and monetary accommodation.

Table 1 Global economic growth and projections (in percentage)

|  |            |            | Projections |            |
|--|------------|------------|-------------|------------|
|  | 2010       | 2011       | 2012        | 2013       |
| <b>World Output</b>                      | <b>5.2</b> | <b>3.8</b> | <b>3.3</b>  | <b>3.9</b> |
| <b>Advanced Economies</b>                | <b>3.2</b> | <b>1.6</b> | <b>1.2</b>  | <b>1.9</b> |
| United States                            | 3          | 1.8        | 1.8         | 2.2        |
| Euro Area                                | 1.9        | 1.6        | -0.5        | 0.8        |
| Japan                                    | 4.4        | -0.9       | 1.7         | 1.6        |
| United Kingdom                           | 2.1        | 0.9        | 0.6         | 2          |
| Canada                                   | 3.2        | 2.3        | 1.7         | 2          |
| Other Advanced economies                 | 5.8        | 3.3        | 2.6         | 3.4        |
| <b>Emerging and Developing Economies</b> | <b>7.3</b> | <b>6.2</b> | <b>5.4</b>  | <b>5.9</b> |
| Central and Eastern Europe               | 4.5        | 5.1        | 1.1         | 2.4        |
| Commonwealth of Independent States       | 4.6        | 4.5        | 3.7         | 3.8        |
| Developing Asia                          | 9.5        | 7.9        | 7.3         | 7.8        |
| Latin America and the Caribbean          | 6.1        | 4.6        | 3.6         | 3.9        |
| Middle East and North Africa (MENA)      | 4.3        | 3.1        | 3.2         | 3.6        |
| Sub-Saharan Africa                       | 5.3        | 4.9        | 5.5         | 5.3        |

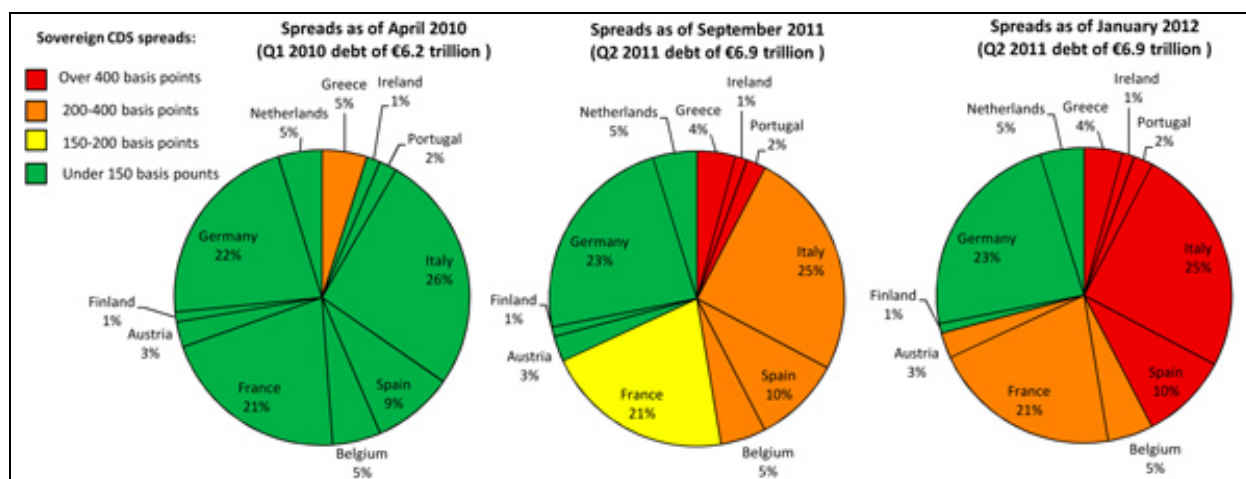
**Source:** IMF, World Economic Outlook Update, January 2012

## Sovereign debt and banking system problems in European countries

The euro area debt crisis has intensified further, requiring urgent action to prevent highly destabilizing outcomes. Sovereign bond yields in the periphery rose sharply, especially at short to medium term maturities, inverting yield curves in 2011 and signaling increased concerns about financing and default risks. Policy packages have been insufficient to contain adverse feedback loops, thus trapping some sovereigns in a “bad equilibrium” as long term foreign investors shed exposures. Domestic institutions were unable to fill the gap, and the European Central Bank (ECB) became a critical support for peripheral sovereign debt through its Securities Markets Program (SMP). As the crisis intensified, it spilled from the periphery into the core with yields rising and spreads widening including the sovereign debt of Austria and France. As of end-2011, more than two-thirds of euro area sovereign debt had credit default swap (CDS) spreads of over 200 basis points (**Figure 2**). Since September 2011, ratings downgraded and negative

outlooks across a wide range of euro area sovereigns have also contributed to the rise in yields. Despite of recent improvement in market conditions, fundamental challenges remain.

Figure 2 Euro Area Government Bond Markets (In percent of total euro area government debt)



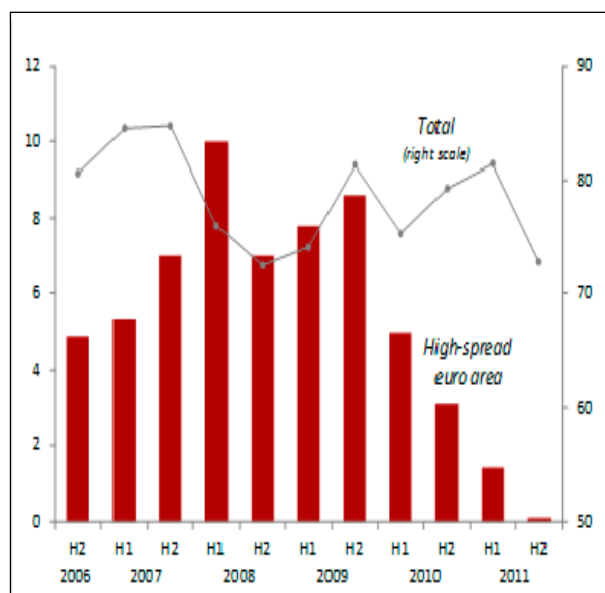
Source: IMF, Global Financial Stability Report (GFSR) Update, January 2012

Sovereign strains also spilled into the euro zone banking system as some funding channels closed, and interbank spreads widened. Banks' access to term funding was sharply curtailed and even short-term markets came under strain as lending tenors were reduced from months and weeks to days. The U.S. money market funds dramatically scaled back credit to euro area banks (Figure 3). This prompted many of those banks to sell U.S. dollar assets.

Pressures on European banks have escalated, reflecting the increase in sovereign stress and the closure of many private funding channels. To protect banks from such negative shocks, global steps toward a safer financial system are essential. In this regard, the European Banking Authority (EBA) has initiated a process calling for banks to reach higher capital ratios. It judged €85 billion in additional capital to be necessary (excluding €30 billion already programmed for Greece) to reach a 9 percent core Tier 1 ratio and provide an adequate sovereign capital buffer (Figure 4).

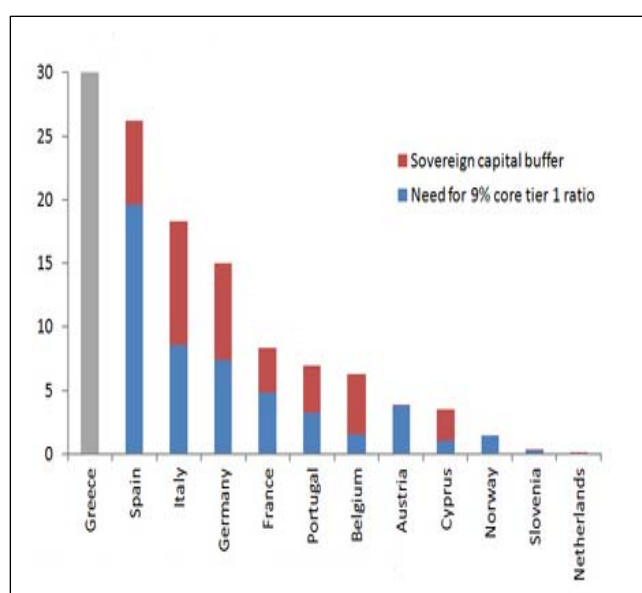


**Figure 3 U.S. Prime Money Market Exposures to Banks (Percent of total assets)**



Source: IMF, GFSR Updates, January 2012

**Figure 4 European Bank Capital Needs (In billions of euros)**



Source: IMF, GFSR Updates, January 2012

The global economy uncertainty following fiscal deficit in the United States and debt crisis in some member countries of the European Union could reduce economic growth in some countries, including Rwanda and EAC region that depends on fuel imports and few commodity exports. However, despite the challenging global and regional economic environment, Rwanda managed to sustain dynamic economic activities, recording high performance in all sectors. Although the risks from an uncertain global economy and further price shocks could bring lower growth and higher inflation, the Rwandan economy is again expected to experience a positive growth during next year based on expected strong performance in the agriculture, service, and industry sectors.

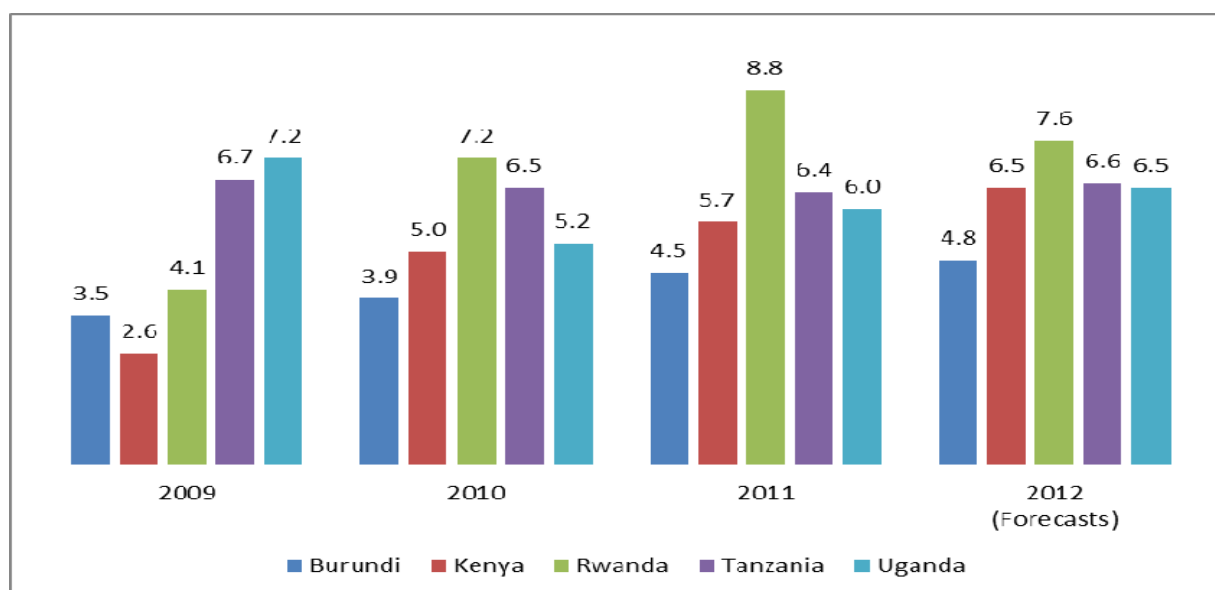
Furthermore, following the pre-crisis financial environment analysis, the group of twenty (G-20), through Basel Committee on Banking Supervision and Financial Stability Board, recommended global financial regulatory reforms to create a stronger international regulatory framework to safeguard financial stability. Therefore, individual countries should respond to these recommendations by strengthening their respective financial sector regulatory regimes to ensure a much safer financial system. However, the recommended reforms need to be adapted to the respective national structures. For the part of Rwanda, the National

Bank of Rwanda continued to employ radical reforms to ensure that financial system is robust and strong, keeping in mind the EAC regional harmonization process on regulation and supervision of the financial sector as a whole. The reforms included the legal and regulatory framework, supervisory tools, modern payment systems and the private credit reference bureau.

## Developments in the East Africa region

The economic growth among the East African Community (EAC) members continued to improve during the last three years (**Figure 5**). The average EAC GDP growth increased from 5.6 percent in 2010 to 6.3 percent at the end of 2011. The decline in 2009 was in part caused by the effects of the global financial crisis, high fuel prices and draught among others.

Figure 5 GDP growth in EAC countries (in percent)

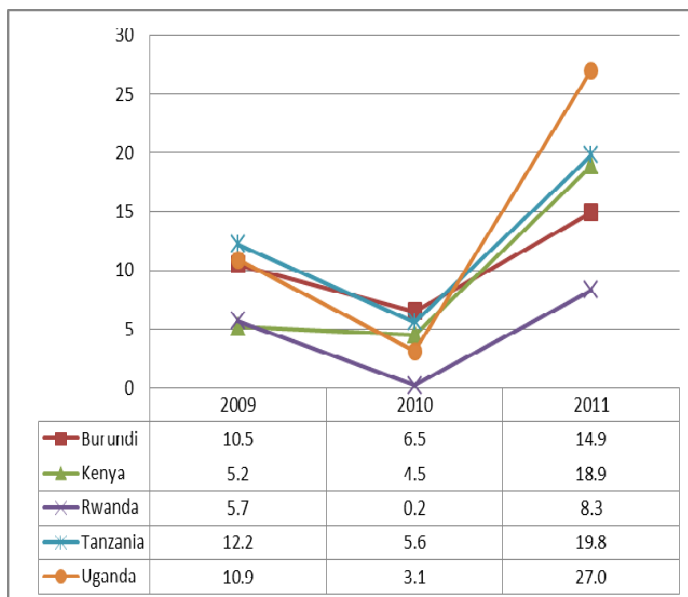


Source: IMF, WEO report April 2011; BNR, Monetary Policy Department

## *Inflation*

After the decline of inflation during 2009 and 2010 with average annual inflation of 8.9 percent and 4.0 percent respectively, EAC region experienced a high inflation throughout 2011 with an average annual inflation of 17.8 percent at the end of 2011. As shown by the **Figure 6**, all EAC countries, except Rwanda, ended 2011 with double digit inflation. The three largest economies in the region, Kenya, Tanzania and Uganda, experienced highest annual inflation at the end of 2011 with 18.9%, 19.8% and 27%

**Figure 6 Annual Inflation trend in EAC countries (in percent)**



**Source:** EAC Central Banks' websites

respectively. The primary cause of high inflation in EAC region had been the global commodity prices that drove up food and fuel prices. Poor regional weather conditions (drought) and the after effects of the global crisis (fiscal deficit in the United States and debt crisis in some member countries of the European Union) also contributed to a jump in EAC inflation.

## *Cross border financial sector inter-linkages in EAC region*

Financial sector linkages have risen in the EAC region during recent years dominated by the expansion of Kenyan financial institutions in the region. During last three years, four Kenyan banks and three insurance companies have opened up subsidiaries in Uganda (as reported by Bank of Uganda in its financial stability report), and two Kenyan banks opened up subsidiaries in Rwanda during the same period. In addition, major international banks have subsidiaries in various East African Community (EAC) countries. The increase in cross-border financial services in East Africa is crucial for regional growth and financial system development as it improves competition and facilitates trade and financial flows within the region. To strengthen cooperation among bank regulators in the region, the EAC Central Banks signed memoranda of understanding among them which will enhance the sharing of information and skills.

### *Performance of banks in the region*

Banks in East Africa were well capitalized overall, with the average regulatory capital to risk-weighted assets ratio at around 21.1 percent as of end December 2011. For all banks of EAC countries this ratio has been increasing during the last three years. The Rwandan banking system has highest ratio as shown in **Appendix 1**. Bank asset quality in East Africa improved during the last three years with the ratio of non-performing loans (NPLs) to total gross loans below 10 percent for all the East African countries. Despite the improvement experienced in 2011 with a decline in NPL ratio from 11.3 percent in 2010 to 8% in 2011, Rwanda still recorded the highest NPL ratio in the EAC region due to the negative impact of 1994 genocide on Rwandan financial sector. Banks' profitability remained largely satisfactory in EAC countries throughout the three years with an average return on equity and asset of 23.7 percent and 3.4 percent respectively. Kenya's banking sector was the most profitable with average return on equity and assets of 30.3 percent and 3.4 percent respectively in December 2011. In Rwanda, these ratios were 14% and 2.9% respectively as of end December 2011.

### **Rwanda's macro financial environment**

During the last three years, Rwanda achieved high growth and macroeconomic stability despite a challenging international and regional economic environment. Rwanda's economy continued to demonstrate resilience to regional and global shocks due to the country's stable macroeconomic framework resulting from important economic reforms and more coordinated macroeconomic policy management.

The Rwandan economy experienced a continuous increase in GDP growth from 2009 to 2011 driven by good performance in all economic sectors of which agriculture grew by 8.2 percent, services sector by 7.2 percent and industry sector by 15 percent.

Rwanda's inflation during 2009 and 2010 was declining. Inflation stood at 5.7 percent in 2009 and at 0.2 percent in 2010. However, inflation in Rwanda increased over the year 2011 due to high oil and food prices and the drought in the region. Rwanda has been able to contain inflation at one digit which stood at 8.3 percent at the end of the year 2011. This was made possible through monetary and fiscal policies shaped to minimize risks and keep inflation under control despite global and regional high inflationary pressures.

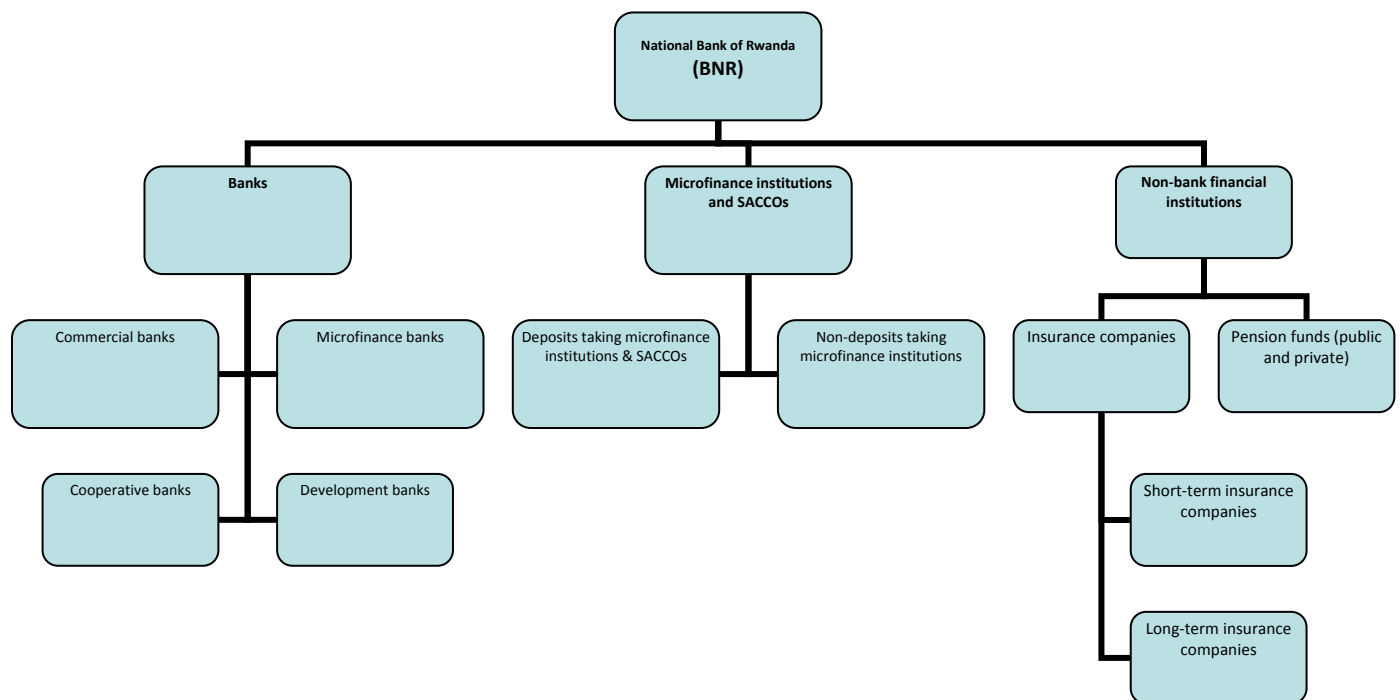


## Financial stability developments and trends

### Structure of the Rwanda's financial system

In 2011, Rwanda's financial sector consisted of 14 banks, 497 microfinance institutions and SACCOs, and 49 non-bank financial institutions. As shown in **Figure 7**, banks comprise of commercial banks, microfinance banks, development banks and cooperative banks (regulated under the Banking Law) and microfinance institutions and SACCOs include taking deposits microfinance institutions and non-taking deposits microfinance institutions (regulated under Microfinance Law), while non-bank financial institutions consist of insurance companies and pension funds.

Figure 7 Structure of the Rwandan financial sector as at December 2011



## *Banking system*

At the end of year 2011, the Rwandan banking system was comprised of nine commercial banks and six specialized institutions (including 3 microfinance banks, 1 development bank, 1 cooperative bank and 1 discount house), accounting for 82.3 percent and 17.7 percent of the banking system respectively. Two bank opened up subsidiary in Rwanda since 2009 and two microfinance institutions upgraded to microfinance bank while one SACCO upgraded to cooperative bank status during the year 2011. However, the Rwandan banking system remained small and concentrated with three largest banks together holding over 50% of the total system assets. Rwandan banks are generally well capitalized with the overall regulatory capital adequacy ratio (CAR) standing at 25 percent as of 31<sup>st</sup> December 2011 and still above regulatory minimum required of 15%. This sound capitalization enables banks to mitigate the still slightly higher proportion of nonperforming loans (NPL).

## *Microfinance institutions*

At the end of year 2011, the Rwandan Microfinance sector was comprised of 497 Institutions including 486 SACCOs and 11 Private Limited Companies. The development in Microfinance industry during the period under review was characterized by the growth of UMURENGE SACCOs that brought a significant improvement with 37.6 percent increase of the total assets of the sector. However, the microfinance sector faced the challenges of poor governance and weak management. Specifically, weak management information system, insufficient security of funds when transporting cash to and from banks (most of MFIs are located in rural areas), and low level of financial literacy of the population, are among problems faced by MFIs. Some initiatives were taken aiming at promoting the financial inclusion, including "Access to Finance Forum" which is a platform whereby stakeholders discuss barriers hindering the access to formal financial services, both at demand and supply side. The consolidation of small SACCOs into viable SACCOs was seen as a way of strengthening the sector; in this regard some SACCOs were merged either with UMURENGE SACCOs or with other SACCOs within their respective networks. A sustainability study was carried out to determine the best organizational structure and the supervisory approach which could fit better the new microfinance institutions. In line with the recovery of non-performing loans, a committee in charge of assisting MFIs in the recovery of debt arrears of microfinance institutions from defaulters was set

up at district level and Ministerial Instruction governing this organization was published in Official Gazette in August 2011.

### *Insurance companies*

As of 31<sup>st</sup> December 2011, the Rwandan insurance sector was comprised of six private insurers and two public insurers, making a total of eight insurance companies, 5 brokers and 105 insurance agents and loss adjusters. As at the end of year 2011 the private insurers registered a gross premium of Rwf 32.0 billion which grew by 9 % compared to 2010 and recorded an underwriting loss of Rwf 440 million indicating a deterioration of 70% compared to 2010. Similarly, profit before tax increased by 43% compared to 2010. The Public insurers, providers of medical insurance, recorded gross premiums of Rwf 20.0 billion or 2% decrease compared to 2010 with underwriting profit of Rwf 8.6 billion or 0.4 % increase compared to 2010. Net profit also decreased by 3% during the same period.

### *Pension funds*

The pension sector is comprised of the National Social Security Fund (NSSF/CSR), which merged with RAMA to form Rwanda Social Security Board (RSSB) and about 40 private/occupational pension funds managed by insurance companies as well as in-house pension schemes by some institutions. The National Social Security Fund (NSSF) commonly known as CSR covers largely salaried workers representing 7% of the working population in Rwanda. The pension coverage is still low compared to middle income economies such as South Africa whose coverage rate is 25%. The pension sector assets (excluding private pension funds) continued to grow with a positive trend reaching Frw211.57bn in 2011 from Frw166.78bn in 2010, resulting into a percentage increase of 27%

### *Financial Market*

The Rwandan financial market is mainly composed of Money markets, Securities markets and Foreign exchange markets (**Table 2**). The money markets dominate the Rwandan financial market with 92 percent (of which 60% is from repurchase agreements) of total outstanding amount. The securities market in Rwanda is dominated by Government bonds operations.

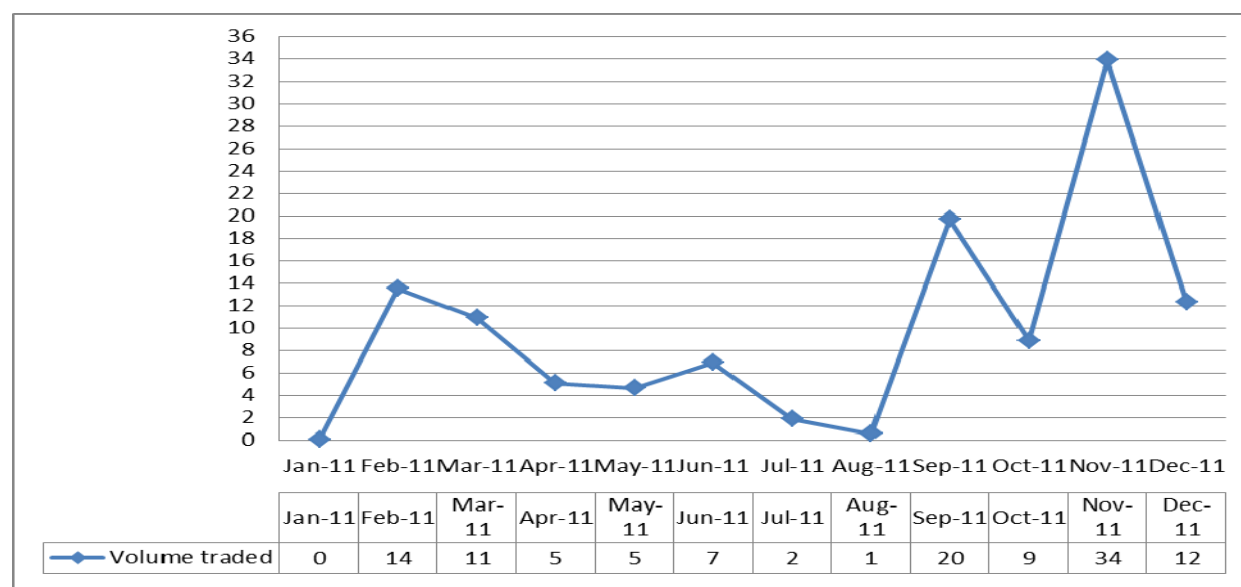
Table 2 Stage of development in domestic financial markets (Outstanding Amount in Millions of RWF)

| Period                          | 2009           | 2010           | 2011           |
|---------------------------------|----------------|----------------|----------------|
| <b>Money markets</b>            | <b>636,398</b> | <b>680,895</b> | <b>190,338</b> |
| Interbank                       | 549,044        | 518,095        | 395            |
| Treasury bill                   | 0              | 54,462         | 64,294         |
| Central bank bill               | 29,254         | 1,538          | 10,749         |
| Repurchase agreements (REPO)    | 58,100         | 106,800        | 114,900        |
| <b>Securities markets</b>       | <b>1,000</b>   | <b>16,000</b>  | <b>16,429</b>  |
| Government bonds                | 0              | 15,000         | 15,000         |
| Corporate bonds                 | 1,000          | 1,000          | 1,000          |
| Equity                          | 0              | 0              | 429            |
| <b>Foreign exchange markets</b> | <b>605</b>     | <b>233</b>     | <b>328</b>     |
| Spot                            | 605            | 233            | 328            |
| <b>TOTAL</b>                    | <b>638,002</b> | <b>697,127</b> | <b>207,095</b> |

Source: BNR, Financial Markets Department

With regard to the stock markets, the Rwanda Stock Exchange (RSE) established in 2010 counted 4 listed companies at the end of 2011. However, only two companies have been active on RSE with approximately 12.8 million at the end of December 2011 (Figure 8).

Figure 8 RSE transactions (in millions)



Source: BNR, Financial Markets Department

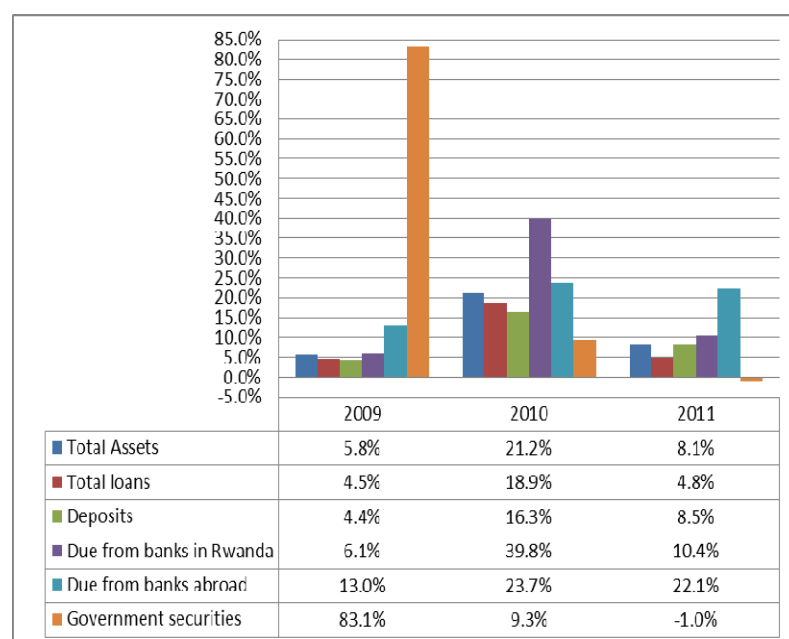
## Domestic macro prudential analysis

In this section the stability of the Rwandan financial system is assessed by analyzing a set of selected macro-prudential indicators for the financial sector (Banks, Insurances and Microfinance institutions).

### *Performance indicators in the banking sector*

Key indicators used in measuring the banking sector development continue to show strong asset growth, increased competition in the mobilization of deposits, increased loans portfolio and a generally robust banking system. Furthermore, the net profit in banking sector upgraded significantly during the last three years. Nevertheless, Rwandan banks felt the impact of the global crisis indirectly through pressures on liquidity and increased funding costs. The situation was reversed by the decreased level of NPLs caused by strong economic activities and improvement in the credit underwriting procedures. The **Figure 9** below shows the growth rate of the banking sector in terms of total assets and other main items of assets and liabilities during the last three years.

**Figure 9 Growth of assets and liabilities (share of total growth)**



The Banking sector registered continuous growth in total assets over the three years to 2011. In 2009 and 2011, there was a steady decrease in the growth proportion as compared to the growth proportion observed in 2010. Significant growth in the banking industry asset size was buoyed mainly by deposits, which also follow the same growth as that of assets over the years.

**Source:** BNR, Bank Supervision Department

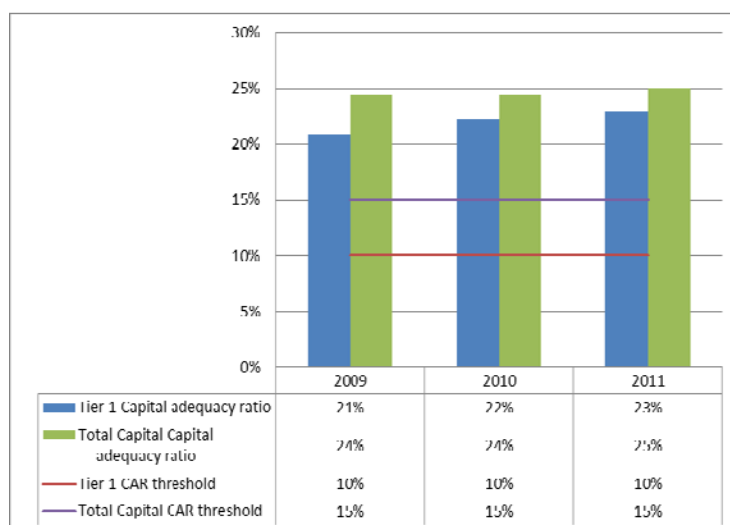
The proportion of growth of total loans significantly increased proportion in 2010 to 18.9% from 4.5% in 2009 and then decreased in 2011 to 4.8%. Government securities proportion of growth hugely increased in 2009, to reduce again in 2010 and 2011. While the proportion of growth of dues from banks abroad did not significantly change over the period, except in 2009 what registered a slight decrease, the proportion of growth of dues from banks in Rwanda, exceptionally increased from 2009 and decreased in 2010 and 2011. The detailed performance indicators of Rwandan banking sector are analyzed below in terms of capital position, asset quality, earnings and profitability, and liquidity.

## Capital position

The regulatory capital (total capital) to risk weighted assets (RWA) ratio served to assess the capital adequacy of the each individual bank and the banking sector as a whole, while the core capital (Tier 1 capital) to risk weighted assets ratio is useful for monitoring capital quality as it measures the most freely and immediately available resources to meet claims against deposit takers. A minimum Tier 1 capital to risk weighted assets ratio of 10% and minimum total capital to risk weighted assets ratio of 15% are imposed to all banks as tools to ensure that banks maintain adequate capital in relation to their risk assets thus protecting depositors' interests and promoting financial stability.

Rwandan banks remained well capitalized during the last three years (2009-2011). By end December 2011, conditions in the Rwandan banking sector continued to show signs of improvement and some positive developments were recorded during the period under review (Figure 10). Banks were adequately capitalized in terms of Tier 1 and total adequacy ratios, with both remaining well

**Figure 10 Banking capital adequacy as at 31 December 2011**



**Source:** BNR, Bank Supervision Department

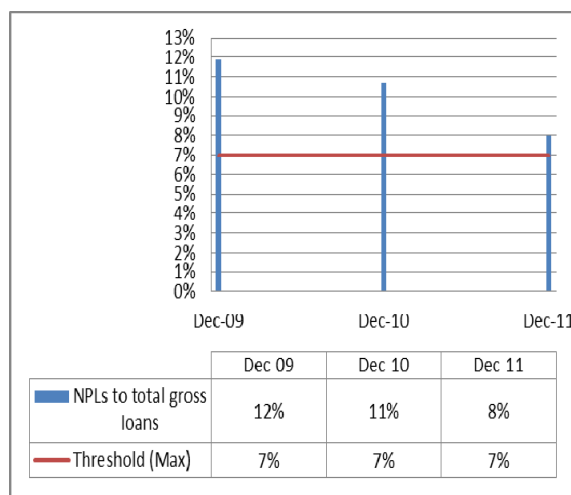
above the minimum prudential requirements of 10 per cent and 15 per cent respectively. The industry ratio of core capital to total risk weighted assets as of end December 2011 was 23% in terms of Tier 1 and 25% in terms of total capital. The key challenge for the banks going forward will be to maintain strong capital positions if real economic activity deteriorates. The strong capital position at the industry level provides a significant gauge of banks' capacity to withstand unexpected losses arising from credit and market risks. Without prejudice to the strong capital adequacy ratio of the banking industry, the National Bank of Rwanda is continuously vigilant in prudential supervision to ensure that early problems in banks irrespective of the size are detected and prudently addressed.

## Asset quality

The total assets of the banking system grew strongly during the last three years by around 66 percent from RWF 652 billion in 2009 to RWF 1,084 billion in 2011. Gross loans in the banking sector were around the RWF 631.2 billion at the end of fourth quarter 2011. On an annual basis, gross loans increased by 23.1% from RWF 512.8 billion end of December 2010 to RWF 631.2 billion as of 31st December 2011. The performance assessment of the asset quality in the Rwandan banking system focuses on the level of non-performing loans (NPLs ratio), credit concentration risk, and SME lending.

## Non-performing loans

Figure 11 Trend of NPLs ratio (in percent)



Source: BNR, Bank Supervision Department

The level of NPLs is a crucial element when assessing the health of the banking system and financial system as a whole. Therefore, the Non-Performing Loans to Total Gross Loans ratio is an important measure of the quality of the assets in banks' loan portfolios. In times of economic slowdown, loan repayments become constrained and thus asset quality tends to deteriorate. As per regulatory requirements, this situation would require banks to make additional provisions which in

turn have an impact on banks' capital. Normally, the reported NPLs in the banking system exhibit large variation among banks, partly reflecting different exposures to distressed sectors. During the last three years, the ratio of Non-performing loans to Gross loans in Rwandan banking sector improved by declining to 8% as of 31<sup>st</sup> December 2011 from 12% recorded in December 2009 (**Figure 11**). Although this ratio was still above the maximum threshold required ratio of 7%, there was seven institutions out of 15 which had their NPL rate this threshold.

The larger part of the portfolio impairment is from loans to commercial & hotel, followed by mortgages, manufacturing, and transport & warehousing related businesses (**Table 3**). At the industry level, the level of NPLs ratio above the maximum required ratio of 7% did not pose a systemic risk to financial stability and is being addressed by a strong capital buffer held by the industry. However, the National Bank has required the banks with high level of NPLs ratios to enhance their credit management system to curb further deterioration of credit portfolios.

**Table 3 Non-Performing Loans by activities sector as at 31 December 2011 (in 000s of RWF)**

| Sector                                    | Dec-10            | Share (%)    | Mar-11            | Share (%)    | Jun-11            | Share (%)    | Sep-11            | Share (%)    | Dec-11            | Share (%)    |
|---|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|
| 0001 : Non_classified activities          | 2,379,282         | 5.9          | 2,460,110         | 5.4          | 2,914,677         | 7.0          | 3,247,365         | 7.5          | 3,214,951         | 8.6          |
| 1000 : Agricultural, fisheries& livestock | 3,151,945         | 7.8          | 3,532,025         | 7.7          | 2,460,129         | 5.9          | 2,687,689         | 6.2          | 2,572,203         | 6.9          |
| 2000 : Mining activities                  | 0                 | 0.0          | 0                 | 0.0          | 12,475            | 0.0          | 0                 | 0.0          | 0                 | 0.0          |
| 3000 : Manufacturing activities           | 3,606,888         | 8.9          | 4,718,850         | 10.3         | 4,884,999         | 11.8         | 3,617,895         | 8.4          | 2,349,157         | 6.3          |
| 4000 : Water & energy activities          | 385,987           | 1.0          | 397,492           | 0.9          | 391,053           | 0.9          | 398,738           | 0.9          | 411,199           | 1.1          |
| 5000 : Mortgage industries                | 7,894,269         | 19.6         | 7,289,690         | 15.9         | 7,601,950         | 18.3         | 8,897,473         | 20.6         | 8,820,835         | 23.7         |
| 6000 : Commercial & hotel                 | 17,798,852        | 44.1         | 22,029,869        | 48.2         | 18,124,552        | 43.7         | 19,333,691        | 44.8         | 16,718,872        | 44.9         |
| 7000 : Transport & warehousing            | 3,792,708         | 9.4          | 3,891,935         | 8.5          | 3,700,054         | 8.9          | 3,766,073         | 8.7          | 2,424,575         | 6.5          |
| 8000 : OFI & Insurance                    | 100,602           | 0.2          | 96,815            | 0.2          | 106,766           | 0.3          | 91,524            | 0.2          | 79,481            | 0.2          |
| 9000 : Service sector                     | 1,260,182         | 3.1          | 1,310,023         | 2.9          | 1,272,192         | 3.2          | 1,154,511         | 2.7          | 672,036           | 1.8          |
| <b>TOTAL</b>                              | <b>40,370,715</b> | <b>100.0</b> | <b>45,726,809</b> | <b>100.0</b> | <b>41,468,847</b> | <b>100.0</b> | <b>43,194,959</b> | <b>100.0</b> | <b>37,263,309</b> | <b>100.0</b> |

Source: BNR, Credit Reference Bureau

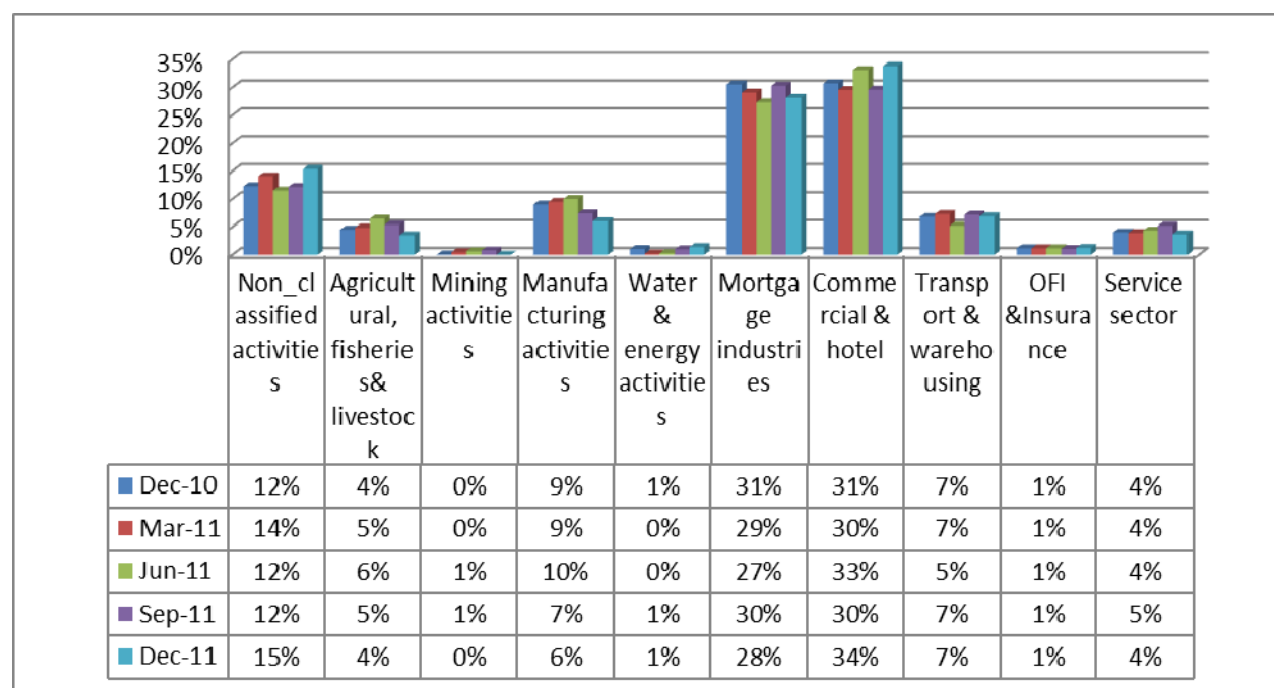
### *Credit concentration risk*

The credit concentration risk in asset portfolios is one of the major causes of bank distress both for individual institutions and banking system as a whole. It is therefore important to measure concentration risk in credit portfolios of banks that mainly arises from unexpected changes in macroeconomic and financial market conditions on the performance of borrowers. The BNR monitors credit concentration in the



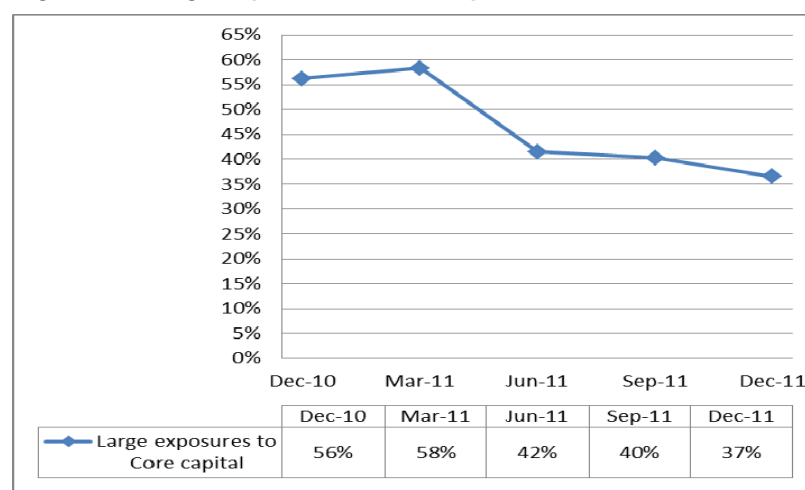
banking system to identify early signs of credit risk. For this purpose, in this report, the credit concentration risk is analyzed through large exposures to capital ratio and loan by sector of activities. As of 31<sup>st</sup> December 2011, Mortgages and Commercial & Hotels sectors accounted for the largest share of loans both totaling 62% followed by personal loans (non-classified activities), manufacturing, and transport sectors (**Figure 12**). In addition mortgages and commercial & hotels businesses were largest NPLs with 68.6% of NPLs as at end December 2011 while manufacturing and transports sectors came next. Therefore, the credit concentration is likely to be directed mainly on mortgage industry, commercial & hotels, manufacturing, and transports.

**Figure 12 Percentage of loans by sector of activities**



Source: BNR, Credit Reference Bureau

**Figure 13 Large exposure to core capital as at 31 December 2011**



Basically, when there is considerable concentration in the loan portfolio, banks become vulnerable to the failure of large borrowers. As far as the present Rwandan banking system analysis is concerned, the large exposure to capital ratio is used as an indication of vulnerabilities arising from the

**Source:** BNR, Bank Supervision Department

concentration of credit risk. As of 31<sup>st</sup>

December 2011, all banks complied with the regulation on credit concentration and large exposure and the growth rate of large exposures to core capital has registered a downward from 2010 to 2011(**Figure 13**).

### ***SMEs lending***

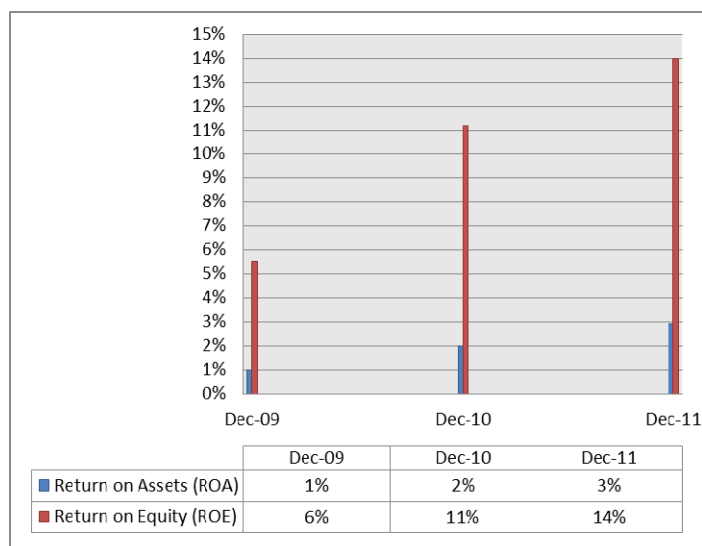
The banks' lending to SMEs report of 2010 and 2011 showed that banks extended loans to SMEs as in 2010 SMEs loans represented 17 percent of total banking system loans, and in 2011 the ratio was at 18 percent. Overall, the banking sector loans to SMEs rose from Rwf 87.5 billion to Rwf 118.4 representing an increase of 26 percent. The expansion in the standards and credit terms and conditions was however associated with increasing interest margins and stricter collateral requirements. If the trends that were observed in liquidity levels continue and the expectations regarding general economic activity remain good, these factors may contribute to further expansion of credit conditions, which may eventually have a positive impact on economic growth.

### **Earnings and profitability**

The earnings and profitability were assessed using the return on equity (ROE) and return on assets (ROA) as well as the growth of income on advances and commissions.

The profitability indicators (**Figure 14**) show that profitability in Rwandan banking system recorded a considerable increase over the last three years. The improvement in profitability can be explained by the BNR continuous monitoring of the banking sector profitability followed by the improvement in asset quality management in the overall banking sector. The ROE upgraded from 6% in 2009 to 14% in 2011 and ROA increased from 1% in 2009 to 3% end of 2011.

**Figure 14 Selected indicators of profitability (in percent)**



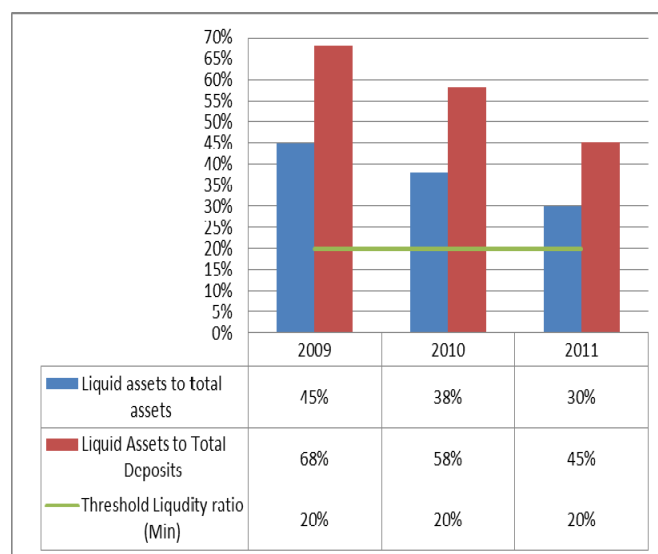
In the period under review, income on advances continued to grow, buoyed by strong loan growth. Commissions' income also continued to rise, growing by 42 percent in the year to December 2011. The growth in bank lending was the main contributor to a steady rise in after-tax profits, which expanded by 42 percent in the year to December 2011, maintaining the trend of the previous period.

**Source:** BNR, Bank Supervision Department

## Liquidity

The level of liquidity ratio is used to assess the liquidity management in Rwandan banking system. The regulatory requirement of a minimum liquidity ratio of 20% is imposed to ensure that banks are all the time capable of meeting the average cash withdraws at short notice.

**Figure 15 Liquidity position as at 31 December 2011**



During the last three years, the total deposits in Rwandan banking system increased by 65% from RWF 443 billion in 2009 to RWF 716 billion as of 31<sup>st</sup> December 2011. This growth in deposits indicates public confidence in the banking system. The liquidity ratio (liquid assets to deposits) which measures the banks' ability to meet liquidity needs from on hand liquid assets was 45% as of 31<sup>st</sup> December 2011 and above the minimum required of 20% (Figure 15). The

**Source:** BNR, Bank Supervision Department

liquid asset to total assets ratio which gauges

banks' ability to meet expected and unexpected demands for cash was 30% by end December 2011. However, the liquid assets to short-term liabilities of 215% at the end of December 2011 indicates mismatch between assets and liabilities in the Rwandan banking system.

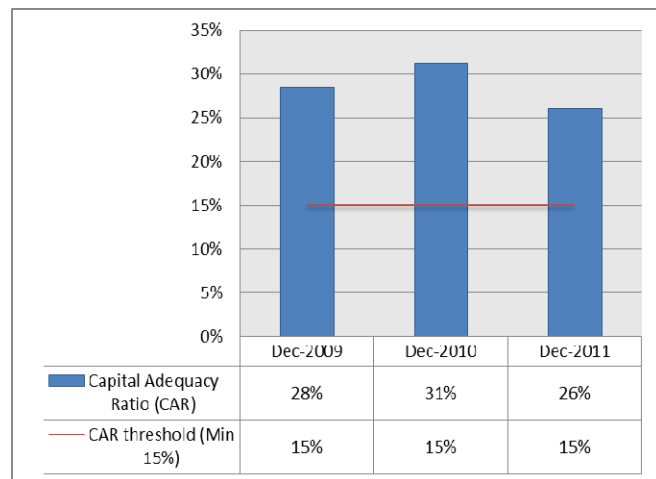
### *Selected indicators in the Microfinance sector*

The selected indicators will be analyzed to assess the performance of Rwandan Microfinance sector in terms of capital position, assets quality, earnings and profitability, and liquidity.

### **Capital position**

The capital adequacy ratio (equity to net assets) served to assess the capital position of Rwandan Microfinance sector as at end December 2011. A minimum regulatory capital adequacy ratio of 15% is required to all microfinance institutions to ensure they maintain adequate capital position.

**Figure 16 Capital adequacy ratio for MFIs**



As of end 2011, the Rwandan microfinance industry was well capitalized (**Figure 16**). The total capital (Equity) increased by 13.5% from RWF 17.8 billion in 2010 to RWF 20.2 billion in 2011. The increase in equity is mainly due to the integration of UMURENGE SACCOs which started to report by the end of the first half of 2011. The capital adequacy ratio (including UMURENGE SACCOs) decreased from 31.2%

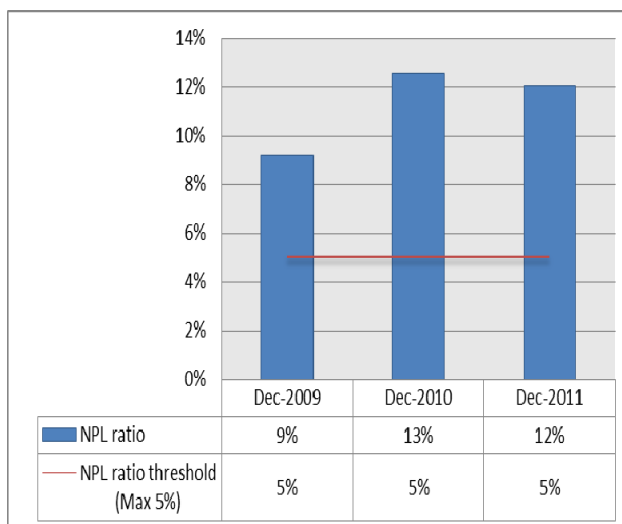
in 2010 to 26.1% in 2011 due to the fact that UMURENGE SACCOs assets increased more rapidly than their share capital. However the solvency ratio remained well above the minimum regulatory ratio of 15%.

**Source:** BNR, Microfinance Supervision Department

### Assets quality

The non-performing loans ratio was the main indicator to assess the asset quality of the Rwandan microfinance sector.

**Figure 17 NPL ratio for MFIs sector**



As of end 2011, the total asset of microfinance industry (including UMURENGE SACCOs) increased by 37.6% from RWF 56.3 billion in 2010 to RWF 77.4 billion in 2011. This shows a big contribution of UMURENGE SACCOs program to the growth of the entire microfinance sector in 2011 because without assets of UMURENGE SACCOs, the increase in total assets is 12.5%. The **figure 16** indicates the trend of delinquency loans.

**Source:** BNR, Microfinance Supervision Department

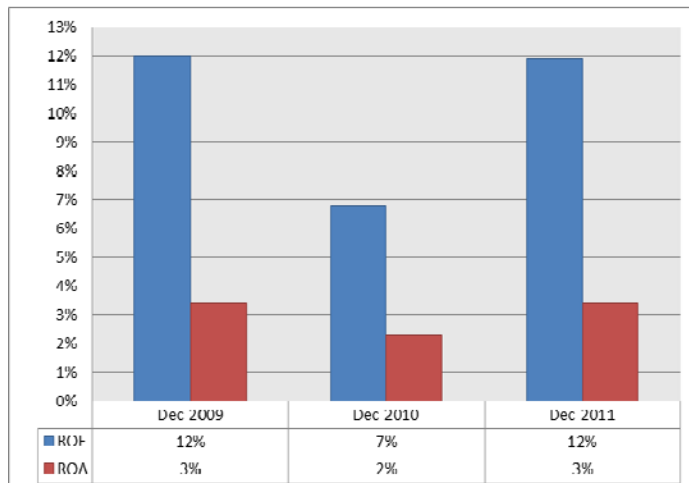
The non-performing loans ratio decreased from 12.6% in 2010 to 12.0% in 2011. These ratios are above the maximum of 5% accepted by best practices in microfinance sector. Without taking into account UMURENGE SACCOs (with a standalone NPL ratio of 5.6%) the NPL ratio in the rest of microfinance industry as at December 2011 was 12.9%.

## Earnings and profitability

The return on equity (ROE) and return on assets (ROA) were the main indicators to assess the quality of earnings and profitability in Rwandan microfinance sector.

The introduction into the Microfinance Sector of UMURENGE SACCOs has outweighed the shift of AGASEKE Ltd and UNGUKA Ltd, MFIs which changed in 2011 their legal status to Microfinance Bank Status. The net income after taxes and donations increased by 91.3%; from RWF 1.17 billion in 2010 to RWF 2.25 billion in 2011. This indicator for UMURENGE SACCOs in December 2011 was RWF 1.5 billion. The **Figure 18** indicates

**Figure 18 ROE & ROA for MFIs**



**Source:** BNR, Microfinance Supervision Department

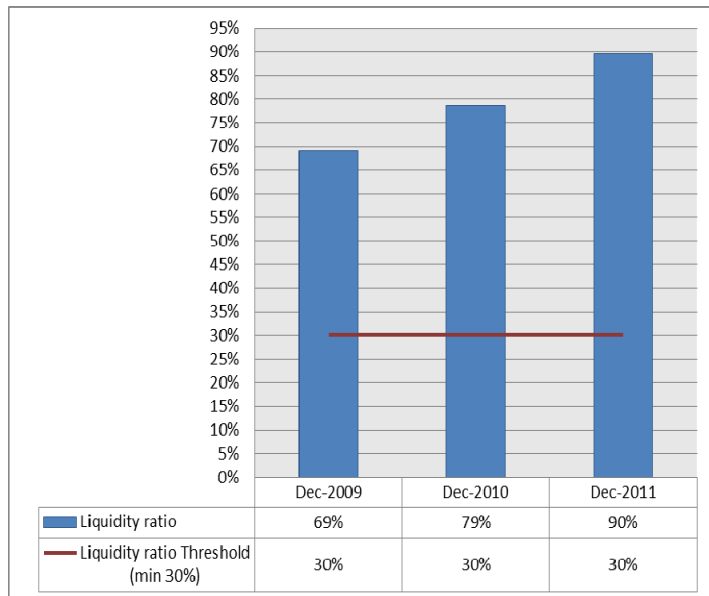
that the profitability indicators (ROE and ROA) have improved. The ROE of the whole Sector increased from 7 percent in 2010 to 12 percent in 2011 while the ROA increased from 2 percent in 2010 to 3 percent in 2011.

## Liquidity

The liquidity ratio was used to assess the liquidity position of the Rwandan microfinance sector. The regulatory requirement of a minimum liquidity ratio of 30% is imposed to microfinance institutions to ensure an adequate level of liquidity.

**Figure 19 Liquidity ratio for MFIs**

As of December 2011, the Rwanda microfinance sector was well liquid. The total deposit boosted by the introduction of UMURENGE SACCOs increased by 45.4% from RWF 23.0 billion in 2010 to RWF 46.4 billion in 2011. The total deposits for UMURENGE SACCOs as at the end of 2011 were RWF 22.4 billion. At the end of 2011, the liquidity ratio in the Rwandan microfinance sector (including UMURENGE SACCOs) was 90 % against 79 % in 2010.



The liquidity ratio remained above the **Source: BNR, Microfinance Supervision Department** minimum required ratio of 30%. Without taking into account of UMURENGE SACCOs (which had a liquidity ratio of 107.0% as of 31<sup>st</sup> December 2011) the liquidity ratio in the rest of microfinance sector was 64.3% at the end of 2011.

### *Selected indicators in insurance sector*

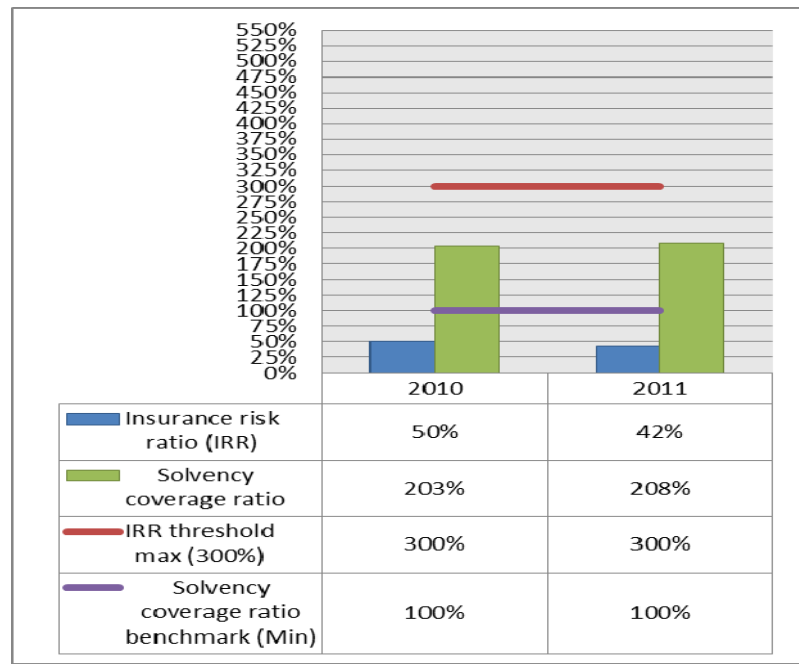
To assess the performance of the Rwandan insurance sector, we used the selected indicators of capitalization, assets quality, reinsurance and actuarial, earnings and profitability, and liquidity.

### **Capital position**

The insurance risk ratio and solvency coverage ratio were the key capital adequacy ratios used to assess the capital position of Rwandan insurance sector for financial stability purposes.

Figure 20 Capital adequacy for Insurance sector

As the regulatory body, the BNR ensure that all insurance companies are well capitalized. Therefore, the BNR focuses most of the attention to the amount of capital held by insurance companies and the level of key capital adequacy indicators. The Rwandan insurance industry, as at December 2011, recorded an increase of 27% in terms of total capital from 85.0 billion in 2010 to 108 billion in 2011.



Source: BNR, NBFI Supervision Department

As at end December 2011 the overall insurance industry was adequately capitalized (Figure 20). The solvency coverage ratio was far above the minimum required of 100% with an increase from 202.7% in 2010 to 208.0% in 2011. The insurance risk (Net premium written to paid up capital) ratio has been below the regulatory maximum of 300% during the last three years with 50% and 42% as at end 2010, and 2011 respectively.

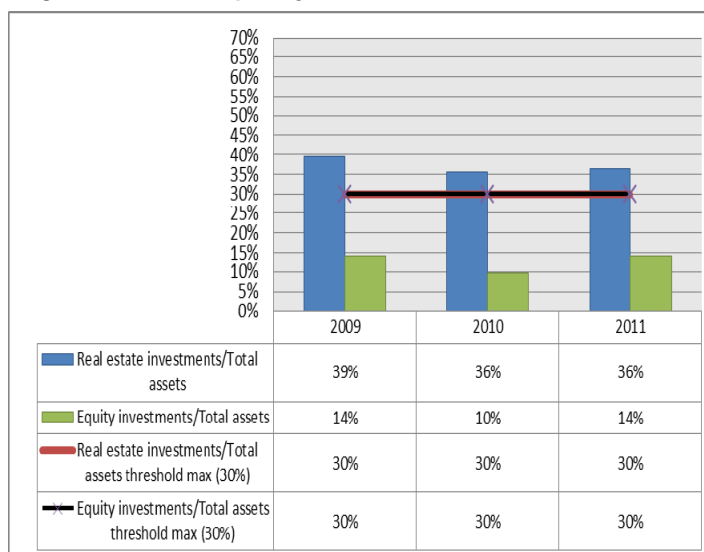
### Assets quality

The key indicators served to assess the asset quality of the Rwandan insurance industry as of end 2011 were real estate investment to total assets ratio and equity investments to total assets ratio.



**Figure 21 Asset quality ratios for Insurance sector**

As at the end of 2011, the total assets of insurance sector increased by 23% from RWF 128 billion in 2010 to RWF 157 billion in 2011. After the decrease of real estate investments to total assets from 39% to 36% in 2009 and 2010 respectively, the ratio remained at 36% as at December 2011 and still above the maximum requirement of 30%. The equity investments to total assets ratio upgraded from 10% to 14% and still



**Source:** BNR, NBF Supervision Department

remained below the maximum required ratio of 30%. The prudential requirements for insurance companies are to have a reasonable investment diversification and at the end of 2011 the real estate investments dominated in total investments of insurance sector.

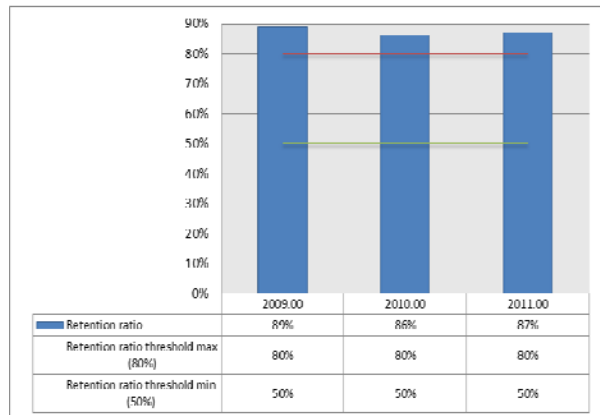
### Reinsurance and actuarial liabilities

The retention ratio was used to assess the level of reinsurance for Rwandan insurance sector. The regulatory requirement set the retention ratio at the minimum of 50% and maximum of 80%.

**Figure 22 Retention ratio for insurance sector**

Overall, reinsurance ceded premiums for 2011 amounted to RWF 6.7 billion out of gross premiums of RWF 51.9 representing a retention ratio of 87%. This is above the maximum required of 80%. This high ratio is due to the fact that only private insurers have reinsurance arrangements. Therefore there are no ceded premiums from public insurers. Thus, reinsurance ceded premiums without public insurers

in 2011 remain RWF 6.7 billion out of RWF 32.0 billion representing a retention ratio of 79% slightly below the maximum required of 80%. It has been noted that there is no reinsurance company operating in Rwanda and all the ceded premiums were paid to reinsurers abroad.

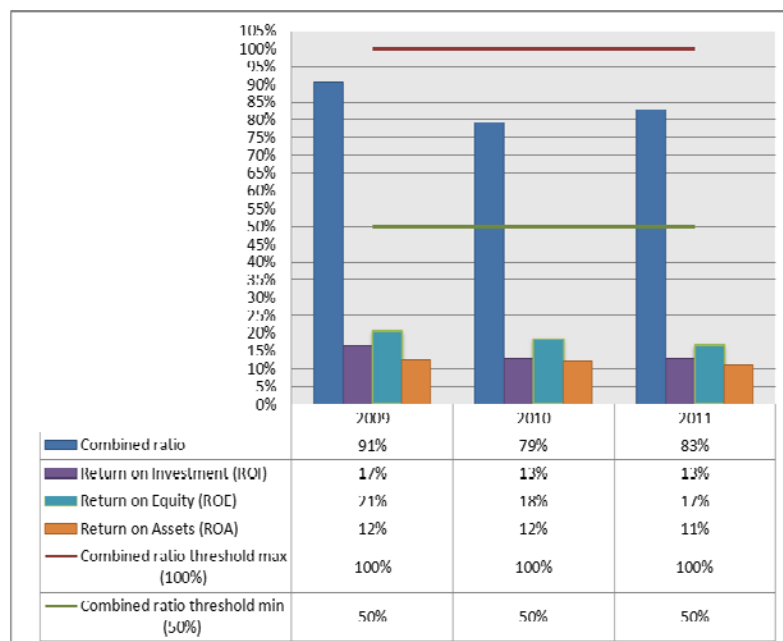


**Source:** BNR, NBF1 Supervision Department

## Earnings and profitability

The key indicators to assess the performance of earnings and profitability in Rwandan insurance industry were combined ratio, return on investment (ROI), return on equity (ROE), and return on assets (ROA).

Figure 23 Earnings and profitability for insurance sector



The insurance sector has been profitable during the year end 2011 (Figure 23). Overall, the insurance industry recorded an increase of 6% from RWF 15.6 billion in 2010 to RWF 16.6 billion in 2011. The underwriting profit increased by 15% from RWF 7.0 billion in 2010 to RWF 8.1 billion in 2011. The investment income also has increased by 4% from RWF 5.6 billion in 2010 to RWF 5.8 billion in 2011.

**Source:** BNR, NBF Supervision Department

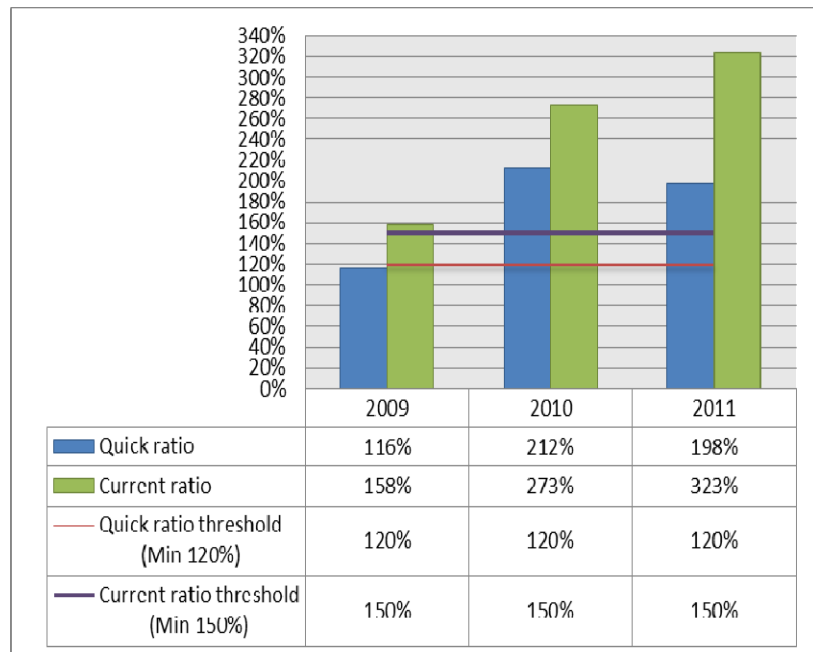
The return on investment (ROI) remained 13% in 2011 as at previous year while the return on equity (ROE) and return on assets (ROA) ratios downgraded from 18% in 2010 to 17% in 2011 and from 12% in 2010 to 11% in 2011 respectively. The combined ratio for the industry also improved from 79% in 2010 to 83% as of 31<sup>st</sup> December 2011 and is still between the minimum required of 50% and maximum required of 100%. However, the private insurers indicated poor pricing and underwriting policies with combined ratio of 103% in 2010 and 102% in 2011 above the maximum required of 100%.

## Liquidity

To assess the level of liquidity of Rwandan insurance sector, the quick ratio and current ratio were used as key indicators.

**Figure 24 Liquidity ratio for insurance sector**

Overall, the Rwandan insurance industry showed a strong level of liquidity as at the end of 2011 (Figure 24). Although, the quick ratio downgraded from 212% in 2010 to 198% in 2011, this ratio is still well above the minimum required of 120%. The current ratio upgraded from 273% in 2010 to 323% in 2011 and remained above the minimum required of 150%. The overall ratio hides wide disparities between private and



**Source:** BNR, NBFi Supervision Department

public insurance companies. On the one hand, the private insurance companies experienced a low level of liquidity with liquidity ratios (quick ratios) of 26% in 2009, 38% in 2010 and 41% in 2011. On the other hand, the public insurance companies showed a high level of liquidity with liquidity ratios (quick ratios) of 1587.8% in 2009, 4146.5% in 2010 and 4982.9% in 2011. However, it has been noted that the public insurers do not have technical provisions which may form a substantial part of liabilities, thus impacting on their liquidity ratio.

## Financial system resilience

Rwandan financial system continued to be sustained and resilient to different shocks due to the strong regulatory framework followed by prudential policies and regular supervision. Onsite and offsite inspection conducted in financial institutions as well as regularly prudential meetings and reforms contributed to the strengthening of financial stability system throughout the period under review. The financial soundness indicators discussed above suggest that the Rwandan financial sector is sound. Assessing by the capital adequacy ratios, it is reasonable to conclude that the financial sector as a whole was well capitalized and resilient to the simulated adverse shocks. There are no strong signs of fragility as trends for the indicators were within acceptable ranges.

Under this section, the financial literacy and inclusion point was also discussed because of its influence to the financial stability. It provides the public with the skills, knowledge and confidence to manage their financial resources effectively and develops the culture of loan repayment and contributes to the financial stability of the system since the public is aware of the importance of loan repayment and the consequences of default.

### *Stress testing results*

In monitoring the stability and resilience of the financial system, the National Bank of Rwanda (BNR) conducts on quarterly basis stress tests on the commercial banks' balance sheet against extreme shocks. However, overtime, the stress tests will be extended to other deposit takers (Microfinance institutions and development bank), pension and insurance sectors. The stress testing involves examining the impact of key risks, namely capital adjustment, credit, exchange rate, and the liquidity risk on individual banks and on the consolidated balance sheet of 9 commercial banks based on December 2011 data.

### **Capital adjustments**

The first step in the stress testing exercise was to make adjustments to bank's reported capital, risk-weighted assets, and net assets to correct for under-provisioning in order to meet regulatory limits. The criteria for the stress tests on assets quality used two capital measures as the relevant metric:

- i. Regulatory capital divided by risk weighted assets (RWA) - CAR
- ii. Core capital (Tier 1) to net assets as a conservative measure of capital.

Capital measures were also adjusted by including general provisions and combination of general and specific provisions.

Based on data reported as of end December 2011, Rwandan banking system was well capitalized and the capital adequacy ratios were above 10% before and after adjustments using both regulatory capital (BNR CAR definition) and conservative measure (Core capital to net assets). Overall, the capital adequacy ratio of 8 banks was above 15% while the capital adequacy of one bank fell between 10% and 15%.

Compliance with provisioning regulation has upgraded. While only one bank was under provisioned as of September 2010 (FSAP report), no bank was under provisioned at the end of December 2011.

### **Credit and concentration risks**

The second step in the stress testing exercises looks on credit and concentration risks. Lending is the core of traditional banking business. In most banking systems, credit risk is the key type of risk. The stress tests on credit and concentration risks as of December 2011 applied the following shocks: (i) a 100% discount on collateral, imposition of general provision and combination of discount on collateral and general provisions; (ii) a uniform increase of NPLs; (iii) the breaking point from a haircut on good loans; (iv) increase in NPLs for housing and agriculture sectors, and (v) a 100% large borrowers default. 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. The provisioning shortfall was deducted from risk weighted assets and net assets as well as capital.

As stress test on Banks' balance sheets for a strict haircut to the eligible collateral held against classified loans revealed that the overall banking industry is well provisioned. According to the regulation on loan classification and provisioning, not all collateral held against a loan is eligible for the purposes of provisioning; the regulation defines and lists eligible collaterals. Under the assumption that 100% of collateral held against classified loans (NPLs) becomes valueless, the overall banking industry is still over provisioned and core capitalization would increase slightly to 14.6% and regulatory capitalization (CAR) to 22.8%. The imposition of 1% general provisions (on normal and watch loans) would cause a downgrade of core capitalization to 14.0% and regulatory capitalization to 21.9%. The combination of 100% discount on collateral and imposition of 1% general provisions would lead the core capitalization to decline to 14.2% and regulatory capitalization to 22.2%. Still the regulatory capitalization is above the minimum regulatory level of 15% and the banking system is still well capitalized.

With regards to the shock on NPLs (uniform increase); this step consisted of testing the level at which an increase in NPLs results in the first bank failure. The stress test as at 31<sup>st</sup> December 2011 shows that the first bank would fail if NPLs would increase by 312%. As this is above the 100%, it shows a strong resilience and soundness of the Rwandan banking system.

The industry was also stress tested by applying a haircut on good loans. This step consisted of the break point from a haircut on total performing loans i.e. test the level at which a haircut results in the first bank failure. The stress test as at 31 December 2011 shows that a shock of 24% in good loans (performing loans) would cause the first bank failure in Rwandan banking system. Under this assumption, the industry would still being adequately capitalized as a whole in term of regulatory capitalization.

When shocks for housing and agriculture sectors are introduced, the overall banking industry remains adequately capitalized. The tests consisted to the likelihood of the increase in NPLs and haircuts of PLs for housing and agriculture sectors. A shock to the housing sector, assuming that NPLs would increase by 30%, would reduce industry core capitalization to 14.4% and regulatory capitalization to 22.6% (still above the required 15%). The stress testing results shows that a haircut of 67% on good housing loans would cause the first bank failure in Rwandan banking system as at 31 December 2011. Under this assumption, core capitalization would decline to 9.5% and regulatory capitalization to 15.3% and the industry would be still complying with regulatory capitalization level. A shock to the agriculture sector, assuming that NPLs would increase by 20%, would reduce industry core capitalization to 14.4% and regulatory capitalization to 22.5% (still above the required 15%). The stress testing results shows that a haircut of 100% on good agriculture loans would cause core capitalization to reduce to 13.3% and regulatory capitalization to 20.9% and the industry as a whole would still well capitalized.

Assuming 100% large borrowers default, tests for concentration risk found that banks will keep above their minimum regulatory capital ratios. Under this assumption, core capitalization would decline to 11.8% and regulatory capitalization to 18.7%.

### **Exchange rate risk**

The third step of stress testing concerned exchange rate risk. With regard to the market risk, the effect of a depreciation of the Rwandan Franc to the USD which is the dominant FX exposure was calculated. As at 31<sup>st</sup> December 2011, foreign exchange risk tests measured the impact of shocks on net open position (NOP) and capital. The test measured the revaluation gains (losses) on the NOP in US dollars from simultaneous depreciation (appreciation). The results were measured against the NOP requirement. In Rwandan banking system, foreign exchange rate risk is dampened by the fact, over the period under

review, that banks are required to maintain the NOP not more than  $\pm 20$  percent of capital. During the period under review, in overall, banks were compliant and the FX position to capital was 17% of capital as of December 2011, which was within the regulatory limits. Stress tests found that an increase of 15% in FX rate from the rate RWF 604 to US\$ 1 to a rate of RWF 695 to US\$ 1 would reduce core capitalization by only 2.0 percentage points and regulatory capitalization by only 2.9 percentage points. Therefore, this reduction would not affect the level of capitalization because the overall banking system would still being well capitalized.

### **Liquidity risk**

The last step undertaken by the stress testing exercise was to assess liquidity risk. By end 31 December 2011, liquidity risk test simulated the following shocks: (i) a 20 percent drop in deposit and its effect on the basic liquidity ratio (i.e. liquid assets to total assets); and (ii) the same shock and its effect on BNR's definition of liquidity ratio (i.e. liquid assets to deposits). The results were measured against the 20 percent liquidity requirement for Rwandan banks. Under assumption of a drop of 20% in deposits as at December 2011, using BNR's definition, the industry liquidity ratio reduced to 33% from 46% and still above the 20% required. In overall, Rwandan commercial banks were reasonably liquid as at 31 December 2011.

Ultimately, the stress testing results indicate that the resilience of Rwandan banking system continued to be sustained during the period under review. The static stress tests covering standard shocks and breaking points showed that, for the period ending 31<sup>st</sup> December 2011, the Rwandan banking system was resilient to adverse changes in asset quality (credit and concentration risk), liquidity, and exchange rate. However, the level of NPLs and loan concentration (especially for mortgage loans) need to be monitored carefully.

### ***Rwandan financial literacy and financial inclusion***

A large proportion of the Rwandan population, particularly in rural areas, do not benefit from financial services, i.e. they are financially excluded. During the last three years, the BNR continued to reinforce the supervisory legal framework to accommodate new market developments such as agent banking, mobile banking among others, all aiming to widen financial access. Banks have expressed interest in these new innovations and as of December 2011 three banks have been licensed to offer agent banking. In addition to



encouraging product innovations and network expansion, two new regional banks opened up subsidiaries. In the year 2011, the number of open accounts increased by 14.4 percent from 1.77 million accounts to 2.03 million accounts in the banking sector while bank's branches and outlets networks reached 683 countrywide supplemented by 170 ATMs. Under the National SME development policy, Business Development Fund (BDF) was assigned to develop access to finance and capacity building solutions for SMEs.

In the same way of promoting access to finance, Rwanda has established savings and credit cooperatives in each of the geographically defined sector known as UMURENGE SACCOs and BNR established a supervision function of those SACCOs and other MFIs at the district level.

In line with the promotion of financial inclusion, Access to Finance Forums (AFF) were launched in all districts. AFF is a platform where local authorities, commercial banks, MFIs, SACCOs and others financial institutions, the Technical Control Unit of SACCOs and development partners meet and discuss the constraints relating to access to finance both on demand and supply side and work out how to address them. Issues discussed in AFF include the problem of financial exclusion, SMEs financing and the rationale for strategic linkages between commercial banks and MFIs and SACCOs and the possible mutual benefits.

With regard to the financial literacy, many initiatives regarding financial education were put in place through NGOs and schools financial education program, but they were still dispersed and non-coordinated. For this reason, the Government embarked the development of a well-coordinated national literacy strategy leading to mobilizing all stakeholders (including industry players) for a financial awareness campaign program with BNR.

## Infrastructure and regulation

### Developments in payment systems

Although the Government of Rwanda has put considerable effort in the modernization of payment systems, cash in form of currency in circulation (notes and coins) is still the most widely used means of payment in Rwanda. The non-cash instruments have registered significant growth by end December 2011. They include cheques, credit transfers, traveler's cheques, certified cheques, bank cards both debit and credit, and mobile banking. The table below shows basic payment indicators as at the end of December 2011.

**Table 4: Basic payment indicators as at end December 2011**

|   | 2009      | 2010      | 2011        |
|---|-----------|-----------|-------------|
| Population (in million)                       | 10.1      | 10.4      | 10.7 (est.) |
| GDP (in RWF billion)                          | 2,985     | 3,277     | 4,105       |
| Cash in circulation (CIC)-in RWF billions     | 77        | 90.5      | 102.8       |
| <b>Volume of transactions:</b>                |           |           |             |
| Cheque  | 1,260,765 | 1,519,277 | 1,351,340   |
| Credit transfers                              | 843,089   | 589,048   | 895,077     |
| E-payments:                                   |           |           |             |
| Payment cards                                 | 241,638   | 413,124   | 201,479     |
| ATM number                                    | 26        | 84        | 167         |
| Internet banking                              |           | 366       | 1,493       |
| Mobile banking                                |           | 11,150    | 527,300     |
| <b>Value of transactions (in Million RWF)</b> |           |           |             |
| Cheque  | 1,552,908 | 2,057,863 | 2,544,311   |
| Credit transfers                              | 1,014,882 | 753,519   | 1,302,136   |
| E-payments:                                   |           |           |             |
| Payment cards                                 | 18,488    | 29,880    | 128,974     |
| Internet banking                              |           | 1,084     | 708         |
| Mobile banking                                |           | 756       | 5,215       |
| <b>Turnover to GDP</b>                        |           |           |             |
| Cash in circulation (%)                       | 0.03      | 0.03      | 2.5%        |
| Cheque (Times)                                | 0.52      | 0.63      |             |
| Credit transfers                              | 0.34      | 0.23      |             |
| E-payments                                    |           |           |             |
| % of GDP:                                     |           |           |             |
| Payment card                                  | 0.01      | 0.01      |             |
| Internet banking                              |           | 0         |             |
| Mobile banking                                |           | 0         |             |
| Mobile banking                                |           |           |             |

**Source:** BNR, Payment Systems Department

\*: Number of items settled through a clearing house only

During the period under review, the BNR continued to modernize Rwandan payment systems to ensure that they are efficient and reliable. The main developments were the implementation of Rwanda Integrated Payment Processing System (RIPPS) and introduction of new payment instruments.

The implementation of RIPPS has reduced time lag in payments and contributed to the mitigation of systemic risk in financial system of Rwanda. The implemented components of RIPPS as at the end of 2011 are the Automated Transfer System (ATS) and the Central Security Depository (CSD). The ATS comprises the Real Time Gross Settlement system (RTGS) and the Automated Clearing House (ACH).

As of end 2011, ATS counted 16 participants including Banks and one operator company (RSwitch). ATS handles gross credit transfer of real time transactions, cheques, and credit transfers. Most of participants implemented full Straight-Through Processing (STP). For the same period, the CSD had 20 participants including banks, brokers and Rwanda Stock Exchange (RSE). The CSD holds both debt securities (public and private instruments) and equities.

**Table 5 Transactions settled through RIPPS as at 31<sup>st</sup> December 2011**

|                        | ATS                    |                        |         |                           |           | CSD           |          |                  |
|------------------------|------------------------|------------------------|---------|---------------------------|-----------|---------------|----------|------------------|
|                        | RTGS                   |                        | ACH     |                           |           |               |          |                  |
|                        | Customers transactions | Interbank transactions | Cheques | Credit transfer (batches) | Total     | N/A           |          |                  |
| Total Messages         | 270,768                | 24,120                 | 32,103  | 69,410                    | 396,401   |               |          |                  |
| Volume of instructions | 270,768                | 24,120                 | 296,595 | 730,599                   | 1,322,082 | 1,569         |          |                  |
| Value (millions Rwf)   | 977,286                | 4,179,446              | 750,217 | 446,206                   | 6,353,155 | Shares traded | Turnover | Debt instruments |
|                        |                        |                        |         |                           |           | 75.70         | 12,726   | 176,890          |

Source: BNR, Payment Systems Department

Regarding the card based payment system, banks continued to issue payment cards and RSwitch as a common platform ensured that the infrastructure is interoperable. As at the end of December 2011, the card based payments improved significantly in terms of number, transactions and value settled as indicated by the **table 6** and **table 7**

**Table 6 Evolution of card based payments as at end December 2011**

| Items                                   | 2009   | 2010   | 2011    |
|---|--------|--------|---------|
| Number of ATMs                          | 26     | 84     | 167     |
| Number of Point of Sale (POS) terminals |        | 99     | 298     |
| Number of debit cards                   | 30,065 | 41,377 | 208,767 |
| Number of credit cards                  | 453    | 172    | 526     |
| Number of prepaid cards                 |        |        | 3,270   |
| Total number of ATM networks            | 2      | 3      | 5       |
| Total number of POS networks            |        | 1      | 2       |

**Source:** BNR, Payment Systems Department

Except ATMs of one new bank, all ATMs are interoperable and some of ATMs and POSs accept international cards such as VISA and ZIPP cards. Negotiations with different international card service providers are ongoing to ensure all international cards are accepted on Rwanda payments terminals.

**Table 7 Cashless Payment Instruments: Number and Value of Transactions as at 31 December 2011**

| Type of instruments and e-Money | 2009                |                           | 2010                |                           | 2011                |                           |
|---------------------------------|---------------------|---------------------------|---------------------|---------------------------|---------------------|---------------------------|
|                                 | Number of Transact. | Value (in Million of RWF) | Number of Transact. | Value (in Million of RWF) | Number of Transact. | Value (in Million of RWF) |
| Cheque                          | 1,260,765           | 1,552,908                 | 1,519,277           | 2,057,863                 | 1,351,340           |                           |
| Credit card                     | 20,149              | 7,450                     | 20,036              | 2,897                     | 42,545              | 4,698                     |
| Debit card                      |                     |                           |                     |                           |                     |                           |
| International debit             | 0                   | 0                         | 0                   | 0                         | 52,930              | 2,396                     |
| Domestic based ATM card         | 221,489             | 11,038                    | 393,088             | 26,983                    | 1,880,881           | 115,442                   |
| E-money                         |                     |                           |                     |                           |                     |                           |
| Mobile banking                  | 0                   | 0                         | 11,150              | 756                       | 527,300             | 5,215                     |
| Internet banking                | 0                   | 0                         | 366                 | 1,084                     | 1493                | 708                       |

**Source:** BNR, Payment Systems Department

In the side of electronic payments and money transfer, the payment indicators show significant improvements during the period under review. Several banks offer mobile and internet banking services to their clients. As at the end of December 2011, two companies have been licensed to provide mobile payment services and 14 institutions (excluding financial institutions) - two foreign and twelve domestic institutions - were licensed as money transfer services providers.

## New laws and regulations

For the banking system, the BNR continued to implement the banking law by putting in place new regulations; fifteen regulations were published in the Official Gazette and two were drafted in 2011. A feasibility study on deposit Insurance fund for banks and MFIs was completed, and the draft law on the establishment of the Fund was prepared.

In line with the Memorandum of Economic and Financial Program signed with the IMF, in 2008 the BNR published the National Payment System Framework and Strategy which stated the vision and objectives of payment system modernization.

In 2009 the Payment system Law was passed by Parliament and a regulation governing the Payment Service Providers was approved by the BNR board. In 2010, concerted effort was put into finalizing the relevant laws and regulations such as: the Electronic Transactions law, the law on the Central Securities Depository and the Payment Systems law which were all published in the official Gazette. Several regulations were also published, notably; regulation on Electronic Funds transfers, regulation on licensing payment systems, regulation on oversight and the regulation on participation in the Central Securities Depository.

Currently the insurance sector is governed by the insurance law N° 52/2008 and a number of insurance regulations that are stipulated below:

- a) The Insurance Regulation on licensing requirements and other requirements for carrying out insurance business;
- b) The Insurance Regulation on licensing and other requirements for insurance intermediaries;
- c) The Insurance Regulation on corporate governance requirements;
- d) The Insurance Regulation on accreditation and other requirements for external auditors of banks, insurers and insurance brokers;
- e) The Insurance Regulation on market conduct requirements for insurers and insurance intermediaries, and,
- f) The Insurance Regulation on market capacity facilitation requirements for foreign insurers.

In the pension area, pension law was drafted and submitted to Parliament in June 2011. Number of regulations were also drafted pending for the pension law enactment:

- Regulation on Licensing and registration of service providers
- Regulation on Licensing and registration of pension schemes
- Regulation on operating standards for pension schemes and service providers. This regulation defines investment benchmarks for pension funds, market conduct for service providers and corporate governance.

## **Observance of standards, principles and codes**

In the domain of banking supervision core principles, the IMF FSAP report on assessment of the state of compliance with Basel Core Principles for Effective Banking Supervision (BCPs) in Rwanda conducted in February 2011, showed that, out of 25 BCPs, Rwanda was compliant with 6 BCPs, largely compliant with 13 BCPs, Materially non-compliant with 4 BCPs, Non-compliant with 1 BCP, and 1 BCP was not applicable. The same report gave recommendations to be implemented by the Central Bank for full compliance.

With regard to the insurance supervision core principles, the BNR has carried out a self-assessment on compliance of the legal and regulatory framework to insurance core principles (ICPs) and undergone a peer review with other EAC country members. The exercise was scheduled to be terminated in 2012.

In the domain of payment systems standards, ten core principles for systemically important payment systems (SIPS), 30 IOSCO Principles of Securities Regulation and 5 general principles for remittances services and retail payment systems are general standards for the design and operation of payment and settlement systems, and aim to emphasize the basic principles of security, reliability and efficiency that should be upheld by systemically important payment systems. As at the end of 2011, the BNR was compliant with 5 SIPS principles, 11 IOSCO principles and all 5 general principles for remittances and retail payment systems standards.

## The outlook for Rwandan financial stability

The outlook for Rwandan financial stability remains positive. As of end 2011, the financial system remained relatively stable and resilient as proven by stress testing results thanks to the strong capitalization and strengthened legal, regulatory and supervisory framework. Although there appear to be no major threats to systemic stability in the short term, risks, particularly to credit could emerge due to the high level of NPLs and credit concentration in the banking system. In addition, the uncertainty of the global economic stability, especially in the euro zone, and regional inflationary pressures could pose challenges to Rwandan financial stability.

Going forward, it is expected that the Rwandan financial system will face some challenges due to the unfavorable global and regional economic growth. Mindful of the potential risks to the financial stability, the BNR remains vigilant in its regular supervision of the financial system for any early warnings and committed to take proactive actions accordingly. The BNR will continue to monitor the soundness of financial institutions under its supervision regime. As the financial system is dominated by the banking system, more attention will be brought to the banks. The National Bank will continue to ensure that banks remain prudent in their operations through on-site and off-site examinations. The non-performing loans (NPLs) ratio is an important measure of the quality of the assets in banks' loan portfolios. Therefore, the maximum of 5 percent of NPLs ratio is the new target set for the year end 2012 in Rwandan banking sector as measure of the asset quality management. The risk based supervision approach adopted by the National Bank of Rwanda is expected to contribute towards the mitigation of any emerging risks to financial sector stability. Since safeguarding financial stability calls for a macro-supervision of the financial system as whole (covering banks, microfinance institutions, insurance and pension companies), the BNR ensures that it is equipped with a strong legal, regulatory and supervisory framework, as well as prudent monetary policy.

## Appendices

Appendix 1: Selected financial soundness indicators for EAC as at 31 December 2011 (in percent)

| Indicator  | Country | Dec-09       | Dec-10       | 2011         |              |              |              |
|--|---------|--------------|--------------|--------------|--------------|--------------|--------------|
|  |         |              |              | MAR          | JUN          | SEP          | DEC          |
|  |         |              |              |              |              |              |              |
| Regulatory Capital to Risk-Weighted Assets<br>MIN 8% (BASLE) | K       | 19.0%        | 21.6%        | 20.6%        | 19.0%        | 18.1%        | 19.4%        |
|  | U       | 21.0%        | 20.2%        | 21.2%        | 19.3%        | 18.3%        | 20.3%        |
|  | T       | 18.4%        | 18.9%        | 19.2%        | 18.2%        |              |              |
|  | R       | <b>24.4%</b> | <b>24.4%</b> | <b>25.8%</b> | <b>24.4%</b> | <b>25.8%</b> | <b>25.0%</b> |
|  | B       | 19.1%        | 19.7%        | 21.7%        | 20.7%        | 20.0%        | 19.8%        |
|  |         |              |              |              |              |              |              |
| Capital to assets  | K       | 12.7%        | 13.2%        | 12.0%        | 12.8%        | 12.4%        | 13.2%        |
|  | U       | 13.6%        | 13.0%        | 14.2%        | 13.4%        | 13.1%        | 14.6%        |
|  | T       | 11.1%        |              |              |              |              |              |
|  | R       | <b>17.4%</b> | <b>14.8%</b> | <b>16.6%</b> | <b>15.2%</b> | <b>17.5%</b> | <b>17.0%</b> |
|  | B       | 11.5%        | 12.7%        | 14.3%        | 14.4%        | 14.2%        | 14.0%        |
|  |         |              |              |              |              |              |              |
| NPLs to Total Gross Loans                                    | K       | 7.9%         | 6.2%         | 6.0%         | 5.4%         | 4.8%         | 4.4%         |
|  | U       | 4.2%         | 2.1%         | 2.5%         | 1.6%         | 1.8%         | 2.2%         |
|  | T       | 6.6%         | 9.3%         | 9.6%         | 9.1%         |              |              |
|  | R       | <b>13.1%</b> | <b>11.3%</b> | <b>10.2%</b> | <b>9.6%</b>  | <b>9.4%</b>  | <b>8.0%</b>  |
|  | B       | 13.0%        | 9.9%         | 8.8%         | 7.6%         | 7.3%         | 7.7%         |
|  |         |              |              |              |              |              |              |
| Return on Assets (ROA)                                       | K       | 2.9%         | 3.6%         | 3.4%         | 3.3%         | 3.1%         | 3.4%         |
|  | U       | 2.0%         | 2.7%         | 2.9%         | 3.1%         | 3.6%         | 4.0%         |
|  | T       | 3.2%         | 2.3%         | 3.0%         | 3.0%         |              |              |
|  | R       | <b>1.0%</b>  | <b>1.8%</b>  | <b>2.7%</b>  | <b>2.3%</b>  | <b>2.0%</b>  | <b>2.9%</b>  |
|  | B       | 2.6%         | 1.3%         | 1.0%         | 1.9%         | 2.9%         | 3.2%         |
|  |         |              |              |              |              |              |              |
| Return on Equity (ROE)                                       | K       | 24.8%        | 29.0%        | 28.6%        | 30.8%        | 30.2%        | 30.3%        |
|  | U       | 12.7%        | 18.0%        | 19.6%        | 22.4%        | 25.4%        | 27.4%        |
|  | T       | 18.5%        | 12.1%        | 17.8%        | 17.9%        |              |              |
|  | R       | <b>5.5%</b>  | <b>10.2%</b> | <b>14.4%</b> | <b>15.7%</b> | <b>12.8%</b> | <b>14.1%</b> |
|  | B       | 22.8%        | 21.7%        | 6.7%         | 13.2%        | 20.3%        | 23.0%        |
|  |         |              |              |              |              |              |              |



| Indicator                                      | Country | Dec-09 | Dec-10 | 2011  |       |       |       |
|--|---------|--------|--------|-------|-------|-------|-------|
|  |         |        |        | MAR   | JUN   | SEP   | DEC   |
|  |         |        |        |       |       |       |       |
| Interest margin to Gross Income                | K       | 35.6%  | 33.6%  | 40.4% | 40.9% | 40.5% | 38.6% |
|  | U       | 50.8%  | 52.5%  | 53.2% | 54.1% | 53.9% | 53.2% |
|  | T       | 73.4%  |        |       |       |       |       |
|  | R       | 45.1%  | 40.4%  | 38.5% | 43.6% | 41.9% | 47.3% |
|  | B       | 20.7%  | 19.1%  | 16.8% | 16.5% | 16.6% | 17.6% |
|  |         |        |        |       |       |       |       |
| Loans/ Deposits                                | K       | 72.4%  | 70.1%  | 73.5% | 76.6% | 78.1% | 77.4% |
|  | U       | 71.7%  | 68.0%  | 69.1% | 71.5% | 76.4% | 78.4% |
|  | T       | 60.9%  |        |       |       |       |       |
|  | R       | 84.6%  | 79.5%  | 81.4% | 69.8% | 78.3% | 88.1% |
|  | B       | 59.8%  | 69.2%  | 77.4% | 83.3% | 88.5% | 80.6% |
|  |         |        |        |       |       |       |       |
| Liquid assets/Assets                           | K       | 36.0%  | 38.4%  | 39.8% | 38.1% | 33.8% | 33.3% |
|  | U       | 29.3%  | 28.3%  | 28.9% | 25.9% | 25.6% | 25.8% |
|  | T       | 40.4%  |        |       |       |       |       |
|  | R       | 48.0%  | 41.4%  | 37.4% | 41.4% | 34.9% | 30.0% |
|  | B       | 38.7%  | 40.2%  | 77.7% | 55.8% | 49.5% | 31.6% |
|  |         |        |        |       |       |       |       |
| Liquid assets/Deposits                         | K       | 46.3%  | 52.0%  | 50.9% | 46.3% | 44.9% | 43.8% |
|  | U       | 44.7%  | 39.8%  | 40.5% | 35.6% | 36.2% | 37.6% |
|  | T       | 51.3%  |        |       |       |       |       |
|  | R       | 68.1%  | 58.2%  | 51.7% | 41.4% | 34.9% | 45.3% |
|  | B       | 54.6%  | 40.2%  | 60.1% | 46.4% | 43.9% | 48.0% |
|  |         |        |        |       |       |       |       |
| Net Open position/Capital                      | K       | 4.9%   | 5.1%   | 4.3%  | 4.3%  | 4.3%  | 4.3%  |
|  | U       | -0.6%  | -1.4%  | -1.9% | -0.8% | -3.0% | -3.2% |
|  | T       | -11.6% |        |       |       |       |       |
|  | R       | 1.9%   | 6.8%   | 4.5%  | 9.7%  | -0.8% | 9.6%  |
|  | B       | 3.8%   | -0.2%  | -0.2% | -8.4% | -9.0% | 3.2%  |
|  |         |        |        |       |       |       |       |
| FX Currency Denominated Assets to Total Assets | K       | 8.7%   | 10.6%  | 10.7% | 12.4% | 13.5% | 11.8% |
|  | U       | 23.0%  | 24.7%  | 25.7% | 26.6% | 29.6% | 27.9% |
|  | T       | 28.4%  | 30.0%  | 30.6% | 31.8% |       |       |
|  | R       | 18.0%  | 18.0%  | 15.6% | 15.2% | 15.2% | 16.5% |
|  | B       | 22.4%  | 19.9%  | 29.1% | 16.1% | 17.1% | 13.0% |
|  |         |        |        |       |       |       |       |

Appendix 2: Financial soundness indicators (FSIs) as at 31 December 2011 (in percent)

A. Banking system

| PERFORMANCE INDICATORS                              | 2009  | 2010  | 2011  |
|---|-------|-------|-------|
| <b>GROWTH RATES</b>                                 |       |       |       |
| Total Assets  | 5.8%  | 19.9% | 8.1%  |
| Total loans   | 4.5%  | 16.9% | 4.8%  |
| Deposits  | 4.4%  | 16.3% | 8.5%  |
| Due from banks in Rwanda                            | 6.1%  | 39.1% | 10.4% |
| Due from banks abroad                               | 13.0% | 23.7% | 22.1% |
| Government securities                               | 83.1% | 9.3%  | -1.0% |
| <b>MEASURES OF CAPITAL ADEQUACY/ STANDARD RATES</b> |       |       |       |
| Core Capital / RWA (MIN 10%)                        | 21.0% | 22.3% | 22.9% |
| Total Qualifying Capital / RWA (MIN 15%)            | 24.4% | 24.4% | 25.0% |
| Insider Loans / Core Capital (MAX 25%)              | 15.2% | 6.7%  | 5.7%  |
| Large Exposures / Core Capital (MAX 20%)            | 50.4% | 56.3% | 36.6% |
| NPLs – Provisions / Core Capital                    | 20.6% | 23.0% | 14.7% |
| <b>MEASURES OF ASSET QUALITY</b>                    |       |       |       |
| NPLs / Gross Loans (MAX 7%)                         | 11.9% | 10.8% | 8.0%  |
| NPLs net of interests/Gross loans                   | 10.0% | 9.3%  | 6.2%  |
| Provisions / NPLs                                   | 58.7% | 50.6% | 50.8% |
| Earning Assets / Total Asset                        | 76.3% | 79.5% | 77.2% |
| Fixed Assets / Core Capital                         | 32.3% | 44.3% | 37.5% |
| Large Exposures / Gross Loans                       | 12.0% | 13.1% | 9.8%  |
| Gross loans/Total assets                            | 62.7% | 58.1% | 58.2% |
| Government security/Total assets                    | 6.0%  | 6.8%  | 6.8%  |
| Cash/Total Assets                                   | 4.5%  | 5.0%  | 3.5%  |
| <b>MEASURES OF EARNINGS (ANNUALISED)</b>            |       |       |       |
| Return on Average Assets                            | 1.0%  | 2.0%  | 2.9%  |
| Return on Average Equity                            | 5.5%  | 11.2% | 14.0% |
| Net Interest Margin                                 | 9.5%  | 9.5%  | 12.9% |
| Yield on Advances                                   | 14.6% | 16.0% | 19.4% |
| Cost of Deposits                                    | 2.3%  | 2.7%  | 3.2%  |
| Cost to Income                                      | 89.3% | 83.0% | 80.9% |
| Overhead to Income                                  | 53.9% | 53.9% | 52.6% |
| <b>MEASURES OF LIQUIDITY</b>                        |       |       |       |
| Short term Gap                                      | 18.2% | 16.2% | 19.6% |

| PERFORMANCE INDICATORS                   | 2009  | 2010   | 2011   |
|--|-------|--------|--------|
| Liquid Assets / Total Deposits (MIN 20%) | 68.1% | 58.2%  | 45.3%  |
| Interbank Borrowings / Total Deposits    | 12.7% | 11.4%  | 8.5%   |
| BNR Borrowings / Total Deposits          | 0.8%  | 0.0%   | 0.1%   |
| Gross Loans / Total Deposits             | 84.6% | 79.5%  | 81.3%  |
| MEASURES OF MARKET SENSITIVITY           |       |        |        |
| Forex Exposure / Core Capital            | 0.9%  | 5.0%   | 6.6%   |
| Forex Loans / Forex Deposits             | 2.8%  | 0.4%   | 5.3%   |
| Forex Assets / Forex Liabilities         | 99.0% | 103.4% | 111.0% |

#### B. Insurance sector

| Indicators  | 2009   | 2010   | 2011   |
|---|--------|--------|--------|
| Capital adequacy  |        |        |        |
| Solvency coverage ratio   |        | 202.7% | 208.0% |
| Net premium to Capital  | 525.0% | 516.0% | 474.3% |
| Capital to total assets   | 7.3%   | 6.5%   | 6.4%   |
| Capital to Technical reserves (Benchmark: MAX 100%)                                 | 24.6%  | 25.9%  | 25.8%  |
| Asset quality   |        |        |        |
| (Real estate+unquoted equities+debtors) to total assets (Benchmark: MAX 30%)        | 39.4%  | 35.6%  | 38.6%  |
| Receivables to (Gross premium+reinsurance recoveries)                               | 26.0%  | 23.1%  | 33.9%  |
| Equities to total assets (Benchmark: MAX 30%)                                       | 60.7%  | 66.3%  | 66.8%  |
| Reinsurance and actuarial issues  |        |        |        |
| Risk retention ratio<br>(Net premium to gross premium) (Benchmark: MAX 80%-MIN 50%) | 88.7%  | 86.3%  | 87.1%  |
| Net technical reserves to average of net claims paid in last three years            |        | 241.5% | 224.7% |
| Net technical reserves to average of net premium received in last three years       |        | 99.8%  | 97.3%  |
| Earnings and profitability  |        |        |        |
| Loss ratio (net claims to net premium)  | 47.2%  | 42.3%  | 42.8%  |
| Expense ratio (Expense to net premium)  | 43.6%  | 36.9%  | 40.1%  |
| Combined ratio=loss ratio+expense ratio (Benchmark: MAX 100%-MIN 50%)               | 90.8%  | 79.2%  | 82.9%  |
| Revisions to technical reserves   | 0.0%   | 0.0%   | 0.0%   |
| Investment income to net premium  | 16.7%  | 13.1%  | 12.9%  |
| Investment income to investment assets  | 9.0%   | 6.0%   | 5.5%   |
| Return on equity (ROE)  | 20.6%  | 18.4%  | 16.6%  |
| Return on Assets (ROA)  | 12.5%  | 12.2%  | 11.1%  |
| Liquidity   |        |        |        |
| Liquid assets to current liabilities (Benchmark: MIN 120%)                          | 116.1% | 211.7% | 197.6% |

### C. Microfinance sector

| Indicators   | 2009       | 2010       | Change in % | 2011       |
|--|------------|------------|-------------|------------|
| Total Assets (in thousands of RWF)                         | 77,963,204 | 56,255,705 | 37.6%       | 77,421,992 |
| Cash and cash equivalent (in thousands of RWF)             | 16,936,903 | 16,787,068 | 95.3%       | 32,787,824 |
| Gross loans (in thousands of RWF)                          | 50,143,929 | 36,788,748 | 10.7%       | 40,723,909 |
| Non-Performing Loan s(in thousands of RWF)                 | 4,608,741  | 4,624,066  | 5.8%        | 4,890,484  |
| Provisions (in thousands of RWF)                           | 2,110,649  | 2,016,897  | 5.6%        | 2,129,758  |
| Net Loans (in thousands of RWF)                            | 48,033,280 | 34,771,851 | 11.0%       | 38,594,151 |
| Current Deposits (in thousands of RWF)                     | 24,515,238 | 21,331,243 | 71.7%       | 36,625,813 |
| Equity (in thousands of RWF)                               | 22,180,232 | 17,547,616 | 15.0%       | 20,181,830 |
| Net Profit after taxes and donations (in thousands of RWF) | 2,659,431  | 1,241,783  | 80.8%       | 2,245,353  |
| NPLs ratio (in%) (Benchmark: MIN 5%)                       | 9.2%       | 12.6%      |             | 12.0%      |
| Liquidity ratio (in %) (Benchmark: MIN 30%)                | 69.1%      | 78.7%      |             | 89.5%      |
| Capital adequacy ratio (in %) (Benchmark: MIN 15%)         | 28.4%      | 31.2%      |             | 26.1%      |
| ROE  | 12.0%      | 6.8%       |             | 11.9%      |
| ROA  | 3.4%       | 2.3%       |             | 3.4%       |

Appendix 3: Balance sheets as at 31 December 2011 (in thousands of RWF)

A. Banking system

|                                     | 31-Dec-09          | 31-Dec-10          | 31-Dec-11            |
|-------------------------------------|--------------------|--------------------|----------------------|
| <b>A. ASSETS</b>                    |                    |                    |                      |
| Cash (domestic notes and coins)     | 29,519,036         | 43,283,526         | 37,477,761           |
| BNR with Balances                   | 25,672,854         | 24,700,636         | 43,881,425           |
| Due from banks in Rwanda            | 109,302,681        | 127,631,537        | 128,783,160          |
| Due from with Banks Abroad          | 47,945,563         | 96,491,305         | 105,802,677          |
| Government Securities               | 39,360,252         | 59,169,534         | 74,107,005           |
| Investments and Other Securities    | 14,999,506         | 20,568,991         | 23,880,112           |
| (a) Loans & Overdrafts (gross)      | 364,122,743        | 449,357,601        | 582,594,272          |
| (b) Less: Provisions                | 28,557,164         | 27,768,567         | 25,674,792           |
| Loans & Overdrafts (Net)            | 335,565,580        | 421,589,033        | 556,919,480          |
| Fixed Assets (net)                  | 31,538,390         | 52,058,448         | 63,357,304           |
| Other Assets                        | 18,722,262         | 24,349,868         | 49,983,121           |
| <b>Total Assets(net)</b>            | <b>652,626,124</b> | <b>869,842,878</b> | <b>1,084,192,044</b> |
| <b>B. LIABILITIES</b>               |                    |                    |                      |
| Due to banks in Rwanda              | 54,720,021         | 64,293,430         | 61,221,372           |
| Borrowings from BNR                 | 3,431,038          | 184,145            | 650,747              |
| Borrowings (for BRD)                | 13,329,510         | 14,573,838         | 16,156,699           |
| Deposits                            | 430,383,968        | 565,151,993        | 716,466,968          |
| Due to Banks Abroad                 | 499,052            | 5,070,993          | 1,853,378            |
| Bills Payable                       | 1,039,750          | 1,046,375          | 1,046,375            |
| Other Liabilities                   | 32,764,295         | 60,101,759         | 61,549,317           |
| <b>Total Liabilities</b>            | <b>536,167,635</b> | <b>710,422,533</b> | <b>858,944,856</b>   |
| <b>C. CAPITAL</b>                   |                    |                    |                      |
| Paid-up-Capital                     | 68,492,124         | 73,688,665         | 98,144,780           |
| Share Premium                       | 6,366,838          | 7,402,094          | 25,674,845           |
| Retained Reserves                   | 5,462,338          | 14,481,252         | 13,644,455           |
| Other Reserves/Subordinated Debt    | 29,948,526         | 46,479,711         | 64,964,200           |
| Profit/loss                         | 6,188,663          | 17,368,623         | 22,818,908           |
| <b>Total Shareholders' funds</b>    | <b>116,458,488</b> | <b>159,420,345</b> | <b>225,247,188</b>   |
| <b>D. OFF BALANCE SHEET ITEMS</b>   |                    |                    |                      |
| Letters of Credit                   | -                  | -                  |                      |
| Guarantees and Performance Bonds    | 110,794,019        | 186,498,759        | 211,606,407          |
| Unused Loans/Overdrafts commitment  | 46,989,709         | 47,374,974         | 122,637,722          |
| Other off balance sheet items       | 11,351,258         | 11,080,131         | 47,084,855           |
| <b>Total Liabilities and Equity</b> | <b>169,134,986</b> | <b>244,953,864</b> | <b>381,328,984</b>   |

**B. Insurance sector**

|                                    | 2009              | 2010               | 2011               |
|------------------------------------|-------------------|--------------------|--------------------|
| <b>ASSETS</b>                      |                   |                    |                    |
| Cash and deposits in banks         | 42,793,000        | 59,464,000         | 67,706,800         |
| Loans and receivables              | 11,164,000        | 11,500,000         | 18,292,000         |
| Investment in securities/equities  | 13,915,000        | 12,219,000         | 22,554,000         |
| Investments in properties          | 13,827,000        | 21,892,000         | 23,480,000         |
| Property and Equipment             | 12,741,000        | 17,386,000         | 9,185,000          |
| Other assets                       | 4,351,000         | 5,750,000          | 16,627,000         |
| <b>Total assets</b>                | <b>98,791,000</b> | <b>128,211,000</b> | <b>157,844,800</b> |
| <b>LIABILITIES</b>                 |                   |                    |                    |
| Unearned premiums provisions       | 13,107,000        | 6,655,000          | 9,005,000          |
| Unexpired risks provisions         | 0                 | 42,000             | 52,000             |
| Reported claims provisions         | 14,235,000        | 9,260,000          | 9,858,000          |
| IBNR provisions                    | 198,000           | 1,314,000          | 1,362,000          |
| Other provisions                   | 1,953,000         | 14,792,000         | 16,752,000         |
| Borrowings                         | 0                 | 306,000            | 0                  |
| Due to parent/affiliates companies | 26,000            | 49,000             | 80,000             |
| Dividend payable                   | 0                 | 0                  | 5,000              |
| Other liabilities                  | 9,289,000         | 10,764,000         | 12,070,000         |
| <b>Total liabilities</b>           | <b>38,808,000</b> | <b>43,182,000</b>  | <b>49,184,000</b>  |
| <b>CAPITAL AND RESERVES</b>        |                   |                    |                    |
| Paid-up capital                    | 7,257,000         | 8,317,000          | 9,548,000          |
| Share premiums                     | 47,000            | 47,000             | 47,000             |
| Retained earnings                  | 36,910,000        | 48,816,000         | 71,643,000         |
| Profit/loss summary                | 12,329,000        | 15,915,000         | 12,266,000         |
| Other reserves                     | 3,440,000         | 11,933,000         | 14,598,000         |
| <b>Total capital and reserves</b>  | <b>59,983,000</b> | <b>85,028,000</b>  | <b>108,102,000</b> |
| <b>OFF BALANCE SHEET ITEMS</b>     |                   |                    |                    |
| Contingent liabilities             | -                 | -                  | -                  |
| <b>Total off balance sheet</b>     | <b>-</b>          | <b>-</b>           | <b>-</b>           |

C. Microfinance sector (including umurenge SACCOs)

| <b>ASSETS</b>   | <b>2009</b>       | <b>2010</b>       | <b>2011</b>       |
|---|-------------------|-------------------|-------------------|
| <b>(1) Treasury and Operations with Banks and Other Financial Institutions (FI)</b> | <b>17,458,168</b> | <b>16,788,168</b> | <b>32,788,924</b> |
| (10) Cash in Vaults   | 1,807,808         | 1,416,652         | 2,413,780         |
| (11+12) Cash held in Banks and Other Financial Institutions                         | 8,238,524         | 13,928,817        | 28,932,445        |
| (134) Term Treasury Loans   | 6,603,735         | 1,086,109         | 1,086,109         |
| (135) Finance Loans to Banks and Other Financial Institutions                       | 31,798            | 4,323             | 4,323             |
| (151) Assets in The Union Credit Group  | 255,038           | 351,167           | 351,167           |
| <b>Cash and Equivalent</b>  | <b>16,936,903</b> | <b>16,787,068</b> | <b>32,787,824</b> |
| (1292) Accrual Receivable Interests   | 521,265           | 1,100             | 1,100             |
| <b>(2) Operations with Clients</b>  | <b>48,425,640</b> | <b>34,979,379</b> | <b>38,801,678</b> |
| (20/21) Overdraft & Treasury Loans  | 5,114,571         | 6,354,474         | 6,354,474         |
| (22) Equipment Loans  | 4,843,683         | 859,866           | 859,866           |
| (23) Consumer Loans   | 6,249,438         | 7,016,890         | 11,499,357        |
| (24) Mortgage Loans   | 20,331,910        | 845,822           | 845,822           |
| (26/27) Others Loans  | 8,995,586         | 17,087,630        | 16,273,906        |
| (29) Non Performing Loans   | 2,498,093         | 2,607,169         | 2,760,726         |
| <b>Total net Loans</b>  | <b>48,033,280</b> | <b>34,771,851</b> | <b>38,594,150</b> |
| (2092) Accrual Receivable Interests   | 392,360           | 207,528           | 207,528           |
| <b>(3) Financial Instruments</b>  | <b>6,011,774</b>  | <b>233,615</b>    | <b>233,615</b>    |
| (331) Treasury Bills  | 3,880,435         | 99,126            | 99,126            |
| (333) Other Securities  | 1,888,790         | 25,626            | 25,626            |
| (342) Equity Investments  | 38,567            | 87,571            | 87,571            |
| (39) Non Performing Securities  | 128,441           | 24,068            | 24,068            |
| <b>Treasury Bills&amp; Placements</b>   | <b>5,936,233</b>  | <b>233,615</b>    | <b>233,615</b>    |
| (3) Accrual Receivable Interests  | 75,541            | -                 | -                 |
| <b>(4) Fixed Assets</b>   | <b>4,365,807</b>  | <b>1,935,809</b>  | <b>2,505,716</b>  |
| (42) Fixed Assets & Depreciation  | 4,365,807         | 1,935,809         | 2,505,716         |
| <b>(5) Other Assets</b>   | <b>1,701,815</b>  | <b>2,318,733</b>  | <b>3,092,059</b>  |
| (44) Receivable Accounts  | 1,174,465         | 1,019,469         | 1,019,469         |
| (46) Others Assets (Stock,...)  | 236,168           | 229,015           | 1,002,341         |
| (47) Suspense Accounts  | 291,181           | 1,070,249         | 1,070,249         |
| <b>TOTAL ASSETS</b>   | <b>77,963,204</b> | <b>56,255,705</b> | <b>77,421,992</b> |

| <b>LIABILITIES &amp; EQUITY</b>   | <b>2009</b>       | <b>2010</b>       | <b>2011</b>       |
|---|-------------------|-------------------|-------------------|
| <b>(1) Treasury and Operations with Banks and Other Financial Institutions (FI)</b> | <b>3,857,314</b>  | <b>5,730,450</b>  | <b>6,411,705</b>  |
| (143/144) Borrowings (Overnight and Term Treasury)                                  | 1,788,504         | 1,588,360         | 2,269,615         |
| (145) Financial Borrowings  | 1,875,960         | 3,797,518         | 3,797,518         |
| (153) Network Resources   | 188,938           | 344,434           | 344,434           |
| (1291) Accrual Payable Interests  | 3,913             | 138               | 138               |
| <b>(2) Operations with Clients</b>  | <b>49,865,635</b> | <b>29,777,780</b> | <b>45,881,454</b> |
| <b>Savings and Deposits:</b>  | <b>48,929,837</b> | <b>29,758,087</b> | <b>45,861,761</b> |
| (201/203) Current Accounts  | 24,515,238        | 21,331,243        | 36,625,813        |
| (204) Saving Accounts   | 6,108,733         | 4,836,014         | 4,836,014         |
| (205) Short Term Deposits   | 3,870,396         | 850,254           | 1,659,358         |
| (205) Long Term Deposits  | 12,837,780        | 840,916           | 840,916           |
| (208) Security Deposits   | 1,597,689         | 1,899,661         | 1,899,661         |
| (2091)) Accrual Payable Interests   | 935,808           | 19,693            | 19,693            |
| <b>(3) Other liabilities</b>  | <b>2,060,023</b>  | <b>3,684,241</b>  | <b>4,947,002</b>  |
| (45) Payable Accounts and other short term liabilities                              | 1,172,768         | 1,804,178         | 3,066,940         |
| (28) Other Long Term Liabilities  | 725,296           | 832,820           | 832,820           |
| (47) Suspense Accounts  | 156,900           | 1,047,243         | 1,047,243         |
| <b>LIABILITIES</b>  | <b>54,383,657</b> | <b>32,870,203</b> | <b>57,240,162</b> |
| <b>EQUITY</b>   | <b>22,180,232</b> | <b>17,547,616</b> | <b>20,181,830</b> |
| (53) Subsidies  | 6,662,730         | 4,922,455         | 5,199,274         |
| Prior Years   | 3,642,894         | 3,539,915         | 3,539,915         |
| Current Year  | 2,476,457         | 1,382,540         | 1,659,359         |
| (575) Legal Reserves  | 154,495           | 271,817           | 271,817           |
| (579) Other Reserves  | 600,920           | 900,959           | 900,959           |
| (59) Earnings   | 5,755,586         | 472,522           | 1,421,591         |
| (5798) Retained Earnings/Accumulated Losses   | 3,076,478         | (1,039,278)       | (823,762)         |
| (59) Net Profit/Loss of Period +/- (From January)                                   | 2,679,022         | 1,511,801         | 2,245,353         |
| (581) Paid up Capital   | 9,006,587         | 10,979,863        | 12,388,190        |
| <b>LIABILITIES&amp;EQUITY</b>   | <b>77,963,204</b> | <b>56,255,705</b> | <b>77,421,992</b> |
| <b>Provisions</b>   | <b>2,110,649</b>  | <b>2,016,897</b>  | <b>2,129,758</b>  |



**Appendix 4: Income statements as at 31 December 2011 (in thousands of RWF)**

**A. Banking system**

|                                   | 2009               | 2010               | 2011               |
|-----------------------------------|--------------------|--------------------|--------------------|
| <b>INCOME</b>                     |                    |                    |                    |
| Interest Income/ Advances         | 52,512,882         | 67,301,602         | 83,194,888         |
| Interest Income/ Govt Securities- | 2,622,427          | 4,450,441          | 5,829,884          |
| Interest Income on placement      | 4,554,965          | 6,164,517          | 7,496,216          |
| Interest Income - Others          | -                  | -                  | 0                  |
| Commissions                       | 8,197,585          | 10,021,315         | 16,044,316         |
| Foreign Exchange Income           | 9,937,836          | 17,037,647         | 16,233,910         |
| Income – Off Balance Sheet        |                    |                    |                    |
| Other Income                      | 23,316,028         | 30,243,610         | 29,847,324         |
| <b>Total Income</b>               | <b>101,141,723</b> | <b>135,219,133</b> | <b>158,646,538</b> |
| <b>EXPENSES</b>                   |                    |                    |                    |
| Interest Expense – Deposits       | 9,859,406          | 13,973,454         | 16,305,138         |
| Other Interest Expenses           | 3,511,426          | 3,856,022          | 5,186,211          |
| Provisions for Bad Debts          | 22,489,933         | 21,592,878         | 23,355,063         |
| Salaries, Wages, staff costs      | 23,935,180         | 32,272,170         | 40,324,015         |
| Premises, Depreciation, Transport | 9,893,870          | 11,882,588         | 15,780,647         |
| Other Expenses                    | 20,678,584         | 28,691,529         | 27,342,259         |
| <b>Total Expenses</b>             | <b>90,368,400</b>  | <b>112,268,641</b> | <b>128,293,332</b> |
| EXTRAORDINARY Credits/Charges     |                    |                    |                    |
| Net Profit Before Tax             | 10,102,784         | 22,950,492         | 30,353,206         |
| Corporation Tax                   | 4,489,139          | 6,937,685          | 7,720,819          |
| <b>Net Profit After Tax</b>       | <b>6,188,663</b>   | <b>17,368,623</b>  | <b>22,818,908</b>  |

**B. Insurance sector**

|  | 2009              | 2010              | 2011              |
|--|-------------------|-------------------|-------------------|
| <b>UNDERWRITING REVENUES</b>           |                   |                   |                   |
| Gross premiums written                 | 42,974,000        | 49,738,000        | 46,180,000        |
| Less: premiums ceded to reinsurers     | 4,876,000         | 6,821,000         | -6,704,000        |
| Net premiums written                   | 38,098,000        | 42,917,000        | 39,476,000        |
| Decrease/Increase in unearned premiums | (763,000)         | (1,872,000)       | 236,000           |
| <b>Net premiums earned</b>             | <b>37,335,000</b> | <b>41,045,000</b> | <b>39,712,000</b> |
| <b>CLAIMS AND EXPENSES</b>             |                   |                   |                   |
| Claims incurred                        | 17,969,000        | 18,166,000        | 17,507,000        |
| Underwriting expenses                  | 1,261,000         | 2,331,000         | 2,328,000         |
| Management expenses                    | 15,356,000        | 13,485,000        | 12,889,000        |
| Total expenses                         | 34,586,000        | 33,982,000        | 32,724,000        |
| <b>Net underwriting profit/loss</b>    | <b>4,395,000</b>  | <b>7,063,000</b>  | <b>6,988,000</b>  |
| <b>OTHER INCOME AND CHARGES</b>        |                   |                   |                   |
| Investment income                      | 6,345,000         | 5,605,000         | 4,063,000         |
| Other income                           | 2,066,000         | 4,541,000         | 3,138,000         |
| Less: finance costs and extra charges  | 48,000            | 348,000           | -192,000          |
| Total other revenues                   | 8,363,000         | 9,798,000         | 6,979,000         |
| Profit/loss before tax                 | 12,758,000        | 16,861,000        | 13,967,000        |
| Provision for tax                      | 429,000           | 1,174,000         | 1,336,200         |
| <b>Net Income after tax</b>            | <b>12,329,000</b> | <b>15,687,000</b> | <b>12,630,800</b> |

C. Microfinance sector (Including Umurenge SACCOs)

| RWF Thousand  | 2009              | 2010             | 2011              |
|---|-------------------|------------------|-------------------|
| <b>Financial Revenue</b>                                    | <b>12,752,991</b> | <b>9,007,987</b> | <b>11,998,660</b> |
| Income on Operations With Banks and Other Fin. Institutions | 948,911           | 284,054          | 204,740           |
| Financial Revenue from Loan Portfolio                       | 10,709,486        | 7,511,421        | 9,056,393         |
| Interest Income on Loan Portfolio                           | 9,320,462         | 6,580,773        | 7,668,030         |
| Fees and Commissions on Loan Portfolio                      | 1,389,024         | 930,648          | 1,388,363         |
| Financial Revenue from Investments                          | 98,474            | 60,389           | 62,666            |
| Other Operating Revenue (Transaction fees, passbooks, etc.) | 996,120           | 1,152,123        | 2,674,861         |
| <b>Financial Expenses</b>                                   | <b>1,624,697</b>  | <b>730,161</b>   | <b>752,350</b>    |
| Financial Expenses on Funding Liabilities                   | 1,486,560         | 651,669          | 627,291           |
| Interest and Fee Expenses on Deposits                       | 1,218,429         | 376,555          | 153,015           |
| Interests and Fee Expenses on Borrowings                    | 268,132           | 275,114          | 474,276           |
| Other financial expenses and Commission paid                | 138,137           | 78,492           | 51,615            |
| <b>Net Financial Income before Provisions</b>               | <b>11,128,294</b> | <b>8,277,827</b> | <b>11,246,310</b> |
| Loss on Loans   | 2,503,703         | 2,849,865        | 2,912,875         |
| Provisions for Non-Performing Loans                         | 2,180,634         | 2,201,461        | 2,032,946         |
| Written-Off Loans   | 323,068           | 648,404          | 879,930           |
| Recoveries on Loans:  | <b>1,016,707</b>  | <b>1,922,326</b> | <b>1,809,542</b>  |
| Provisions written back                                     | 711,837           | 1,524,269        | 1,174,773         |
| Recoveries from Loans Written-Off                           | 304,869           | 398,057          | 634,769           |
| <b>Net Provision Expenses/Gains</b>                         | <b>1,486,996</b>  | <b>927,540</b>   | <b>873,856</b>    |
| <b>Financial Revenue (After Net Provisions)</b>             | <b>9,641,298</b>  | <b>7,350,287</b> | <b>10,142,976</b> |
| <b>Operating Expenses</b>                                   | <b>7,827,736</b>  | <b>6,613,836</b> | <b>10,353,367</b> |
| Personnel Expenses  | 4,041,406         | 3,390,424        | 5,656,562         |
| Administrative Expenses:                                    | <b>3,786,330</b>  | <b>3,223,412</b> | <b>4,696,805</b>  |
| Taxes (Other than Taxes on Profits)                         | 60,984            | 92,331           | 77,416            |
| Office Rent Fees  | 517,431           | 533,521          | 495,789           |
| External Services (Consultancies)                           | 535,211           | 334,160          | 362,439           |
| Depreciation and Amortization Expenses                      | 908,516           | 608,971          | 461,328           |
| Other Administrative Expenses                               | 1,764,188         | 1,654,428        | 1,892,017         |
| <b>Net Operating Income</b>                                 | <b>1,813,562</b>  | <b>736,451</b>   | <b>(210,390)</b>  |
| <b>Net Non-Operating Income/Expense</b>                     | <b>(48,689)</b>   | <b>261,110</b>   | <b>49,344</b>     |
| Non-Operating Revenue                                       | 177,059           | 295,251          | 88,904            |
| Non-Operating Expense                                       | 225,748           | 34,141           | 39,560            |
| <b>Net Income (Before Taxes &amp; Donations)</b>            | <b>1,764,872</b>  | <b>997,561</b>   | <b>1,135,145</b>  |
| Income Tax (Tax on Profits)                                 | 0                 | 2,626            | 17,343            |
| <b>Net Income (After Taxes &amp; Before Donations)</b>      | <b>1,764,872</b>  | <b>994,935</b>   | <b>(178,389)</b>  |
| Donations   | 894,559           | 246,412          | 2,423,742         |
| <b>Net Income after Taxes and Donations</b>                 | <b>2,659,431</b>  | <b>1,241,783</b> | <b>2,245,353</b>  |

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