

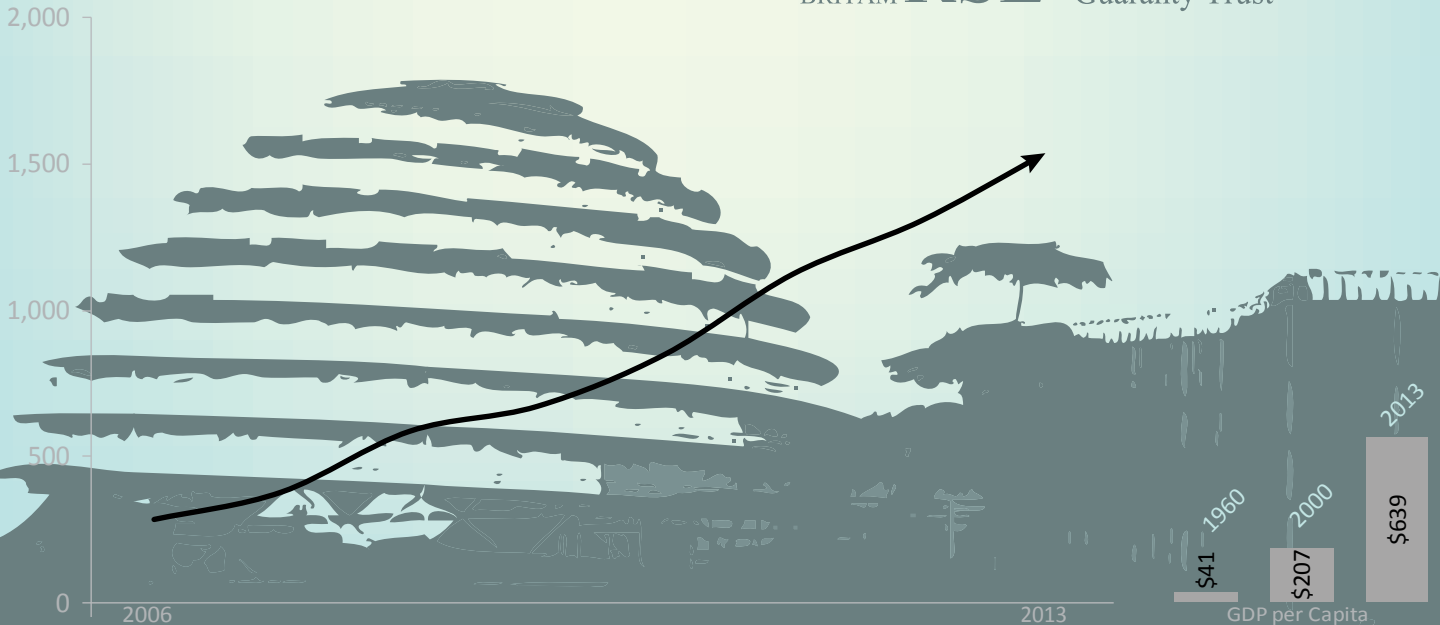
Rwanda Economic Update

June 2015 | Edition No. 8

Financing Development

The Role of a Deeper and More Diversified Financial Sector

Umuganda Bond COGEBANQUE
RSSB UOB SONARWA CORAR
Phoenix I&M BPR Equity AB^{MMI}
Mutuelle de Sante. Umurenge SACCOS CRANE
ZIGAMA CSS BNR SORAS Prime Life
UAP Unguka Radiant Banks BRD Agaseke
KCB Unga Insurance
ECOBANK RSE Bank of Kigali
BRITAM Guaranty Trust



WORLD BANK GROUP
Working for a World Free of Poverty

Rwanda Economic Update

Financing Development

The Role of a Deeper and More Diversified Financial Sector

TABLE OF CONTENTS

Abbreviations and Acronyms	i
Foreword	ii
Overview	iv
Part 1: Recent Economic Developments and Prospects	1
1.1. Introduction	2
1.2. Real Sector	4
1.3. External Sector	8
1.4. Monetary Sector	15
1.5. Fiscal Sector	20
1.6. Macroeconomic Policy Direction	22
1.7. Economic Prospects	23
Part 2: Financing Development	27
2.1. Introduction	28
2.2. Overview of Rwanda's Saving and Investment	28
2.3. Domestic Saving in Rwanda	30
2.4. Foreign Saving in Rwanda	34
2.5. Identifying Alternative Financing Sources for Development	36
2.6. Role of the Financial Sector	39
Part 3: Financing Development: The Role of a Deeper and more Diversified Financial Sector	41
3.1. The Role of the Financial Sector in Economic Growth and Financing Development	42
3.2. The Financial Sector at the Center of Rwanda's Development Vision	44
3.3. The Current State of Rwanda's Financial Sector	45
3.4. Opportunities and Challenges for the Financial Sector to Enable a Successful Transition from ODA	55

ANNEX NOTES

Annex Note 1: Rwanda's foreign direct investment - current status and international comparison	62
Annex Note 2: 2014 tourism sector performance in Rwanda	65
Annex Note 3: How fuel pump price is determined in Rwanda	67
Annex Note 4: Does producer price index lead consumer price index in Rwanda?	69
Annexes Tables	71

FIGURES

Figure 0.1: High growth and low income	iv
Figure 0.2: High public and low private investment	iv
Figure 0.3: Low exports (goods and services, 2009-13 average)	v
Figure 0.4: High net ODA inflows (2010-12 average)	v
Figure 0.5: Annual GDP growth recovered in 2014	v
Figure 0.6: But, quarterly GDP growth decelerating	v
Figure 0.7: Growth drivers in Q3 2014 decelerated in Q4 (production and expenditure account)	vi
Figure 0.8: Real credit growth rate reached the pre-aid decline level (growth rates)	vi
Figure 0.9: Balance of payments deteriorated in 2014	vi
Figure 0.10: Less expansionary fiscal stance (domestic revenue – expenditures)	vii
Figure 0.11: Stable CPI inflation rates due to low transportation	vii

Figure 0.12: Energy imports fluctuate in price and volume	vii
Figure 0.13: Snapshot of Rwanda's macroeconomic development	ix
Figure 0.14: High public investment relies on foreign saving (in 2010-14)	ix
Figure 0.15: Large institutional investor base in East Africa	xiii
Figure 1.1: High growth and low income	3
Figure 1.2: Low exports of goods and services	3
Figure 1.3: Real GDP growth rate recovered in 2014	4
Figure 1.4: Q4 growth became below 5 year average	5
Figure 1.5: Quarterly growth rate decelerated	5
Figure 1.6: Annual GDP growth rate by sector	5
Figure 1.7: Quarterly GDP growth rate by sector	6
Figure 1.8: Annual GDP growth rate by expenditure	6
Figure 1.9: Quarterly GDP growth rate by expenditure	6
Figure 1.10: Real GDI was slightly higher than GDP	8
Figure 1.11: Deteriorated balance of payments	9
Figure 1.12: 2014 current account	9
Figure 1.13: Workers' remittance inflows started to increase in 2010s	10
Figure 1.14: Budgetary grant aid fell in 2014	10
Figure 1.15: Commodity prices	11
Figure 1.16: Imports by category (growth)	11
Figure 1.17: Energy imports (growth)	11
Figure 1.18: High correlation between investment and capital goods imports (growth)	11
Figure 1.19: Gap between GDP deflator and CPI	15
Figure 1.20: CPI inflation rate	16
Figure 1.21: Urban and rural CPI	16
Figure 1.22: Import prices	16
Figure 1.23: CPI and PPI	16
Figure 1.24: Rwandan franc depreciated against the US dollar	17
Figure 1.25: But Rwandan franc appreciated against other key currencies	17
Figure 1.26: Rwandan franc measured by REER appreciated	17
Figure 1.27: Real credit outstanding growth rates recovered the pre-aid decline level	18
Figure 1.28: High correlation between GDP and real credit outstanding growth rates	18
Figure 1.29: Sticky lending rate and declining deposit rate	18
Figure 1.30: GDP and interest rate spread	18
Figure 1.31: Yield curve	19
Figure 1.32: Less expansionary fiscal stance	20
Figure 2.1: Saving and investment rate in 2010-14	29
Figure 2.2: High public and low private investment	29
Figure 2.3: Domestic saving in Rwanda, 2000-14	30
Figure 2.4: Domestic saving: Rwanda and its peer	30
Figure 2.5: Widening saving - investment gap	30
Figure 2.6: Positive correlation between investment and growth in the world (2000-13 average)	31
Figure 2.7: Savings, investment and growth in the World (2000-13 average)	31
Figure 2.8: Positive correlation between income and saving in Rwanda (2000-13)	32
Figure 2.9: Negative correlation between youth dependency and saving in Rwanda (2000-13)	32
Figure 2.10: Positive correlation between financial development and saving in Rwanda (2000-13)	32
Figure 2.11: Current account deficits and financing items in 2010-14	34
Figure 2.12: Public current transfer in 2010-14	35
Figure 2.13: Private current transfer in 2010-14	35
Figure 2.14: Capital account in 2010-14	35
Figure 2.15: Financial account in 2010-14	36
Figure 2.16: Public financial account in 2010-14	36
Figure 2.17: Private financial account in 2010-04	36

Figure 2.18: Bond issuance by Sub-Saharan African countries (excl. South Africa, 2007-14)	38
Figure 3.1: Credit to the private sector	45
Figure 3.2: Credit to the private sector and GDP per capita across the world (2013)	46
Figure 3.3: Financial system structure (2008)	46
Figure 3.4: Financial system structure (2014)	46
Figure 3.5: Banking sector development	48
Figure 3.6: EAC banking sector assets	48
Figure 3.7: Commercial banks outlets	50
Figure 3.8: Growth in the microfinance sector	50
Figure 3.9: Insurance sector development	51
Figure 3.10: Growth in the pension sector (public and private)	52
Figure 3.11: RSSB investment portfolio (2013)	53
Figure 3.12: Capital market size in the EAC	53
Figure 3.13: Framework for understanding the provision of financing for long-term investment	56
Figure 3.14: Institutional investor base in East Africa	57

TABLES

Table 0.1: Actual growth in 2011-14 and projected growth in 2015-16	viii
Table 0.2: Pros and cons of financing options	x
Table 0.3: Kenya is dominant in EAC capital markets	xi
Table 1.1: Rwanda's economy in the world (Low and middle income countries)	2
Table 1.2: Rwanda's economy in EAC	3
Table 1.3: Real GDP growth rates of EAC countries (%)	5
Table 1.4: Link between the production and expenditure accounts	7
Table 1.5: Correlations of growth rates among the production / expenditure account items	7
Table 1.6: Current account balance (% GDP) of EAC countries	9
Table 1.7: Current account comparison between 2013 and 2014 (% GDP)	10
Table 1.8: Traditional goods exports in Jan-Apr 2015 (year on year growth rate, %)	11
Table 1.9: Credit rating history	12
Table 1.10: Rating comparison (Foreign currency rating of S&P as of May 13, 2015)	12
Table 1.11: CPI inflation rates of EAC countries	15
Table 1.12: Rwanda's budget, 2014/15 fiscal year	21
Table 1.13: Growth projections of EAC countries	23
Table 1.14: Actual growth in 2011-14 and projected growth in 2015-16	25
Table 2.1: Rwanda's saving and investment balance (% of GDP)	29
Table 2.2: Gap between gross foreign saving and current account deficit (% of GDP)	34
Table 2.3: Grant inflows	35
Table 2.4: Pros and cons of financing options	37
Table 2.5: Personal remittances, received (% of GDP)	38
Table 3.1: Key financial sector indicators and targets	45
Table 3.2: Structure of Rwanda's financial system	47
Table 3.3: Bank stability and performance indicators (%)	49
Table 3.4: RSSB target portfolio	53
Table 3.5: Size of EAC capital markets	54

BOXES

Box 1.1: Rwanda's trading partners	12
Box 1.2: Informal cross border trade	14
Box 2.1: How can we measure saving in Rwanda?	30
Box 2.2: Targeted financial literacy program is the key for saving	33
Box 2.3: Leveraging migration for financing development	39
Box 3.1: Why are Government debt markets and yield curves important?	51
Box 3.2: Capital market integration in Latin America. Learning from the MILA initiative	60

ABBREVIATIONS AND ACRONYMS

ATM	Automatic Teller Machine	MINICOM	Ministry of Trade and Commerce
BFP	Budget Framework Paper	MINECOFIN	Ministry of Finance and Economic Planning
BNR	Banque Nationale du Rwanda (National Bank of Rwanda)	MPC	Monetary Policy Committee
BOP	Balance of Payments	NBFIs	Non-Bank Financial Institutions
CSDs	Central Securities Depositories	NISR	National Institute of Statistics of Rwanda
CPI	Consumer Price Index	NPLs	Non-Performing Loans
DSA	Debt Sustainability Analysis	ODA	Official Development Assistance
DRC	Democratic Republic of Congo	PFM	Public Financial Management
EAC	East African Community	POS	Point of Sale System
EAPS	East African Payment Systems	PPI	Producer Price Index
EDPRS 2	Second Economic Development and Poverty Reduction Strategy	PSDS	Private Sector Development Strategy
EU	European Union	PSTA	Strategic Plan for the Transformation of Agriculture in Rwanda
FDI	Foreign Direct Investment	RDB	Rwanda Development Board
FSC	Financial Stability Committee	REER	Real Effective Exchange Rate
FSDP	Financial Sector Development Program	REU	Rwanda Economic Update
GDP	Gross Domestic Product	RRA	Rwanda Revenue Authority
GDI	Gross Domestic Income	RSE	Rwandan Stock Exchange
GNDI	Gross National Disposable Income	RSSB	Rwanda Social Security Board
GNI	Gross National Income	RWA	Risk Weighted Assets
ICT	Information and Communications Technology	Rwf	Rwandan franc
IFC	International Finance Corporation	SACCOs	Savings and Credit Cooperatives
IFRS	International Financial Reporting Standards	S&P	Standard and Poor's
IMF	International Monetary Fund	SMEs	Small and Medium-Sized Enterprises
IO table	Input-Output table	UK	United Kingdom
KfW	Kreditanstalt für Wiederaufbau	UN	United Nations
MFIs	Microfinance Institutions	UNCTAD	United Nations Conference on Trade and Development
MILA	Mercado Integrado Latinoamericano or Latin American Integrated Market	US\$	United States Dollar
MINAGRI	Ministry of Agriculture and Animal Resources	WDI	World Development Indicators



FOREWORD

The *Rwanda Economic Update* reports on and synthesizes recent economic developments and places them in a medium-term, regional and global context; it analyzes the implications of these developments and policies on the outlook of Rwanda's economy. These reports attempt to make an analytical contribution to the implementation of Rwanda's national development strategy. Each edition includes a special feature on a selected topic. The report is intended for a wide audience, including policy makers, business leaders, other market participants, and the community of analysts engaged in Rwanda's economy.

The eighth edition of the Rwanda Economic Update was jointly prepared by the Rwanda Macroeconomics and Fiscal Management Global Practice, and Finance and Markets Global Practice teams at the World Bank. Yoichiro Ishihara (Senior Economist) led the team and the sections on recent economic developments and prospects, and financing development. Gunhild Berg (Financial Sector Specialist) led the special focus section. Other team members who contributed to the eighth edition are Toru Nishiuchi (Economist) and Valence Kimenyi (Economist). Apurva Sanghi (Lead Economist and Program Leader) supervised the team. Diarietou Gaye (Country Director), Carolyn Turk (Country Manager), Kevin Carey (Lead Economist) and Albert Zeufack (Practice Manager) provided overall guidance. Sylvie Ingabire (Team Assistant), Maude Jean-Baptiste (Program Assistant), Lydie Ahodehou (Program Assistant), Peace Aimee Niyibizi (Consultant), Robert Waiharo (Consultant designer) and Lindsay Mossman (Editor) supported the team.

Although this report does not represent the official views of the authorities, the macroeconomic unit of the Ministry of Finance and Economic Planning (MINECOFIN) and the National Bank of Rwanda (BNR) were engaged in its formulation and provided valuable comments. The Bank team appreciates their contributions.

The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the World Bank's Board of Executive Directors or the countries they represent. The World Bank does not guarantee the accuracy of the data included in this report. For more information about the World Bank and its activities in Rwanda, please visit www.worldbank.org/rw. To be included in the email distribution of this semiannual series and related publications, please contact Sylvie Ingabire (singabire@worldbank.org). For questions and comments about this publication, please contact Yoichiro Ishihara (yishihara@worldbank.org).

OVERVIEW

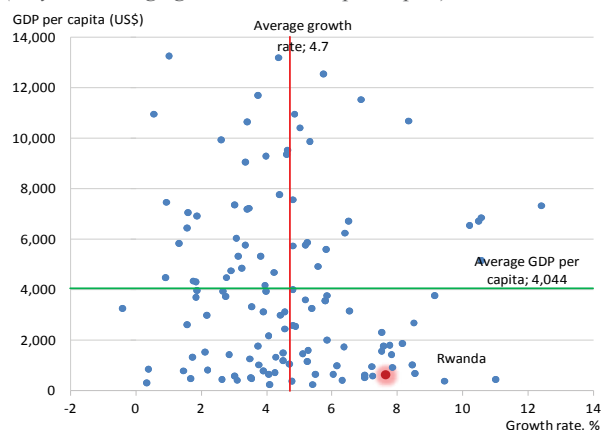
Growth recovery in 2014 is certainly good news. This time last year, we estimated the 2014 growth rate at 5.7 percent. Against all odds, the economy grew by 7 percent. However, growth outlook is not entirely bright. While the oil price decline has brought a positive impact on inflation and trade, recent economic indicators show some weaknesses. Also, global risks (e.g., an increase in US interest rate, slowdown of Chinese and Euro economies, and an appreciation of the US dollar) are emerging. In the medium to long-term, Rwanda's economic resilience will not be achieved without keeping high investment rates. However, the current investment model (high public investment funded by aid) is not likely to be sustainable; given capacity constraints to maintain high public investment and possible decline in aid relative to GDP in the medium-term. Finding alternative sources of development financing is a key determinant of future growth. Development of the financial sector is critical to mobilize both domestic and foreign saving for financing development. This is the message of the Eighth Edition of the Rwanda Economic Update (REU).

Part One: Recent Economic Developments and Prospects

Rwanda's economy can be illustrated by four characteristics: (i) high growth and low per capita income; (ii) high public and low private investment; (iii) low exports and small tradable sector; and (iv) high reliance on aid in the economy. Although Rwanda's annual average growth rate of 7.7 percent in the past decade is the 14th highest among 129 countries, its GDP per capita is one of the lowest (Figure 0.1). Rwanda's relatively high level of investment (about 25

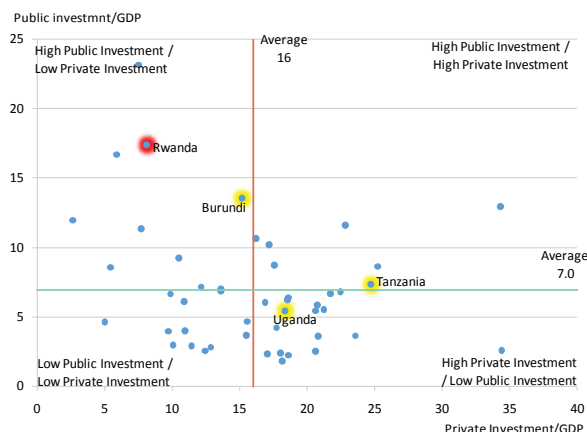
percent of GDP) comes from public rather than private investment (Figure 0.2). The high investment has not developed vibrant tradable sectors (i.e., export crop, manufacturing and mining), which account for only nine percent of GDP. Consequently, the share of exports of goods and services in the economy is lower than Kenya, Tanzania, and Uganda, as well as other country groups (low income, Sub-Saharan Africa) (Figure 0.3). The combination of high public investment and low export revenues has made Rwanda reliant on foreign financing, mainly in aid. The

Figure 0.1: High growth and low income
(10 year average growth and GDP per capita)

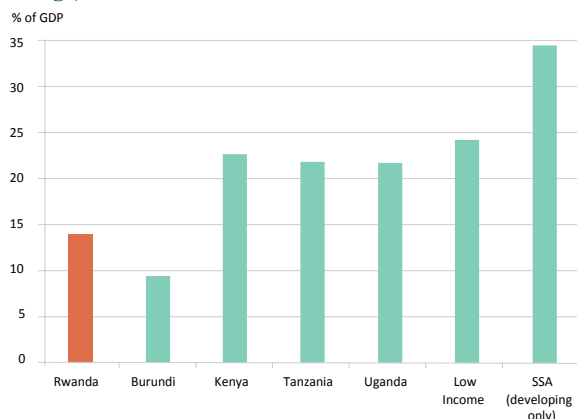


Sources: World Development Indicators, NISR, World Bank staff calculations.

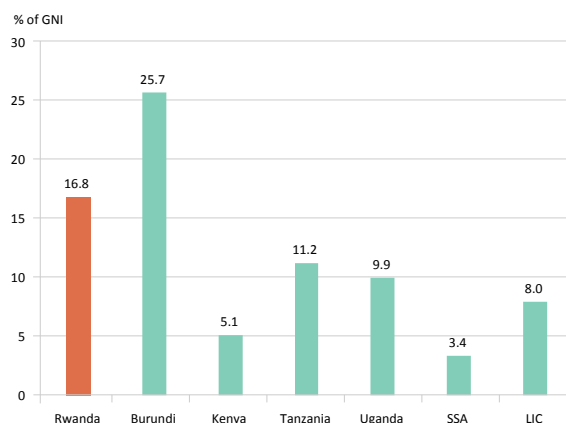
Figure 0.2: High public and low private investment



Sources: World Development Indicators, NISR, World Bank staff calculations.

Figure 0.3: Low exports (Goods and Services, 2009-13 average)

Sources: World Development Indicators, NISR, World Bank staff calculations.

Figure 0.4: High net ODA inflows (2010-12 average)

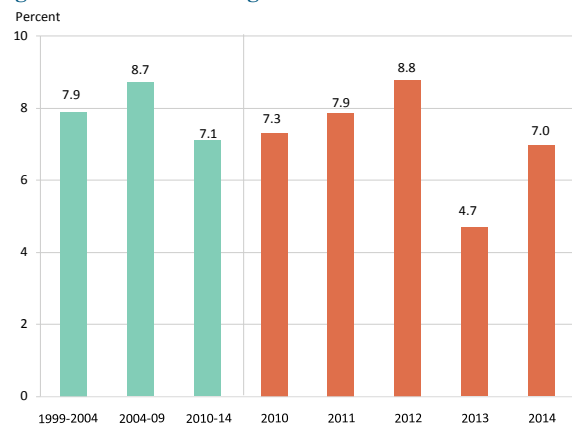
Sources: World Development Indicators, NISR, World Bank staff calculations.

net official development assistance (ODA) inflows far exceed the Sub-Saharan Africa and low-income country averages (Figure 0.4). With these characteristics in mind, Part One of the REU attempts to address the following three questions: (i) What is the current status of the economy? (ii) What is the impact of oil prices for the economy in the first several months of 2015 and onward? (iii) What growth projections can be made for 2015 and 2016?

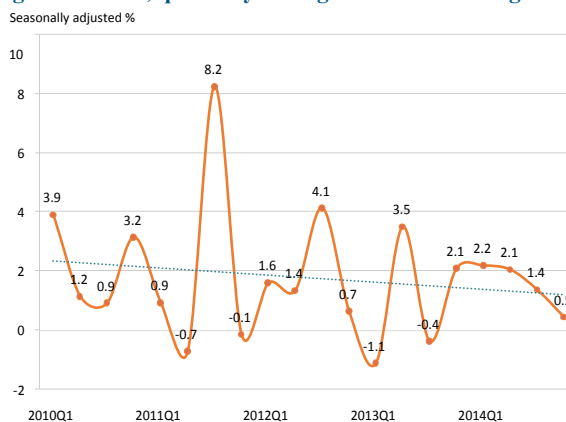
What is the current status of the economy?

Real Sector: Recent economic indicators offer mixed signals on Rwanda's future economic direction. GDP growth rate accelerated from 4.7 percent in 2013 to 7.0 percent in

2014 (Figure 0.5). Private consumption and government consumption led this recovery, which is reflected in the accelerated growth of the services sector. However, the 2014 growth rate is below the potential growth rate (the maximum amount of growth without triggering additional inflation) of approximately eight percent. Additionally, quarterly growth rates (seasonally adjusted) slowed—especially in Q4 2014—mainly due to the deceleration of key growth drivers in the previous quarters of 2014 (private consumption, government consumption and services sector) (Figures 0.6 and 0.7). On the other hand, there are positive signs. Credit growth rates in the economy (in real values) recovered to the pre-aid shortfall period high

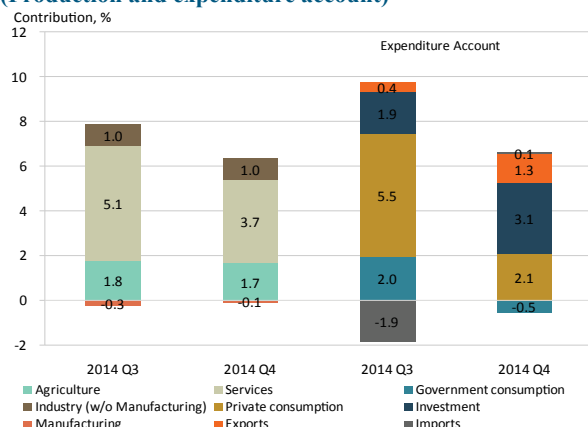
Figure 0.5: Annual GDP growth recovered in 2014

Sources: World Development Indicators, NISR, World Bank staff calculations.

Figure 0.6: But, quarterly GDP growth decelerating

Sources: World Development Indicators, NISR, World Bank staff calculations.

Figure 0.7: Growth drivers in Q3 2014 decelerated in Q4 (Production and expenditure account)



Sources: World Development Indicators, NISR, World Bank staff calculations.

(Figure 0.8). Also, the government indicated that administrative bottlenecks, which negatively affected execution of capital expenditures, were addressed in Q1 2015. Given the important of the government in the economy, efficient and timely execution of capital expenditures will have significant positive impacts on the economy.

External sector: Recent development of the external sector calls for careful monitoring. The balance of payments (BoP), summarizing an economy's transactions with the rest of the world, significantly deteriorated in 2014. The current account deficits deteriorated from 7.4 percent of GDP in 2013 to 11.8 percent in 2014, the worst since at least 1998. The decline in public current transfer (mainly grant aid) contributed more than half to the deterioration. The overall balance turned negative (Figure 0.9), which means that international reserves, in absolute values, fell. In the first four months of 2015, there are few signs of export recovery in formal trade data. Going forward, the development of informal cross border trade will have to be carefully monitored, as well. It accounted for 15 percent of the overall exports (i.e., sum of formal and informal exports) and generated US\$80 million surplus in 2014. In order to revive the export sector, the government formulated the revised National Export Promotion Strategy.

Figure 0.8: Real credit growth rate reached the pre-aid decline level (growth rates)

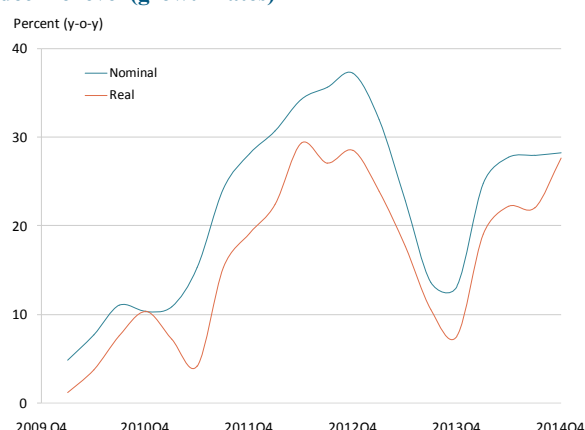
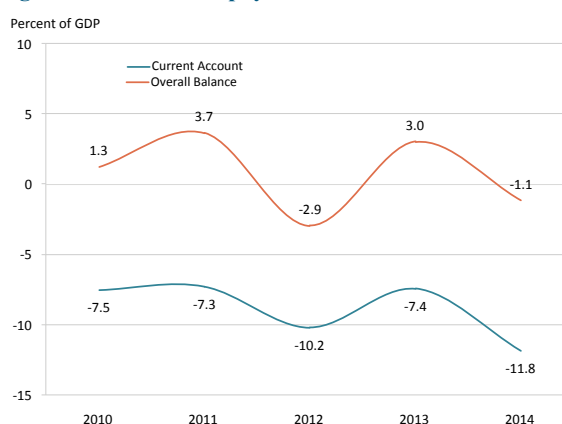


Figure 0.9: Balance of payments deteriorated in 2014



Sources: BNR, World Bank staff calculations.

Monetary sector: Positive monetary sector development has enabled the central bank (BNR) to maintain an accommodative monetary policy. Inflation rates measured by consumer price index (CPI) were below one percent in February-April 2015 before it went up to 2.2 percent in May. Though the exchange rate depreciated against the US dollar, it appreciated against other currencies. There are few signs of inflationary pressure domestically or externally. Thus, the BNR has been able to use accommodative monetary policy (keeping short-term interest rates low, making money cheaper to borrow) in order to support economic growth through facilitating commercial bank lending. As a result, growth rates of commercial bank lending continued to accelerate. In real terms, the growth rate reached the pre-aid shortfall level (Figure 0.8).

However, weak monetary policy transmission and resulting high and sticky lending rates are of concern. In response to the accommodative monetary policy, deposit rates declined from the recent peak at 10.7 percent in Q1 2013 to 7.8 percent in Q4 2014. However, lending rates have been stable at around 17 percent. As a result, interest rate spread, between lending rate and deposit rate, has widened to more than 9 percent in 2014 and remained the same in the first several months in 2015. This is the highest level since 2010.

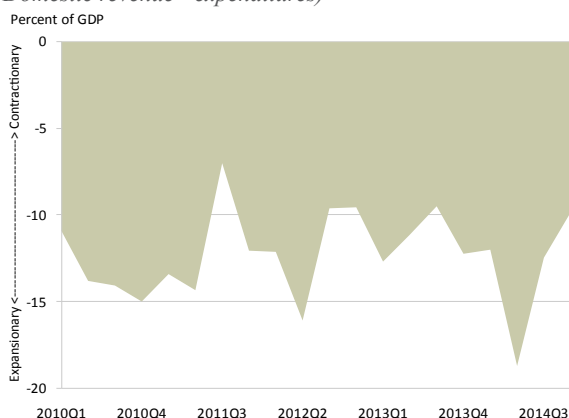
Fiscal sector: Fiscal policy became less expansionary (had a smaller positive effect on the economy) in the second half of 2014 (Figure 0.10). Although fiscal consolidation (i.e.,

reducing fiscal deficit) is a medium-term policy direction, the factors causing the lessening of expansionary fiscal policy are not promising. On revenues, in the first half of 2014/2015 fiscal year, tax revenues were Rwf 406 billion (14.5 percent of GDP) falling short of planned revenues (Rwf 416 billion or 14.9 percent of GDP). On expenditures, execution of capital expenditures was lower than planned by 1.1 percent of GDP. This is mainly due to delayed implementation of domestically financed energy projects. Given the role of the public sector in capital accumulation through public investment in the economy, it is critical to execute capital expenditures as projected without delays.

What is the impact of oil prices for the economy in the first few months of 2015 and onward?

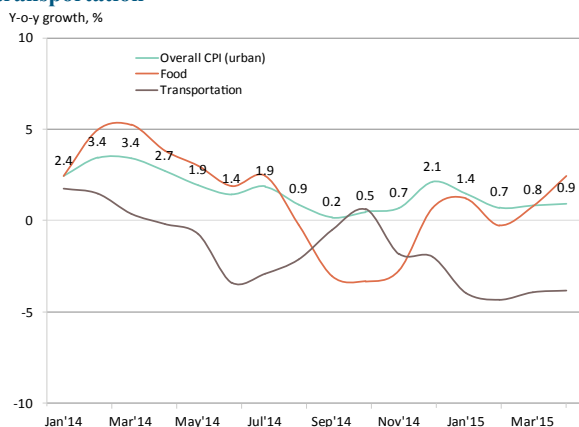
The World Bank analyzed the possible impacts of the oil price decline on Rwanda's economy, using inflation and trade statistics in the previous REU. Positive impacts are observed in both inflation figures and the trade statistics. In CPI, transportation prices (including gasoline) declined by about 4 percent in 2015, which brought down the overall CPI (Figure 0.11). On energy imports, prices started to significantly decline in November 2014. As a result, energy import values fell by 20-40 percent until April 2015 (Figure 0.12). The decline in crude oil prices accelerated in mid-2014. Thus, going forward,

Figure 0.10: Less expansionary fiscal stance
(Domestic revenue - expenditures)



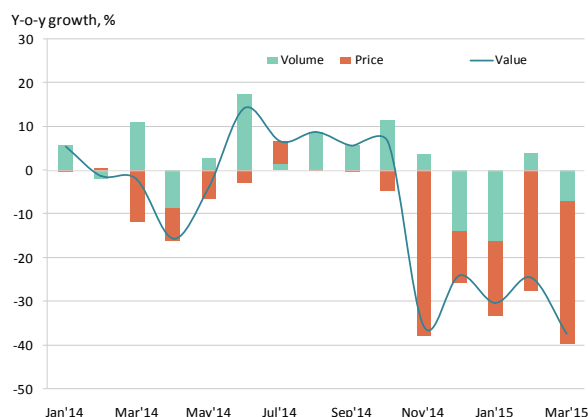
Sources: MINECOFIN, World Bank staff calculations.

Figure 0.11: Stable CPI inflation rates due to low transportation



Sources: BNR, World Bank staff calculations.

Figure 0.12: Energy imports fluctuate in price and volume



Sources: BNR, World Bank staff calculations.

year-on-year CPI inflation rates and energy imports will benefit until at least mid-2015.

Macroeconomic projections for 2015 and 2016

The actual growth rate, of 7 percent in 2014, was in line with the World Bank projection made in February 2015 and higher than our projection of 5.7 percent in August 2014. Recent economic developments do not lead us to change the 2015 and 2016 growth projection the Bank made in the previous edition, which is 7.4 percent in 2015 and 7.6 percent in 2016. There are broadly four reasons / assumptions to keep the growth projections: (i) macroeconomic stability (mainly inflation rate and exchange rate);

(ii) resulting policy flexibility; (iii) expected acceleration of budget execution and (iv) positive regional economic outlook. With this level of growth, Rwanda's poverty rate (US\$1.25 a day, PPP terms) is projected to decrease to 54 percent in 2016, down from 63 percent in 2011, moving approximately one million people above the poverty rate. However, this is subject to the execution of public expenditures as budgeted, especially capital expenditures. There are also four global emerging downside risks to be aware of, including an increase in US interest rate, appreciation of the US dollar, slowdown of Chinese economy, and collapse of EU, that could cause projections shortfalls.

Table 0.1: Actual growth in 2011-14 and projected growth in 2015-16

	2011	2012	2013	2014	2015 (proj.)	2016 (proj.)
Real gross domestic product	7.8	8.8	4.7	7.0	7.4	7.6
Private consumption	9.0	6.9	2.9	5.3	6.0	5.5
Government consumption	4.0	14.7	1.0	14.5	10.0	10.0
Gross fixed capital investment	9.3	22.2	7.7	9.6	12.0	10.1
Exports, goods and services	40.5	17.5	13.7	4.2	15.0	15.0
Imports, goods and services	24.5	21.4	5.5	7.2	10.0	10.0
GDP, at market prices	7.8	8.8	4.7	7.0	7.4	7.6
Primary	4.7	6.5	3.2	5.3	5.4	5.4
Secondary	17.9	8.5	9.2	5.8	10.3	10.5
Tertiary	8.0	11.5	5.4	8.9	8.6	8.9
Output gap	-0.5	1.5	0.1	0.3	0.7	1.1
CPI Inflation, period average	5.7	6.3	4.2	1.8	2.0	4.0
Current account balance, % of GDP	-7.2	-11.3	-7.1	-11.5	-11.3	-11.8
Fiscal balance, % of GDP 1/	-3.2	-1.5	-5.2	-4.3	-5.1	-3.5
Poverty rate (\$1.25 a day, PPP terms) 2/	63	59.8	59.1	57.6	55.9	54.2
Gini coefficient consumption	49.6	..	..	..	..	..

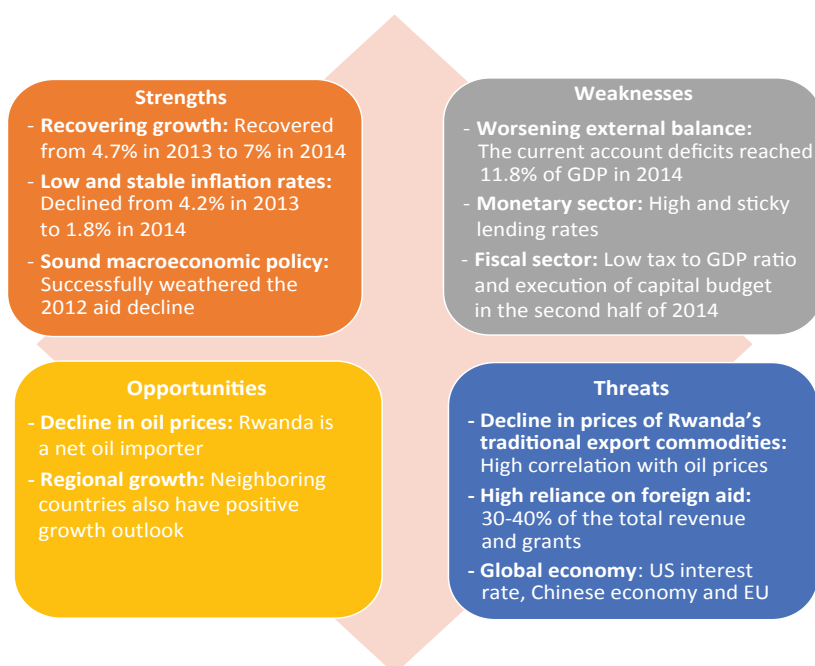
1/ Fiscal balance is on based on Rwanda's fiscal year. For example, 2014 data shows FY2013/14 data between July 2013 and June 2014.

2/ All poverty rates beyond 2011 are estimates.

Source: World Bank staff estimate.

Rwanda's Economy at a Glance?

Figure 0.13: Snapshot of Rwanda's macroeconomic development

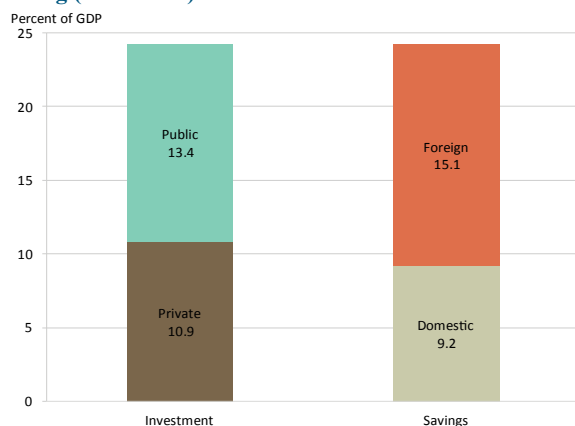


Source: World Bank staff.

Part Two: Financing Development

Searching for alternative financing sources: In order for Rwanda to achieve high and sustainable growth in the medium-term, investment is critical. Although Rwanda's investment at 24 percent of GDP is slightly higher than the average of low/medium income countries, it is mostly financed by foreign saving, including aid (Figure 0.14).

Figure 0.14: High public investment relies on foreign saving (in 2010-14)



Sources: NISR, WDI, World Bank staff calculations.

Given the extent of grant aid inflows (6.9 percent of GDP) in the past five years and probable decline in the future by about 5 percent of GDP, it is imperative to find alternative domestic and external financing sources.¹

Tapping additional foreign sources: Increasing domestic saving to the extent that they could compensate for the probable decline in aid is difficult. That strategy is unlikely to be realized in the next several years and could only be achieved through less consumption. Thus, Part Two makes a preliminary analysis on foreign financing sources from the viewpoints of costs, past trends, and volatility (Table 0.2). From the preliminary analysis, workers remittance and foreign direct investment (FDI) stood out as potential sources.

¹ In Rwanda, against the theoretical framework, gross foreign saving calculated by the national account and the current account in the BoP do not match, most likely due to data collection issues on both the national account and the balance of payments (see Table 2.2).

Table 0.2: Pros and cons of financing options

	Inflows in 2014 (\$mln)	Financing Cost	Growth Rate (Annual)			Volatility		Prospects
			LT Growth (98-14, in %)	MT Growth (09-14, in %)	Recent growth	Standard deviation (98-14, in %) 1/	Remark	
1. Public Current Transfers								
Budgetary grant (excluding Debt relief under Heavily Indebted Poor countries HIPC)	382	Zero	22	-8	Negative	2	H	Negative
Technical assistance	36	Zero	-2	4	Medium	1	M	?
Humanitarian aid	107	Zero	1	5	Medium	1.2	M	?
2. Private Current Transfers								
Remittance from diaspora	175	Zero	29	15	High	0.9	L	Positive
Private transfers for churches and association	67	Zero	5	14	High	0.6	L	?
3. Capital Account								
Public Investment Projects (PIP)	334	Low	11	11	High	1	M	?
4. Financial Account								
Public sector long-term capital	286	High	8	26	High	1.7	H	?
Foreign direct investment	200	Low	23	11	High	1.4	M	Positive
Portfolio investment	5	High	12	-190	Negative	1.2	L	?

1/ To adjust trend, calculated based on share in GDP.

Source: World Bank staff estimates.

Role of the financial sector: The development of the financial sector in Rwanda is essential in financing development, for two reasons. First, the positive relationship between domestic saving and development of the financial sector suggests that the financial sector will be able to mobilize more saving, especially through improving access to finance in the medium to long-term. Second, the financial sector will play a key role in attracting foreign saving. Access to finance is a prerequisite for transferring money into Rwanda. Without having a bank account, it is difficult for a Rwandan household to receive financial services. International transfers from Rwandans living abroad will help, as remittances promote financial development in developing countries. On FDI, in addition to its financing function, “financial markets allow the backward linkages between foreign and domestic firms to turn into FDI spillovers”.² The development of the capital market is critical to attract foreign investors into local bond/stock markets.

Part III: Special Topic on the Financial Sector - Financing the Development of Rwanda's Economy

“A well-developed financial system can help an economy grow by mobilizing savings, allocating funds to investment, and redistributing risk. If the financial system fails to reach large portions of the population, household savings will be stunted. People need a secure, accessible vehicle for storing their wealth. If the banks do not provide it, people will save less, or store their money in less liquid forms that do not serve the wider economy well.”³

Rwanda's financial sector has made great strides towards becoming a modern financial sector

The financial sector consists of a wide and growing array of institutions: Banks, microfinance institutions, savings and credit cooperatives (SACCOs), insurance companies,

² Alfaro, Chanda, Kalemli-Ozcan and Sayek (2006) “How does foreign direct investment promote economic growth? Exploring the effects of financial markets on linkages”.

³ The growth report (2008).

and pension funds. In addition, capital market firms provide an expanding range of products and services to address the financial needs of the private sector, even though there is still scope for further improvement. Credit to the private sector, relative to GDP, stood at 16.6 percent as of end 2014, compared to 11.6 percent in 2009. While the trend over the last few years is positive, private sector credit relative to GDP remains low relative to other EAC and low income countries.

The financial sector has also become diversified.

While commercial banks still hold over 50 percent of financial sector assets, it is considerably less than in 2008 when the banks' share exceeded 60 percent. This positive development shows increased competition, with new and different types of institutions, as well as, a wider breadth of financial products available. At the same time, the diversification implies the emergence of new interconnections between different parts of the financial sector. This diversification, along with new interconnections, can potentially function as a contagion channel in times of stress. Thus, system-wide monitoring with more sophisticated regulatory and supervisory arrangements is essential.

Rwanda's capital market has become more developed over the past five years. The Rwandan Stock Exchange (RSE) has six equity listings (two

domestic and four cross-listings from the EAC). Seven bonds are traded on the stock exchange (five government and two corporate bonds). The government has started to regularly issue bonds to deepen the capital market and lengthen the yield curve, with the longest maturity today being seven years. Rwanda also successfully launched a Eurobond (US\$400 million) in 2013 and the IFC issued a Rwf 15 billion (US\$22 million) local currency bond on the RSE in 2014. Non-government debt and equity markets are showing potential. The market capitalization of Rwanda's debt and equity market was still very small at Rwf 1,332 billion (US\$2.0 billion) or 24.7 percent of GDP as of December 2014. This compares to an aggregate market capitalization of US\$61.6 billion of all EAC debt and equity markets, with Kenya accounting for about 60 percent of this combined capitalization (Table 0.3).

How can the financial sector contribute to financing development?

The financial sector can enable development financing and a gradual transition from aid. It contributes to economic growth and an expansion of government revenues. It helps governments facilitate efficient domestic revenue mobilization, and government transfer targeting via effective payment systems, and curbs

Table 0.3: Kenya is dominant in EAC capital markets

	Kenya	Uganda	Tanzania	Rwanda	Burundi	EAC Totals
Listed companies (#)	64	16	21	6	0	107
Domestic	63	8	14	2	0	87
Cross listed	1	8	7	4	0	20
Corporate bonds	14	5	4	2	0	25
Market capitalization, US\$ millions						
Equities	25,393	6,218	12,800	1,931	0	46,342
Domestic firms	25,393	815	5,751	859	-	32,818
Cross listed	-	5,403	7,049	1,072	-	13,524
Bonds	11,314	928	2,914	92	10	15,248
Government	10,541	879	2,889	69	10	14,378
Corporate	773	49	25	23	0	870
Total	36,707	7,146	15,714	2,023	10	61,590

Note: Data as of end December 2014. Burundi numbers are for 2012.

Sources: Stock Exchanges, Central Banks.

illicit financial flows. In addition, the financial sector can facilitate domestic and foreign debt financing, including through bond issuance and accessing international capital markets, as well as, investments by institutional investors, such as insurance and pension funds.

Financing development requires long-term finance (maturities of at least five years or financing sources with no specific maturities but relatively stable over time). However, the number of financial institutions that can provide such long-term financing, at required levels to facilitate sizable contributions to development financing, are limited.

Institutional investors are crucial for financing development

While commercial banks are still the most important source of financing, their investments are constrained by the maturity of their liabilities, which consist mainly of local short-term deposits. As a result, investing in long-term assets creates a balance sheet mismatch between assets and liabilities. While such maturity transformation is one of the main functions of commercial banks, they can only do it to a certain extent without risking their own stability. Therefore, the banks' ability to invest in longer-term assets is limited. Another constraint for commercial banks is Rwanda's relatively small economy, which makes it difficult to realize economies of scale. With economies of scale, banks could be more efficient as the required fixed costs are spread over a wider operation. Thus, it is crucially important for banks' to extend their reach across Rwanda's borders, and include the currently unbanked into the banking system, to ultimately realize the benefits of economies of scale.

As the banking sector has limited capacity to provide long-term financing, institutional investors, such as pension and insurance funds, are natural candidates for investing in long-term projects. In comparison to short-

term consumer deposits in commercial banks, pension funds have access to funds that do not need to be immediately liquid. This means they have access to funding that can be locked in for longer periods of time. As a result, these funds can then be lent out or invested in projects that require larger investments over a longer period of time. Revenues from these investments revert back to institutional investors over a longer time horizon, matching with their payout schedules. Institutional investors may also place long-term deposits in banks which can then extend long-term finance through the banking channel. The most important source of such long-term financing in Rwanda is the Rwanda Social Security Board (RSSB), followed by private pension and insurance funds, which are growing quickly, albeit from a low base. The institutional investor base in Rwanda was US\$1,045 million in 2014 (equivalent to 13 percent of GDP); this is larger in size than the potential decline in medium-term aid (5 percent). While some of the funds have been already invested in long-term projects, an efficient allocation of available funds could make a substantial contribution to the investment needs of the country.

Supporting RSSB and the insurance sector in strengthening their investment policy and fund management would contribute to a stronger investor base. Rwanda is still at an early stage in the process of reforming the predominantly public pension sector. It is establishing a new regulatory regime and other measures, aimed at strengthening the management and governance of these institutions. The Pension Bill has only recently been approved, and regulatory guidelines are still pending. Further strengthening will also be required in terms of the RSSB's fund management capacity. Historically, the bulk of its investments were in real estate, which is not liquid, and 34 percent of the RSSB's assets are currently parked in commercial banks' term deposits, above the official target of 25 percent, and earning relatively low interest. Regarding the insurance sector, the split-up of composite insurers and the establishment of separate life

insurers, as well as, the soon to-be-introduced new approach to regulation and supervision which will focus more on the risks of institutions and the system, is increasing the demand for longer-term investments of high quality, a trend that will only grow over time.

Tapping regional (and international) sources of funding is an ideal complement to allocating domestic long-term funds more efficiently

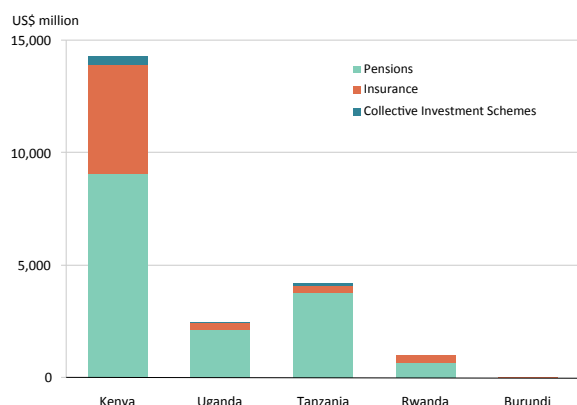
The institutional investor base in the EAC is significantly larger than Rwanda alone (Figure 0.15). Tapping into these pools of funds can therefore be an important source of funding going forward. All countries in the EAC face structural issues related to the small size of their economies, weak global competitiveness, and relatively shallow domestic investor bases. Even the Kenyan market is small in an international comparison. These factors severely limit the overall size and potential growth of capital markets in each of the EAC member countries. With a limited number of issuers, it is challenging to attract and broaden the investor base, as development and professionalization is linked to the availability of investment products. Expanding into an integrated regional market to achieve a larger scale can help overcome some of these challenges and improve the ability of regional firms to access capital markets for long-term

financing needs. Regional market integration also gives non-bank financial institutions and others, access to a wider range of securities. This would allow them to better manage their portfolios in line with their chosen risk/return frontier. International experience, such as Peru (see Box 3.2), shows that smaller countries tend to benefit more from regional integration by leveraging the position of the largest market in the region to create advantages of greater scale, efficiency, and visibility with institutional investors.

Regional integration does not necessarily require a single integrated market with an identical regulatory framework applying in all countries. Nevertheless, attracting a wider range of investors requires:

- The removal of barriers between markets, so that investors located in the region can hold bonds issued by any of the member governments, without discriminatory penalty;
- A harmonized and transparent approach to policies and practices, i.e. of both the issuer and market participants;
- A harmonized or compatible legislative and regulatory framework;
- Investment regulations and processes that enable institutional investors, such as pension funds and insurance companies, to invest freely within the region;
- Infrastructure that allows investors to trade, settle and manage their securities transactions and portfolios, wherever located, in ways that are flexible, safe and inexpensive; and
- Sound macroeconomic policy management across the region.

Figure 0.15: Large institutional investor base in East Africa



Notes: Data as of 2014 with the following exceptions: Uganda – Insurance: 2013; Tanzania – Insurance and Pensions: 2013; Burundi: 2012.
Source: EAC regulatory authorities.

As part of this effort, Rwanda and Kenya have recently connected their stock markets electronically. This is expected to increase the flow of investments between the two countries. Automation of the EAC members' stock markets forms a key pillar of capital markets integration, and it is expected that all EAC stock exchanges will ultimately be automated

and connected. Given that Nairobi's and Kigali's Central Securities Depository Systems are now connected, it is possible to buy shares in Kenya and sell them in Rwanda and vice versa, which can increase turnover on either exchange.

While Rwanda has already successfully tapped the international market, further leveraging of the regional market is expected to be more predictable and cheaper in the long-run. With the Eurobond issued in 2013, Rwanda successfully attracted international funds at an attractive yield. Tapping international markets has been relatively easier for newly issuing countries because of the search for yield by international investors.

This is happening in times of record low interest rates and quantitative easing in major developed markets, most notably the US. While predicting future interest rates is difficult, expectations are that they will be moving upwards. This will make tapping international markets more expensive in the future for countries like Rwanda. Benefits will have to be weighed more carefully against the costs of borrowing, coupled with the exchange rate risk that comes with borrowing in foreign currency. Large investment projects that will have part or all of their revenue streams in foreign currency will be best suited for utilizing such funding in the future.



PART ONE

Recent Economic Developments and Prospects



1.1. Introduction

Rwanda's Economy in the World⁴

The comparison between Rwanda and the rest of the world (low and middle income countries) shows that Rwanda lags behind other countries in most key indicators, despite its remarkable growth in the past ten years (Table 1.1). Annual average growth rate between 2003 and 2013 reached 7.7 percent, which ranked 14th among 129 countries, far exceeding the average growth rate at 4.7 percent. However, the size of the economy (nominal Gross Domestic Product (GDP) at US\$7.5 billion) and income level (Gross National Income (GNI) per capita at US\$630) were almost at the bottom of the table. Although the level of investment (25.5 percent of GDP) was slightly above the average, those of private investment (8.1 percent of GDP) and Foreign Direct Investment (FDI) (1.5 percent of GDP) were less than half of the average implying that public investment was dominant. The combination of the dominance of public investment and low domestic revenues (tax to GDP rate at 13.7 percent) shows high reliance on aid. Net Official Development Assistance (ODA)

as a share of Gross National Income (GNI) stood at 12.3 percent in 2012 even though the ratio in 2012 was unusually low due to the aid shortfall. Exports as a share of GDP at 14.4 percent is almost the bottom of the table.

Rwanda's Economy in East African Community (EAC) Countries

Rwanda does not stand out in key indicators among EAC countries other than high GDP growth rate and low private investment (Table 1.2). Annual GDP growth rate in the past ten years is the highest, while the private investment as a share of GDP is by far the lowest among EAC countries. The comparison between Rwanda and Uganda shows interesting features. While Rwanda has higher GDP growth rate and higher GNI per capita, Uganda seems to have better economic prospects. Uganda attracted higher private investment and FDI (mainly due to the natural resources sector) and thus it relies less on aid. A higher exports-to-GDP ratio in Uganda implies that Uganda successfully tapped international markets.

Table 1.1: Rwanda's economy in the World
(Low and Middle Income Countries)

Topic	Indicator	Year 1/	Figure	Average of total sample countries	Rank / Total # of countries
Size of economy	GDP (current US\$, billion)	2013	7.5	185.7	90 / 131
Income level	GNI per capita (current US\$)	2013	630	4,029	112 / 128
Growth rate	Annual GDP growth rate in 10 years	2013	7.7	4.7	14 / 129
Investment	Gross fixed capital formation, % of GDP	2013	25.5	23.7	33 / 97
Private investment	Gross fixed capital formation by private investment, % of GDP	2013	8.1	17.2	55 / 61
FDI	FDI % of GDP	2013	1.5	4.7	102 / 130
Domestic revenues	Tax revenues, % of GDP	2012	13.7	16.7	53 / 70
Aid dependency	Net ODA, % of GNI	2012	12.3	6.5	22 / 128
Exports	Exports (goods and services), % of GDP	2013	14.4	36.9	97 / 106

1/ Years are different due to availability of data.
Source: World Development Indicators.

⁴ Based on the World Development Indicators as of March 2015. For international comparison, the latest data on Rwanda is not used.

Table 1.2: Rwanda's Economy in EAC

Indicator 1/	Year	Rwanda	Burundi	Kenya	Tanzania	Uganda
GDP (current US\$, billion)	2014	7.9	3.1	60.1	46.1	27.2
GNI per capita (current US\$)	2013	630	260	1,160	630	550
Annual GDP growth rate in 10 years	2013	7.7	4.1	5.2	7.0	7.0
Gross fixed capital formation, % of GDP	2013	25.5	28.7	20.4	32.1	23.8
Gross fixed capital formation by private investment, % of GDP	2013	8.1	15.2	..	24.7	18.3
Foreign direct investment, % of GDP	2013	1.5	0.3	0.9	5.6	5.6
Tax revenues % of GDP	2012	13.7	..	15.9	16.1	13.0
Net official development assistance, % of GNI	2012	12.3	21.2	5.3	10.3	8.5
Exports (goods and services) % of GDP	2013	14.4	7.4	17.7	24.7	23.7

1/ Green shows the best, while red shows the worst among EAC countries.

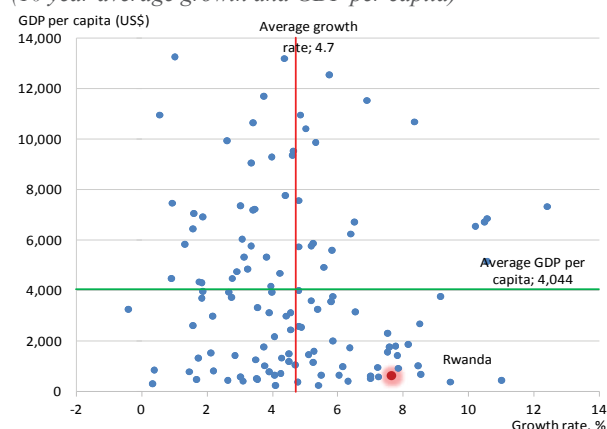
Source: World Development Indicators.

Four Stylized Facts of Rwanda's Economy

By positioning Rwanda's economy into the global and regional contexts, four stylized facts have emerged.

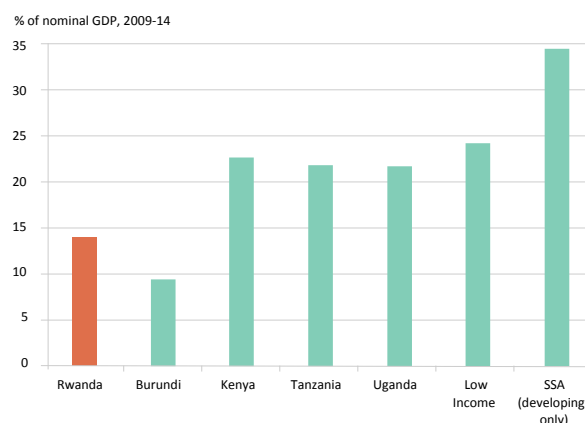
- (i) **High growth and low per capita income.** Annual average growth rate for the past ten years, up to 2013, reached 7.7 percent and ranked 14th among 129 low and middle income countries. Yet, its income measured by GNI per capita remained at US\$630, 112th among 128 low and middle income countries (Figure 1.1).
- (ii) **Low private investment (including FDI) and high public investment.** The level of investment is one of the key determinants of future growth, as it accumulates physical capital. While the level of investment
- (iii) **Low exports:** For a small land-locked country, such as Rwanda, that relies on imports for a large portion of its economic activity; exporting goods and services to meet import bills is essential. However, Rwanda's exports as a share of GDP stood at 14.4 percent which barely meets import bills (in 2014 exports covered 25 percent of imports), and it is lower than neighboring countries (Figure 1.2). In addition, goods exports are highly concentrated to traditional goods such as coffee, tea and minerals. The low exports mirrors the dominance of the

Figure 1.1: High growth and low income
(10 year average growth and GDP per capita)



Sources: WDI and World Bank staff calculations.

Figure 1.2: Low exports of goods and services



Sources: WDI, World Bank staff calculations.

non-tradable sector (the total production excluding export crops in agriculture, mining and manufacturing) in the economy. The share of the tradable sector in the economy has been almost unchanged since late 1990s ranging between 7 and 10 percent.

- (iv) **Aid:** The high public investment and imports of intermediate and capital goods were supported by aid flows. Net ODA as a share of GDP at 12.3 percent (though low

according to Rwanda's standard aid levels) was almost twice as large as the global average and the second highest among EAC countries.

With the four stylized facts in mind, the rest of Part One examines Rwanda's economic development in the medium term, as well as regional contexts in the real sector, external sector, monetary sector, and fiscal sector.

1.2. Real Sector

Key Points

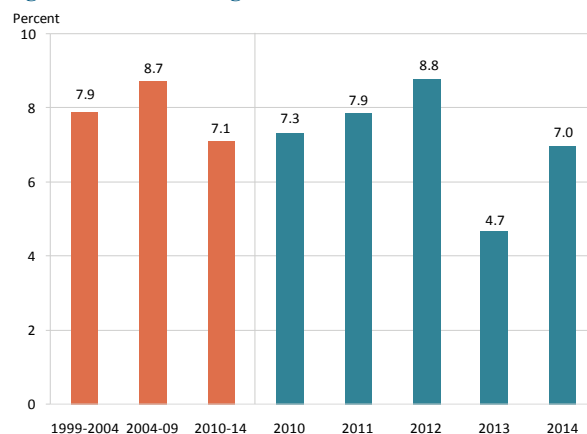
Some negative signs emerged in Q3-Q4 2014:

- Seasonally adjusted quarterly growth rates decelerated in Q3 and Q4 2014.
- Contribution of the services sector decelerated in Q4 2014 due to hotels and restaurants, and public administration.
- Contribution of private consumption decelerated in Q4 2014.

Why focus on GDP growth?⁵ GDP measures the total added value of all goods and services produced over a specific time period within an economy, by both residents and nonresidents. GDP growth rate shows an increase in economic activities over the previous period and thus measures the strength and weakness of an economy. In Rwanda, GDP is measured by both the production approach and expenditure approach. The production approach sums the "value-added" at each stage of production, where value-added is defined as total sales minus the value of intermediate inputs. The expenditure approach adds up the final value of household consumption, government consumption, investment, and exports and imports. The input-output (IO) table is a useful tool to show a link between the production and expenditure accounts.

Medium-term progress: In the past 5 years, between 2010 and 2014, the economy grew by 7.1 percent on average. The five-year average annual growth rate was lower than the preceding two five-year periods (8.7 percent in 2004-09, and 7.9 percent in 1999-2004) (Figure 1.3).

Figure 1.3: Real GDP growth rate recovered in 2014



Sources: NISR, World Bank staff calculations.

Regional context. A comparison among EAC countries shows that Rwanda's growth performance in the last five years is the best among EAC countries, although Rwanda's growth performance lagged behind Tanzania in 2014, and Kenya and Tanzania in 2013 (Table 1.3).

Overview of Rwanda's growth in 2014: Year-on-year growth rates decelerated from 8.1 percent in Q3 2014 to 6.2 percent in Q4 2014. The growth

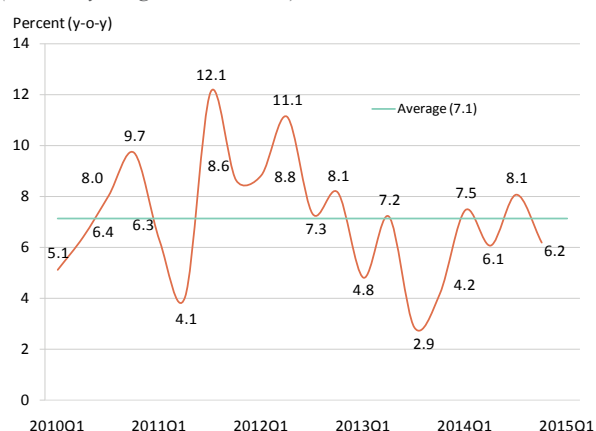
⁵ <http://www.imf.org/external/pubs/ft/fandd/basics/gdp.htm>

Table 1.3: Real GDP growth rates of EAC countries (%)

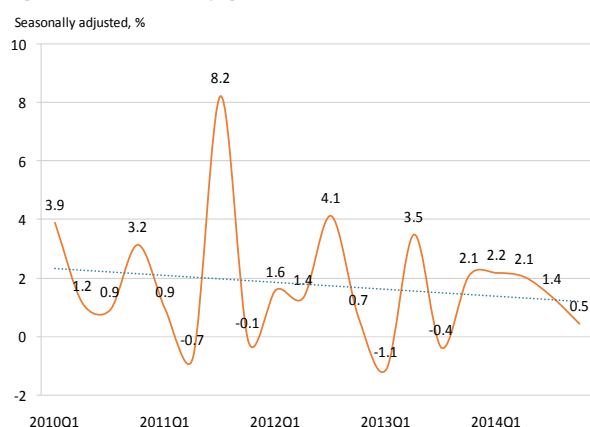
	2010	2011	2012	2013	2014	Average
Rwanda	7.3	7.9	8.8	4.7	7.0	7.1
Burundi	5.1	4.2	4.0	4.5	4.7	4.5
Kenya	8.4	6.1	4.5	5.7	5.4	6.0
Tanzania	6.4	7.9	5.1	7.3	7.2	6.8
Uganda	5.2	9.7	4.4	3.3	4.5	5.4

Source: World Bank Global Outlook.

rate in Q4 was below the five-year average of 7.1 percent (Figure 1.4). A key question is if growth is decelerating. In order to measure the growth trend in the recent few quarters, seasonally adjusted growth figures are computed. The result shows that quarterly growth rates were decelerated in the third quarter (1.4 percent) and fourth quarter

Figure 1.4: Q4 2014 growth became below 5 year average
(Year-on-year growth rates, %)

Sources: NISR, World Bank staff calculations.

Figure 1.5: Quarterly growth rate decelerated

Sources: NISR, World Bank staff calculations.

(0.5 percent). Also, the linear trend line shows a downward slope (Figure 1.5).

Production Account: The development in the production account shows that the services sector is the dominant source of growth in the past five years, followed by agriculture, industry (without manufacturing) and manufacturing (Figure 1.6). On average, the services sector contributed to 4.0 percentage points to the average annual GDP growth at 7.1 percent followed by agriculture (1.6 percent), industry (without manufacturing) (1.1 percent) and manufacturing (0.3 percent). Two important features are high and stable contribution by services and declining contribution by manufacturing. In 2014, manufacturing growth fell from 4.6 percent in 2013 to 0.9 percent in 2014 mainly as a result of the export restriction by DRC on beverages and tobacco, which accounted for about half of manufacturing export growth in 2013.

Figure 1.6: Annual GDP growth rate by sector

Sources: NISR, World Bank staff calculations.

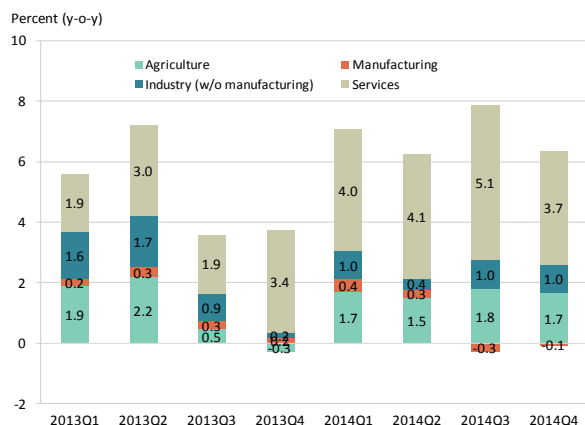
On a quarterly basis, while services are the largest contributor to the overall growth at 3.7 percent in Q4 2014, its contribution fell from 5.1 percent in Q3 2013 (Figure 1.7). This is the main factor driving the deceleration of year-on-year growth rate from 8.1 percent in Q3 2014 to 6.2 percent in Q4 2014. Among services, decelerations of hotels and restaurant (from 7.4 percent in Q3 to 0.0 percent in Q4) and public administration (from 15.8 percent in Q3 to 0.0 percent in Q4) contributed to it. The deceleration of the public administration services is consistent with low government expenditures in Q4 2014 (please see Section 1.5 on fiscal sector). In agriculture, production of export crops turned negative (-7.4 percent). Some coffee and tea producing areas suffered from dry weather. In industry, the mining

sector saw zero growth and manufacturing of beverage and tobacco declined double digits for two straight quarters (-10.3 percent in Q3 and -10.7 percent in Q4).

Expenditure Account: In the past five years, household consumption is the main growth source contributing 4.5 percentage points of the annual average growth at 7.1 percent (Figure 1.8). It was followed by investment (2.7 percent), exports (2.2 percent) and government consumption (1.2 percent). Net exports (exports minus imports) contributed negatively at -1.4 percent. In 2014, while the contribution of net exports (-1.4 percent = 0.7 percent -2.4 percent) remained the same as the 5 year average (-1.4 percent = 2.2 percent -3.6 percent), the contributions from both exports and imports shrank. Also, the contribution of government consumption (2.0 percent) was almost twice as high as the five year average rate at 1.2 percent.

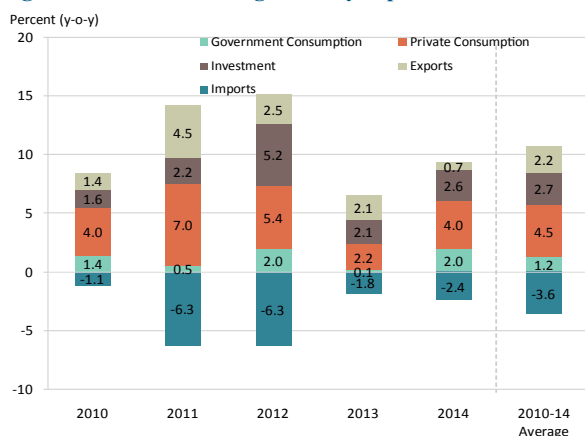
Q4 2014 data shows signs of change, from the previous few quarters (Figure 1.9). First, the contribution from government consumption turned negative (-0.5 percent) for the first time since Q2 2013. As government consumption was a key growth driver in the first half of 2014, this change should be noted. While this may partly reflect high contributions in the preceding three quarters, lower than projected

Figure 1.7: Quarterly GDP growth rate by sector



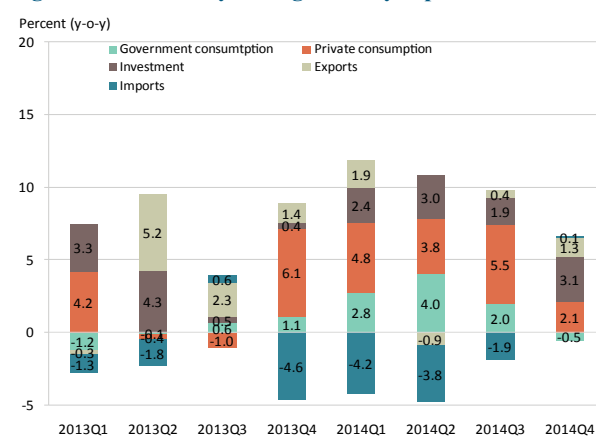
Sources: NISR, World Bank staff calculations.

Figure 1.8: Annual GDP growth by expenditure



Sources: NISR, World Bank staff calculations.

Figure 1.9: Quarterly GDP growth by expenditure



Sources: NISR, World Bank staff calculations.

revenues may have affected the decline. Second, private consumption (2.1 percent) became less than half of what it was in the previous quarter. Third, the contribution from imports became positive (0.1 percent) for the first time since Q3 2013 (i.e., import growth turned negative). The negative import growth implies slowing economic activities, and it is consistent with the decelerating quarterly growth rate.

Linking production and expenditure account:

Linking the production and expenditure accounts is essential to comprehend the overall picture of the economy. The input-output table is a useful analytical tool to comprehend the relationship between the two (Table 1.4). Higher numbers between the production and expenditure accounts suggest closer relationships. For example, among the total value added of the agriculture sector, 91 percent is expensed by household consumption. The total production of the industry sector is mostly expensed by household consumption, investment and imports. However, industry's

share of the economy (14.4 percent) is much smaller than agriculture (33.1 percent) and services (47.1 percent). Thus, the link between industry and household consumption may not be as strong as it appears. The production of services is mostly expensed by households and the government.

The link between the production and expenditure accounts are partly evident in the correlation of growth rates (Table 1.5). For example, agriculture is highly correlated with private consumption, which supports the result of the IO table. Industry is highly correlated with investment. This is mainly because of an obvious relationship between the construction sub-sector in industry and construction investment. Interestingly, there is high correlation between services and investment, though a plausible reason for this is difficult to find. Also, relatively high correlation is found between services and government consumption. This is partly because services includes public services and also government

Table 1.4: Link between the production and expenditure accounts

		Share of expenditure items in the main production items (percent) 1/				
		Household	Gov't / NGO	Investment	Exports	Imports
Production	Agriculture	91	0	5	8	-5
	Industry	93	0	66	16	-75
	Services	54	39	1	16	-9

1/ excluding margins and taxes on products less subsidies.

Sources: NISR, World Bank staff calculations.

Table 1.5: Correlations of growth rates among the production / expenditure account items

(Correlation Coefficient of Year-on-Year Growth Rates between Q1 2007 and Q4 2014)

	Agriculture	Industry	Services	Government Consumption	Private Consumption	Investment	Exports	Imports
Agriculture	-	0.23	0.11	0.27	0.44**	0.08	-0.01	0.26
Industry	-	-	0.47**	-0.13	0.15	0.61**	0.60**	0.39**
Services	-	-	-	0.30*	0.11	0.82**	0.17	0.32*
Government Consumption	-	-	-	-	0.08	-0.07	-0.01	0.15
Private Consumption	-	-	-	-	-	-0.06	-0.06	0.82**
Investment	-	-	-	-	-	-	0.12	0.12
Exports	-	-	-	-	-	-	-	0.37**
Imports	-	-	-	-	-	-	-	-

**/* statistically significant with 5%/10%

Source: World Bank staff calculations.

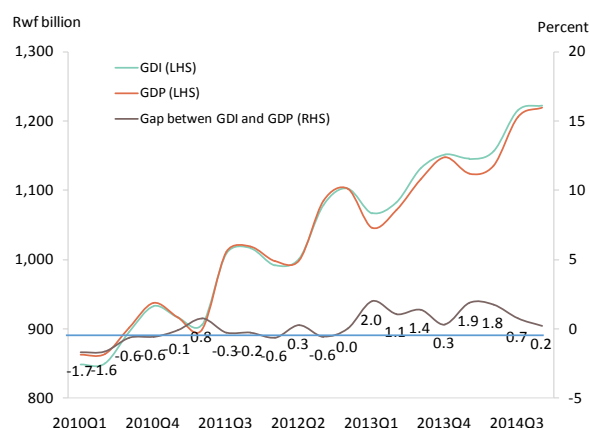
purchased services from the private sector. Another interesting fact is the high correlation between private consumption and imports. About 28 percent of the total imports in 2014 was consumption goods. The high correlation shows a reliance of private consumption on imported goods.

These theoretical and historical relationships can be applied to recent macroeconomic developments. For example, the lesser services contribution in Q4 2014 corresponds to that of government spending. Though not supported by the theoretical and historical relationships, the slowdown on private consumption corresponds to negative growth of beverage and tobacco manufacturing, primarily expensed by exports.

Gross domestic income (GDI)⁶ and terms of trade: While real GDP is the most commonly used indicator to measure economic situation of a country, GDP does not fully reflect a country's real purchasing power due to terms of trade. Terms of trade is an index that shows the value of a country's average export prices, relative to their average import prices. Thus, when export prices increase higher than import prices, terms of trade improves. Under this situation, GDI becomes higher than GDP, which shows an improvement of a country's purchasing power.

Although the share of international trade in GDP is relatively small in Rwanda, the recent fluctuations of commodity prices of Rwanda's major export (coffee, tea and minerals) and import (energy) items may have affected country's GDI. The comparison between GDP and GDI in Rwanda shows that the country's purchasing power measured by GDI was higher than GDP by 0.2 percentage point in Q4 2014 (Figure 1.10). In 2013 and 2014, GDI was higher than GDP by 1.2 percentage point. In 2013, commodity prices of Rwanda's major export items such as minerals increased. In 2014, energy prices fell faster than the commodity prices.

Figure 1.10: Real GDI was slightly higher than GDP



Sources: NISR, World Bank staff calculations.

1.3. External Sector

Key Points

- The external sector, measured by the BoP, deteriorated in 2014.
- There are few signs of export recovery in 2015.
- Impact of the oil price decline has not yet been felt in energy imports.

Importance of the Balance of Payments: The BoP summarizes an economy's transactions with the rest of the world, for a specific time period. It is more comprehensive compared to international trade statistics, as it usually covers goods only. The BoP consists of the current account, and the capital and financial

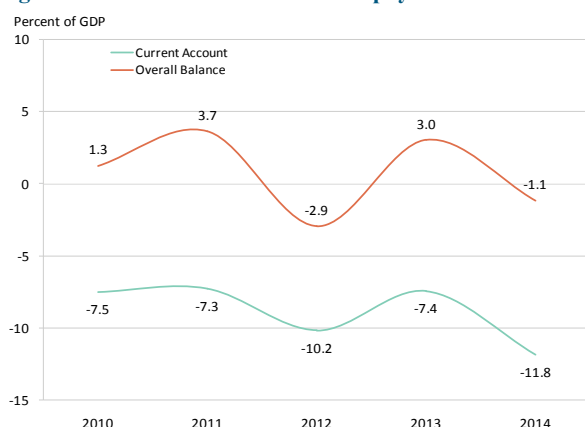
account. The current account broadly measures an economy's saving and spending behaviors. In other words, current account deficit means that an economy spends more than it saves. For this reason, the current account balance as a share of GDP is one of the most important indicators of macroeconomic stability. The sum of the current

⁶ GDI is defined as the sum of GDP and terms of trade effect.

account, capital account, and financial account (called the overall balance), shows the change in international reserves.

Medium-term context: The BoP in 2014 is one of the worst in the past five years. The current account deficit reached 11.8 percent of GDP, the highest since at least 1999 (Figure 1.11). The overall balance turned negative at 1.1 percent. Since 1999, there were only four years that Rwanda experienced negative overall balance: 1999, 2003, 2012 and 2014.

Figure 1.11: Deteriorated balance of payments



Sources: BNR, World Bank staff calculations.

Regional context: All EAC countries have experienced relatively high current account deficits. However, the deterioration of the current account in 2014 made Rwanda the worst among EAC countries (Table 1.6).

Table 1.6: Current account balance (% GDP) of EAC countries

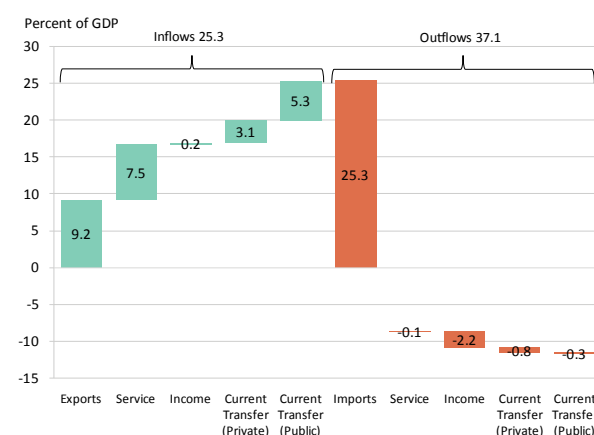
	2010	2011	2012	2013	2014	Average
Rwanda	-7.5	-9.6	-9.5	-8.7	-11.8	7.1
Burundi	-5.4	-7.3	-10.2	-7.4	-11.5	-8.4
Kenya	-6.3	-7.9	-8.5	-8.3	-9.0	-8.0
Tanzania	-5.8	-5.7	-11.6	-10.3	-10.3	-8.7
Uganda	-8.4	-9.8	-8.4	-7.0	-6.4	-8.0

Sources: WDI, BNR, World Bank staff calculations.

Balance of Payments in 2014: The current account deficits in 2014 reached 11.8 percent. In other words, the country invested 11.8 percent more than savings (see Part II on Financing Development). The disaggregation of the current account shows that total inflows reached 25.3 percent, while outflows reached 37.1 percent (Figure 1.12). The total inflows were just enough to only cover goods imports. The comparison between 2013 and 2014 shows that the decline in public current transfer (mainly budget support operation) contributed to 55 percent of the deterioration followed by the increase in imports (16 percent) and service outflows (14 percent) (Table 1.7).

(i) **Trade Balance:** The trade balance deteriorated by 0.9 percent from 2013. While the export of goods declined by 0.2 percent, the imports of goods increased by 0.7 percent. The decline in exports came almost entirely from the decline in minerals, primarily coltan. Coltan exports fell from US\$135 million in 2013 to US\$105 million in 2014, as a result of the combination of volume factor (30 percent) and price factor (70 percent). On goods imports, energy imports declined by 0.3 percent of GDP, as the increase in volume was offset by the decline in prices. However, imports of capital goods and intermediate goods increased by 0.3 percent and 0.6 percent, respectively.

Figure 1.12: 2014 current account



Sources: BNR, World Bank staff calculations.

Table 1.7: Current account comparison between 2013 and 2014 (Percent of GDP)

	2013	2014	Gap	Cont.
Current account inflows	28.1	25.3	-2.8	63.8
Goods exports	9.4	9.2	-0.2	4.2
Service exports	7.7	7.5	-0.1	3.3
Income	0.2	0.2	0.0	0.0
Current transfer (Private)	3.1	3.1	-0.1	1.5
Current transfer (Public)	7.7	5.3	-2.4	54.7
Current account outflows	-35.5	-37.1	-1.6	36.2
Goods imports	-24.6	-25.3	-0.7	16.4
Service imports	-7.8	-8.5	-0.6	14.5
Income	-2.0	-2.2	-0.2	4.2
Current transfer (Private)	-0.7	-0.8	-0.1	1.5
Current transfer (Public)	-0.3	-0.3	0.0	-0.3
Current account balance	-7.4	-11.8	-4.4	100.0

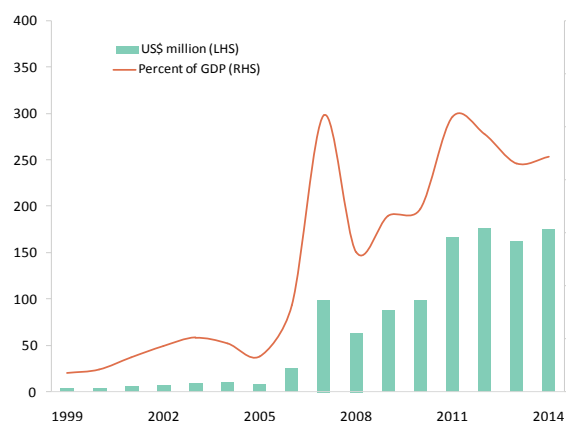
Sources: BNR, World Bank staff calculations.

- (ii) **Service Balance:** Travel (i.e., tourism) is the single largest current account inflow item. In 2014, tourism inflows increased by 3.4 percent to reach US\$304 million or 15 percent of the total current account inflows (see Annex Note 2 on 2014 Tourism Sector Performance in Rwanda).
- (iii) **Current Transfer:** Current transfer is further divided into private and public current transfers. Key items in the private current transfer are workers remittance and those in the public transfer are grant aid, technical assistance and humanitarian aid. Workers remittance inflows started to increase in 2011 and reached US\$175

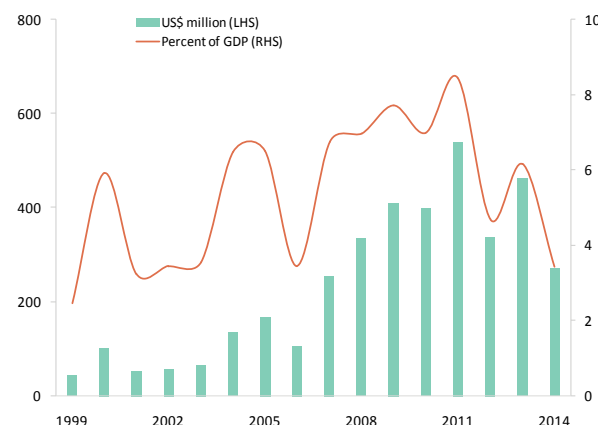
million (equivalent to 2.2 percent of GDP) in 2014 (Figure 1.13). While Rwanda has significant workers remittance outflow (about US\$50 million), the recent increase in workers remittance inflows is a positive sign. Grant aid inflows in 2014 fell to US\$277 million, the lowest since 2007 (US\$259 million). In terms of the share in GDP, it fell to 3.5 percent, the lowest rate since 1999 (Figure 1.14). Grant aid in 2014 was lower than 2012, when Rwanda experienced the aid shortfall, although the shift from grant aid to lending by major development partners, such as the World Bank, partly contributed to the decline of grant aid.

Monthly trade data: During the first four months in 2015, goods exports grew by 6.8 percent from a year earlier, almost the same as the sluggish export growth rate in 2014 at 4.7 percent. Goods imports fell by 4.2 percent.

On exports, in the first four months, coffee and tea exports grew by 42.4 percent and 22.9 percent, while mineral exports fell by 21.1 percent. Interestingly, price and volume factor contributed in a different way. The increase in coffee exports was driven by prices, while that in tea exports was driven by volume. The price developments seem to follow international commodity prices (Figure 1.15). Recent coffee prices indicate that

Figure 1.13: Workers' remittance inflows started to increase in 2010s

Sources: BNR, World Bank staff calculations.

Figure 1.14: Budgetary grant aid fell in 2014

Sources: BNR, World Bank staff calculations.

Table 1.8: Traditional goods exports in Jan-Apr 2015
(Year on year growth rate, percent)

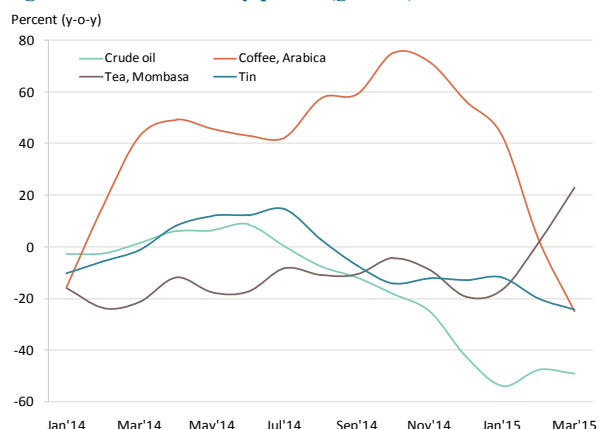
	Volume	Price	Value
Coffee	-16.8	54.9	28.8
Tea	20.3	-2.7	17.1
Minerals	-28.2	3.3	-25.8

Sources: NISR and World Bank staff calculations.

coffee prices will negatively contribute to its exports, and tea prices will positively contribute to its exports.

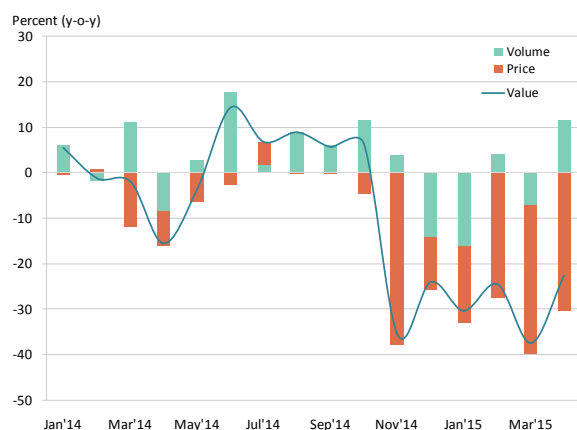
On imports, year-on-year growth rates were negative in four out of the recent five months, until April 2015. Import growth rates for capital goods and energy were negative in Q1 2015 (Figure 1.16).

Figure 1.15: Commodity prices (growth)



Source: World Bank.

Figure 1.17: Energy imports (growth)

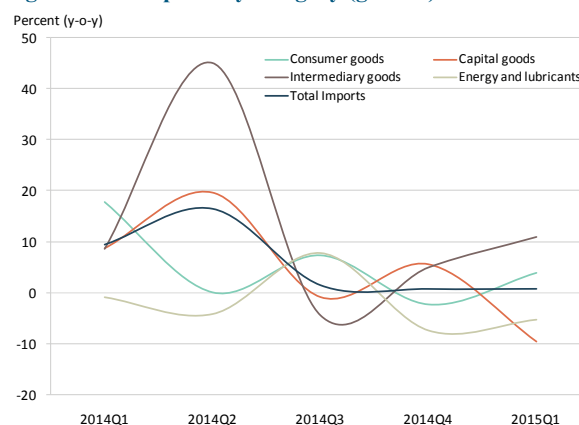


Sources: BNR, World Bank staff calculations.

The impact of the oil price decline on energy imports have been felt in import data. The value of energy imports has significantly fallen since November 2014. The fall was led by prices (Figure 1.17).

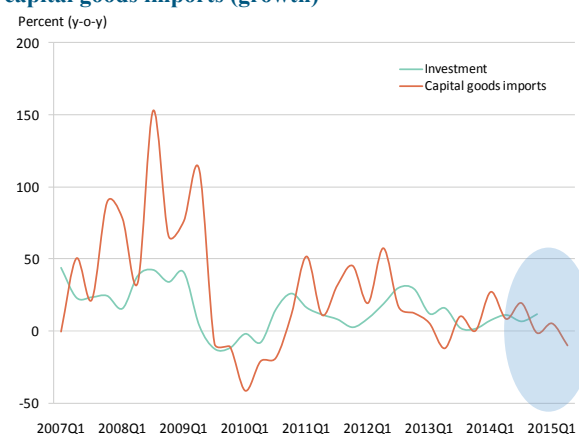
Going forward, the decline in capital goods imports in recent months is of concern due to high correlation between capital goods imports and nominal investment (i.e., gross fixed capital formation) in GDP. If the relationship holds, investment growth in Q1 2015 is likely to decelerate (Figure 1.18).

Figure 1.16: Imports by category (growth)



Sources: BNR, World Bank staff calculations.

Figure 1.18: High correlation between investment and capital goods imports (growth)



Sources: BNR, World Bank staff calculations.

Credit rating: Rwanda's credit ratings have upgraded since last summer. Most recently, Standard and Poors (S&P) upgraded Rwanda's rating from B to B+ in March 2015 (Table 1.9). According to S&P: (i) risks to Rwanda's external financing are reducing as a result of stable aid flows and the government's ability to access the capital markets; and (ii) the stable outlook reflects our (as well as S&P's) view that stability of external funding will support Rwanda's external position, while its fiscal position will not significantly deteriorate from our current forecasts. As a result, Rwanda's rating is equal to peer Sub-Saharan African countries such as Kenya and Uganda (Table 1.10).

Table 1.9: Credit rating history

Date	S&P	Fitch
Aug 15, 2013	-	B (Outlook revised to positive)
Jul 25, 2014	-	B+
Sep 12, 2014	B (Outlook revised to positive)	-
Mar 13, 2015	B+ (Outlook stable)	-

Sources: S&P and Fitch websites.

Table 1.10: Rating comparison

(Foreign currency rating of S&P as of May 13, 2015)

Rwanda	Kenya	Uganda	Zambia	Senegal	Ethiopia
B+	B+	B	B+	B+	B

Source: <http://www.standardandpoors.com/ratings/sovereigns/ratings-list/en/us/?subSectorCode&start=100&range=50>

Box 1.1 Rwanda's Trading Partners

Rwanda imports from more than 200 countries and economies. Among the countries and economies, China has been the largest partner since 2013 followed by Uganda, India, UAE and Kenya. China ranks in the top five in every category other than energy. Among other EAC countries, Tanzania ranked sixth and Burundi ranked 41th in 2014.

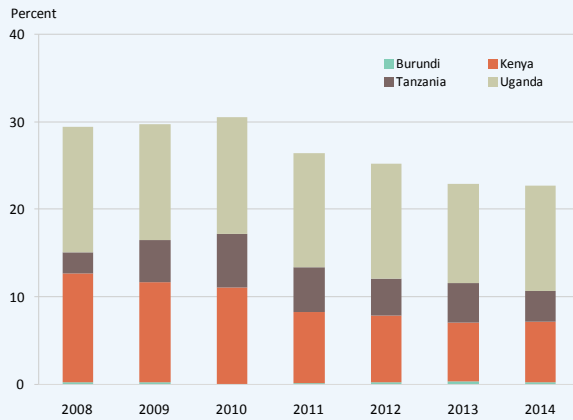
Box Table 1.1: Rwanda's major trading partners (Ranking by Year)

	2008	2009	2010	2011	2012	2013	2014
Capital goods							
China	1	2	1	1	1	1	1
Germany	5	5	6	2	3	2	2
India	16	14	10	4	4	4	4
Japan	3	3	2	3	2	3	3
United Arab Emirates	2	4	3	5	5	6	5
Consumer Goods							
China	6	5	6	5	4	4	3
India	4	4	3	3	2	3	2
Kenya	1	2	2	2	3	2	4
Uganda	2	1	1	1	1	1	1
Tanzania	7	6	5	4	5	5	5
Energy							
India	5	4	5	5	5	2	2
Iran	20	31	10	8	8	6	5
South Africa	18	5	3	3	3	4	4
Switzerland	12	6	4	1	1	3	3
United Arab Emirates	4	2	2	2	2	1	1
Intermediary Goods							
China	3	4	2	2	2	2	2
India	5	5	6	7	6	5	4
Kenya	2	2	3	3	3	4	3
Russia	74	19	5	16	4	9	5
Uganda	1	1	1	1	1	1	1
Total							
China	3	3	3	2	2	1	1
India	6	6	5	5	3	3	3
Kenya	2	2	2	3	4	5	5
Uganda	1	1	1	1	1	2	2
United Arab Emirates	4	4	4	4	5	4	4

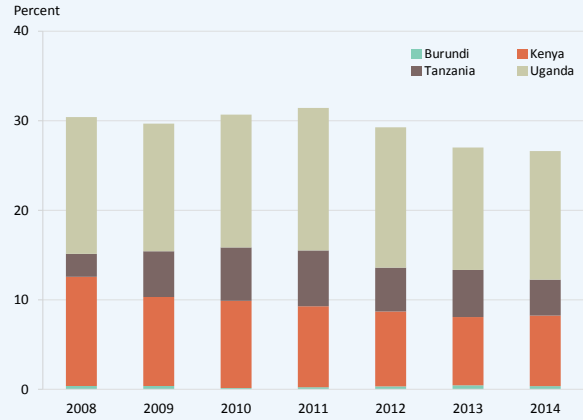
Sources: BNR, World Bank staff calculations.

Box 1.1 Rwanda's Trading Partners (continued)

Imports from EAC countries increased by 10 percent per year, to US\$547 million in 2014, from US\$308 million in 2008. However, the EACs share of total imports has started to decrease after the peak in 2010 (Box Figure 1.1). The trend is the same even if energy imports are excluded (Box Figure 1.2).

Box Figure 1.1: Share of EAC (Total imports)

Sources: BNR, World Bank staff calculations.

Box Figure 1.2 Share of EAC (Total without energy)

Sources: BNR, World Bank staff calculations.



Box 1.2 Informal Cross Border Trade^{7,8}

Magnitude: In the past three years, 2012 through 2014, informal exports from Rwanda to the neighboring countries, (including Burundi, DRC, Tanzania, and Uganda), were about US\$100 million, while informal imports from these countries were around US\$20 million. Thus, informal exports account for about 15 percent of the total exports (sum of formal and informal trade), while informal imports account for 1 percent of the total imports (Box Table 2.1).

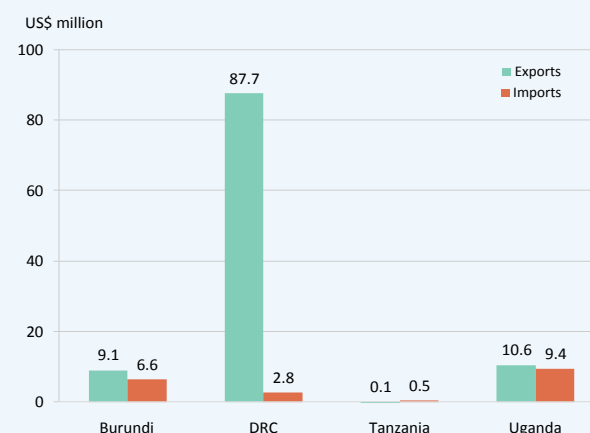
Box Table 2.1 Summary formal and informal trade

	2012		2013		2014	
	Million US\$	Share (%)	Million US\$	Share (%)	Million US\$	Share (%)
I. Exports	585	100	685	100	707	100
Formal	483	83	573	84	600	85
Informal	102	17	112	16	108	15
II. Imports	2,134	100	2,265	100	2,419	100
Formal	2,112	99	2,247	99	2,399	99
Informal	23	1	18	1	19	1
III. Trade Balance	-1,550	100	-1,580	100	-1,711	100
Formal	-1,629	105	-1,674	106	-1,800	105
Informal	79	-5	94	-6	88	-5

Sources: BNR, World Bank staff calculations.

By trading partner: Among trading partners, DRC accounted for more than 70 percent of the total informal trade, followed by Uganda (16 percent), Burundi (12 percent), and Tanzania (0 percent) (Box Figure 2.1). The importance of DRC on the informal trade is striking, as DRC is ranked 31st in the import destination (please see Box 1.1) above.

By products: Among import products in 2014, coltan accounted for 12 percent, followed by coffee (parched) (9 percent), alcoholic spirits (8 percent), Irish potatoes (6 percent), and dried beans (5 percent). Among export products, maize flour accounted for 8 percent, followed by bovine cattle live (8 percent), beef meat (6 percent), other fishery products (5 percent), and raw milk (5 percent).

Box Figure 2.1: Informal trade by trading partners in 2014

Sources: BNR, World Bank staff calculations.

Policy implication: The positive informal trade balance (US\$80-90 million a year) has been contributed to the easing of BoP pressure (the informal trade is included in the BoP). In light of the importance of informal trade in mitigating the current account deficit, removing formal and informal barriers to trade, such as, improving infrastructure, reducing harassment, normalizing relationships between traders and officials, bringing better regulatory transparency to the border environment, are the critical stepping stones to formalization.

⁷ BNR, NISR, MINICOM, RRA and MINAGRI have conducted a survey on informal cross border trade, which is defined as trade transactions of residents and non-residents across the economic boundaries that are not recorded by customs authorities.

⁸ This box relies on data from BNR and the Informal Cross Border Trade Survey Report (January-December 2014).

1.4. Monetary Sector

Key Points

- Inflation rate has been kept low, partly due to low transportation (including gasoline) prices;
- Banks' real credit growth rates to the economy recovered to the pre-aid shortfall level;
- Low inflation provides policy flexibility to the BNR.

Introduction: Stable inflation rate is one of core indicators of macroeconomic stability. Price stability is the most important monetary policy objective for many central banks. In Rwanda, the National Bank of Rwanda (BNR) Law requires the BNR to conduct monetary policy in a way to deliver price stability in a low inflation environment.⁹ Consumer price index (CPI) is used for policy purposes.

Regional context: Compared with other EAC countries, Rwanda's inflation rates, measured by CPI, were lower than other countries (Table 1.11). Inflation rates are one indicator of macroeconomic stability. In this regard, Rwanda is the most stable country in the EAC.

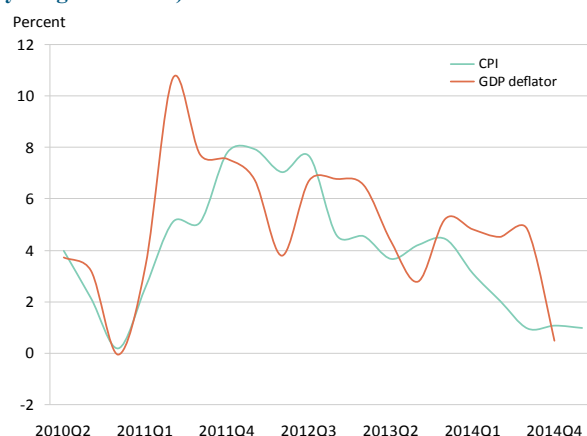
Table 1.11: CPI inflation rates of EAC countries (Annual average)

	2010	2011	2012	2013	2014	Average
Rwanda	2.3	5.7	6.3	4.2	1.8	4.1
Burundi	6.4	9.7	18	7.9	4.4	9.3
Kenya	4.1	14	7.8	5.2	6.9	7.6
Tanzania	6.2	12.7	16	7.9	6.1	9.8
Uganda	4.1	18.6	14	5.5	4.3	9.3

Sources: Respective Central Banks, World Bank staff compilations.

GDP deflator: CPI includes imports, while GDP deflator measures domestically-produced goods and services. Thus, GDP deflator is more comprehensive than CPI in measuring domestic inflation.¹⁰ While GDP deflator and CPI show a similar downward trend, GDP deflator shows that growth rate sharply decelerated from 4.8 percent in Q3 to 0.5 percent in Q4 (Figure 1.19). The lower CPI growth rates in comparison with GDP deflator in recent quarters reflect an improvement of terms of trade.

Figure 1.19: Gap between GDP deflator and CPI (year-on-year growth rate)

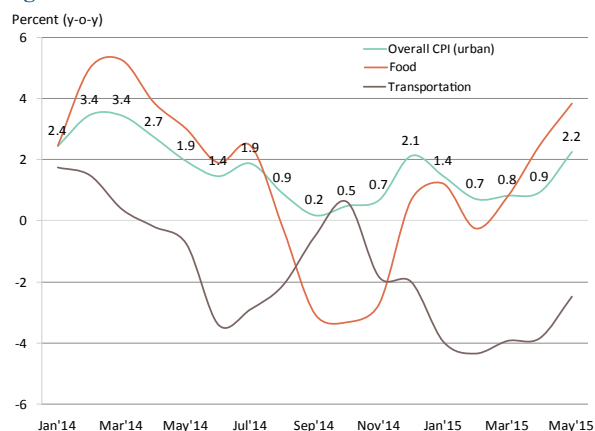


Sources: NISR, World Bank staff calculations.

Consumer Price Index: Year-on-year CPI inflation rates increased from 0.9 percent in April to 2.2 percent in May 2015. Among major categories, inflation of food prices (account for 28 percent of the CPI basket) accelerated, and transportation prices fell by 2.5 percent. Transportation prices (including fuel and lubricants such as gasoline) had deflation for seven months (Figure 1.20). When we refer to CPI in Rwanda, it is to CPI in urban areas, such as Kigali. However, 98 percent of the poor live in rural areas. Thus, CPI in rural areas is more important for the poor. The comparison between urban and rural CPIs shows that rural CPI growth rates have been lower than urban CPI rates in recent several months (Figure 1.21). At the same time, prices are more fluctuated in rural areas. Price volatility measured by standard deviation shows that vegetable prices are volatile in rural areas.

⁹ <http://www.bnr.rw/index.php?id=180>

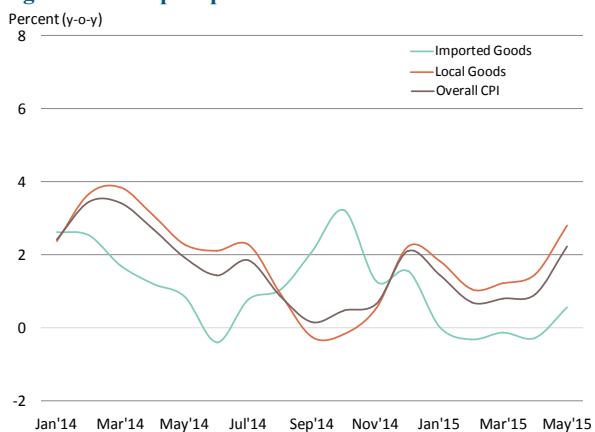
¹⁰ However, in practice, GDP has some challenges to be used for policy purposes. First, its availability lags behind CPI. Second, its frequency is on a quarterly basis. Third, obtaining the right GDP deflator is technically challenging, as some deflators are calculated based on the ratio between nominal and constant prices.

Figure 1.20: CPI inflation rate

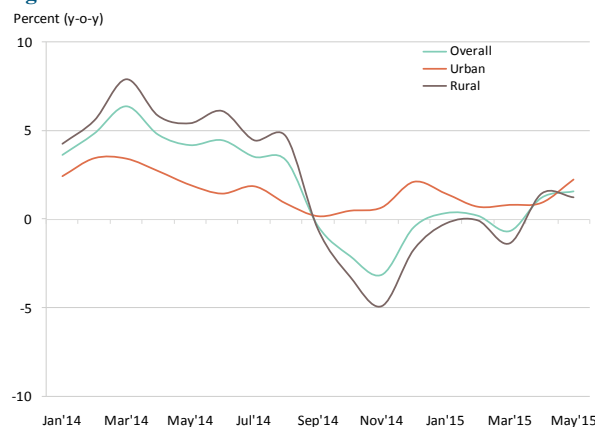
Sources: NISR, World Bank staff calculations.

In light of the depreciation of the exchange rate against the US dollar, the BNR focuses on imported prices (see section on monetary policy). The comparison between the overall CPI and imported goods index shows that year-on-year growth rates of imported price index was below 4 percent since early 2014 and lower than the overall CPI in 2015 (Figure 1.22). This suggests that the depreciation of the exchange rate against the US dollar has not been passed through to CPI. This is due to the decline in international commodity prices and the appreciation of the Rwandan franc against other non-US currencies.

Impacts of the oil price decline on CPI: The decline in oil prices has contributed to the low CPI inflation rate. For example, in April 2015,

Figure 1.22: Import prices

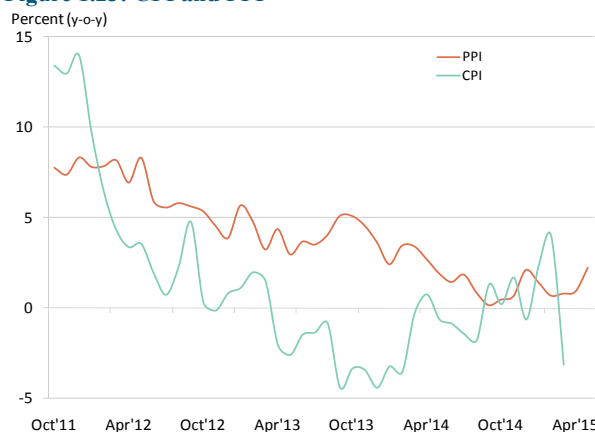
Sources: NISR, World Bank staff calculations.

Figure 1.21: Urban and rural CPI

Sources: NISR, World Bank staff calculations.

transportation cost fell by 3.8 percent and energy prices fell by 3.1 percent from a year earlier. The decline of transportation pushed year-on-year growth rates by 0.7 percentage points (see Annex Note 3 on How Fuel Pump Price is Determined in Rwanda).

Producer Price Index (PPI): NISR started to publish PPI in 2014. Unlike CPI, PPI measures prices received by domestic producers for the production of their goods and services. Assuming that production costs transfer to consumer goods, PPI leads to CPI. A simple correlation coefficient analysis shows that PPI and CPI have the highest statistically significant correlation with four months lag (Figure 1.23 and see Annex Note 4 on PPI and CPI).

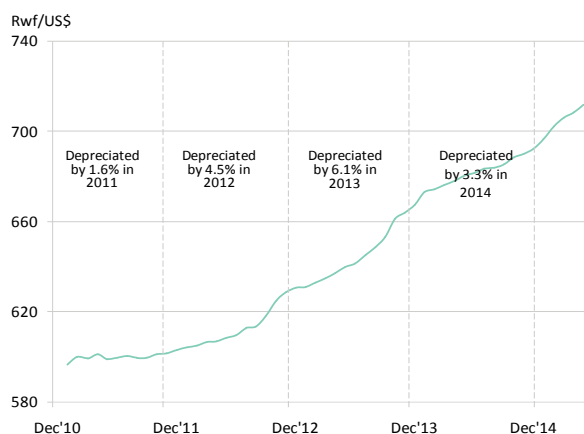
Figure 1.23: CPI and PPI

Sources: NISR, World Bank staff calculations.

Exchange rate: After the deceleration of exchange rate against the US dollar by 3.3 percent in 2014, the currency's depreciation started to accelerate in 2015. In the first five months of 2015, the currency depreciated by 2.8 percent, almost the same pace as 2013 depreciation (Figure 1.24). However, the depreciation against the US dollar should be understood as the appreciation of the US dollar against other currencies. Unlike the episode in 2013, the Rwandan franc has been appreciating against the Euro, as well as Tanzanian and Kenyan currencies (Figure 1.25).

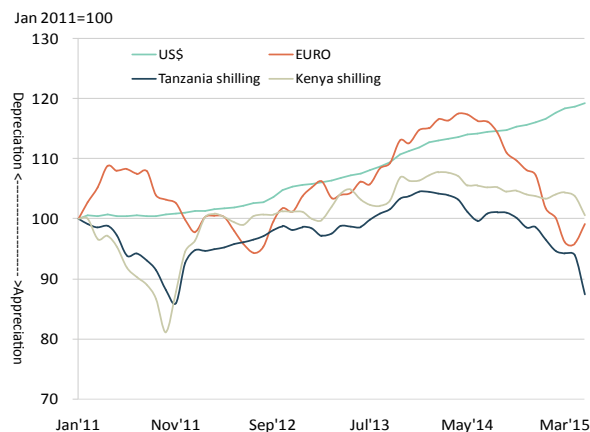
While most people are familiar with nominal exchange rates—the number of units of domestic currency that can purchase a unit of foreign currency—nominal exchange rates

Figure 1.24: Rwandan franc depreciated against the US dollar



Sources: BNR, World Bank staff calculations.

Figure 1.25: But, Rwandan franc appreciated against other key currencies



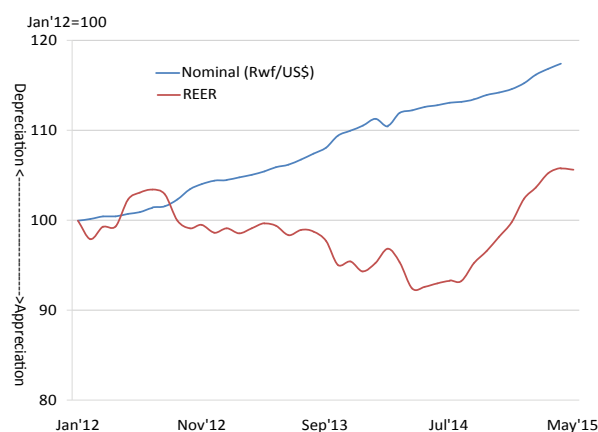
Sources: BNR, World Bank staff calculations.

do not accurately show purchasing power of the domestic currency. Why? The purchasing power depends on the relative importance of foreign currencies and, domestics and foreign inflation rates. The real effective exchange rate (REER) takes the relative importance of foreign currencies by the shares of international trade and the inflation rates.¹¹

Rwandan franc measured by REER started appreciating in mid-2014. This is consistent with its appreciation against other currencies than the US dollar (Figure 1.26). The level of the REER is close to its long-term average in the 2000s and 2010s, and thus does not raise an immediate concern. Nevertheless, as an exchange rate affect country's competitiveness in the long-term, its development should be carefully monitored.

Credit to the economy: Adequate credit is essential for the acceleration of economic activities. Credit outstanding to the public and private sector increased by 28.3 percent (year-over-year) in Q4 2014, though it is still lower than the recent peak of 37.3 percent in Q4 2012. However, on a real basis (i.e., adjusted by GDP deflator), Q4 2014 growth rate at 27.6 percent is almost the same as the peak in Q2 2012 at 29.4 percent (Figure 1.27). As described in Figure 1.28, there is a high correlation in recent years between GDP growth and credit outstanding growth rates

Figure 1.26: Rwandan franc measured by REER appreciated



Sources: Brungel database, World Bank staff calculation

¹¹ Box 1.4 of the Seventh Edition of Rwanda Economic Update explains nominal and real effective exchange rate in details.

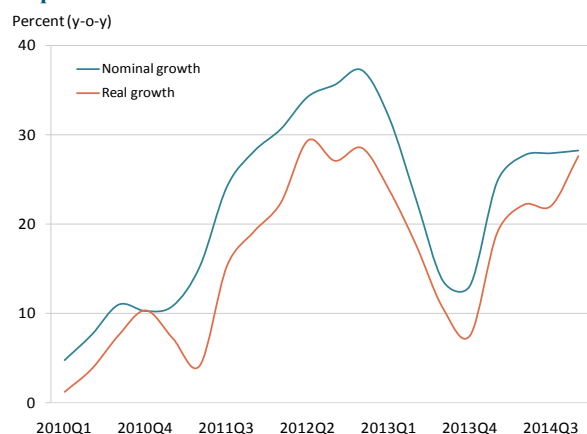
(Figure 1.28). Credit to the private sector further increased in Q1 2015. Year-on-year growth rate increased from 19.7 percent in December 2014 to 21.5 percent in March 2015.

Interest rate: Lending rates have been stable at around 17 percent since 2010, while deposit rates declined from the recent peak at 10.7 percent in Q1 2013 to 7.8 percent in Q4 2014; thereafter, it slightly went up to 8.2 percent in Q1 2015. As a result, interest rate spread, between lending rate and deposit rate, has widened to above 9 percent in 2014, the highest level since 2010 (Figure 1.29). This suggests that the interest rate spread tends to increase when the economy slows (Figure 1.30). This is understandable from the viewpoint of commercial banks' maintaining profits. On

the other hand, the interest rate spread decreases in 2011-12 when the economy accelerates. This suggests that the BNR has a limited impact over commercial banks' lending rate, as the rate is subject to the economic situation. Also, the reduction of interest rate spread in late 2012 and early 2013 was due to scarcity of funding in the economy during the aid shortfall.

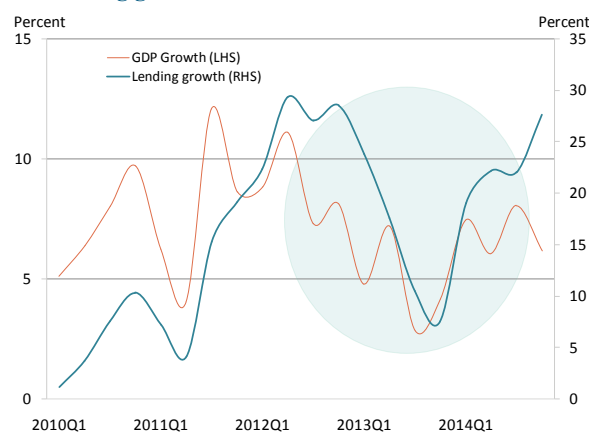
The shape and level of a yield curve, in theory, suggests aggregate view of investors on the future an economy. An upward sloping yield curve shows that the economy is growing and investors are confident. A level shows an expected rate of return (i.e., nominal growth rate). In Rwanda where transactions of T-bills are limited and a long-term bond market is undeveloped, the yield

Figure 1.27: Real credit outstanding growth rates recovered the pre-aid decline level



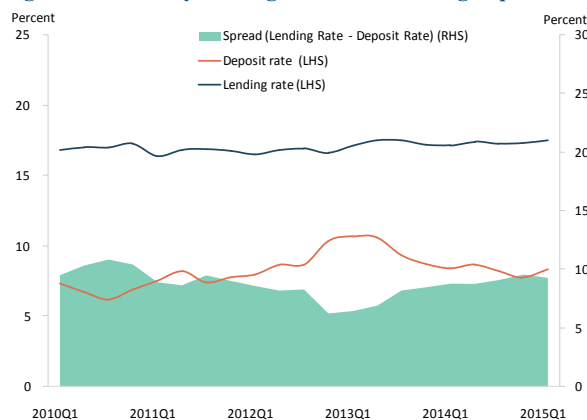
Sources: BNR, World Bank staff calculations.

Figure 1.28: High correlation between GDP and real credit outstanding growth rates



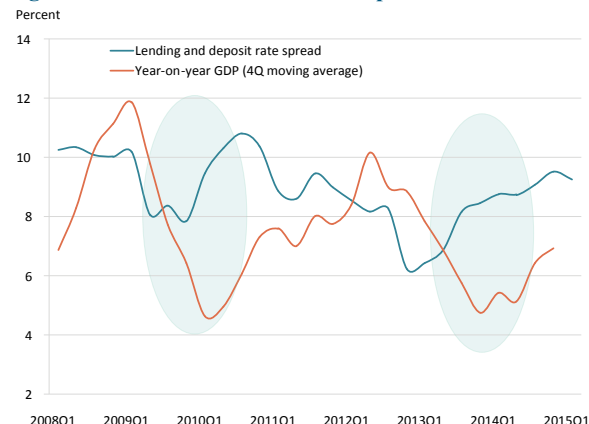
Sources: BNR, World Bank staff calculations.

Figure 1.29: Sticky lending rate and declining deposit rate



Sources: BNR, World Bank staff calculations.

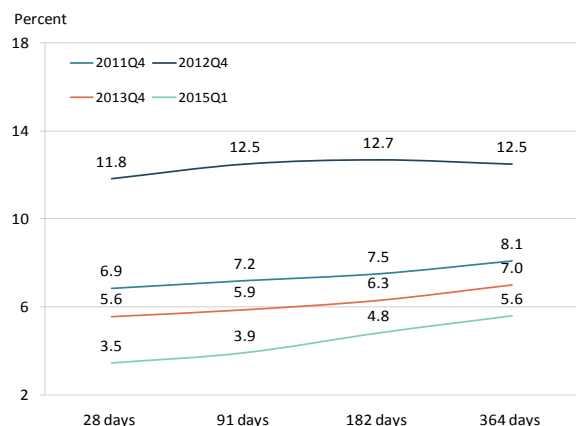
Figure 1.30: GDP and interest rate spread



Sources: BNR, World Bank staff calculations.

curve should be analyzed with care. Nevertheless, its yield curve between 1 month and 1 year shows that the yield curve shifted downward since 2012 and slightly steepened (Figure 1.31). This reflects a positive view on the economy and inflation.

Figure 1.31: Yield curve



Sources: BNR, World Bank staff calculations.

Monetary policy: The quarterly financial stability committee (FSC) and monetary policy committee (MPC) meeting in March 2015, observed that the financial sector remains sound, and the MPC decided to maintain the current accommodative monetary policy to continue supporting economic financing.¹² The MPC decided to maintain the current monetary policy stance by keeping the Key Repo Rate unchanged at 6.5 percent for the second quarter 2015. The Key Repo Rate (policy interest rate) has been unchanged since

June 2014 when it was lowered from 7.0 percent to 6.5 percent, although short-term interest rates kept declining. For example, Treasury Bill rates (28 days) fell from 4.3 percent in June 2014, when the policy interest rate was lowered, to 2.9 percent in May 2015. The monetary policy and financial stability statement in February 2015 states that, “drop in oil prices will contribute to reduce pressures on inflation giving more room for an accommodative monetary policy by BNR to continue supporting the economic financing by the banking sector and keep inflation rate around the medium term objective of 5 percent”. This statement implies that BNR will continue the accommodative monetary policy to stimulate bank lending as long as inflation rates are below 5 percent. At the same time, the document states that, “the main challenge is expected to come from the external sector, if the commodity prices of Rwanda’s main exports continue to decrease in 2015. This may exert more pressures on the Rwf exchange rate, leading to Rwf depreciation and an increase in the exchange rate passed through to domestic prices.” As a result, it is important to watch for changes in exchange rates or in the prices of imported goods. In order for monetary policy to support economic financing, given the high correlation between credit and economic growth rates (Figure 1.28), effectiveness of Rwanda’s monetary policy will have to be improved further.¹³

¹² http://www.bnr.rw/fileadmin/media/Monetary_Policy/Statements/Quarterly_Financial_Stability_Committee_and_Monetary_Policy_Committee_Meetings.pdf

¹³ Box 1.7 of the Fifth Edition of Rwanda Economic Update (December 2013) discussed factors affecting effectiveness of Rwanda’s monetary policy.

1.5. Fiscal Sector

Key Points

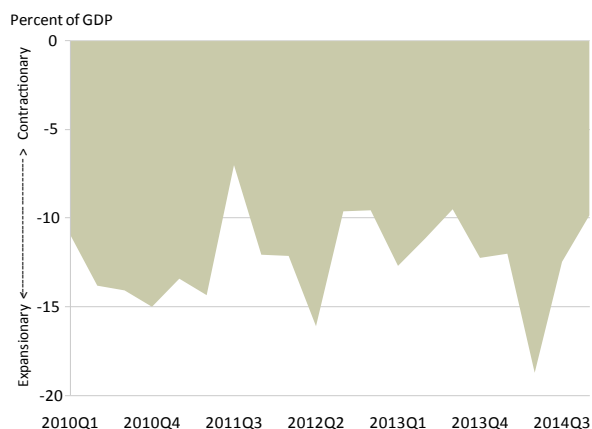
- Fiscal policy became less expansionary (less positive impact on the economy) in Q3-Q4 2014;
- Fiscal outturn in the first half of 2014/15 fiscal year (July-December 2014) was below target.
 - Tax revenues were below projection by 2 percent
 - Capital expenditures were below projection by 9 percent
- Medium-term fiscal direction is confirmed to be fiscal consolidation

Importance of the fiscal sector in Rwanda: Given the importance of the public sector in the economy measured by the size of government expenditures relative to GDP, development of the fiscal sector is important in Rwanda. Key indicators are domestic revenue mobilization (e.g., tax to GDP ratio), overall deficit, and progress on expenditures.

Expansionary vs. contractionary fiscal policy:

Fiscal consolidation is a medium-term fiscal policy direction in Rwanda. While a potential negative impact on the economy could be mitigated through improving efficiency and effectiveness gains of expenditures, short-term impact would be broadly measured by the gap between domestic revenues and expenditures as a share of GDP. Fiscal policy was expansionary in Q2 2014 as domestic revenues minus expenditures reached -18.7 percent of GDP. However, the policy became less expansionary in the following quarters, mainly due to lower-than-projected expenditures (Figure 1.32).

Figure 1.32: Less expansionary fiscal stance
(Domestic revenue - expenditures)



Sources: MINECOFIN, World Bank staff calculations.

Progress in the first half of fiscal year 2014/15

(Table 1.11): Preliminary outturn of the first half of fiscal year 2014/15 is disappointing on two aspects. First, tax revenues at Rwf 406 billion (14.5 percent of GDP) were below the projected revenues of Rwf 416 billion (or 14.9 percent of GDP). The collection of taxes on goods and services is the main source of discrepancy. One of potential reasons behind it is a delay in deployment of Electronic Billing Machine (EBM). The gap in absolute terms is of concern, as the economy recovered during the period. On expenditures, while current execution of current expenditures was as projected, execution of capital expenditures were lower than projected, by 1.1 percent of GDP. This is mainly due to delayed implementation of domestically financed energy projects. Given the role of the public sector in capital accumulation in the economy, this also requires careful monitoring. On the whole, the overall balance at -2.5 percent of GDP was lower by 1.8 percentage point compared with the projection.

Fiscal year 2014/2015 revised budget: Building on the progress of the first half of 2014/15 fiscal year, the government prepared the revised budget for 2014/15 fiscal year, which passed parliament in March 2015. Compared to the approved budget, the revised budget projects lower grants revenues (9.5 percent of GDP in the approved budget vs. 7.3 percent in the revised budget). On the other hand, the total expenditures were revised upward by 0.4 percentage points. As a result, the overall deficit (including grants) is projected to increase from 3.1 percent of GDP in the approved budget to 5.2 percent in the revised budget, though there was confusion on how to classify loans and grants in the approved budget.

Table 1.12: Rwanda's budget, 2014/15 fiscal year

Item	FY2014/15				Jul–Dec 2014			
	Original		Revised		Projected		Provisional	
	Billion Rwf	Percent of GDP	Billion Rwf	Percent of GDP	Billion Rwf	Percent of GDP	Billion Rwf	Percent of GDP
Revenue and grants	1,530.4	26.6	1,414.5	24.9	709.0	25.4	688.2	24.6
Total revenue	985.5	17.2	997.4	17.6	460.5	16.5	447.3	16.0
Tax revenue	906.8	15.8	894.6	15.7	416.1	14.9	406.3	14.5
Direct taxes	379.2	6.6	364.0	6.4	166.9	6.0	166.3	6.0
Taxes on goods and services	461.5	8.0	461.5	8.1	218.9	7.8	211.2	7.6
Taxes on international trade	66.1	1.2	69.1	1.2	30.2	1.1	28.8	1.0
Nontax revenue	78.8	1.4	102.9	1.8	44.4	1.6	41.0	1.5
Total grants	544.8	9.5	417.1	7.3	248.5	8.9	240.9	8.6
Budgetary grants	328.4	5.7	176.1	3.1	123.0	4.4	115.4	4.1
Capital grants	216.4	3.8	241.0	4.2	125.5	4.5	125.5	4.5
Total expenditure and net lending	1,698.2	29.5	1,700.2	29.9	830.1	29.7	758.9	27.2
Current expenditure	797.4	13.9	794.4	14.0	428.2	15.3	426.5	15.3
Wages and salaries	204.1	3.5	207.0	3.6	105.7	3.8	101.9	3.6
Purchases of goods and services	168.1	2.9	151.2	2.7	90.8	3.3	101.6	3.6
Interest payments	41.4	0.7	42.9	0.8	21.4	0.8	21.8	0.8
Transfers	300.4	5.2	301.0	5.3	149.7	5.4	140.3	5.0
Exceptional social expenditure	83.4	1.5	92.3	1.6	60.6	2.2	60.9	2.2
Capital expenditure	791.2	13.8	787.0	13.8	339.0	12.1	307.6	11.0
Domestic	452.0	7.9	440.4	7.7	167.4	6.0	128.6	4.6
Foreign	339.2	5.9	346.6	6.1	171.7	6.1	179.0	6.4
Net lending	109.7	1.9	118.8	2.1	62.8	2.2	24.8	0.9
Change in arrears (– : net reduction)	–9.9	–0.2	..	..	..	..	..	..
Overall deficit (cash basis)								
Including grants	–177.7	–3.1	–285.7	–5.0	–121.1	–4.3	–70.7	–2.5
Excluding grants	–722.5	–12.6	–702.8	–12.4	–369.6	–13.2	–311.6	–11.2
Financing	177.7	3.1	295.6	5.2	130.4	4.7	29.1	1.0
Foreign financing (net)	107.6	1.9	197.4	3.5	98.4	3.5	103.5	3.7
Domestic financing	70.1	1.2	98.2	1.7	32.0	1.1	–74.4	–2.7

Sources: MINECOFIN and World Bank staff calculations.

2015/16 Budget and onward: The government published the budget framework paper (BFP) in May 2015. In the BFP, the government reconfirmed its medium term commitments to achieve fiscal consolidation through increased efforts towards domestic revenue mobilization with new tax measures and expenditure rationalization / prioritization, including improving quality at the

entry of public investment projects, as reliance on external donor financial assistance reduces. The medium-term direction reflects the government's view that aid as a share of GDP is likely to decline. The government projects that grants will decrease from 9.2 percent of GDP in 2013/14 to 4.7 percent in 2017/18.

1.6. Macroeconomic Policy Direction

Key Points

- BNR will maintain accommodative monetary policy, fiscal policy became less expansionary in the past few quarters.
- New investment law and formulation of the revised export strategy show government commitment to a private sector-led economy.

In the past six months, until April 2015, there has been no major change in macroeconomic policy direction. However, while the BNR has continued accommodative monetary policy to support economic activities, fiscal policy became less expansionary. Other major policies formulated in the past 6 months include the new investment law and the second export promotion strategy.

New investment law: The government revised the 2005 investment and export promotion and facilitation.¹⁴ There are several changes between the 2005 and revised law.

- Priority sectors:** The new law identifies exports, manufacturing and investment in the sectors of energy, transport, ICT, financial services, and construction of affordable services. From the 2005 law, tourism, agriculture and agro-based industries, fishing and forestry, mining, research, infrastructure especially investments in water resource and activities, and waste recycling are excluded. On the other hand, transport, financial services, and construction of affordable housing are new priority sectors.
- Timeline for issuance of investment certificate:** The timeframe was reduced from 10 working days (Article 5 of the 2005 law) to 2 working days (Article 12 of the revised law).
- Incentives for registered investors:** The annex to the revised law defines special incentives for registered investors

including preferential tax rates; tax holidays; exemption of customs tax for products used in Export Processing Zones; exemption of capital gains tax; value added tax refund; and accelerated depreciation.

Second export promotion strategy. The government, led by the Ministry of Trade and Industry, revised the 2012 national export strategy in December 2014, currently waiting for cabinet approval. The revised strategy aims to reflect a number of changes, such as the formulation of the second Economic Development and Poverty Reduction Strategy (EDPRS 2) in 2013, since its inception 2012. The EDPRS 2 set an ambitious target to increase exports of goods and services from US\$1.3 billion in 2013 to US\$4.5 billion in 2018.

- Approach:** In order to revise the strategy, the government conducted sector reviews, market reviews and firm-level reviews.
- Constraints to exports:** The revised strategy has identified key constraints to exports including: (i) export finance; (ii) standards and other technical requirements; (iii) tax on exports (especially service exports); and (iv) transport costs.
- Four strategy pillars:** Building on the analysis, the revised strategy has formulated four strategic pillars including (i) sector interventions; (ii) improved access to markets; (iii) upgrade firm capacity to access and growth in export market; and (iv) export growth facility.

¹⁴ http://www.rdb.rw/uploads/tx_sbdownloader/Rwanda_Investment_Code_2005.pdf

(iv) **Export growth paths:** With an assumption that related strategies (e.g., PSDS and PSTA III) are also implemented, the revised strategy describes two scenarios. The

optimistic scenario projects that exports will grow by 28.7 percent per annum and reach to US\$4.2-4.4 billion in 2018. This scenario is close to the EDPRS 2 target.

1.7. Economic Prospects

Key Points

- Bank's growth projections for 2015 and 2016 are unchanged from the previous edition.
- The projections assume execution of government expenditures as budgeted and good weather conditions.
- Monthly economic indicators show mixed directions. While the decline in capital goods imports is negative, the acceleration of credit growth is a positive sign.

Positive regional growth outlook: World Bank projects that all EAC countries will grow faster or almost equal in 2015 and 2016 (Table 1.12). The positive regional growth outlook is positive given the economic relationship with these countries through trade in goods (both formal and informal) and in services such as tourism.

The 2014 actual growth rate turned to be 7.0 percent, as projected by the World Bank in the February 2015 edition of the Rwanda Economic Update. In the agriculture sector, while export crop production was lower than projected, the sector was compensated by stronger growth rates of others. In the industry sector, lower than projected manufacturing growth was compensated by stronger construction growth. In the services sector, public expenditure-led services (the sum of public administration, education and health) were lower than projected, but other services grew higher than projected.

Economic growth projections for 2015 and 2016 are almost unchanged from the previous edition. Growth is projected to reach 7.4 percent in 2015 and 7.6 percent in 2016—close to the country's potential. There are broadly five main reasons / assumptions to keep the growth projections for 2015 and 2016 including (i) macroeconomic stability (mainly inflation rate and exchange rate); (ii) resulting policy flexibility; (iii) expected acceleration of budget execution; and (iv) positive economic outlook.

- (i) **Macroeconomic stability:** Developments regarding inflation and exchange rates to date indicate that there is little inflationary pressure and exchange rate depreciation in the near future. As Rwanda is a net oil importer, the sharp drop in oil prices is likely to have a positive impact on the economy through an improved balance of payments, lower inflation rates, and lower expenditures on fuel subsidies.

Table 1.13: Growth projections of EAC countries

Percent	2012 (Actual)	2013 (Actual)	2014 (Actual)	2015 (Projection)	2016 (Projection)	Direction
Rwanda	8.8	4.7	7.0	7.4	7.6	↑
Burundi	4.0	4.5	4.7	4.8	5.0	↑
Kenya	4.5	5.7	5.4	6.1	6.5	↑
Tanzania	5.1	7.3	7.2	7.2	7.1	→
Uganda	4.4	4.3	4.5	5.6	6.4	↑

Source: World Bank Macro Poverty Outlook for Sub-Saharan Africa (April 2015).

- (ii) **Policy flexibility:** These factors would contribute to increased fiscal and monetary policy flexibility. Rwanda's favorable outlook builds on continued macroeconomic stability and continued implementation of priority policies (e.g., strategic investment) through the budget.
- (iii) **Expected execution of government investment as budgeted:** While the execution of capital expenditures in the first half of 2014/15 fiscal year was lower than projected by 9 percentage points, the government strengthened monitoring of strategic projects to accelerate project implementations. This is expected to result in the implementation of strategic projects.
- (iv) **Positive regional economic outlook:** Given the close relationships with neighboring countries such as EAC countries, the positive regional economic outlook is expected to contribute to Rwanda's economy through trade in goods and services.

The outlook for continued poverty reduction is positive. Food crop production, the main livelihood for the bulk of the poor, sustained its strong performance, growing at an average rate of 5.5 percent between 2011 and 2014, with a favorable outlook through at least 2016. Household consumption grew about 5 percent per year between 2011 and 2014 and is projected to pick up to 9 percent in 2015 and 10 percent in 2016. Based on elasticities, the number of Rwandans below the international US\$1.25/day poverty rate is expected to decrease to 54.2 percent in 2016, from 62.1 percent in 2011.

Nevertheless, a number of factors pose risks to this projection. As the public sector plays a key role in both investment and consumption, Rwanda's near-term outlook depends on the implementation of the government budget, especially to overcome the strong stop-start cycle

in investment. A second risk is the continued decline in commodity prices of Rwanda's main export items (coffee, tea, and minerals), which could expand current account deficits. A third risk is regional instability: tourism receipts are Rwanda's largest source of foreign exchange but are heavily dependent on regional security. A fourth risk is the rain-fed nature of Rwanda's agriculture. Abnormal rain and floods severely affect not only the agricultural sector but also the food manufacturing and trade sectors.

Recent indicators pose a risk to the growth outlook. Seasonally-adjusted data shows quarterly growth rates decelerated in Q3 and Q4 2014. While the trade balance in Q1 2015 improved by 10 percentage points from the same period in 2014, the negative capital goods import growth in recent months is a negative sign. Also, fiscal policy in the past few quarters was less expansionary. On the other side, the acceleration of credit growth is a positive sign.

Structural challenges: The aid shortfall and the resulting economic slowdown revealed structural bottlenecks, such as, heavy reliance on aid and the dominance of the public sector in the economy. Given a possible decline in the share of aid in the medium term, the role of public expenditure is expected to shift from driving growth to catalyzing it. Maintaining high growth and creating jobs to accommodate a fast-growing working-age population will require a shift to growth driven by the private sector.¹⁵ Such a structural transformation will depend on addressing the underlying constraints to private investment and continuing to make effective and efficient use of public resources through enhanced public financial management (PFM). In particular, it is important to mobilize additional domestic resources to create fiscal space and to further prioritize expenditures; including improved public investment management. While public investment has played the central role in Rwanda's economic development in the past few

¹⁵ The World Bank has been preparing for a job study to be published in mid-2015.

decades, it will have to be upgraded to the next level, including leveraging private investment and decision-making based on economic and financial rates of return. For growth to continue to be accompanied by fast poverty reduction, recent gains in agricultural productivity have to be consolidated and further deepened. This can be achieved by focusing on resilience to the key risks: crop diseases and pests, weather, and price fluctuation.¹⁶ Existing social protection systems need to be better targeted. Further progress in decentralization is essential to ensure greater equality and quality in the delivery of public services, in particular in rural areas.

Financing development: Among the various structural challenges, aid shortfall and resulting lack of financing for development is a critical issue. The results of 2014 BoP suggests that aid shortfall may be faster and deeper than we had thought, which negatively affected the execution of capital expenditures. Thus, identifying alternative financial sources, and the development of the financial sector to support it, is a key development issue for Rwanda.

Table 1.14: Actual growth in 2011-14 and projected growth in 2015-16

	2011	2012	2013	2014	2015 f	2016 f
Real gross domestic product	7.8	8.8	4.7	7.0	7.4	7.6
Private consumption	9.0	6.9	2.9	5.3	6	5.5
Government consumption	4.0	14.7	1.0	14.5	10	10
Gross fixed capital investment	9.3	22.2	7.7	9.6	12	10.1
Exports, goods and services	40.5	17.5	13.7	4.2	15	15
Imports, goods and services	24.5	21.4	5.5	7.2	10	10
GDP, at market prices	7.8	8.8	4.7	7.0	7.4	7.6
Agriculture	4.7	6.5	3.2	5.3	5.4	5.4
Industry	17.9	8.5	9.2	5.8	10.3	10.5
Services	8.0	11.5	5.4	8.9	8.6	8.9
Output gap	-0.5	1.5	0.1	0.3	0.7	1.1
CPI inflation, period average	5.7	6.3	4.2	1.8	2.0	4.0
Current account balance, % of GDP	-7.2	-11.3	-7.1	-11.5	-11.3	-11.8
Fiscal balance, % of GDP 1/	-3.2	-1.5	-5.2	-4.3	-5.1	-3.5
Poverty rate (US\$1.25 a day, PPP terms) 2/	63	59.8	59.1	57.6	55.9	54.2
Gini coefficient consumption	49.6	..	..	..	..	..

1/ Fiscal balance is on based on Rwanda's fiscal year. For example, 2014 data shows FY2013/14 data between July 2013 and June 2014.

2/ All poverty rates beyond 2011 are estimates.

Source: NISR, MINECOFIN, World Bank staff estimate.

¹⁶ The seventh edition of the REU picked up agriculture risks.

PART TWO

Financing Development



2.1. Introduction

For a country in the relatively early stages of development, such as Rwanda, quality investment and resulting capital accumulation is critical.¹⁷ In order to realize investment and capital accumulation, investments have to be well financed.

The Government has been well aware of this issue. Vision 2020, the country's long-term development strategy, formulated in 2010, refers to the need for high levels of saving and private investment, as well as reducing the dependence on external aid.¹⁸ In order to meet this need, the Government formulated the National Savings Mobilization Strategy in 2009, with the main focus of "meeting and funding increased investment requirements through mobilization of savings nationally".¹⁹ Subsequently, the Government formulated the second financial sector development program (FSDP II) in 2012, which outlines the use of, "investment and savings to transform the economy", in its third program.²⁰ Finally, in EDPRS 2, the third priority (increasing investment in priority sectors) under the Economic Transformation thematic area states that, "the investment process will target large foreign investors in priority sectors of the economy; accelerate measures to increase long-

term savings, transform the financial sector for increased access to long term international and domestic financing for the private sector, strengthen tax and regulatory reform to spur medium and large enterprise growth, and attract large investors". Though quantitative targets are not always consistent across strategies and programs, FSDP II aims to achieve the gross national saving rate at 20 percent of GDP by 2020. The macroeconomic framework of the EDPRS 2 assumes the overall investment / saving rate at 26 percent of GDP in 2017.

However, increasing the saving rate is challenging for Rwanda, especially due to a likely decline in aid in the coming period (aid is part of foreign saving). According to the latest debt sustainability analysis (DSA), in late 2014, it became apparent that external grants, as a share of GDP are projected to decline from 8.6 percent in 2013 to 3.3 percent in 2018, when EDPRS 2 is completed; although part of this reflects a shift from grants to loans. In other words, all things being equal, in order to maintain the same level of investment, alternative financing sources amounting about 5 percent of GDP will have to be found from the combination of domestic saving and foreign saving.

2.2. Overview of Rwanda's Saving and Investment

In the past five years, 2010 to 2014, investment (i.e., gross fixed capital formation) as a share of GDP reached 24.2 percent. Private investment accounted for 10.9 percent and government (public) investment was accounted for 13.4 percent. Investment should be financed by saving. Thus, saving (including both domestic and foreign) is equal to investment and the saving rate should also be 24.2 percent of GDP. Of the total saving rate, the gross domestic saving rate,

GDP minus consumption, was 9.2 percent. Thus, the foreign saving rate should equal 15.1 percent (Table 2.1 and Figure 2.1).

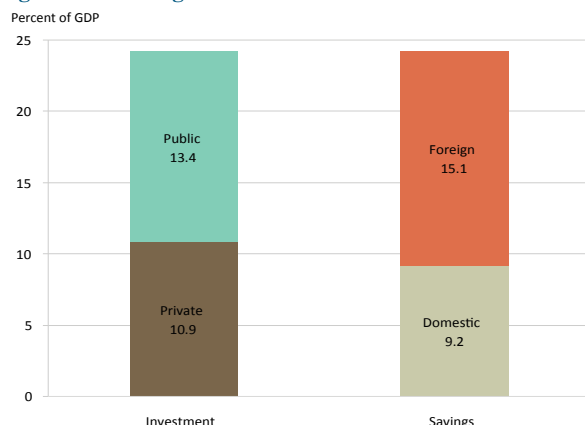
Rwanda's investment rate is slightly higher than the average of low and middle income countries at 23 percent in 2013. However, a striking feature of Rwanda's investment is its high public investment and low private investment; although the year 2013 is a bit

¹⁷ Madsen (2000) "The causality between investment and economic growth", shows that growth is predominately caused by investment in machinery and equipment, whereas investment in non-residential buildings and structures is predominantly caused by economic growth.

¹⁸ <https://repositories.lib.utexas.edu/bitstream/handle/2152/5071/4164.pdf?sequence=1>

¹⁹ http://www.minecofin.gov.rw/fileadmin/templates/documents/National_Savings_mobilization_strategy.pdf

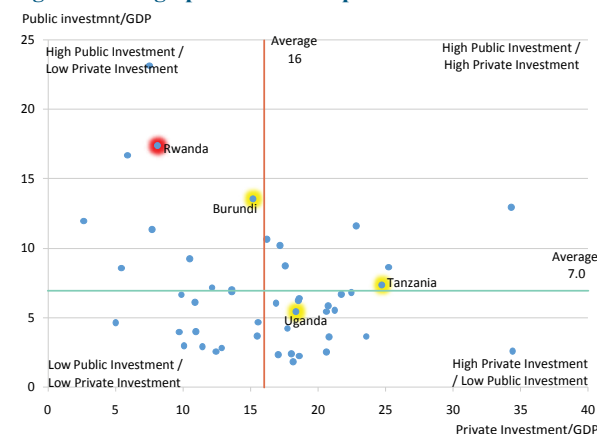
²⁰ http://www.minecofin.gov.rw/fileadmin/templates/documents/Rwanda_Financial_Sector_development_program_II.pdf

Figure 2.1: Saving and investment rate in 2010-14

Sources: NISR, WDI, World Bank staff calculations.

exceptional (Figure 2.2). Thus, it is important to find investment opportunities for the private sector, while maintaining high public sector investment. At the same time, it is critical that financing sources through domestic and foreign saving become available for this investment.

An increase in saving can be achieved through the combination of domestic and foreign saving. As domestic saving is the gap between GDP and consumption, the only way to increase domestic saving is to reduce consumption of

Figure 2.2: High public and low private investment

Sources: WDI, World Bank staff calculations.

the government and/or the private sector. On government saving, “an increase in taxes could be considered the appropriate policy measure... to raise government saving...In analyzing the impact of higher taxes, it is necessary to take account of the behavioral response of private saving and private investment”.²¹ On private saving, further development of the financial sector will play a key role in mobilizing private saving through, for example, improving access to finance and offering a variety of saving options.

Table 2.1: Rwanda's saving and investment balance (% of GDP)

	2010	2011	2012	2013	2014	2010-14 Average
GDP	100	100	100	100	100	100
Private consumption	77.8	78	77.5	74.3	74.2	76.4
Government consumption	14.9	13.7	14.4	14.2	15.1	14.4
Investment	22.5	22.9	25.1	25.5	25.3	24.2
Exports	12.1	14.4	14.1	15.6	14.9	14.2
Imports	28.0	29.6	32.0	30.7	30.5	30.1
<Investment>						
Private investment 1/	11.0	12.6	11.6	8.1	11.0	10.9
Public investment	11.5	10.2	13.5	17.4	14.3 2/	13.4
Investment	22.5	22.9	25.1	25.5	25.3	24.2
<Saving>						
Gross domestic saving	7.3	8.3	8.1	11.5	10.7	9.2
Gross foreign saving	15.2	14.5	17.0	14.0	14.6	15.1
Gross saving rate	22.5	22.9	25.1	25.5	25.3	24.2

1/ Data from World Development Indicator; 2/ Sum of capital expenditures and net lending.
Source: WDI, NISR, World Bank staff calculations.

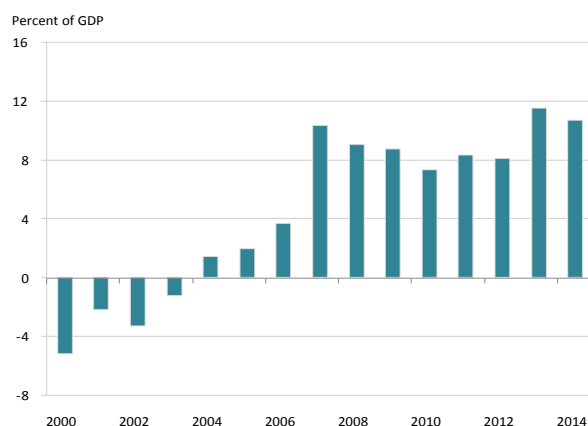
²¹ Paragraph 555 of the Balance of Payment Manual, 5th Edition.

2.3. Domestic Saving in Rwanda

Rwanda's domestic saving continued to rise throughout the 2000s from a negative level (Figure 2.3). Rwanda's domestic saving rose from -5.2 percent of GDP in 2000 to 10.7 percent in 2008. The sharp increase in the saving rate in the 2000s was followed by a moderate increase in the 2010s. Even after this increase, Rwanda's domestic saving rate in the 2010s is 10 percentage points lower than region's best performers: Ethiopia, Tanzania and Uganda (Figure 2.4).

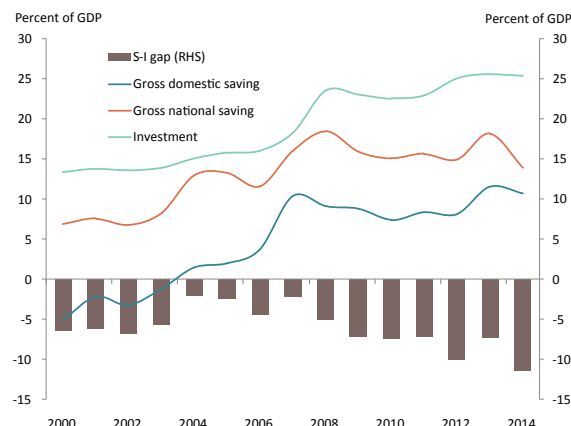
Rwanda's remarkable growth, more than 7 percent a year since 2000, has not been financed by domestic saving (Figure 2.5). The strong economic growth was supported by robust investment. However, the stagnant national saving, defined as domestic saving plus net income and current transfers, has resulted in expansion of the saving-investment gap (see Box 2.1). The increased saving-investment gap, in turn, has been financed by increased current account deficit. Current account deficit expanded to 11.8 percent of GDP in 2014.

Figure 2.3: Domestic saving in Rwanda, 2000-14



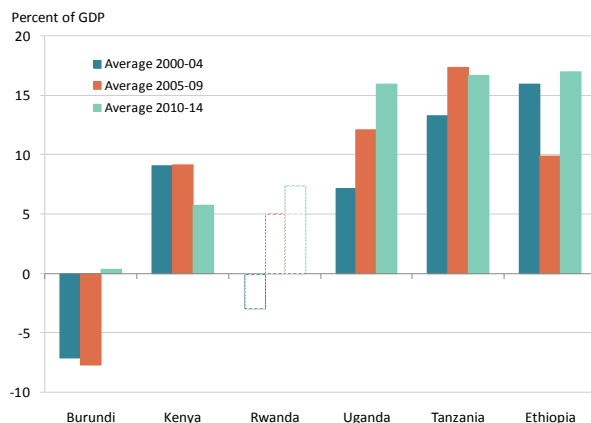
Sources: NISR; and World Bank staff calculations.

Figure 2.5: Widening saving - investment gap



Sources: NISR; and World Bank staff calculations.

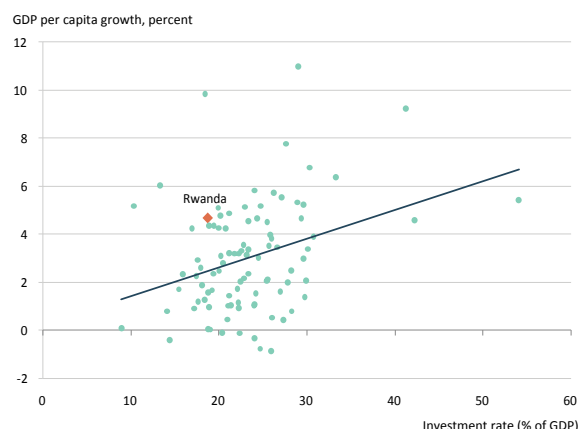
Figure 2.4: Domestic saving: Rwanda and its peer



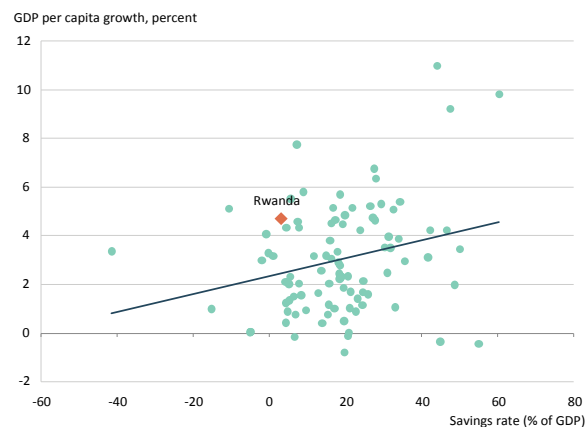
Sources: NISR and World Bank staff calculations.

Box 2.1 How can we measure saving in Rwanda?

Saving within a country can be defined in two ways: gross domestic saving and gross national saving. Gross domestic saving is defined as difference between GDP and final consumption. Gross national saving is defined as difference between Gross National Disposable Income (GNDI) and final consumption, where GNDI equals GDP plus net income from abroad plus net transfers from abroad. In the case of Rwanda, there is non-negligible difference between gross domestic saving and gross national saving, reflecting large inflows of grant aid. Gross domestic saving, having been lower than gross national saving, unveils domestic capacity to finance investment. Given anticipated decline in aid inflows in the near future, Rwanda needs to finance its investment through domestic sources. Therefore, we use gross domestic saving as a definition of saving in this note.

Figure 2.6: Positive correlation between investment and growth in the world (2000-13 average)

Source: World Development Indicators.

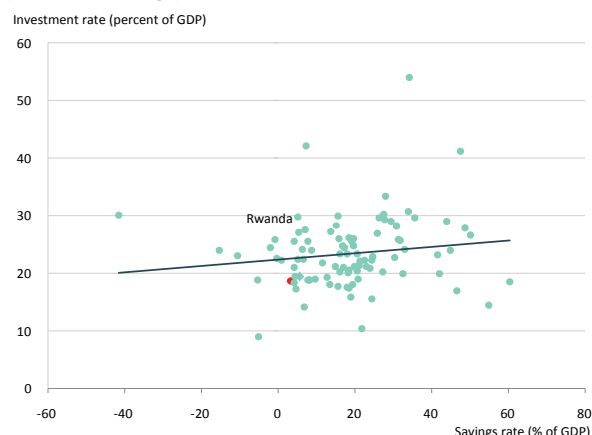


Source: World Development Indicators.

Why does domestic saving matter for Rwanda?

The Commission on Growth and Development (2008) concludes that an investment rate of 25 percent of GDP or higher is common among the high-growth countries of the post-World War II era. In addition, previous literature has confirmed that investment determines how fast economies can grow (Figure 2.6).²²

The literature demonstrates that low saving hampers long-run investment and growth. Cross-country data suggests that national saving exhibits high correlation with both investment and economic growth (Figure 2.7).

Figure 2.7: Savings, investment and growth in the World (2000-13 average)

Source: World Development Indicators.

Although there has been controversy on causality between saving and growth, the causality that runs from saving to growth plays a critical role through capital accumulation. In theory, it does not matter how investment is financed. In practice, however, close connection between the two is observed especially in the long run.

The links in the relationship between saving and growth are not mechanical, but depend on the quality of the financial system and public institutions in general. Economic growth requires an efficient financial system through which saving is effectively allocated to investment (see the transformational function of the financial sector in Part III on Rwanda's financial sector).²³ Likewise, institutional capacity and the rule of law affect investment decisions. For instance, macroeconomic stability is a determinant for the calculation of the real rate of return for an investment. Contract enforcement affects smooth implementation of investment.

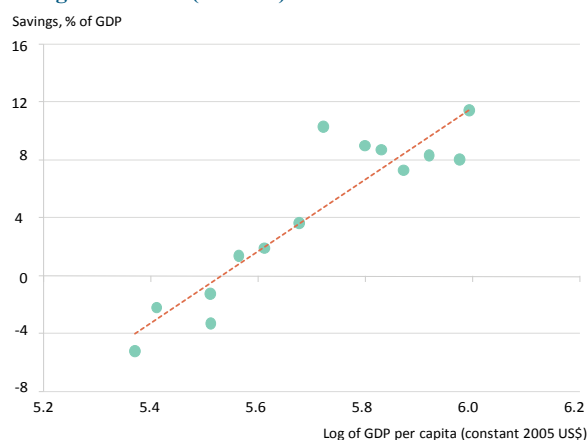
Rwanda's saving behavior is mostly attributable to three determinants: income level; youth dependency; and financial development.

²² Refer Loayza et al. (2010) for literature review.

²³ Levine (2005).

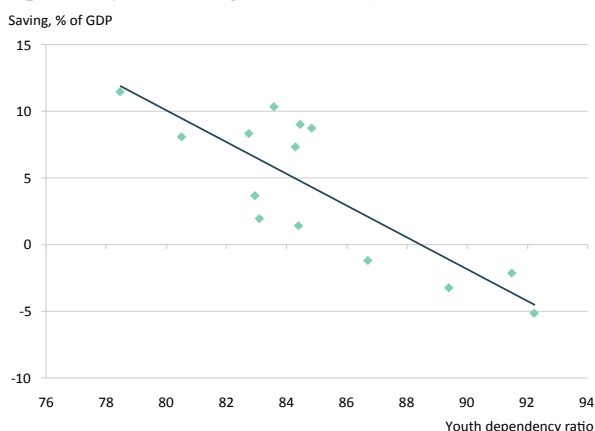
- (i) Increase in *income level* since 2000 has boosted Rwanda's domestic saving. The literature suggests that households start to save when their income exceeds subsistence levels. The remarkable economic growth in post-genocide Rwanda has led to an increase in domestic saving. Rwanda's per capita GDP (in 2005 constant US\$) doubled in the 2000-13 period (Figure 2.8).
- (ii) Decline in the *youth dependency ratio* (the ratio of younger dependents—people younger than 15—to the working-age population—those ages 15-64), in general,

Figure 2.8: Positive correlation between income and saving in Rwanda (2000-13)



Source: World Development Indicators.

Figure 2.9: Negative correlation between youth dependency and saving in Rwanda (2000-13)

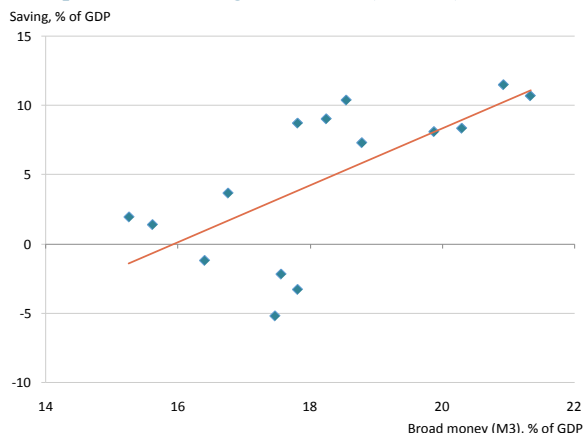


Source: World Development Indicators.

contributes to raising saving. Rwanda's youth dependency ratio fell from 92 percent in 2000 to 78 percent in 2013 (Figure 2.9). The literature finds a strong negative correlation between youth dependency ratio and saving. With fewer children to support, households can save more of their disposable income. The steep decline in youth dependency ratio is attributable to another steep decline in fertility. The average number of children per woman, fell from 6.1 in 2005 to 4.6 in 2010, a 25 percent decline. Rwanda's fertility is now well below the average for Sub-Saharan Africa of 5.1. The sharp drop in fertility can be explained by an increase in female education attainment, which accounts for 23 percent of the decline in fertility.

- (iii) In emerging countries like Rwanda, *financial development* can have a positive impact on saving through expanding the financial sector's outreach, and offering attractive saving instruments.^{24,25} Financial development, measured by a share of broad money to GDP, has advanced from 17.4 percent in 2000 to 20.9 percent in 2013 (Figure 2.10).

Figure 2.10: Positive correlation between financial development and saving in Rwanda (2000-13)



Source: World Development Indicators and IMF World Economic Outlook.

²⁴ Levine, (2005).

²⁵ Note that this positive association could be a result of financial development being highly correlated with national income.

Box 2.2 Targeted Financial Literacy Program is the Key for Saving

Saving is crucial not only for economic growth, but also poverty alleviation at household levels. Saving allows households to accumulate capital to invest in education, pay for health care, and fund seeds of entrepreneurship. Lack of access to banking has been a challenge, especially for the rural poor. Households without access to banks often save at home or save in non-monetary assets like cows. In either case, interest cannot be accrued. Financial institutions are reluctant to provide services to the rural poor due to high cost. The number of individuals in the world without access to banks is estimated at 2 billion (Demircuc-Kunt et al., 2015).

How can we change saving behavior? - Rwanda's case studies

Rwanda is one of the rare countries in Sub-Saharan Africa which has rapidly expanding access to finance. The introduction of 416 Umurenge SACCOs in 2009 has improved financial inclusion, now covering more than 90 percent of Rwandans within a five-kilometer radius of Umurenge SACCOs. The improvement in financial inclusion, however, has yet to change households' saving behavior. Although the number rural households saved money at increased rate of 31.1 percent to 53.9 percent between 2011 and 2014, those that saved at a financial institution increased with a smaller magnitude from 19.4 percent to 22.0 percent, likely due to a combination of a lack of financial literacy, a lack of trust against financial institutions, and distance and transportation costs to the closest SACCO (Box Table 2.1).²⁶ In a case study in Nyaruguru district, at least half of Umurenge SACCOs members have limited knowledge on services offered, do not trust financial institutions, and live more than 7 kilometers away, and need to pay more than Rwf 400 to reach the closest SACCO (Kerosi, Iyikirenga and Msaki, 2014).

Box Table 2.1: Saving behavior by groups (% , age 15+)

	Saved any money?		Saved at a financial institution?	
	2011	2014	2011	2014
Total	30.5	55.2	17.8	25.5
Female	24.1	52.2	12.6	20.2
Male	37.1	58.2	23.3	31
Rural	31.1	53.9	19.4	22

Note: The 2014 Global Findex database provides estimates for account penetration in rural populations but not urban populations for following reasons: (i) distinguishing between urban and rural areas is not straightforward; and (ii) the estimates of account ownership for urban populations are often imprecise. See Demircuc-Kunt et al. (2015) for detailed explanation.

Source: The Global Financial Inclusion (Global Findex) Database, 2014.

This, however, does not mean that rural households cannot save at financial institutions. Financial literacy training can help households to save. Sayinzoga et al. (2014) provided experimental financial literacy training in rural areas.²⁷ One-week training not only improved their financial literacy, but changed their financial behavior. Participants started to save at financial institutions. In addition, non-borrowing farmers took up loans and started new income-generating activities, and indebted farmers improved repayment performance. A cross-country survey finds that a financial literacy program can be effective. Specifically if it focuses on awareness and attitude more than numerical skills, on targeted groups—especially women, the youth and the poor than general public, and lastly, by building trust between households and financial institutions by improving governance and products offered (Xu and Zia, 2013). These findings tell us that well-targeted financial literacy programs can change households' saving behavior.

To contribute to the goal set by Vision 2020, transforming the country into a middle-income country by 2020, the second Financial Sector Development Program seeks to develop a stable, sound and efficient financial sector, and target financial inclusion as a key program to achieve this end. With support from Access to Finance Rwanda, funded by the UK government, World Bank, and KfW, the National Financial Education Strategy was established in 2011, with the aim of deepening and broadening Rwandan's financial literacy. The strategy defines the scope of financial education, both at the national and priority group levels, and provides an appropriate foundation for consumer protection. MINECOFIN, in close collaboration with BNR, has been taking a leading role to develop the strategy.²⁸

²⁶ The 2012 FinCap Survey also confirmed that the majority of Rwandans lack sufficient knowledge of numeracy, cash flow management, future planning, and financial services usages.

²⁷ The training program consisted of six modules: (i) cooperative principles; (ii) explanation of microfinance activities, savings and credit; (iii) how to develop a business plan for small, income-generating activity; (iv) loan management; (v) basic bookkeeping and management of small income-generating projects; and (vi) example business plans for small income-generating projects.

²⁸ For detailed argument, see MINECOFIN (2013).

2.4. Foreign Saving in Rwanda

While mobilizing domestic saving is essential, the correlation with income level and demography shows that domestic saving cannot be increased in the short-term. Thus, it would be more realistic to increase foreign saving (i.e., increase in current account deficit) with stable sources. In Rwanda, against the theoretical framework, gross foreign saving calculated by the national account and the current account in the BoP do not match, most likely due to data collection issues on both the national account and the BoP (Table 2.2). Nevertheless, the BoP provides better information on financing items. Also in Rwanda, current transfers (mainly from budget support from development partners and remittance from diaspora) in practice function as financing items. Thus, for this note, the current account deficits excluding current transfers is used as a proxy for foreign saving.

Table 2.2: Gap between gross foreign saving and current account deficit (% of GDP)

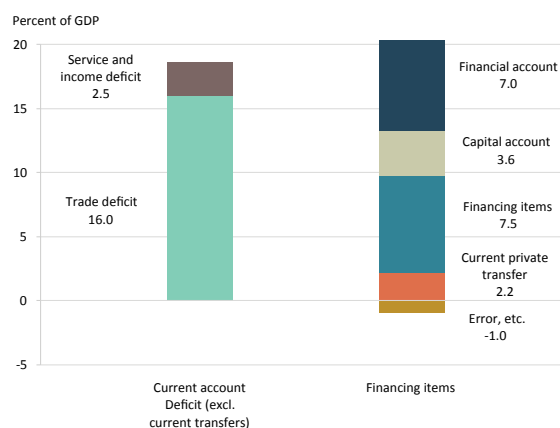
	2010	2011	2012	2013	2014	2010-14 Ave
Gross foreign saving	15.2	14.5	17.0	14.0	14.6	15.1
Current account deficit	7.5	7.3	10.2	7.4	11.5	8.8
Gap	7.7	7.3	6.8	6.6	3.1	6.3

Sources: BNR, NISR, World Bank staff calculations.

Assuming that there is no change in the overall balance in the BoP (i.e., no change in international reserves), the current account deficits excluding current transfers have to be financed by: (i) current transfers; (ii) financial account; and (iii) capital account.²⁹ Between 2010 and 2014, the current account deficits excluding current transfers reached about 19 percent of GDP (Figure 2.11). Trade deficits of goods reached 16.0 percent and the sum of services and income account deficits reached 2.5 percent of GDP. Among financing items, the public current

transfer has the dominant shares at 7.5 percent followed by the financial account at 7.0 percent, the capital account at 3.6 percent and private current transfers at 2.2 percent.

Figure 2.11: Current account deficits and financing items in 2010-14



Sources: BNR, World Bank staff calculations.

Going forward, the latest DSA, released in late 2014, shows that external grants as a share of GDP is projected to decline from 8.6 percent in 2013 to 3.3 percent in 2018, although part of which is offset by the shift from grants to loans. In other words, all things being equal, in order to maintain the same level of investment, alternative financing sources amounting about 5 percent of GDP will have to be found. For this purpose, the composition and extent of the current financing items are scrutinized.

(1) Current Transfers (Figure 2.12 and 13)

Current transfers are further divided into public and private transfers. Public current transfers mainly include budgetary grants and non-budgetary grants (including technical assistance and other humanitarian aid) to the public sector. Private current transfers mainly include transfers to churches and associations, and workers remittance. Budgetary grants is one of the key inflow items, however, its share in GDP

²⁹ Items in current transfers do not create any obligations for repayments in the future as opposed to loans. Thus, current transfers directly affect a country's income level. On the other hand, items in the capital involve transfers of ownership of fixed assets.

Figure 2.12: Public current transfer in 2010-14



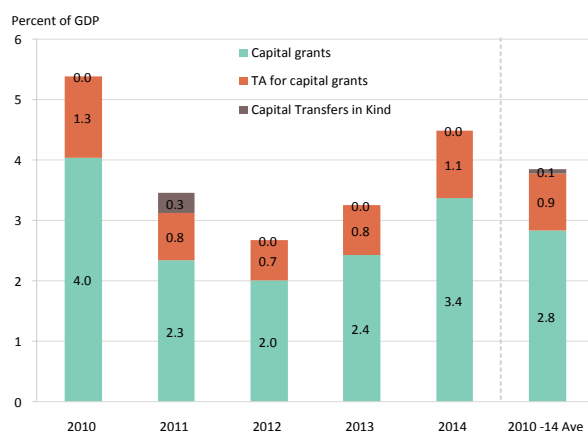
Sources: BNR, World Bank staff calculations.

has significantly declined from 7.1 percent in 2010 to 3.5 percent of GDP. Workers remittance increased in the past five years and exceeded 2 percent of GDP.

(2) Capital Account

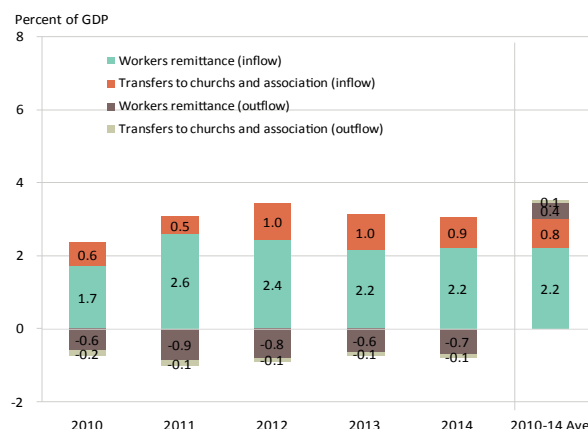
The main items in the capital account are capital grants to support long-term projects and their accompanying technical assistance. In 2010-14, annual average capital account inflows reached 2.8 percent of GDP. The inflows fell in 2012 to 2.0 percent during the period of the aid shortfall, but recovered 3.4 percent of GDP in 2014 (Figure 2.14). Although capital grants recovered in 2013 and 2014, total grants (the sum of budgetary

Figure 2.14: Capital account in 2010-14



Sources: BNR, World Bank staff calculations.

Figure 2.13: Private current transfer in 2010-14



Sources: BNR, World Bank staff calculations.

grants and capital grants) fell from 11.6 percent in 2010 to 7.0 percent of GDP in 2014 (Table 2.3).

(3) Financial Account

The financial account is further divided into (i) public sector capital (e.g., loans to the public sector); (ii) private sector capital (e.g., FDI and debt flows with the private sector) and (iii) other capital (e.g., portfolio investment). In 2010-14, the financial account contributed to 7.5 percent of GDP (Figure 2.15). However, both public and private capital significantly fluctuated. For example, public capital sharply increased from 1.5 percent in 2012 to 7.2 percent of GDP.

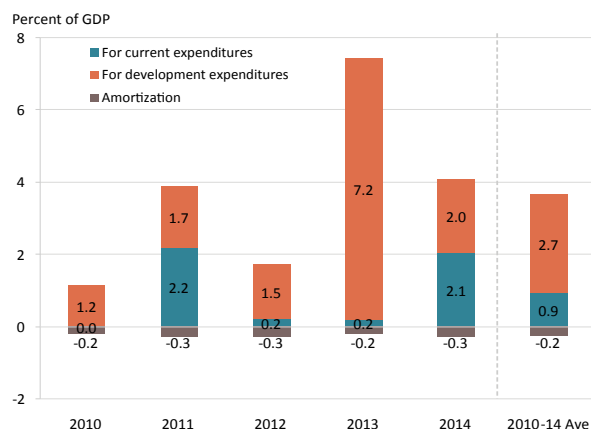
Table 2.3: Grant inflows

	2010	2011	2012	2013	2014	2010-14 Ave
US\$ million						
Budgetary grants	403	546	343	469	277	408
Capital grants	214	133	128	176	253	181
Total grants	617	679	472	645	530	588
% GDP						
Budgetary grants	7.6	9.6	5.4	6.5	3.7	6.5
Capital grants	4.0	2.3	2.0	2.4	3.4	2.8
Total grants	11.6	11.9	7.4	8.9	7.0	9.4

Sources: BNR, World Bank staff calculations.

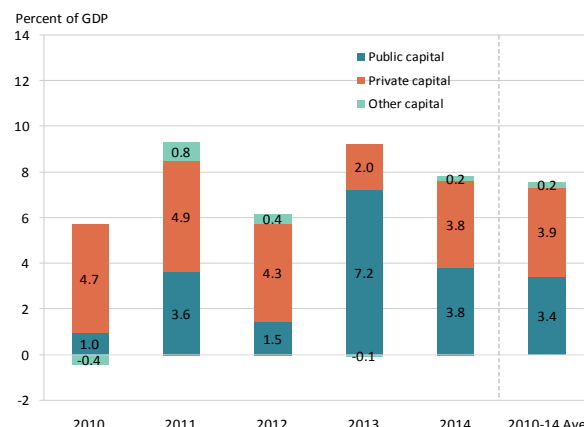
- (i) **Public capital** (Figure 2.16). The sharp increase in 2013 was mainly due to the issuance of Eurobond (US\$400 million). Without the impact of the Eurobond, public capital inflows in 2013 was 1.7 percent of GDP.
- (ii) **Private capital** (Figure 2.17). Long-term debt and FDI are the main items. Long-term debt inflows reached 2.1 percent of GDP in 2010-14, but its impact was fully offset by amortization (debt repayment). Thus, almost all net inflows in private capital are from FDI. However, FDI is not stable or increasing in the past several years (see Annex Note 1 on Rwanda's FDI).

Figure 2.16: Public financial account in 2010-14



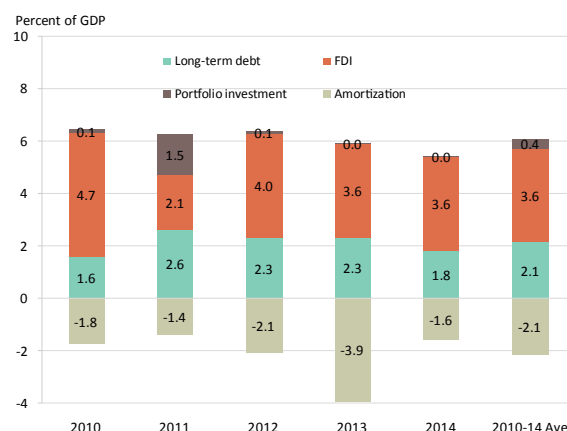
Sources: BNR, World Bank staff calculations.

Figure 2.15: Financial account in 2010-14



Sources: BNR, World Bank staff calculations.

Figure 2.17: Private financial account in 2010-14



Sources: BNR, World Bank staff calculations.

2.5. Identifying Alternative Financing Sources for Development

The recent trend in grant aid (Table 2.3) emphasizes the importance of identifying alternative financing sources for development. The analysis on domestic saving shows that the domestic saving rate is highly correlated with income, youth dependency and financial sector development. However, income level and youth dependency are not likely to change in the short-term. Thus, the financial sector will have to play a key role in mobilizing domestic saving (see Part III on the Financial Sector in Rwanda).

On foreign saving, while some items, such as Eurobond, under private capital can generate short-term significant inflows, it is more expensive compared to concessional financing and financing availability and is subject to the international financial market. In order to identify alternative financing sources from foreign saving, different items are compared in terms of (i) costs; (ii) medium / long-term trends and (iii) volatility (Table 2.4).

Table 2.4: Pros and cons of financing options

	Inflows in 2014 (US\$ mln)	Financing Cost	Growth Rate (Annual)			Volatility		Prospects
			LT Growth (98-14, in %)	MT Growth (09-14, in %)	Recent growth	Standard deviation (98-14, in %) 1/	Remark	
1. Public current transfers								
Budgetary grant (excluding Debt relief under Heavily Indebted Poor countries HIPC)	382	Zero	22	−8	Negative	2	H	Negative
2. Private current transfers								
Remittance from diaspora	175	Zero	29	15	High	0.9	L	Positive
Private transfers for churches and association	67	Zero	5	14	High	0.6	L	?
3. Capital account								
Public Investment Projects (PIP)	334	Low	11	11	High	1	M	?
4. Financial account								
Public sector long-term capital	286	High	8	26	High	1.7	H	?
Foreign direct investment	200	Low	23	11	High	1.4	M	Positive
Portfolio investment	5	High	12	−190	Negative	1.2	L	?

1/ To adjust trend, calculated based on share in GDP.

Sources: BNR, World Bank staff calculations.

(1) Public Current Transfers

On budgetary grants, while financing costs are almost zero, recent growth rates are negative and volatilities are high. Thus, prospects are considered to be negative. Non-budgetary grants (technical assistance and other humanitarian aid) had positive growth in the past five years and their volatility is low. However, it is not clear if government can influence non-budgetary grants through policy initiatives. Thus, it is not feasible to identify alternative financing sources from public current transfers.

(2) Private Current Transfers

Both remittance from diaspora (i.e., workers remittance) and private transfers for churches

and association have high growth rates and low volatility. While the government has exercised limited policy influence, workers remittance has room to increase. A comparison with EAC countries and other country groups shows that Rwanda's remittance inflows are almost the average of Sub-Saharan Africa (2.3 percent of GDP), but significantly lower than the low income country average at 6.3 percent (Table 2.5). The government may wish to seek opportunities to learn from other low income countries (Box 2.2). Also, the BNR has not been correcting information on the origins of remittances. With availability of the information, the government would be able to formulate a strategy to attract workers' remittance.

Table 2.5: Personal remittances, received (% of GDP)

	2009	2010	2011	2012	2013	Average (09-13)
Burundi	1.6	1.7	1.9	1.9	1.8	1.8
Kenya	1.7	1.7	2.2	2.4	..	2
Rwanda	1.7	1.9	2.7	2.5	2.3	2.2
Tanzania	0.1	0.2	0.2	0.2	0.1	0.2
Uganda	4.6	4.1	4.4	3.8	3.8	4.1
Sub-Saharan Africa (developing only)	2.9	2.3	2.2	2	..	2.3
Low income	5.9	6	6.6	6.6	..	6.3
Lower middle income	4.7	4.2	4.2	4.4	4.2	4.4
Upper middle income	0.9	0.8	0.8	0.7	0.7	0.8

Source: World Development Indicators.

(3) Capital Account

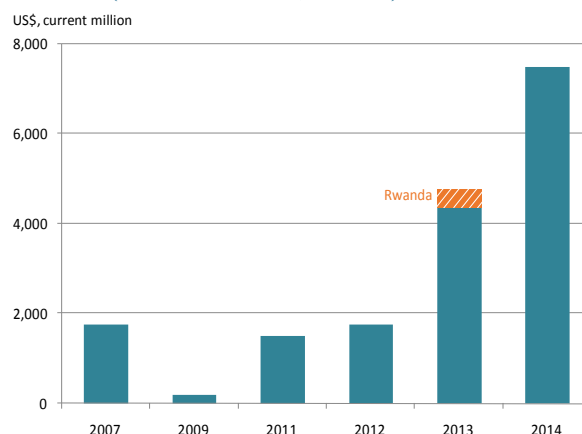
Public capital grants have high growth with medium volatility. As the capital grants are directly linked to specific projects, they are less affected by changes to the political environment compared to budgetary grants. In order to attract public capital grants, public investment management (including execution of capital expenditures) will have to be significantly improved.

(4) Financial Account

Public sector long-term capital and FDI has led to positive growth in the past several years; however, their volatilities are relatively high. On the public sector, long-term capital, access to the international capital market can bring significant and immediate impact. In the past few years, Sub-Saharan African countries had access to international capital market (Figure 2.18). However, costs are higher than concessional loans / grants, and funding availability depends on international capital markets. Also, an impact of new bond issuance on the debt distress rating will

have to be carefully scrutinized. Nevertheless, the recent upgrade of the credit rating (see Part I) would be helpful.

Figure 2.18: Bond issuance by Sub-Saharan African Countries (excl. South Africa, 2007-14)



Source: Thomson-Reuters.

FDI is considered to be a stable financing source, yet its importance in Rwanda remains small compared to neighboring countries, such as Tanzania and Uganda (natural resources attract FDI in these countries).

2.6. Role of the Financial Sector

The development of the financial sector in Rwanda is essential for financing development, for two reasons. First, the positive relationship between domestic saving and development of the financial sector suggests that the financial sector will be able to mobilize more domestic saving, especially through improving access to finance. Second, the financial sector will play a key role in attracting foreign saving.

Access to finance is a prerequisite for transferring money into Rwanda. Also, “remittances promote financial development in developing countries”.³⁰ On FDI, in addition to its financing function, “financial markets allow the backward linkages between foreign and domestic firms to turn into FDI spillovers”.³¹ Development of capital market is critical to attract foreign investors into local bond / stock markets.

Box 2.3 Leveraging migration for financing development

World Bank’s note on Migration and Development³² finds that the total migrants’ remittance reached US\$436 billion in 2014. Of which, US\$33 billion was for Sub-Saharan Africa. Among Sub-Saharan African countries, remittances reached more than 20 percent of GDP in the Gambia and Lesotho. The cost of sending money in Sub-Saharan Africa (12 percent) is higher than the global average (8 percent) by 50 percent. It also argues that as much as US\$100 billion or more, could be raised annually by developing countries via:

- **Mobilizing diaspora savings:** A diaspora bond issued by a country of origin could be attractive to migrant workers who hold deposits in host-country banks;
- **Reducing remittance costs:** The introduction of online and mobile money transfer systems in many developing countries offers new opportunities for more cost-effective means of sending money.
- **Reducing migrant recruitment costs:** Recruitment costs by migrant workers to recruitment agents, on top of the fees paid by the employers, are a major drain on poor migrants’ income and remittances.
- **Mobilizing philanthropic contributions from the diaspora:** Some governments have attempted to channel collective remittances through Home Town Associations by offering matching grants.

³⁰ Aggarwal, Demircuc-Kunt and Peria (2006) “Do Workers’ Remittances Promote Financial Development?”

³¹ Alfaro, Chanda, Kalemli-Ozcan and Sayek (2006) “How does foreign direct investment promote economic growth? Exploring the effects of financial markets on linkages”

³² Migration and Development Brief 24 (April 2015) <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1288990760745/MigrationandDevelopmentBrief24.pdf>

PART THREE

Special Focus: Financing Development: The Role of a Deeper and More Diversified Financial Sector



3.1. The Role of the Financial Sector in Economic Growth and Financing Development

The financial sector plays an important role in contributing to economic growth. Financial institutions perform essential intermediation functions in the economy. They mobilize and pool savings, allocate those savings to investments, monitor the use of those investments by firms and individuals, diversify and manage risk, ease the exchange of goods and services, and facilitate the payment, clearing and settlement in the economy, including across borders.³³ Well-functioning financial systems promote economic growth through financing firms with the potential to grow, channeling savings into promising investments, diversifying risk, and promoting sound governance. In practical terms, a well-functioning financial system provides reliable and inexpensive payments services, makes available safe deposit facilities that generate a positive return and offers entrepreneurs access to a suitable range of sources for short- and long-term funds. Through offering safe and remunerative deposit facilities, financial systems also contribute to mobilizing national savings.³⁴

Academic studies mostly conclude that financial sector development drives economic growth, rather than the other way around. The level of financial development positively predicts long-run economic growth, capital accumulation and productivity growth.³⁵ The mechanics of the relationship between financial sector development and growth have been explored and validated via industry and firm-level analysis. For example,

industries that rely heavily on external funding grow comparatively faster in countries with well-developed financial systems.³⁶ Research further indicates that the growth gains from financial sector development are particularly significant for developing economies.^{37,38} While the majority of this research focuses on the banking sector, there is also support in literature for the positive contribution of capital markets to economic growth, yet this relationship is considerably less studied.³⁹ Recent empirical studies also note that financial sector development is associated with beneficial distributional effects,⁴⁰ while small-firm industries benefit disproportionately from financial development.⁴¹

Finance matters for development not only when it functions well, but also when it faces problems. Where the governance structures of financial institutions are weak, they can undermine effective oversight and accommodate corruption in lending and other financial transactions. Unsound financial markets and imprudent behavior by financial institutions can also lay the foundations for financial crises, such as the recent global financial crisis. Financial crises are typically associated with a drastic erosion of real economic activity and—as the official sector intervenes to stave off an impending collapse of the financial system—a significant increase in public indebtedness occurs, which undermines growth and the government’s ability to adequately attend to social and equity objectives.

³³ Levine, R. 2005. “Finance and Growth: Theory and Evidence.” In Philippe Aghion and Steven Durlauf, eds., *Handbook of Economic Growth*. New York: Elsevier.

³⁴ <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23268767~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html>

³⁵ King, R. G., and R. Levine. 1993. “Finance, Entrepreneurship and Growth: Theory and Evidence.” *Journal of Monetary Economics* 32(3):513–42.

³⁶ Rajan, R., and L. Zingales. 1998. “Financial Dependence and Growth.” *American Economic Review* 88: 559–86.

³⁷ Calderon, C. and L. Liu. 2003. “The Direction of Causality between Financial Development and Economic Growth.” *Journal of Development Economics* 72(1):321–34.

³⁸ Mavrotas, G., and S. Son. 2006. “Financial Sector Development & Growth: Re-examining the Nexus.” In M. Bagella, L. Becchetti, and I. Hasan, eds. *Transparency, Governance and Markets*. Oxford: Elsevier Publishers.

³⁹ Beck, T., and R. Levine. 2004. “Stock Markets, Banks, and Growth: Panel Evidence.” *Journal of Banking and Finance* 28: 423–442.

⁴⁰ Beck, Demirgüç – Kunt and Levine. 2007. “Finance, inequality and the poor.” *Journal of Economic Growth* 12(1): 27–49.

⁴¹ See Beck, Demirgüç – Kunt, Laeven and Levine. 2008. “Finance, Firm Size, and Growth.” *Journal of Money, Credit and Banking* 40(7): 1379–1405.

The financial sector can enable development financing and facilitate a gradual transition away from aid. By contributing to economic growth through private sector development, thus ‘growing the pie’, the financial sector expands government revenues and through that channel can contribute to the financing of development. The financial sector can also help governments to more effectively collect their ‘share of the pie’ by facilitating efficient domestic revenue mobilization and government transfer targeting via effective payment systems, and curbing illicit financial flows.⁴² In addition to increasing the size and share of domestic revenues, the financial sector can facilitate domestic and foreign debt financing, through bond issuance, accessing international capital markets, and institutional investors, such as insurance and pension funds, that can be used to finance development.

Within the financial sector, the banking sector plays a central role in accelerating economic growth, particularly through its role of maturity transformation. Maturity transformation means that banks can transform short-term savings and deposits into long-term credit and investments. The nature of banks’ business means that they attract large amounts of deposits and savings from the population, most of which have relatively short maturities. This means that they need to be potentially available on a daily basis in case depositors request use of their funds. This transformation function is essential to support economic growth through investments, but at the same time exposes banks to liquidity risk (i.e., the risk that short-term funding can be withdrawn instantly, while longer-term loans are only repaid over a longer period of time). While banks can play an essential role in economic growth, their investments tend to be constrained by the maturity of their liabilities, therefore making it challenging to invest in a large number of long-term projects.

Capital markets play a critical role for economic growth and development financing by supporting investments in priority sectors that require long-term local currency resources. Capital markets channel the growing wealth of institutional investors to those who can put it to productive long-term use. The G20 has noted that institutional investors such as pension funds, insurers, and sovereign wealth funds, are a significant but underused source of long-term financing. A lack of appropriate financing vehicles, and insufficient investment and risk management expertise are highlighted as key constraints to developing economies in more fully leveraging institutional investors.⁴³ At the same time, local-currency bond markets support the growth of domestic investor bases and help mobilize domestic saving to support productive investments. Both the public and private sectors need access to capital to meet basic infrastructure, housing, and social sector (e.g. health and education) financing needs while small and medium-sized enterprises (SMEs) and larger companies require access to long-term and affordable debt and equity capital to grow. Capital markets are expected to be an increasingly relevant tool to enable a transition away from aid, particularly for financing public infrastructure. Countries can make themselves more attractive for long-term financing through sound governance and institutional frameworks.

Sound macroeconomic management and effective regulation and supervision are required to fully leverage the financial sector’s contribution to economic growth and facilitation of debt financing. Low and stable inflation, a relatively stable exchange rate, and sound debt management are important ingredients to support robust financial sector development. They help financial institutions price savings and credit products appropriately, help in the development of financial products

⁴² World Bank. “Financing for Development Post-2015.” Washington, D.C. In 2013, the Post-2014 HLP Secretariat noted that “Domestic revenues mobilization of emerging and developing economies [have] grown by 14 percent annually since 2000...These buoyant domestic revenues have lowered aid dependency and raised country creditworthiness for official and private non-concessional loans, thereby having a multiplier effect on the volume of resources available for development.”

⁴³ Umbrella paper on Long-Term Investment Financing for Growth and Development, prepared by the World Bank and other International Organizations for the G20, 2013.

with longer durations—for which a stable macroeconomic framework is a prerequisite, and provide benchmark pricing through the yields of government securities. As one example, the more sound the macroeconomic framework, the less risk the private sector has to price in, and the lower the interest rates on credit products can be. In addition, as the recent global financial crisis demonstrated, financial sectors are not self-

regulating, and thus active regulation is required to minimize market volatility and prevent crises. To ensure the overall stability of the financial sector, regulators play a critical role in encouraging and maintaining competition among financial sector players, limiting excessive risk-taking and/or speculation, and protecting consumers from potential abuses and loss of funds.

3.2. The Financial Sector at the Center of Rwanda's Development Vision

An efficient, sound, and inclusive financial sector is a critical enabler for Rwanda to achieve its development vision. Financial intermediation is a key theme—both explicitly and implicitly—in Rwanda's VISION 2020 strategy as well as in supporting strategic plans including EDPRS 2 and FSDP II.⁴⁴ Direct links to the financial sector are found in the pillars and themes of these strategies, particularly among economic clusters. However a sound and stable financial sector provides a foundation for the achievement of all strategic objectives, including in the areas of social development and governance.

Four of the six main pillars of Vision 2020 rely on financial development as a key enabler. While the financial sector plays an important role for each of the VISION 2020's six pillars, the role of finance in four pillars merits particular emphasis. As stated in Vision 2020, in order to achieve the objective of the third pillar—the development of an efficient private sector spearheaded by competitiveness and entrepreneurship—the “financial sector will be crucial... [and]...must be able to provide the necessary capital for private sector development”. The financial sector, and bond markets in particular, play a key role in infrastructure development—VISION 2020's fourth pillar—by allowing governments to efficiently raise capital and imposing a degree of discipline in the allocation of these funds. The fifth pillar of productive and market-oriented markets is noted in Vision 2020 as a key policy area.

Building on Vision 2020's sixth pillar, regional and international integration, the Government of Rwanda has stated its vision of becoming a Global Financial Centre by exploiting regional and international opportunities for Rwanda to develop a blend of financial services, including in banking, trade finance, captive insurance, as well as, pensions and fund management.

The financial sector also plays an integral role in achieving the objectives set forth in EDRPS 2, particularly in the areas of economic transformation, productivity, youth employment, and rural development. A robust domestic financial sector facilitates private sector investment and operations via financing and transaction services, which in turn increases productivity and growth in all sectors. Well-developed and accessible rural finance markets support agricultural productivity and stability and thus, improve the material and social well-being of rural residents.

Rwanda's ambitious vision for its financial sector is outlined most explicitly in its Financial Sector Development Program. The vision of FSDP II is to develop a stable and sound financial sector that is sufficiently deep and broad, capable of efficiently mobilizing and allocating resources to address the development needs of the economy and reduce poverty. Building on the first FSDP (2008-2012), FSDP II establishes four main programs: (i) financial inclusion; (ii) developing financial institutions, markets, and the supporting

⁴⁴ http://www.minecofin.gov.rw/fileadmin/templates/documents/Rwanda_Financial_Sector_development_program_II.pdf

Table 3.1: Key financial sector indicators and targets

Indicator	Baseline value (year)	Target value (year)
Credit to the private sector / GDP (%)	15.6 (2012)	20.2 (2017/2018)
Value of credit to SMEs by banks and MFIs / SACCOs (billion Rwf)	161 (2012)	882 (2017/2018)
Payment transactions done electronically (% of total)	41.5 (2012)	75 (2017/2018)
Adult population accessing financial services (%)	72 (2012)	>85 (2017/2018)

Source: EDPRS 2.

infrastructure; (iii) investment and savings to transform the economy; and (iv) protecting consumers and maintaining financial stability. FSDP II provides a roadmap of hundreds of policy actions, ranging from the establishment of

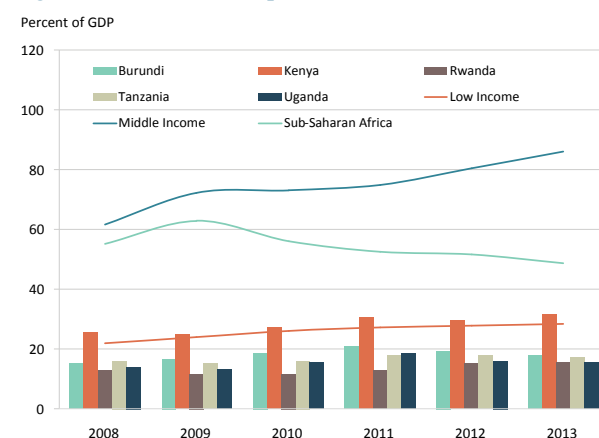
agency banking regulations to a revision of the pension law to the alignment of bank prudential standards with EAC agreed convergence, among many others.

3.3. The Current State of Rwanda's Financial Sector

Rwanda's financial sector has made great strides towards becoming a modern financial sector. Banks, microfinance institutions, SACCOs, insurance companies, pension funds, and capital markets firms are providing an expanding range of products and services to address the financial needs of the private sector, even though there is still scope for further improvement. Currently, products offered to the private sector range from payments over savings, to credit, insurance, and retirement products, with different levels of sophistication and innovation.

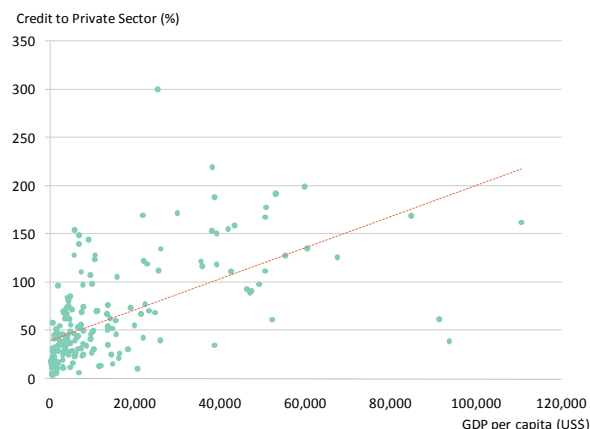
This positive trend is also visible in the development of typical financial sector deepening indicators. Credit to the private sector relative to GDP stood at 16.6 percent as of end 2014, compared to 11.6 percent in 2009. While the trend for Rwanda has clearly been positive over the last years and the country managed to catch up with other EAC neighbors, private sector credit relative to GDP remains on

the low side in relative terms. The average in low income and middle income countries is 30 percent and over 80 percent of private sector credit to GDP, respectively, leaving room for growth (Figure 3.1). Generally, a positive relationship exists between private sector credit to GDP and GDP per capita across the world, as shown in Figure 3.2.

Figure 3.1: Credit to the private sector

Note: Data for Sub-Saharan Africa includes South Africa.
Sources: World Development Indicators and BNR.

Figure 3.2: Credit to the private sector and GDP per capita across the world (2013)



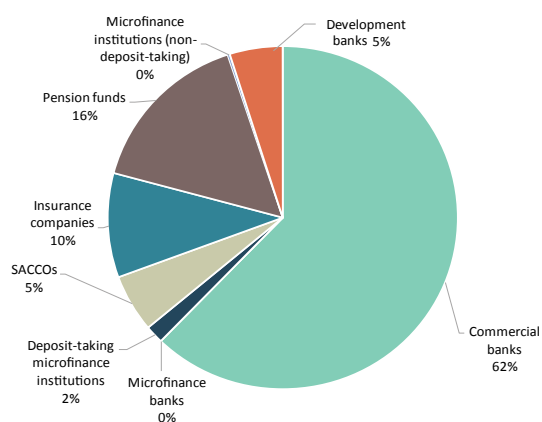
Source: World Development Indicators.

Rwanda's financial sector is composed of a wide and growing array of institutions, and is becoming increasingly diversified, which is a positive development. Commercial banks continue to hold the largest combined share of financial sector assets at slightly over 50 percent (Figure 3.3 and 3.4, and Table 3.2). Yet, the change over time is noteworthy. In 2008, the banks' combined share was over 60 percent, signifying that the financial sector has become more diversified in recent years. This is a positive development as it implies increased competition from new and different types of institutions as well as a wider breadth of financial products available. Government, as well as, the

private sector contributed to this development. The main contribution to diversification came from other depository institutions, mainly microfinance banks, but also deposit-taking MFIs and SACCOs. At the same time, an increase in diversification implies that new interconnections between different parts of the financial sector may emerge. These have to be monitored with more sophisticated regulatory and supervisory arrangements on a system-wide basis, since they can potentially function as a contagion channel in times of stress.

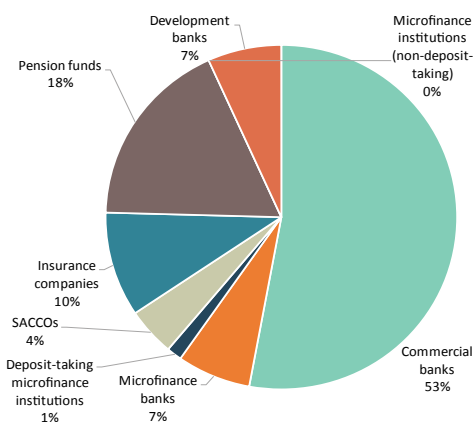
Apart from banks and other deposit-taking institutions, several insurance companies, pension funds and other non-bank financial institutions (NBFIs) are active in Rwanda. The growth in NBFIs assets between 2008 and 2014 can mainly be attributed to the growth of the Rwanda Social Security Board (RSSB), the public pension and insurance fund, and the Rwanda Development Bank (Table 3.2). The RSSB continues to be the single largest financial institution in Rwanda and the most important source of long-term capital in the market. Private insurance companies, instead, have grown more slowly and have therefore kept a constant share of financial sector assets over time. There have also been advancements in capital markets with six equities being traded on the Rwanda Stock Exchange and more bonds being issued.

Figure 3.3: Financial system structure (2008)



Sources: BNR and World Bank staff calculations.

Figure 3.4: Financial system structure (2014)



Sources: BNR and World Bank staff calculations.

Table 3.2: Structure of Rwanda's financial system

	2008				2014			
	Number	Assets (Rwf billion)	Assets (US\$ million)	Percent of total assets	Number	Assets (Rwf billion)	Assets (US\$ million)	Percent of total assets
Commercial banks	7	511.1	914.5	62.2	10	1,434.50	2,094.20	53
Private	6	388.9	695.9	47.4	10	1,434.50	2,094.20	53
Domestic	2	151.5	271.1	18.5	3	776.7	1,133.90	28.7
Foreign	4	237.4	424.8	28.9	7	657.8	960.3	24.3
State-owned	1	122.1	218.5	14.9	0	0	0	--
Other depository institutions	116	58.7	105	7.1	492	343.9	502	12.7
Microfinance banks	--	--	--	--	5	184.6	269.5	6.8
Deposit-taking microfinance institutions	12	14.2	25.4	1.7	13	37.3	54.5	1.4
SACCOs	104	44.5	79.6	5.4	480	122	178.1	4.5
Non-bank financial institutions	25	251.4	449.8	30.6	79	930.4	1,358.3	34.4
Insurance companies	8	80.1	143.3	9.8	14	264	385.4	9.8
Life insurance	--	--	--	--	4*	37.4	54.6	1.4
Non-life insurance	4	40.3	72.2	4.9	10**	226.6	330.8	8.4
Composite	4	39.7	71.1	4.8	0	0	0	--
Pension funds	1	129	230.9	15.7	41	480.7	701.8	17.8
Public	1	129	230.9	15.7	1	480.7	701.8	17.8
Private	--	--	--	--	40	n/a	n/a	n/a
Securities industry	7	n/a	n/a	n/a	7	n/a	n/a	n/a
Broker-dealers	7	n/a	n/a	n/a	7	n/a	n/a	n/a
Microfinance institutions (non-deposit-taking)	2	1.5	2.6	0.2	1	0.7	1	0
Development banks	1	40.5	72.6	4.9	1	183.5	267.9	6.8
Financial auxiliaries	6	0.3	0.5	0	10	1.5	2.2	0.1
Insurance brokers	6	0.3	0.5	0	10	1.5	2.2	0.1
Capital markets								
Equities***	0	--	--	--	6	--	--	--
Bonds	3	--	--	--	7	--	--	--
Collective Investment Schemes (CIS)	n/a	--	--	--	n/a	--	--	--
Total Financial System	148	821.2	1,469.3	100	581	2,708.8	3,954.5	100

Note: end-2008 exchange rate: US\$1 = Rwf 559, end-2014 exchange rate: US\$1 = Rwf 685.

*These emerged from the split-up of the composite insurers present in 2008, and are therefore not new companies.

**Includes two public insurers.

***Refers to the total number of equities listed on the RSE.

Sources: BNR and World Bank staff calculations.

The BNR is the integrated regulator for commercial banks, microfinance institutions, SACCOs, insurance companies and pension funds. Responsibility for the supervision of insurance funds has only been assigned to the BNR in 2009 and the supervision of pension funds will be a new task for the BNR given the recent passage of the Pension Bill. The capital market is regulated and supervised by the Capital Market Authority.

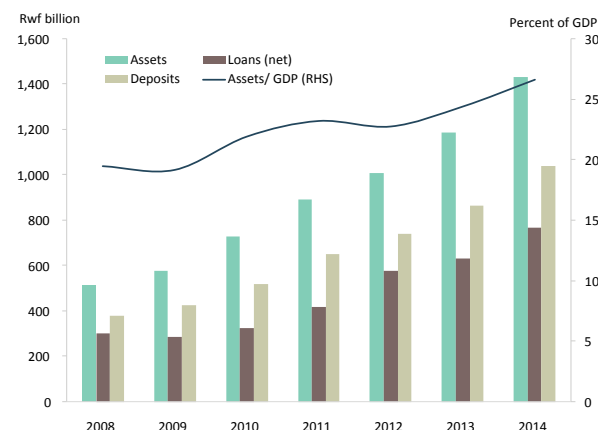
The Banking Sector

The banking sector assets have almost tripled in nominal terms since 2008. Banking sector assets, net loans, and deposits have grown over 20 percent per annum, with loans showing the strongest average growth at 26 percent. Given that banks rely, to a large extent on deposits to fund loan growth, a drop in deposits generally means slower loan growth in the following year unless banks can find other sources of funding. Banking assets as a share of GDP also increased remarkably, especially considering the high nominal GDP growth over the period (Figure 3.5). This illustrates the strong relationship between banking sector development and economic development more broadly and the contribution the financial sector can have to economic growth.

Banking sector expansion has been in part due to organic growth—existing banks have

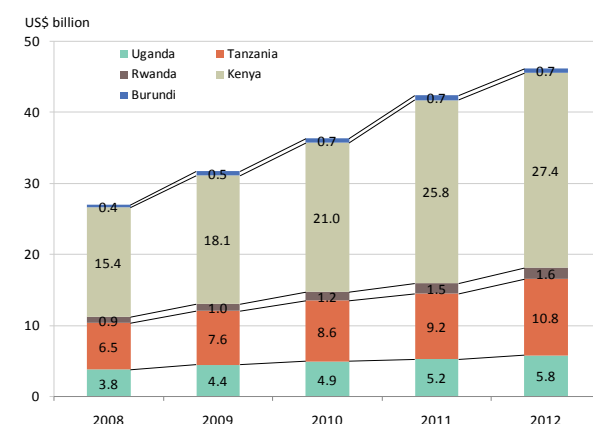
grown larger—but can also be associated with new entrants. Seven out of the 10 licensed commercial banks as of end 2014, were foreign-owned. Kenya Commercial Bank and Equity Bank entered the market in 2008 and 2011 respectively, reflecting the increasing attractiveness of the Rwandan market to foreign investors, particularly from within the EAC. AB Bank Rwanda, a bank focused on SME finance, entered in market in 2013. The BNR and the government play an important role in that regard by providing an accommodating legal and regulatory framework and business environment. The entry of these banks was a particularly welcome development due to the innovative agency banking model and SME finance technology, relying mainly on cash-flow-based lending, which are being rolled out across the country. Agency banking in that context refers to a bank contracting a retail outlet such as a shop or post office to facilitate client transactions, including payments, deposits, and withdrawals. These agents are not full-fledged banks and therefore offer a smaller range of services, but are less costly to establish, helping the bank to reach into more remote areas. They are common in many countries across the world, including Kenya, Brazil, and India. Mobile payments and mobile banking have also increased in importance in recent years. As of end 2014, there were about 1.8 million active mobile payment account holders making about 105 million transactions

Figure 3.5: Banking sector development



Sources: BNR, World Bank staff calculations.

Figure 3.6: EAC banking sector assets



Sources: World Bank staff calculation based on central bank data from the 2012 EAC FSAP.

to the tune of Rwf 692 million, an increase of over 100 percent in both cases. Mobile banking has seen equally strong growth but is still smaller in relative terms (660,000 accounts, 4.6 million transaction, Rwf 41 million).

Despite the impressive growth of the banking sector in recent years, it continues to be the second smallest in the EAC region. The Kenyan banking sector is larger than all other EAC banking sectors combined (as of end 2012) (Figure 3.6). This can largely be attributable to the different sizes of the EAC economies. In smaller countries such as Rwanda and Burundi it is more challenging for banks to reach economies of scale and expand beyond a certain size. Nevertheless, even in these smaller countries there is still scope for growth and for expanding the bank's scale by banking the currently underserved and unbanked and by ultimately venturing across borders as Kenyan banks have already demonstrated successfully in the EAC, or attracting clients from outside the country.

Rwanda's banking sector appears to be sound on a system-wide basis, based on typical stability indicators. The capital adequacy ratio (total capital to risk weighted assets (RWA)) of the banking sector stood at 22 percent in December 2014, above the regulatory minimum of 15 percent (Table 3.3). The quality of the bank's loan portfolios deteriorated in 2013, but improved again in 2014. The ratio of non-performing loans (NPLs)/gross loans was at 6.2 percent as of December 2014 compared to 7.2 percent in 2013. Loan loss provisions relative to NPLs stood at 56.6 percent. Over 95 percent of total assets were classified as earning assets in 2014, meaning that banks are strongly engaged in lending activities.

The banking sector is also strengthening from a liquidity perspective and becoming more efficient. Banks continue to improve after the peak of the 2012 aid shortfall and corresponding liquidity shock in 2013, which affected loan growth. The liquid assets⁴⁵ to total deposits ratio

Table 3.3: Bank stability and performance indicators (percent)

	2008	2009	2010	2011	2012	2013	2014
Measures of Capital Adequacy							
Core Capital / RWA	15.9	19	16.3	27.8	19.6	19.3	20.4
Total Qualifying Capital / RWA	15.9	19	21.7	28.7	20.9	20.6	22
NPLs – Provisions / Core Capital	39.1	35.6	18.3	10.4	14.2	16.7	13.4
Measures of Asset Quality							
NPLs / Gross Loans	14.3	14.8	6.5	7.4	6.3	7.2	6.2
Provisions / NPLs	47.7	42.1	50.2	54.4	54.4	55.7	56.6
Earning Assets / Total Asset	81.3	81.7	79.1	80.1	79.4	76.9	95.3
Measures of Earnings (Annualized)							
Return on Average Assets	2.3	0.7	3.5	2.9	2	1.3	2
Return on Average Equity	17.8	4.9	23.9	13.4	11.6	7.4	13.7
Net Interest Margin	2.6	2.3	8.4	7.4	9.5	9.7	7.8
Cost to Income	77.8	91	67.4	72.9	83	87.7	82.7
Measures of Liquidity							
Liquid Assets / Total Deposits	61.1	65.3	60.9	53.5	42.5	49.5	50.7
Loan to deposit ratio	87.8	73.9	77.8	72.2	91.1	87.9	85.5

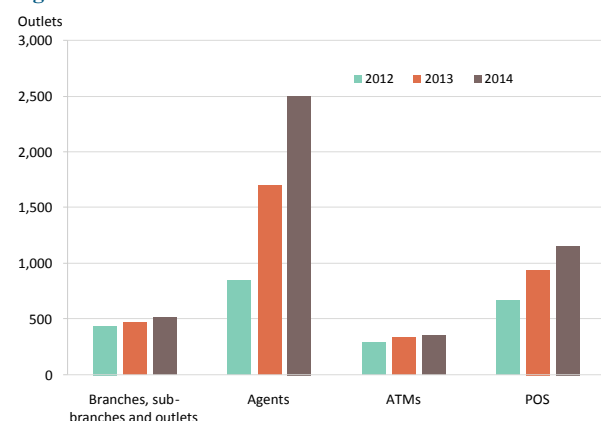
Sources: BNR and 2009 Rwanda FSAP (for 2008 and 2009 data).

⁴⁵ Liquid assets consist of cash, balances held with the BNR, balances due from financial institutions, and trading and other securities.

increased over the past years to 50.7 percent as of December 2014 (the minimum stipulated by regulations is 20 percent). However, banks continue to predominantly depend on retail deposits and 61.4 percent of deposits were demand deposits at end December 2014. The loan to deposit ratio was at 85.5 percent, which is high but lower than in previous years, signifying an expanding deposit base at banks in Rwanda. There were improvements in several banking sector efficiency indicators in 2014: costs to total income decreased, the return on average assets and equity increased, and the net interest margin went further down (Table 3.3). The fluctuation in some of these indicators can partly be attributed to the significant bank entry in Rwanda.

In addition to becoming more stable and efficient, the banking network continues to expand (Figure 3.7). The total number of commercial bank branches, sub-branches and outlets increased to 515 as of end 2014, and the number of bank agents increased to 2,499. The strong growth in bank agents is particularly impressive with an annual growth rate of over 70 percent since 2012, increasing the density of bank outlets considerably. The number of ATMs and POSs stood at 354 and 1,152 respectively as of end 2014. However, payment terminals are still concentrated in urban areas, predominantly in Kigali.

Figure 3.7: Commercial banks outlets



Sources: BNR, World Bank staff calculation

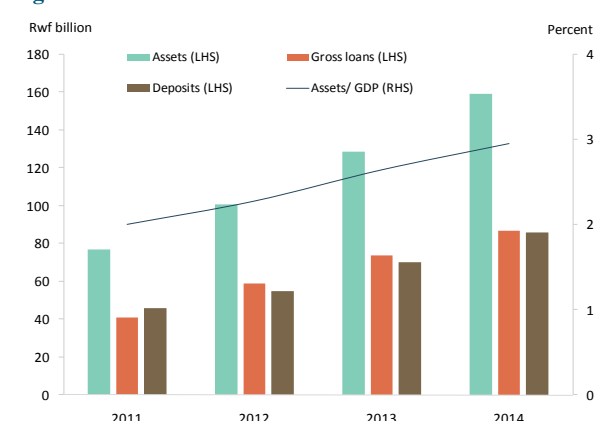
The Microfinance Sector

The microfinance sector constitutes a rising share in the financial sector, and plays an important outreach role in bringing formal financial services to Rwandans. The sector is comprised of microfinance banks, microfinance institutions, and a large number of SACCOs, including Umurenge SACCOs, which are present in all districts of Rwanda. The sector has grown in terms of assets, loans, and deposits in the few past years. MFIs and SACCOs alone now comprise seven percent of financial sector assets in Rwanda (Figure 3.8). On an aggregate level, the microfinance sector showed a capital adequacy ratio of 33 percent as of December 2014, well above the 15 percent regulatory threshold. The NPL ratio was at 7.0 percent for the whole sector, but NPL ratios vary considerably between institutions. While microfinance institutions and SACCOs offer a range of different credit and savings products, most have not yet ventured into other types of financial products such as micro insurance.

The Insurance Sector

The insurance sector is growing rapidly, albeit from a low base. As of end-2014, there were 12 licensed private insurance companies in Rwanda: 8 general insurers and 4 life insurance companies. There are two public insurers operating in the

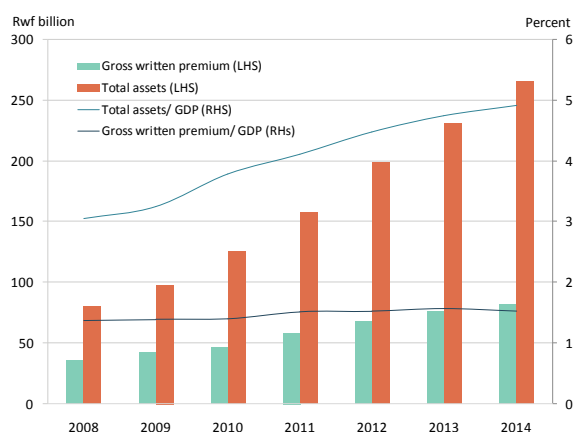
Figure 3.8: Growth in the microfinance sector



Sources: BNR, World Bank staff calculation

health insurance sector: RSSB Medical Scheme and Military Medical Insurance. The public insurance sector also includes the Special Guarantee Fund and the Mutuelles de Sante program. While the insurance sector is still small, the sector has shown notable growth in recent years in terms of gross written premium as well as in terms of total assets (Figure 3.9). Total assets under management amounted to about US\$385 million in 2014. Despite the growth in written premium and assets, insurance penetration, measured as the ratio of gross written premium to GDP, remains low. As of 2014, insurance penetration in Rwanda was 1.5 percent, low compared to the overall African insurance market (3.6 percent), as well as, the more mature market in neighboring Kenya (3.2 percent).

Figure 3.9: Insurance sector development



Sources: BNR, World Bank staff calculations.

The sector is in transition with new entrants to the market and significant investments in domestic companies by foreign financial holding companies. Until recently, the private insurance sector consisted primarily of a few locally owned and operated composite insurers that had been in operation for several decades. While initially established as domestic Rwandan companies, most of these insurers evolved to include at least some component of foreign ownership, largely as a result of the need for

capital injections. Subsequently, the regulatory requirement introduced in 2009 to separate short-term and long-term insurance business resulted in the re-organization of these companies. With separate licenses issued to the newly established life insurance companies, the number of insurers almost doubled by 2012. In 2013, the industry expanded yet again, with the introduction of three new general insurance licenses. Two of these companies are subsidiaries of large Kenyan financial groups with extensive insurance businesses. In addition, controlling stakes in two of the insurance holding companies have been acquired by foreign financial groups with significant insurance interests in 2014. These acquisitions indicate that large regional players in the African insurance market see the Rwandan market as an opportunity for profitable growth and the expansion from neighboring countries has the potential to bring new products and technical expertise to the market.

However, the lack of innovation and new product development have limited the growth of the insurance market and contributed to problems with premium rate competition. Aggregate industry results demonstrate that profitability continues to be a challenge, and premium rate competition is strong, particularly for motor insurance. High management expenses indicate inefficient operations and point to the significant need to achieve sector growth to secure economies of scale. As the industry grows through new entrants and market innovation, insurance companies can expect more challenges in this area rather than less. Full compliance with recent regulatory changes, including those for minimum capital and minimum solvency margin requirements, is also still in process. While links between the insurance sector and other parts of the financial system are still limited, they present an opportunity for growth, especially through bancassurance⁴⁶ and micro insurance distributed through MFIs and SACCOs.

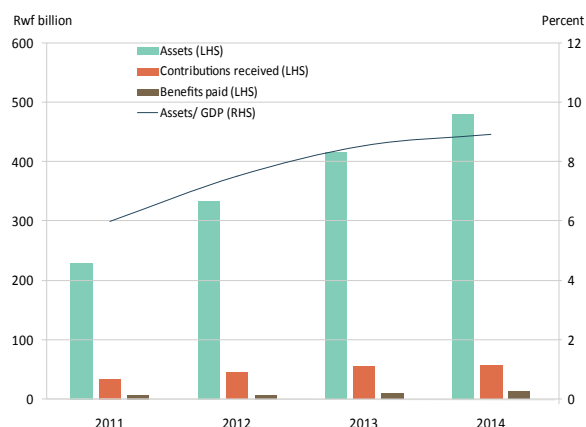
⁴⁶ Bancassurance refers to an arrangement in which a bank and an insurance company form a partnership so that the insurance company can sell its products to the bank's clients.

The Pension Sector

The pension sector has shown strong growth, and is the second-largest contributor to financial sector assets after commercial banks.

Total pension sector assets were at Rwf 480 billion in 2014, or 9 percent of GDP (Figure 3.10). The pension sector is dominated by the Rwanda Social Security Board (RSSB), the public pension fund. The RSSB provides defined pension benefits (along with healthcare and other protection) on a mandatory basis to all workers formally employed in the public and private sector. The scheme has around 350,000 contributors and pays pensions to around 30,000 retirees, which constitutes less than 10 percent of the labor force in the country or around 3 percent of the population. The RSSB is also the main source of deposits in commercial banks. As of 2014, 15.7 percent of all deposits in the banking system came from the RSSB. Social protection is also covered by an old age grant, paid to around 1 million vulnerable citizens, targeted on a geographical and household poverty basis (not specifically elderly targeted). According to the Vision 2020 Umurenge Program, the goal is to reach national coverage by 2018.

Figure 3.10: Growth in the pension sector (public and private)



Sources: BNR, World Bank staff calculations.

In addition to the public pension scheme, around 50 companies offer private occupational pensions to their workers. Some

of these are managed in-house as provident funds (e.g. by some financial firms, brewing company, for staff of international corporations, organizations and embassies etc.). Others are managed externally by insurance companies acting as pension fund administrators, operating the funds either on a stand-alone basis or part of a pooled umbrella fund. Membership of these funds is currently very small (around 6,000 people). In addition, the three main life-insurance companies have sold retirement products to around 100,000 individuals. These are either deferred annuities, or pension endowments (combining a guaranteed return saving element with a life insurance product).

The pension sector is still largely unregulated.

Aside from the Decree Law 22/8/1974 on the Organization of Social Security in Rwanda governing the RSSB, private pensions in Rwanda have been unregulated.⁴⁷ The Law Governing the Organization of Pension Schemes has just been passed by parliament and covers the operation of public and private pension schemes in the country. The BNR, which will be the supervisor of the pension system, has also prepared a Draft Regulation on Minimum Operating Standards and Supervision of (voluntary and mandatory) Pension Schemes. These will be put into effect once the Pension Law has passed.

The vast majority of pension assets in Rwanda are managed (in-house) by the RSSB, with a well-articulated investment strategy. The fund currently has approximately US\$400 million in assets under management (covering all schemes). This constitutes around 8 percent of GDP and makes the fund one of the largest pools of domestic and long-term capital in the country. The scheme has been estimated to be financially secure until the 2040s.⁴⁸ The investment strategy is intended to cover a three year period, but is designed to be reviewed annually.⁴⁹ It is set by the RSSB Board and follows the ‘prudent investor’ rule (Table 3.4). Actuarial reports are meant to be carried

⁴⁷ The taxation of mandatory and voluntary pension funds is covered in the Law No. 16/2005 of 18/08/2005 on Direct Taxes on Income.

⁴⁸ ILO Actuarial Valuation carried out in 2013.

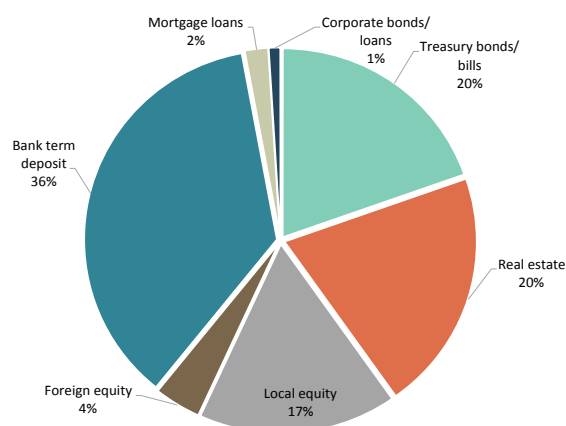
⁴⁹ The last published strategy (available on the RSSB website) covers the 2010-2012 period. The strategy is currently under review.

Table 3.4: RSSB target portfolio

Investment class	Percentage of market value of portfolio		
	Strategic policy weight	Tactical policy weights	
		Minimum weight	Maximum weight
Fixed income			
Government securities	20	10	50
Fixed deposits	25	10	50
Corporate bonds / loans	2	0	10
Mortgage loans	3	0	5
Total fixed income	50		
Foreign / offshore Investments (Fixed income and equity)	10	2	15
Non fixed-income			
Real Estate	25	10	40
Equity (Public and private)	15	10	25
Total non-fixed income	40		
Total portfolio	100		

Source: RSSB website.

out tri-annually. The risk management policy is also well-designed. The Investment Committee designs the target portfolio. In practice however, the funds are invested mainly in government bonds, bank deposits and real estate (Figure 3.11). The equity portfolio (particularly international holdings) is not well diversified.

Figure 3.11: RSSB investment portfolio (2013)

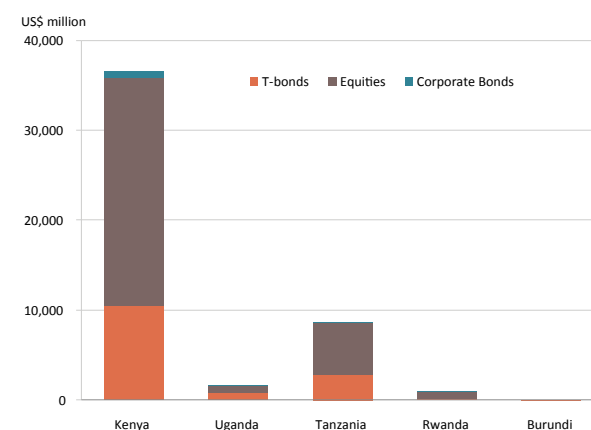
Note: Total assets held by RSSB in respect of the pension, medical, and occupational hazard schemes were Rwf 403.96 billion as of 31st December 2013.

Sources: RSSB, World Bank staff calculations.

The capital market

Rwanda's capital market has become more developed over the past five years, but continues to be the second smallest within the EAC in

terms of absolute market capitalization. The Rwandan Stock Exchange (RSE) has six equity listings (two domestic and four cross-listings from within the EAC). Three of the listings are commercial banks (one domestic, Bank of Kigali, and two cross-listings from Kenya, KCB and Equity Bank). The other domestic listing is Bralirwa, the local brewing company. Seven bonds are traded on the stock exchange (5 government and two corporate bonds). In 2014, the market capitalization of Rwanda's debt and equity market was Rwf 1,332 billion (US\$2.0 billion) or 24.1 percent of GDP, as of December 2014 (Table 3.5). This compares to an aggregate

Figure 3.12: Capital market size in the EAC

Notes: Equity market capitalization only includes domestic companies to avoid double counting of regional cross-listed stocks. Data as of end 2014.

Sources: Stock Exchanges, Central Banks.

Table 3.5: Size of EAC capital markets

	Kenya	Uganda	Tanzania	Rwanda	Burundi	EAC Total
Listed companies	64	16	21	6	0	107
Domestic	63	8	14	2	0	87
Cross listed	1	8	7	4	0	20
Corporate Bonds	14	5	4	2	0	25
Market capitalization, US\$ millions						
Equities	25,393	6,218	12,800	1,931	0	46,342
Domestic firms	25,393	815	5,751	859	-	32,818
Cross listed	-	5,403	7,049	1,072	-	13,524
Bonds	11,314	928	2,914	92	10	15,248
Government	10,541	879	2,889	69	10	14,378
Corporate	773	49	25	23	0	870
Market capitalization, % of GDP						
Equities	41.8	22.5	26.7	24.1	0	31.6
Domestic firms	41.8	3	12	10.7	-	22.3
Cross listed	-	19.6	14.7	13.4	-	9.2
Bonds	18.6	3.4	6.1	1.1	0.4	10.4
Government	17.3	3.2	6	0.9	0.4	9.8
Corporate	1.3	0.2	0.1	0.3	0	0.6

Note: Data as of end December 2014. Burundi numbers are for 2012.

Sources: Stock Exchanges, Central Banks.

market capitalization of US\$61.6 billion of all EAC debt and equity markets, with Kenya accounting for about 60 percent of combined capitalization (Table 3.5 and Figure 3.12). In contrast, Nigeria's debt and equity markets are more than 3 times the size, and South Africa's is more than 40 times as large as all EAC markets combined. Relative to GDP, Rwanda's market capitalization is more comparable to Uganda and Tanzania, especially in terms of the equities market, however the absolute value of market capitalization is important for determining the attractiveness of a market internationally.

The Government debt market is growing and maturities are lengthening, but there is still a long way to go. Outstanding government securities stood at US\$295 million or 1.4 percent of GDP by mid-2014. This compares to US\$21.7 billion for the whole EAC, US\$14.2 billion or 22.6 percent of GDP in Kenya, US\$45.5 billion in Nigeria and US\$138.8 billion in South Africa. Secondary market trading outside of Kenya is very low. The Rwandan government has started to

regularly issue bonds to deepen the capital market and lengthen the yield curve with the longest maturity today being 7 years. The government also publishes an issuance calendar to provide predictability to the market. Rwanda successfully launched a Eurobond (US\$400 million) in 2013 and the IFC issued a Rwf 15 billion (US\$ 22 million) local currency bond on the RSE in 2014. In comparison, the non-government debt market, as well as, the equity market are nascent (Figure 3.12). I&M bank issues the only other corporate bond since 2007. The maturity of the bond was 10 years for a total of Rwf 1 billion.

IFC's issuance of a local currency bond in Rwanda is supporting capital market development and the availability of long-term local-currency finance for local businesses. The five-year bond, dubbed "Umuganda," marked the first placement by a nonresident issuer in Rwanda's domestic capital markets. It was also IFC's first issuance in East Africa under the IFC Pan-African Domestic Medium Term Note Programme, which was launched in May 2012 to

support capital market development in the region. By issuing a five-year bond, the IFC helped in lengthening the yield curve which at that time only extended to three years (see Box 3.1 on the importance of the yield curve). The Umuganda bond was designed to appeal to a broad range

of domestic and international investors looking to diversify their portfolios. The order book was 2.19 times oversubscribed. Orders were received from Rwandan pension funds, international and domestic asset managers, insurance companies, and banks.

Box 3.1 Why are Government debt markets and yield curves important?

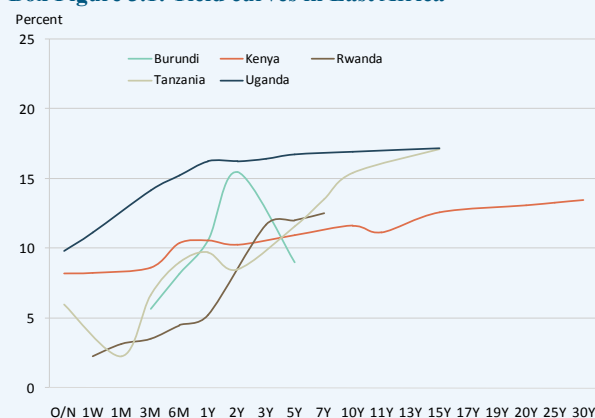
Government debt markets have a special role to play in the development of capital markets. In particular, they provide:

- A comparatively risk-free asset that allows fund managers and other investors, including pension funds and insurance companies, to build asset portfolios that are efficient in meeting a chosen risk/return profile; and which, as collateral, supports the development of parallel markets.
- A benchmark for pricing corporate bonds and other assets, including long-term loans as well as insurance liabilities under IFRS; this benchmark is usually represented by the government bond yield curve.

Developing government debt markets is a dynamic process. It requires simultaneous focus on the demand as well as the supply of government securities. On the demand side, i.e. the investors, it is important that there is a certain variety of investors and that requirements posed to investors are not overly burdensome. On the supply side, the issuance frequency, volume, and practices are determinants of the efficiency of the process.

The regular government debt issuance in Rwanda has supported a lengthening of the yield curve from 3 years in 2013 to 7 years in 2014. As a means of comparison, Kenya's yield curve extends to 30 years and both Tanzania's and Uganda's extend to 10 years.

Box Figure 3.1: Yield curves in East Africa

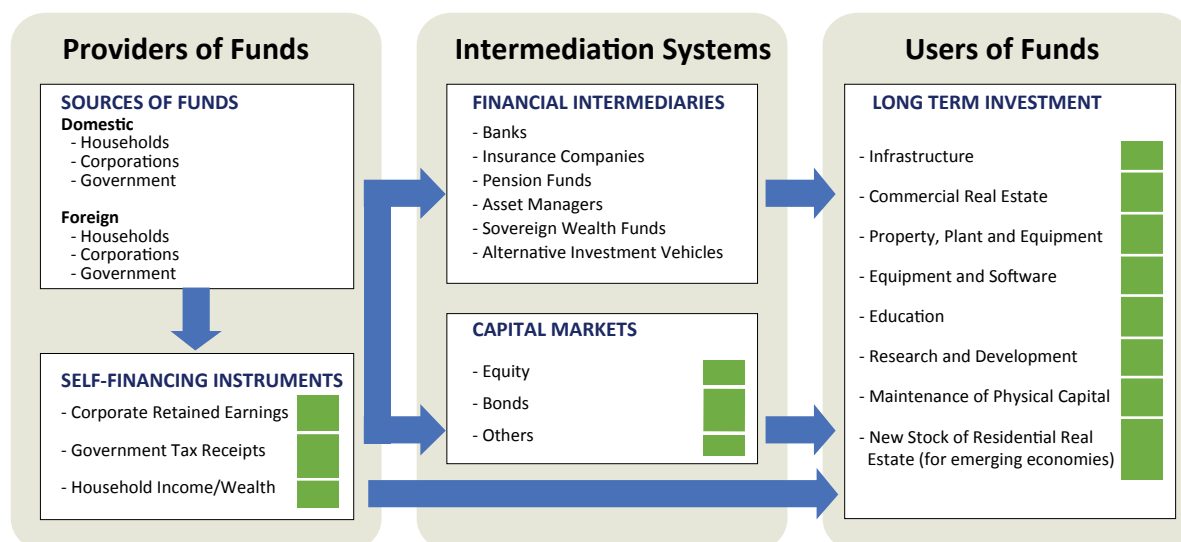


Source: EAC Central Banks; data as of March 2015 or latest available

3.4. Opportunities and Challenges for the Financial Sector to Enable a Successful Transition from ODA

When thinking about the financial sector as an enabler for moving away from ODA to other financing sources, several questions emerge. First, what are financing sources that can be tapped into more effectively domestically? Second, are the resources available sufficient to bridge the ODA gap if they are efficiently allocated? Third, does the maturity of available domestic financing match the needs? If the answer to the previous two questions is no, how can the resources needed be grown, and in the meantime, what are alternative sources of financing the country can tap into abroad?

Only long-term finance can effectively substitute development assistance. The G20 defines long-term as maturities of at least five years, or sources of financing with no specific maturities, but relatively stable over time. The availability of long-term finance depends, among others, on the depth of financial and capital markets, as well as, the legal and regulatory framework. Financial institutions need to have long-term horizons and a spectrum of financial instruments at their disposal, including long-term loans from banks, equity, and bonds—all of which ensure that there is no mismatch of

Figure 3.13: Framework for understanding the provision of financing for long-term investment

Source: Adapted from McKinsey Global Institute.

maturities between the sources of funding and investments (see Figure 3.14 for a framework for understanding long-term financing). Allowing regional and international flows of funds is another important component of the availability of long-term finance. In the absence of well-developed capital markets, long-term investments are, by necessity, financed by a limited set of instruments, including those with short maturities or volatile financing sources, which in turn may lead to financial instability. If there is no capacity to undertake long-term investments at all, capital-intensive investments in the country are hindered.

The Banking sector alone will not be able to fill the ODA gap

Commercial banks are still the most important provider of financing; however, their investments tend to be constrained by the maturity of their liabilities, which consist mainly of local short-term deposits. Given that banks in Rwanda are primarily funding themselves through demand deposits—which can be withdrawn on a daily basis—their liabilities are short-term in nature. This implies that once banks invest in long-term assets, they are creating a mismatch between their assets and liabilities, creating

larger risk. While such maturity transformation is one of the main functions of banks in an economy, they can only do this to a certain extent without risking their own stability. The BNR is also interested in banks keeping sufficient liquid assets that can be converted into cash quickly for that same stability reason. Therefore, bank's ability to invest in longer-term assets is limited. In addition, the long-term assets they invest in are typically government securities because they create a relatively secure stream of income at an attractive yield. Investments in infrastructure projects of significant size and long maturity are still rare, and in the few cases they tended to be syndicated loans.

Another constraint for the banking sector is the size of the economy and the challenge to reach economies of scale. Given the relatively small size of Rwanda's economy, it is challenging for any one bank to reach the economies of scale and grow to a size where larger deals are possible. Economies of scale refers to the idea that banks become more efficient when they increase in size, mainly because the required fixed capital for a bank to operate is spread over a wider operation. This is another reason why banks have to join forces,

for instance through syndicated loans, if they want to invest in a project of a size that is beyond their own means. Extending banks' reach across Rwanda's borders and including the currently unbanked into the banking system can facilitate the growth needed to reach economies of scale. Kenyan banks have demonstrated successfully that moving across borders is possible in the region, but they also had the advantage of having a larger economy as their home base. Including the unbanked and leveraging the savings present in the Rwandan economy, both from households and small firms, is a natural channel for increasing funding options, even though those would also be largely short-term in nature.

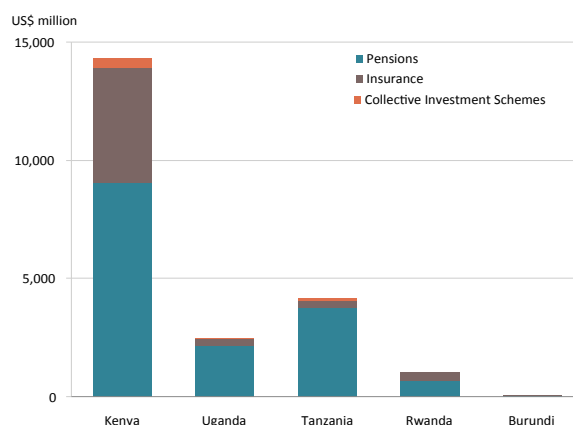
Institutional Investors are Crucial

The most important source of long-term financing in Rwanda is the RSSB, followed by private pension and insurance funds, and to a lesser extent collective investment schemes. These so-called institutional investors are important because they have access to funding that can be locked in for a longer time period; for example, pension funds have access to funds that do not need to be immediately liquid, unlike short-term consumer deposits in banks. These can then be lent out or invested in projects that require larger investments over a longer period of time. Revenues from these investments revert back to institutional investors over a longer time horizon which matches with their payout schedules. Institutional investors may also place long-term deposits in banks which can then extend long-term finance through the banking channel.

The investor base in Rwanda and the EAC as a whole remains narrow despite significant growth in recent years. In 2014, the institutional investor base in the EAC was estimated at US\$22 billion, but was dominated by Kenya, which accounted for around 65 percent of all institutional assets under management (Figure 3.14). Pension funds constitute the largest percentage of institutional investors (71 percent across the EAC), while the insurance and mutual

funds industries are only weakly developed. Major pension reforms implemented in Kenya in 2004 helped to professionalize the market and encourage the growth of a local fund management industry, which is lacking in other EAC countries, including Rwanda.

Figure 3.14: Institutional investor base in East Africa



Notes: Data as of 2014 with the following exceptions: Uganda – Insurance: 2013, Tanzania – Insurance and Pensions: 2013; Burundi: 2012. Source: EAC regulatory authorities.

Institutional investors in Rwanda will be an important source to tap into for the move away from ODA. In 2013, Rwanda received net ODA of US\$1,081 million. In comparison, the institutional investor base in Rwanda was US\$1,045 million in 2014. Although some of the funds are already invested in long-term projects an efficient allocation of the funds available could already make a contribution to the investment needs of the country. For instance, 34 percent of the RSSB's assets are currently parked in commercial banks term deposits (Figure 3.11), while the official target is only 25 percent. These funds could therefore be put to more productive use, even when recognizing that they are in local currency while ODA provides foreign exchange.

Supporting the RSSB in strengthening its investment policy and fund management would be a necessary precursor to establishing a larger institutional investor base in Rwanda. Rwanda is still at an early stage in the process of reforming the predominantly public pension sector with the establishment of a new

regulatory regime and other measures aimed at strengthening the management and governance of the institution. The Pension Bill has only recently been approved, and regulatory guidelines are therefore also still pending. Further strengthening will also be required in terms of the RSSB's fund management capacity. Historically, the bulk of its investments were in real estate, which is not liquid, and a considerable amount of funds are held at commercial banks earning relatively low interest. The investments in equity have grown over time, but need to be more diversified. Given that diversification is difficult to achieve within Rwanda, investment elsewhere in the region will be needed. At the same time, the investments need to be commensurate with the risk profile of the RSSB. Since the RSSB is responsible for managing all public pension funds in Rwanda, it has to ensure that pension funds are kept safe while at the same time earning a sufficient return.

A modernized insurance sector will be able to play its part in strengthening the investor base. The split-up of the composite insurers and the establishment of distinct separate life insurers is increasing the demand for longer-terms investments, a trend that will only grow over time. It is also expected that longer-term savings products will become more widely available as new players that entered the market offer different product menus. The to-be-introduced risk-based approach to regulation and supervision will also encourage insurers to diversify their investments and invest in assets with better credit ratings and liquidity. This could in turn increase the demand for government and corporate bonds, as well as encourage banks to seek credit ratings, which would help further develop the market.

A Compelling Case for Regional Integration

Tapping into regional sources of funding will be a necessary complement to allocating domestic long-term funds more efficiently. As indicated in Figure 15 above, the institutional investor base in the EAC is significantly larger than available

funds in Rwanda alone. Tapping into these pools of funds can therefore be an important source of funding going forward. As a case in point, when Bralirwa listed on the RSE, one third of the investors were domestic, one third was regional, and one third was foreign from outside the region, demonstrating that Rwanda has the ability to attract capital inflows from the region. However, these regional investors are themselves constrained by investment policies applicable in their home countries as well as available investment opportunities. Nevertheless, pension fund investment regulations in several EAC countries recognize regional investments in the same category as domestic assets, increasing the pool of potential institutional investor capital.⁵⁰

Regional integration is a compelling solution to building a deeper and more efficient capital market that can meet the region's long-term financing needs. All countries in the EAC, not only Rwanda, face deep-rooted structural issues related to the small size of their economies and weak global competitiveness and relatively shallow domestic investor bases. Even the Kenyan market is small in an international comparison. These factors severely limit the overall size and potential growth of capital markets in each of the EAC member countries. With a limited number of issuers, it is challenging to attract and broaden the investor base, whose development and professionalization is linked to the availability of investment products. Expanding into an integrated regional market to achieve a larger scale can help overcome some of these challenges and improve the ability of regional firms to access capital markets for their long-term financing needs; at the same time it gives non-bank financial institutions and others access to a wider range of securities, allowing them to better manage their portfolios in line with their chosen risk/return frontier. The East African Payment System (EAPS) which was launched in 2014 will help facilitate such cross-border transactions. International examples show that the smaller countries tend to benefit

⁵⁰ The EAC is working on harmonizing regulations across the EAC which would harmonize such regional investment for all pension funds in the community.

more from regional integration by leveraging the position of the largest market in the region to create advantages of greater scale, efficiency and visibility with institutional investors (see Box 3.2).

Regional integration in this sense does not require a single integrated market with an identical regulatory framework applying in all countries. It does not require a single market infrastructure (a broad term which includes trading venues, practices and conventions, settlement processes and the central securities depositories, CSDs). In order to reduce barriers and costs and enable trading, which would attract a wider range of investors, it will require:

- A removal of barriers between markets, so that investors wherever located in the region can hold bonds issued by any of the member governments, without discriminatory penalty;
- A harmonized and transparent approach to policies and practices, i.e. of both the issuer and market participants;
- Harmonized or compatible legislative and regulatory frameworks;
- Investment regulations and processes that enable institutional investors, such as pension funds and insurance companies, to invest freely within the region;
- Infrastructure that allows investors to trade, settle, and manage their securities transactions and portfolios, wherever located, in ways that are flexible, safe, and inexpensive;
- Sound macroeconomic policy management across the region.

As part of the regionalization effort, Rwanda and Kenya have recently connected their stock markets electronically. This is expected to increase investments between the two countries. Automation of the EAC members' stock markets forms a key pillar of capital markets integration, and it is expected that all EAC stock exchanges will ultimately be automated and connected. Given that Nairobi's and Kigali's

Central Securities Depository Systems are now connected, it is possible to buy shares in Kenya and sell them in Rwanda and vice versa, which can increase turnover on either of the exchanges.

Beyond the Region

Beyond further leveraging the regional market, Rwanda has already successfully tapped international markets. With the Eurobond issued in 2013, the country has successfully attracted international funds at an attractive yield. Tapping international markets has been, in comparison, easier for newly issuing countries because of the search for better yields for international investors, in times of record low interest rates and quantitative easing in major developed markets—most notably the US. While predicting interest rates for the future is a difficult endeavor, expectations are that they will be moving upwards. This will make tapping international markets more expensive for countries like Rwanda and the benefits will have to be weighed more carefully against the costs of borrowing, coupled with the exchange rate risk that comes with borrowing in foreign currency. Large investment projects that will have part or all of their revenue streams in foreign currency will be best suited for utilizing such funding in the future.

The success of IFC's Umuganda bond demonstrated that the Rwandan capital market can facilitate long-term, local currency financing for key economic sectors. The bond helped attract attention to the Rwandan market and may entice other potential issuers to follow suit. The IFC issue considerably increased the value of non-government bonds outstanding in Rwanda and contributed to building the capacity of regulators, market intermediaries and investors in Rwanda. The regulatory framework for non-government bond issuance is considered conducive but more work is needed in developing a pipeline of credible issuers (including sub-national issuers) and building a credit culture and capacity amongst investors.



Over and above, it will be important for Rwanda to further strengthen and modernize its financial sector and continue to ensure macroeconomic stability. This holds for all parts of the financial sector, from banking to pensions, insurance, and the capital market. Investors are attracted to markets that are sound, stable, and efficient, including a stable macroeconomic framework. A sound debt management policy is similarly important. The government and BNR have undertaken major reforms to the legal and regulatory framework for the financial

sector, including strengthening the system for being prepared should a financial crisis ever hit the country. Completing these reforms and eliminating all potential barriers to efficient investment allocations will help Rwanda be an attractive destination for local, regional, and international investments in the future. Underpinning all these developments is the need for financial education and awareness to build a culture for long-term savings and investment in Rwanda.

Box 3.2 Capital market integration in Latin America. Learning from the MILA initiative

In 2011, the exchanges of Chile, Colombia and Peru, together with their respective central securities depositories launched a consolidated regional exchange known as MILA, Mercado Integrado Latinoamericano or Latin American Integrated Market. The first stage of the MILA integration initiative established a unified trading platform which permits brokers and investors located in each of these three countries to invest directly in equities listed on any of the three exchanges. In December 2014, the Mexican stock exchange and securities depository joined MILA. The establishment of MILA created an exchange which is now the largest in the region in terms of the number of listed companies, with more than 750 companies quoted and a market capitalization of US\$ 988 billion (as of December 2014).

By pooling liquidity and deepening capital markets, each of the MILA countries were better positioned to compete for foreign investment flows with the larger Latin American markets such as Brazil or Mexico before it joined, and by creating greater scale, lower transactions costs and improve cross-border investment efficiencies. The combined market also allows investors across the region to diversify their portfolio holdings. For example, most investors' holdings in Peru are concentrated in the mining sector which dominates the local exchange. A more diversified MILA portfolio might be expanded to encompass exposure to Chilean retailing firms or Colombian construction companies. Other benefits include the ability to attract more major institutional investors based on the increased market depth and new trading opportunities. The primary market activity is also expected to grow through more IPOs by medium-size firms that had historically shied away from accessing the equity market due to the limited number of potential buyers.

An interesting feature of the MILA integration is the fact that while all three exchanges are fairly well-developed by international standards, there is still a relatively wide gap between the Chilean Stock Exchange (Market Cap: US\$233 billion), the Colombian exchange (Market Cap: US\$153 billion) and the Peruvian exchange (Market Cap: US\$121 billion). The Mexican exchange is now the dominating exchange with a market cap of US\$ 481 billion. As is typical of other regional integration projects, it is usually the smaller countries, in this case Peru, that stands to benefit the most from the MILA initiative. As Alonso Segura, Head of Strategy at Banco de Credito del Peru, explained: "It is like free-trade agreements, the smaller party often accrues the greater benefit. The BVL may mean relatively little to Colombia and Chile, but this means a lot to us." Similarly, as Hugo Perea, Chief Economist of BBVA noted, "Before, a foreign investor would worry about being able to get out of their position if they bought shares in the BVL. But the MILA opens the market up to a greater number of buyers and thus may help to allay some of these concerns."

Source: Exchange data; plus "A regional platform: Three countries come together to create the Integrated Latin American Market", available at www.oxfordbusinessgroup.com/news



ANNEX NOTES

Annex Note 1: Rwanda's Foreign Direct Investment - Current Status and International Comparison

Pprivate sector development is a key development agenda for the EDPRS 2, which aims to transform the economy from one led by the public-sector and financed by aid, into a private-sector led self-sustained economy. Attracting FDI is a core part of private sector development. EDPRS 2 has identified FDI as part of new and innovative sources of financing. The government aims to increase the FDI as a share for GDP from 2.3 percent (US\$160 million) to 3.5 percent (US\$313 million) in 2015/16 and 4.5 percent (US\$473 million) in 2017/18.

Given the importance of FDI in Rwanda, in addition to FDI data in the balance of payments (BoP) the Government publishes a report on foreign private capital in Rwanda on an annual basis. Also, UNCTAD regularly publishes FDI data across countries. By using the above mentioned data and report, this note aims to address the following questions.

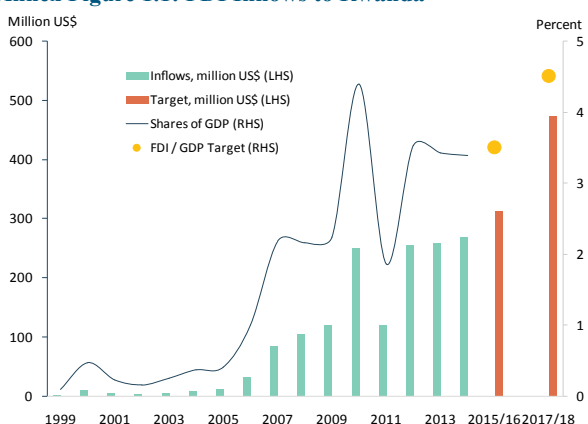
- What is the status of Rwanda's FDI?
- How much does FDI contribute to economic activities, net exports and job creation in Rwanda?

- Is Rwanda's FDI high or low in EAC countries and among land-locked countries?

Status of Rwanda's FDI?

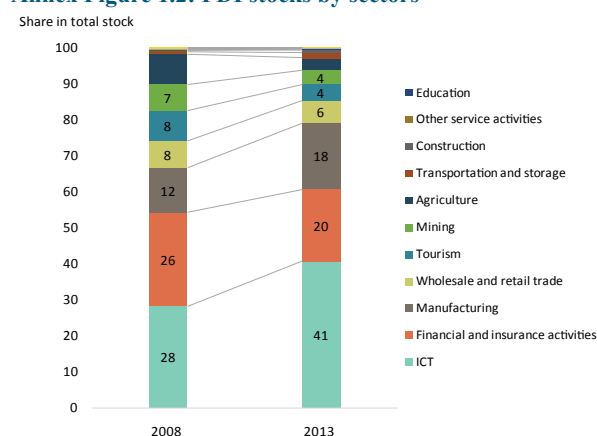
BOP data using updated information from the report on foreign private capital, shows that FDI inflows significantly increased in 2010 following the stagnation in 2007-2009. In terms of a share of GDP, FDI inflows reached 4.5 percent in 2010 (Annex Figure 1.1). Thus, the EDPRS 2 target at 4.5 percent in 2017/18 fiscal year was met.⁵¹ However, the ratio fell to about 3.5 percent in 2011-13. Breaking down sector composition of FDI, as of 2013 ICT accounted for 41 percent of total FDI stocks (US\$838 million), followed by financial and insurance (20 percent), and manufacturing (18 percent). The comparison with 2008 shows that while the shares of ICT and manufacturing increased, those of other sectors fell (e.g., mining share fell from 7 percent to 4 percent) (Annex Figure 1.2). On ICT, there were significant FDI inflows in 2010 and 2012. Mining accounted for 38 percent of total FDI inflows in 2013, a stark increase compared with preceding years.

Annex Figure 1.1: FDI Inflows to Rwanda



Sources: BNR, World Bank staff calculations.

Annex Figure 1.2: FDI stocks by sectors



Sources: BNR, World Bank staff calculations.

⁵¹ When the EDPRS 2 was formulated, the Government data showed much lower FDI inflows than the current data. Thus, the FDI / GDP ratio was already achieved in 2010.

Contributions of FDI to economic activities, net exports and job creation

- **How much does FDI contribute to economic activities?** While the national account does not provide disaggregated data by investment types, the share of FDI companies in the declared turnover serves as a proxy for the relative importance of FDI companies in economic activities. According to the report, the total turnover of foreign private capital in 2013 was US\$1.6 billion, equivalent to 38 percent of the total turnover (US\$4.1 billion).
- **How much does FDI contribute to net exports?** One of the key motivations to attract FDI is to finance current account deficits with non-debt inflows.⁵² However, the report shows that the impact of FDI on financing the current account deficits is rather limited. This is because net exports of FDI companies are negative. Net exports of FDI companies reached –US\$146 million in 2012 and –US\$90 million in 2013. The negative net exports offset FDI inflows by themselves (US\$255 million in 2012 and US\$258 million in 2013). Among major sectors, wholesale and retail trade (–US\$68 million), manufacturing (–US\$58 million), electricity (–US\$38 million) and construction (–US\$21 million) experienced negative net exports, while mining (US\$95 million).
- **How much does FDI contribute to job creation?** The report shows that total employment by foreign private capital in 2013 was 34,114 in 2013, of which, 32,909 were local residents. The total number of formal employment measured tax data shows that there were 255,001 employed in December 2013. Thus, the share of foreign private capital in the total formal employment was 13 percent. Which sectors contributed to job creation effectively and efficiently? Agriculture employs 9,596 followed by finance (5,129) and mining (3,825). In terms of efficiency, measured by employment per US\$ million FDI stock, real estimate was most efficient at generated jobs, followed by administration, although their FDI stocks are small.

Annex Table 1.1: Employment by FDI sectors

	FDI Stock (US\$)	Employment	Employment / US\$ million
Administrative and support service activities	1,088,529	1,329	1,221
Agriculture	28,818,104	9,596	333
Financial and insurance activities	167,344,172	5,129	31
ICT	340,605,412	461	1
Manufacturing	154,492,260	3,191	21
Mining	33,414,148	3,825	114
Real estate activities	271,478	1,231	4,534
Tourism	37,521,793	778	21
Wholesale and retail trade	51,511,394	618	12
Others	22,586,564	7,956	-
TOTAL	837,653,855	34,114	41

Sources: BNR, World Bank staff calculations.

⁵² For example, Paragraph 47 of the EDPRS 2 refers to FDI as a means to finance the current account deficit.

International Comparison:

- **Among EAC countries:** An international comparison using UNCTAD database (Please note that Rwanda's data is revised using the latest BoP data) shows that Rwanda's FDI inflows as a share of GDP is about average among EAC countries. In 2013, FDI inflows in Tanzania and Uganda exceeded 5 percent of GDP, while those in Kenya and Burundi were less than 1 percent (Annex Figure 1.3).

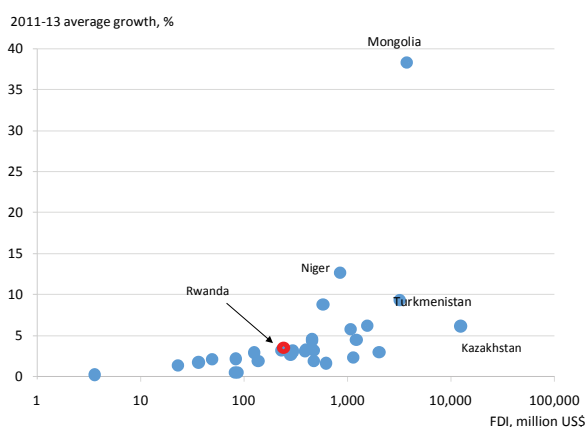
Annex Figure 1.3: FDI / GDP in EAC countries



Sources: BNR, UNCTAD data and World Bank staff calculations.

- **Among land-locked countries:** Being landlocked is identified as being a key bottleneck of private sector investment in Rwanda. Thus, it is worthwhile to compare Rwanda's FDI inflows with other land-locked countries. In a comparison of 31 landlocked countries, Rwanda ranks 11th in terms of FDI to GDP ratio in 2011-13, and ranks 21st in terms of FDI inflows in absolute values (Annex Figure 1.4). Mongolia attracted FDI inflows equivalent to about 40 percent of GDP in 2011-13 mainly from the mining sector.

Annex Figure 1.4: FDI / GDP in 31 land-locked countries



Sources: BNR, UNCTAD data and World Bank calculations.

Annex Note 2: 2014 Tourism Sector Performance in Rwanda

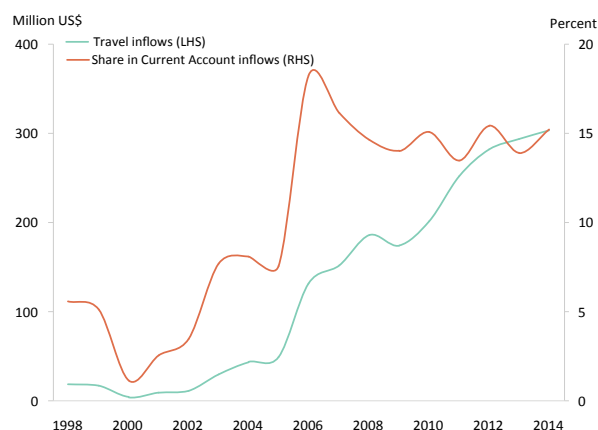
The tourism sector is the single largest foreign exchange earner in Rwanda. In 2014, foreign exchange inflows from the sector reached US\$304 equivalent to 15.4 percent of the total inflows in the current account (Annex Figure 2.1). Rwanda Development Board (RDB) collects information on the number and nationality of tourists, purpose of visiting Rwanda, revenues from tourism—by purpose and destinations in Rwanda—on a monthly basis. This notes summarizes key findings of the 2014 Tourism Report in the following issues:

- Where do tourists come from?
- Why do tourists come to Rwanda?
- How much revenue do tourists generate in Rwanda?

Where do tourists come from?

In 2014, the total number of tourists reached 1.29 million, higher by 8.7 percent compared to 1.12 million in 2013. Nationals from African countries accounted for 89 percent followed by Europe (5 percent) and America (3 percent). On a country basis, DRC accounted for 44 percent followed by Uganda (23 percent), Burundi (8 percent), Tanzania (7 percent) and Kenya (5 percent). Thus, EAC countries have the dominant share of 43 percent (Annex Figure 2.2).

Annex Figure 2.1: Tourism sector in BOP



Sources: BNR and World Bank staff calculations.

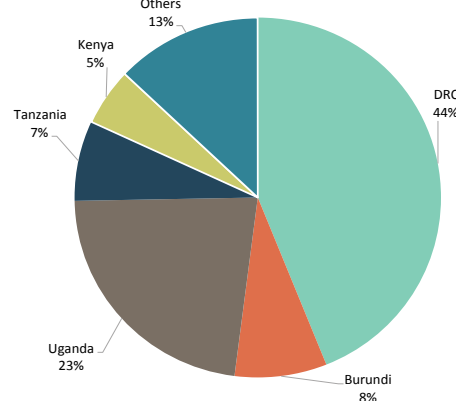
Why do tourists come to Rwanda?

In the past 4 years between 2010 and 2014, the total number of tourists increased from 604 thousand to 1.22 million with an annual growth rate at 19 percent. In 2014, the main purpose of visiting Rwanda was visiting families and relatives (33 percent) followed by business (32 percent) and transit / others (26 percent), with holiday or vacation accounting for 9 percent. Among the major purposes, transit and others increased by 85 percent on an annual basis. The government has placed an emphasis on MICE (meetings, incentives, conferences and events); tourists with a business purpose increased by 7 percent on an annual basis (Annex Figure 2.3).

How much revenue do tourists generate in Rwanda?

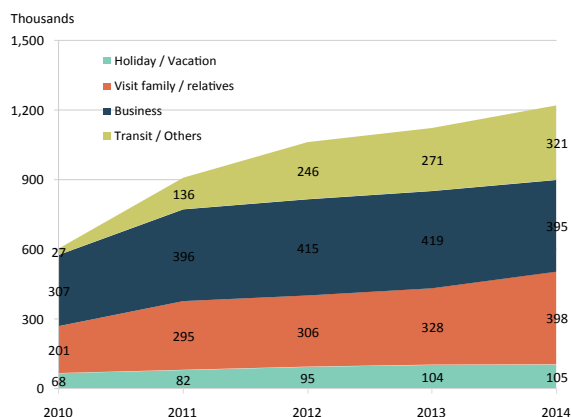
Total revenue from tourism increased from US\$200 million in 2010 to US\$304 million in 2014 with an annual average growth rate of 11 percent. While tourists for holiday and vacations accounted for only 9 percent of the total tourists, they generated 47 percent of the total revenue (Annex Figure 2.4). On the other hand, tourists visiting families and relatives generated 12 percent of the total revenues, despite being 33 percent of total tourists. Tourists for holiday and

Annex Figure 2.2: Tourists by Nationalities in 2014 (Share in the total tourists)



Sources: RDB and World Bank staff calculations.

Annex Figure 2.3: Tourists by purpose

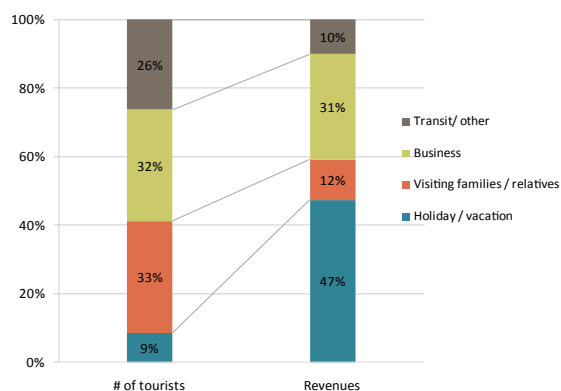


Sources: RDB and World Bank staff calculations.

vacation spent US\$1,374 per person, per visit, while those visiting families and relatives spent US\$95 per person, per visit.

The three main national parks in Rwanda (Volcanoes, Akagera and Nyungwe) attracted

Annex Figure 2.4: Share in the number of tourists and revenues by purpose



Sources: RDB and World Bank staff calculations.

68 thousand tourists and generated revenues of US\$17 million. While the number of tourists for Volcanos national park accounted for 41 percent of total national park tourists, it generated 94 percent of total park revenues.

Annex Note 3: How Fuel Pump Price is Determined in Rwanda

In Rwanda, fuel accounts for 2.5 percent of the Consumer Price Index (CPI) basket. Despite its small share, change in fuel prices is highly correlated with overall inflation rate; partly because fuel prices affect transportation costs, which account for 17.7 percent of the CPI basket (Annex Figure 3.1). Rwanda imports all its fuel, mainly through Mombasa and Dar es Salaam ports. Crude oil prices on the international market, measured by Brent, declined by 51.7 percent from the peak at US\$111.8 per barrel in June 2014 to US\$57.9 per barrel in February 2015. During the same period, fuel pump prices in Rwanda responded to global trends by declining by 16.3 percent—from Rwf 1,010 per liter in June 2014 to Rwf 845 in February 2015. However, the extent of the decline in domestic fuel pump prices does not really correspond to international oil prices (Annex Figure 2). In order to estimate impacts of oil prices on CPI, it is important to comprehend how domestic fuel pump prices are determined.

Using data from the Ministry of Trade and Commerce (MINICOM), this note attempts to answer two questions:

- How is fuel pump price determined in Rwanda?

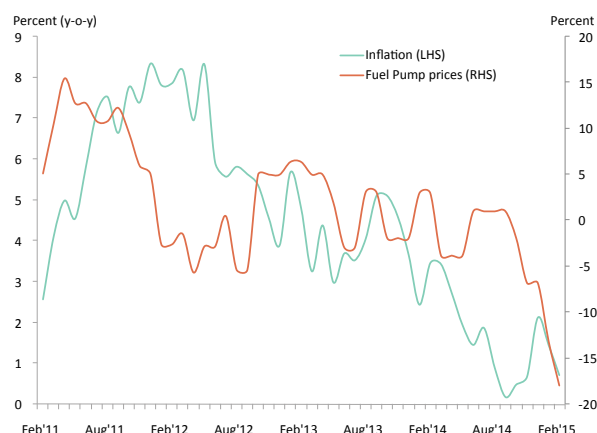
- How has Government responded to fluctuations of international oil price in the past?

How is fuel pump price determined in Rwanda?

Fuel pump prices are regulated in Rwanda. Every month, MINICOM convenes a meeting with representatives of the private sector, such as fuel traders, to review the fuel pump price.

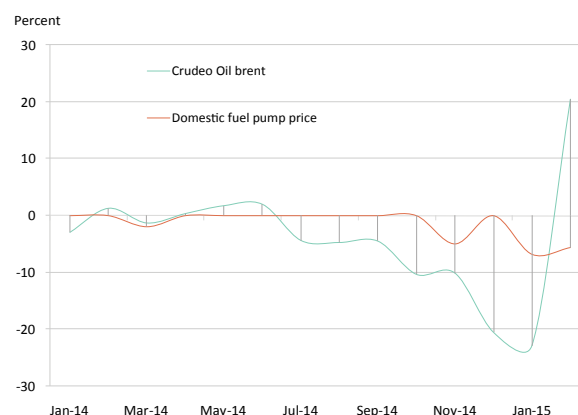
In reviewing the fuel pump price, MINICOM takes the following factors into account: (i) international oil prices, (ii) trader's margins (both distributors and retailers); and (iii) tax revenues from excise duties and administration fees. The formula used by MINICOM when computing fuel pump prices has both market related costs and administered costs. Market related costs are linked to fuel cost (as well as international oil prices) and insurance and freight costs to Kigali (CIF Kigali). Administered costs include excise duty (Rwf 183 per liter for gasoline and Rwf 150 for diesel, which are unchanged since 2012), the distributor's margin (set at Rwf 35 per liter in November 2014), retailer's margin (set at Rwf 25 per liter in November 2014), and Government accumulated margin (at Rwf 28 per liter).

Annex Figure 3.1: Inflation and fuel pump prices



Sources: MINICOM, NISR, World Bank staff calculations.

Annex Figure 3.2: Growth rate of domestic fuel and crude oil prices (month-on-month)



Sources: MINICOM and World Bank staff calculations.

As of March 2015, 43 percent of fuel pump prices are determined by Government (i.e., administrative costs) and 57 percent is determined by international oil prices and insurance, transport, and administrative fees to Kigali (Annex Figure 3.3).

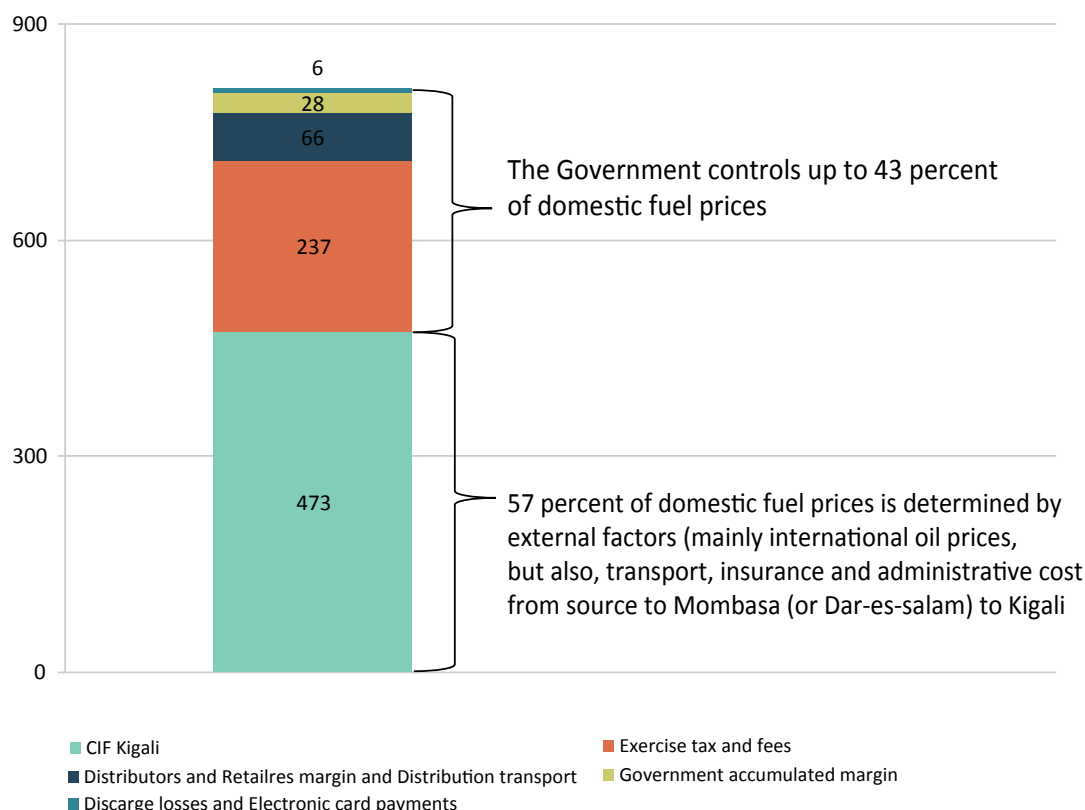
How has the Government responded to fluctuations of international oil price in the past?

Given this fuel pump price structure, the Government has the flexibility to (1) increase its revenue from excise duties and fees; (2) increase distributors and retailers profit margins; or (3) keep 1 and 2 constant and reduce the fuel pump price to benefit domestic fuel consumers.

Since 2012, excise duty on fuel has not been changed. In Rwanda, the rate of excise duty on fuel is determined by law; hence, it cannot be frequently changed every time fuel market conditions change. For example, it was last changed in fiscal year 2011/2012, following a substantial hike in global oil prices, when crude oil prices increased by 41.6 percent between June 2010 and June 2011 (from US\$74.7/bbl to US\$105.8/bbl), the Government reduced excise duties by Rwf 100 per liter in the following fiscal year. The Government sought to cushion the transmission of increasing global oil prices to domestic inflation. Since 2012, however, excise duty on fuel has remained the same. Nevertheless, changing excise duty on fuel remains an option for Government to control fuel prices and tax revenues.

Annex Figure 3.3: Structure of domestic fuel prices

Rwf/Liter, March 2015



Sources: MINICOM and World Bank staff calculations.

Annex Note 4: Does Producer Price Index lead Consumer Price Index in Rwanda?

On a monthly basis, the NISR publishes the Consumer Price Index (CPI)⁵³ and Producer Price Index (PPI).⁵⁴ CPI is used for policy purposes. Nonetheless, it would be useful for monetary policy if future CPI can be estimated by PPI. An economic theory suggests that PPI leads CPI, as changes in production costs affect prices of final goods. Does this economic theory work in Rwanda? Using monthly PPI and CPI data from NISR, this note attempts to examine whether PPI leads to CPI.

CPI and PPI seem to be highly contemporaneously correlated (Annex Table 4.1).⁵⁵ The highly contemporaneous correlation may reflect common items affecting both prices at the same time. Food is a major component of both CPI and PPI basket—it accounts for 28 and 16 percent of CPI and PPI basket. This means both CPI and PPI prices are significantly affected by change in food prices. On a lagged basis, there is the highest correlation if PPI leads CPI by 4–5 months. This result suggests that PPI leads CPI.

To estimate the impact of PPI on CPI, we employed a Vector Error Correction Model (VECM).⁵⁶ The model is used to estimate if there is a statistically significant short-term and long-run relationship between the two, using monthly data between 2012 and 2014. The results show that in the short-run, a one percent change in PPI

would lead to that in CPI in the same direction by 0.22 percent after three months (Annex Table 4.2). The impact is more sizeable in the long-run—one percent change in PPI would lead to a 0.77 percent change in CPI

Annex Table 4.1: Correlation between CPI and PPI

	PPI	PPI	PPI	PPI	PPI	PPI
	0	(-1)	(-2)	(-3)	(-4)	(-5)
CPI	0.64	0.67	0.68	0.69	0.73	0.73

Sources: BNR, World Bank staff calculations.

Note: The results are all statistically significant.

Annex Table 4-2: Summarized VECM estimates

Cointegrating Eq:	CointEq1
LCPI(-1)	1
LPPI(-1)	0.772 [8.367]
Error correction:	D(CPI)
CointEq1	-0.158 [1.744]
D(LCPI(-1))	0.102 [0.369]
D(LCPI(-2))	0.357 [1.277]
D(LCPI(-3))	0.396 [1.493]
D(LCPI(-4))	0.499 [1.908]
D(LPPI(-1))	0.130 [0.695]
D(LPPI(-2))	0.166[0.955]
D(LPPI(-3))	0.220 [1.300]
D(LPPI(-4))	0.147 [0.843]
C	0.009
Adjusted R-Squared	0.625
Granger causality P-Value	0.822

Figures in [] stand for T-statistics and they show level of significance.

Source: NISR, World Bank staff calculations.

⁵³ CPI covers prices of a typical basket of goods and services purchased by typical consumer. This metric measures the price change of a basket of goods and services from the perspective of the consumer.

⁵⁴ PPI covers prices of goods produced by domestic producers. It looks at prices changes from the perspective of the producer.

⁵⁵ Contemporaneous correlated means variables change in the same direction in the same period of time.

⁵⁶ Detailed specifications of the model are explained in annex 1.

ANNEX TABLES

Annex Table 1: Rwanda - Selected economic indicators

	2010	2011	2012	2013	2014
GDP Growth Rate (percent)	7.3	7.9	8.8	4.7	7.0
Agriculture	4.9	4.7	6.4	3.3	5.3
Industry	8.5	17.6	8.5	9.3	5.8
Services	9.2	8.0	11.6	5.3	8.9
Fiscal Framework (percent of GDP) 1/					
Revenues and Grants	25.4	24.8	25.3	23.2	26.0
Total revenue	12.4	13.8	14.3	15.5	16.8
Tax revenue	11.9	13.2	13.4	13.7	14.8
Non-tax revenue	0.5	0.6	0.8	1.8	2.0
Grants	13.0	10.8	11.0	7.7	9.2
Budgetary grants	9.0	6.1	6.4	4.0	3.3
Capital grants	4.0	4.7	4.6	3.7	5.9
Total expenditure and net lending	25.5	27.9	26.5	28.5	30.0
Current expenditure	14.5	15.5	14.8	13.4	15.2
Capital expenditure	10.0	12.5	11.6	12.9	13.9
Domestic	5.0	6.2	5.6	5.1	6.2
Foreign	5.0	6.2	6.1	7.8	7.6
Net lending	0.9	0.5	0.0	2.2	1.0
Budget Deficit (cash basis)					
Excluding grants	-13.4	-14.5	-12.5	-13.2	-13.6
Including grants	-0.5	-3.8	-1.5	-5.4	-4.3
External Sector					
Exports (year-on-year growth)	26.5	56.2	27.3	19.0	-0.02
Imports (year-on-year growth)	8.7	44.5	18.7	-0.4	7.1
Gross reserves (Millions US\$)	813.3	1,050.0	850.3	1,070.0	986.1
Gross reserves (months of imports of GS)	4.5	5.1	4.1	4.8	3.7
Consumer Price Index (percentage change)					
End of period	0.2	8.3	3.9	3.6	2.1
Period average	2.3	5.7	6.3	4.2	1.8
Exchange Rate (Rwf/US\$)					
End period	594.5	603.4	631.0	667.7	692.6
Period average	594.5	600.3	631.4	670.1	694.4

1/ On a fiscal year basis (July-June). For example, the column ending in 2011 refers to FY2010/2011.

Source: NISR, BNR and MINECOFIN.

Annex Table 2: Rwanda - Gross domestic product by kind of activity (continued)

	2011		2012		2013		2014	
	1 st half	2 nd half	1 st half	2 nd half	1 st half	2 nd half	1 st half	2 nd half
	<i>(Rwf billion, current prices)</i>							
GROSS DOMESTIC PRODUCT (GDP)	1,795	2,051	2,078	2,359	2,323	2,541	2,596	2,793
AGRICULTURE, FORESTRY & FISHING	556	688	659	823	761	862	850	934
Food crops	379	467	460	565	545	616	617	657
Export crops	25	53	25	76	28	51	34	71
Livestock & livestock products	59	63	67	71	74	78	81	87
Forestry	88	97	100	105	105	107	108	110
Fishing	6	7	8	8	8	10	10	10
INDUSTRY	256	299	288	350	346	379	375	399
Mining & quarrying	35	39	32	37	44	46	47	49
TOTAL MANUFACTURING	89	115	105	129	117	136	128	132
<i>Of which: Food</i>	19	31	22	33	25	34	29	31
<i>Beverages & tobacco</i>	45	55	52	63	60	67	65	63
Electricity	5	6	6	8	8	9	9	10
Water & waste management	6	7	8	8	8	8	8	8
Construction	121	131	136	168	168	181	183	200
SERVICES	851	938	1,009	1,070	1,099	1,178	1,221	1,314
TRADE & TRANSPORT	269	323	329	378	356	402	401	434
Maintenance & repair of motor vehicles	9	10	10	10	12	12	12	12
Wholesale & retail trade	212	254	257	296	275	313	312	340
Transport	49	58	61	72	69	77	78	82
OTHER SERVICES	582	616	679	692	743	775	820	880
Hotels & restaurants	48	51	52	54	54	56	57	59
Information & communication	43	50	56	61	56	60	61	72
Financial services	56	51	69	68	81	83	82	89
Real estate activities	144	142	151	131	140	140	154	169
Professional, scientific & technical activities	47	49	56	55	58	61	61	62
Administrative & support service activities	49	53	57	59	61	64	66	68
Public administration & defense; compulsory social security	48	68	68	79	78	88	86	95
Education	60	62	73	77	100	102	113	114
Human health & social work activities	17	21	24	25	27	28	33	32
Cultural, domestic & other services	68	69	74	82	88	94	106	119
Taxes less subsidies on products	131	127	122	115	117	122	148	145

Source: NISR.

Annex Table 2: Rwanda - Gross domestic product by kind of activity

	2011		2012		2013		2014	
	1 st half	2 nd half	1 st half	2 nd half	1 st half	2 nd half	1 st half	2 nd half
	<i>(Rwf billion, current prices)</i>							
GROSS DOMESTIC PRODUCT (GDP)	1,816	2,030	1,997	2,187	2,117	2,264	2,260	2,425
AGRICULTURE, FORESTRY & FISHING	575	669	617	708	658	710	692	749
Food crops	390	454	430	476	458	480	484	512
Export crops	25	53	23	63	27	54	27	52
Livestock & livestock products	60	62	64	65	68	70	73	77
Forestry	91	93	94	97	98	99	100	101
Fishing	8	6	6	6	7	8	8	8
INDUSTRY	260	294	276	325	314	342	335	360
Mining & quarrying	34	40	32	36	39	43	44	47
TOTAL MANUFACTURING	93	112	100	116	105	121	112	117
<i>Of which: Food</i>	20	30	21	29	24	31	26	27
<i>Beverages & tobacco</i>	46	52	48	55	49	57	51	51
Electricity	5	6	6	6	7	8	8	8
Water & waste management	6	7	8	8	8	8	8	8
Construction	123	129	130	157	156	164	165	180
SERVICES	856	934	973	1,023	1,022	1,081	1,108	1,181
TRADE & TRANSPORT	274	318	322	358	341	379	377	407
Maintenance & repair of motor vehicles	10	10	10	10	10	10	10	12
Wholesale & retail trade	214	253	253	279	266	297	296	319
Transport	51	56	59	68	65	72	71	76
OTHER SERVICES	583	615	651	665	681	702	731	774
Hotels & restaurants	48	51	52	54	53	55	55	57
Information & communication	41	51	59	65	59	64	65	78
Financial services	54	53	60	61	68	66	70	70
Real estate activities	144	141	147	137	143	144	151	159
Professional, scientific & technical activities	48	49	53	51	53	54	55	55
Administrative & support service activities	50	52	54	55	56	57	59	60
Public administration & defense; compulsory social security	48	67	64	75	73	80	78	86
Education	62	62	66	66	68	68	74	74
Human health & social work activities	18	22	24	23	24	25	26	30
Cultural, domestic & other services	68	69	72	79	83	87	97	107
Taxes less subsidies on products	125	133	131	132	124	131	125	136

Source: NISR.

Annex Table 3: Rwanda - Inflation indicators (year-on-year percent change)

	Overall	Core	Import prices	Energy prices	Food prices
2012					
January	7.8	7.1	7.9	8.4	12.7
February	7.9	6.0	6.0	5.8	15.5
March	8.2	5.3	4.9	8.3	15.5
April	6.9	4.8	3.8	6.9	12.8
May	8.3	5.4	3.1	10.8	15.1
June	5.9	3.7	2.6	6.6	11.3
July	5.6	3.0	2.6	8.8	10.4
August	5.8	2.5	1.2	5.4	12.6
September	5.6	2.1	1.2	2.8	13.7
October	5.4	2.5	2.7	5.5	12.1
November	4.5	2.8	2.9	5.9	9.8
December	3.9	2.5	3.2	5.7	7.9
2013					
January	5.7	4.7	3.0	5.6	8.3
February	4.8	5.1	4.0	8.5	4.7
March	3.2	4.8	3.4	4.6	1.9
April	4.4	5.2	4.0	6.4	4.1
May	3.0	3.6	3.5	2.5	2.6
June	3.7	3.4	1.9	0.9	4.4
July	3.5	3.6	1.5	-0.9	4.0
August	4.0	3.6	2.7	2.0	4.9
September	5.1	3.3	2.5	2.8	7.8
October	5.1	3.2	1.2	0.3	8.2
November	4.6	3.4	2.3	0.2	6.4
December	3.6	3.8	1.6	0.0	3.9
2014					
January	2.4	2.7	2.6	1.6	2.4
February	3.4	2.8	2.5	1.6	5.0
March	3.4	2.6	1.7	0.7	5.2
April	2.7	2.3	1.2	-0.5	3.8
May	1.9	2.3	0.9	-4.2	3.0
June	1.4	2.0	-0.4	0.2	1.9
July	1.9	2.3	0.8	2.2	2.4
August	0.9	2.5	1.1	0.8	-0.2
September	0.2	3.0	2.1	1.2	-3.1
October	0.5	3.5	3.2	0.8	-3.3
November	0.7	2.9	1.3	0.7	-2.7
December	2.1	2.9	1.6	2.0	0.7
2015					
January	1.5	1.8	0.0	0.3	1.2
February	0.7	1.6	-0.3	-0.4	-0.3
March	0.8	1.7	-0.1	-0.9	0.8
April	0.9	1.6	-0.3	-3.1	2.5
May	2.2	2.0	0.6	0.5	3.8

Source: NISR.

Annex Table 4: Rwanda – Exchange rate (Monthly average)

Month	US dollar	Euro	UK pound	Uganda shilling	Kenya shilling	Tanzania shilling	Burundi franc
2012							
January	604.37	779.26	936.44	0.25	7.11	0.39	0.47
February	605.15	799.47	955.36	0.26	7.40	0.39	0.47
March	606.75	801.24	959.52	0.25	7.44	0.39	0.47
April	607.01	799.45	971.24	0.25	7.39	0.39	0.46
May	608.58	780.82	970.12	0.25	7.33	0.39	0.45
June	609.94	764.00	947.89	0.25	7.30	0.39	0.44
July	612.95	752.14	955.23	0.25	7.40	0.39	0.44
August	613.60	759.79	963.57	0.25	7.43	0.39	0.43
September	618.22	794.17	995.03	0.25	7.43	0.39	0.43
October	625.24	810.86	1,006.08	0.25	7.47	0.40	0.43
November	628.77	806.64	1,003.95	0.24	7.46	0.39	0.43
December	630.99	827.21	1,018.50	0.24	7.46	0.40	0.42
2013							
January	631.29	838.05	1,008.81	0.24	7.38	0.40	0.42
February	633.25	846.82	981.39	0.24	7.36	0.39	0.41
March	634.98	824.27	957.00	0.24	7.52	0.39	0.41
April	637.38	829.03	974.68	0.25	7.69	0.40	0.41
May	640.13	831.41	979.34	0.25	7.73	0.40	0.41
June	641.66	846.19	993.12	0.25	7.61	0.40	0.42
July	645.22	843.25	980.34	0.25	7.55	0.41	0.42
August	649.01	864.16	1,005.03	0.25	7.53	0.41	0.43
September	653.26	871.37	1,033.65	0.26	7.60	0.41	0.43
October	661.29	901.19	1,064.45	0.26	7.88	0.42	0.43
November	664.30	897.29	1,068.75	0.27	7.84	0.42	0.43
December	667.74	914.43	1,093.43	0.27	7.85	0.43	0.44
2014							
January	672.66	916.57	1,107.13	0.27	7.91	0.43	0.44
February	674.65	920.46	1,115.73	0.28	7.95	0.42	0.44
March	676.39	935.04	1,124.54	0.27	7.95	0.42	0.44
April	678.20	936.67	1,135.18	0.27	7.90	0.42	0.44
May	680.67	935.68	1,146.96	0.27	7.79	0.41	0.44
June	681.69	927.85	1,151.55	0.27	7.79	0.41	0.44
July	683.47	926.05	1,168.56	0.26	7.76	0.41	0.44
August	684.23	911.52	1,143.32	0.26	7.76	0.41	0.44
September	685.48	884.88	1,118.46	0.26	7.71	0.41	0.44
October	688.68	873.83	1,107.96	0.26	7.72	0.41	0.44
November	690.33	861.13	1,090.39	0.25	7.68	0.40	0.45
December	692.56	854.74	1,083.04	0.25	7.66	0.40	0.45
2015							
January	696.56	811.29	1,056.41	0.24	7.63	0.39	0.45
February	701.89	797.85	1,076.69	0.24	7.68	0.39	0.45
March	705.54	766.00	1,058.88	0.24	7.69	0.38	0.45
April	708.48	764.31	1,060.41	-	7.65	0.38	-
May	712.10	789.67	1,095.06	-	7.42	0.36	-

Source: BNR.

Annex Table 5: Rwanda - Key interest rates (percent)

	Policy rate	Average deposit rate	Average lending rate	Interbank rate	Treasury bill rate				
					28 days	91 days	182 days	364 days	Weighted average rate
2012									
January	7.0	7.4	17.0	7.3	7.1	7.3	7.7	8.4	7.6
February	7.0	8.3	16.3	6.9	7.1	7.6	7.4	8.0	7.6
March	7.0	8.2	16.3	7.7	7.4	7.6	7.9	7.8	7.7
April	7.0	8.1	16.9	8.0	7.5	7.6	7.9	8.5	7.9
May	7.5	9.9	16.7	8.6	7.9	8.1	8.3	8.9	8.3
June	7.5	7.9	16.8	9.0	8.8	9.6	9.4	9.1	9.3
July	7.5	8.9	16.5	9.1	9.4	10.2	-	-	9.8
August	7.5	8.6	17.1	9.5	10.6	10.2	10.5	11.7	11.1
September	7.5	8.5	17.1	10.8	11.5	12.1	12.0	12.7	12.3
October	7.5	9.2	16.6	10.9	11.9	12.4	12.5	-	12.1
November	7.5	11.2	16.7	11.9	11.8	12.5	12.7	-	12.4
December	7.5	10.7	16.5	11.1	11.8	12.6	12.8	-	12.4
2013									
January	7.5	11.3	17.1	11.1	12.1	12.6	12.8	-	12.4
February	7.5	10.3	17.0	10.4	11.6	12.3	12.7	-	12.2
March	7.5	10.4	17.2	10.0	11.0	12.1	12.6	12.8	12.1
April	7.5	10.7	17.3	10.9	11.2	12.3	12.8	13.0	12.0
May	7.5	10.6	17.6	11.1	11.0	12.0	12.4	12.7	12.0
June	7.0	10.6	17.7	9.6	10.0	10.7	11.3	11.7	10.8
July	7.0	8.5	17.2	9.6	8.9	9.6	10.0	10.7	9.7
August	7.0	10.5	17.5	7.6	7.8	8.3	8.9	9.3	8.6
September	7.0	9.0	17.8	7.0	6.8	6.9	7.3	7.8	7.1
October	7.0	9.5	17.4	6.7	6.2	6.5	6.7	7.6	6.8
November	7.0	8.0	17.2	6.1	5.5	5.9	6.2	7.0	6.1
December	7.0	8.5	16.9	5.6	5.0	5.3	5.9	6.4	5.6
2014									
January	7.0	8.9	17.5	5.6	5.4	6.0	6.7	8.2	6.4
February	7.0	8.0	17.1	5.8	5.1	5.8	6.5	8.1	6.1
March	7.0	8.3	16.8	5.8	4.9	5.5	6.6	8.0	6.0
April	7.0	8.0	17.4	5.6	4.8	5.3	6.3	7.8	6.0
May	7.0	9.3	17.2	5.7	4.5	5.3	6.3	7.4	5.9
June	6.5	8.6	17.5	5.7	4.3	5.0	5.7	6.6	5.6
July	6.5	8.4	17.2	5.5	4.0	4.5	5.2	6.5	5.5
August	6.5	8.8	17.4	5.5	4.1	4.4	5.0	6.3	5.2
September	6.5	7.3	17.1	5.6	4.2	4.5	5.2	6.5	5.5
October	6.5	7.3	17.5	5.7	4.2	4.6	5.2	6.4	5.3
November	6.5	8.2	16.7	5.7	3.9	4.4	5.0	6.3	5.1
December	6.5	7.8	17.7	4.7	3.7	4.1	5.0	6.2	4.9
2015									
January	6.5	8.5	17.5	4.2	3.7	4.1	4.9	5.9	4.6
February	6.5	8.5	17.5	4.1	3.5	3.9	4.9	5.5	4.6
March	6.5	8.1	17.4	3.8	3.2	3.6	4.6	5.3	4.3
April	6.5	8.0	17.9	3.5	3.0	3.4	4.5	5.1	4.1
May	6.5	n.a	17.4	2.8	2.9	3.3	4.2	5.1	4.0

Source: BNR.

Annex Table 6: Rwanda – Gross international reserves

Month	Rwf billions	US\$ million
2012		
January	596.7	986.8
February	581.5	960.0
March	545.6	899.1
April	514.1	845.4
May	464.4	762.2
June	526.3	859.4
July	472.9	771.3
August	450.7	733.4
September	449.0	721.0
October	470.6	750.4
November	476.9	757.4
December	535.5	850.3
2013		
January	465.2	735.8
February	436.5	688.3
March	443.6	697.7
April	451.7	706.9
May	623.6	972.9
June	653.0	1,016.1
July	659.3	1,017.5
August	657.4	1,011.7
September	680.8	1,035.5
October	691.3	1,044.8
November	682.9	1,024.4
December	717.0	1,070.0
2014		
January	679.7	1,008.1
February	648.2	959.8
March	632.3	932.7
April	630.3	927.5
May	656.4	963.2
June	646.0	946.5
July	629.0	919.6
August	617.9	902.8
September	604.3	879.7
October	562.4	815.7
November	567.6	820.9
December	597.7	986.1
2015		
January	583.6	846.2
February	567.0	815.4
March	603.9	863.6

Source: BNR.



Annex Table 7: Rwanda - Tourism sector data

Tourist arrivals						Park visits			
Year/month	Leisure	Visiting friends and relatives	Businesses and conferences	Transit/other	Total	Volcanoes	Akagera	Nyungwe	Total
2012									
January	8,126	28,711	27,977	15,794	80,608	2,738	2,186	646	5,570
February	8,775	19,956	33,441	18,481	80,653	2,516	1,856	739	5,111
March	7,848	21,236	33,684	18,413	81,181	1,945	1,315	457	3,717
April	5,890	22,691	33,828	16,554	78,963	1,443	1,269	448	3,160
May	5,167	23,405	40,168	17,569	86,309	1,627	1,492	357	3,476
June	7,364	23,697	29,491	19,104	79,656	2,690	2,384	544	5,618
July	9,663	25,186	36,097	22,034	92,980	3,149	3,457	1,001	7,607
August	10,693	33,299	34,014	22,242	100,248	3,219	2,984	1,014	7,217
September	10,102	25,112	32,532	19,878	87,623	2,843	1,786	603	5,232
October	8,961	25,105	35,042	22,869	91,978	2,906	1,443	725	5,074
November	5,810	27,292	45,012	30,102	108,215	1,583	2,605	441	4,629
December	9,403	33,096	39,663	25,214	107,376	1,824	2,423	646	4,893
Total	97,802	308,786	420,949	248,254	1,075,790	28,483	25,200	7,621	61,304
2013									
January	8,934	29,762	39,935	23,532	102,163	1,901	2,061	672	4,634
February	8,975	21,977	40,240	20,721	91,913	2,002	2,032	686	4,720
March	7,402	23,797	43,085	24,375	98,659	1,927	2,126	641	4,694
April	6,747	30,593	35,003	17,367	89,710	862	1,235	338	2,435
May	7,923	25,648	36,875	17,148	87,594	1,151	2,024	391	3,566
June	9,342	26,397	32,436	16,515	84,690	2,379	2,756	581	5,716
July	9,584	30,170	43,370	12,500	95,624	3,208	3,673	820	7,701
August	12,033	32,274	31,295	18,269	93,871	3,346	3,345	700	7,391
September	7,862	25,998	29,906	16,248	80,014	3,004	2,845	604	6,453
October	8,166	26,936	30,645	35,224	100,971	2,047	2,910	439	5,396
November	7,794	29,772	32,671	39,997	110,234	1,510	1,844	394	3,748
December	11,975	28,294	29,513	32,211	101,993	1,862	2,836	636	5,334
Total	106,737	331,618	424,974	274,107	1,137,436	25,199	29,687	6,902	61,788
2014									
January	6,650	34,396	36,304	22,221	99,571	2,167	2,108	737	5,012
February	9,306	31,803	37,178	25,949	104,236	2,080	1,960	637	4,677
March	8,251	32,476	33,324	27,894	101,945	1,892	2,204	640	4,736
April	6,294	23,997	28,775	24,929	83,995	1,365	1,453	704	3,522
May	6,907	27,024	33,499	26,562	93,992	1,399	2,575	778	4,752
June	9,314	32,092	36,895	26,570	104,871	2,664	2,847	918	6,429
July	10,838	30,893	27,165	29,335	98,231	3,426	3,294	1219	7,939
August	10,057	36,644	35,299	32,128	114,128	3,438	3,879	1007	8,324
September	10,462	32,102	27,525	30,242	100,331	3,246	1,894	677	5,817
October	8,883	33,752	35,120	27,889	105,644	2,488	2,555	573	5,616
November	7,792	41,895	35,308	30,747	115,742	1,703	2,564	473	4,740
December	10,456	41,037	28,952	16,395	96,843	2,017	3,513	777	6,307
Total	105,213	398,111	395,344	320,861	1,219,529	27,885	30,845	8,966	67,696

Source: RDB.

The World Bank, Rwanda

Blvd. de la Revolution

SORAS Building

P.O. Box 609 Kigali, Rwanda

Telephone: +250 252 591 300

Fax: +250 252 576385

www.worldbank.org/rw



WORLD BANK GROUP

**Produced by Macroeconomics & Fiscal Management Global Practice
and Finance & Markets Global Practice**

Photo credits: © World Bank

Design by: Robert Waiharo