



National Bank of Rwanda **Banki Nkuru y'u Rwanda**

QUARTERLY INFLATION REPORT

Fourth Quarter, 2016



March 2017

EXECUTIVE SUMMARY

The Global economic growth decelerated to 3.1% in 2016 from 3.2% in 2015 on weaker than expected performances in advanced economies. Looking ahead, global growth is expected to improve to 3.4% in 2017 due to positive growth prospects in emerging and developing economies following the anticipated recovery in commodity prices.

On the international commodity market, prices generally improved in 2016Q4 and are expected to continue recovering for most commodities in 2017. According to the World Bank, oil prices are foreseen to rise by 28.5% to around USD 55/barrel in 2017, reflecting continued market rebalancing and following OPEC's effort to squeeze oil supply. Responding to faster than expected mines closures, prices for metals are projected to increase in 2017. For agriculture commodities, the outlook is expected to be erratic depending on supply conditions. Similar trends have been traced by the International Monetary Fund which projected oil prices to grow by 9.7% and 1.4% respectively in 2017Q1 and 2017Q2.

In line with rising commodity prices, global inflation is expected to go up to 1.7% in 2017 from 0.7% in 2016 in developed countries, but still lower compared to central bank targets as economic activities remain weak. With subdued inflationary pressures and lackluster economic activity, markets expect Central Banks in developed economies to remain accommodative for longer than previously anticipated with the only exception of United States.

On the foreign exchange markets, the dollar is expected to further strengthen in 2017 as strong December 2016 U.S. jobs and wage data support the case for the Fed to raise further interest rates during 2017 and even beyond. The strength of the greenback is likely to fuel pressures on currencies in emerging and developing economies which will be however moderated by gains in commodity exports.

The Rwandan franc depreciated by 9.7% end December 2016 compared to a depreciation of 7.6% end December 2015, as pressure from the wide mismatch between imports and exports were amplified by the increased demand for forex from different companies and government projects under Public Private Partnership (PPP) framework. To minimize exchange rate pressures, BNR increased its forex sales by 19.7%, from USD 273.5 million in December 2015, to USD 327.5 million in December 2016. Looking at the basket of currencies for Rwanda's main trading partners, it is worth mentioning that by end December 2016, the FRW real effective exchange rate depreciated by 3.4% y-o-y after a depreciation of 8.3% end September 2016 and an appreciation of 3.5% end December 2015, while in nominal effective terms, it depreciated by 7.5% compared to an appreciation of 2.0% end December 2015. This trend implies increasing pass through to imported inflation.

The still lower external demand and recovering metal and mineral prices may have a downside effect on Rwandan imported inflation. However, rising oil prices together with the strengthening of the greenback are pointing to higher oil import bill, putting

more pressure on domestic pump prices. In addition, the exchange rate pass-through has increased since last year. Dry weather conditions in the region and in the horn of Africa are likely to fuel pressures on food prices. The joint effect of these developments on domestic prices is likely to maintain the current increasing trend in imported inflation.

Despite the challenging global economic environment, the Rwandan economy remained resilient and recorded good performance in 2016 as real GDP grew by 5.9%, though lower than 8.9% recorded in 2015. In 2016Q4, real GDP grew by 2.3% lower than 10.0% recorded in the same period of 2015, following the slowdown in construction, mining and quarrying, wholesale and retail trade as well as in financial services. The slowdown in economic activities is also linked to the slow pace in credit to the private sector as new authorized loans declined by 1.2% in 2016Q4, to FRW 212.0 billion from FRW 214.6 billion in 2015Q4. Outstanding loans increased by 7.8%, to FRW 1,269.6 billion recorded end December 2016 from FRW 1,178.1 billion as of end December 2015, against 30.0% end December 2015. In line with the ongoing slowdown of the domestic economy, the output gap is still low and thus, non-inflationary.

In 2016Q4, headline inflation in Rwanda increased to 7.0% from 6.4% in 2016Q3, mainly driven by rising food prices and transport costs. Food inflation increased from 12.3% in 2016Q3 to 15.4% in 2016Q4. This persistent rise in food prices was caused by the poor performance in agriculture production compared to 2015 due to the long spell of the dry season that mostly affected prices for vegetables and fruits. Transport inflation remained high despite easing from 8.7% in 2016Q3 to 7.7% in 2016Q4. Upward pressures on transport inflation mainly came from cars inflation, which stood at 15.2% in the last two quarters of 2016. Cars are mainly imported from Japan and their prices have been mainly influenced by the double exchange rate effect following the appreciation of the Yen against the USD and the depreciation of the FRW against the USD.

Generally, the main risks to the inflation outlook remain rising food prices following a prolonged dry season, the exchange rate effect, the increase in tariffs for some products, the increase in prices of drinks produced by Bralirwa and the upward revision in local pump prices in line with the increase in international oil prices. The above risks imply that inflation is expected to range between 7.0% and 8.0% in 2017Q1 and between 6.5% and 7.5% in 2017Q2.

LIST OF ACRONYMS AND ABBREVIATIONS

BNR:	National Bank of Rwanda
CIEA:	Composite Index of Economic Activities
CPS:	Credit to the Private Sector
GDP:	Gross Domestic Product
EAC:	East African Community
ECB:	European Central Bank
IMF:	International Monetary Fund;
KCC:	Kigali Conventional Centre
M3:	Broad money
NCG:	Net Credit to Government
NDA:	Net Domestic Assets
NFA:	Net Foreign Assets
NISR:	National Institute of Statistics of Rwanda
OPEC:	Organization of the Petroleum Exporting Countries
UK:	United Kingdom
US:	United States
USD:	United States Dollars
WEO:	World Economic Outlook
WTI:	Western Texas Intermediate

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	II
LIST OF ACRONYMS AND ABBREVIATIONS.....	IV
TABLE OF CONTENTS.....	V
LIST OF TABLES.....	VII
LIST OF FIGURES.....	VIII
I. GLOBAL ECONOMIC AND FINANCIAL DEVELOPMENTS.....	1
1.1 ECONOMIC DEVELOPMENTS.....	1
1.1.1 DEVELOPMENTS IN UNITED STATES.....	1
1.1.2 DEVELOPMENTS IN EUROZONE.....	1
1.1.3 DEVELOPMENTS IN CHINA.....	2
1.1.4 DEVELOPMENTS IN SUB-SAHARAN AFRICA AND EAC.....	3
1.2 RECENT DEVELOPMENTS IN COMMODITY PRICES.....	4
1.3 FINANCIAL MARKETS AND FOREIGN EXCHANGE MARKET.....	5
1.4 OUTLOOK FOR THE GLOBAL ECONOMY.....	6
II. DOMESTIC ECONOMY AND FINANCIAL DEVELOPMENTS.....	8
2.1 DOMESTIC DEMAND AND OUTPUT.....	8
2.1.1 DOMESTIC DEMAND.....	8
2.1.2 ECONOMIC PERFORMANCE BY SECTOR.....	8
2.1.3 THE OUTPUT GAP.....	11
2.1.4 OUTLOOK OF THE DOMESTIC DEMAND AND OUTPUT.....	11
2.2 PUBLIC DOMESTIC DEBT DEVELOPMENTS.....	12
2.3 EXTERNAL SECTOR DEVELOPMENTS.....	13
2.3.1 FORMAL TRADE BALANCE.....	13
2.3.1.1 EXPORTS OF GOODS.....	13
2.3.1.2 IMPORTS OF GOODS.....	15
2.3.2 FORMAL TRADE WITH EAC COUNTRIES.....	17
2.3.3 INFORMAL CROSS-BORDER TRADE.....	18
2.3.4 THE EXCHANGE RATE: BILATERAL AND EFFECTIVE.....	19
2.4 MONETARY AND FINANCIAL DEVELOPMENTS.....	20
2.4.1 MONEY SUPPLY AND DEMAND.....	20
2.4.1.1 MONEY SUPPLY.....	20

2.4.1.2 MONEY DEMAND	22
2.4.2 BANKING SYSTEM LIQUIDITY DEVELOPMENTS	23
2.4.3 INTEREST RATES DEVELOPMENTS.....	24
2.4.4 OUTLOOK FOR LIQUIDITY CONDITIONS.....	24
2.4.5 FINANCIAL STABILITY ANALYSIS: TRACKING KEY INDICATORS.....	25
2.4.5 FINANCIAL STABILITY AND MONETARY POLICY OUTLOOK.....	26
III. INFLATION DEVELOPMENTS AND OULOOK.....	28
3.1 CURRENT INFLATION DEVELOPMENTS	28
IV. INFLATION OUTLOOK AND RISKS.....	32
4.1 DEMAND-SIDE PRESSURES.....	32
4.2 SUPPLY SHOCKS	32
4.3 EXCHANGE RATE DEVELOPMENTS	32
4.5 GLOBAL AND REGIONAL INFLATIONARY PRESSURES.....	33
4.6 INFLATION FORECASTS	33

LIST OF TABLES

TABLE 1: ECONOMIC GROWTH IN EAC COUNTRIES (IN %)	3
TABLE 2: HEADLINE INFLATION IN EAC COUNTRIES, IN %	3
TABLE 3: INTEREST RATES DEVELOPMENTS (IN % PER ANNUM)	5
TABLE 4: IMF COMMODITY PRICES FORECASTS (IN % CHANGE)	7
TABLE 5: DOMESTIC DEMAND (% CHANGE).....	8
TABLE 6: CIEA (% CHANGE, Y-O-Y)	10
TABLE 7: TURNOVERS (INDUSTRY & SERVICES), % Y-O-Y CHANGE.....	10
TABLE 8: SECTORAL COMPOSITION OF PUBLIC DOMESTIC DEBT (BILLION FRW).....	12
TABLE 9: EXPORTS DEVELOPMENTS (ANNUAL % CHANGE)	14
TABLE 10: IMPORTS DEVELOPMENTS (ANNUAL % CHANGE)	15
TABLE 11: TRADE FLOW OF RWANDA WITHIN EAC BLOC.....	17
TABLE 12: RWANDA INFORMAL CROSS BORDER TRADE	18
TABLE 13: APPRECIATION/DEPRECIATION RATE OF SELECTED CURRENCIES AGAINST THE FRW.....	19
TABLE 14: MONETARY AGGREGATES (FRW BILLION).....	21
TABLE 15: NEW AUTHORIZED LOANS BY SECTOR (FRW BILLION, UNLESS OTHERWISE INDICATED).....	22
TABLE 16: DEPOSITS BY CATEGORY OF DEPOSITORS IN % SHARE	23
TABLE 17: MOST LIQUID ASSETS OF COMMERCIAL BANKS (FRW BILLION).....	24
TABLE 18: INTEREST RATES DEVELOPMENTS (QUARTERLY AVERAGE IN %).....	24
TABLE 19: BANKING SECTOR PERFORMANCE (IN BILLIONS FRW)	25
TABLE 20: KEY FINANCIAL SOUNDNESS INDICATORS, (IN %)	26
TABLE 21: INFLATION DEVELOPMENTS (% , Y-O-Y)	28

LIST OF FIGURES

FIGURE 1: ECONOMIC GROWTH DEVELOPMENTS (IN %)	2
FIGURE 2: CRUDE OIL PRICE DEVELOPMENTS (USD/BARREL)	4
FIGURE 3: QUARTERLY REAL GDP GROWTH, IN % (YOY)	9
FIGURE 4: THE OUTPUT (%) GAP FOR RWANDA	11
FIGURE 5: TRADE BALANCE IN MILLIONS OF USD	13
FIGURE 6: EXPORTS DEVELOPMENTS (IN USD MILLION)	15
FIGURE 7: IMPORTS DEVELOPMENTS (IN USD MILLION)	16
FIGURE 8: TRADE FLOW OF RWANDA WITHIN EAC BLOC (USD MILLION)	17
FIGURE 9: INFORMAL CROSS BORDER TRADE (IN USD MILLIONS)	18
FIGURE 10: DRIVERS OF REAL EFFECTIVE EXCHANGE RATE	20
FIGURE 11: TYPE OF DEPOSITS IN % SHARE	23
FIGURE 12: MAIN DRIVERS OF FOOD INFLATION (% , Y-O-Y)	29
FIGURE 13: MAIN DRIVERS OF TRANSPORT INFLATION (% , Y-O-Y)	29
FIGURE 14: INFLATION BY SOURCE (% , Y-O-Y)	30
FIGURE 15: IMPORTED INFLATION DEVELOPMENTS, QUARTERLY BASIS (% CHANGE)	30
FIGURE 16: INFLATION BY VOLATILITY (% , Y-O-Y)	31
FIGURE 17: INFLATION FORECASTS (FAN CHART)	33

I. GLOBAL ECONOMIC AND FINANCIAL DEVELOPMENTS

1.1 Economic Developments

The world economy continued to grow at decelerating pace in 2016. IMF January 2017 estimated the global economic growth at 3.1% against 3.2% recorded in 2015. Global growth is however forecasted to improve to 3.4% in 2017 on expected recovery in emerging and developing economies. Recovering commodity prices may provide support to resource exporting countries in 2017. Sluggish global economic activity and still low though recovering commodity prices have resulted into persistently low global inflationary pressures. World inflation is estimated to stand at 2.9% in 2016 and expected to slightly rise to 3.3% by end 2017 on recovering energy prices.

1.1.1 Developments in United States

In United States, the economy slowed in the first half of the year owing to a stronger US dollar and a slowdown in energy related investment. The growth rate decelerated to 1.9% in 2016Q4 from 3.5% in 2016Q3 undermined by more negative net exports. Third quarter strong growth was due to rising personal consumption spending, housing activity, recovery in federal government spending, and a rebound in non-residential investments and improving net exports though still negative. For the 2017Q1 and 2017Q2, GDP growth is expected to improve to 2.1% and 2.3% on sustained consumer spending and investment together with less negative net exports. Going forward, US GDP growth rate is expected to pick up to 2.3% in 2017 on waning effect of lower energy prices and past appreciation of the U.S. dollar.

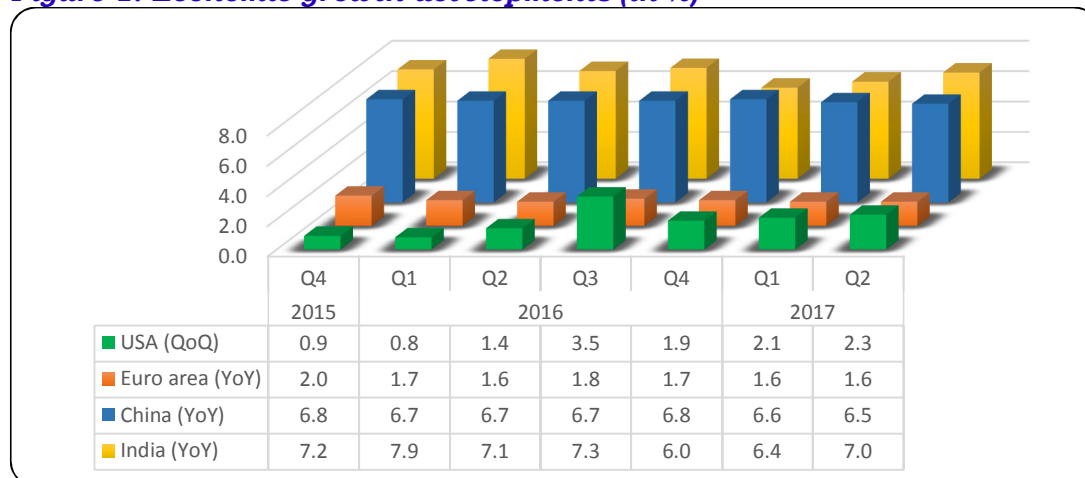
Driven by increasing prices of shelter and gasoline, US headline inflation went up to 2.1% in December 2016 from 1.5% in September 2016. Core inflation stood at 2.2% in the year ending December 2016, unchanged compared to September 2016 level. On quarterly basis, US inflation stood at 1.8% in 2016Q4 from 1.1% in 2016Q3 while expected to increase to 2.5% and 2.4% respectively in 2017Q1 and 2017Q2. In December 2016, basing on positive economic progress and the strength of the labor market, the Fed increased the target range for its fund rate to 0.50% - 0.75% from 0.25%-0.50% and expects to continue to gradually normalize the monetary policy stance in line with economic conditions. Two up to three further moves are expected in the year 2017 as the output is close to potential. Meanwhile, the stance remains accommodative to continue supporting the economy and keep inflation close to the target.

1.1.2 Developments in Eurozone

In Eurozone, economic activity has been moderately growing supported by net exports and continued positive contributions from domestic demand. Real GDP grew by 1.8% in 2016Q3 reflecting positive contributions from gross capital formation and household consumption partly offset by negative contribution from external trade. Preliminary estimates set GDP growth at 1.7% in 2016Q4. For both 2017Q1 and

2017Q2, latest survey indicators point to moderate growth of 1.6%. For the whole year 2016, real GDP decelerated to 1.7% from 2.0% in 2015 and projected to slow further to 1.6% in 2017 as external demand is likely to dampen positive growth prospects from domestic demand.

Figure 1: Economic growth developments (in %)



Source: BLOOMBERG and IMF, World economic Outlook, January 2017

Due to still lower than potential output, inflation remained below central Bank target of 2%. In December 2016, inflation rose to 1.1% from 0.4% in September 2016 and averaged 0.7% for 2016Q4, driven by an increase in energy prices. Going forward, inflation is foreseen to stand at 1.7% in 2017Q1 and 1.6% in 2017Q2 as the output gap is trending to closure and inflation expectations are going up. Thus, the ECB monetary policy needs to stay accommodative, at least for the two quarters of 2017, to allow for favorable financial conditions. The Central Bank rate remained unchanged at 0% and the ECB assets purchase program was maintained at Euro 80 billion per month but is expected to be revised down to Euro 60 billion since April 2017.

1.1.3 Developments in China

In China, for the third straight quarter, real GDP growth remained stable at 6.7% in 2016Q3, supported by improvement in all sectors of the economy before rising to 6.8% in 2016Q4. Real GDP is foreseen to decelerate to 6.6% and 6.5% in 2017Q1 and 2017Q2 and on average to 6.5% in 2017 as stimulus may be waning. Following a rebound in energy prices, Chinese inflation went up from 1.9% in September 2016 to 2.1% in December 2016 still lower compared to the target of 3%. For 2017Q1 and 2017Q2, inflation is foreseen to stand at 2.2% and 2.3% respectively. To support a gradual economic recovery, the Central Bank of China has maintained a flexible monetary policy stance.

1.1.4 Developments in Sub-Saharan Africa and EAC

The slowdown in global demand and its spillover effect on commodity prices affected the fiscal position of large African commodity exporting countries and dampened their growth perspectives. Countries like Angola, Nigeria and South Africa, which account for 60% of Sub-Saharan African GDP, were severely affected by lower oil prices and pulled down GDP growth rate for the Sub-Saharan African block to 1.6% in 2016 from 3.4% and 5.1% respectively in 2015 and 2014. Drought in some countries like Malawi, Ethiopia, Lesotho, Zimbabwe and Swaziland; the Ebola disease in Liberia, Sierra Leone and Guinea as well as the political unrest in some other countries added to the impact of low commodity prices.

Dry weather conditions put pressures on food prices which, together with recovering oil prices, increased Sub-Saharan African inflation to 11.3% in 2016 from 7.0% in 2015. Looking ahead, inflation is forecasted to decelerate to 10.8% by end 2017.

Table 1: Economic growth in EAC countries (in %)

	2015	2016			Ann. average		
	Q4	Q1	Q2	Q3	2015	2016 Proj.	2017 Proj.
Burundi	-	-	-	-	-4.0	-0.5	2.0
Kenya	5.7	5.9	6.2	5.7	5.6	6.0	6.1
Rwanda	7.1	7.6	5.4	5.2	6.9	6.0	6.0
Tanzania	9.0	5.5	7.9	-	7.0	7.2	7.2
Uganda	5.7	4.0	3.0	1.1	4.8	4.9	5.5

Source: National Bureau of Statistics Websites and IMF WEO, October 2016

The EAC bloc has shown more resilience to the global shocks than the rest of the continent. Apart from the Burundian economy which is forecasted to stagnate, other economies are expected to continue growing through 2016 and beyond in 2017, as evidenced by positive growth during the first half of 2016 despite slowdown observed in 2016Q3.

Inflation in EAC remained moderate due to reducing pressures on regional currencies despite some pressures from food and oil prices. Going forward, inflationary pressures from food prices are likely to increase on continuous dry season in the region and in the horn of Africa in general (South Sudan, Somalia, Ethiopia, Uganda, Kenya and Tanzania).

Table 2: Headline inflation in EAC countries, in %

	2015	2016					Annual average	
	Dec.	Mar	Jun.	Sep	Nov.	Dec.	2015	2016
Uganda	8.4	6.2	5.9	4.2	4.6	5.7	5.5	5.5
Kenya	8.0	6.5	5.8	6.3	6.7	6.4	6.6	6.2
Tanzania	6.8	5.4	5.5	4.5	4.8	5.0	5.6	5.2
Burundi	7.1	4.3	3.9	7.0	7.1	9.6	5.6	5.6
Rwanda	4.5	4.6	5.5	5.8	6.4	7.3	2.5	5.7

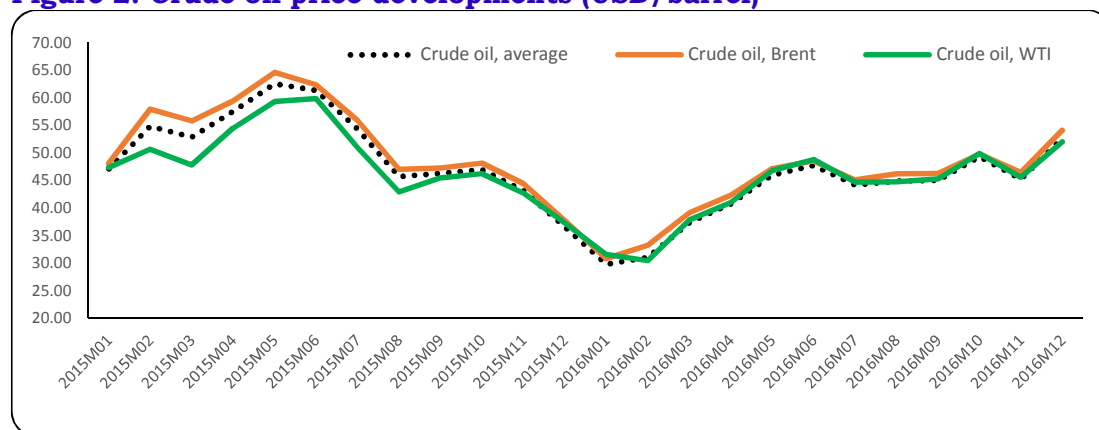
Source: Country Bureaus of Statistics IMF, World Economic Outlook, Oct 2016

1.2 Recent developments in commodity prices

Global inflation has been mostly driven by developments in commodity prices. In 2016Q4, commodity prices increased for the third consecutive quarter driven by both energy and non-energy commodity prices. Quarter-on-quarter, prices hiked for energy by 11.1% and for non-energy by 1.3%. Among non-energy commodities, prices went up for metals and minerals by 10.0% and by 2.0% for fertilizers while they declined for agriculture commodities (-1.6%) including beverages (-3.1%), food (-1.7%) and raw materials (-0.5%).

Energy prices were supported by rising prices of crude oil, coal and natural gas. Crude oil prices rose by 9.8% quarter-on-quarter, standing at USD 49.06/barrel from USD 44.68/barrel in 2016Q3, on the back of supply outages in various countries including Nigeria, Iraq, Libya and Yemen hit by political unrest, improving market sentiment, OPEC’s effort to cut oil supply as well as cuts in oil investments previously occasioned by lower oil prices. Brent crude oil prices advanced by 9.3% in 2016Q4 to USD 50.08/barrel.

Figure 2: Crude oil price developments (USD/barrel)



Source: World Bank

Overall, the price index of agriculture commodities slightly fell but trends are mixed across products. In 2016Q4, beverages prices fell by 3.1% quarter-on-quarter reflecting sharp losses in cocoa prices (-16.5%) while prices increased for tea (6.7%), Arabica coffee (+1.8%) as well as for Robusta coffee (+10.6%). Coffee prices went up due to increased demand from India and after weather conditions (prolonged drought) cut coffee supply in Brazil and Vietnam particularly affecting Robusta supply. Overall, food prices fell Q-o-Q by 1.7% in 2016Q4 consecutively to a decline of 0.2% in the previous quarter.

Metals and minerals prices started to decline since 2011 following the slowdown and a move away from commodity-intensive investment in China. In 2016Q4, metals and minerals prices increased by 10.0% Q-o-Q, supported by continuing expansion in

China's housing market, mines closures¹ and improving manufacturing activity across the world, particularly in China. Chinese demand for metals increased after announcement of a package of stimulus fueling pressures on metals prices.

1.3 Financial markets and Foreign Exchange market

In response to persistently low inflation and weak economic activity, central banks in advanced countries remained accommodative with the only exception of United States where policy moves started with December 2015 and continued with December 2016.

Table 3: Interest rates developments (in % per annum)

		2015				2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
USA	3-month deposit rate	0.390	0.410	0.450	0.680	0.825	1.018	0.885	1.535
	10-year interest rate	1.923	2.355	2.037	2.269	1.770	1.470	1.596	2.4443
Euro area	3-month deposit rate	-0.020	-0.040	-0.060	-0.085	-0.240	-0.270	-0.280	0.350
	10-year interest rate	0.180	0.764	0.587	0.629	0.150	-0.130	-0.119	0.208
Japan	3-month deposit rate	0.005	-0.120	0.010	-0.215	-0.080	-0.120	-0.310	-0.440
	10-year interest rate	0.505	0.465	0.356	0.265	-0.030	-0.217	-0.089	0.046
UK	3-month deposit rate	0.550	0.560	0.575	0.575	0.670	0.670	0.560	0.610
	10-year interest rate	1.576	2.024	1.762	1.960	1.420	0.867	0.746	1.239

Source: Bloomberg

Consistent with low central bank rates, short-term deposit rates remained negative in the Eurozone and Japan to discourage bank deposits and ensure supportive financial conditions, necessary to stimulate the economic recovery. In December 2016, the 3-month deposit rate was at -0.350% from -0.280% in September 2016 in Eurozone, and at -0.440% from -0.310% in Japan. It hiked to 1.535% and to 0.610% respectively in USA and UK from 0.885% and 0.560% in September 2016.

On the foreign exchange market, fluctuations in exchange rates remained in line with monetary policy views about policy directions, economic growth prospects and capital flows. Compared to end December 2015, the USD strengthened against the Euro and the Pound, respectively by 3.2% and 19.4% end December 2016 while it fell by 2.7% against the Yen. The dollar benefited from continuing improvement in the US labor market and a strong GDP growth in 2016Q3. The pound was undermined by concerns over the Brexit whereas the Japanese currency gained from its safe haven appeal amid a flight to safety related to the Brexit vote and a US slower-than expected interest rate hike.

¹ Nickel mines in Philippines; Coal, lead and zinc in China, Zinc mines in Australia and Ireland, Gold mines in Zimbabwe and South Africa among others.

1.4 Outlook for the global economy

Global economic growth decelerated to 3.1% in 2016 from 3.2% in 2015 on weaker than expected performances in advanced economies. Looking ahead, global growth is expected to improve to 3.4% in 2017 on expected recovery in emerging and developing economies. Growth in emerging and developing economies is projected to stand at 4.5% by end 2017 helped by recovering commodity prices and by recovery in previously distressed economies such as Nigeria, Russia, South Africa, Middle East and Latin America. Overall, risks to global activity remain on the downside due to financial imbalance and political uncertainty.

In USA, recent survey indicators suggest the economy will continue to grow even at accelerating pace driven by improving sentiment among businesses and strong consumer spending as well as residential and capital spending while net exports will continue to be a drag to GDP growth. For the 2017Q1 and 2017Q2, the US GDP growth is projected at 2.0% and 2.3% while expected to average 2.3% for the whole year 2017 from 1.6% in 2016.

Lower ECB interest rates, favorable financial conditions, sustained employment gains as well as improving private consumption continue to support the economic growth and likely to support inflation to move close to the target. Eurozone economy is projected to slow to 1.6% in both 2017Q1 and 2017Q2 as external demand is likely to dampen positive growth prospects from moderate domestic demand. Overall developed economies are performing below potential output but US is trending to close with this year 2017.

In 2017Q1 and 2017Q2, Chinese economy is foreseen to further slow to 6.6% and 6.5% respectively as stimulus may be waning, therefore continuing to threaten commodity markets. Sub-Saharan Africa growth rate decelerated to 1.6% by end 2016, the lowest growth seen since a decade but is estimated to slightly improve to 2.8% in 2017.

On the international commodity market, prices are expected to continue recovering for most commodities in 2017. According to World Bank, oil prices are foreseen to rise by 28.5% to around USD 55/barrel in 2017, reflecting continued market rebalancing and following OPEC's effort to squeeze oil supply. Responding to faster than expected mines closures, prices for metals are projected to increase in 2017. For agriculture commodities, outlook is expected to be erratic depending on supply conditions.

Similar trends have been traced by the International Monetary Fund which projected oil prices to grow by 9.7% and 1.4% respectively in 2017Q1 and 2017Q2.

Table 4: IMF commodity prices forecasts (in % change)

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4	2017
Spot Crude	-13.5	-22.4	36.7	-0.2	9.7	9.7	1.4	1.7	0.4	28.2
Metals and minerals										
Iron Ore	-15.8	2.0	16.0	4.8	20.8	11.1	-8.3	-6.1	-5.2	21.1
Tin	-1.0	2.4	9.5	10.0	12.0	1.7	-0.1	-0.3	-0.5	17.6
Beverages										
Tea	-6.2	-20.0	-13.4	13.2	13.6	4.1	0.0	0.0	0.0	17.1
Arabica	-1.6	0.0	5.1	9.5	1.0	-2.6	1.6	2.2	2.7	7.0
Robusta	-3.3	-6.6	10.1	8.9	7.7	4.5	0.2	0.4	0.2	18.1
Cereals										
Wheat	-9.2	0.2	-2.1	-19.4	-4.4	7.0	3.2	5.1	5.0	-2.5
Maize	-1.4	-4.3	7.0	-10.3	-0.8	2.8	1.9	2.9	3.0	1.9
Rice	-4.4	2.8	9.3	4.1	-12.6	0.0	3.7	2.9	1.8	-1.4
Barley	-3.7	-2.8	14.8	-4.6	-1.4	-6.6	0.0	0.1	0.0	-6.6

Source: <http://www.imf.org/external/np/res/commod/index.aspx>

Waning base effects of past drops in prices of commodities are anticipated to push upward inflation in short-term though weak activity continues to weigh on prices. As result, inflation is expected to go up to 1.7% in 2017 from 0.7% in 2016 in developed countries; but still lower compared to central bank targets. In USA, inflation is projected to continue rising over the medium term on rising energy prices and increasing labor related income gains. It is foreseen to 2.5% and 2.4% for the 2017Q1 and 2017Q2 respectively. In Eurozone, inflation is expected at 1.7% and 1.6% in 2017Q1 and 2017Q2 while in China, consumer prices are projected to rise by 2.1% and 2.2% over the same period.

With subdued inflationary pressures and lackluster economic activity, markets expect Central Banks in developed economies to remain accommodative for longer than previously anticipated with the only exception of United States. The latter started to gradually increase the fund rate on the back of positive economic data but the stance remains accommodative. Two up to three increases are expected in 2017.

On the foreign exchange markets, the dollar is expected to further strengthen in 2017 as strong December U.S. jobs and wage data support the case for the Fed to raise further interest rates during 2017 and even beyond. The strength of the greenback is likely to fuel pressures on currencies in emerging and developing economies which will be however moderated by gains in commodity exports.

On the balance, the still lower external demand and recovering metal and mineral prices may have a downside effect on Rwandan imported inflation. However, rising oil prices together with the strengthening of the greenback are pointing to higher oil import bill, putting more pressure on domestic pump prices. In addition, the exchange rate pass-through has increased since last year. Dry weather conditions in the region and in the horn of Africa are likely to fuel pressures on food prices. The joint effect of these developments on domestic prices is likely to maintain the current increasing trend in imported inflation.

II. DOMESTIC ECONOMY AND FINANCIAL DEVELOPMENTS

2.1 Domestic Demand and Output

Despite the challenging global economic environment, the Rwandan economy remained resilient and recorded good performance in 2016 as real GDP grew by 5.9%, though lower than 8.9% recorded in 2015. This good performance was mainly driven by the service sector which grew by 7.1% from 10.4% in 2015 and accounted for 48.4% of the total real GDP, followed by the industry sector (+6.8%) and agriculture sector (+3.9%) with respective shares of 17.3% and 27.2% in total real GDP.

2.1.1 Domestic demand

In 2016Q4, real GDP grew by 2.3% lower than 10.0% recorded in the same period of 2015, mainly attributed to household consumption which decelerated to 1.0% from 16.0% in 2015Q4, representing 78.7% of the total real GDP. The slowdown in household consumption was a result of the low performance of the agriculture sector in 2016Q4, which is also reflected in low growth of credit to the private sector. Total investment (gross fixed capital formation) declined by 13.0% after growing by 17.0% in 2015Q4. The construction sector, representing 69.7% of the total fixed capital formation, declined by 9.0% in 2016Q4 after a growth of 7.0% in 2015Q4.

Domestic demand in 2016Q4 was mainly buoyed by government consumption which increased by 15.0% after a deceleration of 13.0% in 2015Q4.

Table 5: Domestic demand (% change)

	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Gross Domestic Product	9.3	8.1	10.0	8.9	7.4	5.3	2.3
Total final consumption expenditure	13.0	9.0	15.0	3.0	11.0	2.0	3.0
Government	-6.0	7.0	13.0	10.0	0.0	13.0	15.0
Households and NGOs	18.0	10.0	16.0	2.0	13.0	0.0	1.0
Gross capital formation	16.0	28.0	17.0	30.0	6.0	15.0	-13.0
Gross fixed capital formation	18.0	28.0	17.0	30.0	8.0	16.0	-13.0
Construction	18.0	29.0	7.0	14.0	-8.0	14.0	-9.0
Change in inventories	-16.0	12.0	-5.0	41.0	-34.0	-16.0	-6.0
Exports of goods & serv.	9.0	1.0	3.0	8.0	8.0	17.0	19.0
Imports of goods & serv.	26.0	22.0	28.0	10.0	17.0	7.0	-2.0

Source: National Institute of Statistics of Rwanda

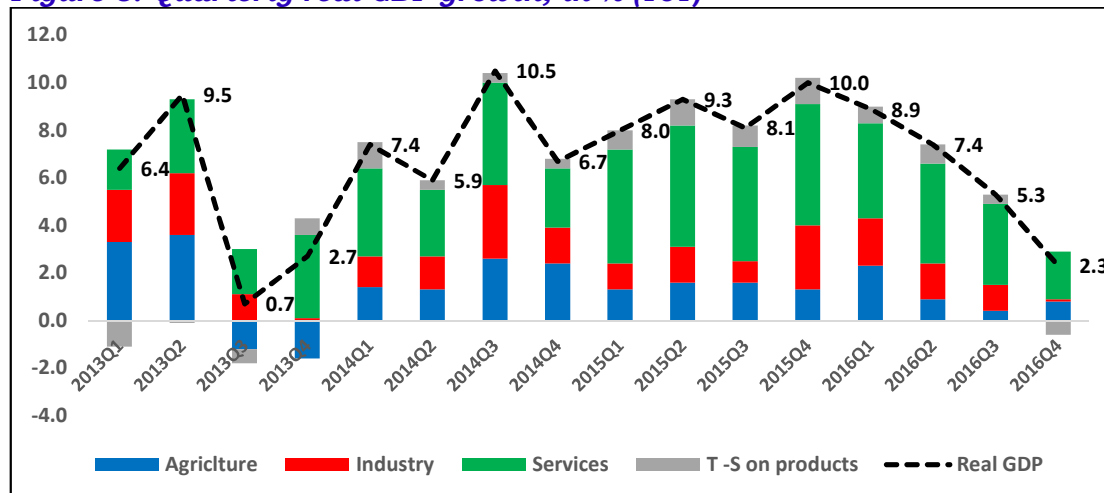
The net external demand (resource balance) continues to be weighed by imports of goods and services, and has remained in deficit in 2016Q4 (FRW -315 billion).

2.1.2 Economic performance by sector

The real GDP grew by 2.3% in 2016Q4 from 5.3% and 10.0% recorded in 2016Q3, and 2015Q4, respectively, mainly driven by the service sector (+4.0%) and agriculture sector (+3.0). The industry sector did not perform well in 2016Q4 (+1.0%) compared to the same quarter of the previous year (+16.0%) due to the decline in construction

sector which is the main contributor of the industry sector (+44%). The low performance was also attributed to the mining and quarrying sub-sector which recorded a negative growth (-1.0%) as a result of falling international prices basically for metals and minerals.

Figure 3: Quarterly real GDP growth, in % (YoY)



Source: NISR, BNR, Monetary Policy and Research Department

The performance of the industry sector was however supported by manufacturing and electricity sub-sectors. The manufacturing which is the second contributor to the industry sector (+34%) grew by 4.0% in 2016Q4 but lower than 8.0% recorded in 2015Q4. The electricity sub-sector expanded by 12.0% in 2016Q4 from 7.0% in the corresponding period of 2015 resulting from new plants such as KIVUWATT and MUKUNGWA 1 that boosted electricity production.

The service sector went up by 4.0% in 2016Q4 after 11.0% in 2015Q4, attributed mainly to real estate activities (+10.0%), followed by hotels and restaurants (+11.0%), and transport services (+4.0%). The slow pace in service sector compared to the same period of the previous year was a result of a decline in wholesale and retail trade (-8.0%) as well as financial services (-2.0%).

Leading economic indicators of economic activities; such as the composite index of economic activities (CIEA), total turnovers and new authorized loans, indicate a downward trend in 2016Q4 compared to the same period of the previous year. The CIEA, in real terms, increased by 5.7% in 2016Q4 against 10.5% in 2016Q3 and 15.3% recorded in 2015Q4. It also grew by 10.4% in nominal terms from 14.9% in 2016Q3 and 20.0% in 2015Q4.

Table 6: CIEA (% change, y-o-y)

CIEA	Nominal		Real	
	2015	2016	2015	2016
Q1	15.5	19.4	15.4	15.3
Q2	13.7	17.7	13.8	12.3
Q3	16.4	14.9	11.2	10.5
Q4	20.0	10.4	15.3	5.7

Source: BNR, Monetary Policy and Research Department

This downward trend is also confirmed by total turnovers which grew by 6.9% in 2016Q4 from 11.4% in 2016Q3 and 16.3% in 2015Q4.

Table 7: Turnovers (industry & services), % y-o-y change

	% change					
	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Total turnovers	12.7	16.3	12.1	10.2	11.4	6.9
Industries	5.3	14.8	13.4	4.2	18.2	-3.0
Mining and Quarrying	-47.1	-43.9	-48.2	-21.6	-11.4	-19.3
Manufacturing	22.4	15.2	24.9	5.0	9.5	5.6
Energy Sector	-18.6	19.5	57.5	73.5	57.1	27.8
Construction Sector	14.9	41.5	6.5	-6.0	31.0	-18.1
Services	15.6	16.8	11.4	12.3	9.0	11.0
Wholesale and retail trade	15.7	15.5	7.8	7.7	6.8	11.2
Petroleum distributors	24.7	19.5	9.4	4.2	4.7	9.4
Transport and Storage	4.5	8.4	12.8	25.6	23.2	28.3
Hotels and Restaurants	5.1	18.4	18.2	14.7	14.9	16.1
Information and Communication	7.3	6.7	11.4	30.0	-0.3	7.9
Banks	28.4	29.4	33.2	30.1	22.7	11.1
Real Estate Activities	40.3	57.4	-13.0	14.0	3.5	39.9

Source: BNR, Monetary Policy and Research Department

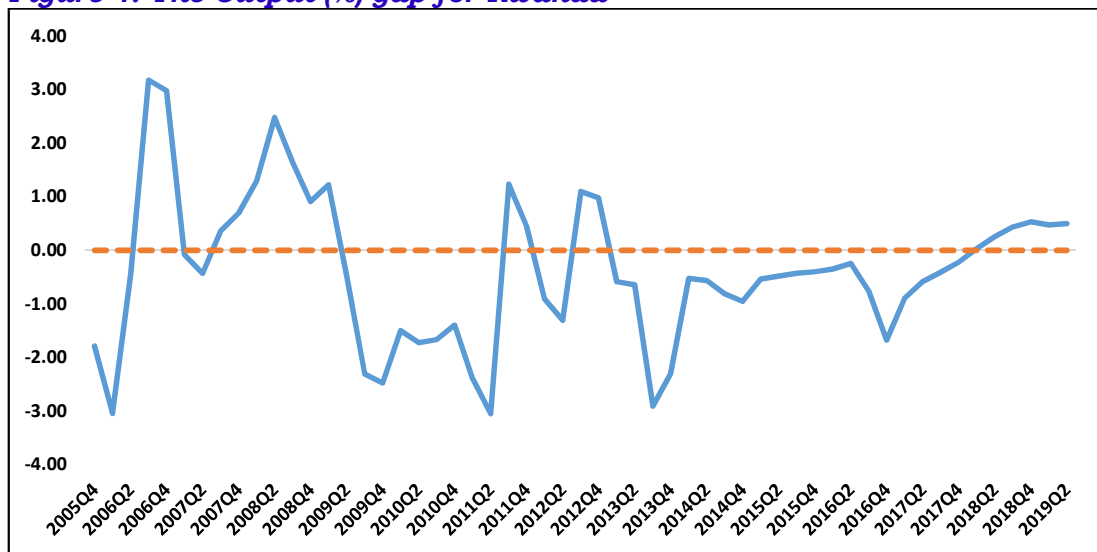
The slow pace in total turnovers resulted mainly from a decline in construction (-18.1% in 2016Q4 from 41.5% in 2015Q4), a continuous decrease in mining (-19.3% from -43.9%) and a slowdown in wholesale and retail sales (+11.2% from 15.5%). The total turnover's growth was mainly driven by the good performance in transport and storage (+28.3%), energy sector (+27.8%) and hotels & restaurants (+16.1%). The expansion in the transport and storage was mainly driven by RWANDAIR, which extended its businesses by acquiring three new aircrafts and introducing 6 new destinations. The energy sector continued to be supported by recent new plants namely, KIVUWATT, MUKUNGWA 1, NYABARONGO 1 and RUKARARA 1 and 2 which boosted electricity production. Petroleum distributors' turnovers accelerated to 9.4% from 19.5% in 2015Q4, thanks to the recent increase in local pump prices.

The slowdown in economic activities is also linked to the slow pace in credit to the private sector as new authorized loans declined by 1.2% in 2016Q4 to FRW 212.0 billion from FRW 214.6 billion in 2015Q4. They however increased by 6.3% end December 2016 after 13.6% in December 2015, amounting to FRW 788.5 billion from FRW 742.1 billion. Outstanding loans increased by 7.8%, to FRW 1,269.6 billion recorded end December 2016 from FRW 1,178.1 billion as of end December 2015, against 30.0% end December 2015.

2.1.3 The Output gap

The output gap is used to approximate the cyclical position of the Rwandan economy. In 2016Q4, the output gap shows a downward trend, where actual output was below its potential. It indicates the presence of the slowdown in economic activities mainly attributed to the industry sector. In the context of inflation, this below potential output gap shows weakness in domestic demand, hence no inflationary pressures from domestic demand.

Figure 4: The Output (%) gap for Rwanda



Source: BNR, Monetary Policy and Research Department

2.1.4 Outlook of the domestic demand and output

The Rwandan economy has remained resilient, with real GDP growing by 5.9% in 2016 after 8.9% in 2015. Real GDP is projected to grow by 6.2% in 2017, sustained by the expected improvement in prices of metals and minerals, the ongoing government measures such as the reduction in electricity tariffs by at least 28%, Government projects such as rehabilitation and construction of roads, and, the continued increase in cement production by CIMERWA.

The output gap shows that domestic demand is still low due to the slowdown in economic activities mainly attributed to the industry sector. Thus, no inflationary pressures are expected from the domestic demand side in the first and second quarters of 2017. However, since inflation continued to be high in the beginning of 2017 driven by high food prices, current inflationary pressures from food supply are expected to continue during 2017Q1 and 2017Q2 and outweigh non-inflationary pressures from the domestic demand.

2.2 Public Domestic Debt Developments

The stock of the Government domestic debt at the end of 2016Q4 amounted to FRW 476.1 billion, indicating an annual increase of 13.2% compared to the amount recorded in the last year's same period. The upsurge was largely contributed by non-banking sector holdings which expanded by 73.6% following the increased involvement in the government's security markets. Indeed the purchase of T-bills and development bonds by non-banking sector rose by 443.5% and 69.3% respectively compared to the same period in 2015.

Table 8: Sectoral Composition of Public Domestic Debt (billion FRW)

	2015		2016				Ann.% Change 2016Q4/2015Q4
	Q3	Q4	Q1	Q2	Q3	Q4	
BNR (excluding monetary instruments)	38.6	38.6	39.8	43.2	58.2	37.5	-2.8
Consolidated debt	38.6	38.6	38.1	38.1	38.1	37.5	-2.8
Overdraft	0	0	1.7	5.1	20.1	0	0
Banking Sector	253.7	268.6	282.4	279.4	246.6	242.1	-9.9
Development bonds	55.7	61.0	66.8	70.3	74.0	75.0	23.0
Bonds issued at MINECOFIN	0.8	0.4	0.4	0.4	0.4	0.2	-50.0
Treasury bills	197.2	207.2	215.2	208.7	172.2	166.9	-19.4
Non-Banking Sector	106.0	113.2	127.3	152.2	185.1	196.5	73.6
Development bonds	47.6	54.0	63.3	69.3	80.4	91.4	69.3
Consolidated debt to RSSB	48.5	40.4	39.4	38.3	36.3	35.2	-12.6
Bonds issued at MINECOFIN	0.9	0.9	0.9	0.9	0.9	0.9	0
Treasury bills (for treasury issues)	2.7	11.5	17.3	37.3	61.1	62.5	443.5
Other bonds for old arrears	6.4	6.4	6.4	6.4	6.4	6.4	0
TOTAL DOMESTIC DEBT STOCK	383.9	420.4	449.4	474.8	489.9	476.1	13.2

Source: MINECOFIN

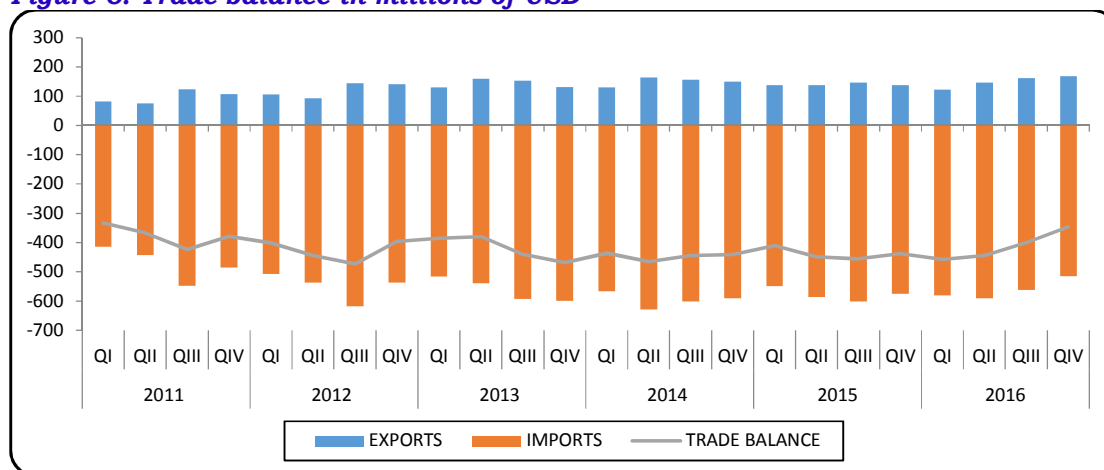
In terms of composition by type of creditors, the banking sector remains the main holder of the government overall outstanding debt with a total share of 50.9%, followed by non-banking sector with 41.3%. In terms of occupancy in securities market, non-banking sector has shown large involvement over this sector with an annual increase of 443.5% against the shortfall of 19.4% in T-bills market as well as 69.3% compared to 23.0% in development bonds. Indeed, most of these bank competitors making up the sector are their large depositors, and therefore their increased involvement is plausible in terms of mitigating the effect of crowding out of the private sector. In general, the overall growth in government domestic financing against the same last year's period is mostly accountable to increases in purchase of new development bonds and treasury bills by the non-banking sector.

2.3 External Sector Developments

2.3.1 Formal trade balance

Rwanda’s trade deficit reduced by 20.8% in 2016Q4, to a deficit of USD 347.04 million from a deficit of USD 438.00 million in 2015Q4 following an increase in formal exports value by 22.0% and a decrease in formal imports value by 10.5%. In 2016 compared to 2015, Rwanda’s trade deficit reduced by 5.9% as exports grew by 7.1% from a contraction of 6.8% in 2015. Despite this reduction, Rwanda’s trade balance remains in a deficit. Formal exports covered 32.6% of formal imports in 2016Q4 from 23.9% in 2015Q4.

Figure 5: Trade balance in millions of USD



Source: BNR, Monetary Policy & Research Department

2.3.1.1 Exports of goods

In 2016Q4, formal exports are dominated by re-exports with 37.5% of the total export earnings compared to 33.6% in 2015Q4, followed by traditional exports² with 36.8% of the total export earnings compared to 47.2% during the corresponding period of 2015, and non- traditional exports (25.7%).

Total exports recorded a growth of 22.0% in value (USD 167.98 million from USD 137.74 million in 2016Q4), after a decrease of 7.9% in 2015Q4, as a result of the high growth recorded by re-exports (+36.2%) and other exports (+63.3%). Exports volume also increased by 28.9% in 2016Q4, due to robust growth in re-exports (+49.8%) and other exports (+14.9%).

² composed of tea, coffee, pyrethrum, minerals as well as hides and skins

Table 9: Exports developments (annual % change)

	Volume				Value			
	2015Q3	2015Q4	2016Q3	2016Q4	2015Q3	2015Q4	2016Q3	2016Q4
Total exports	21.6	10.5	15.0	28.9	-6.8	-7.9	10.9	22.0
Main exports	-4.6	3.9	-11.4	0.0	-29.5	-21.4	-19.9	-5.0
Coffee	6.9	40.6	-18.4	6.7	-13.8	10.2	-14.6	6.4
Tea	9.0	-10.7	-8.5	3.4	61.1	32.5	-29.8	-8.4
Mining	-42.1	-22.8	0.5	-5.3	-55.5	-46.1	-17.9	-11.5
Cassiterite	-42.6	-28.1	-3.3	9.7	-61.6	-52.1	12.5	63.1
Coltan	-44.4	-20.1	-7.5	-37.0	-53.8	-42.0	-31.8	-44.4
Wolfram	-38.5	-12.2	17.8	0.8	-47.2	-52.5	-18.4	12.9
Hides and Skins	-23.2	-7.9	-2.6	-24.7	-34.5	-25.5	13.9	-12.6
Pyrethrum	349.8	141.2	-91.1	5.0	372.6	141.8	-91.5	3.5
Re-exports	81.1	60.3	24.6	49.8	60.8	27.6	15.0	36.2
Other exports	-1.6	-17.9	15.3	14.9	9.1	-13.8	89.8	63.3

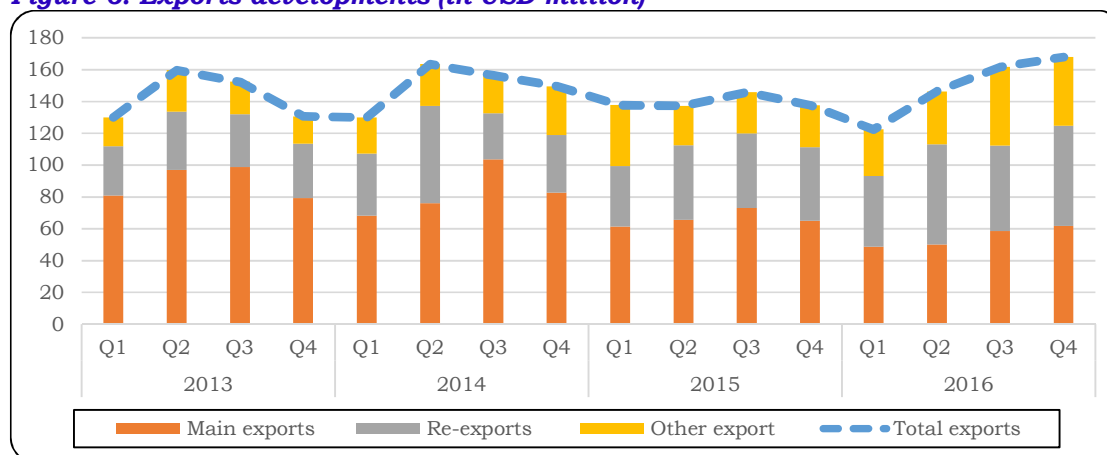
Source: BNR, Statistics Department

In 2016Q4, coffee exports increased by 6.7% in volume and by 6.4% in value due to the rise in the unit price by 0.1%, from USD 3.30/Kg to USD 3.31/Kg in 2016Q4. Tea exports increased in volume by 3.4% but decreased in value by 8.4% due to the fall in unit price (-11.4%) from USD 3.27/kg to USD 2.90/Kg.

The mining sector recorded a poor performance declining in both volume and value by 5.3% and 11.5% respectively, due to the fall in international mineral prices. For instance, Coltan declined by 37.0% in volume and by 44.4% in value due to the fall in its unit price by 11.8%. However, exports of Cassiterite increased in both volume and value by 9.7% and 63.1% respectively as its unit price rose by 48.6%. The rise in the unit price of wolfram by 12.1% led to an increase in its exports value by 12.9% and by 0.8% in volume.

Non-traditional exports (other exports) which are dominated by products of other minerals (+59.6%) and milling industry (+14.6%), representing 25.7% of the total formal exports highly increased by 63.3% in value and 14.9% in volume, mainly attributed to the rise in exports of other minerals (+248.1% in value and +57.5% in volume). The good performance of other minerals is mainly due to improving prices.

Re-exports increased by 36.2% in value and 49.8% in volume due to upsurge in re-exports of petroleum products (+50.1% in value and +80.7% in volume) as well as machines and engines (+130.7% in value and +49.6% in volume). Re-exports are dominated by petroleum products (+52.7%) mostly re-exported to Burundi, other re-exports (+38.1%) and machines and engines (+6.0%).

Figure 6: Exports developments (in USD million)

Source: BNR, Monetary Policy & Research Department

2.3.1.2 Imports of goods

In 2016Q4, formal imports decreased by 10.5% in value (to USD 515.02 million from USD 575.73 million), after an increase of 2.6% in the corresponding period of 2015, following the decline in the value and volume of all import components except consumer goods which increased by 13.9% in volume.

Table 10: Imports developments (annual % change)

	Volume				Value			
	2015Q3	2015Q4	2016Q3	2016Q4	2015Q3	2015Q4	2016Q3	2016Q4
Total imports	2.2	10.6	-5.6	-4.3	0.1	-2.6	-6.5	-10.5
Consumer goods	7.1	16.4	9.2	13.9	1.7	3.6	16.5	-2.8
Food product	5.2	16.0	15.5	25.8	-13.5	14.1	35.7	33.0
Health and care	-0.5	17.0	3.6	-12.4	-15.9	12.6	18.6	-28.4
Domestic articles	7.2	0.8	84.1	-17.8	26.6	4.4	124.8	-27.2
Capital goods	29.1	18.6	-15.5	-25.9	9.5	7.0	-10.4	-14.8
Transport Material	49.8	61.2	-9.4	-42.1	26.8	5.4	6.2	-22.7
Machines, devices and tools	41.9	18.6	-15.8	-22.4	10.3	13.4	-8.8	-19.3
Intermediary goods	-2.1	4.3	-18.7	-16.8	1.7	-6.8	-20.8	-15.5
Construction material	-0.9	0.2	-25.9	-30.8	21.8	-9.0	-36.8	-25.8
Industrial products	-17.6	19.1	5.4	-4.7	-19.1	1.0	-7.7	-16.7
Fertilizers	62.1	-32.8	-51.9	62.0	56.3	-29.6	-66.4	36.7
Energy and lubricants	1.0	17.1	7.4	-1.6	-20.8	-24.7	-14.5	-7.5
Petroleum products	-0.5	-0.1	0.5	-3.9	-26.5	-25.3	-15.8	-8.7
Trade deficit					-455.5	-438.0	-400.4	-347.0
Imports cover (ratio of exports to imports)					24.3	23.9	28.8	32.6

Source: BNR, Statistics Department

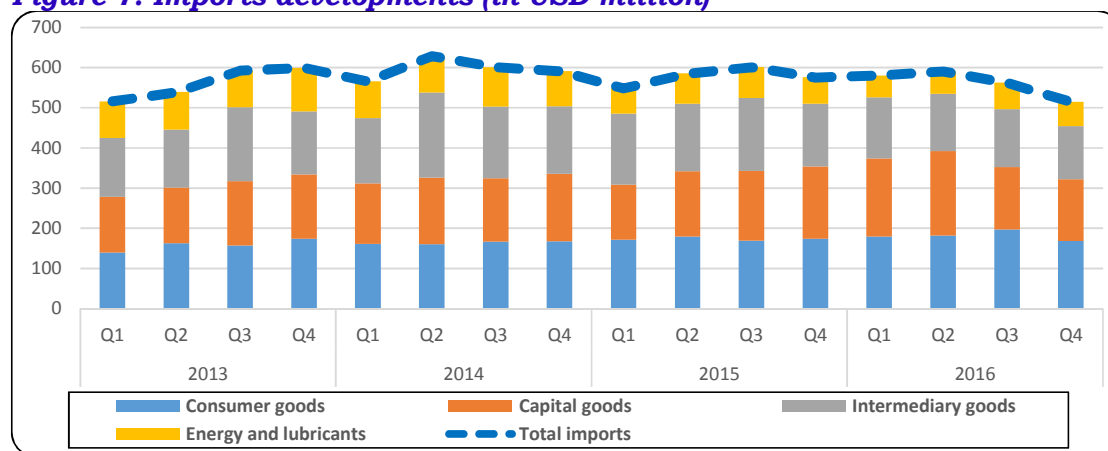
In 2016Q4, the increase in volume of imported consumer goods, resulted from food products which increased by 13.9% with a share of 40.4% in volume. Despite a high increase of food products in value (+33.0%), imports of consumer goods declined by 2.8% in value, mainly attributed to the fall in imports of health care products (-28.4%), beverage and tobacco (-6.3%), domestic articles (-27.2%) and article of clothing (-32.2%) mainly due to the Government policy to promote made in Rwanda.

Capital goods dominated by machines, devices and tools as well as transport materials which account for 29.8% of the total formal imports decreased in both volume and value by 25.9% and 14.8% respectively, mainly due to the low imports of machines and devices (-22.4% in volume and -19.3% in value), as well as imports of transport materials which decreased by 42.1% in volume and by 22.7% in value.

Intermediary goods, dominated by construction materials, industrial products, and fertilizers, decreased in volume by 16.8% and in value by 15.5%. The decrease was mainly due to the low imports of construction materials which decreased by 30.8% in volume and by 25.8% in value, driven by the fall in imported cement and other similar products which represent 68.0% of the total imports of construction materials. In fact, imports of cement and other similar products decreased in both volume and value by 35.0% and 33.8% respectively as a result of increased domestic production (+33.3%). Industrial products also decreased in both volume and value by 4.7% and 16.7% respectively.

Imports of energy and lubricants decreased by 1.6% in volume and by 7.5% in value, due to the decline in prices of imports of petroleum products which decreased by 8.7%.

Figure 7: Imports developments (in USD million)



Source: BNR, Monetary Policy & Research Department

2.3.2 Formal Trade with EAC Countries

In 2016Q4, Rwanda’s exports to other EAC member countries, which represent 23.1% of the total exports increased by 15.8% from an increase of 11.4% in the corresponding period of 2015, amounting to USD 38.8 million from USD 33.5 million in 2015Q4. Imports from EAC countries decreased by 22.9%, from USD 149.9 million recorded in 2015Q4 to USD 115.6 million in 2016Q4. As a result, the trade deficit reduced by 33.9%, to USD 76.9 million in 2016Q4 from USD 116.4 million in the corresponding period of 2015.

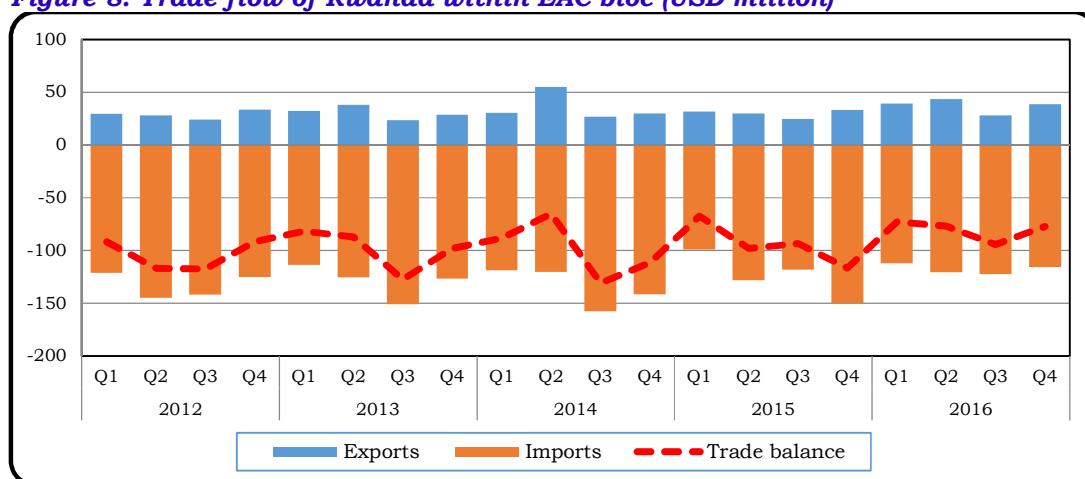
Table 11: Trade flow of Rwanda within EAC bloc

	Description	2015Q3	2015Q4	2016Q3	2016Q4
Exports to EAC	Value in USD millions	24.9	33.5	28.1	38.8
	% change	-7.4	11.4	12.8	15.7
	Share of total formal exports	17.1	24.3	17.4	23.1
Imports from EAC	Value in USD millions	118.1	149.9	122.1	115.6
	% change	-25.0	6.0	3.4	-22.9
	Share of total formal imports	19.6	26.0	21.7	22.4
Trade balance	In USD millions	-93.2	-116.4	-94.0	-76.9

Source: BNR, Statistics Department

Rwanda’s main exports to other EAC member countries remain tea (sold at Mombasa commodity exchange), raw hides and skins of bovine, coffee, bars and rods of iron or non-alloy steel, leguminous vegetables, telecommunication equipment and beer. With regard to imports, the main products are refined and non-refined palm oil and other cooking oils, sugar cane, vegetable fats, animals, minerals or chemical fertilizers and clothing.

Figure 8: Trade flow of Rwanda within EAC bloc (USD million)



Source: BNR, Monetary Policy & Research Department

2.3.3 Informal cross-border trade

Accounting for 22.7% of formal exports, Rwanda’s informal cross-border exports with neighbouring countries decreased by 23.7%, amounting to USD 25.0 million in 2016Q4 from USD 32.7 million in the same period of 2015. In terms of share, exports to the Democratic Republic of Congo (DRC) represent a big share of 87.5% of the total informal cross border exports, followed by exports to Uganda with 7.2%, while exports to Burundi and Tanzania account for 5.2% and 0.02% respectively.

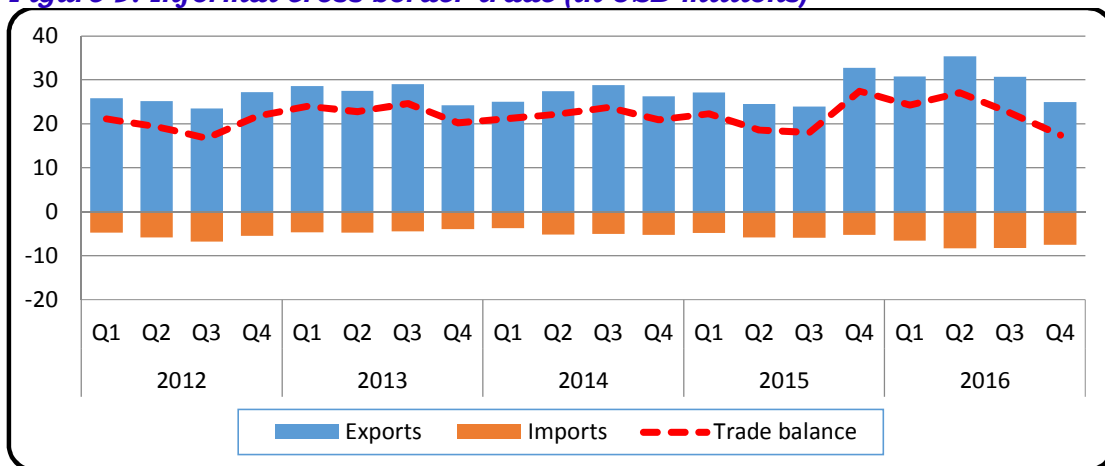
Table 12: Rwanda informal cross border trade

		2015Q3	2015Q4	2016Q3	2016Q4
Exports	Value in USD millions	24.0	32.7	30.8	25.0
	% change	-16.8	24.7	28.3	-23.7
	Share of total formal exports	16.4	23.8	19.0	14.9
Imports	Value in USD millions	5.9	5.3	8.2	7.5
	% change	16.3	-0.1	39.8	42.9
	Share of total formal imports	1.0	0.9	1.5	1.5
Trade balance	In USD millions	18.1	27.5	22.5	17.5

Source: BNR, Statistics Department

Informal imports increased by 42.9% in 2016Q4, to USD 7.5 million from USD 5.3 million in 2015Q4. Rwanda’s informal trade surplus with neighbouring countries decreased by 36.4%, from USD 27.5 million in 2015Q4 to USD 17.5 million in 2016Q4. The main trading partners are Uganda, Burundi and Democratic Republic of Congo (DRC) with shares of 69.1%, 20.8% and 7.7% respectively.

Figure 9: Informal cross border trade (in USD millions)



Source: BNR, Monetary Policy & Research Department

2.3.4 The exchange rate: bilateral and effective

The Rwandan franc depreciated by 9.7% end December 2016 (trading for FRW 819.79 per dollar against FRW 747.41 end December 2015) compared to a depreciation of 7.6% end December 2015. In the same period, the FRW depreciated by 5.3% versus the EURO but appreciated by 9.2% against the British Pound (GBP). It also depreciated by 9.6%, 8.6% and 2.3% against the Kenyan, Tanzanian and Ugandan shillings respectively while it appreciated by 0.2% against the Burundian franc. For the last twelve years since 2004, the Rwandan Franc has recorded the highest depreciation in 2016.

Table 13: Appreciation/Depreciation rate of selected currencies against the FRW

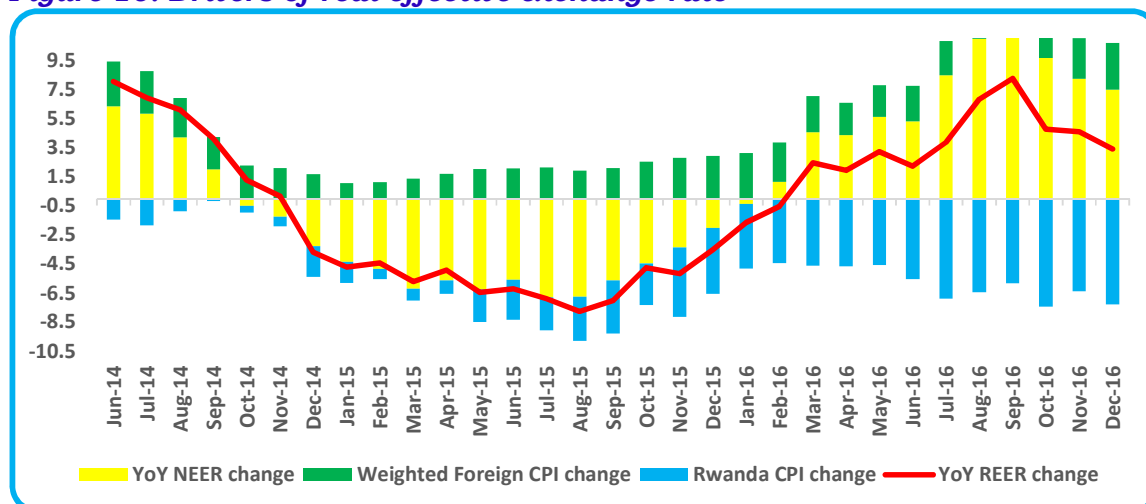
	USD/FRW	GBP/FRW	EUR/FRW	KES/FRW	TZS/FRW	UGS/FRW	BIF/FRW
Dec-13	6.1	8.0	10.2	5.3	6.2	11.7	4.9
Dec-14	3.6	-2.4	-8.5	-2.8	-7.0	-6.7	1.0
Dec-15	7.6	2.8	-3.2	-4.6	-13.5	-11.6	10
Mar-16	2.8	-0.2	6.3	3.9	1.4	2.8	1.5
Jun-16	4.8	-5.0	6.6	6.1	3.3	3.7	-3.7
Sep-16	8.4	-5.1	11.3	9.5	7.1	8.0	-0.5
Dec-16	9.7	-9.2	5.3	9.6	8.6	2.3	-0.2

Source: BNR, Monetary Policy and Research Department

Pressure from the demand for forex was mostly driven by the wide mismatch between imports and exports, as well as increased demand from different companies and government projects under Public Private Partnership (PPP) framework, like KIVUWATT, POSITIVO and RWANDAIR. Aiming to support commercial banks to meet some of the market needs, BNR increased its forex sales by 19.7%, from USD 273.5 million in December 2015, to USD 327.5 million in December 2016, and consequently this has contributed in reducing the most liquid assets in the banking system.

Looking at the basket of currencies for Rwanda's main trading partners, it is worth mentioning that by end December 2016, the FRW real effective exchange rate depreciated by 3.4% (y-o-y) after a depreciation of 8.3% end September 2016 and an appreciation of 3.5% end December 2015, while in nominal effective terms, it depreciated by 7.5% compared to an appreciation of 2.0% end December 2015. This trend implies increasing pass through to imported inflation.

Figure 10: Drivers of real effective exchange rate



Source: BNR, Monetary Policy and Research Department

2.4 Monetary and Financial Developments

2.4.1 Money Supply and Demand

The broad money expanded at low pace end 2016Q4 compared to end 2015Q4 mainly due to a slowdown in net domestic assets while net foreign assets recovered. The currency in circulation growth slowed down end 2016Q4 compared to end 2015Q4. Its ratio in broad money continue to decline on account of payments system modernization, extension of banking sector network and microfinance institutions. Total deposits also decelerated end 2016Q4 compared to end 2015Q4 as result of a slowdown in economic activities

2.4.1.1 Money Supply

The broad money M3 expanded by 7.5% end 2016Q4 against 21.1% recorded end 2015Q4. This deceleration in money supply end 2016Q4 is due to a reduction in the growth of net domestic assets (NDA) to 1.7% compared with 57.3% end 2015Q4 mitigated by an increase in NFA by 15.0% end 2016Q4 against a contraction of 6.9% realized in 2015Q4.

The deceleration in NDA end 2016Q4 followed a reduction in NCG by 74.2% to FRW 10.2 billion compared to the increase of 286.1% and a slowdown in CPS growth to 7.8% from 30% end 2015Q4.

The decline in NCG end 2016Q4 is a result of a reduction in government borrowing from the banking system. Actually Government borrowed more from non-banking investors whose share increased to 40.3% end 2016Q4 from 20.4% end 2015Q4. The slowdown in CPS is linked to the deceleration in economic activities.

Table 14: Monetary aggregates (FRW billion)

	2014	2015		2016				% change	
	Q4	Q3	Q4	Q1	Q2	Q3	Q4	2015Q4/ 2014Q4	2016Q4/ 2015Q4
Net foreign assets	690.4	560.1	642.6	559.3	567.5	546.7	739.2	-6.9	15.0
Foreign assets	890.9	780.8	860.8	769.7	890.0	872.6	1078.2	-3.4	25.3
Foreign liabilities	200.5	220.7	218.1	210.5	322.5	325.9	339.0	8.8	55.4
Net domestic assets	533.5	857.9	839.5	920.7	1004.9	954.1	853.5	57.3	1.7
Domestic credit	897.0	1203.3	1223.1	1328.0	1436.3	1393.9	1323.6	36.4	8.2
Central government (net)	-21.2	98.7	39.5	73.2	124.4	47.7	10.2	286.1	-74.2
Credit	222.3	323.0	304.1	315.7	318.3	299.9	284.5	36.7	-6.4
Deposits	243.6	224.4	264.6	242.5	193.9	252.2	274.3	8.6	3.7
Public enterprises	11.9	9.3	5.6	35.4	40.3	40.6	43.7	-53.2	682.6
<i>O/W in foreign currency</i>	<i>6.1</i>	<i>4.6</i>	<i>1.3</i>	<i>12.8</i>	<i>17.6</i>	<i>17.3</i>	<i>21.7</i>	<i>-79.4</i>	<i>1623.2</i>
Private sector	906.3	1095.4	1178.1	1219.5	1271.6	1305.6	1269.6	30.0	7.8
<i>O/W in foreign currency</i>	<i>63.6</i>	<i>95.6</i>	<i>134.9</i>	<i>171.0</i>	<i>196.5</i>	<i>215.5</i>	<i>163.0</i>	<i>112.1</i>	<i>20.8</i>
Other items net (Assets: +)	-363.5	-345.4	-383.7	-407.3	-431.4	-439.8	-470.0	5.5	22.5
Broad money M3	1223.9	1417.9	1482.1	1479.9	1572.4	1500.8	1592.7	21.1	7.5
Currency in circulation	118.5	122.0	142.6	133.0	150.8	133.6	145.9	20.3	2.3
Deposits	1105.3	1295.9	1339.5	1347.0	1421.6	1367.2	1446.8	21.2	8.0
O/W Demand deposits	456.2	578.9	614.6	617.8	640.0	548.4	587.9	34.7	-4.3
Term deposits	407.3	461.1	469.0	472.8	512.4	523.0	530.4	15.1	13.1
Foreign currency deposits	241.8	255.9	255.9	256.4	269.2	295.8	328.5	5.8	28.4

Source: BNR, Statistics Department

In 2016Q4, new authorized loans, in 2016Q4 reduced by 1.2% to reach FRW 212.0 billion from FRW 214.6 billion in 2015Q4 while increasing by 41.6% compared to 2016Q3. The high increase in 2016Q4 compared to the previous quarter is due the financing of some big projects, especially credit to fixed assets for electricity generation and a big loan to a company producing construction materials.

Considering the whole year 2016, the new authorized loans growth decelerated to 6.3% from 13.7% recorded in 2015. The deceleration recorded in 2016 was mainly explained by a decline in new loans to public works and building (17.8%) as well as transport, warehousing & communication (29.9%) from + 71.5% and +27.5% respectively recorded in 2015. This development in new authorized loans is in line with a slowdown in economic activities.

Table 15: New authorized loans by sector (FRW billion, unless otherwise indicated)

Activity sector	2014	2015		2016			% Change			
	Total	Q4	Total	Q3	Q4	Total	2015/ 2014	2016/ 2015	Q4-16/ Q3-16	Q4-16/ Q4-15
Non-classified Activities	62.6	18.9	67.1	19.5	20.4	77.7	7.3	15.8	4.5	7.9
Agricultural, Fisheries& Livestock	8.8	2.9	13.9	3.0	2.2	11.5	58.1	-17.5	-26.4	-23.7
Mining Activities	0.2	0.0	0.3	0.1	0.0	1.8	44.6	448.3	-87.2	-
Manufacturing Activities	72.5	21.4	51.2	6.3	21.8	63.9	-29.3	24.6	245.3	1.8
Water & Energy Activities	25.6	0.04	1.3	0.1	16.6	24.7	-94.9	1800.6	17113.3	41400.0
Public works and building	138.4	67.4	237.1	49.5	55.6	195.0	71.3	-17.7	12.1	-17.6
Commerce, Restaurant and Hotels	272.1	76.7	279.7	55.9	76.6	348.6	2.8	24.6	36.9	-0.2
Transport & Warehousing & Communication	42.2	18.0	54.1	9.2	9.9	37.7	28.2	-30.2	7.7	-45.2
OFI & Insurances and Other Non-financial Services	4.5	1.8	4.8	1.2	1.1	5.8	6.8	21.6	-5.5	-36.4
Services provided to the Community	26.1	7.6	32.6	4.9	8.0	21.8	24.6	-33.1	60.9	5.2
Total	653.0	214.6	742.1	149.8	212.0	788.5	13.7	6.3	41.6	-1.2

Source: BNR, Financial Stability Directorate

2.4.1.2 Money demand

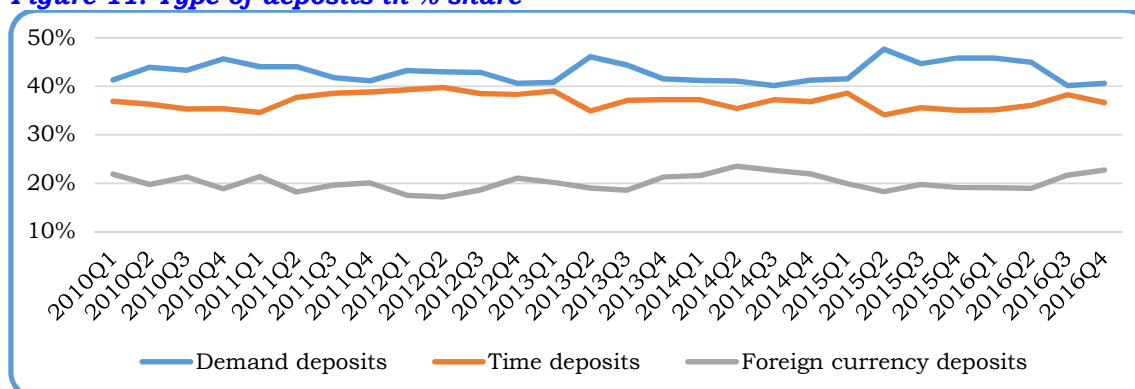
Currency in circulation (CIC) expanded by 2.3% y-o-y end 2016Q4 against +20.3% recorded end 2015Q4.

The currency to broad money ratio continued to decline since the recent past, averaging to 9% in 2016 from 12% in 2012. It also decreased to 9.2% end 2016Q4 from 9.6% end 2015Q4. The extension in banking sector network, microfinance institutions, payments system modernization remain the main cause of this trend.

The total bank deposits growth slowed to 8% end 2016Q4 compared to 21.2% end 2015Q4 reflecting a deceleration in economic activities.

Demand deposits reduced by 4.3% end 2016Q4 compared to an increase of 34.7% end 2015Q4, while term deposits expanded by 13.1% from 15.1%, foreign currency deposits grew by 28.4% from 5.8% mainly due to domestic currency depreciation and improvement in exports earnings.

The share of demand deposits as proportion of total deposits continued to dominate with 41% end 2016Q4 while term deposits stayed around 37% and foreign currency deposits 23% versus 46%, 35% and 19% respectively recorded end 2015Q4.

Figure 11: Type of deposits in % share

Source: BNR, Statistics Department

Considering the deposits by category of depositors, Households and non-profit Institutions Serving Households (NPISHs) continued to dominate with a great share of 47.9% end 2016Q4 followed by other non-financial corporations (26.4%), social security funds (14.9%), other financial institutions (7.0%) and public enterprises. (3.8%)

Table 16: Deposits by category of depositors in % share

	2012	2013	2014				2015				2016			
	Q4	Q4	Q3	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Other financial institutions	7.8	7.2	6.4	6.2	6.4	6.5	6.6	7.3	9.0	9.3	8.3	8.4	7.4	7.0
Social Security Funds	11.6	15.1	16.2	15.9	15.6	15.2	17.2	16.3	15.7	15.8	16.3	14.9	15.7	14.9
Public enterprises	2.5	2.4	2.4	2.4	2.3	2.8	4.0	3.8	4.7	4.2	5.0	4.2	3.6	3.8
Other non-financial corporations	28.5	27.3	27.4	31.6	28.5	29.8	27.2	28.8	27.7	25.9	25.9	26.0	25.0	26.4
Households and NPISH	49.6	48.0	47.5	44.0	47.2	45.7	44.9	43.7	42.9	44.9	44.5	46.6	48.2	47.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: BNR, Monetary Statistics Department

2.4.2 Banking system liquidity developments

During the fourth quarter of 2016, the banking system liquidity conditions were still tight in comparison with their level during the same quarter last year. Banks' most liquid assets fell by 13.0 billion standing at FRW 263.6 billion end 2016Q4 from FRW 302.9 billion recorded in the corresponding period of 2015. As for other monetary aggregates, this decline was mainly attributed to the slowdown in economic activities in combination of continued foreign exchange interventions.

Table 17: Most liquid assets of commercial banks (FRW billion)

	2014	2015				2016				% change	
	Q1	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q4-15/ Q4-14	Q4-16/ Q4-15
T-bills	172.3	173.4	206.5	218.0	225.1	232.7	214.0	180.3	177.7	30.6	-21.1
Repo	47.5	46.0	78.5	15.0	26.5	15.0	34.0	0.0	30.5	-44.2	15.1
Excess reserves	17.2	20.8	20.8	29.1	17.1	20.7	31.7	20.5	24.5	-0.6	43.3
Cash in vault	35.4	32.2	30.9	31.2	34.2	30.5	32.0	28.3	30.8	-3.4	-9.9
Total	272.4	283.0	336.7	293.3	302.9	298.8	311.7	229.2	263.6	11.2	-13.0

Source: BNR, Monetary Policy & Research Department

2.4.3 Interest rates developments

During the period under review money market interest rates increased in line with the banking liquidity conditions. T-bills, repo and interbank interest rates soared respectively to 8.79%, 5.10% and 6.61% on average end quarter four 2016 from 6.88%, 3.53% and 4.97% during the corresponding quarter of 2015.

Table 18: Interest rates developments (Quarterly average in %)

	2014	2015				2016				2016			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Sept	Oct	Nov	Dec
Key Repo Rate	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.42	6.50	6.50	6.50	6.25
Discount Rate	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.42	10.50	10.50	10.50	10.50
Repo rate	3.26	2.29	1.99	1.97	2.01	3.53	3.26	4.43	5.10	4.73	5.28	5.00	5.02
T-Bills Rate	5.10	4.49	4.05	4.59	5.69	6.88	7.10	7.93	8.79	8.22	8.67	8.68	9.02
Interbank Rate	5.38	4.04	3.45	5.49	3.54	4.97	5.81	6.17	6.61	6.67	6.61	6.61	6.61
Deposit Rate	7.75	8.37	8.50	8.21	7.87	7.70	8.22	8.04	7.70	8.24	7.08	8.01	8.01
Lending Rate	17.28	17.44	17.49	17.31	17.10	17.12	17.17	17.53	17.35	17.36	17.27	17.57	17.21
Spread	9.53	9.07	8.99	8.21	9.23	9.42	8.95	9.49	9.65	9.12	10.19	9.56	9.20

Source: BNR, Monetary Policy and Research Department

With regards to market rates, lending rate increased slightly to 17.35% on average in 2016Q4 from 17.10% in 2015Q4, while deposit interest rates declined slightly to an average of 7.70% in 2016Q4 from 7.87% recorded in the same quarter of 2015.

2.4.4 Outlook for liquidity conditions

The money supply M3 is projected to grow moderately in 2017Q1 thus its impact on inflation will ease.

In 2017Q1, new authorized loans will remain in the same range as in the same period in 2016 based on the observed trend over the past first two months of 2017 and big projects that have ended in 2016.

The liquidity in commercial banks likely to slow down as a result of a projected decline of 4.8% in government spending and liquidity withdrawal through taxes which projected to increase by 20.1% in 2017Q1.

The development of interbank market is projected to reduce the liquidity in banking system and therefore put pressure on interest rates.

2.4.5 Financial stability analysis: tracking key indicators

In 2016Q4, the financial sector which is dominated by the banking sector, remained resilient and stable, as evidenced by key performance indicators. In particular, the ended quarter left the banking sector profitable and capitalized amidst challenging domestic and international economic environment. The Herfindahl Hirschman index (HHI) stood at 0.14, which is below the 0.18 threshold under which the market is considered to be moderately concentrated. An indication that the banks market structure is moderately competitive. This level of competition has been reached following entry of new banks into the market, the expansion of banks outreach services as well as the implementation of legal reforms that provided favorable environment for financial services.

The banking sector's assets continued to expand though at a slower pace compared to the last year's corresponding quarter, growing by 11.5% (yoy) against 18.3% that had been registered. The lower growth in total assets of banks was mainly attributable to slower growth of loans in 2016Q4 by 14.6% lower than 21.5% recorded in 2015Q4. The lower pace was mainly due to a deceleration in financing of public works and building industry as well as transport, ware housing and communications sectors by 18% and 45%, down from growth of 78% and 55% in 2015Q4 respectively. In general, this resulted from slower growth in economic activities. The banks investment in government securities, with a share of 8.5% of the total assets, fell by 15.5% compared to high growth of 35.5% recorded in 2015Q4.

Table 19: Banking sector performance (in billions FRW)

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	% change (YoY)
Total assets	2,132.5	2,183.5	2,278.1	2,247.3	2,377.9	11.5
Total deposits	1,417.9	1,445.2	1,507.0	1,437.1	1,528.1	7.8
Loans (on balance sheet)	1,227.9	1,289.9	1,322.6	1,392.4	1,406.7	14.6
Profit after tax	43.1	10.0	19.4	32.1	40.3	-6.5
Government Securities	239.8	246.7	229.2	206.5	202.7	-15.5

Source: BNR, Financial Stability Directorate

Concerning the banks' liabilities, deposits represent 79% of the total banks' liabilities by end 2016Q4 and are largely dominated by demand deposits. However, the term deposits have recorded a high growth of 18.1% (yoy) up from 8.2% registered in 2015Q4, a good progress to the banks' growing capacity to finance loans on long-term maturities.

Regarding the soundness of the sector, the banks' assets quality remains sound as at end 2016Q4 despite a rise of non-performing loans ratio (NPLs) to 7.5% from 6.2% recorded in 2015Q4, pointing to the slowdown in economic activities.

The banks' quarterly growth in return on average assets (ROA) and return on Equity (ROE) respectively stood at 1.7% and 9.2% lower than 2.1% and 11.2% recorded in 2015Q4. This slowdown in growth of the sector's profitability was largely due to high overhead costs to income ratio which increased by 50.0% as well as the increase in interest expenses on banks term deposits by 18% by the end of 2016. This lower profitability growth depressed the buildup of capital buffers and accessing bank financing services, thus adversely impacting credit supply, as well as the growth of the real economy.

However, the preparedness of banks to absorb unexpected shocks on their balance sheets before becoming insolvent shows that the industry remains resiliently above the current regulatory requirement. Particularly the capital adequacy ratio (CAR) stood at 21.8% by end 2016Q4 and has been well above the BNR minimum regulatory requirement of 15%. Similarly, the Tier 1 which is a measure of high quality capital stood at 19.9% above the minimum prudential requirement of 10%. This largely follows the increased desires for capital investments in loans and other risk weighted assets by banks.

The banking liquidity ratio stood at 42.5% in 2016Q4 which is slightly above twice the minimum prudential liquidity ratio of 20%. This buffer provides the assurance of the depositors' protection as well as the stability of the banking system.

Table 20: Key Financial soundness indicators, (in %)

Indicator	2015				2016			
	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
Solvency ratio (total capital)	25.9	24.3	24.2	22.5	24.9	23.3	22.1	21.8
NPLs / Gross Loans	6.3	5.9	6.3	6.2	6.2	7.0	7.4	7.5
NPLS net of interests/Gross loans	4.8	4.9	5.1	5.2	5.2	5.9	5.8	5.9
Provisions / NPLs	52.3	51.5	48.3	46.2	46.0	42.7	43.5	42.0
Large Exposures / Gross Loans	19.3	22.5	20.9	23.4	22.6	25.6	29.9	30.8
Return on Average Assets	2.7	2.4	2.3	2.1	1.9	1.7	1.9	1.7
Return on Average Equity	14.0	13.1	12.7	11.2	9.8	9.2	10.1	9.2
Cost of deposits	3.1	3.1	3.1	3.2	3.7	3.6	3.6	3.7
Overhead to Income	43.6	46.0	46.2	46.8	49.1	49.9	49.5	50.0
Liquid assets/total deposits	46.0	49.5	46.8	45.8	43.9	42.8	42.3	42.5
Forex exposure/core capital (min/max 20%)	-5.5	-7.1	-7.9	-5.7	-6.7	-1.8	-6.3	-7.1

Source: BNR, Financial Stability Directorate

2.4.5 Financial stability and monetary policy outlook

The ended quarter left the banking sector profitable and capitalized though at lower levels compared to the preceding quarters. The future resilience of the banking system is ensured following regulatory reforms undertaken to strengthen on and off site supervisory capacities which are expected to reinforce compliance with prudential norms. Through a supportive monetary policy stance, the BNR will continue stimulating changes in aggregate demand by stimulating credit growth

while continuing to keep an eye on the real economy to curb the likely adverse effects on debt servicing capacities of the economic actors.

The leading indicators of economic activities show that the real growth of the economy will slightly improve as projected at 6.2% in 2017 up from 6.0% estimated in 2016. Largely supported by projected recovery in agriculture sector facilitated by favorable weather conditions projected. This recovery is likely to improve economic standards of households and corporate sectors as well as increasing the number of loan applications and debt servicing capacity of banks debtors. In addition, the government's continued support to promote made in Rwanda initiative, the trade balance is expected to improve following the expected slowdown in import demand against the expected increase in export volume and recovery in international commodity prices.

At the same time, BNR is expected to continue implementing its prudent monetary policy to ease the growth of loans to private sector through banking system. While with its regulatory mandate will continue keeping an eye on their growth against that of the real economy to curb the likely adverse effects on debt servicing capacities of the economic actors. As result, inflation and exchange rate pressures are expected to ease, loans to private sector are projected to expand while the ratio of NPLs is expected to shorten following the expected improvement in debt servicing capacity of economic actors. The resilience of banking system is also expected to strengthen largely due to the enforcement of the new capital and liquidity requirement (Basel II/III compliant). This will also be helped by the new banking law that will facilitate the enactment of associated regulations in a bid to bring about the dynamism in the banking system, along with the regulation on banks disclosure of financial statements.

III. INFLATION DEVELOPMENTS AND OUTLOOK

3.1 Current Inflation Developments

In 2016Q4, headline inflation in Rwanda increased to 7.0% from 6.4% in 2016Q3, mainly driven by rising food prices and transport costs, which altogether account for 46% of the CPI basket. Inflation for housing, which accounts for 23% of the CPI basket eased from 2.2% in 2016Q3 to 1.2% in 2016Q4, helping to minimize inflationary pressures. The decline in housing inflation was due to the ease in solid fuels inflation from 4.9% in 2016Q3 to 1.9% the following quarter. The same factor also led to the eased in energy inflation.

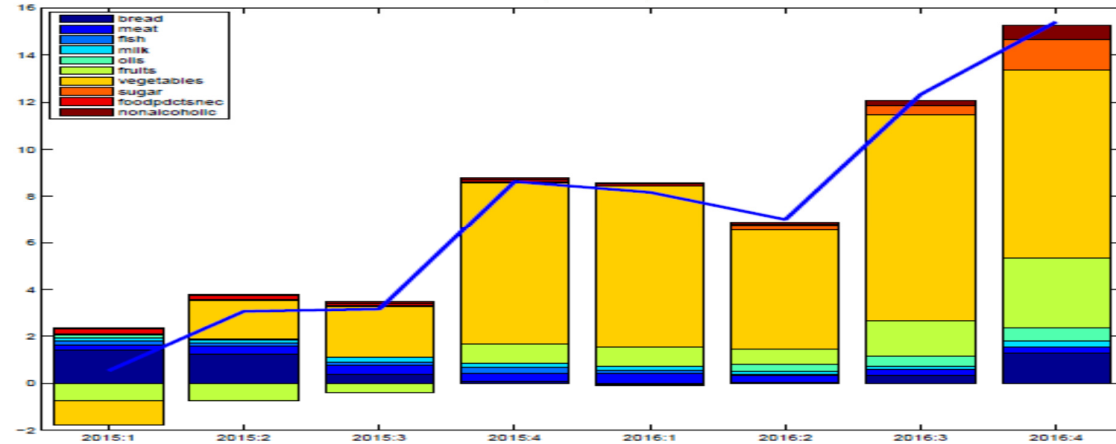
Table 201: Inflation developments (% , y-o-y)

	2014Q1	2014Q2	2014Q3	2014Q4	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Headline	3.1	2.0	0.9	1.1	1.0	2.0	3.0	4.1	4.5	4.9	6.4	7.0
Domestic	3.3	2.5	1.0	0.9	1.4	2.3	3.1	5.2	5.3	5.2	6.7	6.9
Food	4.2	2.9	-0.3	-1.9	0.5	3.1	3.2	8.6	8.2	7.0	12.3	15.4
- vegetables	2.9	-0.9	-8.4	-10.0	-2.9	4.5	6.0	19.2	19.2	14.2	24.5	22.3
- Bread	-0.6	1.4	7.7	7.3	7.6	6.7	2.0	0.3	-0.3	0.2	1.8	6.9
- Sugar	-4.3	-9.0	-6.4	-4.3	0.2	1.0	1.5	1.3	-0.5	4.6	10.1	30.6
- Fruits	20.1	19.5	7.6	-0.7	-6.2	-6.1	-3.5	6.8	6.9	5.4	12.5	25.2
Alcoholic	8.2	8.0	7.4	5.6	4.0	1.1	8.2	10.2	9.1	9.3	1.8	0.7
Education	7.1	7.1	7.1	7.3	0.5	0.5	0.5	0.3	1.2	1.7	1.9	2.3
Housing	0.1	-0.3	1.0	2.9	3.7	4.0	4.8	3.5	3.0	3.2	2.2	1.2
Transport	1.2	-1.5	-1.9	-1.1	-4.0	-1.6	1.7	1.0	4.7	7.3	8.7	7.7
Cars												
Imported	-1.2	-3.6	-6.4	-1.9	-3.4	2.0	5.8	0.5	4.1	10.5	15.2	15.2
Core	2.3	0.5	1.4	2.0	-0.1	1.2	2.7	0.8	2.1	4.1	5.4	7.3
Energy	2.7	2.2	2.6	3.1	1.7	2.2	2.7	1.9	2.8	3.8	4.5	5.2
	1.3	-1.5	1.4	1.1	-0.3	-0.6	2.3	2.9	4.2	6.2	3.8	1.7

Source: BNR, Monetary Policy & Research Department (2017)

However, the uptick in headline inflation was mostly reflected in food prices. Food inflation increased from 12.3% in 2016Q3 to 15.4% in 2016Q4. This persistent rise in food prices was caused by the poor performance in agriculture production compared to 2015 due to the long spell of the dry season that mostly affected prices for vegetables and fruits. Despite recording some slight ease, vegetables inflation remained high, standing at 22.3% in 2016Q4, from 24.5% of the previous quarter while fruits inflation rose from 12.5% in 2016Q3 to 25.2% in 2016Q4. Owing to the increment in the EAC common tariff for sugar, from 0% in 2015/16 to 25% effective since July 2017, sugars inflation surged to 30.6% in 2016Q4 from 10.1% in the previous quarter.

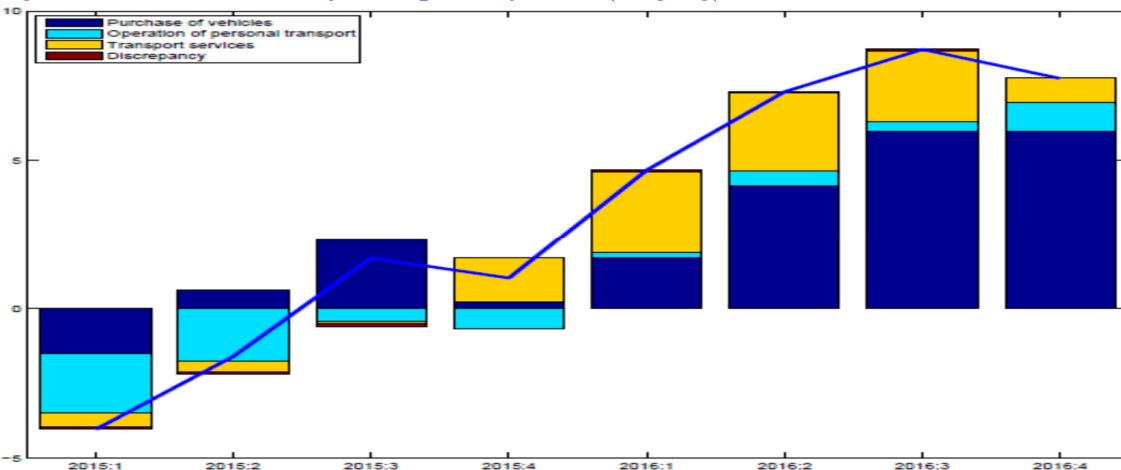
Figure 12: Main drivers of food inflation (% , y-o-y)



Source: BNR, Monetary Policy & Research Department (2017)

Transport inflation remained high despite easing from 8.7% in 2016Q3 to 7.7% in 2016Q4. Upward pressures on transport inflation came from purchase of vehicles, mainly cars, and operation of personal transport. Inflation for purchase of vehicles stabilized at 14.9% in the last two quarters of 2016 as cars inflation stagnated at 15.2% during the same period. Cars are mainly imported from Japan and their prices have been mainly influenced by the double exchange rate effect following the appreciation of the Yen against the USD and the depreciation of the FRW against the USD. Inflation for operation of personal transport jumped from 1.2% in 2016Q3 to 3.6% in 2016Q4, mainly due to the increase in prices for fuels and lubricants and for spare parts increased. Downward pressures came from transport services, whose inflation dropped from 7.2% in 2016Q3 to 2.5% the next quarter given that road transport inflation, which accounts for 99% of transport services, eased as the effects of increased bus fares since 2015Q4 faded away.

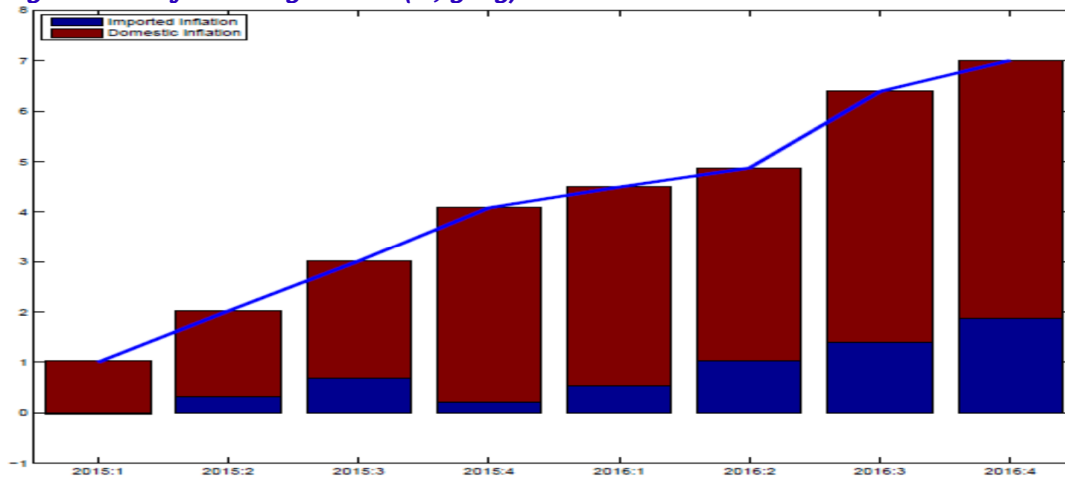
Figure 13: Main drivers of transport inflation (% , y-o-y)



Source: BNR, Monetary Policy & Research Department (2017)

In line with the increase in domestic food inflation from 14.4% in 2016Q3 to 17.5% in 2016Q4, domestic inflation increased to from 6.7% to 6.9% during the same period. Imported inflation picked from 5.4% in 2016Q3 to 7.3% in 2016Q4, mainly due the exchange rate effect and to some extent due to the effect of the increase in tariffs for some products such as sugar, cooking oils, clothing and footwear as well as rice.

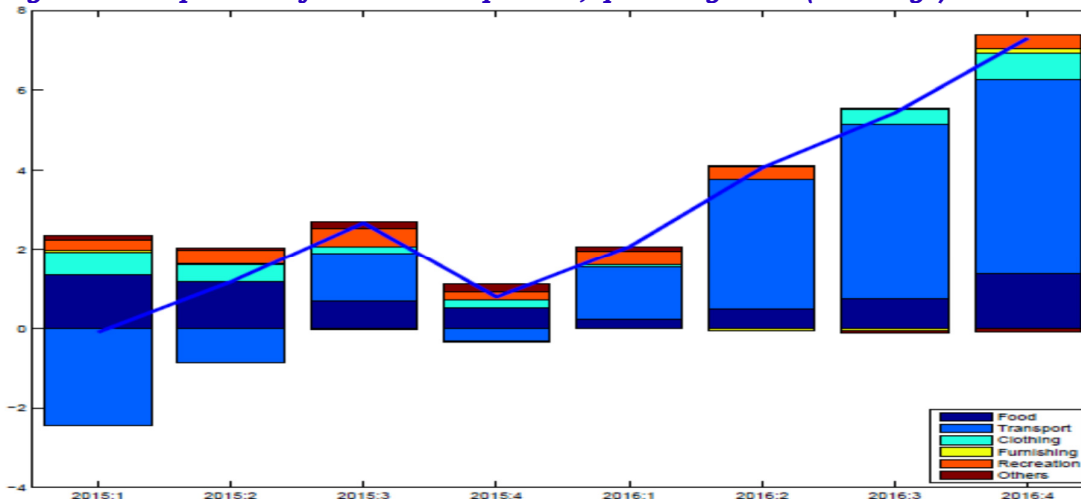
Figure 14: inflation by source (% , y-o-y)



Source: BNR, Monetary Policy & Research Department (2017)

The most affected components of imported inflation were therefore transport, food and clothing. Imported transport inflation increased from 10.2% in 2016Q3 to 11.4% in 2016Q4. During the same period, imported food inflation jumped from 3.6% to 6.6% while imported clothing rose from 2.7% to 4.8%.

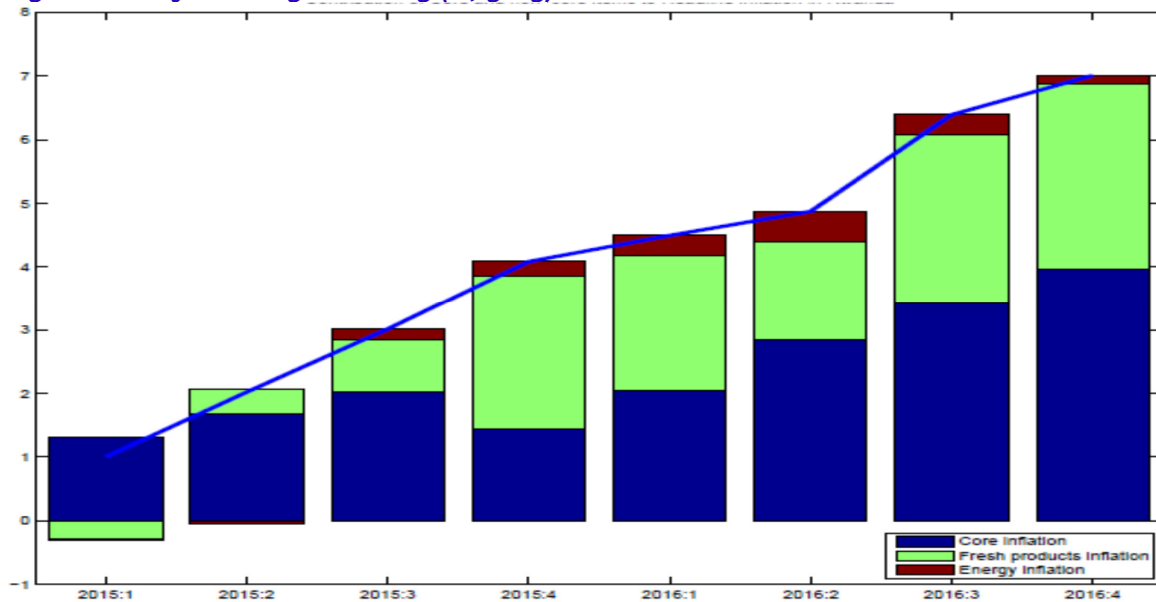
Figure 15: Imported Inflation developments, quarterly basis (% change)



Source: BNR, Monetary Policy & Research Department (2017)

Core inflation reached 5.2% in 2016Q4 from 4.5% of the previous quarter. In addition to the exchange rate effect, the uptick in core inflation was mainly caused by the surge in prices for imported products classified as core, following the increase in external common tariff for products that do not meet the EAC originality criteria like imported oils, sugars and the increase in some local core products such as milk products and BRALIRWA drinks. In line with the trend in vegetables and fruits inflation, fresh products inflation rose from 15.3% in 2016Q3 to 16.5% in 2016Q4. During the same period, energy inflation eased from 3.9% to 1.9% mainly due to the decline in solid fuels (i.e. charcoal and firewood) inflation from 4.9% to 1.9%.

Figure 16: Inflation by volatility (% y-o-y)



Source: BNR, Monetary Policy & Research Department (2017)

IV. INFLATION OUTLOOK AND RISKS

4.1 Demand-side pressures

Until 2016Q3, real GDP growth slow-paced, mainly constrained by the poor performance of the agriculture sector resulting from the long spell of the dry season. In 2016Q4, economic performance did not improve as indicated by high frequency indicators of economic activities: the real CIEA increased by 5.7% in 2016Q4 against 10.5% in 2016Q3 and 15.3% recorded in 2015Q4; total turnovers grew by 6.9% in 2016Q4 from 11.4% in 2016Q3 and 16.3% in 2015Q4; Outstanding loans increased by 7.8% end December 2016 against 30.0% end December 2015. In line with these developments, the output gap is still negative, implying that no inflationary pressures are expected from the domestic demand side, at least in the first two quarters of 2017.

4.2 Supply shocks

The dry season is still on going and this will continue to influence prices of key food stuffs, especially vegetables and fruits. Therefore, food inflation is likely to even go beyond its 2016Q4 level, going forward.

Prices for most commodities are expected to rise in 2017. Of particular interest is the likely increase in international oil prices, having both direct and indirect effects on inflation: the indirect effect will result from pressures on the exchange rate due to the increase in the import bill; and, the direct effect will result from the upward revision in local pump prices as international oil prices increase. The outlook for agricultural commodities is still uncertain as these depend mostly on weather and other supply conditions.

This will be exacerbated by the increment in the EAC common tariff for sugar, from 0% in 2015/16 to 25% effective since July 2016, cooking oils, rice as well as clothing and footwear. The increase in prices of soft drinks produced by BRALIRWA is expected to add to these pressures.

4.3 Exchange rate developments

The Rwandan franc depreciated by 9.7% end December 2016 compared to a depreciation of 7.6% end December 2015. In addition to the long-standing structural mismatch between imports and exports, the increase in the FRW depreciation was amplified by the increased forex demand by big projects under the Public-Private Partnership (PPP). Looking ahead, the FRW depreciation is expected to ease as the trade deficit is improving on the account of rising export receipts, boosted by a recovery in international commodity prices, especially for minerals and metals. In addition, most of the PPP projects have phased out and this will reduce the domestic demand for forex. Other downward pressures may come from the increased domestic production of some key items, such as cement and electricity that required a lot of forex to import, and from the fact that the current level of credit to the private sector cannot generate excessive import demand. Outstanding credit to the private sector is projected to grow by 16.3% in 2017. These downward pressures may however be reversed by the rallying of the USD as the FED tightens its monetary policy.

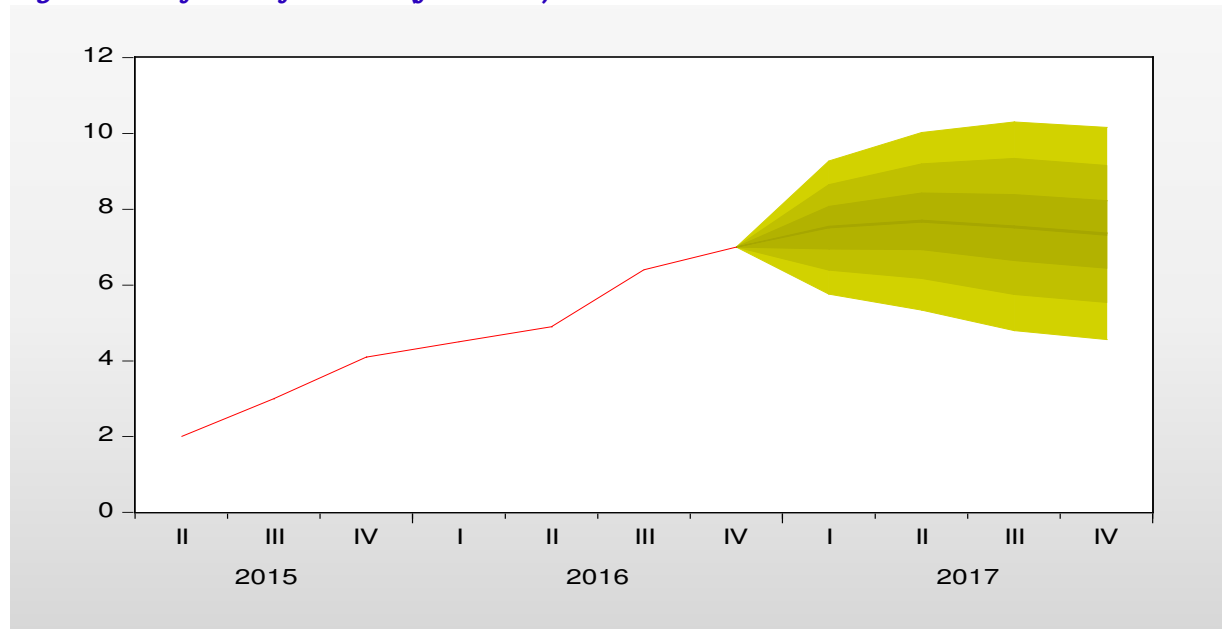
4.5 Global and regional inflationary pressures

The increase in commodity prices and recovery in economic activities across several economies around the world is expected to push inflation upwards in the short-term. As result, inflation is expected to go up to 1.7% in 2017 from 0.7% in 2016 in developed countries, but still lower compared to central bank targets. In the EAC, inflationary pressures will continue to be influenced by rising food prices and imported inflation, mainly due to the exchange rate effect.

4.6 Inflation forecasts

The main risks to the inflation outlook remain rising food prices following a prolonged dry season, the exchange rate effect, the increase in tariffs for some products, the increase in prices of soft drinks produced by Bralirwa and the upward revision in local pump prices in line with the increase in international oil prices. The above risks imply that the inflation outlook is tilted to the upside and is expected to range between 7.0% and 8.0% in 2017Q1 and between 6.5% and 7.5% in 2017Q2.

Figure 17: Inflation forecasts (fan chart)



Source: BNR, Monetary Policy & Research Department (2017)