National Bank of Rwanda

Banki Nkuru y'u Rwanda

QUARTERLY INFLATION REPORT

Third Quarter, 2018

EXECUTIVE SUMMARY

The world economic performance remained strong in 2018Q3 and this good performance is expected to continue in 2018Q4. According to the IMF's October 2018 estimates, the world economy is projected to grow by 3.7% in both 2018 and 2019, same growth as recorded in 2017, supported by favorable global financial conditions, the improvement in global trade, and international commodity prices. The global Manufacturing Purchase Manager Index remains high, pointing to favorable business conditions that are supporting a strong economic outlook. However, the potential re-emergence of global trade barriers, rising volatility in asset markets and continued US interest rates normalization are likely to impact the near-term growth prospects.

In emerging and developing economies, the growth will remain close to 2017 levels as a gradual slowdown in Chinese growth prospects is offset by the recovery in commodity exporting countries. Growth is projected at 4.7% in emerging and developing economies and to 3.1% in Sub-Saharan Africa, from 4.7% and 2.7% respectively in 2017. China's GDP growth is foreseen to decelerate to 6.6% in 2018 and furthermore to 6.2% in 2019 from 6.9% recorded in 2017. Though subdued in Burundi, growth for all EAC economies is expected to remain strong in 2018 and going forward in 2019.

Globally, strong global demand is likely to continue supporting the Rwandan economic prospects. Foreign demand for local export products is expected to remain healthy which continues to support Rwandan export earnings. Strong consumer and business sentiment are suggesting continuous increase in global aggregate demand. This is expected to drive upward the demand for Rwandan exports particularly for metals and minerals. However, due to excess supply of coffee and tea, prices are likely going to decline.

The Rwandan economy is expected to perform well in 2018Q3 and 2018Q4, and this is evidenced by rising trend of output gap, composite index of economic activities as well as total turnovers of industry and services sectors. In Addition, the economy will be boosted by 2018 agricultural season B good performance. Despite flooding and land sliding in some regions, the agricultural season B, 2018 was good as reflected by the decline in food inflation and farmers' views in the price expectations survey. During 2018Q3, local food inflation decreased by 3.3% on average against an increase of 7.6% on average during the same period in 2017.

Compared to the same period of 2017, Rwanda's trade deficit widened by 4.2% in 2018Q3, to a deficit of USD 353.2 million from a deficit of USD 338.9 million in 2017Q3, following an increase in formal imports value by 3.5%, despite the growth in formal exports value by 2.6%. Formal exports covered 42.5% of formal imports in 2018Q3 from 42.9% in 2017Q3. When including informal cross border trade, exports cover of imports increased to 47.4% in 2018Q3 compared to 46.6% in the same period of 2017.

As a result of these developments, the foreign exchange rate pressures on the Rwandan Franc (FRW) remained modest%%. Relative to December 2017, the FRW depreciated by 2.9% against the USD at end September 2018, slightly higher than 2.2% observed in the same period of 2017, but far below 8.4% recorded in 2016Q3.

In 2018Q3, NBR maintained an accommodative monetary policy stance at 5.5% to support the financing of the economy by the banking sector, given that both inflationary and exchange pressures remained passive. Outstanding credit to the private sector increased by 7.2% in 2018Q3 compared to 6.6% in the corresponding period of 2017. The broad money increased by 11.9% in 2018Q3 compared to 16.5% in the same period of 2017.

In 2018Q3, headline inflation dropped to 1.8% from 2.5% recorded in 2018Q2. The decline in headline inflation was mostly reflected in food prices that dropped from 0.6% to -2.0%.

Agricultural production in season C pushed down vegetables prices in 2018Q3 and food prices are expected to ease in 2018Q4. Oil prices are expected to persist at current high levels in 2018Q4. In view of the downward and upward risks, headline inflation is projected to evolve around 1.2% in 2018Q4.

LIST OF ACRONYMS AND ABBREVIATIONS

NBR	: 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 Convention Center
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

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I. GLOBAL ECONOMIC AND FINANCIAL DEVELOPMENTS

1.1 Economic Developments

The world economic performance remained strong in 2018Q3 and this good performance is expected to continue in 2018Q4. According to the IMF's October 2018 estimates, the world economy is projected to grow by 3.7% in both 2018 and 2019, same growth as recorded in 2017. This growth is supported by favorable global financial conditions, the improvement in global trade, and international commodity prices. The global Manufacturing Purchase Manager Index remains high, pointing to favorable business conditions that are supporting a strong economic outlook. However, the potential re-emergence of global trade barriers, rising volatility in asset markets, and continued US interest rates normalization are likely to impact the near-term growth prospects.

Real GDP growth in advanced economies is projected to increase by 2.4% in 2018, from 2.3% registered in 2017. Positive growth expectations in 2018 are likely to push up core inflation, stimulating Central Banks to consider tightening policy. The global annual average inflation rose to 3.2% in 2017 and is expected to increase to 3.8% in 2018 in line with rising commodity prices and improvement in global demand.

1.1.1 Developments in United States

In USA, Real GDP grew by 3.0% in 2018Q3 after 2.9% in 2018Q2, buoyed by increased business investments, and rising consumer spending. The US growth outlook is anticipated to remain strong, standing at 3.1% in 2018Q4 due to expansionary fiscal policy. The cut in the tax bill and the Job Act of 2017 are likely to provide additional support for the year 2018, adding to the still easy monetary conditions.

US inflationary pressures remained high, with annual inflation increasing to 2.9% in June 2018 and 2.3% in September 2018, from 2.1% in December 2017 and 2.2% in September 2017. Core inflation increased to 2.2% in September 2018 higher than the Federal Reserve target of 2.0%. As inflationary pressures keep rising, markets are expecting more interest rate hikes over the course of the year 2018.

1.1.2 Developments in Eurozone

After growing by 2.2% in 2018Q2, real GDP increased by 1.7% in 2018Q3 and is expected at 1.7% in 2018Q4. The Eurozone economic growth is predicted to decelerate compared with the April WEO forecasts, from 2.4% in 2017 to 2.0% in 2018 and 1.9% in 2019. Forecasts for 2018 growth have been revised down for Germany and France after activity softened more than expected in the first quarter, and in Italy, where wider sovereign spreads and tighter financial conditions in the wake of recent political uncertainty are expected to weigh on domestic demand.

Overall, however, the growth remains strong on the back of healthy global demand and improving productivity.

Table 1: Economic growth developments (in %)

	2017				2018				Annual average project.		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
United States (YoY)	1.2	3.1	2.3	2.5	2.6	2.9	3.0	3.1	2.2	2.9	2.5
Euro area (YoY)	2.1	2.4	2.6	2.7	2.4	2.2	1.7	1.7	2.4	2.0	1.9
Japan (YoY)	-	-	2.0	2.0	1.0	1.3	0.9	1.1	1.7	1.1	0.9
United Kingdom (YoY)	-	-	1.7	1.4	1.1	1.2	1.4	1.3	1.7	1.4	1.5
China (YoY)	6.9	6.9	6.8	6.8	6.8	6.7	6.5	6.4	6.9	6.6	6.2
India (YoY)	6.1	5.6	6.3	7.0	7.7	8.2	7.4	7.2	6.7	7.3	7.4

Source: BLOOMBERG and IMF, World economic Outlook, April 2018

In September 2018, the Eurozone inflation stood at 2.1%, up from 2.0% in June 2018 and 1.5% in September 2017. This uptick in inflation is due to the rise in energy inflation to 9.5% from 9.2% in August as well as in unprocessed food inflation to 3.2% against 2.5% in August 2018. Services inflation and non-energy industrial goods inflation stabilized at 1.3% and 0.3% respectively. Annual core inflation stood at 0.9% in September 2018.

1.1.3 Developments in China

Chinese GDP grew by 6.5% in 2018Q3, slightly lower than 6.7% recorded in 2018Q2, and this was the weakest year-on-year quarterly GDP growth since 2009Q1. Real GDP growth is projected to slow to 6.4% in 2018Q4, reflecting continuous drag from Chinese tightening monetary policy and the slowing fiscal stimulus as well as the issue of the US raising trade barriers which may affect China's exports growth. China's GDP growth is foreseen to decelerate to 6.6% in 2018 and further to 6.2% in 2019, from 6.9% recorded in 2017.

In China, inflation increased to 2.5% in September 2018, from 2.3% in August 2018, and 1.9% in June 2018, driven by the prices of food, which rose by 3.6% from 1.7% in August 2018, as prices rose at faster pace for fresh fruits by 10.2% from 5.5% as well as fresh vegetables by 14.6% from 4.3% in August 2018. Still, inflation remained below the Chinese government's target of around 3% for 2018.

1.1.4 Developments in Sub-Saharan Africa and EAC

The Sub-Saharan African economic growth is projected to rise to 3.1% in 2018 and to 3.8% in 2019, from 2.7% in 2017. Growth is expected to pick up in commodity exporting countries, such as Nigeria, as the recovery in commodity prices continues, and it is expected to grow by 1.9% and 2.3% respectively in 2018 and 2019 against 0.8% registered in 2017.

Headline inflation was 11.0% in 2017 but is expected to fall to 8.6% in 2018 and 8.5% in 2019 as local currencies will be recovering, following the increase in commodity exports. Previously, inflationary pressures were mainly resulting from the impact of droughts and weak currencies in Sub-Saharan Africa.

In the East African Community (EAC), GDP growth is projected at 5.9% in 2018 and 6.3% in 2019 from 5.3% in 2017. Apart from Burundi whose growth is projected to remain subdued, growth in the EAC countries is expected to remain strong in both 2018 and 2019.

Table 2: Economic growth in EAC countries (in %)

	2016	2017					2018	Annual Average		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	2017	2018	2019
Burundi	-	-	-	-	-	-	-	0.0	0.1	0.4
Kenya	6.1	4.8	4.7	4.7	5.4	5.7	6.3	4.9	6.0	6.1
Rwanda	2.4	1.7	4.0	8.0	10.5	10.5	6.7	6.1	7.2	7.8
Tanzania	5.6	5.7	7.8	6.8	-	-	-	6.0	5.8	6.6
Uganda	2.7	4.5	6.5	7.0	6.2	6.2	5.0	4.8	5.9	6.1

Source: National Bureau of Statistics Websites and IMF WEO, April 2018

In EAC, despite rising oil prices, inflation remained benign in the first nine months of 2018, following rising agriculture production on the back of favorable weather conditions as well as easing exchange rate pressures.

Burundi recorded a deflation of -5.6% in September 2018, after a deflation of -2.3% the previous month, and -0.4% in June 2018. In Kenya, inflation increased to 5.7% in September 2018 from 4.0% in the previous month and 4.3% in June 2018.

In Tanzania, inflation rate slightly increased to 3.4% in September 2018 from 3.3% in August 2018, mainly due to high cost of housing and utilities. In Uganda, inflation rate fell to 3.7% in September 2018 from 3.8% in August 2018 on the back of easing prices for transport by 13.4% from 15.2%, and housing & utilities by 5.3% from 7.7%.

Table 3: Headline inflation in EAC countries, in %

	2017				2018				Annual average		
	Mar.	Jun.	Sept.	Dec	Mar.	June	Aug.	Sept.	2017	2018 pro	2019 pro
Burundi	21.1	15.1	15.2	10.3	-2.6	-0.4	-2.3	-5.6	16.6	1.2	7.3
Kenya	10.3	9.2	7.1	4.5	4.2	4.3	4.0	5.7	8.0	5.0	5.6
Rwanda	7.7	4.8	3.8	0.7	0.9	2.9	2.1	1.2	4.8	3.3	5.5
Tanzania	6.4	5.4	5.3	4.0	3.9	3.4	3.3	3.4	5.3	3.8	4.7
Uganda	6.4	6.4	5.3	3.3	2.0	2.2	3.8	3.7	5.6	3.8	4.2

Source: Country Bureaus of Statistics, IMF, World Economic Outlook, April 2018

1.2 Recent developments in commodity prices

The global commodity price index continued to increase in 2018Q3 reflecting improving global economic activity and supply constraints for a number of commodities. In 2018Q3, global energy prices rose by 41.2% against 13.7% registered in the same period of 2017, spurred by a sustained global demand.
In the period under review, non-energy prices slightly decreased by 0.8% against an increase of 3.3% in 2017Q3. A part from fertilizers whose prices increased by 18.8%

in 2018Q3, prices decreased for all categories of non-energy commodities; agricultural commodities decreased by 1.2%, metals & minerals by 1.8%, and precious metals by 6.2%.

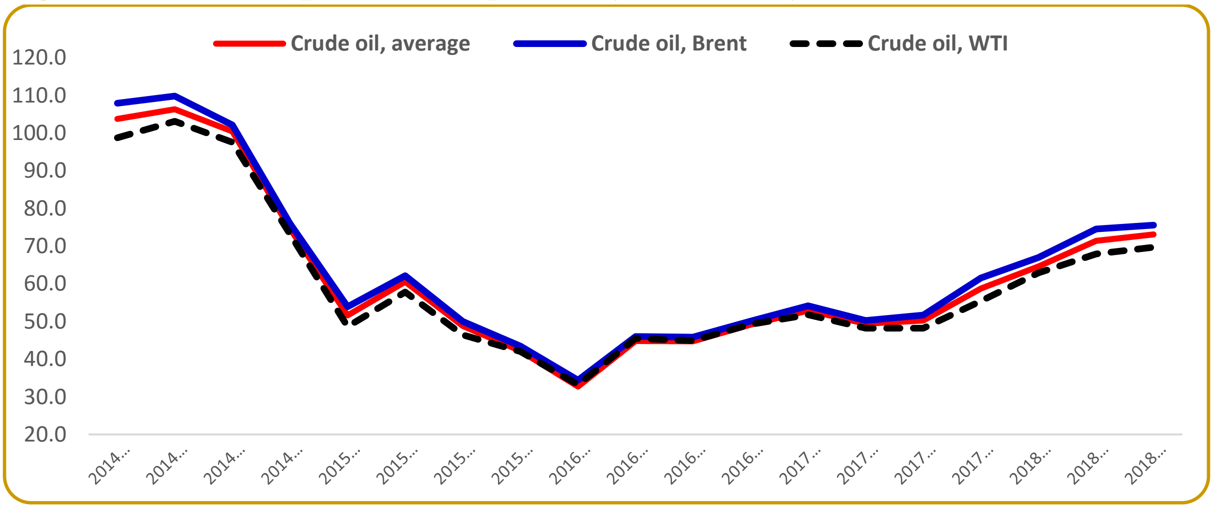
Table 4: World Bank commodity prices (%)

	2017			2018			Forecast, % changes	
	Q1	Q2	Q3	Q1	Q2	Q3	2018	2019
Energy	**57.8**	**14.8**	**13.7**	**21.3**	**40.1**	**41.2**	**19.9**	**-0.4**
Crude oil, average	61.8	10.3	12.3	22.0	44.5	45.5	23.1	0.0
Non-energy	**13.0**	**2.1**	**3.3**	**3.6**	**8.7**	**-0.8**	**4.1**	**0.3**
Agric. commodities	**7.7**	**-3.1**	**-4.2**	**-0.5**	**4.3**	**-1.2**	**2.3**	**1.3**
Beverages	-0.4	-9.9	-12.5	-7.3	1.3	-8.3	-0.2	1.2
Arabica coffee	10.0	-5.5	-13.5	-17.2	-10.0	-15.5	-2.1	0.3
Robusta coffee	43.3	21.5	10.4	-17.3	-13.4	-21.6	-10.3	1.0
Tea Mombasa	20.3	32.9	25.0	-3.1	-12.6	-17.4	-1.6	0.3
Grains/Cereals	-6.0	-4.0	3.4	12.3	11.9	7.9	7.6	1.5
Metals & Minerals	**32.0**	**19.6**	**26.0**	**13.8**	**19.4**	**-1.8**	8.6	-2.1
Tin	29.6	17.9	10.4	5.9	5.1	-5.9	3.2	0.9
Iron ore	77.7	13.2	22.4	-13.0	3.6	-7.1	-10.9	-6.3
Precious metals	**5.5**	**0.1**	**-6.2**	**6.5**	**2.4**	**-6.2**	**3.5**	**-3.0**
Gold	3.3	-0.2	-4.2	9.0	3.9	-5.1	3.3	-1.4
Fertilizers	**-9.1**	**-9.6**	**-3.9**	**0.6**	**10.1**	**18.8**	**2.0**	**2.5**

Source: World Bank

Crude oil prices rose by 45.5% on average during 2018Q3, compared to 12.3% in the corresponding quarter of 2017. The increase was on the back of geopolitical concerns, tightening product inventories as well as a strong global demand, in supplement to the continuous OPEC oil supply adjustments.

Figure 1: Crude oil price developments (USD/barrel)



Source: World Bank

Average prices fell for agriculture commodities in 2018Q3, attributed mainly to the falling food and beverages prices as unfavorable weather conditions reduced harvests of other foods. During the same period, prices fell by 15.5% and 21.6%, respectively for Arabica and Robusta coffee. Prices for fertilizers went up by 18.8% in 2018Q3, compared to a decrease of 3.9% in the same period of 2017.

1.3 Financial markets and Foreign Exchange market

Monetary policy remained accommodative in most advanced economies with the central bank rate remaining unchanged in the Eurozone and Japan. The European Central Bank rate (ECB) was maintained at 0.00% and the asset purchase program kept at Euro 30 billion a month and likely to remain so until December 2019.

The Bank of England (BoE) increased its key repo rate by 25 basis points up to 0.75% on 2nd August 2018. This increase was supported by recent data, which appeared to confirm that the dip in output in 2018Q1 was temporary and the labor market has continued to tighten and wage growth has firmed. The BoE also reiterated that an ongoing tightening of monetary policy over the forecast period will be appropriate to return inflation sustainably to the 2.0% target. The Bank of Japan continued to apply a negative 0.100% interest rate and to buy government bonds to encourage the financing of economic activities.
The three-month deposit rates remained negative in the Eurozone and Japan, standing at -0.363% and -0.110% respectively in 2018Q3 from -0.337% and -0.110% in 2018Q2, affecting banks' deposits in the Central Bank and encouraging economic financing. In USA and UK, three-month deposit rates increased to 2.375% and 0.769%, respectively, after 2.365% and 0.671% in 2018Q2.

Table 5: Interest rates developments (in % per annum)

		2016	2017				2018		
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
USA	3-month deposit rate	1.535	1.430	1.300	1.350	1.705	2.295	2.365	2.375
	10-year interest rate	2.444	2.387	2.304	2.334	2.405	2.739	2.860	2.962
Euro area	3-month deposit rate	0.350	-0.320	-0.388	-0.373	-0.375	-0.373	-0.337	-0.363
	10-year interest rate	0.208	0.328	0.466	0.464	0.427	0.497	0.302	0.413
Japan	3-month deposit rate	-0.440	-0.090	-0.095	-0.145	-0.120	-0.117	-0.110	-0.110
	10-year interest rate	0.046	0.070	0.086	0.068	0.048	0.059	0.044	0.100
UK	3-month deposit rate	0.610	0.430	0.400	0.380	0.511	0.611	0.671	0.769
	10-year interest rate	1.239	1.139	1.257	1.365	1.190	1.454	1.309	1.443

Source: Bloomberg

On the foreign exchange market, the US dollar is recovering against major currencies, notably the Euro, the British pound and the Japanese Yen.

Table 6: Exchange rate (dollars/unit currency, inversely for Yen)

	2016	2017				2018		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
USD/GBP	0.8101	0.7968	0.7677	0.7465	0.7402	0.7134	0.7572	0.7676
USD/EUR	0.9506	0.9385	0.8752	0.8464	0.8330	0.8114	0.8558	0.8617
USD/JPY	116.96	111.39	112.39	112.51	112.69	106.28	110.76	113.70

Source: Bloomberg

Compared to 2017Q4, the US dollar appreciated by 3.70% against the British pound, 3.44% against the Euro, and by 0.90% against the Japanese Yen in 2018Q3 after respective depreciation of 7.85%, 10.96% and 3.85% in 2017Q3. The US dollar has recovered against the Japanese Yen for the first time after a long period of depreciation.

1.4 Outlook for the global economy

The global economy remained robust in 2017 and expected to remain strong over the next two years. Real GDP growth will be supported by favorable global financial conditions, the improvement in global trade and international commodity prices. Most advanced economies are performing above their potential, indicating a continued stronger aggregate demand in the near future.
The US positive growth dynamics continue. Core and headline inflation are moving slightly higher than 2.0%, pointing to further interest rate hikes. The Eurozone economy is expected to decelerate to 2.0% in 2018 and further to 1.9% in 2019 from 2.4% in 2017. However, growth remains strong on the back of healthy global demand, improving productivity and competitiveness.

In emerging and developing economies, the growth will remain close to 2017 levels as a gradual slowdown in Chinese growth prospects is offset by the recovery in commodity exporting countries. Growth is projected at 4.7% in emerging and developing economies and to 3.1% in Sub-Saharan Africa, from 4.7% and 2.7% respectively in 2017. China's GDP growth is foreseen to decelerate to 6.6% in 2018 and furthermore to 6.2% in 2019 from 6.9% recorded in 2017. Although economic growth remains subdued in Burundi, for other EAC economies, it is expected to remain strong in 2018 and in 2019.

On the international commodity market, prices are expected to increase reflecting improving global economic activity and supply constraints for a number of commodities.

Globally, strong global demand is likely to continue supporting the Rwandan economic prospects. Foreign demand for local export products is expected to remain healthy which continues to support Rwandan export earnings. Strong consumer and business sentiment are suggesting continuous increase in global aggregate demand. This is expected to drive upward the demand for Rwandan exports particularly for metals and minerals. However, due to excess supply of coffee and tea, prices are likely going to decline.

On the other hand, rising global demand and increasing international commodity prices are likely to fuel inflation globally, particularly as spare capacity gets used up. The resulting interest rate tightening is foreseen to drive up short-term and long term interest rates and therefore strengthening currencies in major advanced economies. This will result into high imported inflation and financial market volatilities. Also, there may be capital flights from emerging and developing economies searching for higher returns in advanced market economies.

An appreciation of the USD and/or other major currencies against the franc, a continued increase in oil prices and rising foreign inflation are likely going to exert pressures on domestic prices in 2018.

II. DOMESTIC ECONOMY AND FINANCIAL DEVELOPMENTS

2.1 Domestic Demand and Output

The Rwandan economy recorded good performance in the first half of 2018, with a growth of 10.6% in 2018Q1 and 6.7% in 2018Q2. The growth was mainly supported by favorable weather conditions, recovery in construction sector, improvement in transport services and increase of fixed investment as well as private consumption. The good economic performance continued in 2018Q3, as highlighted by the growth of leading economic indicators. The composite index of economic activities (CIEA) increased by 13.3% in real terms and total turnovers of industry and service sectors gained, respectively, by 15.9% from 12.6% and 13.0% in 2017Q3.

2.1.1 Domestic demand

Domestic demand recovered in 2018Q2, growing by 7.1% from a decline of 0.2% in 2017Q2, boosted by strengthening investment and improvement in private consumption.

Table 7: Domestic demand (% change)

	2017				2018	
	Q1	Q2	Q3	Q4	Q1	Q2
Domestic demand	**-0.5**	**-0.2**	**3.8**	**1.4**	**9.3**	**7.1**
Total final consumption Expenditure	**5.0**	**0.0**	**6.0**	**1.0**	**5.0**	**3.0**
Government	6.0	18.0	9.0	10.0	0.0	-1.0
Households and NGOs	5.0	-2.0	5.0	-1.0	6.0	4.0
Gross capital formation	**-12.0**	**-2.0**	**16.0**	**27.0**	**36.0**	**21.0**
Gross fixed capital formation	-12.0	-1.0	15.0	27.0	35.0	20.0
Construction	-7.0	-4.0	-1.0	-1.0	8.0	11.0
Other	-20.0	3.0	48.0	94.0	90.0	36.0
Change in inventories	-33.0	-11.0	30.0	33.0	79.0	33.0
Imports of goods & serv.	**4.0**	**0.0**	**17.0**	**20.0**	**17.0**	**7.0**

Source: National Institute of Statistics of Rwanda

Gross capital formation continued to sustain its recovery with an expansion of 21.0% in 2018Q2 from a decline of 2.0% in 2017Q2. This increase came from other fixed investment that expanded by 36.0%, and investment for construction purpose which recovered, growing by 11.0% in 2018Q2 from a decrease of 4.0% in 2017Q2. The high growth of other fixed investment is reflected in imported machines and devices equipment, which increased by 4.0% in value in 2018Q2 from a decline of 32.7% in 2017Q2. The recovery of construction investment was driven by on-going construction projects and is indicated by the good performance of construction sector. Private consumption increased by 4.0% in 2018Q2 from -2.0% in 2017Q2; partly supported by an increase in food production following good harvest in agricultural season A, 2018. This improvement in private consumption strengthened the increase in total final consumption by 3.0% in 2018Q2. Private consumption represented 83.9% in total final consumption of 2018Q2.

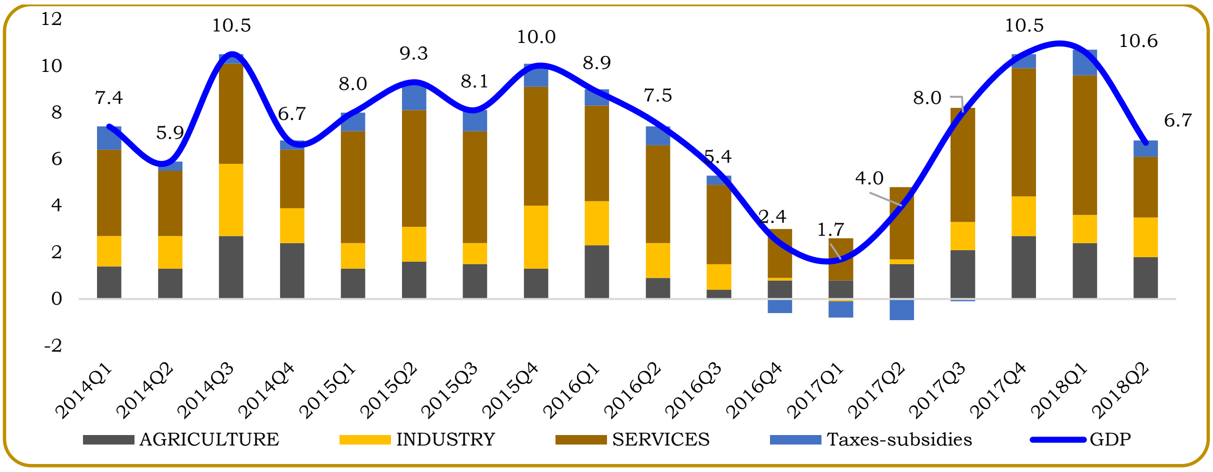
After stagnating in 2017Q2, imports of goods and services increased by 7.0% in 2018Q2 led mainly by imports of goods, which increased by 8.4% in 2018Q2 from a decline of 11.8% in 2017Q2. The growth of imports of goods was widespread as consumer goods imports expanded by 14.1% in volume, capital goods by 15.0%, intermediary goods by 33.2% and energy and lubricants by 30.6%.

2.1.2 Economic performance by sector

2.1.2.1 Real Sector

Growth in 2018Q2 was boosted by outstanding performance of industry sector, which grew by 10.0% in 2018Q2 from 1.0% in 2017Q2; thanks to the recovery of construction sub-sector (11.0% from - 4.0% in 2017Q2) as well as good performance of manufacturing sub-sector (+12.0% against 6.0%), both representing 78.6% of industry sector. The agriculture sector followed with a growth of 6.0% and the services sector rose by 5.0%. However, the services continued to be the leading sector, with a share of 47.0% of GDP in 2018Q2 while agriculture and industry sectors represent 30.0% and 16.0% respectively.

Figure 2: Quarterly Real GDP growth (% change, y-o-y)



Source: NBR, Monetary Policy Department

The agriculture sector recorded a good performance in 2018Q2, growing by 6.0% from 4.0% in 2017Q2, mainly driven by food crops production which represents 59.0% of the sector. Food crops increased by 5.9% in 2018Q2 from 4.1% in 2017Q2; owing to favorable weather conditions during the agricultural season A of 2018.

The services sector increased by 5.0% in 2018Q2, supported by the recovery of wholesale and retail trade (+18.5% from -2.0% in 2017Q2) and good performance of transport services (+20.5% from 6.0% in 2017Q2). Wholesale and retail trade performance was supported by the recovery in private consumption as well as construction sector; which was in turn reflected in the demand of cement. The good performance in the transport services was enhanced by air transport that increased by 17.0% in 2018Q2 as well as land transport services (+12.0% in 2018Q2).

2.1.2.2. Leading indicators of economic activities

The good performance of the Rwandan economy observed in the first half of 2018 continued in the third quarter. This is evidenced by the increase of the leading indicators of economic activities, namely the composite index of economic activities (CIEA) and total turnovers of industry and service sectors.

Table 8: CIEA (percentage change, y-o-y)

CIEA	Real		Nominal	
	2017	2018	2017	2018
Q1	6.3	17.5	10.2	16.7
Q2	9.3	13.7	14.1	8.7
Q3	12.6	13.3	14.2	9.5
Jan. - Sept	9.4	14.8	12.9	11.5

Source: NBR, Statistics Department

The real CIEA increased by 13.3% in 2018Q3 higher than 12.6% recorded in 2017Q3; indicating an upturn in the aggregate demand. The improvement in aggregate demand was supported by the increase in real terms of exports of tea (+31.1%) and mining (+5.3%), electricity production (+9.3%), cement (+26.0%), growth of outstanding credit to private sector (+16.1% in real terms) and increase of sales of industry and services sectors (15.9% in nominal terms).

The 2018Q3 growth of total turnovers of industry and service sectors was broad based; with industry sector gaining by 6.1% and the services sector's turnovers accelerating by 19.3%.

Table 9: Turnovers of industry & services (% change, y-o-y)

	2017				2018			
	Q1	Q2	Q3	Jan.-Sept	Q1	Q2	Q3	Jan.-Sept
Total turnovers	**14.8**	**16.2**	**13.0**	**14.5**	**19.4**	**12.3**	**15.9**	**15.9**
Industries	**10.1**	**12.6**	**4.7**	**8.9**	**17.2**	**13.6**	**6.1**	**12.1**
Mining & Quarrying	9.1	8.8	23.6	14.5	44.0	63.3	7.4	35.3
Manufacturing	9.6	27.0	11.8	15.8	16.7	9.0	12.2	12.5
Energy Sector	19.1	5.8	13.2	12.3	4.3	1.7	9.2	5.1
Construction	7.7	-4.2	-12.6	-3.9	19.0	17.7	-7.6	9.6
Services	**16.5**	**17.6**	**16.3**	**16.8**	**20.2**	**11.9**	**19.3**	**17.0**
Wholesale & Retail trade	16.7	27.1	29.3	24.6	30.8	11.1	14.4	18.1
Petroleum distributors	44.1	14.4	4.2	19.0	0.8	16.3	15.8	10.9
Transport & Storage	18.8	10.6	22.1	17.2	23.9	22.2	26.4	24.3
Hotels & Restaurants	2.7	1.7	-6.4	-0.8	19.0	12.4	29.4	20.2
Hotels	5.5	7.4	4.8	5.9	26.7	17.7	34.1	26.1
Restaurants	-6.7	-17.1	-39.7	-22.5	-10.0	-10.4	5.2	-5.7
Information & Comm.	0.9	-4.8	0.1	-1.4	9.5	6.2	5.1	6.9
Financial & insurance	8.1	12.3	8.4	9.5	15.1	10.6	19.5	15.1
Banks	10.7	11.5	4.7	8.8	14.6	10.0	22.3	15.8
Real Estate Activities	13.5	-11.9	-44.8	-19.6	7.8	18.3	19.4	14.8

Source: NBR, Statistics Department

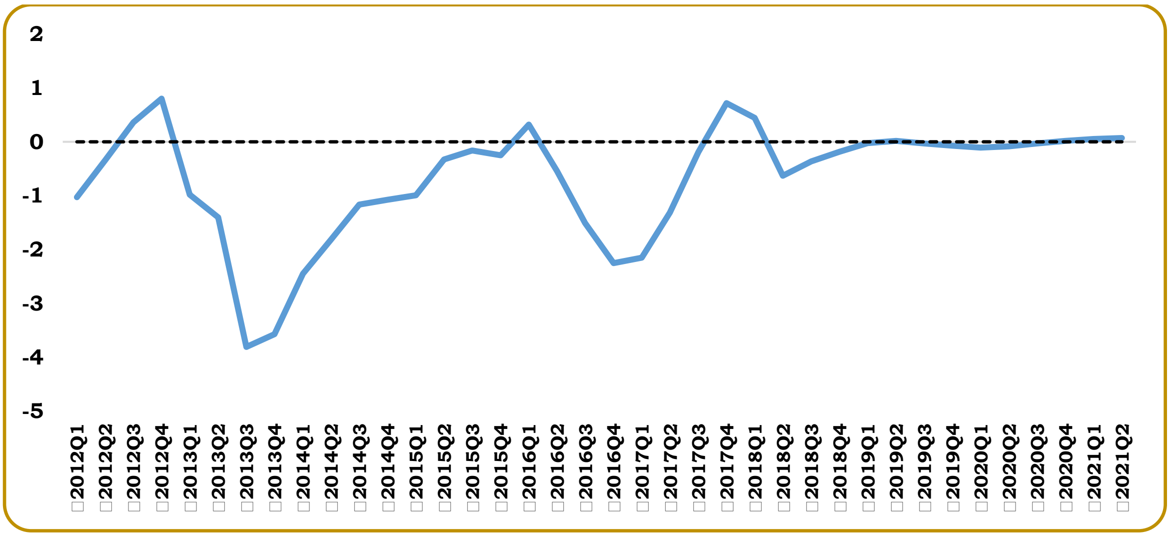
The industry sector's performance was mainly supported by manufacturing activities, whose turnovers increased by 12.2% in 2018Q3, after 11.8% in 2017Q3. %%%%%However, the industry sector sales' growth was moderated by the construction sub-sector growth that declined by 7.6% and the growth of mining and quarrying turnovers decelerated to 7.4% in 2018Q3.

The good performance of services sector was led by hotels (+34.1%), transport and storage sub-sector (+26.4%), petroleum distributors (+ 15.8%), wholesale and retail trade (+14.4%), financial services (19.5%) and real estate (+19.4%). The good performance of hotels was mainly attributable to events, related to MICE (meetings, incentives, conferences and exhibitions) tourism. The expansion in transport and storage sub-sector continued to be supported by RwandAir; whose turnovers rose by 39.2% in 2018Q3.

2.1.3 The Output gap

In 2018Q3, the estimated output gap was -0.4% after -0.6% in 2018Q2, signals a continuous improvement of aggregate demand. However, this aggregate demand remains below potential; hence, its improvement does not fuel inflationary pressures. The upward trend of output gap continues in 2018Q4, implying that the observed good performance of the economy may continue in the last quarter of 2018.

Figure 3: The Output gap for Rwanda (% deviation from the trend)



Source: NBR, Monetary Policy Department

2.1.4 Outlook of the domestic demand and output

The Rwandan economy is expected to perform well in 2018Q3 and 2018Q4, and this is evidenced by rising trend of output gap, composite index of economic activities as well as total turnovers of industry and services sectors. In Addition, the economy will be boosted by 2018 agricultural season B good performance. Despite flooding and land sliding in some regions, the agricultural season B, 2018 was good as reflected by the decline in food inflation and farmers' views in the price expectations survey.

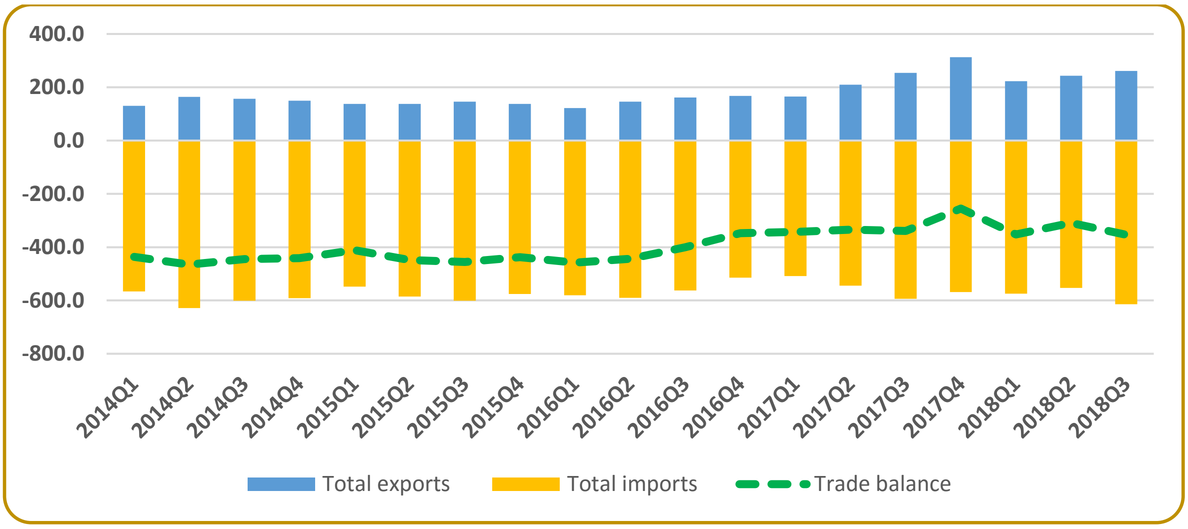
During 2018Q3, local food inflation decreased by 3.3% on average against an increase of 7.6% during the same period in 2017.

2.2 External Sector Developments

2.2.1 Formal trade balance

Compared to the same period of 2017, Rwanda's trade deficit widened by 4.2% in 2018Q3, to a deficit of USD 353.2 million from a deficit of USD 338.9 million in 2017Q3, following an increase in formal imports value by 3.5%, outweighing the growth in formal exports value by 2.6%. Formal exports covered 42.5% of formal imports in 2018Q3 from 42.9% in 2017Q3. However, by including informal cross border trade, exports cover of imports increased to 47.4% in 2018Q3 compared to 46.6% in the same period of 2017.

Figure 4: Trade balance in millions of USD



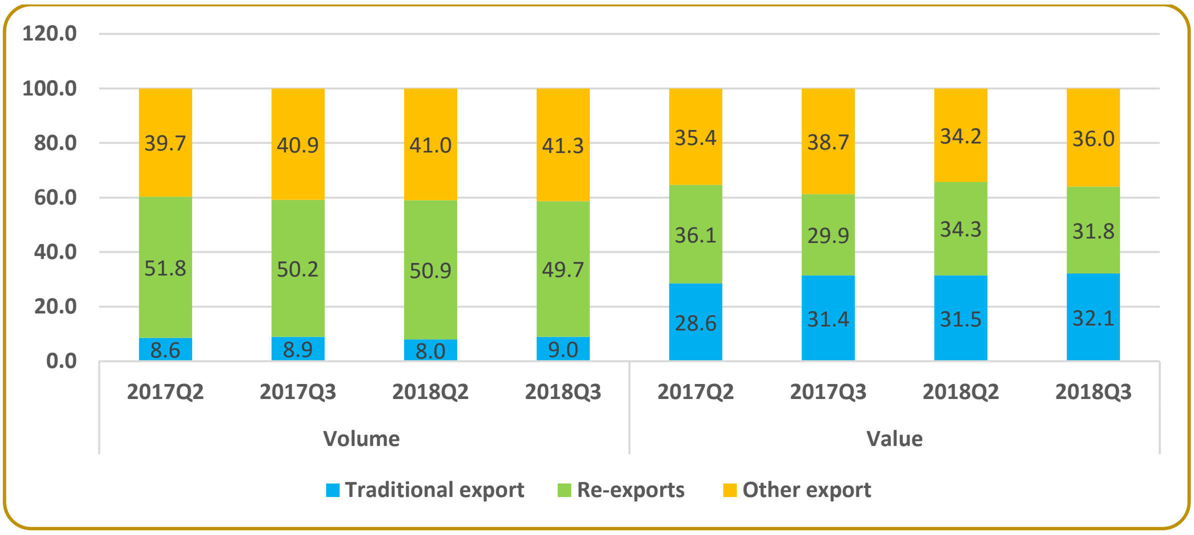
Source: NBR, Monetary Policy Department

2.2.1.1 Formal exports of goods

Rwanda's formal exports are composed of traditional exports, re-exports and non-traditional exports. In 2018Q3, formal exports were dominated by non- traditional exports with a share of 36.0% of the total export earnings, followed by traditional exports[1] with 32.1%, and re-exports representing 31.8%. The gradual diversification of the export base continued, as the share of traditional exports is gradually declining.

[1] *Composed of tea, coffee, pyrethrum, minerals as well as hides and skins*

Figure 5: Exports developments (% share)



Source: NBR, Monetary Policy Department

Total formal export receipts continued to expand, recording an increase of 2.6% in 2018Q3 from 57.4% in 2017Q3 (USD 261.27 million in 2018Q3 from USD 254.64 million in 2017Q3), following growth recorded by minerals (+16.4%), tea (+9.7%) and re-exports (+9.4%), despite the decrease recorded by coffee (-1.9%) and non-traditional exports (-4.5%). Formal exports volume also increased by 4.4% in 2018Q3, due to the growth in tea (+32.8%), minerals (+3.4%), re-exports (+3.5%) and non-traditional exports (+5.5%).

Table 10: Exports developments (annual % change)

	Volume				Value			
	2017Q2	2017Q3	2018Q2	2018Q3	2017Q2	2017Q3	2018Q2	2018Q3
Total exports	**27.1**	**45.9**	**12.8**	**4.4**	**43.5**	**57.4**	**16.0**	**2.6**
Traditional exports	1.5	5.1	5.9	4.9	19.4	36.7	27.8	4.9
Coffee	10.9	8.2	7.7	-0.4	14.0	19.9	14.7	-1.9
Tea	-2.5	5.1	14.2	32.8	36.4	35.6	2.4	9.7
Minerals	7.2	25.8	24.1	3.4	12.3	51.8	62.3	16.4
Cassiterite	25.6	44.7	26.2	-8.7	46.4	60.4	30.5	-9.5
Coltan	4.7	26.9	26.9	0.9	-5.0	59.2	96.0	21.4
Wolfram	-25.8	-12.2	14.2	45.8	-12.9	4.1	66.2	94.8
Hides and Skins	-1.8	-27.3	-60.2	-89.8	18.4	-8.4	-42.5	-90.9
Pyrethrum	-38.1	3739.8	36.3	-86.7	-39.7	1956.5	8.9	-74.3
Re-exports	34.6	57.4	11.0	3.5	20.7	41.3	10.2	9.4
Non-Traditional exports	24.9	45.2	16.6	5.5	122.9	99.3	12.2	-4.5

Source: NBR, Statistics Department

Traditional exports, composed of coffee, tea, minerals, pyrethrum as well as hides and skins rose by 4.9%, amounting to USD 83.89 million in 2018Q3 from USD 79.98 million in 2017Q3 as reflected in all its components.

Compared to 2017Q3, coffee exports receipts decreased by 1.9% in 2018Q3, to USD 24.38 million from USD 24.86 million, because of decreased exported volume by

0.4% as well as declining unit price by 1.5%, from 3.88 USD/Kg in 2017Q3 to 3.82 USD/Kg in 2018Q3. The decrease in coffee volume exports is attributed to a decrease in production by 1.1%, from 6,784.5 tons in 2017Q3 to 6,712.5 tons in 2018Q3 following unfavorable weather for coffee.

Tea exports receipts increased by 9.7%, from USD 18.20 million in 2017Q3 to USD 19.97 million in 2018Q3, due to the rise in volume, outweighing the decrease in prices. Tea exports volume increased by 32.8%, from 5,539.6 tons in 2017Q3 to 7,356.0 tons in 2018Q3, on the account of increased tea production that rose by 17.9% from 4,288.6 tons in 2017Q3 to 5,058.0 tons in 2018Q3. The increased production came from good season for tea, while its prices decreased by 17.4% from 3.29 USD/Kg in 2017Q3 to 2.71 USD/Kg in 2018Q3.

The mining sector continued to perform well in 2018Q3, owing to rising metal prices at the international market on the account of strong global demand. Exports value of traditional minerals (Coltan, Cassiterite and Wolfram) increased by 16.4% from USD 33.51 million recorded in 2017Q3 to USD 39.00 million in 2018Q3. This good performance was due to the increase in export earnings from coltan (+21.4%) and wolfram (+94.8%), following the rise in their unit prices (rising by 20.3% and 33.6% respectively), that outweighed the decrease in export earnings from cassiterite (-9.5%).

Re-exports (mainly composed of petroleum products, machines and engines, vehicles and other re-exports) increased in both value and volume by 9.4% and 3.5% respectively. This was mainly driven by increase in other re-exports by 35.0% in value and 33.7% in volume, despite a decrease in re-exports of petroleum products by 17.5% and 23.5% in value and volume respectively. Changes in other re-exports component was due to the increased demand of foodstuffs like cooking oil, rice and other manufactured products exported to DRC.

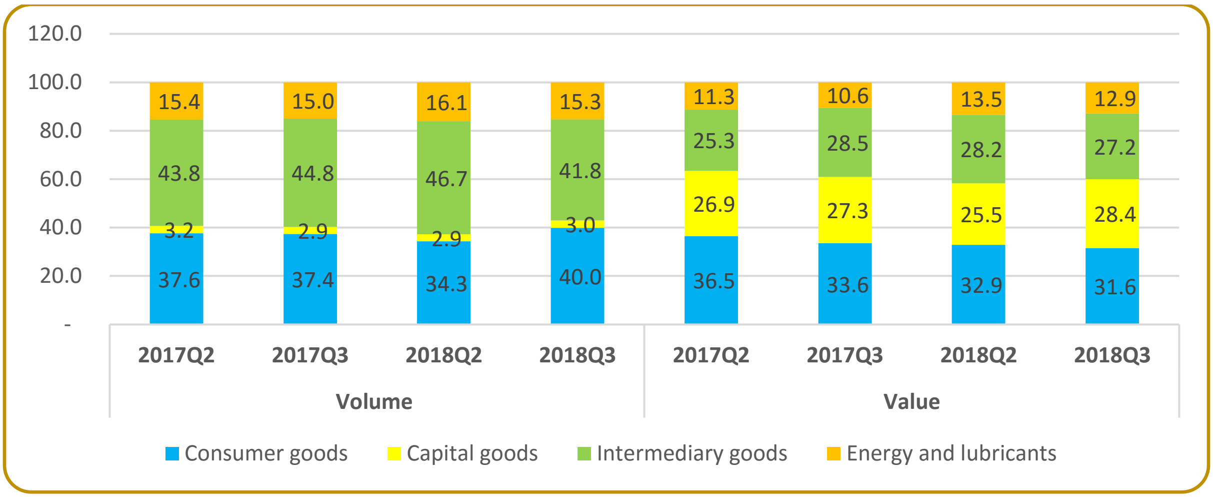
Non-traditional exports, dominated by other minerals, products of milling industry and other manufactured products decreased by 4.5%, amounting to USD 94.18 million in 2018Q3 from USD 98.61 million in 2017Q3. The decrease mainly came from the fall in exports of the products of milling industry by 35.3% in 2018Q3, to USD 10.15 million from USD 15.67 million in 2017Q3. In addition, revenues from cereals decreased by 90.1% to USD 11.74 million in 2018Q3 from USD 118.66 million in the corresponding period of 2017. The fall in the non-traditional category is also explained by the decrease in exports of other manufactured products like soap, organic surface, active agents & washing preparation (-73.3%), footwear (-76.5%) and scraps iron (-66.7%) among others.

2.2.1.2 Formal imports of goods

Rwanda's formal imports are composed of consumer goods, capital goods, intermediary goods as well as energy and lubricants. In 2018Q3, imports in volume were dominated by intermediary goods with a share of 41.8% of the total formal imports volume, followed by consumer goods (40.0%), energy & lubricants (15.3%)

and capital goods (3.0%). In value terms, consumer goods dominated with a share of 31.6%, followed by capital goods (28.4%), intermediary goods (27.2%) and energy & lubricants (12.9%).

Figure 6: Imports developments (% share)



Source: NBR, Monetary Policy Department

Table 11: Imports developments (annual % change)

	Volume				Value			
	2017Q2	2017Q3	2018Q2	2018Q3	2017Q2	2017Q3	2018Q2	2018Q3
Total imports	**-1.3**	**15.5**	**25.1**	**-1.1**	**-7.4**	**5.8**	**1.4**	**3.5**
Consumer goods	**1.4**	**10.3**	**14.1**	**5.8**	**9.2**	**0.9**	**-8.7**	**-2.7**
Food products	10.0	14.7	15.9	5.9	28.8	25.5	2.8	-8.3
Beverages and tobacco	-19.2	27.6	64.4	0.8	-23.0	46.0	43.7	135.0
Article of Clothing	-55.9	2.6	-16.3	-3.1	-7.7	18.9	-19.9	10.9
Health and care	-19.9	7.5	12.6	-6.6	2.2	-6.1	-16.6	-20.0
Domestic articles	-11.7	-49.0	-5.9	12.7	-37.2	-64.5	-12.2	-10.5
Non-utility transport	-25.3	-23.8	50.9	66.9	-41.5	-32.6	59.1	71.0
Papers and cartons	38.6	-9.9	-33.4	-15.5	31.8	0.9	-37.7	-28.1
Other goods	6.4	-10.9	-9.3	48.8	25.7	5.1	-33.2	4.3
Capital goods	**-23.0**	**5.1**	**15.0**	**2.3**	**-30.3**	**4.6**	**-4.1**	**7.7**
Transport Materials	-18.7	3.0	-12.3	8.7	-9.4	12.3	-29.0	-2.7
Machines, devices and tools	-23.3	-7.7	44.8	15.4	-32.7	-4.4	4.0	18.1
Intermediary goods	**-1.7**	**22.9**	**33.2**	**-7.7**	**-3.3**	**17.5**	**13.1**	**-1.3**
Construction materials	-10.6	-4.2	30.2	22.9	-21.3	-2.7	15.4	13.4
Industrial products	12.8	40.8	37.2	-30.1	19.5	29.5	14.7	-6.6
Fertilizers	-54.9	121.4	76.6	-30.8	-61.9	153.2	88.7	-23.6
Energy and lubricants	**-0.8**	**10.5**	**30.6**	**1.0**	**15.4**	**-2.7**	**21.3**	**25.3**
Petroleum products	-1.2	4.4	14.7	3.5	15.1	2.9	23.4	27.2
Trade balance (Exports less imports)					**-334.6**	**-338.9**	**-308.8**	**-353.2**
Cover rate of imports/ exports, %					**38.6**	**42.9**	**44.1**	**42.5**

Source: NBR, Statistics Department

Imports of consumer goods mainly composed of foodstuffs decreased by 2.7% in value, to USD 193.97 million in 2018Q3 from USD 199.26 million in 2017Q3. Consumer goods increased by 5.8% in volume, to 231.15 thousand tons in 2018Q3 from 218.52 thousand tons in 2017Q3. The decrease in value of consumer goods is mainly driven by imports of food products (-8.3%), health and care, mainly pharmaceutical products (-20.0%), as well as domestic articles (-10.5%). Imports of food products decreased in value by 8.3% due to the fall in imports of milk and milk products (-79.5%), fats and oils of animal or plant origin (-7.1%) and sugar & sweet (-37.9%) following an increase of sugar production by 36.6% to 3,098 tons in 2018Q3 from 2,268 tons in 2017Q3.

During the same period, imports of capital goods, dominated by machines, devices and tools as well as transport materials, increased by 7.7% in value (to USD 174.48 million, from USD 162.06 million) and by 2.3% in volume. The increase in volume is largely due to soared imports bill on machinery, electrical and electronic equipment as their volume increased by 15.4%, as well as transports materials which increased by 8.7%.

In 2018Q3, imports of intermediary goods, dominated by construction materials, industrial products and fertilizers, decreased by 1.7% in value and 7.7% in volume, respectively. The decrease is attributed to the decline in demand of industrial products by 30.1% imported by various local industries like food and wood industries which fell by 60.5% and 14.1% respectively. In contrast, imports of cement and similar products increased by 31.9% in value and 29.1% in volume, due to an uptick in demand of imported cement which increased by 31.8%.

Imports of energy and lubricants, of which 94.4% is petroleum products, increased by 25.3% in value and by 1.0% in volume. This increase is explained by the rise in imports of petroleum products by 27.2% in value and 3.5% in volume. Oil prices went up following the decision by OPEC countries, together with a number of non-OPEC producers led by Russia to cut oil production between January 2017 and March 2018. The deal was later extended to run through 2018 based on concerns about geopolitical tensions and supply disruptions in crude-producing countries.

2.2.2 Formal Trade with EAC Countries

In 2018Q3, Rwanda’s trade deficit with the EAC member countries expanded by 38.9% to stand at USD 125.3 million from USD 90.2 million in 2017Q3. The deterioration in trade balance follows the high increase in imports bill by USD 27.3 million (representing +21.8%) exacerbated by a decline of USD 7.8 million (-22.1%) in exports receipts.

Table 12: Trade flow of Rwanda within EAC bloc, (Value FOB in million USD)

	Exports (FOB USD)							Yoy % change
	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	
Burundi	4.8	5.6	5.5	5.3	3.9	3.4	3.5	-37.3
Kenya	25.6	32.5	21.1	31.5	29.5	32.5	19.9	-5.9
South Sudan	0.2	0.1	0.1	0.2	0.2	0.2	0.6	452.4
Tanzania	0.4	0.3	0.8	0.5	0.4	0.5	0.5	-41.9
Uganda	5.4	9.9	7.6	9.3	11.5	12.3	3.0	-60.4
Total exports	36.4	48.4	35.1	46.8	45.4	49.0	27.3	-22.1
Imports (CIF USD)								
Burundi	0.8	0.5	0.5	1.6	1.1	0.7	1.0	93.9
Kenya	33.7	40.1	40.8	33.4	36.9	37.4	49.2	20.6
South Sudan	-	-	-	-	-	-	-	-
Tanzania	21.4	22.9	25.6	27.2	22.9	28.7	34.9	36.3
Uganda	51.3	50.8	58.4	57.2	57.5	63	67.6	15.7
Total imports	107.2	114.3	125.3	119.4	118.4	129.8	152.6	21.8
Trade balance	-70.8	-65.9	-90.2	-72.6	-73	-80.8	-125.3	38.9

Source: BNR, Statistics Department

Imports from EAC countries increased by 21.8%, amounting to USD 152.6 million in 2018Q3 from USD 125.3 million in the same period of 2017. This growth is reflected in high increase in imports from Tanzania, Uganda and Kenya, respectively growing by 9.3 million, 9.2 million and 8.4 million. This is mainly because of higher imports of cement and food products especially cereals such as maize corn, rice and sorghum. The ratio of imports from EAC partner states in the total formal imports stood at 17.9%, dropping from 28.0% in the same period.

2.2.3 Informal cross-border trade

In 2018Q3, Rwanda's informal cross border trade (ICBT) registered a trade surplus of USD 27.2 million (+45.32%) up from USD 18.7 million in 2017Q3. Informal exports with neighboring countries in 2018Q3 constitute a share of 12.3% of the total formal exports receipts and increased by 27.1% from USD 25.2 million in 2017Q3 to USD 32.0 million. The growth in exports is explained by removal of non-tariff barriers (NTBs) by DRC and good agricultural harvest due to favorable weather conditions. We note that agricultural products are predominant in this trade. The main informal export partners include DR Congo, representing 86.8% of the total informal exports, followed by Uganda (+11.7%), Burundi (+1.5%) and Tanzania (+0.0%).

Table 13: Rwanda Informal Cross Border trade (USD, million)

	2016		2017				2018		
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Exports	30.73	24.99	22.46	24.28	25.17	26.50	31.38	31.80	32.00
% change (yoy)	**28.3**	**-24.0**	**-27.1**	**-31.4**	**-18.1**	**6.1**	**39.7**	**31.0**	**27.1**
Imports	8.22	7.52	4.45	5.87	6.46	5.82	4.91	6.36	4.81
% change(yoy)	**43.3**	**65.8**	**-31.8**	**-28.9**	**-21.4**	**-22.7**	**10.4**	**8.3**	**-25.5**
Trade Balance	22.51	17.47	18.01	18.41	18.71	20.68	26.47	25.45	27.20
% change (yoy)	**24.6**	**-36.4**	**-48.7**	**-32.1**	**-16.9**	**18.4**	**47.0**	**38.2**	**45.32**

Source: BNR, Statistics Department

Informal cross border imports decreased by 25.5%, from USD 6.5 million in 2017Q3, largely contributed by decline in trade flows from Uganda that fell by 23.6%, followed by DRC (-5.2%) and Burundi (-2.1%) despite the increase by 5.3% from Tanzania. Uganda remains the leading ICBT import-trading partner with 57.4% of the total ICBT imports, followed by Burundi (19.5%), Tanzania (12.6%) and DRC (10.5%).

2.2.4 The exchange rate: bilateral and effective

In 2018Q3, the foreign exchange rate pressures on the Rwandan Franc (FRW) remained moderate.%% Relative to December 2017, the FRW depreciated by 2.9% against the USD at end September 2018, slightly higher than 2.2% observed in the same period of 2017, but far below 8.4% recorded in 2016Q3. Compared to 2017Q3, FRW depreciated by 3.8% in 2018Q3 higher than 3.4% recorded in 2017Q3, while on quarterly basis, it depreciated by 0.9%, 0.5% and 0.8% in 2018Q3, 2018Q2 and 2018Q1 respectively.

Compared to other major currencies, relative to December 2017, the FRW appreciated by 0.1% against the British pound, while depreciated by 0.6% versus the Euro. Compared to regional currencies, the FRW depreciated by 5.2%, 0.6% and 2.0% against the Kenyan and Tanzanian shillings and the Burundian Francs, respectively, but appreciated by 2.4% against the Ugandan shillings.

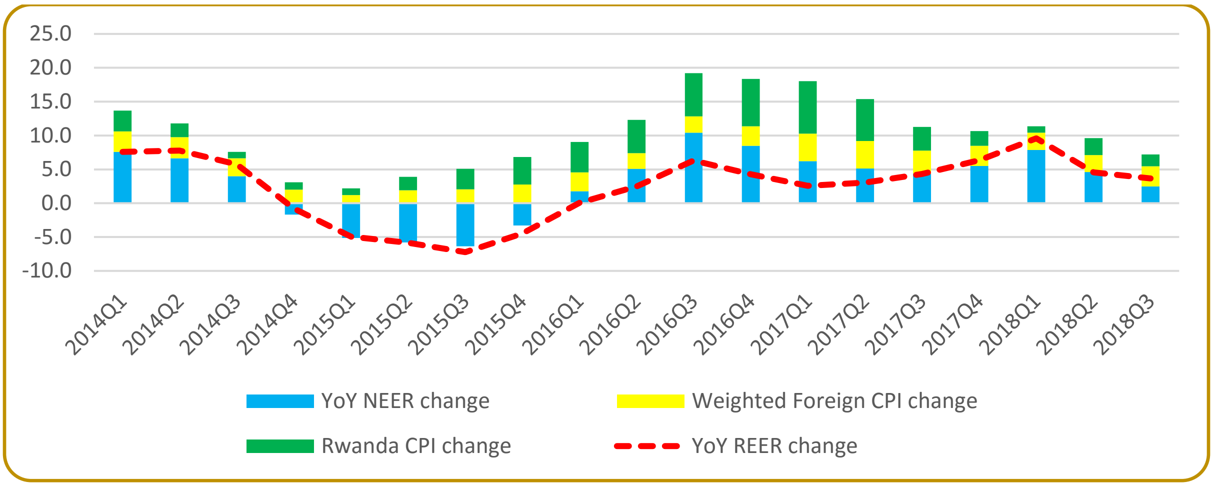
Table 14: Appreciation/Depreciation rate of selected currencies against the FRW

	USD/FRW	GBP/FRW	EUR/FRW	KES/FRW	TZS/FRW	UGS/FRW	BIF/FRW
2016Q1	2.8	-0.2	6.3	3.9	1.4	2.8	1.5
2016Q2	4.8	-5.0	6.6	6.1	3.3	3.7	-3.7
2016Q3	8.4	-5.1	11.3	9.5	7.1	8.0	-0.5
2016Q4	9.7	-9.2	5.3	9.6	8.6	2.3	-0.2
2017Q1	0.8	2.5	2.5	0.3	-1.6	0.8	-0.3
2017Q2	1.3	7.5	10.4	0.0	-1.4	2.0	-1.0
2017Q3	**2.2**	**11.8**	**14.7**	**1.5**	**-0.9**	**2.6**	**-1.4**
2017Q4	3.1	13.2	16.9	2.3	0.4	2.7	-1.0
2018Q1	0.9	5.6	4.6	3.3	0.0	-0.6	0.8
2018Q2	1.7	-0.9	-0.4	4.0	-0.1	-4.7	1.5
2018Q3	**2.9**	**-0.1**	**0.6**	**5.2**	**0.6**	**-2.4**	**2.0**

Source: NBR, Monetary Policy Department

The FRW real effective exchange rate depreciated by 3.7% (y-o-y) in 2018Q3 against 4.3% recorded during the same period in 2017. This was mostly attributed to the depreciation of the nominal value of the FRW against currencies of some of the major trading partners. In nominal effective terms, it depreciated by 2.5% compared to a depreciation of 4.4% recorded in 2017Q3.

Figure 7: Drivers of real effective exchange rate



Source: NBR, Monetary Policy Department

2.3 Monetary Developments

2.3.1 Monetary Policy Stance

In 2018Q3, NBR maintained an accommodative monetary policy stance at 5.5%, aiming to continue supporting the financing of the economy by the banking sector, given that both inflationary and exchange pressures remained passive.

As a result, outstanding credit to the private sector increased by 7.2% in 2018Q3 compared to 6.6% in the corresponding period of 2017. Broad money increased by 11.9% in 2018Q3 compared to 16.5% in the same period of 2017.

2.3.2 Money Supply and Demand

Broad Money (M3) grew by 11.9% in 2018Q3 (y-o-y) standing at FRW 1957.8 billion from a growth of 16.5% realized in 2017Q3.

2.3.2.1 Money Supply

The above-mentioned growth in broad money mainly resulted from an increase in net domestic assets of 3.3% in 2018Q3 and in net foreign assets (NFA) of 26.2% in 2018Q3.

The growth in net domestic assets was mainly attributed to an increase of 97.1% in loans to Public enterprises from 7.4% in 2017Q3. During the same period, the stock of credit to the private sector (CPS) grew by 7.2% from 6.6% recorded in 2017Q3.

Table15: Monetary aggregates (FRW, billion)

	2016 Q3	2017 Q3	2018 Q3	17Q3/ 16Q3	18Q3/ 17Q3
Net foreign assets	**546.7**	**662.6**	**835.9**	**21.2**	**26.2**
foreign assets	872.6	1084.3	1248.8	24.3	15.2
foreign liabilities	325.9	421.7	412.9	29.4	-2.1
Net domestic assets	**954.1**	**1086.3**	**1122.0**	**13.9**	**3.3**
Domestic credit	1409.3	1619.4	1761.6	14.9	8.8
Central government (net)	47.7	167.4	166.2	250.8	-0.7
Credit	299.9	408.1	472.5	36.1	15.8
Deposits	252.2	240.7	306.3	-4.6	27.3
Public enterprises	40.1	43.1	84.9	7.4	97.1
Private sector	1321.4	1408.9	1510.4	6.6	7.2
O/W in foreign currency	198.2	179.1	172.6	-9.6	-3.6
Other items net (Assets: +)	-455.2	-533.1	-639.6	17.1	20.0
Broad money M3	**1500.8**	**1748.9**	**1957.8**	**16.5**	**11.9**
Currency in circulation	133.6	147.9	162.6	10.8	9.9
Deposits	1367.2	1600.9	1795.3	17.1	12.1
o/w Demand deposits	548.4	648.5	726.2	18.2	12.0
Time and saving deposits	523.0	569.4	598.8	8.9	5.2
Foreign currency deposits	295.8	383.1	470.2	29.5	22.7

Source: BNR, Monetary Policy Department

The increase observed in NFA came from a growth in both commercial banks' NFA of 42.2%, in 2018Q3, and monetary authority's NFA of 24%. The growth in commercial banks' NFA is a result of the good performance in the external sector.

Table 16: New authorized loans by sector (FRW billion, unless otherwise indicated)

Branch of activity	**2017**				**2018**			**% change**	
	Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**2017Q3/ 2016Q3**	**2018Q3/ 2017Q3**
Non-classified activities	23.4	21.1	22.1	24	25.2	26.2	26.8	13.3	21.1
Agriculture, fisheries& livestock	2.9	2	2.2	1.7	2.6	3.1	3.4	-27.1	52.7
Mining activities	0.4	0.3	0	0.2	0	0.2	0.0	-100.0	0.0
Manufacturing activities	8	20.4	13.4	18.4	10.3	22.8	11.4	112.5	-15.1
Water & energy activities	8	0.9	4.9	6.5	0.2	0	15.1	4981.0	207.8
Public works and buildings	55.2	50	61.5	64.1	51	50.8	55.1	24.0	-10.4
Commerce restaurants and hotels	84.7	84.6	69.9	71.7	65.1	80.2	79.3	25.6	13.5
Transport & warehousing & communication	19.7	18.5	12.7	22.7	33	15.4	10.6	38.8	-16.7
OFI &Insurances and other non-financial services	5.4	1.1	2.2	0.8	0.4	0.6	1.4	85.7	-38.2
Services provided to the community	6.1	4.1	3.5	5.8	10.1	4.6	5.1	-29.2	44.3
Total	**213.7**	**202.9**	**192.5**	**215.7**	**197.9**	**204.8**	**208.0**	**28.7**	**8.1**

Source: BNR, Financial Stability Directorate

New authorized loans by the banking sector increased by 8.1% in 2018Q3, lower than an increase of 28.7% recorded in 2017Q3. The low growth was due to higher loan rejection (26.6 from 13.8%) but also weak credit demand in hotels, attributed to the completion of big projects that were financed by banks in 2016 and 2017. The deceleration in the growth of new authorized loans in 2018Q3 was largely reflected in manufacturing activities (-15.1%), public works and buildings (-10.4%) and Transport & warehousing & communication (-16.7%).

Considering the distribution of new authorized loans by sector of activities, commerce, restaurants and hotels remained the most financed economic sector, representing 38.1% of the total new authorized loans, followed by public works and buildings (26.5%).

Table 17: Distribution of new authorized loans by sector of activities (% share of total new loans)

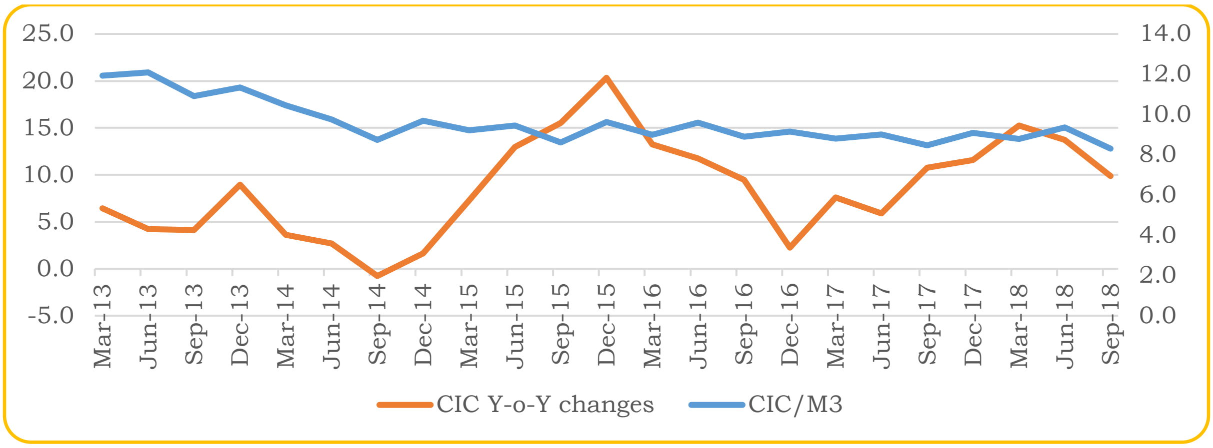
Branch of activity	2017				2018		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Non-classified activities	10.9	10.4	11.5	11.1	12.7	12.8	12.9
Agriculture, fisheries& livestock	1.4	1.0	1.1	0.8	1.3	1.5	1.6
Mining activities	0.2	0.1	0.0	0.1	0.0	0.1	0.0
Manufacturing activities	3.7	10.1	7.0	8.5	5.2	11.1	5.5
Water & energy activities	3.7	0.4	2.5	3.0	0.1	0.0	7.2
Public works and buildings	**25.8**	**24.6**	**31.9**	**29.7**	**25.8**	**24.8**	**26.5**
Commerce restaurants and hotels	**39.6**	**41.7**	**36.3**	**33.2**	**32.9**	**39.2**	**38.1**
Transp. & warehousing & comm.	9.2	9.1	6.6	10.5	16.7	7.5	5.1
OFI &Insur. and other non-fin ser.	2.5	0.5	1.1	0.4	0.2	0.3	0.7
Services provided to the community	2.9	2.0	1.8	2.7	5.1	2.2	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: BNR, Financial Stability Directorate

2.3.2.2 Money demand

Currency in circulation (CIC) grew by 9.9%, in 2018Q3, from 10.8% in 2017Q3. The change in CIC was explained by lower growth of economic activities (11.5% in 2018Q3 from 12.9% in 2017Q3). In addition, the monetization of the economy continued to improve as the ratio of broad money to GDP increased to 23.4% in 2017 from 15.4% in 2013. The currency in circulation to broad money ratio stood at 8.3% in 2018Q3, below an average of 10% in the last 5 years. This downward trend in the ratio of CIC to broad money continues to be mainly caused by the improvement in financial inclusion and payment systems modernization.

Figure 8: Currency to broad money ratio and CIC growth (%, y-o-y)



Source: BNR, Statistics Department

Total deposits rose by 12.1% y-o-y in 2018Q3, versus 17.1% in 2017Q3. Demand, time and foreign currency deposits increased by 12.0%, 5.2% and 22.7% in 2018Q3 respectively, against 18.2%, 8.9% and 29.5% in the same period of last year. %The share of demand deposits in total deposits remains high at 40.5%, followed by time and saving deposits (33.3%) and foreign deposits (26.2%).%%%%%%

The category of households and non- profit Institutions Serving Households (NPISHs) continued to represent the biggest share in deposits, with 42.2% by end 2018Q3. Other non-financial corporations cover 27.3%, social security funds (18.4%), other financial institutions (8.5%) and public enterprises (3.6%).

Table 18: Deposits by category of depositors (% share)

	2015	2016		2017		2018		
	Q3	Q3	Q4	Q3	Q4	Q1	Q2	Q3
Other financial institutions	9	7.4	7	7.8	7.6	9.2	8.6	8.5
Social Security Funds	15.7	15.7	15	19.1	17.3	17.9	16.8	18.4
Public enterprises	4.7	3.6	3.8	3	2.9	3	3.1	3.6
Other non-financial corporations	27.7	25	26.4	25	26.6	25.5	26.7	27.3
Households and NPISH	42.9	48.2	47.8	45	45.6	44.4	44.8	42.2
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: BNR, Statistics Department

2.3.3 Banking system liquidity developments

The banking system liquidity conditions continued to improve during 2018Q3 compared to the same quarter of the previous year. Commercial banks' most liquid assets grew by 17.9% standing at FRW 366.3 billion in 2018Q3 from FRW 310.6

billion recorded in 2017Q3. Comparatively to their levels in the previous quarter, they decelerated by 3.5%.

Table19: Most liquid assets of commercial banks (FRW, billion)

	2016		2017				2018			% change	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q3-18/ Q3-17	Q3-18/ Q2-18
T-bills	176.3	173.7	187.3	207.9	245.0	243.6	253.5	249.5	256.8	**4.8**	**2.9**
Central bank bill	4.0	4.0	5.0	-	9.0	6.0	37.0	18.5	25.5	**183.3**	**37.8**
Repo	0.0	30.5	21.0	60.4	13.0	30.0	54.7	45.0	36.0	**176.9**	**-20.0**
Excess reserves	20.5	24.5	14.8	9.9	15.2	20.6	17.2	36.8	14.2	**-6.6**	**-61.4**
Cash in vault	28.3	30.8	31.4	30.9	28.4	33.1	32.1	29.9	33.9	**19.3**	**13.4**
Total	**229.2**	**263.6**	**259.5**	**309.1**	**310.6**	**333.3**	**394.5**	**379.7**	**366.3**	**17.9**	**-3.5**

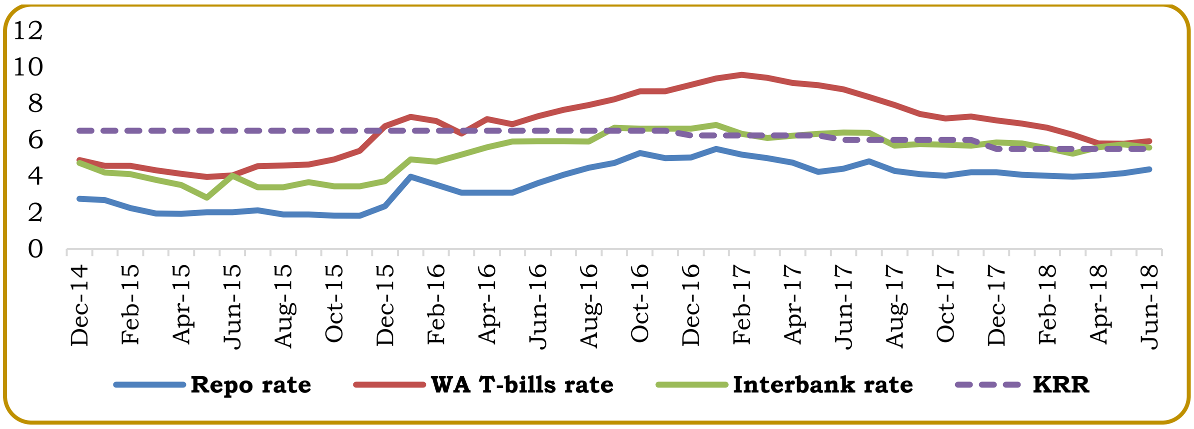
Source: BNR, Monetary Policy Department

The improvement in liquidity conditions during the quarter under review, was mainly explained by the drop in sales to banks which amounted to USD 55.9 million in 2018Q3 from USD 80.2 million sold in 2017Q3. There was also a net fiscal injection of FRW 2.4 billion in 2018Q3 compared to the net fiscal absorption of FRW 3.6 billion during the same quarter of last year.

2.3.4 Interest rates developments

In line with favorable liquidity conditions and current monetary policy stance, money market interest rates have been relatively stable around the KKR. 28-days T-bills and interbank rate respectively decreased on average to 4.85% and 5.63% in 2018Q3, from 6.06% and 5.94% in 2017Q3. Repo rate increased by 5 basis points to stand at 4.45% from 4.40% during the same period. That was due to the fact that the central bank intensified its interventions through repos in a bid to keep adequate excess reserves in the banking system.

Figure 9: Money market interest rates (%)



Source: BNR, Monetary Policy Department

The decline in money market rates was reflected in commercial banks interest rates, showing some improvement in interest pass-though. Deposit rate decreased by 90 basis points, standing at 6.83% on average in 2018Q3 from 7.73% in 2017Q3. Likewise, lending rates declined by 19 basis points to stand on average at 17.16% from 17.41% during the same period.

Table 20: Market interest rates (percent, average)

	2013	2014	2015	2016	2017	2017				2018		
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
Lending	17.32	17.26	17.33	17.29	17.17	17.03	17.11	17.41	17.21	17.03	17.01	17.16
Deposit	9.93	8.24	8.24	7.91	7.63	7.48	8.11	7.73	7.19	7.44	8.18	6.83
Spread	7.39	9.02	9.09	9.38	9.54	9.55	9.00	9.68	10.02	9.59	8.83	10.33

Source: BNR, Monetary Policy Department

III. INFLATION DEVELOPMENTS

In 2018Q3, headline inflation dropped to 1.8% from 2.5% recorded in 2018Q2. The decline in headline inflation was mostly reflected in food prices that dropped from 0.6% to -2.0%.

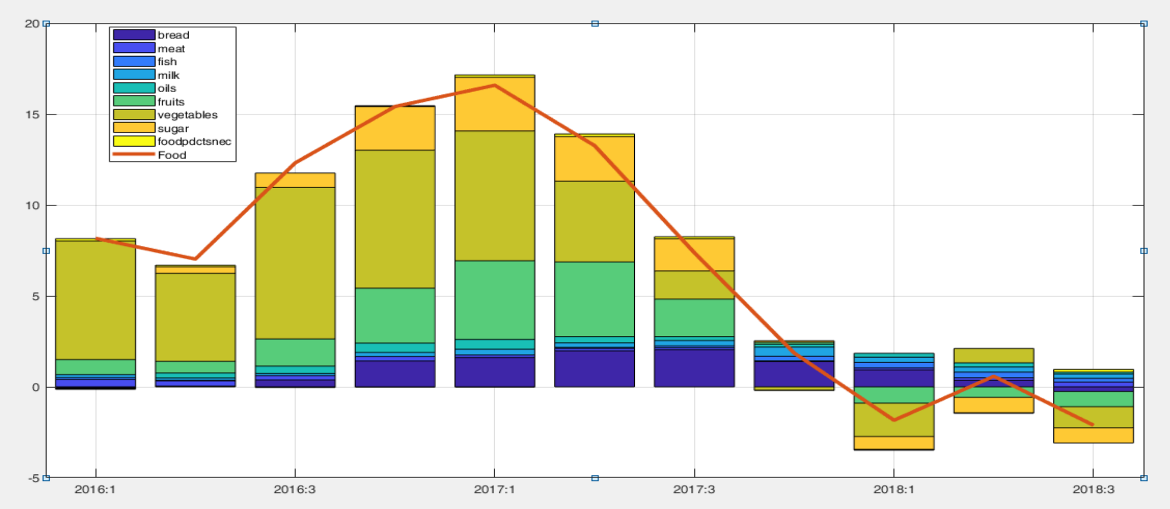
Table 21: Inflation developments for key items (%, Y-o-Y)

	2017				2018		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Headline	7.7	6.2	3.5	2.2	0.9	2.5	1.8
Domestic	7.4	6.0	3.4	1.4	-0.1	1.8	0.9
Food:	16.6	13.3	7.4	1.9	-1.8	0.6	-2.0
- Vegetables	21.0	13.3	4.6	-0.5	-5.4	2.3	-3.3
Housing	2.0	1.8	1.7	2.3	2.4	4.4	3.6
Transport	8.5	5.4	1.2	3.0	3.0	8.2	10.3
Imported	8.8	6.9	3.9	4.7	4.4	5.0	4.8
Core	5.5	4.6	3.1	2.5	1.7	1.8	1.5
Energy	4.3	5.2	3.5	6.3	7.3	12.7	11.0

Source: NBR, Research Department

Food prices were driven by vegetables whose inflation decelerated from 2.3% in 2018Q2 to -3.3% in 2018Q3. The decrease in vegetable prices come from increase in the quantity supplied on the market following the good harvest in Season C, 2018.

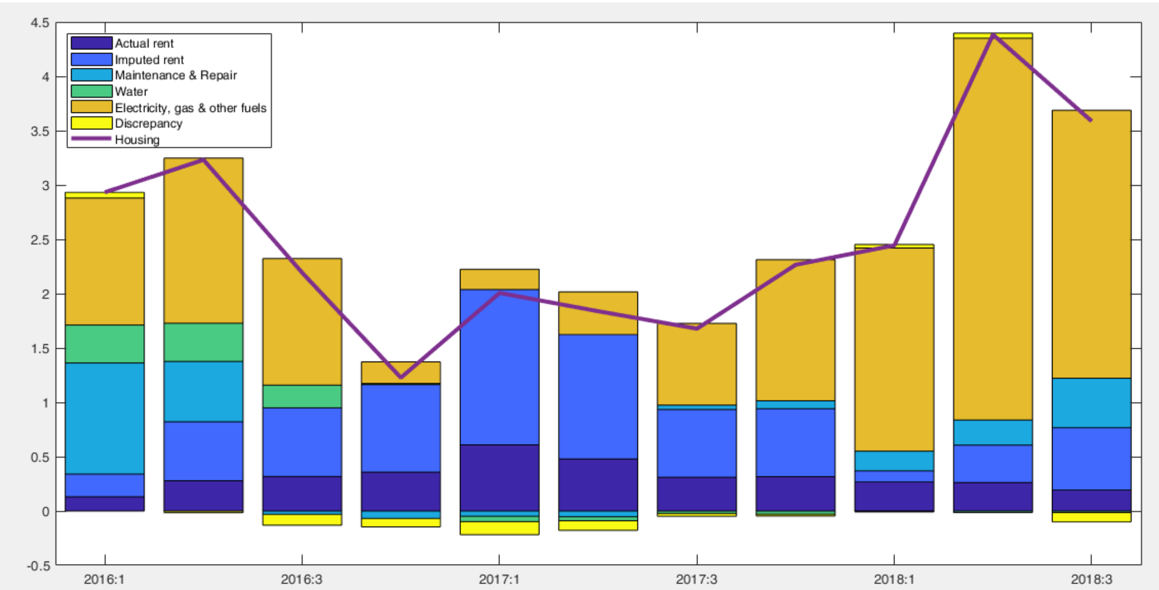
Figure 10: Contribution to Food Inflation (%, Y-o-Y)



Source: NBR, Research Department

Housing inflation decreased to 3.6% in 2018Q3 from 4.4% in 2018Q2. The decrease resulted from the fall in solid fuels prices (charcoals and firewood) which is one of the components of housing inflation. Solid fuels prices decreased to 14.7% in 2018Q3, from 21.0% in 2018Q2.

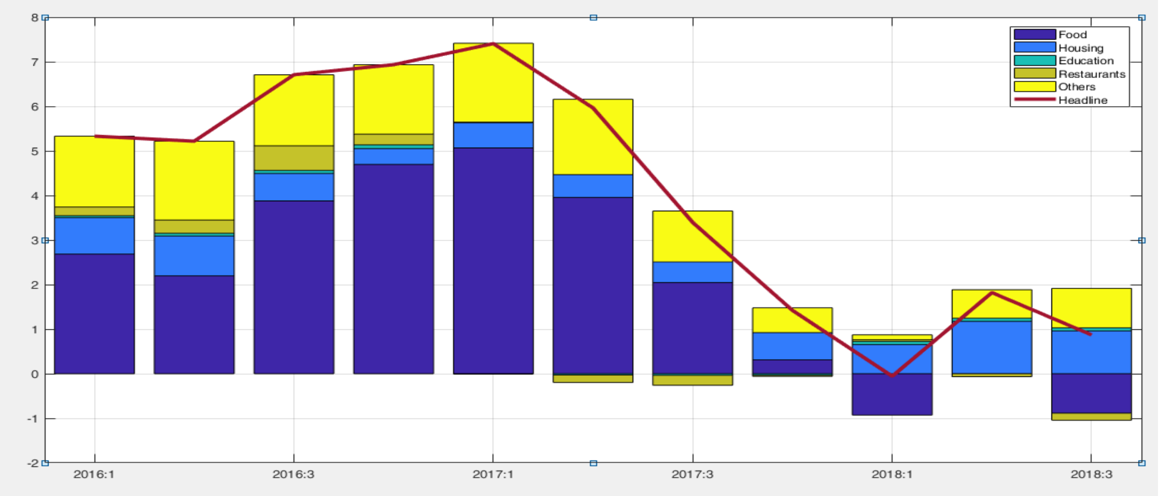
Figure 11: Contribution to Housing Inflation (%, Y-o-Y)



Source: NBR, Research Department

Imported inflation decreased to 4.8% in 2018Q3 from 5.0% in 2018Q2 during the same period, in line with the decline in prices of imported food from the EAC region. Domestic inflation reduced to 0.9% in 2018Q3 from 1.8% in 2018Q2 mainly because of the aforementioned abundant food supply.

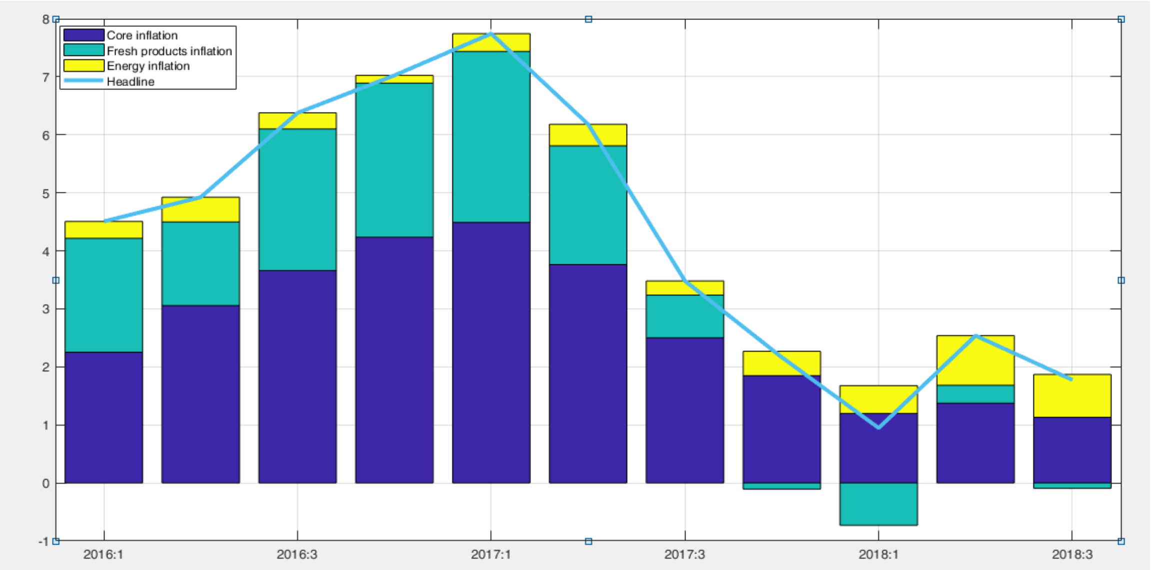
Figure 12: Contribution to Domestic Inflation (%, Y-o-Y)



Source: NBR, Research Department

Core inflation eased from 1.8% in 2018Q2 to 1.5% in 2018Q3. The current low levels of core inflation are consistent with the levels at which the non-agricultural sector operate.

Figure 13: Core, Energy and Fresh Products Inflation (%, Y-o-Y)



Source: NBR, Research Department

IV. INFLATION OUTLOOK AND RISKS

4.1 Demand-side pressures

In 2018Q3, the estimated output gap was -0.4% after -0.6% in 2018Q2, signaling a continuous improvement of aggregate demand. However, this aggregate demand remains below potential; hence, its improvement does not fuel inflationary pressures. The upward trend of output gap is projected continued in 2018Q4, implying that the observed good performance of the economy will continue in the last quarter of 2018.

4.2 Supply shocks

In 2018Q3, local food inflation unexpectedly decreased further from 2018Q2. In line with the recent developments in food supply, this trend is likely going to continue and thus posing downward pressures on inflation in the near term.

4.3 Exchange rate developments

In 2018Q3, the foreign exchange rate pressures on the Rwandan Franc remained modest and it is projected to remain consistent with the long run equilibrium level.

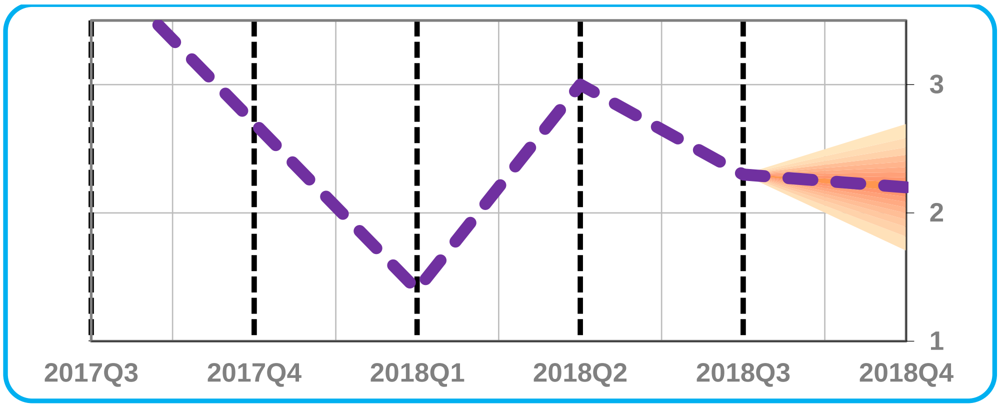
4.4 Global and regional inflationary pressures

The global economy remains strong and expected to further pick up over the next two years. Most advanced economies are performing above their potential, indicating a continued stronger aggregate demand in the near future. The resilience of the global economy is expected to continue, stimulating not only Rwanda's export receipts but also easing exchange rate pressures. At the same time, oil prices are expected to continue hovering around the current level. Therefore, pressures from global economy on inflation remain muted.

4.5 Inflation forecasts

Agricultural production in season C pushed down vegetables prices in 2018Q3 and food prices are expected to ease in 2018Q4. Oil prices are expected to persist at current high levels in 2018Q4. In view of the downward and upward risks, headline inflation is projected to evolve around 1.2% in 2018Q4.

Figure 14: Headline inflation forecasts (fan chart)



Source: BNR, Research Department