



NATIONAL BANK OF RWANDA
BANKI NKURU Y'U RWANDA



MONETARY POLICY REPORT

NOVEMBER 2021



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MONETARY POLICY COMMITTEE DECISION, CURRENT OUTLOOK AND RISKS

The statutory quarterly Monetary Policy Committee (MPC) meeting held on 10 November 2021 reviewed the impact of its previous decisions and assessed recent economic developments at the global and domestic level, as well as the outlook. The MPC noted that inflation is projected to be slightly above zero in 2021, before rising to around the 5.0 percent inflation benchmark in 2022. The committee decided to maintain the current accommodative monetary policy stance by maintaining the Central Bank Rate (CBR) at 4.5 percent. This stance is adequate to support the economic recovery, while bringing inflation up to the medium-term objective of 5.0 percent.

Currently, inflation evolves below the lower bound but is projected to start rising in 2021Q4. This uptick results from concurrent pickups in core and food inflation, and a continued rise in energy inflation, reflecting the recent domestic and global economic developments.

November 2021 projections point to an increase in core inflation, which is in line with the continued global and domestic economic recoveries. With the ongoing recovery in the global economy, commodity prices and foreign inflation are expected to remain high, maintaining the current inflationary pressures from imported production costs. The rally in global demand is also expected to support domestic economic recovery efforts. The latter reflects fiscal sector plans to raise domestic demand, adding to the recovery in private consumption relating to the reopening of domestic economic activities following the easing of restrictions measures. The decision to maintain the CBR at 4.5 percent also aims to support the momentum in economic recovery. The resulting increase in domestic output will exert pressures on domestic production costs, leading to upward pressures on core inflation in 2022 in line with the medium-term inflation objective.

Although food and non-alcoholic beverages inflation slightly eased in 2021Q3, higher international food prices and lower domestic food production kept exerting pressures upward. International food prices are projected to decline gradually in 2022 and 2023 as supply conditions improve. However, in 2022 supply constraints may persist for some food imports such as edible oils despite government support to curb pressures. With higher global food prices and the expected slowdown in domestic food production during the growing period of Season A 2022, food inflation is expected to pick up in 2021Q4 and continue in 2022.

Energy inflation picked up in 2021Q3, following pressures from international oil prices. In 2021Q4, reduced global gas supply is expected to bring additional pressures and volatility as the country is yet to put in place infrastructures that help to regulate gas prices. In 2022, global energy prices are expected to remain high, and maintain pressures on energy inflation.

I. GLOBAL ECONOMIC DEVELOPMENTS AND OUTLOOK

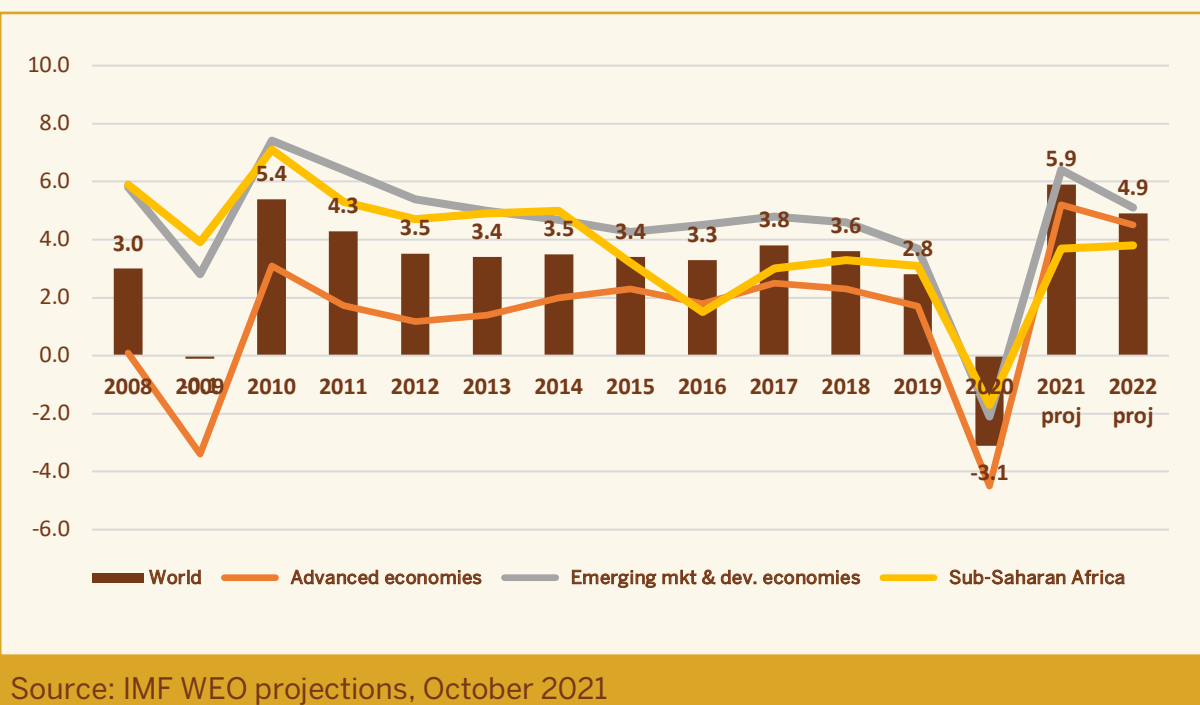
According to the International Monetary Fund's (IMF) World Economic Outlook (WEO) forecasts published in October 2021, the world economic growth is projected to recover by 5.9 percent in 2021 and 4.9 percent in 2022 from a contraction of 3.1 percent in 2020. Growth projections for 2021 were revised down by 0.1 percentage points relative to July WEO update, reflecting forecast downgrades to the advanced economies and low-income developing countries,

Global economic recovery continues

According to the International Monetary Fund's (IMF) World Economic Outlook (WEO) published in October 2021, the world economy is projected to recover from a contraction of 3.1 percent in 2020, growing by 5.9 percent in 2021, and 4.9 percent in 2022. Growth projections for 2021 were revised down by 0.1 percentage points relative to July WEO update, reflecting forecast downgrades to the advanced economies and low-income developing countries.

In 2021, economic growth in advanced economies is projected to recover by 5.2 percent after a contraction of 4.5 percent in 2020, 0.4 percentage points lower compared to July WEO update. Growth prospects for 2021 in advanced economies are revised down compared to the July WEO update, largely reflecting downgrades to the United States, Germany and Japan.

Chart 1: GDP growth and projections across regional blocks (% change)



Relative to the July WEO update, the US economic growth projections are revised down by 1.0 percentage points in 2021 to 6.0 percent and 0.3 percentage points in 2022 to 5.2 percent, due to large inventory drawdowns in the second quarter, in part reflecting supply

disruptions and softening consumption in the third quarter. The US outlook incorporates the infrastructure bill recently passed by the Senate and anticipated legislation to strengthen the social safety net, equivalent to about \$4 trillion in spending over the next 10 years.

Japan's 2021 projections are revised down by 0.4 percentage points, mostly reflecting tighter restrictions in the first half of the year as caseloads picked up. The Japanese economy is anticipated to see a stronger rebound in the second half of 2021, as vaccination proceeds and the economy fully reopens. Real GDP growth is expected to improve in 2021 to 2.4 percent after contracting by 4.6 percent in 2020.

Compared to the July WEO update, economic growth projections for Germany are revised down by 0.5 percentage points in 2021 to 3.1 percentage points, due to the shortage of key inputs outweighing on manufacturing output.

However, across advanced economies, an anticipated strong rebound in the first half of the next year, as vaccination proceeds, yields an upward revision to the growth forecast for 2022.

Emerging market and developing economies are projected to recover by 6.4 percent in 2021, after contracting by 2.1 percent in 2020, and projected to grow by 5.1 percent in 2022. The forecast for the group is marked up by 0.1 percentage points in 2021 compared with the July WEO update, reflecting upgrades across almost all regions, despite growth markdowns for emerging and developing Asian economies.

In China, GDP growth is projected at 8.0 percent in 2021, from 2.3 percent recorded in 2020. Compared to the projected growth of 8.1 percent in July 2021 WEO update, the projected growth for 2021 are slightly marked down by 0.1 percentage points due to strong-than-anticipated scaling back of public investment. India's economy is projected to recover by 9.5 percent in 2021, from a contraction of 7.3 percent recorded in 2020, and projected to grow by 8.5 percent in 2022. The projections for 2021 remained unchanged relative to July WEO update.

The Sub-Saharan African economy is projected to recover by 3.7 percent in 2021 (0.3 percentage points higher relative to July WEO update), compared to a contraction of 1.7 percent in 2020. The upward revision reflects improved assessments for some commodity exporters out-weighting drags from pandemic developments. The region's economic recovery is also reflected in the recovery of the two big economies, namely Nigeria (2.6 percent) and South Africa (5.0 percent). However, the projected recovery depends on the path of the global pandemic and the region's vaccination effect. Compared to other regions, it is projected to be the slowest growing region in 2021, as the slow recovery reflects differences in policy space and slower vaccine rollout. Growth projections for 2022 were revised down by 0.3 percentage points to 3.8 percent.

The low-income developing countries are projected to grow by 3.0 percent in 2021, from 0.1 percent in 2020, and growth prospects for the group is marked down by 0.9 percentage

points relative to July WEO update, with the continuing slow rollout of vaccines as the main factor weighing on the recovery.

However, global forecasts are subject to higher uncertainty regarding the evolution of the pandemic, the outlook for inflation, and the associated shifts in global financial conditions. On the downside, the main risk factors are emergence of more transmissible and deadlier SARS-CoV-2 variants, more persistent supply-demand mismatches, intensification of trade and technological tensions, financial market volatility, grater social unrest, more adverse climate shocks, as well as cyberattacks on critical infrastructure.

Faster vaccine production and distribution, and productivity growth spurt are the two highlighted upside factors. Large amounts of vaccine supplies are expected to come over the coming months, both in terms of production of existing vaccines and deployment of completely new vaccines. A faster pace of vaccinations than what is assumed would have a direct positive effect on economic activity. It could also boost the confidence of consumers and firms, triggering a rise in spending and investment that would strengthen the economic recovery.

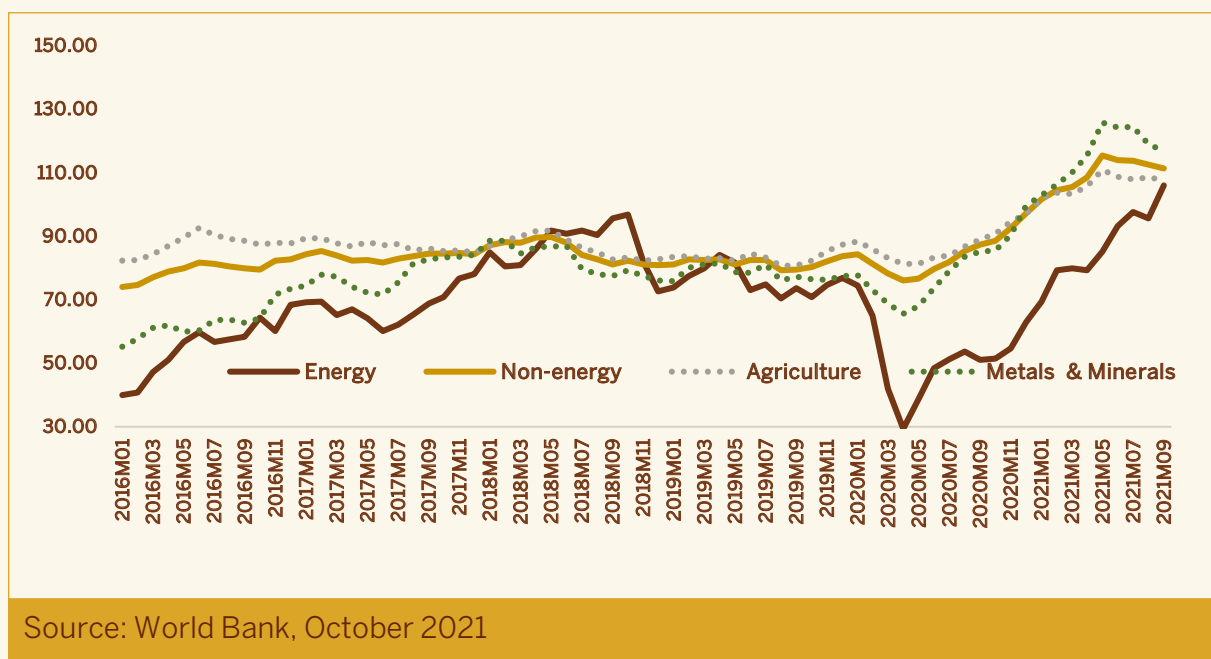
Higher global commodity prices induced by a rising global demand

In 2021Q3 (y-o-y), global commodity prices increased, reflecting a rebound in global demand. Energy prices rose highly by 92.0 percent from a drop of 28.7 percent in 2020Q3, attributed mainly to the rise in crude oil prices. Non-energy commodity prices increased by 32.6 percent in 2021Q3, from 5.4 percent in 2020Q3, owing to higher prices for metals & minerals, agricultural commodities, and fertilizers.

According to the World Bank October forecasts, global energy prices are projected to increase by 83.4 percent in 2021, attributed mainly to the projected rising crude oil prices and natural gas. Non-energy prices are projected to increase by 31.0 percent, reflecting particularly strong increase in the prices of metals and food over recent months.

In 2021Q3, crude oil prices increased by 70.5 percent on average compared to a decline of 29.6 percent in 2020Q3, following supply disruptions and production constraints. Crude oil prices initially softened in August amid worries about renewed outbreaks of the pandemic, but these were offset by supply disruptions in the United States arising from Hurricane Ida

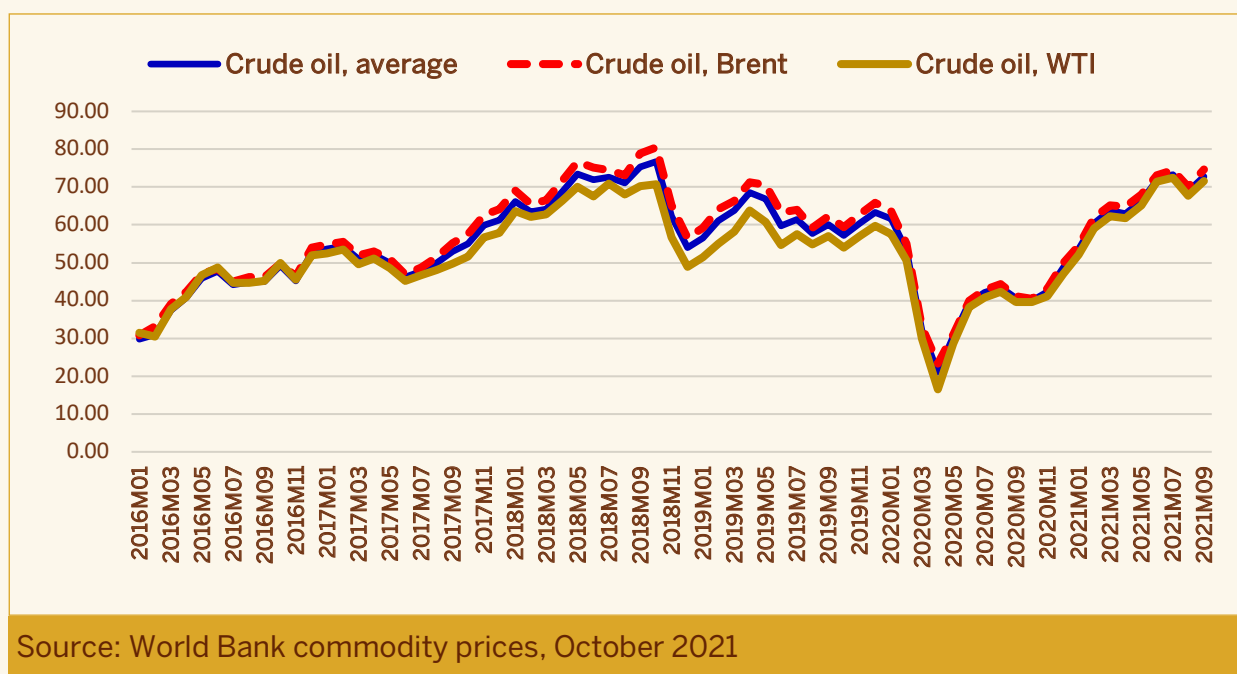
Chart 2 - Commodity Prices Index in Nominal US Dollar (2010=100)



on production in the Gulf of Mexico. Oil prices have also reflected higher natural gas prices as it is becoming more competitive in heating and electricity generation.

World Bank projects oil prices to increase by 69.5 percent in 2021, from USD 41.3/barrel in 2020 to USD 70.0/barrel in 2021, reflecting a rise in oil consumption.

Chart 3: Crude Oil Price Developments (USD/barrel)



In 2021Q3, average prices for agricultural commodities increased by 24.7 percent from 6.1 percent in 2020Q3, reflecting supply shortfalls, input cost increases (especially fertilizers, natural gas, and coal), and strong demand for animal feed commodities in China.

Food prices increased by 32.3 percent in 2021Q3 compared to 6.7 percent in 2020Q3, of which oils & meals (42.5 percent compared to 17.0 percent), grains, (26.3 percent after 2.1 percent), and other foods (24.8 percent against -0.2 percent). Local food prices have surged in response to the ongoing spike in energy and fertilizers prices as well as Covid-induced supply-chain constraints. .

Beverages prices increased by 15.7 percent in 2021Q3 from 10.8 percent in the corresponding period of the previous year mainly led by coffee prices due to weather-related production shortfalls in Brazil following a frost that affected the country's coffee production regions.

Agricultural commodity prices are projected to further increase by 22.0 percent in 2021 after 4.6 percent in 2020 attributed mainly to the projected rising food prices (28.1 percent), and beverages (13.2 percent), of which coffee Arabica (29.5 percent) and coffee Robusta (28.3 percent).

Metals & mineral prices went up by 45.5 percent in 2021Q3, from 5.7 percent in 2020Q3, reflecting the impact of rising demand that favored industrial production activities. Tin prices increased highly by 95.8 percent in 2021Q3 from 3.2 percent in 2020Q3. Metal prices continued to climb in early 2021, driven by strong demand in China, the ongoing global economic recovery, and supply disruptions.

Most base metal prices continued to rise due to supply curtailments, electricity shortages and China's policies to reduce energy consumption from metal processing. Demand for base metals has continued to increase driven by the global economic recovery while production has been disrupted by energy shortages and lockdowns.

Metals prices are projected to increase by 48.5 percent in 2021, from 0.9 percent in 2020, attributed mainly to the projected increase of tin prices. Tin prices are projected to rise by 85.2 percent in 2021 from a drop of 8.2 percent in 2020, as growth in electronics and photovoltaic installations significantly increased the demand for tin.

Precious metals dropped by 5.3 percent in 2021Q3 after rising by 31.2 percent in 2020Q3, due to declining investor sentiment stemming from higher real interest rates and a stronger US dollar. Precious metals fell amid a rise in US 10-year treasury bills with large falls for platinum compared to gold and silver. Gold prices fell by 6.4 percent in 2021Q3 after rising by 29.7 percent in 2020Q3, partly driven by a slump in investment demand amid a rise in interest rates, as well central banks, which have reduced gold purchases in recent months.

Prices for fertilizers increased by 73.9 percent in 2021Q3 from a drop of 8.1 percent in 2020Q3, mainly driven by strong demand in US and Brazil, amid reduced global production capacity due to Covid-19 restrictions. More pressure on DAP fertilizers, came from rising input costs in China and Europe, adverse weather in United States, and trade policies of which China's recent suspension of phosphate exports until June 2022 putting. The World Bank projects fertilizers to increase by 58.6 percent in 2021 from a drop of 10.1 percent in 2020.

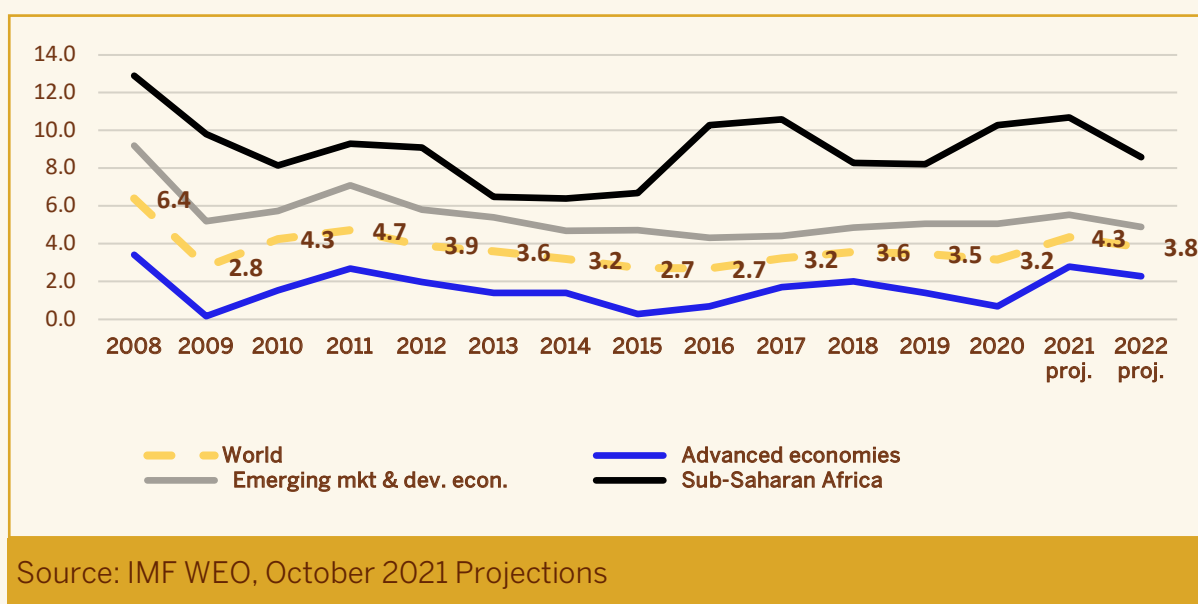
Global inflation expected to come down to its pre-pandemic range in 2022 once supply-demand mismatches resolve across most countries

World annual average inflation is projected to increase to 4.3 percent in 2021 from 3.2 percent in 2020, following strong economic recovery, rapidly rising commodity prices and global supply chain disruptions. Since the beginning of 2021, headline inflation has increased in advanced and emerging market economies, driven by firming demand, input shortages, and rapidly rising commodity prices. Headline inflation has been relatively stable in low-income countries.

Headline inflation rates have increased rapidly in the United States and in some Emerging market and developing economies in the recent months, although there are differences in the extent of pressures across countries. In some Sub-Saharan African countries and the Middle East and Central Asia, food prices have increased significantly amid local shortages and the rise in global food prices. In some countries, exchange rate depreciations have also contributed to higher import goods prices. Global inflation is projected to ease to 3.8 percent in 2022.

However, various indicators point to a highly uncertain outlook for inflation. Across most countries, inflation is expected to come down to its pre-pandemic range in 2022, once supply-demand mismatches resolve. However, the lagged pass-through to broader inflation from higher food and oil prices for importers means that price pressures are anticipated to stay elevated into 2022 in some Emerging markets and developing economies.

Chart 4- Global inflation and projections across regional blocks (% change)



In advanced economies, consumer price inflation is expected to increase to 2.8 percent in 2021 from 0.7 percent in 2020, reflecting stronger economic activities and rapidly rising commodity prices. The annual average inflation is projected to rise to 4.3 percent in 2021 from 1.2 percent in 2020 in the United States, at 2.2 percent from 0.3 percent in the Euro zone, and at 2.2 percent after 0.9 percent in the United Kingdom.

In the emerging market and developing economies, inflation is projected to rise to 5.5 percent in 2021, from 5.1 percent in 2020, but projected to ease to 4.9 percent in 2022. The Chinese annual average inflation is projected to ease at 1.1 percent in 2021, from 2.4 percent in 2020, and projected at 1.8 percent in 2022.

In Sub-Saharan Africa (SSA), annual headline inflation is projected to increase to 10.7 percent in 2021, from 10.3 percent in 2020, following the projected rising inflation rates in Zambia (22.8 percent from 15.7 percent), Ethiopia (25.2 percent from 20.4 percent), Nigeria (16.9 percent from 13.2 percent), and Angola (24.4 percent from 22.3 percent). In some Sub-Saharan African countries, food prices have increased significantly, amid local shortages and the rise in global food prices. Exchange rate depreciations have also contributed to higher prices of imported goods in many Sub-Saharan African countries. Sub-Saharan Africa's inflation is projected to ease to 8.6 percent in 2022.

II. EXTERNAL SECTOR DEVELOPMENTS

Rwanda's trade recovery continued in the third quarter of 2021.

In 2021Q3, merchandise exports¹ rose by 58.8 percent amounting to USD 302.1 million, up from USD 190.3 million recorded in the same quarter of 2020. The increase is owed to the continued recovery of external demand supported by rising commodity prices and domestic economic activities as COVID-19 restriction measures ease.

Traditional exports revenues grew by 43.1 percent, year-on-year, in 2021Q3 amounting to USD 86.9 million, up from USD 60.8 million in 2020Q3, due to increased receipts from coffee exports (+24.6 percent), tea (+10.5 percent) and minerals (+89.5 percent), reflecting improving global commodity prices and value addition in minerals. In addition, exports quantities in the period under review went up significantly compared to the same period of last year as the supply disruptions caused by the pandemic have reduced.

Moreover, non-traditional exports rebounded in 2021Q3, registering USD 73.9 million from USD 50.1 million a year ago, an increase of 47.5 percent, mainly attributed to increased exports of horticulture products to European market as well as manufacturing exports mainly composed of construction materials to neighboring countries. Lastly, receipts from re-exported products soared by 48.9 percent year-on-year in the third quarter of 2021, standing at USD 119.1 million from USD 80.0 million recorded in 2020Q3, largely driven by re-exports of food products. Exports revenues from Informal Cross-Border Trade (ICBT)² amounted to USD 23.0 million in 2021Q3, following the opening of some borders with DRC as COVID-19 infections decreased.

Merchandise imports rose by 12.7 percent mainly driven by higher demand of consumer goods (+10.4 percent) largely food products that also reflected higher international prices, intermediary goods (+6.9 percent) in large part driven by industrial products, and lastly energy (+74.6 percent) driven by increasing global oil prices. The increase in imports reflected the rebound of domestic economic activities in the period under review.

Projections for 2021 show that the external position will improve compared to last year, buoyed by continued recovery of external demand as well as Rwandan economy as Covid-19 restrictions decrease supported by the vaccine rollout. However, there are risks to these projections. Downside risks include renewed waves, virus mutations, and difficulties in accessing the vaccine in many developing countries which might delay the recovery in trade, travel, and tourism. Projections indicate that the current account deficit (CAD) is estimated to grow by 11.1 percent in 2021 from 11.9 percent in 2020 before widening in 2022 driven by higher oil prices and increased imports of capital and intermediate goods as the recovery of domestic economic activities continues. On the financing side, FDI and private borrowing are likely to remain subdued, but Rwanda could attract additional donor

¹ Merchandise exports/ imports refers to exports/imports excluding gold. It includes formal exports and informal cross-border trade (ICBT).

² ICBT trade was suspended during April-October 2020 due to closure of borders in order to reduce the spread of the pandemic. However, at the end of November some borders with DRC resumed.

inflows and disbursements for the existing projects, notably Bugesera airport. However, Rwanda's external vulnerability remains marginal as the gross international official reserves remain adequate. The coverage of foreign reserves is estimated at 5.8 future months of imports as of end September 2021. It will stay at above the desired level of 4.0 months of imports in the medium term.

III. DOMESTIC ECONOMIC DEVELOPMENTS

3.1 Economic growth Q2 2021

The Rwandan economy has been gradually recovering from the adverse effects of COVID-19, on the back of sizeable policy support measures, of which fiscal and monetary. The real GDP grew by 20.6 percent in 2021Q2 after 3.5 percent in 2021Q1 and -3.4 percent in 2020. This strong growth was broad based across all sectors, with agricultural sector growth at 7.3 percent, industrial production at 29.9 percent and services sector at 23.9 percent.

Gradual recovery of domestic economy from the recession caused by the COVID-19 pandemic.

Rwanda's economy continues to recover from the adverse effects of COVID-19 pandemic, which caused an economic contraction of 3.4 percent in 2020. Real GDP growth was 20.6 percent in 2021Q2 and 3.5% in the first quarter of 2021. This strong growth was broad based across all sectors.

Agricultural sector grew by 7.3 percent in 2021Q2 compared with a decline of 1.6 percent in 2020Q2. This improvement was driven by good harvest of food crops during the 2021 agricultural season A, supported by favorable weather conditions and increased use of agricultural inputs such as fertilizers and improved seeds. In the second quarter of 2021, food production increased by 7.0 percent and accounted for 64.9 percent of agriculture's value added. In addition, with the exception of export crops, other sub-sectors recorded good performance: livestock and livestock products rose by 8.6 percent, forestry and forest products by 6.0 percent and fishing by 102.7 percent. The export crop production decreased by 2.2%, mainly due to a 14.4% decrease in coffee production, partly due to aging coffee trees and low use of fertilizers.

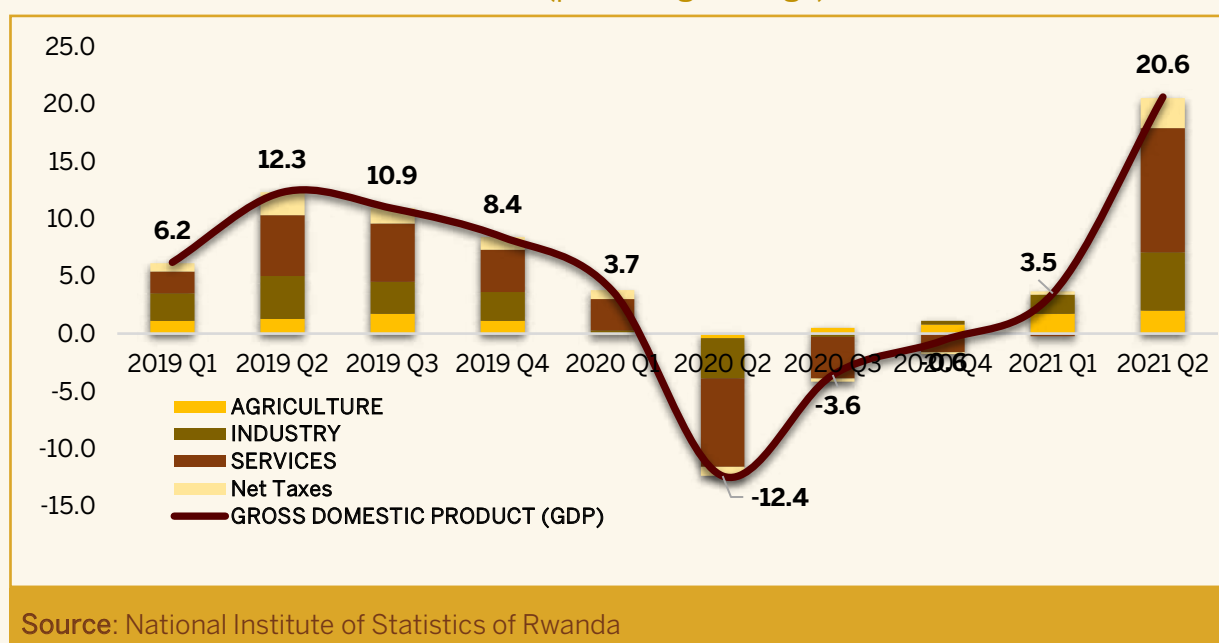
Industrial production increased by 29.9 percent in 2021Q2 after a growth of 9.7 percent in 2021Q1 and a fall of 18.9 percent in 2020Q2, boosted policy measures that helped the economy to recover from the adverse effects of COVID-19. The good performance was seen in all industry subsectors. Mining and quarrying grew by 87.4 percent from a decline of 52.8 percent, mainly due to rising mineral prices on international markets. The metals and mineral price index rose 76.3 percent in 2021Q2, following a 45.6 percent increase in 2021Q1 and a 13.2 percent decline in 2020Q2.

Manufacturing and construction related activities expanded by 22.7 percent and 32.8 percent in 2021Q2 respectively, backed by infrastructure projects, part of the economic

recovery actions, that led to increased demand for locally produced construction materials such as metal products (+47.2 percent) and paints and varnishes (+109.6 percent), contributing to the rapid recovery of industrial sector. The good performance in the manufacturing industry is associated with positive contributions from the food processing (+10.5 percent), beverages (+8.6 percent), furniture and other manufactured products (+111.4 percent).

The services sector grew by 23.9 percent in 2021Q2 compared to a contraction of 16.3 percent in 2020Q2. This performance is related to the recovery of trade services (+33.7 percent), transport (+48.3 percent), hotels and restaurants (+33.6 percent), financial services (+18.8 percent), Professional, scientific & technical services (+20.3 percent), education (+168.0 percent) and the good performance of information and communication (+27.8 percent).

Chart 5: Real Gross Domestic Product (percentage change)



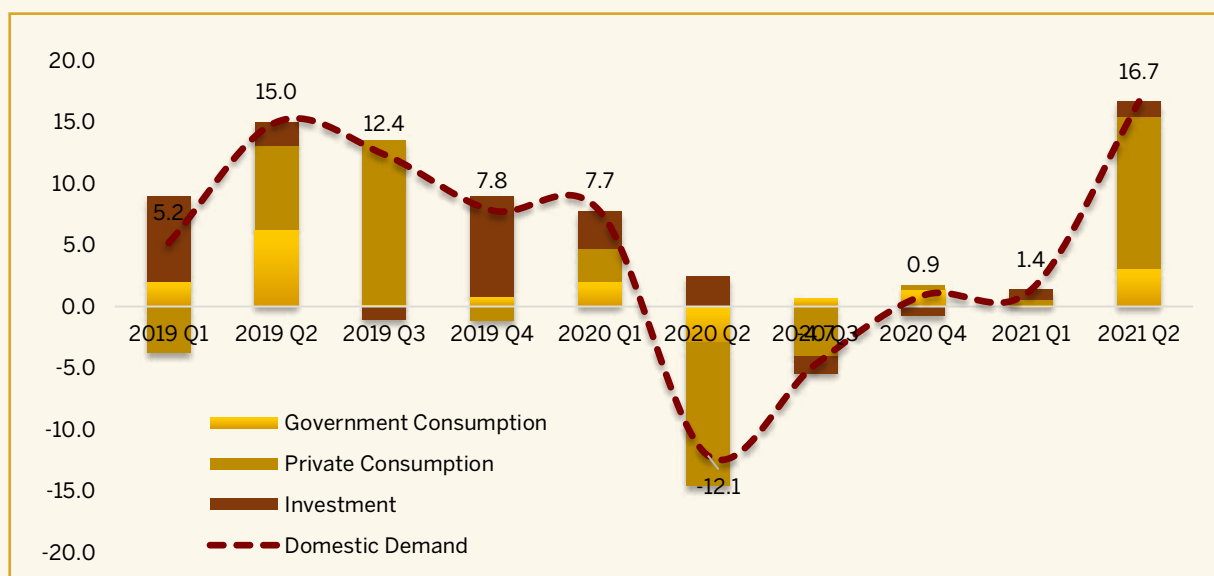
The domestic demand continued to recover in the second quarter of 2021.

With government support and easing of restrictive measures, domestic demand continued to recover from the impact of Covid-19. It grew by 16.7 percent in the second quarter of 2021, following 1.4 percent in the first quarter of 2021 and a 12.1 percent decline in the second quarter of 2020.

This strong growth in domestic demand was mainly driven by private and public consumption, which increased by 20.9 percent and 19.9 percent, respectively in 2021Q2, while they decreased by 18.4 percent and 17.6 percent in 2020Q2.

The growth in domestic demand also depends on investment, which grew by 5.0 percent. Investments were dominated primarily by construction (+32.9 percent) and equipment (+32.2 percent). Subsequent expansion of investment was related to the aforementioned infrastructure projects that have played an important role in Rwanda's current economic recovery.

Chart 6: Domestic demand (percentage change)



Source: National Institute of Statistics of Rwanda

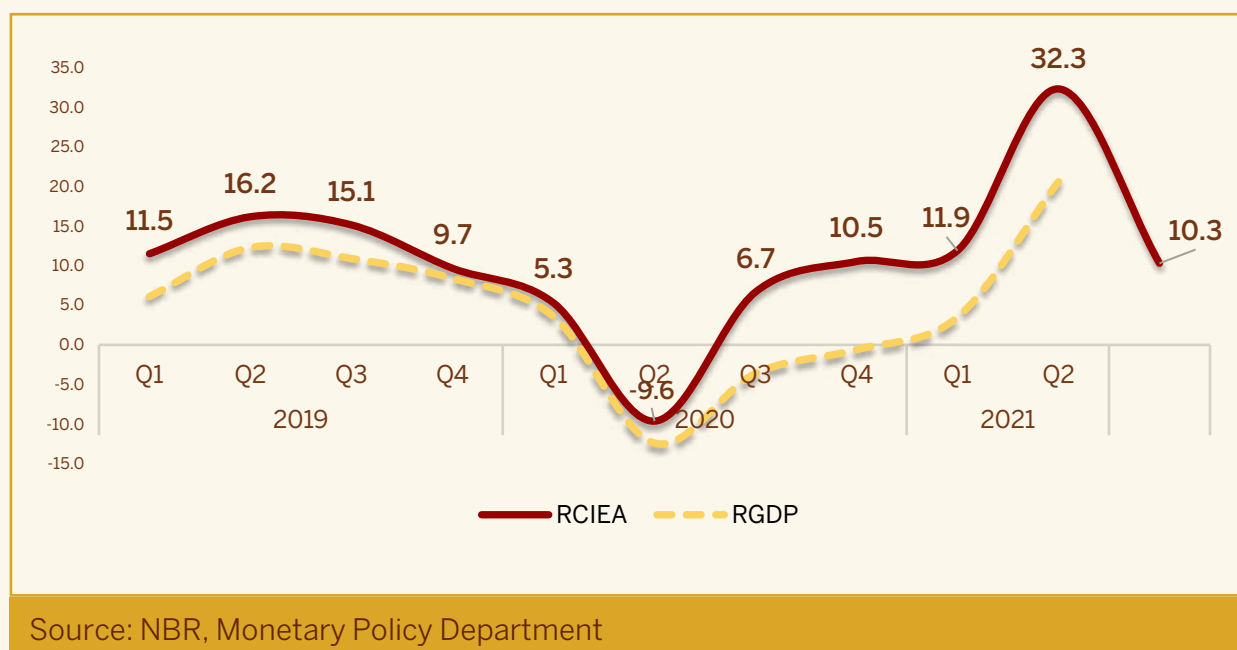
3.2 High frequency indicators Q3 2021

The economic recovery from COVID-19 adverse economic effects continued in 2021Q3 supported by fiscal and monetary stimulus, the ease of containment measures as well as the vaccine rollout. This is evidenced by the composite index of economic activities (CIEA), that increased by 10.3 percent in 2021Q3 after 32.3 percent in 2021Q2 and 6.7 percent in 2020Q3.

High-frequency indicators evidence continuous economic recovery in 2021Q3

Supported by the economic recovery plan, manufacturing and build to recover program, accommodative monetary policy, easing of restriction measures as well as the vaccine rollout, economic activities continued to recover in 2021Q3 despite the third wave of covid-19. The later led to tight restriction measures during the month of July. The Composite Index of Economic Activities (CIEA) increased by 10.3 percent year-on-year in 2021Q3 after 32.3 percent in the previous quarter and 6.7 percent in 2020Q3.

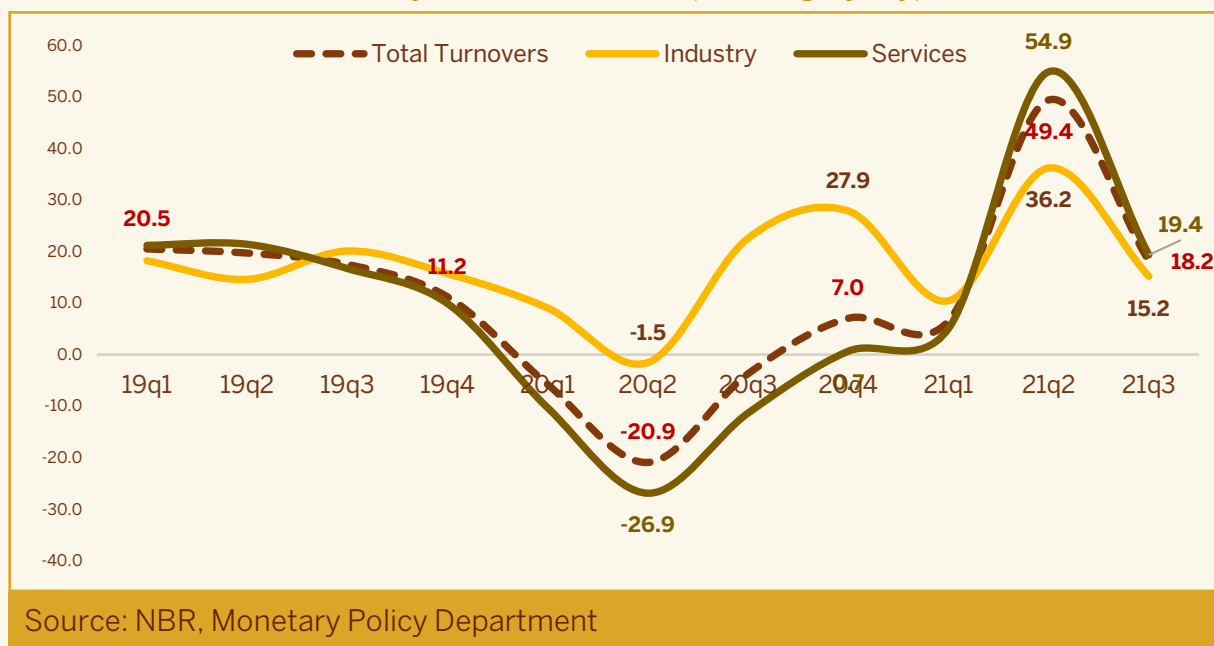
Chart 7: Quarterly Real GDP growth vs CIEA (% change, y-o-y)



The sustained economic recovery is also evidenced by the continuous increase in turnovers of the industry and services sectors (+18.2 percent 2021Q3). The industrial sector has maintained a rapid recovery path, with the development of manufacturing, construction and mining playing an important role. The construction subsector grew by 18.3 percent from 7.3 percent in 2020Q3 backed by on-going infrastructure projects; of which KIVU 56 and Rwanda urban development project. These projects boosted the demand for construction materials, which contributed to the good performance of local manufacturing industries (+8.8 percent in 2021Q3). In addition, activities of food, beverages, textile, wood, paper, chemical, and furniture industries have expanded in line with the relaxation of restriction measures and growing regional export demand. The combined index of industrial production grew by 21.7 percent in 2021Q3 from a decline of 0.3 percent in the corresponding period of 2020.

In 2021Q3, mining and quarrying turnovers increased by 67.9 percent from a decline of 3.9 percent in 2020Q3. This strong recovery reflected favorable international market conditions as indicated by the increasing metal and mineral prices (45.5 percent increase in 2021Q3 from 5.7 percent in 2020Q3), coupled with improving global demand.

Chart 8: Turnovers of industry & services sectors (% change, y-o-y)



The services sector has been improving, recording a total turnover growth of 19.4 percent in 2021Q3 against a contraction of 11.3 percent in 2020Q3. The relaxation of restriction measures and the high vaccine uptake have increased the demand for services and facilitated the service delivery. In addition, the RDB supportive measures including special tour packages valid until December 2022, and the focus on sport tourism boosted the recovery of the tourism related services and limited the effect of July containment measures that followed the spike of infection rate, amid the third wave of COVID-19. This translated into a strong recovery of trade services (+16.3 percent from -7.2 percent), transport and storage (+70.3 percent from -43.0 percent), hotels and restaurants (+67.3 percent from -51.9 percent) and financial services (+27.8 percent from -7.1 percent). The information and communication (+11.0 percent from +27.5 percent) continued performing well supported by strong demand for IT services driven by teleworking measures aimed to contain the spread of the virus.

IV. INFLATION DEVELOPMENTS AND OUTLOOK

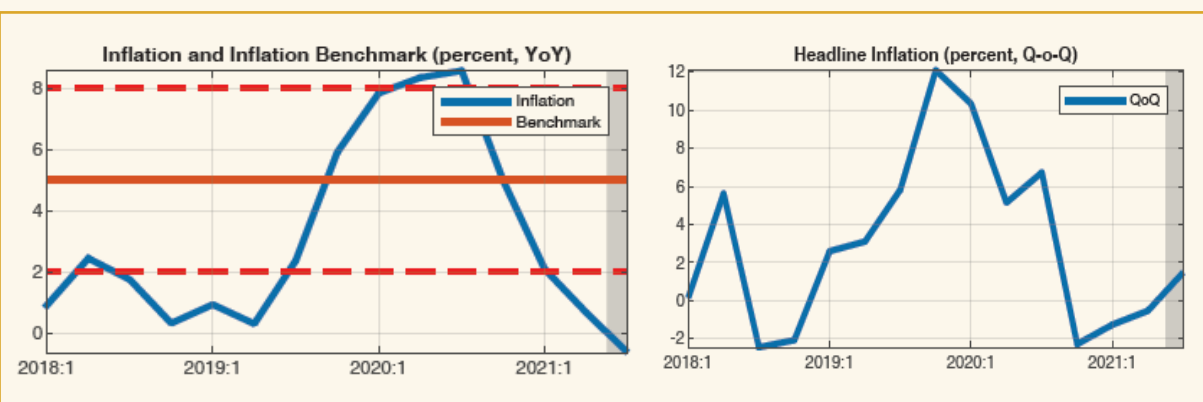
4.1 Inflation developments

Headline inflation decelerated to -0.6 percent in 2021Q3 from 2.1 percent and 0.7 percent recorded in 2021Q1 and 2021Q2, respectively. These decelerations reflect mainly the slowdowns in core and fresh food components. The easing trend observed in headline inflation was attributed mostly to the higher prices recorded last year in the corresponding period. Unlike core and fresh food inflation, energy inflation picked up following the lower prices recorded last year the same period.

Headline inflation decelerated in 2021Q3 on the back of the base effect.

The decline in headline inflation in y-o-y terms was mostly reflected in both core and fresh food inflation components. In 2021Q3, core inflation reduced to 0.3 percent from 1.2 percent, while fresh food inflation reduced to -5.8 percent from -0.3 percent. Unlike core and fresh food inflation, energy inflation slightly rose to 3.9 percent from -1.5 percent recorded in the previous quarter. However, in the past 3 quarters of 2021 headline inflation is increasing in quarter on quarter (q-o-q) terms, indicating the ease in disinflationary pressures.

Chart 9: Developments in headline inflation (y-o-y, q-o-q, percentage change)



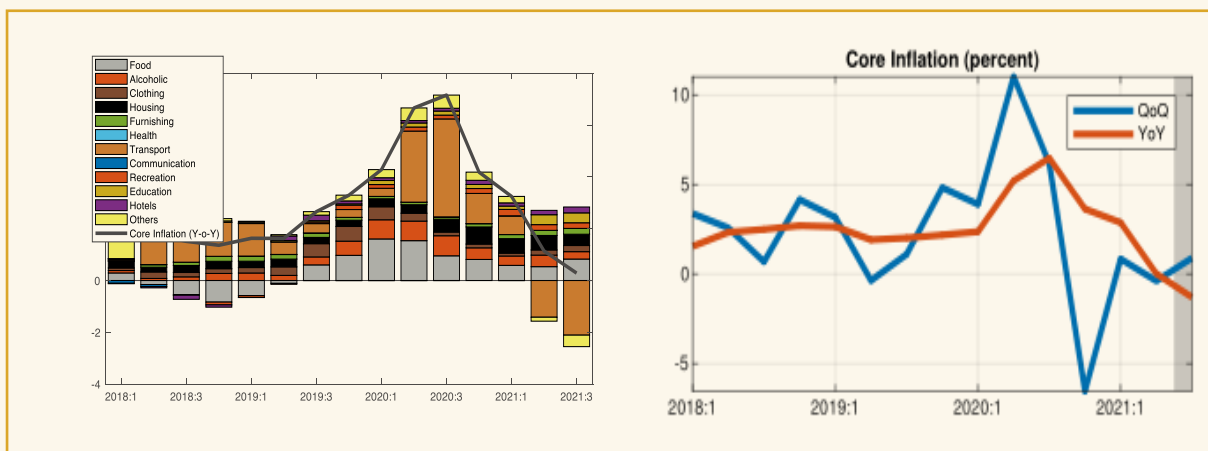
Source: NBR, Monetary Policy and Research Directorate

Core inflation declined in 2021Q3 (y-o-y) following the base effect in transport, in spite of core food inflation that picked up over the same period.

The downward trend observed in core inflation (y-o-y) was mostly reflected in transport inflation that dropped to -15.3 percent in 2021Q3 from 5.2 percent and -9.2 percent recorded in 2021Q1 and 2021Q2, respectively. Since the beginning of 2021, core transport road inflation started to decline from 0.5 percent in 2021Q1 to -17.9 percent in 2021Q2 and reached -27.1 percent in 2021Q3. Last year over the corresponding period, the prices of transport by road largely picked up following the measures taken to limit the spread of Covid-19 among passengers. That shock faded away in May 2021, and it induced a decline in core inflation.

Considering quarter on quarter (q-o-q) terms for 2021Q1 until 2021Q3, core (excluding food and energy components) inflation stabilized around zero, as subdued domestic cost of production offset imported pressures.

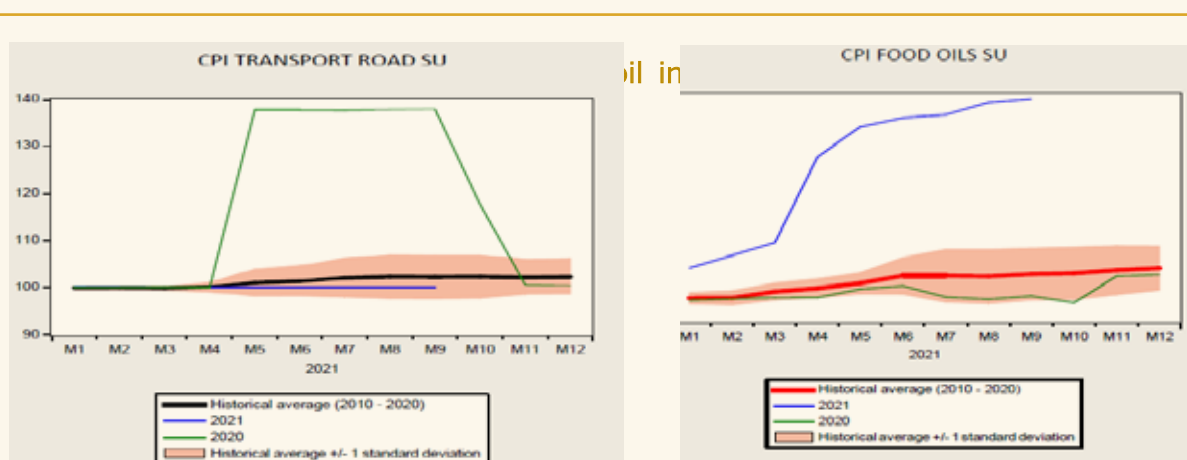
Chart 10 : Core inflation (percentage change)



Source: NBR, Monetary Policy and Research Directorate

While road transport contributed downwardly on core inflation, cooking oils and bread & cereals contributed to the upwards. Cooking oils surged to 39.1 percent in 2021Q3 from 32.4 percent in the previous quarter, while bread & cereals picked up to 5.4 percent from 3.4 percent, over the same period.

In 2021, domestic cooking oil prices remained above 2020 levels and their historical trend consistent with the international cooking oil prices. The latter picked up as a result of booming biofuel industry, farm labor issues in Asia, increased demand in china, climate change, coupled with taxes that were imposed on exports of oils like export duties in Indonesia and Malaysia. The rise in core food inflation originated from the downward trend in prices observed in bread & cereals over the corresponding period.



Source: NBR, Monetary Policy and Research Directorate

Fresh food inflation dropped on the back of good performance of Season B and C 2021, adding to base effect

The decline in fresh food inflation (y-o-y) in the first three quarters of 2021 was mainly reflected in vegetables inflation. Vegetables inflation declined to -11.2 percent in 2021Q3 from -6.9 percent in 2021Q2 while it stood at -7.2 percent in 2021Q1. Vegetables prices evolved below the 2020 price levels as well as the normal patterns of the historical prices (2010-2020). The recent developments in vegetables inflation is attributed to good performance in food crops production in 2021 compared to the previous year of 2020.

Chart 12 : Fresh food inflation (y-o-y)

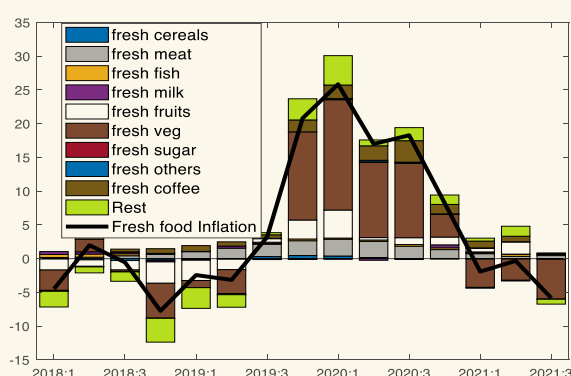
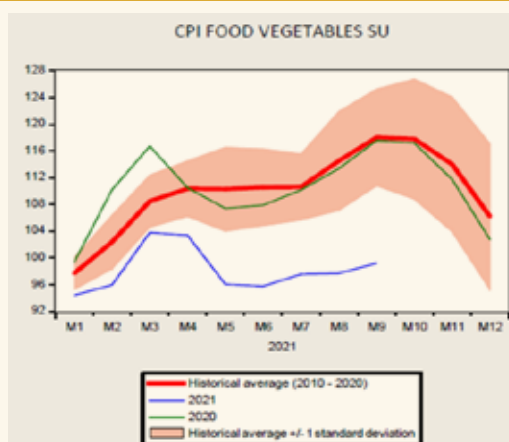


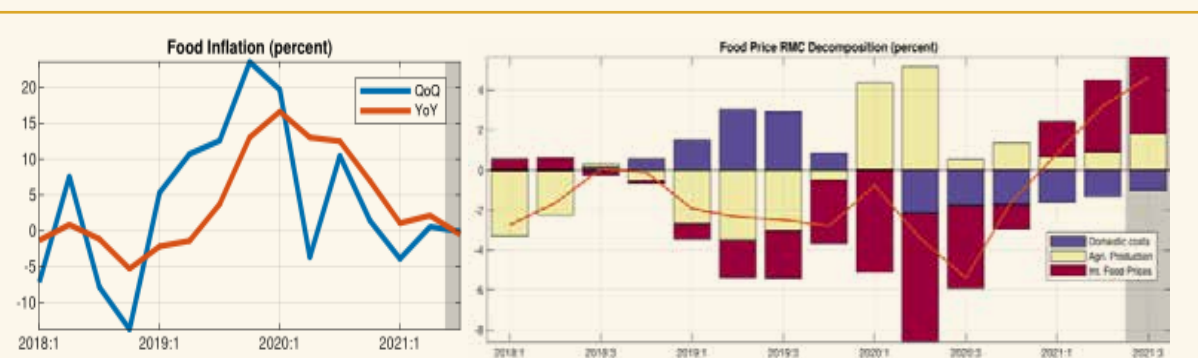
Chart 13 : Vegetables CPI



Source: NBR, Monetary Policy and Research Directorate

Unlike core excluding volatile items, food and beverages inflation in quarter on quarter terms picked up in 2021 on the back of international prices pressures that outweighed domestic demand pressures

Chart 14: Food and beverages inflation



Source: NBR, Monetary Policy and Research Directorate

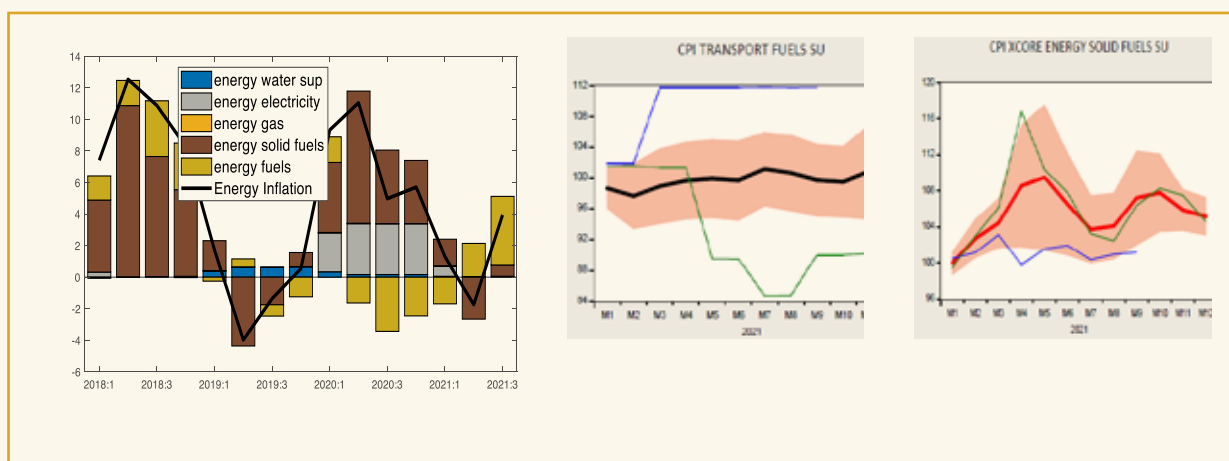
Energy inflation surged in both year on year and quarter on quarter terms following the base effect as well as the increase in the international oil prices

The uptick in energy inflation reflects mainly the increase observed in both liquid and solid fuel inflations. In 2021, liquid fuel inflation increased from -6.4 percent in 2021Q1 to 8.4 percent in 2021Q2 and standing at 16.6 percent in 2021Q3. Since March 2021, liquid fuel prices remained above the 2020 levels and the normal price range consistent with the trend in the international oil prices. Liquid fuel inflation accelerated in the second and third quarters of 2021 as a result of price drops in the corresponding period of 2020. Contrarily, solid fuel prices (charcoals and firewood) evolved below the 2020 levels. However, in 2021Q3 solid fuels inflation picked up (from -5.2 percent to 1.4 percent) as a result of a declining trend observed last year the corresponding period.

In quarter on quarter (q-o-q) terms energy inflation for 2021Q3 increased and the uptick mostly reflects pressures from the international oil prices.

Chart 15 : Energy inflation (y-o-y)

Chart 16: Solid and liquid fuels CPI

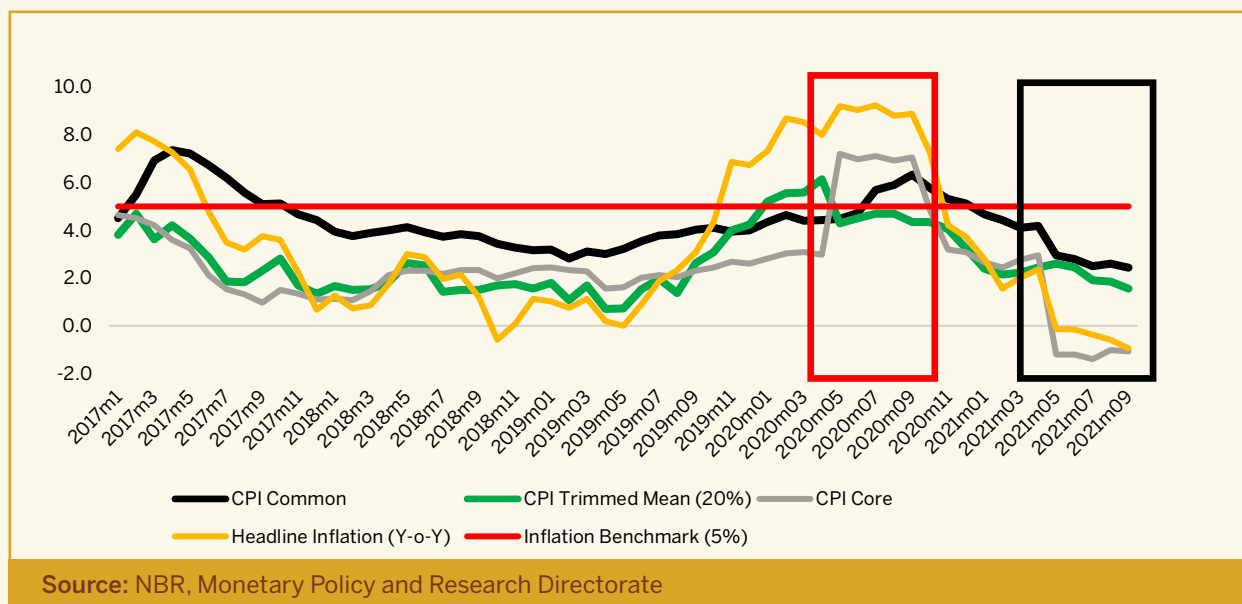


Source: NBR, Monetary Policy and Research Directorate

Underlying inflation indicators are currently evolving around 2.0 percent

These indicators show the prevailing level of headline inflation after removing transitory shocks. CPI Trimmed Mean slightly reduced to 1.8% in 2021Q3 from 2.5% in 2021Q2 on average. CPI Common eased to 2.5% in 2021Q3 from 3.3% in 2021Q2 on average. Though headline inflation is declining, the decline is not so strong when looking at underlying inflation indicators that are consistent with macroeconomic fundamentals.

Chart 17: Indicators of underlying inflation vs headline inflation (y-o-y)



4.2 Inflation outlook

4.2.1 Forecast assumptions

The strengthening of the global economy is expected to impact the domestic economy positively over the medium term.

Consistent with the IMF projections (WEO of October 2021), the global economy is projected to grow at 5.9 percent in 2021 and 4.9 percent in 2022 before moderating to 3.3 percent onwards. The aforementioned projections are backed by the progress in terms of access to vaccines for Covid-19 pandemic, and early policy supports within developed, emerging and developing economies. For instance, in the US economy, the real GDP is projected to leap above the potential level towards the end of 2021. For the Eurozone economy, GDP growth is anticipated to remain strong in 2022 before returning below the potential level in 2023. Over the medium-term, inflation rates remain well anchored globally, especially in advanced economies, allowing monetary policy to remain accommodative. The projected paths of global economic growth and inflation rates are favorable to the domestic economy through export earnings.

The international commodity prices are expected to remain at high levels in 2022, maintaining observed pressures on imported inflation.

In 2021, international commodity prices (mainly energy and food products) continued to rise. Going forward, projections by the World Bank indicate that energy prices are expected to remain on the rise in 2022 (supported by continued robust demand) before falling in 2023 (as production finally keeps up with the global demand). Unlike energy prices, food prices are projected to decline gradually in 2022 and 2023 as supply conditions improve. However, supply is likely to remain constrained for some key food products imported in Rwanda, such as edible oils. Consistently, imported food and energy products are expected to maintain current inflation pressures over the policy horizon.

4.2.2 Baseline projections of key macroeconomic variables

1. Drivers of inflation projections

Domestic economy is expected to continue recovering and this will allow the economy to operate above full capacity of production, creating inflationary pressures over the policy horizon.

In the first two quarters of 2021, the domestic economy recorded positive growth as lockdown measures eased and most economic activities reopened. The current projections indicate the continuous recovery in output over the forecasting horizon, and the trend may return to the pre-pandemic momentum towards the end of 2023. In non-agricultural sectors, the expected growth will be supported by the rising global demand, accommodative monetary conditions, and other initiatives put in place to boost economic activity. The rise in economic activity is expected to translate into increases in domestic cost of production, creating upwards inflationary pressures from 2022H2 onwards.

The imported costs of production will remain high in 2022H1, but are expected to become non-inflationary afterward.

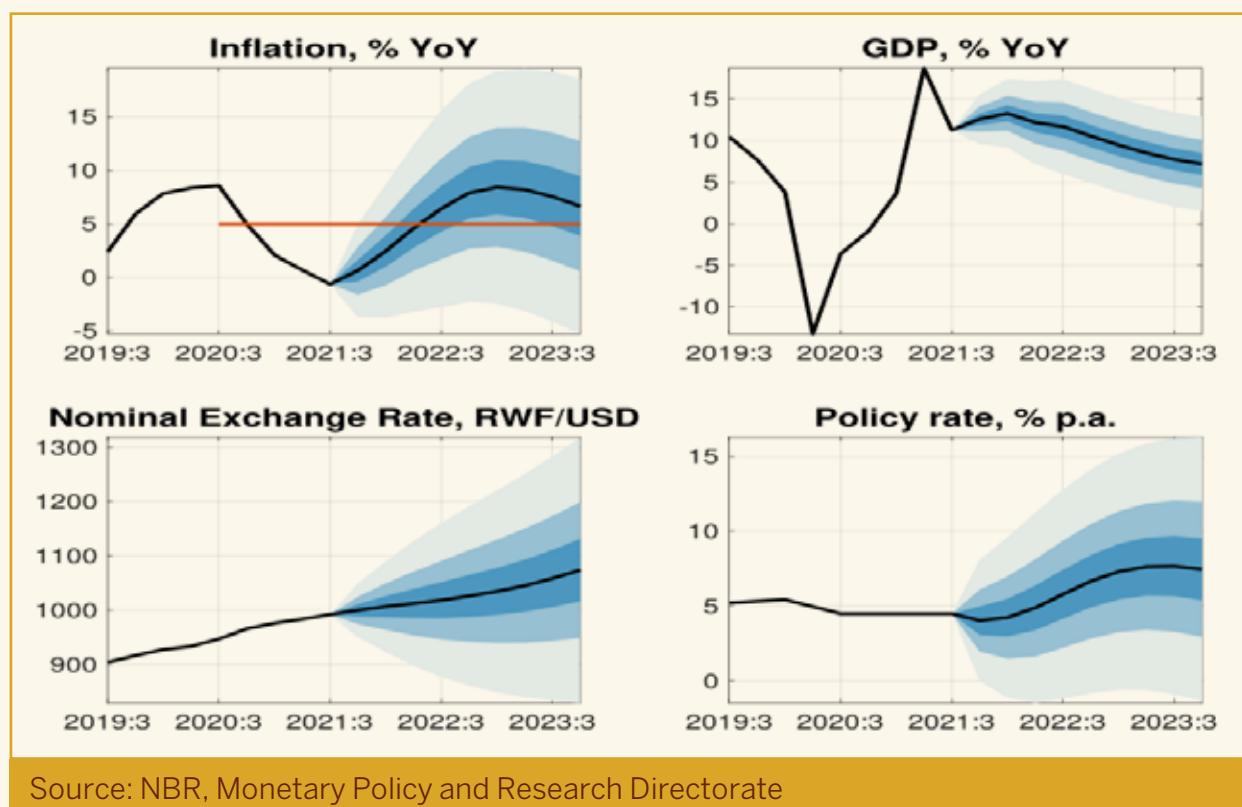
In 2021, the price of foreign goods and services in domestic currency increased, which implied inflationary imported production costs. In the first half of 2022, these imported costs are expected to remain high but decelerating. Over the policy horizon, imported costs are projected to become non-inflationary on the back of reducing global inflation (towards target levels) and moderate FRW depreciation. In 2022, however, pressures will start rising but domestic headline inflation will remain close to its benchmark level.

2. Projections of key macroeconomic indicators

Consistent with the initial economic conditions, assumptions on the global economy, and other key economic variables, headline inflation is projected to evolve around 0.7 percent in 2021 before picking up to 5.4 percent in 2022. Core inflation is expected to increase slightly in 2022, reflecting the upward trend in domestic costs of production as the economy is recovering. The current pressures from international food prices on food inflation are expected to continue in 2022H1. In 2023, however, the pressures are expected to dissipate as international food prices moderate and offset the increase in domestic costs of production. Similarly, the costs of producing energy will remain inflationary in 2022 following the projected hike in international oil prices.

The figure below indicates the outlook for key macroeconomic variables throughout the policy horizon.

Chart 18-Projections of key macroeconomic variables



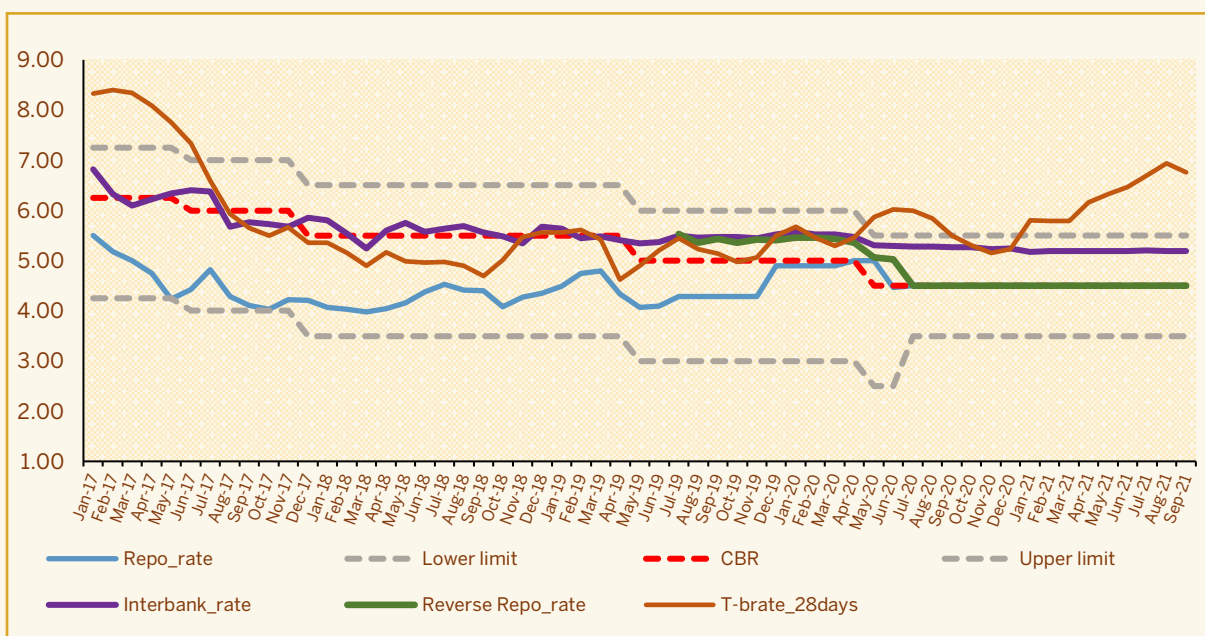
V. FINANCIAL AND MONETARY DEVELOPMENTS

Money market rates remained steered around the central bank rate. Regarding market rates, in 2021Q3 (y-o-y), the average lending rate lessened by 12 basis points to 16.35 percent, as a result of growth in long term loans which were priced at low rates for both corporate and individual customers. During the same period, broad money and outstanding credit to private sector picked up by 15.8 percent and 18.6 percent (y-o-y), respectively.

Money Market rates were largely steered close to the central bank rate.

The Monetary Policy Committee (MPC) decided in August 2021 to maintain an accommodative monetary policy stance by keeping the central bank rate (CBR) at 4.5 percent to assist the economy during the COVID-19 pandemic. Money market rates were steered around the central bank rate as a result of prudent monetary policy implementation. The interbank rate dropped by 7 basis points in 2021Q3 to 5.20 percent on average, year-on-year. The repo and reverse repo rates were steered at the CBR since July 2020, in an effort to enhance the monetary policy transmission mechanism.

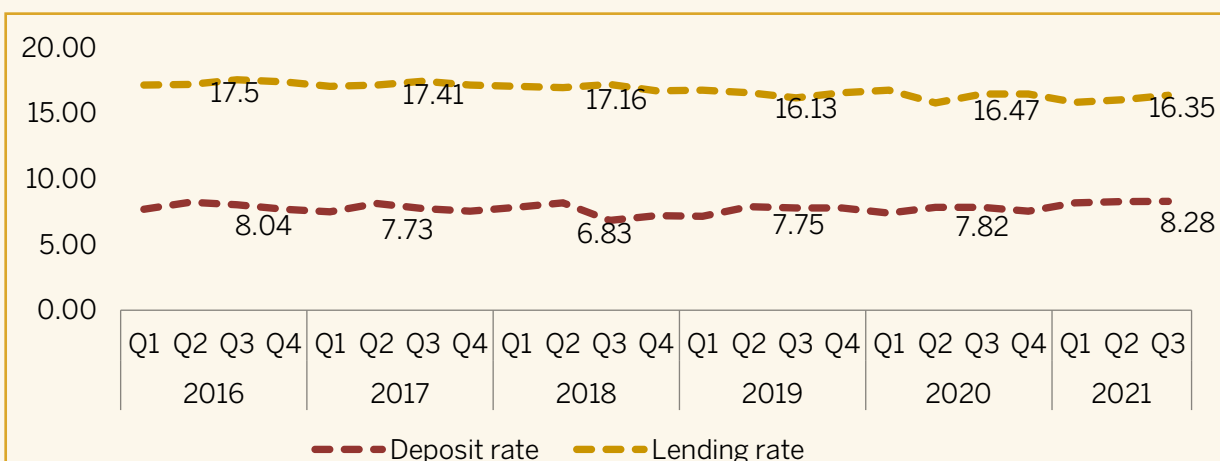
Chart 19: Money market rates developments



Source: NBR, Monetary Policy and Research Directorate

Regarding market rates, the lending rate lessened by 12 basis points to 16.35 percent in 2021Q3 year-on-year, reflecting a growth in long term loans which were priced at low rates for both corporate and individual customers. During the same period, depositors benefited from the rise in the deposit rate which increased by 18 basis points to 8.00 percent on average. As a result, the spread between the lending rate and the deposit rate reduced by 30 basis points to 8.35 percent on average in 2021Q3, down from 8.65 percent in 2020Q3.

Chart 20: Market interest rates (percent average)



Source: NBR, Monetary Policy and Research Directorate

The foreign exchange market remains stable.

In 2021Q3, the franc depreciated against the USD as the economy maintained a steady recovery from the pandemic, inducing higher demand for imports, of which still higher Covid-19 related foreign spending. However, compared to December 2020, the FRW depreciated by 2.58 percent versus the US dollar end September 2021, lower than 3.72 percent recorded in the corresponding period of last year, partly reflecting a gradual improvement in foreign inflows.

The Rwandan franc also depreciated by 1.33 percent against the Pound but advanced by 3.17 percent and 5.47 percent versus the Euro and the Yen, respectively.

Table 1: Appreciation/Depreciation rate of FRW against selected currencies

	FRW/USD	FRW/GBP	FRW/EUR	FRW/JPY	FRW/KES	FRW/TZS	FRW/UGS	FRW/BIF
Dec-18	4.04	-1.96	-0.07	6.20	5.46	1.24	1.77	1.93
Dec-19	4.94	8.48	2.81	6.25	4.53	3.73	5.13	-0.24
Dec-20	5.42	9.42	15.71	11.43	-1.34	5.66	7.17	2.53
Jan-21	0.28	0.94	-1.29	-1.00	-0.49	0.40	-0.82	0.18
Feb-21	0.46	2.94	-0.69	-2.39	-0.04	0.46	-0.27	0.27
Mar-21	0.70	1.52	-4.09	-6.29	0.42	0.70	0.15	0.31
Apr-21	0.99	3.48	-0.43	-4.25	2.31	0.99	2.83	0.50
May-21	1.22	5.54	0.45	-4.78	2.76	1.22	3.98	-0.45
Jun-21	1.51	3.26	-1.73	-5.23	2.83	1.51	4.10	-0.56
Jul-21	1.80	4.31	-1.61	-4.09	2.41	1.80	4.40	-0.37
Aug-21	2.13	3.38	-1.81	-4.13	1.53	2.13	5.30	-0.15
Sep-21	2.58	1.33	-3.17	-5.47	1.45	3.05	5.57	0.09
Sep-20	3.72	1.53	8.68	7.21	-2.26	3.96	3.52	1.27

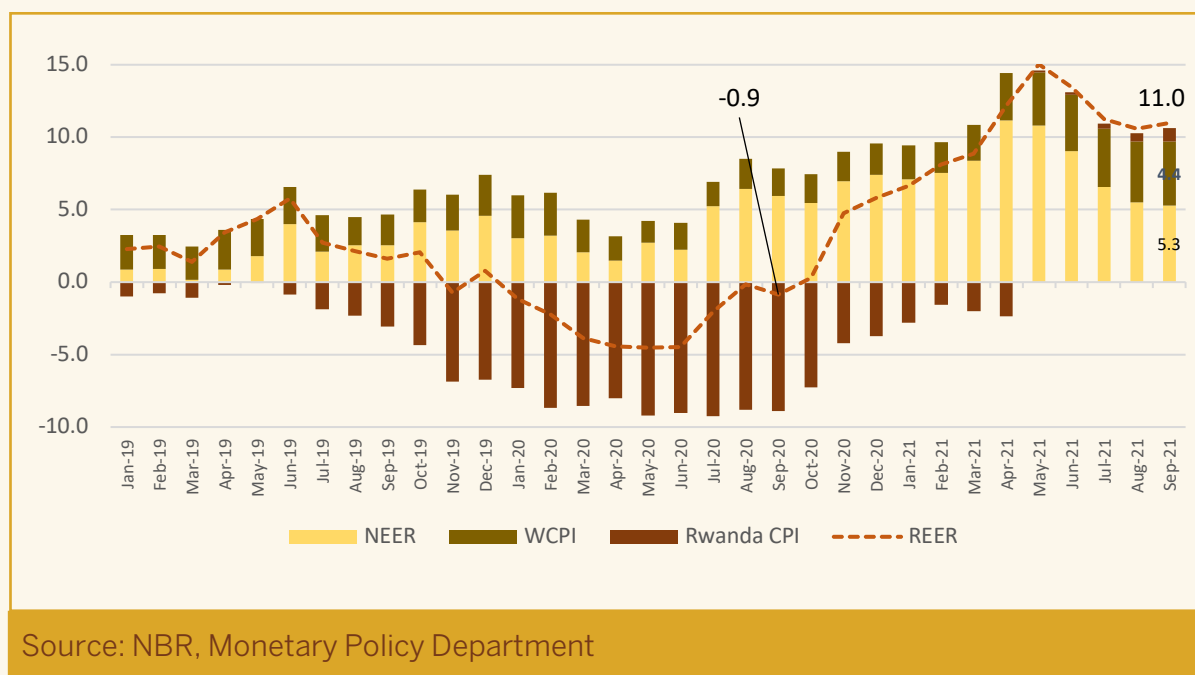
Source: NBR, Monetary Policy Department

Compared to regional currencies, the FRW weakened against the Kenyan Shilling, depreciating by 1.45 percent against an appreciation of 2.26 percent end September 2020. It curbed losses against the TZS and BIF, losing 3.05 percent and 0.09 percent after 3.96 percent and 1.27 percent recorded in the previous year. The local currency further weakened vis-à-vis UGS, slowing down by 5.57 percent end September 2021 faster than 3.52 percent depreciation recorded in the corresponding period 2020.

Compared to a basket of currencies of Rwanda's main trading partners, the FRW depreciated in nominal effective terms by 5.3 percent end September 2021, compared to a depreciation of 5.9 percent end September 2020.

In real terms³, the FRW depreciated by 11.0 percent (y-o-y) end September 2021, against a 0.9 percent appreciation recorded during the corresponding period of the year 2020. This was mostly attributable to rising prices of foreign goods and sharp decline in domestic inflation.

Chart 21: Drivers of REER movement



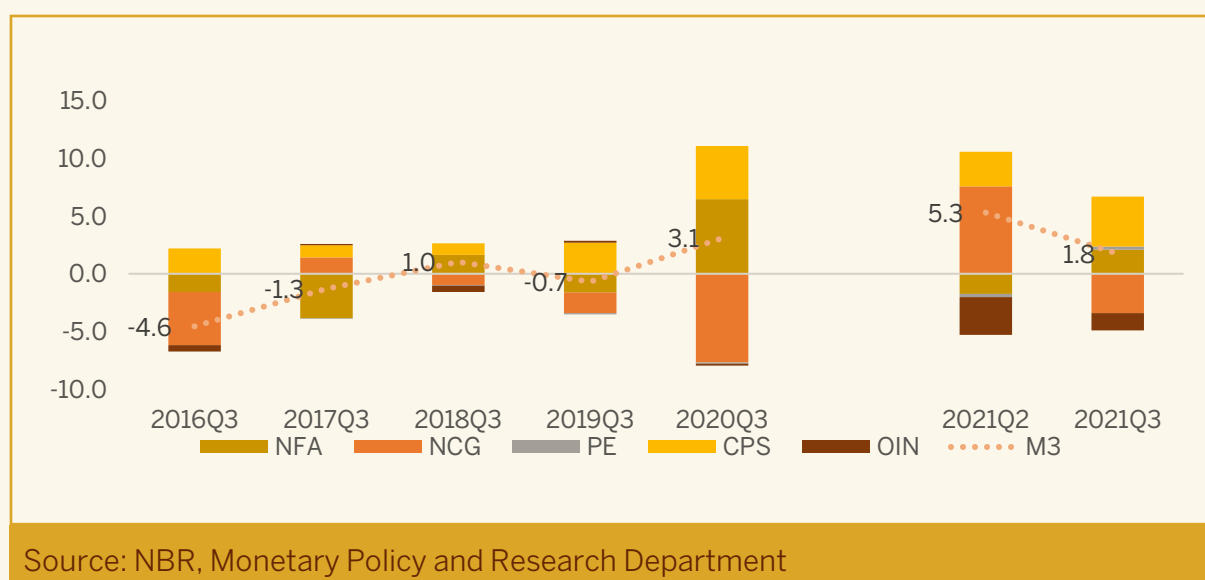
³ The real effective exchange rate (REER) measures the real value of a country's currency against a basket of currencies of its trading partners. It is calculated as the nominal effective exchange rate adjusted with the corresponding relative consumer price indices. The WCPI is a weighted average CPI of trading partners. The Real effective exchange rate is an important indicator which helps to assess the competitiveness of an economy vis-à-vis the rest of the world. It is an important tool in economic research and policy analysis.

Broad money M3 kept increasing in 2021Q3, in line with the accommodative monetary policy stance.

Broad money M3 picked up by 15.8 percent in 2021Q3, year-on-year, mainly attributed to the growth in outstanding Credit to the Private Sector (CPS) by 18.6 percent reflecting a high increase in new authorized loans in the first nine months of 2021.

Looking at q-o-q changes, the broad money M3 increased by 1.8 percent in 2021Q3 against a growth of 5.3 percent recorded in 2021Q2. This growth emanated from the increase in Net Foreign Assets (NFA), outstanding Credit to Private Sector (CPS) and Credit to the Public Enterprises (CPE) by 4.6 percent, 5.6 percent, and 7.1 percent respectively. However, the Net Credit to Government (NCG) and the Other Items Net (OIN) pulled down the growth of M3 with a contraction of 43.9 percent and 4.4 percent respectively in 2021Q3 (q-o-q).

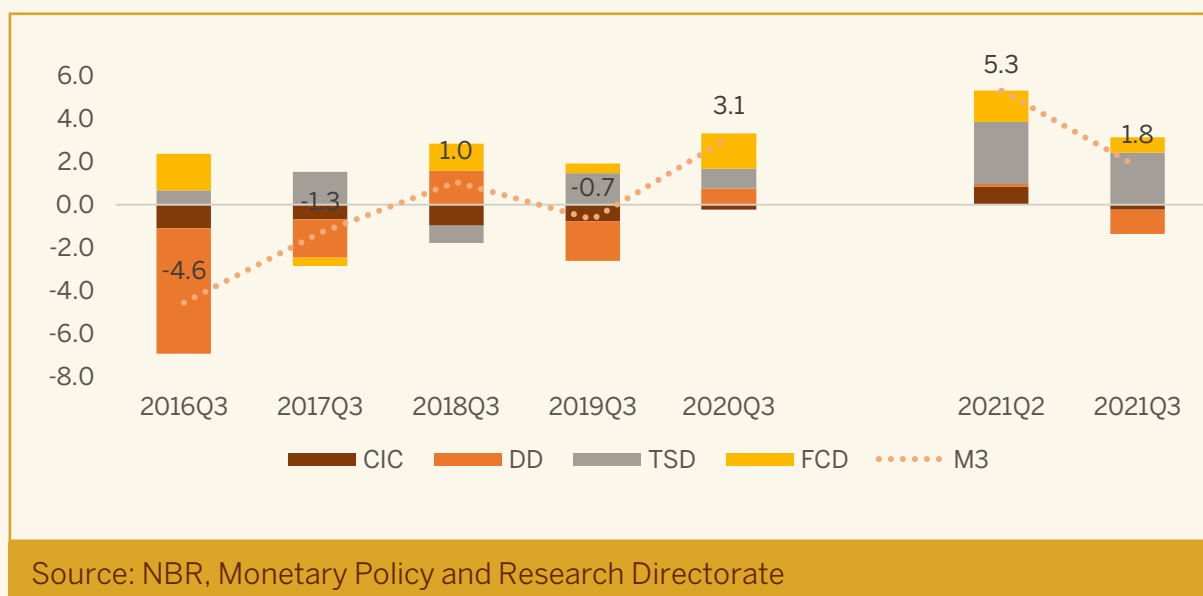
Chart 22: Contributors to M3 growth from assets side



With regard to the broad money M3 components, its increase of 1.8 percent in 2021Q3 (q-o-q), was mainly attributed to the growth of time and savings deposits (TSD) of 7.3 percent, foreign currency deposits (FCD) of 2.9 percent. Contrary, demand deposits (DD) and currency in circulation (CIC) contributed negatively to the growth of M3 as they contracted by 3.3 percent and 2.7 percent respectively.

Considering the y-o-y changes, the increase of 15.8 percent in M3 was mainly reflected in the growth of FCD of 26.0 percent, followed by a growth in TSD (22.3 percent), in demand deposits (4.7percent), and in CIC (10.2 percent).

Chart 23: Contributors to M3 growth from liabilities side

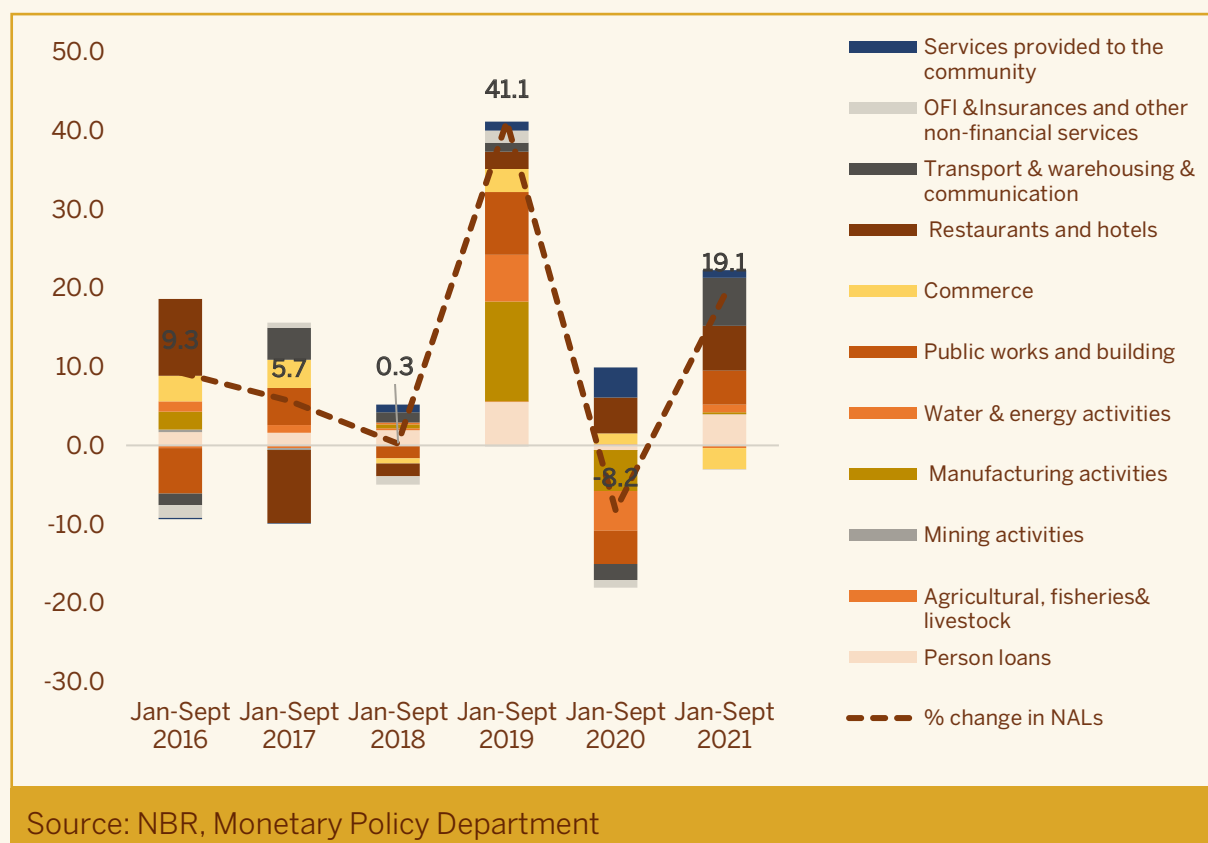


Sound credit to the private sector owing to continuous accommodative monetary policy and supportive policy measures.

The outstanding Credit to the Private Sector (CPS) increased by 18.6 percent in 2021Q3, Y-o-Y, compared to 17.4 percent growth in 2020Q3 due to high new disbursed loans in the first nine months of 2021.

New Authorized loans (NALs) picked up in 2021 on improving economic outlook compared to the previous year. In the first nine months of 2021, NALs grew by 19.11 percent compared with a contraction of 8.2 percent recorded in the same period of 2020. The top five sectors reflecting that growth are commerce (+24.2 percent), public works & buildings (+21.5 percent), personal loans (+14.6 percent), restaurants and hotels (+11.0 percent), as well as Transport, warehousing & communication (+10.0 percent).

Chart 24: Contributions of Sectors to the Change in New Authorized Loans (% changes)







The increase in NALs was in line with the rise in loan demand in both value and volume, induced by the relaxation of the tight Covid-19 restrictions and improving economic outlook that followed the vaccination program. In terms of value, loan demand increased by 18.0 percent compared with 12.7 percent contraction recorded in the first nine months of 2020, whereas it rose by 14.9 percent in terms of number of applications against 0.7 percent increase recorded last year during the period under consideration.



Looking at quarter on quarter changes, NALs rose by 4.3 percent in 2021Q3 compared with a negative growth of 9.6 percent registered in 2021Q2.



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