Monetary Policy Report

October 2024

Table of Contents

List of Figures ii
List of Tables ii
ACRONYMS AND ABBREVIATIONS iii
EXECUTIVE SUMMARY iv
1. GLOBAL DEVELOPMENTS AND OUTLOOK 0
1.1 Global economic activity 0
1.2 Global inflation 2
1.3 Global commodity prices 3
1.4 Global financial markets 5
1.5 Implications for Uganda 6
2. DOMESTIC DEVELOPMENTS AND OUTLOOK 7
2.1. Domestic financial markets 7
2.2. Treasury securities markets 7
2.3. Lending interest rates 8
2.4. Fiscal operations 11
2.5. Balance of Payments Developments 13
2.6. Exchange rates 16
2.7. Domestic economic activity 18
2.8. Domestic inflation and outlook 19
2.8.1. Domestic inflation 19
2.8.2. Inflation outlook 20
2.8.2.1. Baseline forecasts 20
2.8.2.2. Alternative scenarios 21
3. MONETARY POLICY DECISION 24

List of Figures

Figure 1: Consumer price inflation projections for selected economies (y-o-y, %) 3
Figure 2: Commodity price outturn and forecasts (y-o-y, %) 4
Figure 3: Commodity price outturn and forecasts (y-o-y, %) 4
Figure 4: US Fed Index LHS and AE 10-year Bond yields RHS 6
Figure 5: Central Bank Rate and interbank interest rates.. 7
Figure 6: Secondary market annualized yields on T-bills and T-bonds. 8
Figure 7: Weighted average lending rates for selected Sectors 9
Figure 8: Growth in private sector credit (left) and loans applications (Shillings billion) 10
Figure 9: Annualized growth in private sector credit (3-month moving average, % shares in brackets) 11
Figure 10: BOP developments – Current Account Balance (US$ Million) 14
Figure 11: Currency movements against the US dollar (m-o-m, %) 17
Figure 12: Real Effective Exchange Rate (y-o-y, %) 17
Figure 13: Selected currencies against the US dollar (Index, 2019M12=100) 18
Figure 14: Business Tendency Index, Consumer Confidence Index (Left) and Purchasing Managers Index (Right) 19
Figure 15: Domestic inflation decomposition (y-o-y, %) 20
Figure 16: Baseline inflation forecast. 21
Figure 17: Alternative scenario of an appreciated exchange rate 22
Figure 18: Alternative scenario of a more depreciated exchange rate 22
Figure 19: Alternative scenario assuming double-digit GDP growth over the forecast horizon....... 23
Figure 20: Alternative scenario assuming higher oil prices due to escalating geopolitical tensions ... 23

List of Tables

Table 1: Global economic growth projections 0
Table 2: Fiscal operations (Shs. billion) 12
Table 3: Tax Revenue Performance (Shs. Billion) 13
Table 4: BOP Projections 15

ACRONYMS AND ABBREVIATIONS

AEs	Advanced Economies
AHA	Anti-Homosexuality Act
BOE	Bank of England
BoP	Balance of Payments
BOU	Bank of Uganda
BTI	Business Tenday Index
CBR	Central Bank Rate
EAC	East African Community
ECB	European Central Bank
EFU	Energy, Fuel and Utilities
EMDEs	Emerging Market and Developing Economies
G20	Group of 20
FDI	Foreign Direct Investment
FY	Financial Year
GDP	Gross Domestic Product
MPC	Monetary Policy Committee
NTR	Non-Tax Revenue
OECD	Organization for Economic Co-operation and Development
OPEC	Organization of Petroleum Exporting Countries
OPEC+	OPEC and partners
PDM	Parish Development Model
PDMF	Public Debt Management Framework
PMI	Purchasing Managers Index
SHS	Uganda shilling
US	United States
US$	United States Dollar
URA	Uganda Revenue Authority

EXECUTIVE SUMMARY

The global economy remains resilient with falling inflation and modest resurgence in economic growth albeit with many vulnerabilities. Global GDP is projected to grow at 3.2 percent in 2024 and 2025 according to the OECD, on account of continued disinflation, the resultant improvement in real incomes and eased monetary policy stances. Nevertheless, the prolonged sluggish pace of global growth, compounded by heightened political tensions, leaves many countries vulnerable to economic shocks. Indeed, the regional growth outlook remains varied with particularly stronger growth expected in emerging markets and developing economies.

Global inflation continues to decline and is expected to reach most central banks' targets by 2025. According to IMF, global headline inflation is expected to ease from 5.9 percent in 2024 to 4.4 percent in 2025. Much of the disinflation is expected to come from EMDE where inflation is projected to ease to 6.0 percent in 2025 from 8.2 percent in 2024 but remain higher than in AEs albeit with divergent expectations across countries.

Domestically, money market rates continued to decline in the three months to September 2024 compared to the three months to June 2024 due to easing of financial conditions. The overnight rate and 7-day interbank weighted average rate fell to 10.3 percent and 10.9 percent in the three months to September 2024. Additionally, the uptake of the Standing Lending Facility (SLF) by banks decreased to Shillings 9.97 trillion over the same period. Yields in the primary and secondary market for securities edged up across all tenors in the three months to September 2024 relative to the three months to June 2024, due to an increase in supply of government paper along with higher administrative cutoffs.

The weighted average shillings and foreign currency lending rates remained relatively stable in the three months to August 2024 compared to the three months to May 2024, reflecting eased liquidity conditions. The weighted average shilling lending rate and foreign currency lending rates, which are used as proxies for the effective lending rates rose to 18.2 percent and 9.2 percent, respectively in the three months to August 2024. The rise in lending rates was most pronounced in the Transport sector due to risk profile on long maturity loans borrowed for new long-term projects.

The growth in private sector credit (PSC) recovered in the three months to August 2024 relative to the three months to May 2024 in line with the monetary policy stance and improved financial conditions during the quarter. Annualized average PSC growth rose to 8.4 percent in the three

months to August 2024 relative to 6.9 percent in the three months to May 2024. Demand and Supply of credit rose in the three months to August 2024 relative to the three months to March 2024, although demand for credit is expected to remain constrained due to elevated costs of access to credit.

Preliminary data for the first two months of FY2024/25 indicates an expansionary fiscal stance compared to FY 2023/24 with total government expenditure amounting to Shs.6,678.7 billion, Shs.843.9 billion higher than planned and revenue overperforming, mainly driven by taxes. The overall deficit including grants was larger than the target by Shs.127.3 billion mainly due to the overperformance in government expenditure. The fiscal deficit was financed largely from domestic sources.

The current account balance deteriorated to a deficit of US$1,101.7 million in the 3 months to August 2024, from US$1,019.7 million in the 3 months to May 2024 due decline in balances on all sub-accounts, except the secondary income, which improved on account of higher remittances and NGO inflows during the quarter. The stock of reserves at the end of August 2024 was US$3,397.9 million, which is equivalent to 3.1 months of future import cover excluding oil project-related imports, an improvement from US$3,258.8 million, which was about 3.0 months of imports excluding oil project imports at end May 2024. In the short term, Uganda's external sector outlook remains vulnerable to negative spillover effects from ongoing geopolitical tensions, restricted access to external financing, and commodity prices fluctuations. In the medium term, the trajectory of the current and financial accounts will likely be influenced by developments in the oil sector.

The Ugandan shilling has broadly maintained relative stability against US Dollar in September 2024. In the three months to September 2024, the Shilling appreciated by 1.90 percent compared to the previous quarter however, it depreciated by 0.50 percent relative to the same quarter the previous year.

Growth in economic activity and business sentiments remains buoyant evidenced by the quarterly GDP from UBOS which indicates that real GDP growth in Q2 2024 was 6.6 percent driven by a significant recovery in agricultural activity from 5.6 percent in Q2 2023. Nevertheless, Risks to the growth outlook are balanced with economic growth for FY2024/25 is projected in the range of 6.0 to 6.5 percent, then rising above 7.0 percent in subsequent years driven by investment in extractive industry and government programs targeted at boosting

productivity.

Annual headline and core inflation declined in September 2024 to 3.0 percent and 3.7 percent from respective rates of 3.5 percent and 3.9 percent in August 2024, driven by a decline in food and energy prices. The inflation outlook indicates that inflation will remain subdued for the rest of the fiscal year, primarily due to a stronger shilling exchange rate and lower oil prices. Inflation is projected to remain below 5 percent in FY2024/25 but is expected to return to target in the medium term. Going forward, risks to the inflation outlook remain balanced, with upside risks such as inflation further disruptions to global supply chains resulting from escalation of geopolitical conflicts, trade tension, and extreme domestic weather conditions, higher domestic growth due to increased investment in the extractive industries, and a more depreciated exchange rate that could lead to higher inflation. On the downside, inflation could be lower than forecast due to slower global growth, bumper harvests leading to lower food crop prices, exchange rate appreciation following oil exports in FY2025/26, and softer global inflation.

The MPC assessed that inflation is expected to remain below the target in the near term and risks to the inflation outlook are broadly balanced however, the uncertainty in the outlook warrants a cautious monetary policy action. As such, the MPC reduced the CBR by 25 basis points to 9.75 percent. The bands on the CBR were maintained at +/-2 percentage points, and the margins on the CBR for the rediscount and bank rates at 3 and 4 percentage points, respectively. Consequently, the rediscount and bank rates will remain at 12.75 percent and 13.75 percent, respectively.

1. GLOBAL DEVELOPMENTS AND OUTLOOK

1.1 Global economic activity

The world economy remains resilient, with falling inflation and modest resurgent growth particularly in emerging markets and developing economies (EMDE). However, growth is still weak, disjointed and driven mainly by the continued strong performance of the US economy. Business and consumer confidence are fragile worldwide, reflecting precarious economic prospects and political uncertainty in many countries, as well as festering geopolitical instability in many hot spots. One disconnects in the world economy relates to the wide disparities in growth momentum and prospects. The US and Indian economies are experiencing robust growth rates, while most other advanced economies and many emerging market economies, including China are mired in a slump and remain hamstrung by rising debt burdens. Nonetheless, growth momentum is likely to accelerate as several central banks ease monetary policy in response to the fall in inflation. According to the organization for economic cooperation and development's (OECD) interim report released in September 2024, global GDP growth is projected at 3.2 percent in 2024 and 2025 on account of continued disinflation, and the resultant improvement in real incomes and eased monetary policy stances (**Table 1**).

Table 1: Global economic growth projections

Year over Year, (Percent change, unless noted otherwise)					
		Projections		Difference from May 2024 Projections 1/	
	2023	2024	2025	2024	2025
World Output	**3.1**	**3.2**	**3.2**	**0.1**	**0.0**
United States	2.5	2.6	1.6	0.0	-0.2
Euro Area	0.5	0.7	1.3	0.0	-0.2
Japan	1.9	0.7	1.0	-0.2	0.0
United Kingdom	0.1	1.1	1.2	1.2	0.2
China	5.2	4.9	4.5	0.0	0.0
India 4/	8.2	6.7	6.8	0.1	0.2
Russia	3.6	3.7	1.1	1.1	0.1
Brazil	2.9	2.9	2.6	1.0	0.5
Saudi Arabia	-0.7	1.0	3.7	1.2	-0.4
South Africa	0.7	1.0	1.4	0.0	0.0

Source: OECD, September 2024

In the US, annual GDP is expected to grow at 2.6 percent in 2024 due to robust consumer spending, high business investment, and lower interest rates but it is likely to slow down to 1.6 percent in 2025 as demand normalizes (**Table 1**). Growth in the US strengthened in Q2 2024 as private consumption was buoyed by real wage increases due to the decline in inflation. GDP

growth in the Euro Area is expected to accelerate from 0.7 percent in 2024 to 1.3 percent in 2025 as real incomes and credit availability increase. Nonetheless, growth in Germany was weak due to manufacturing slowdown, lower exports and rising energy costs on account of structural problems and geopolitical challenges.

Growth in EMDE shows divergent growth patterns but it is expected to remain broadly stable with India and China as the main drivers (**Table 1**). Economic activity in India is projected to expand by 6.7 percent in 2024 and 6.8 percent in 2025, a 0.2 percentage point upward revision due to strong investor confidence, consumption demand and government investments in infrastructure projects. In China however, growth is expected to slow down from the 5.2 realized in 2023 to 4.9 percent and 4.5 percent in 2004 and 2025, respectively on account of subdued demand, trade tension with AE, and challenges in the real estate sector despite the government efforts to stimulate export growth. Domestic demand has boosted economic activity in Brazil, which is expected to grow at 2.9 percent in 2024 then moderate to 2.6 percent in 2025 driven by mining, agriculture, and manufacturing activities as well as strong and rapid growth of the service sector.

Sub-Saharan Africa (SSA) is set to grow according to several forecasts. The IMF economic outlook for July 2024 indicates that SSA economy is expected to expand by 3.7 percent in 2024 and improve further to 4.1 percent growth in 2025 as these economies recover from four turbulent years following the Covid-19 pandemic and supply-side shocks driven by geopolitical tensions. The World Bank's Global Economic prospects report of June 2024 projects similar but slightly conservative growth of 3.5 percent in 2024 for SSA region and expects it to expand by 4.0 percent in 2025-2026 as inflation retreats and private consumption and investment improve.

There are risks to these growth forecasts that are balanced. On the upside, interest rate cuts and moderating inflation could enhance real incomes. Additionally, increased labor availability might reduce wage pressures, and lower input-commodity prices, such as oil, could boost production. On the downside, persistent conflicts in the Middle East, like the Houthi rebel attacks on the Red Sea, could raise shipping freight costs, drive up oil prices, and slow global growth. Furthermore, growing geopolitical and trade tensions also pose risks to global growth.

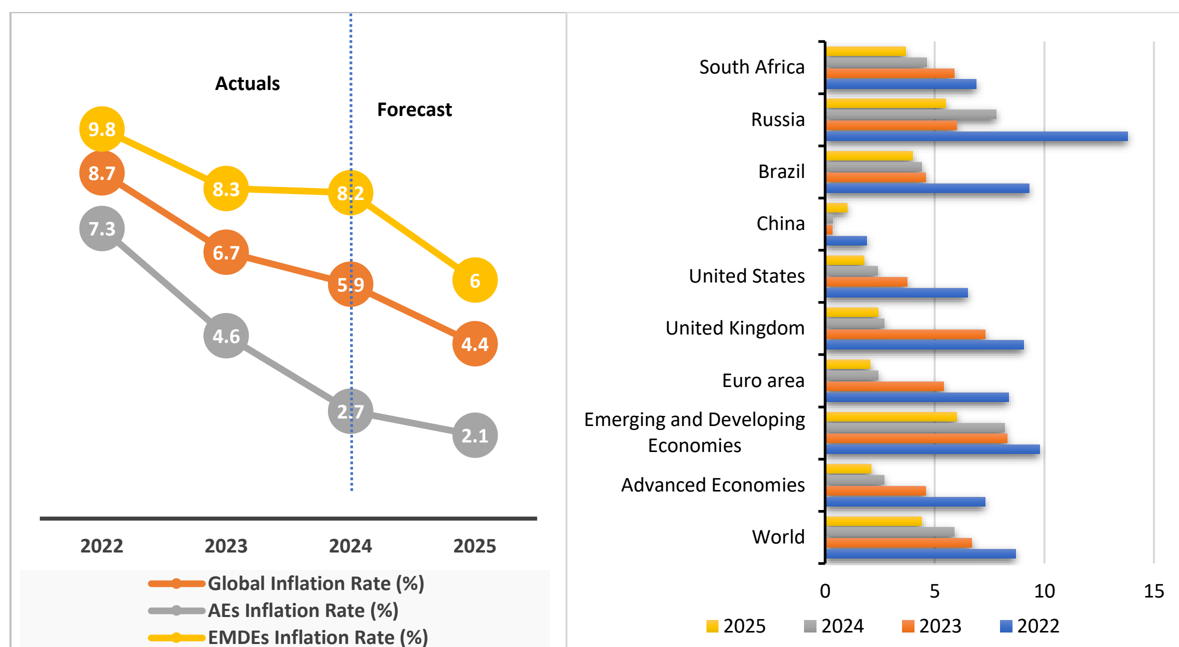
1.2 Global inflation

Global headline inflation is expected to ease from 5.9 percent in 2024 to 4.4 percent in 2025 according to the IMF, partly due to a decline in commodity prices and monetary policy actions. (**Figure 1**). Core inflation is expected to decline to 2.7 percent in 2024 and further to 2.1 percent in 2025, although services inflation that is expected to remain elevated.

The decline in consumer price inflation has boosted household spending, marking a significant shift from the situation in 2022. Back then, tight financial conditions and supply shortages due to geopolitical and trade tensions negatively impacted consumer expectations. In the US consumer price index inflation reduced to 2.4 percent in September 2024 from the 2.5 percent recorded in August 2024. This follows the Personal Consumption Expenditures (PCE) price index, a key measure used by the Federal Reserve that has decreased by just 0.3 percentage points to 2.2 percent in August 2024 from an annual rate of 2.5 percent in the previous month.

Inflation in the Euro Area and the United Kingdom fell to 2.1 percent and 1.7 percent in September 2024 from 2.4 percent and 2.2 percent in August 2024, respectively. The European Central Bank (ECB) reduced the deposit facility rate (policy rate) by 25 basis points to 3.50 percent in response to the dynamics of the underlying inflation and assessment of the outlook. The Bank of England held its policy rate at 5.0 percent and is expected to reduce the rate further if inflation continues on the current trend. Inflation remains high and persistent in the EMDE with headline inflation forecasted to ease to 6.0 percent in 2025 from 8.2 percent expected in 2024 albeit with divergent expectations across countries. Inflation in EMDEs is expected to remain higher than in AEs driven by current macroeconomic and structural impediments in these countries. The Chinese inflation reduced to 0.4 percent in September 2024 and is expected to remain in low.

Figure 1: Consumer price inflation projections for selected economies (y-o-y, %)



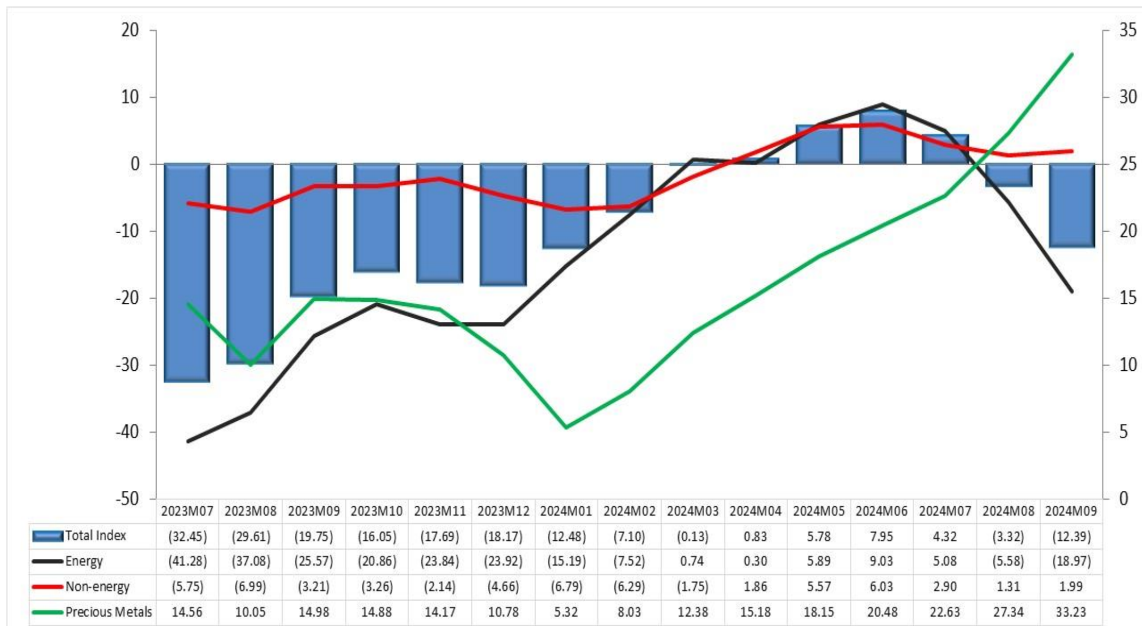
Source: IMF WEO July 2024 interim report and OECD, September 2024 interim report

There are, however, upside risks to the global inflation outlook mainly arising from constrained financial conditions, uncertainty arising from escalating geopolitical tensions to supply-chain disruptions, and adverse weather conditions.

1.3 Global commodity prices

Despite the geopolitical tensions in the Middle East, global commodity prices continued to decline in September 2024 compared to August 2024 according to the World Bank pink Sheet for October 2024. This was largely because USA buffers and softening China growth somewhat outweighed the geopolitical impact. Energy prices decreased further by 18.97 percent year-on-year and 7.1 percent month-on-month, driven by a 7.3 percent drop in crude oil prices due to reduced demand from China. In addition, natural gas prices rose by 1.0 percent month on month but fell by 3.1 year on year due to high inventories. Precious metals prices rose by 4.3 percent month on month and by 33.2 percent year on year due to global uncertainty which makes these metals safe haven for investments. In particular, gold prices rose by 4.1 percent month on month and 34.2 percent year on year. Similar trends were exhibited by most the precious metals as illustrated in **Figure 2**.

Figure 2: Commodity price outturn and forecasts (y-o-y, %)

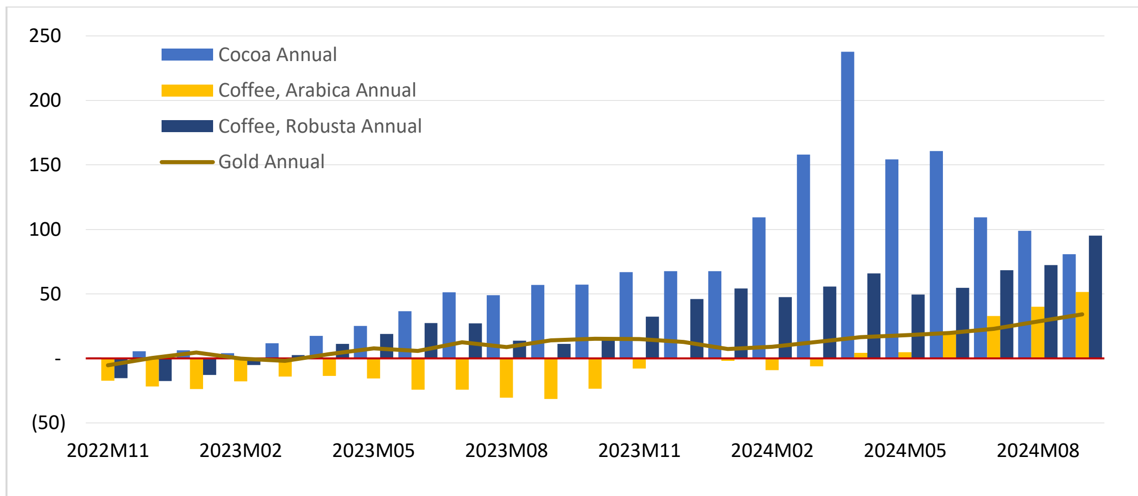


	2023M07	2023M08	2023M09	2023M10	2023M11	2023M12	2024M01	2024M02	2024M03	2024M04	2024M05	2024M06	2024M07	2024M08	2024M09
Total Index	(32.45)	(29.61)	(19.75)	(16.05)	(17.69)	(18.17)	(12.48)	(7.10)	(0.13)	0.83	5.78	7.95	4.32	(3.32)	(12.39)
Energy	(41.28)	(37.08)	(25.57)	(20.86)	(23.84)	(23.92)	(15.19)	(7.52)	0.74	0.30	5.89	9.03	5.08	(5.58)	(18.97)
Non-energy	(5.75)	(6.99)	(3.21)	(3.26)	(2.14)	(4.66)	(6.79)	(6.29)	(1.75)	1.86	5.57	6.03	2.90	1.31	1.99
Precious Metals	14.56	10.05	14.98	14.88	14.17	10.78	5.32	8.03	12.38	15.18	18.15	20.48	22.63	27.34	33.23

Source: World Bank pink Sheet, September 2024

Non-energy prices rose by 2.3 percent month on month and 2.0 percent year on year due to increases in prices of beverages (63.4 percent) and increases in prices of raw materials (by 2.7 percent) as shown in Figure 2. Cocoa prices rose by 80.8 percent on an annual basis, as did Arabica and coffee Robusta coffee which rose by 51.4 percent and 95.2 percent, respectively, on account of adverse weather in major exporting countries which dampened harvests, pushing up the global prices (**Figure 3**).

Figure 3: Commodity price outturn and forecasts (y-o-y, %)



Source: World Bank pink Sheet, September 2024

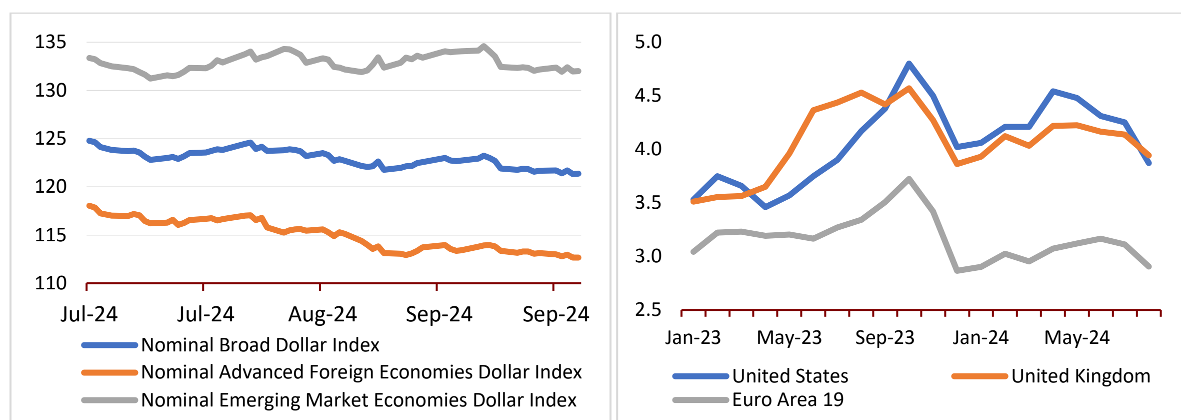
Food prices continue to decline due to a fall in prices in grains, edible oils, meals and cereals such as wheat and maize. Prices for beverages, particularly of coffee, tea, and cocoa prices increased. However, price devaluations in Ethiopia could adversely affect the market for Uganda's coffee. Metal prices, particularly rose in June 2024 and are expected to rise further as a haven commodity amidst global uncertainty.

The risks to the projections of commodity prices are tilted to the upside. They include geopolitical tensions in the Middle East, and Russia-Ukraine war that could disrupt the energy markets and shipping through the red sea. Downside risks are likely to arise from the normalization of agricultural (coffee) production particularly from Brazil and Venezuela that was affected by adverse weather shock (i.e. El Nino).

1.4 Global financial markets

Global financial conditions remain accommodative. Long-term yields have edged downwards, in tandem with the repricing of policy paths. However, rising public debts in several countries are constraining the extent of the sharp drop in yields, even as monetary policies ease. Additionally, investor sentiment remains cautious due to uncertainties regarding US elections and global economic headwinds. The US markets experienced volatility in August 2024 due to low growth results but by September 2024 the S&P500 had hit record highs due to the US Federal reserve's 50 basis point interest rate cut. The 10-year bond yields in Advanced economies dipped year on year with the US bond yields dipping to 3.87 percent in August 2024 lower than the 4.17 percent recorded in August 2023, while in the EU the bond yield dropped to 2.91 percent from 3.34 percent and the UK bond yields dropped to 3.94 percent from 4.53 percent over the same period (**Figure 4**). In addition, the declining strength of the US dollar as well as the lower bond yields have resulted into stronger currencies in developing countries with increased inflows into the latter countries.

Figure 4: US Fed Index LHS and AE 10-year Bond yields RHS



Source: Financial Times

There are, however, risks to the global finance outlook arising from the timing of the interest rate cuts, the pace of the cuts and the shift in monetary policy that could be mis-calculated to cause recession. In addition, persistence of geopolitical and global trade tensions could add to volatility in the global financial markets.

1.5 Implications for Uganda

Uganda is an open economy integrated into the global economic system and is therefore exposed to international shocks. The expected acceleration of economic growth in AEs and EMDEs, is likely to translate into increased demand for Uganda's exports. Similarly, the decline in global inflation could lead to lower domestic inflation as import prices for imported intermediate and final consumption goods dissipate.

The fall in energy prices is likely to translate into lower inflation if exchange rate remains competitive resulting into lower production costs. On commodities exports front, Uganda benefited from the rise in prices of beverages, particularly coffee since it coincided with a period of bumper harvests. The high export earnings have in part supported the exchange rate market resulting into an appreciation of the shilling against the US dollar.

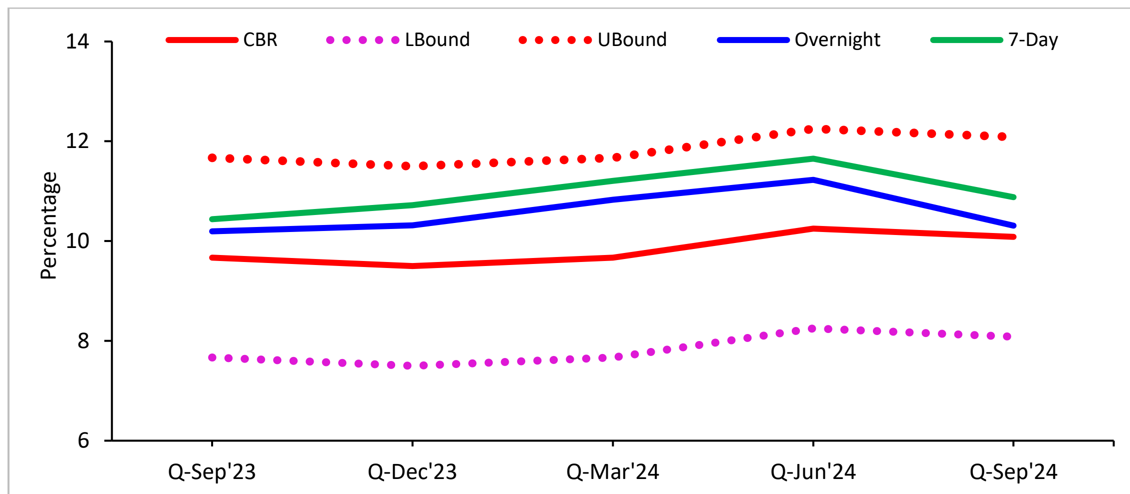
The interest rate cuts in the advanced economies could lead to higher capital inflows, lower borrowing costs through the reduction in debt servicing pressures. The change in the relative rate of return is likely to attract portfolio investors into Uganda's debt securities market, which contributes to strengthening of the shilling.

2. DOMESTIC DEVELOPMENTS AND OUTLOOK

2.1. Domestic financial markets

Money market rates fell in the three months to September 2024 relative to the three months to June 2024 as shown in **Figure 5**, as liquidity conditions continue to ease. The overnight rate fell to 10.3 percent in the three months to September 2024 relative to 11.2 percent in the three months to June 2024. Similarly, the 7-day interbank weighted average rate fell to 10.9 percent in the three months to September 2024, from 11.7 percent in the three months to June 2024. Utilization of the Standing lending facility declined to Shs.9.97 trillion (160 transactions) during the three months to September 2024 compared to the Shs.21.52 trillion (266 transactions) accessed in the three months to June 2024. In the three months to September 2024, the volume of issued of repurchase agreements for liquidity mop-up rose to Shs.4.3 trillion from Shs.2.2 trillion in the three months to June 2024. However, the issued Bank of Uganda Bills fell to Shs.297.4 billion in the three months to September 2024 from Shs.406.4 billion in the three months to June 2024.

Figure 5: Central Bank Rate and interbank interest rates



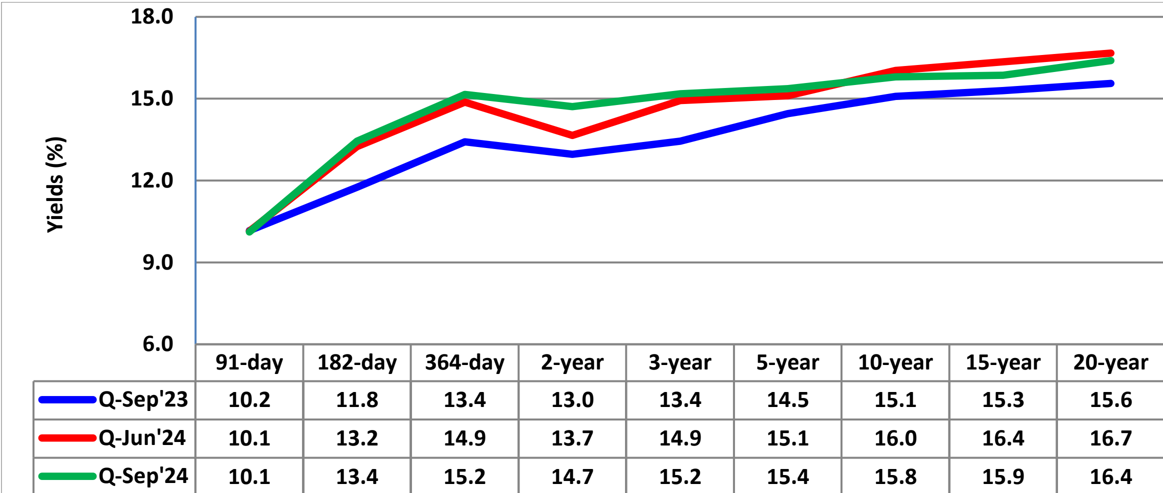
Source: Bank of Uganda

2.2. Treasury securities markets

Yields in the primary market for treasury bills and bonds rose across all tenors in the three months to September 2024, even with administrative cutoffs relative to the three months to June 2024, due to an increase in domestic financing of fiscal deficits. The amount of treasury securities issued rose by 69.7 percent to Shs.5.4 trillion in the three months to September 2024

relative to Shs.3.2 trillion in the three months to June 2024. Demand for government securities remained high with all auctions oversubscribed, pointing to strong appetite for investments in government paper. In the secondary market, yields rose on the short end but fell on the long end, signifying investor confidence on the economy and expectation for higher relative return as illustrated in **Figure 6**.

Figure 6: Secondary market annualized yields on T-bills and T-bonds.



	91-day	182-day	364-day	2-year	3-year	5-year	10-year	15-year	20-year
Q-Sep'23	10.2	11.8	13.4	13.0	13.4	14.5	15.1	15.3	15.6
Q-Jun'24	10.1	13.2	14.9	13.7	14.9	15.1	16.0	16.4	16.7
Q-Sep'24	10.1	13.4	15.2	14.7	15.2	15.4	15.8	15.9	16.4

Source: Bank of Uganda

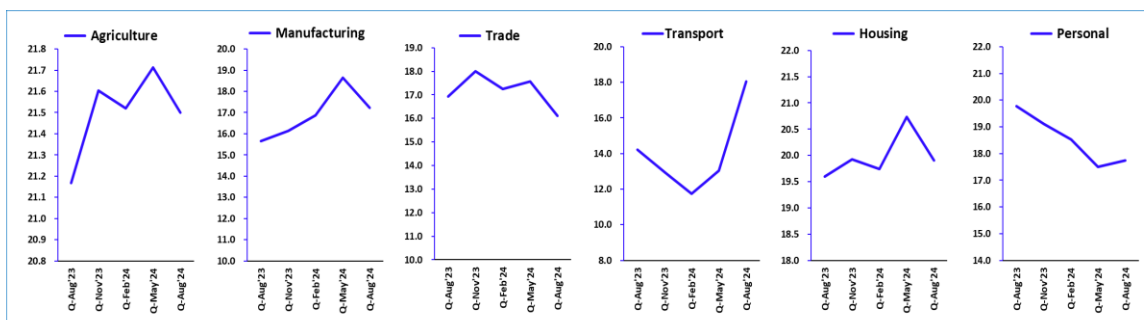
2.3. Lending interest rates

The weighted average shillings and foreign currency lending rates remained relatively stable in the three months to August 2024 relative to the three months to May 2024, reflecting eased liquidity conditions. The weighted average shilling lending rate averaged 18.2 percent in the three months to August 2024 relative to 18.0 percent in the three months to May 2024. Similarly, the lending rate on foreign currency-denominated loans averaged 9.2 percent relative to 9.1 percent over the same period. In term of sector distribution of the lending rates, there was a notable rise in rates in the Transport sector due to the risk profiles of the long maturity loans extended for investment in new long-term projects in the water and air transport activities (**Figure. 7**).

In general, the lending rates are expected to remain relatively stable in the near term, as monetary and fiscal policies continue to support economic recovery. The findings from the quarterly Bank Lending Survey for FY 2024/25Q1 revealed that 91.3 percent of commercial banks expect lending rates to remain stable due to favorable macroeconomic conditions and anticipated stability of the central bank rate. The remaining 8.7 percent of banks foresee a decline in lending

rates by December 2024, an indication of more confidence in future economic performance and anticipation of further monetary policy easing. The downside risks to the outlook for lending rates include continued easing policy, economic recovery and a stable foreign exchange market. The upside risks include sector-specific rate hikes, increased government borrowing, and shifts in global financial conditions. Overall, the risks to near term lending rates outlook are skewed to the upside.

Figure 7: Weighted average lending rates for selected Sectors



Source: Bank of Uganda

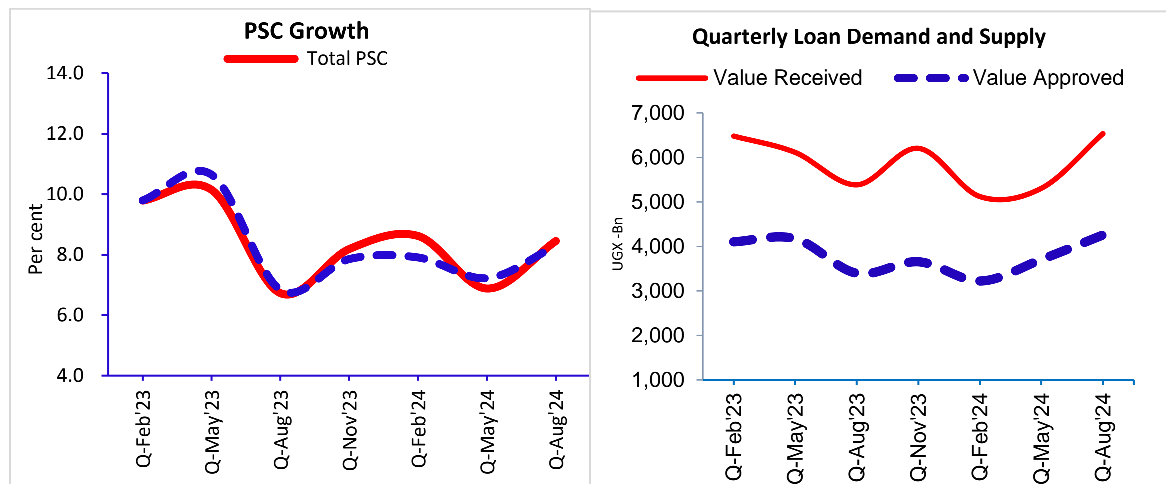
Credit to the private sector

Growth in private sector credit (PSC) extended by the other depository corporations (ODC) recovered in the three months to August 2024 relative to the three months to May 2024 in line with the monetary policy stance and financial conditions in the quarter. Annualized average PSC growth rose to 8.4 percent in the three months to August 2024 relative to 6.9 percent in the three months to May 2024 (**Figure 8, left**). Including net of valuation and capitalized interest, PSC growth rose to 8.3 percent in the three months to August 2024 from 7.2 percent in the three months to May 2024. The shilling-denominated loans grew by 9.5 percent in the three months to August 2024 up from 9.0 percent observed in the three months to May 2024, while the foreign currency-denominated loans rose to 5.7 percent from 1.5 percent over the same period. The net credit extensions rose in the three months to August 2024 amounted to Shs.1.4 trillion from Shs.402.7 billion in the three months to May 2024 as firms begins to build inventory for sale and end of year festivities.

The demand and supply of credit also rose in the three months to August 2024 compared with the three months to May 2024 due to increased optimism among firms and households as inflation abates. Demand for and supply of credit rose to Shs.6.5 trillion and Shs.4.3 trillion in

the three months to August 2024 from Shs.5.3 trillion and Shs.3.7 trillion, respectively in the three months to May 2024 (**Figure 8, right**). The rate of approval for credit fell to 65.2 percent in the three months to August 2024 from 70.0 percent in the three months to May 2024. According to the Credit Demand Survey conducted by BoU for the third quarter of 2024 (2024Q3), the main challenges cited for loan access included lower business earnings and insufficient collateral.

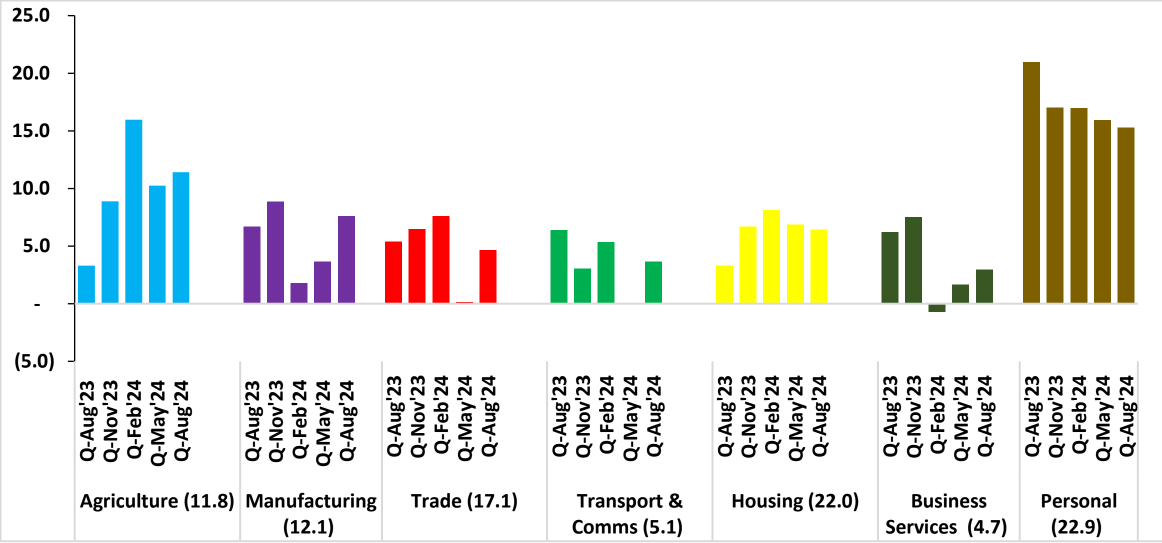
Figure 8: Growth in private sector credit (left) and loans applications (Shillings billion)



Source: Bank of Uganda

Annualized private sector credit growth was robust across most of the major economic sectors in the 3 months to August 2024 (**Figure 9**). The main contributors to the growth in manufacturing were increased financing to the production of construction materials, chemicals, pharmaceuticals, plastics and rubber products. The credits to wholesale and retail trade activities were driven by higher financing towards retail and export credit. The contributions towards the transport and communications sector were attributed to higher financing on new projects for water and air transport.

Figure 9: Annualized growth in private sector credit (3-month moving average, % shares in brackets)



Source: Bank of Uganda

Private sector credit is expected to continue strengthening in the near term, supported by the strong demand from manufacturing, trade, and transport sectors. The improved macroeconomic environment coupled with increased availability of loanable funds from commercial banks and other financial intermediaries is likely to drive further growth in the medium term. The upside risks to this outlook include favorable macroeconomic conditions, increased public and private investments, and favorable weather conditions for borrowers in the agriculture sector. The downside risks include increased government borrowing that may crowd-out the private sector, global economic uncertainty, and credit risk concerns. overall, the risks to private sector credit growth are tilted to the upside.

2.4. Fiscal operations

Preliminary data for the first two months of FY2024/25 indicates an expansionary fiscal stance compared to FY 2023/24 with total government expenditure amounting to Shs.6,678.7 billion, Shs.843.9 billion higher than planned and revenue overperforming, mainly driven by taxes (**Table 2**). The resultant fiscal deficit including grants was larger than the target by Shs.127.3 billion mainly due to the overperformance in expenses other than compensation of employees and purchase of goods, and Shs.590.1 billion overperformance in grants to other government units. The primary balance which signals the borrowing requirements for purposes other than interest payments, amounted to a deficit of Shs.956.8 billion compared to a surplus of

Shs.1,087.0 billion in the same period in the previous financial year. The fiscal deficit was financed largely from domestic sources.

Table 2: Fiscal operations (Shs. billion)

	Jul'23-Aug'23	Jul'24-Aug'24	Prog. Jul'24-Aug'24*	Variation	Annual change (%)
Revenue (A)	**4,102.1**	**4,713.2**	**4,681.4**	**31.8**	**14.9**
Taxes	3,725.6	4,293.3	4,126.5	166.8	15.2
Grants (project support)	59.0	139.6	240.1	-100.6	136.6
Other revenue	317.6	280.4	314.8	-34.5	-11.7
Expense (B)	**3,998.5**	**6,678.7**	**5,834.9**	**843.9**	**67.0**
Compensation of employees	623.2	833.0	1,216.5	-383.5	33.7
Purchase of goods and services	590.4	773.8	1,120.8	-347.0	31.1
Interest payments	1,087.2	1,365.2	1,293.9	71.3	25.6
Domestic	863.9	1,103.8	1,007.4	96.4	27.8
External (including commitment fees)	223.3	261.4	286.5	-25.1	17.1
Grants	1,445.7	2,222.7	1,632.7	590.1	53.7
Social benefits	48.0	54.6	62.3	-7.7	13.7
Other expense	204.0	1,429.4	508.7	920.7	600.7
Gross operating balance (A-B)	**103.6**	**-1,965.6**	**-1,153.5**	**-812.1**	**-1996.7**
Net Acquisition of Nonfinancial Assets (C)	103.8	356.5	1,041.3	**-684.8**	243.4
Net lending/borrowing (A-B)-C	**-0.2**	**-2,322.0**	**-2,194.7**	**-127.3**	
Transactions in financial assets and liabilities Financing (net) (D-E)	**-0.2**	**-2,322.0**			
Net Acquisition of financial Assets (D)	**-1,010.9**	**-567.0**			**-43.9**
Domestic	-1,010.9	-567.0			-43.9
Foreign	0.0	0.0			
Net Acquisition of financial Liabilities (E)	**-1,023.5**	**4,669.5**			**-556.2**
Domestic	-1,077.1	4,541.2			-521.6
Foreign	53.6	128.3			139.4
Errors & Omissions	-12.8	2914.5			

Note: * Indicates target

Source: Ministry of Finance Planning and Economic Development

In the first two months of the FY2024/25, relative to the Uganda Revenue Authority (URA) targets, the outturns for total net tax and Non-Tax Revenue (NTR) collections amounted to Shs.4,549.8 billion of which net URA tax revenue contributed Shs.4,297.7 billion, an overperformance of Shs.171.3 billion above the target for the period (**Table 3**). On an annual basis, total net tax revenue registered a growth of 15.4 percent in the two months of the FY2024/25 compared to the 12.0 percent growth in the previous year. The overperformance in net URA tax was largely attributed to higher international trade and direct domestic tax collections. International trade taxes overperformed by Shs.44.2 billion mainly due to higher than target collections in import duty, while domestic taxes overperformed by Shs.98.2 billion due to an overperformance of Shs.43.7 billion and Shs.21.2 billion in corporate tax and withholding tax on government securities, respectively. In contrast indirect tax collections, underperformed by Shs.27.7 billion largely because of lower collections of value added tax (VAT) on manufactured goods.

Table 3: Tax Revenue Performance (Shs. Billion)

	Jul-Aug'22	Jul-Aug'23	Jul-Aug'24	URA Target Jul-Aug'24*	Jul-Aug'24 Variation from Target	Annual change 2022/2023-2023/24 (%)	Annual change 2023/2024 -2024/25 (%)
Net Tax and Non-Tax Revenue	**3,601.8**	**3,957.2**	**4,578.1**	**4,441.3**	**136.8**	**9.9**	**15.7**
Net Tax & URA NTR (excl. Refunds)	3,582.3	3,966.2	4,549.8	4,414.1	136.7	10.7	14.7
Net URA tax revenue	3,326.6	3,725.6	4,297.7	4,126.5	171.3	12.0	15.4
Direct Domestic Taxes	1,000.4	1,191.6	1,442.6	1,344.5	98.2	19.1	21.1
o/w PAYE	**574.5**	**690.6**	**757.1**	**752.1**	**5.0**	**20.2**	**9.6**
o/w Corporate tax	66.7	**50.2**	**113.8**	**70.2**	**43.7**	**-24.7**	**126.6**
o/w Withholding tax	213.3	240.9	322.4	310.7	11.7	12.9	33.8
o/w Treasury bills &bonds	90.3	142.5	146.9	125.7	21.2	57.9	3.1
Indirect Domestic Taxes	782.7	1,044.1	1,120.6	1,148.3	-27.7	33.4	7.3
o/w Excise duty	291.7	344.0	372.7	380.9	-8.2	18.0	8.3
o/w VAT	491.0	700.0	747.9	767.4	-19.5	42.6	6.8
Taxes on international Trade	1,534.8	1,576.0	1,790.6	1,746.3	442.0	2.7	13.6
Stamp duty & embossing fees	18.6	20.1	199.0	215.0	-1.6	8.1	-0.9
Non-Tax Revenue	275.2	231.6	280.4	314.8	-34.5	-15.8	21.1
o/w URA Non-Tax Revenue	256.8	240.6	252.0	287.6	-35.6	5.9	4.7
Tax Refunds	-100.0	-106.2	-76.0	-134.1	58.1	962.0	-28.4

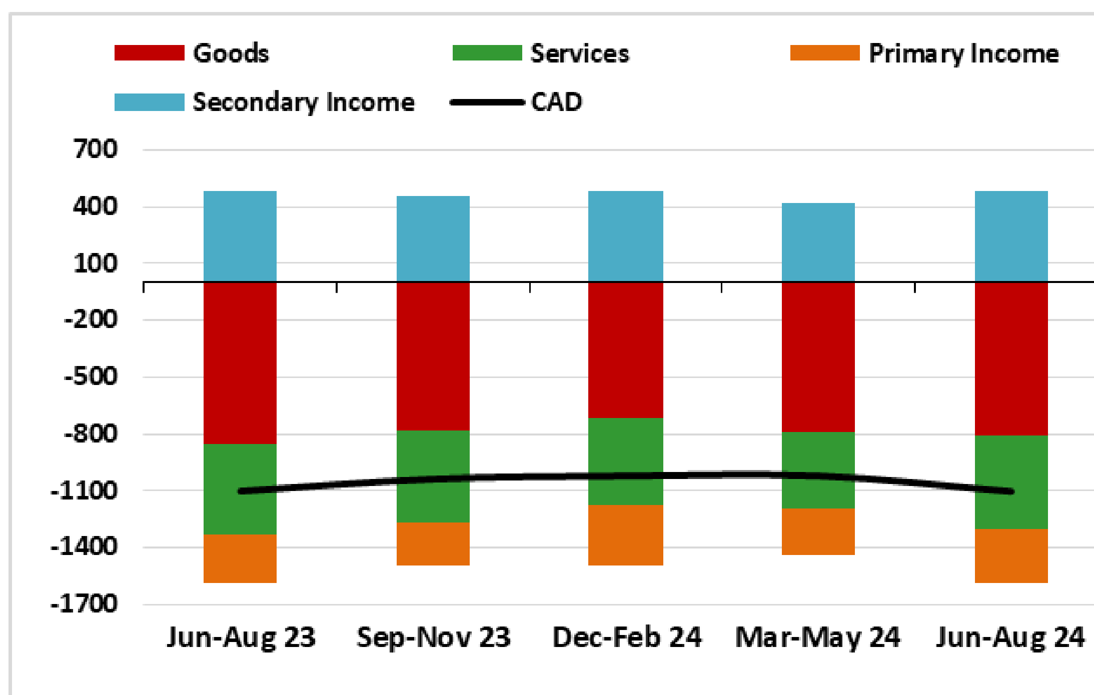
Note: * Indicates target

Source: Ministry of Finance Planning and Economic Development

2.5. Balance of Payments Developments

The current account balance deteriorated to a deficit of US$ 1,101.7 million in the 3 months to August 2024, from US$ 1,019.7 million in the 3 months to May 2024 due decline in balances on all sub-accounts, except the secondary income, which improved on account of higher remittances and NGO inflows during the quarter. Specifically, the surplus in the secondary income account increased by 16.2 percent to US$ 485.4 million in the quarter to August 2024 due to increased personal transfers. Compared to a similar quarter a year ago, the current account deficit deteriorated by 0.2 percent from a deficit of US$ 1,100.0 million (**Figure 10**). The services deficit widened by 21.0 percent to US$ 486.33million owing to higher payments for transport and other business services. The primary income account deficit deteriorated quarter-on-quarter by 19.7 percent to US$ 289.1 million, primarily attributed to an increase in interest payments on public external debt.

Figure 10: BOP developments – Current Account Balance (US$ Million)



Source: Bank of Uganda

Conversely, the deterioration in the current account balance was lessened by improvements in trade balance. The merchandise trade deficit narrowed by 22.4 percent to US$ 740.7 million in the three months to August 2024 mainly due to higher export earnings from coffee. The growth in coffee exports was fueled by increased external demand and higher prices on the international market. The import bill increased by US$ 85.4 million to US$ 3,104.9 million in the quarter to August 2024 primarily due to high expenditure on both non-monetary gold and Government imports.

On the financing side, the financial account balance improved, from a surplus of US$ 500.2 million in the quarter to May 2024 to US $730.2 million in the quarter to August 2024 due to higher Foreign Direct Investment (FDI) inflows despite a combination of negative factors, including offshore exits, high public debt service payments and constrained project aid/budget support inflows. FDI inflows were robust during the three months to August 2024, with net inflows amounting to US$ 869.0 million, attributed mainly to investment in the oil project related activities. The strong FDI inflows reflect investor confidence in Uganda's economy, particularly with the progress in oil exploration and production activities and the likely positive spillover effects. The portfolio transactions resulted into a net outflow of US$ 111.3 million in

the quarter to August 2024, a reduction in net outflow of US$ 146.4 million compared that of the quarter to May 2024 mainly on account of offshore investors' exit from the government securities market. Moreover, the other investment account posted net outflows of US$ 28.7 million in the quarter to August 2024, down from net outflows of US$ 113.3 million registered in the quarter to May 2024, largely driven by lower budget support disbursements.

The stock of reserves at the end of August 2024 was US$ 3,397.9 million, which is equivalent to 3.1 months of future import cover excluding oil project-related imports, an improvement from US$ 3,258.8 million, which was about 3.0 months of imports excluding oil project imports at end May 2024.

In the short term, Uganda's external sector outlook remains vulnerable to negative spillover effects from ongoing geopolitical tensions, restricted access to external financing, and fluctuations in global commodity prices. The current account deficit is expected to remain elevated over the coming months (**Table 4**). In the medium term however, the deficit is projected to gradually narrow. Imports are anticipated to remain high due to continued investments in the oil sector, while export revenues are expected to grow steadily, driven by regional trade, and increase sharply in FY2026/27 with the commencement of oil exports, maintaining a high level thereafter. The services deficit is likely to expand in line with rising goods imports. On a positive note, strong remittance inflows and tourism revenues will provide some support to the current account.

Table 4: BOP Projections

BOP Accounts	FY24/25		FY25/26		FY26/27		FY27/28	
	$BN	%GDP	$BN	%GDP	$BN	%GDP	$BN	%GDP
Current account	**-3.9**	**-7.3%**	**-3.5**	**-6.9%**	**-1.7**	**-3.5%**	**-0.2**	**-0.3%**
Trade Balance	-3.2	-5.9%	-3.0	-5.8%	-1.5	-2.9%	-0.3	-0.7%
Services	-1.7	-3.2%	-1.6	-3.1%	-1.3	-2.6%	-1.0	-2.0%
Primary income	-1.0	-2.0%	-1.1	-2.1%	-1.1	-2.2%	-1.1	-2.3%
Secondary income	2.0	3.8%	2.1	4.0%	2.1	4.3%	2.3	4.6%
Capital account	**0.4**	**0.7%**	**0.3**	**0.6%**	**0.3**	**0.5%**	**0.3**	**0.6%**
Current and Capital Account	**-3.5**	**-6.6%**	**-3.2**	**-6.3%**	**-1.5**	**-2.9%**	**0.1**	**0.3%**
Financial Account*	**3.3**	**6.2%**	**3.0**	**5.8%**	**1.6**	**3.1%**	**1.1**	**2.2%**
FDI*	3.1	5.7%	2.9	5.7%	2.6	5.1%	2.3	4.7%
Portfolio investment*	0.1	0.1%	0.1	0.1%	0.0	0.1%	0.0	0.0%
Other investment*	0.2	0.3%	0.0	0.0%	-1.0	-2.1%	-1.3	-2.6%
Overall Balance*	**-0.4**	**-0.7%**	**-0.3**	**-0.5%**	**0.1**	**0.2%**	**1.2**	**2.4%**
** Signs inverted to reflect direction of flows*								

Source: Bank of Uganda

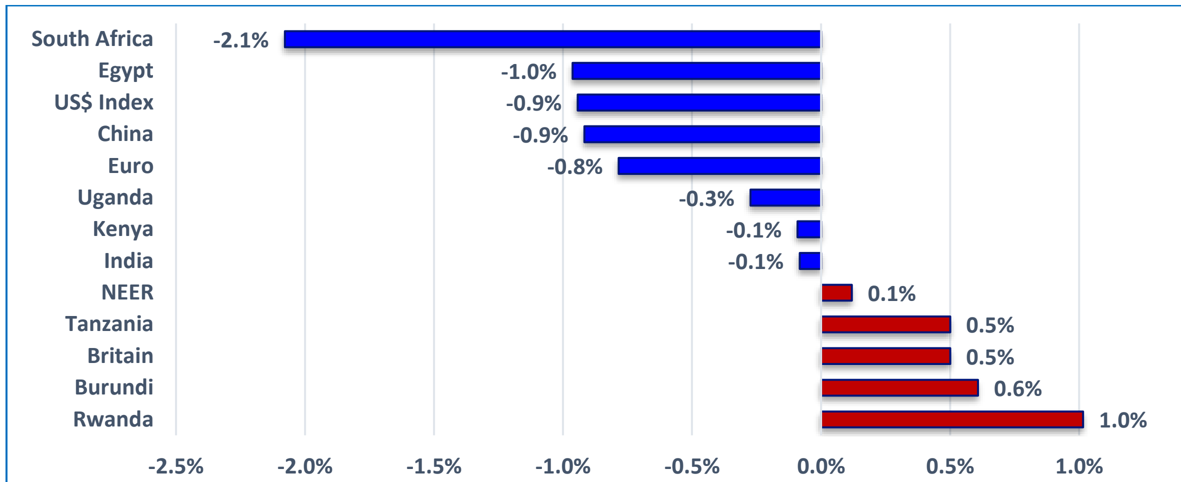
The financial account surplus is forecast to narrow gradually over the medium term, due to reduced inflows from budget support and project aid loans as well as increase in external debt repayments. However, strong FDI inflows into the oil sector is likely to provide support to the financial account. The FDI inflows for oil project-related, investment is expected to taper off in the later years as the investment phase in oil and gas concludes and its exports picks-up. Overall, BOP deficits are projected in the first two years, followed by surpluses in subsequent years. Similarly, the stock of reserves is expected to decline initially before rebounding in the later years.

2.6. Exchange rates

The Uganda Shilling traded stable against the US dollar during the month of September 2024 with an appreciation of 0.3 percent month-on-month to an average mid-rate of Shs.3,711.31 per US dollar (**Figure 11**). The performance of the shillings was driven by inflows from coffee receipts, Non-Government Organizations (NGOs), offshore players, and remittances, which subdued corporate demand from oil and manufacturing firms. Furthermore, the US dollar generally registered its weakest performance in over a year owing to the 50-basis-point Federal Reserve rate cut which, subsequently lowered investor inflows, and coincided with strengthening of foreign currencies in Europe and Asia. In the three months to September 2024, the Shilling appreciated notably by 1.90 percent compared to the previous quarter but depreciated by 0.50 percent relative to the same quarter the previous year.

As illustrated in **Figure 11**, the Nominal Effective Exchange Rate (NEER), the trade-weighted index of a basket of currencies depreciated by 0.1 percent month-on-month compared to a depreciation of 1.2 percent in month ending August 2024. The NEER also depreciated by 1.0 percent, year-on-year compared to a depreciation of 1.5 percent in the year ending August 2024.

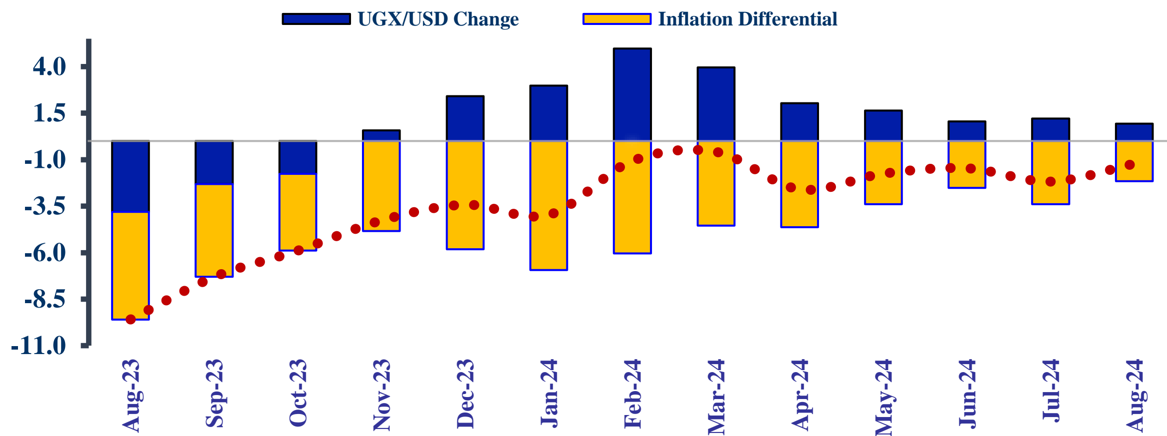
Figure 11: Currency movements against the US dollar (m-o-m, %)



Source: Bank of Uganda

In real effective terms, the exchange rate sustained appreciation path for over twenty months (**Figure 12**). In August 2024, the Real Effective Exchange Rate (REER) appreciated by 1.2 percent year-on-year as domestic inflation has eased at a faster pace than foreign inflation.

Figure 12: Real Effective Exchange Rate (y-o-y, %)

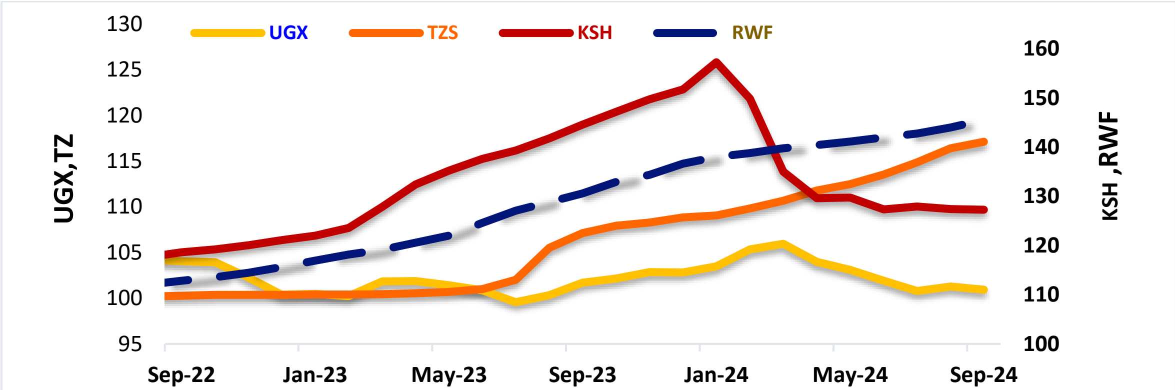


Source: Bank of Uganda

In the East African Community (EAC) region, the Ugandan Shilling and Kenyan Shilling posted stronger performances against the US Dollar compared to the Tanzanian, and Rwandan currencies as depicted in **Figure 13**. In the period under review, the Kenyan Shilling appreciated by 0.1 percent compared to an appreciation of 0.4 percent in August 2024 while the Tanzanian

and Rwandan currencies depreciated by 0.60, and 1.0 percent relative to 1.4, and 0.9 percent, respectively, in the preceding month.

Figure 13: Selected currencies against the US dollar (Index, 2019M12=100)



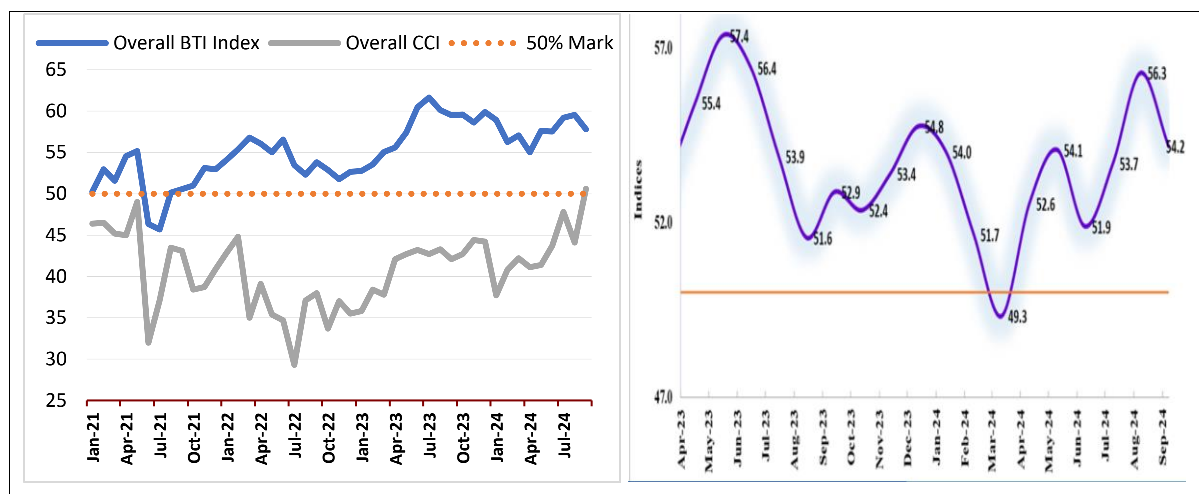
Source: Bank of Uganda

2.7. Domestic economic activity

Growth in economic activity and business sentiment remains robust, as evidenced by the quarterly GDP data from the Uganda Bureau of Statistics (UBOS). Real GDP growth in Q2 2024 was 6.6 percent, driven by a significant recovery in agricultural activity, up from 5.6 percent in Q2 2023. The agricultural sector grew by 11.1 percent in Q2 2024, compared to a contraction of 3.1 percent in Q2 2023. However, during the same period, the industry and services sectors grew at slower rates of 1.5 percent and 7.9 percent, respectively, down from 6.4 percent and 8.8 percent.

The Consumer Confidence Index (CCI) also improved in September 2024 by 6.5 points reaching 50.6 points from 44.1 points in August 2024 and crossing to the optimistic territory for the second time in history (**Figure 14**). This mainly reflects improved optimism about the near-term in consumers' expectations. Business confidence continued to be positive during September 2024, albeit less optimistic with the Business Tendency Index (BTI) registering at 57.8 points, lower than 59.2 points in the previous month (**Figure 14**). This was on account of a decline in confidence about the current business situation amid unchanged optimism about the near-term outlook for the economic situation. The Purchasing Managers Index (PMI) stood at 54.2 in September 2024, down from 56.3 in August 2024 but higher than 53.7 in July 2024, signaling a further improvement in economic activity, buoyed by increases in both output and new orders at the end of the Q3.

Figure 14: Business Tendency Index, Consumer Confidence Index (Left) and Purchasing Managers Index (Right)



Source: Bank of Uganda analysis based on surveys of businesses and Consumer Confidence Index and Purchasing Managers Index

Economic growth for FY2024/25 is projected to be between 6.0 percent and 6.5 percent, with expectations of exceeding 7.0 percent in subsequent years. This growth is driven by investments in the extractive industry and government programs aimed at boosting productivity. The risks to the growth outlook are balanced. Downside risks include intensified geopolitical tensions that could disrupt trade and supply chains, leading to higher commodity prices, especially oil. Additionally, adverse weather conditions could negatively impact growth. Increased domestic financing might crowd out private sector credit, and weaker global growth combined with lower coffee prices could reduce export proceeds. On the upside, higher investment in the extractive industry, with oil exports expected in FY2025/26, and favorable weather conditions leading to good food crop harvests could boost growth. Furthermore, government interventions, accommodative monetary policy, and increased disposable incomes could significantly stimulate demand.

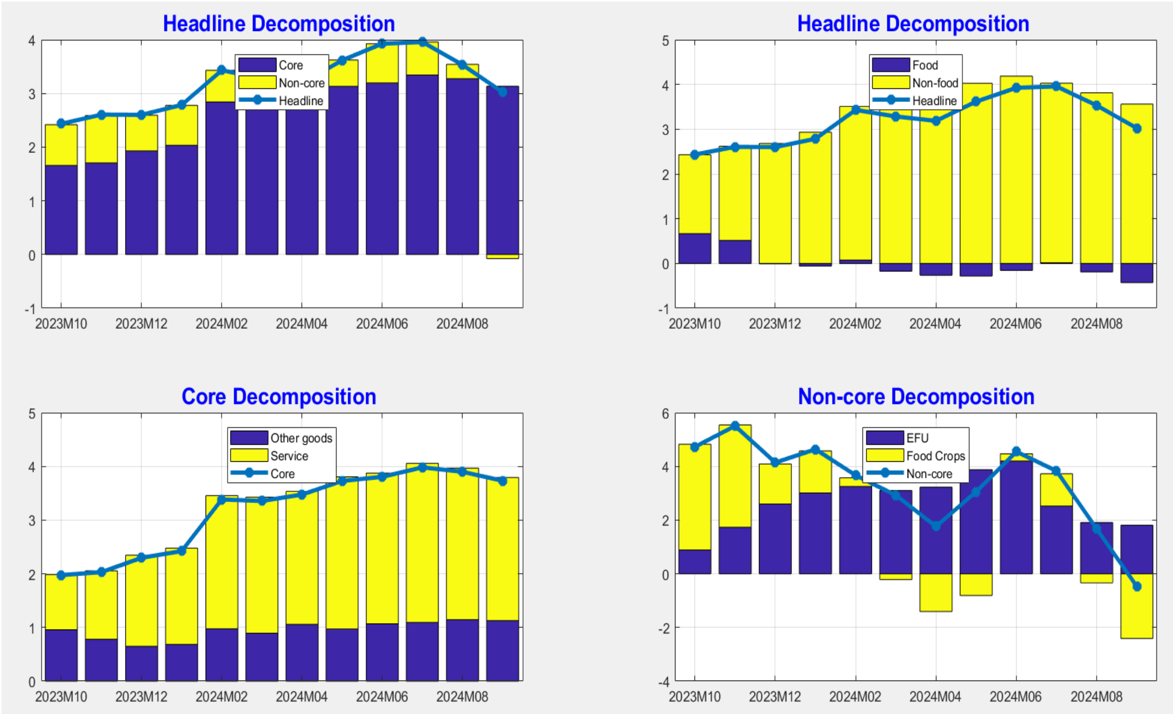
2.8. Domestic inflation and outlook

2.8.1. Domestic inflation

In September 2024, annual headline inflation decreased to 3.0 percent, down from 3.5 percent in August 2024, in part due to lower good and energy prices. Annual core inflation also decreased to 3.7 percent from the 3.9 percent registered in August 2024, driven by a notable decrease in annual services inflation, mainly passenger transport services (**Figure 15**). Services

inflation dropped to 5.8 percent from 6.2 percent in the previous month, indicating a broad-based easing in the cost of services. In comparison, other goods inflation remained steady at 2.1 percent, showing stability in non-food and non-energy goods prices. Notably, non-core inflation also declined over the same period to -0.5 percent from 1.7 percent. This was largely on account of food crops and related items inflation that significantly decreased to -4.1 percent in September 2024 from -0.6 percent in the year ended August 2024, reflecting increased supplies to the markets following a bumper harvest. Similarly, Energy, Fuel, and Utilities (EFU) inflation declined to 4.5 percent from 4.7 percent over the same period, driven by lower liquid fuel prices. This comprehensive decline across various inflation measures indicates a broad-based easing of price pressures in the economy.

Figure 15: Domestic inflation decomposition (y-o-y, %)



Source: Uganda Bureau of Statistics UBOS

2.8.2. Inflation outlook

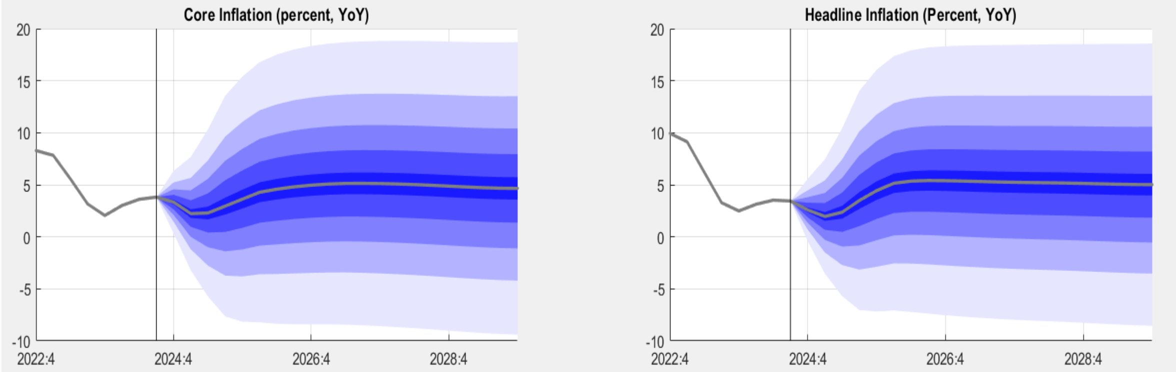
2.8.2.1. Baseline forecasts

The inflation forecasts have been revised downwards compared to the August 2024 forecast round (**Figure 16**). Headline and core inflation are now expected to be 1.2 and 1.3 percentage points lower than in the previous round for FY 2024/25. These adjustments are primarily due to an appreciation of the nominal exchange rate and lower oil prices. Inflation is projected to

remain below 5 percent in FY2024/25 but it is expected to return to target in the medium term.

This outlook is subject to several risks, both domestic and global. On the upside, inflation could be higher than projected if domestic growth is higher, driven by increased investment in the extractive industries and the implementation of the government's 10-fold growth programme. Additionally, disruptions to global supply chains due to escalating geopolitical conflicts, a more depreciated exchange rate due to fiscal policy risks, and extreme weather conditions, affecting market supply, could drive up inflation. Conversely, there are downside risks that could result in lower-than-projected inflation. These include the exchange rate appreciation following oil exports in FY2025/26, a bumper harvest resulting in lower food crop prices, and softer global inflation. Overall, the risks to the inflation outlook are generally balanced.

Figure 16: Baseline inflation forecast.

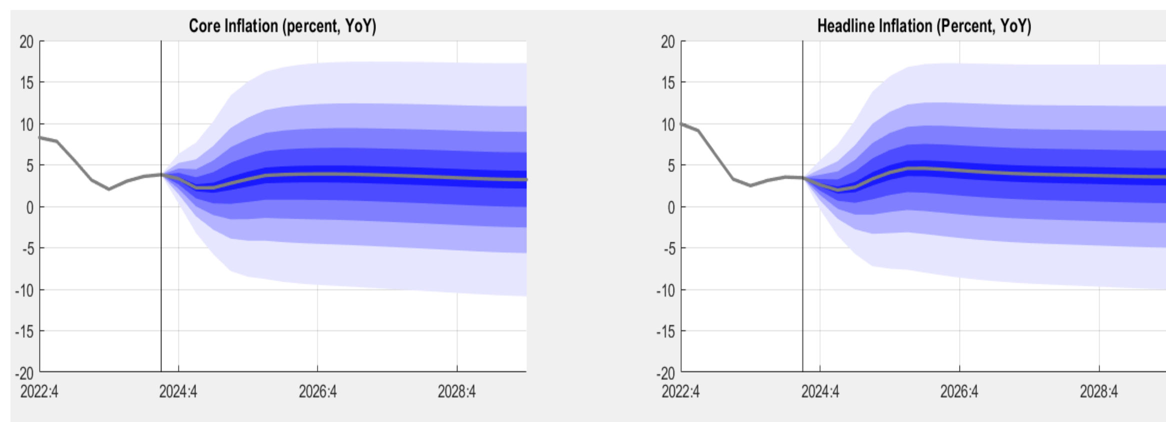


Source: Bank of Uganda

2.8.2.2. Alternative scenarios

The first alternative scenario assumes that the shilling will continue to appreciate, mainly driven by increased foreign direct investment in oil-related activities in the lead-up to oil production. Under this scenario, headline and core inflation are expected to be 0.1 percentage points and 0.9 percentage points lower than in the baseline in 2024/25 (**Figure 17**).

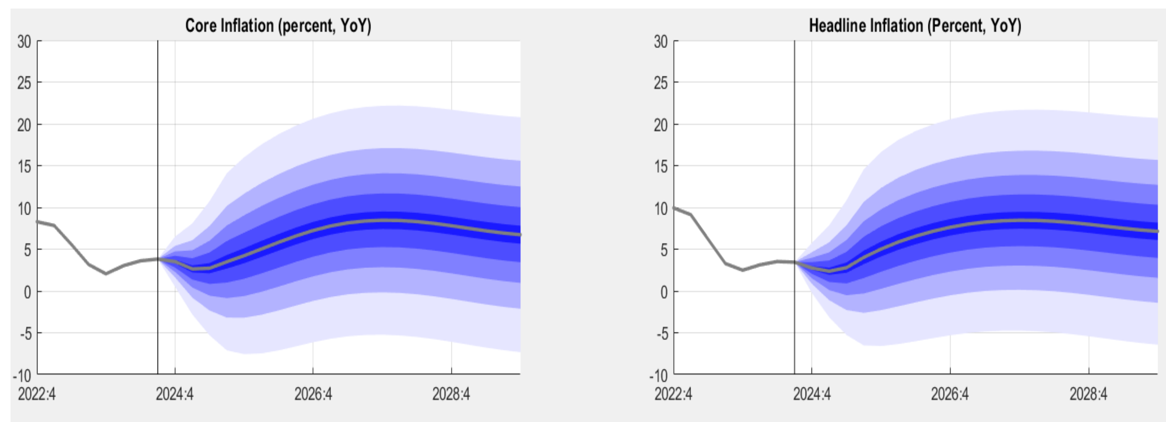
Figure 17: Alternative scenario of an appreciated exchange rate



Source: Bank of Uganda

The second alternative scenario assumes that the exchange rate is 5 percent more depreciated than the baseline over the forecast horizon. In Scenario 3, headline inflation would be 0.3 percentage points higher than the baseline for this financial year, while core inflation would be 0.2 percentage points higher than the baseline over the same period (**Figure 18**).

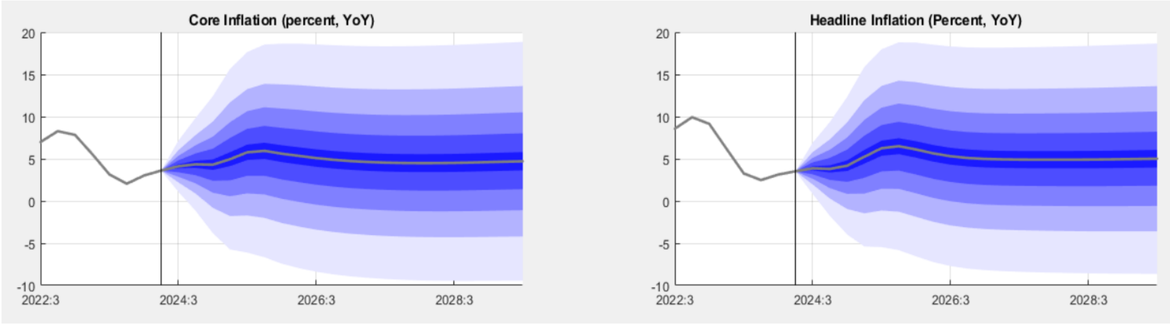
Figure 18: Alternative scenario of a more depreciated exchange rate



Source: Bank of Uganda

The third alternative scenario assumes potential growth remains in the range 6.5 percent-7.0 percent with double-digit GDP growth over the forecast horizon driven by increased investment in the extractive industries and successful implementation of the government's10-fold growth programme. In this scenario, headline and core inflation would be 0.1 and 0.2 percentage points higher than the baseline in FY 2025/26 (**Figure 19**).

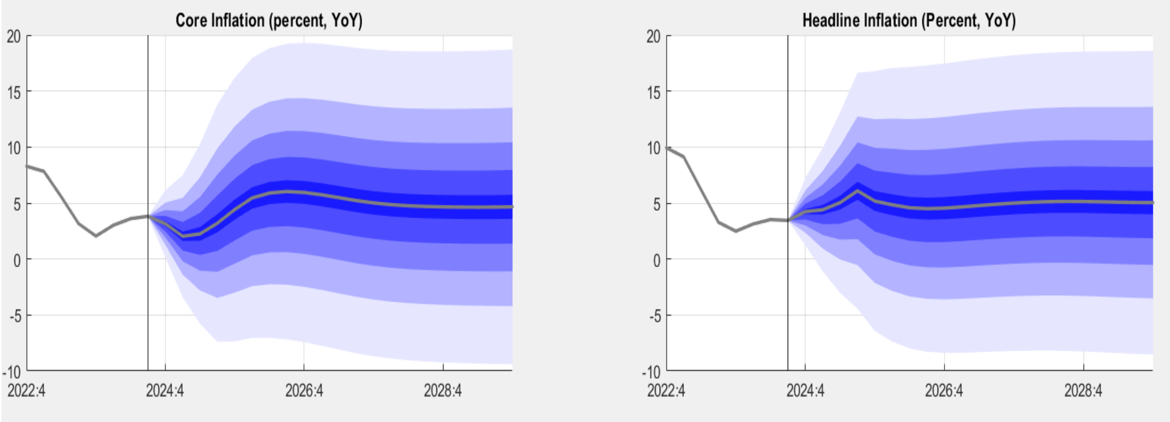
Figure 19: Alternative scenario assuming double-digit GDP growth over the forecast horizon



Source: Bank of Uganda

The fourth alternative scenario assumes higher oil prices due to escalating geopolitical tensions similar to those observed at the height of the Russia-Ukraine crisis. Headline inflation is expected to be 1.8 percentage points higher than the base inflation in FY2024/25. Core inflation would be 0.2 percentage points higher than the baseline over the same period (**Figure 20**).

Figure 20: Alternative scenario assuming higher oil prices due to escalating geopolitical tensions



Source: Bank of Uganda

3. MONETARY POLICY DECISION

In the short-term, the global economy remains resilient albeit with many vulnerabilities. There are reasons for cautious optimism however as global GDP growth is projected to grow at 3.2 percent in 2024 on account of continued disinflation, the resultant improvement in real incomes and eased monetary policy stances. Nevertheless, the prolonged sluggish pace of global growth, compounded by heightened political volatility, which leaves many countries vulnerable to economic shocks. Indeed, the regional growth outlook remains varied with particularly stronger growth experienced in emerging economies.

Growth in domestic economic activity and business sentiments remains buoyant evidenced by the quarterly GDP from UBOS which indicates that real GDP growth in Q2 2024 was 6.6 percent driven by a significant recovery in agricultural activity up from 5.6 percent in Q2 2023. Risks to the growth outlook are balanced with economic growth for FY2024/25 projected between 6.0 percent and 6.5 percent, rising above 7.0 percent in subsequent years driven by investment in extractive industry and government programs targeted at boosting productivity. However, there are lingering risks in the horizon largely associated with fraying geopolitics and a possible combination of low growth and high debt in most countries which could spillover into domestic economy.

Domestic annual headline and core inflation declined in September 2024 to 3.0 percent and 3.7 percent from respective rates of 3.5 percent and 3.9 percent in August 2024, driven by a notable decrease in annual services inflation, mainly passenger transport services. In addition, inflation forecasts have been revised down downwards compared to the August 2024 forecast round primarily due to an appreciation of the nominal exchange rate and lower oil prices. Inflation is projected to remain below 5 percent in FY2024/25 but it is expected to return to target in the medium term. Going forward, risks to the inflation outlook remain broadly balanced, with upside risks such as further disruptions to global supply chains resulting from an escalation of geopolitical conflicts and extreme domestic weather conditions, higher domestic growth due to increased investment in the extractive industries, and a more depreciated exchange rate that could lead to higher inflation. On the downside, inflation could be lower than forecast due to slower global growth, bumper harvests leading to lower food crop prices, exchange rate appreciation following oil exports in FY2025/26, and softer global inflation.

The MPC assessed that while inflation is expected to remain below the target in the near term and risks to the inflation outlook are broadly balanced, the uncertainty in the outlook warrants a cautious monetary policy stance. As such, the MPC reduced the CBR by 25 basis points to 9.75 percent. The bands on the CBR remain at +/-2 percentage points, and the margins on the CBR for the rediscount and bank rates at 3 and 4 percentage points, respectively. Consequently, the rediscount and bank rates will remain at 12.75 percent and 13.75 percent, respectively.