QUARTERLY MACROECONOMIC UPDATES ON THE ETHIOPIAN ECONOMY

Volume 9 Number 4

February 2025

This article shall be cited as 'Ethiopian Economics Association. 2025. Quarterly Macroeconomic Updates on the Ethiopian Economy. Volume 9, No. 4. EEA.'

Table of Contents

Figures

Acknowledgment

1. Introduction

This quarterly macroeconomic report provides a comprehensive update on the performance of the Ethiopian economy, focusing on the development of critical macroeconomic aggregates that are shaping the country's economic trajectory. This issue highlights two interconnected areas: the performance of the foreign exchange (FX) market and inflation dynamics.

Ethiopia's transition from a managed float to a freely floating exchange rate regime represents a pivotal policy shift aimed at addressing long-standing challenges in the foreign exchange market. This reform serves as the foundation for discussions in the report, with a focus on its immediate effects on key macroeconomic indicators and the potential longer-term implications for economic stability and growth.

The report begins with an analysis of the Foreign Exchange (FX) market, focusing on exchange rate trends, market liquidity, and the effectiveness of recent policy measures in stabilizing the market. It examines the implications of the reform on foreign exchange shortages, black market premiums, and overall market efficiency.

Inflation, a persistent concern for Ethiopia, is then explored in the context of domestic and external pressures, including the pass-through effects of FX adjustments on consumer prices. The report delves into inflationary trends, discussing the likely drivers and their implications for monetary policy.

The following sections of the report provide a detailed analysis of key developments, focusing on selected indicators. The report covers the second quarter of the Ethiopian Fiscal Year (EFY), from mid-September to December 2024, for the analysis of the FX market, and the first quarter of the EFY, from July to September 2024, for inflation dynamics. The aim is to provide policymakers, stakeholders, and researchers with valuable insights into Ethiopia's evolving macroeconomic landscape, supporting evidence-based decision-making.

2.   Exchange Rate Developments and Market Adjustments

This section extends the earlier analysis of exchange rate dynamics from July to mid-September 2024 (*Quarterly Macroeconomic Update, Volume 09, No. 03)* focusing on developments from mid-September to December 2024 under Ethiopia's floating exchange rate regime. The analysis examines trends in exchange rate movements, banks' adjustments to exchange rate margins, the persistent gap between official and parallel rates, and its policy implications. These insights shed light on market responses, challenges, and progress towards achieving the expected long-term currency stability.

2.1.   Trends in Exchange Rate Movements

The Ethiopian economy underwent a significant policy shift in July 2024, with the implementation of an exchange rate liberalization reform aimed at aligning the Ethiopian Birr (ETB) with market fundamentals. This reform marked a pivotal moment in Ethiopia's economic management, designed to address long-standing distortions in the foreign exchange market and foster a more competitive economic environment. However, as with any structural adjustment, the reform has brought both opportunities and challenges. From mid-September to December 2024, the ETB experienced sustained depreciation against the US Dollar (USD), highlighting the complexities of transitioning to a market-driven exchange rate system. This sub-section analyzes the exchange rate movements during this period and their broader economic implications, as illustrated in Figure 1 below.

Figure 1: Trends in Average Daily Exchange Rates (ETB/USD) from September 16 to December 31, 2024
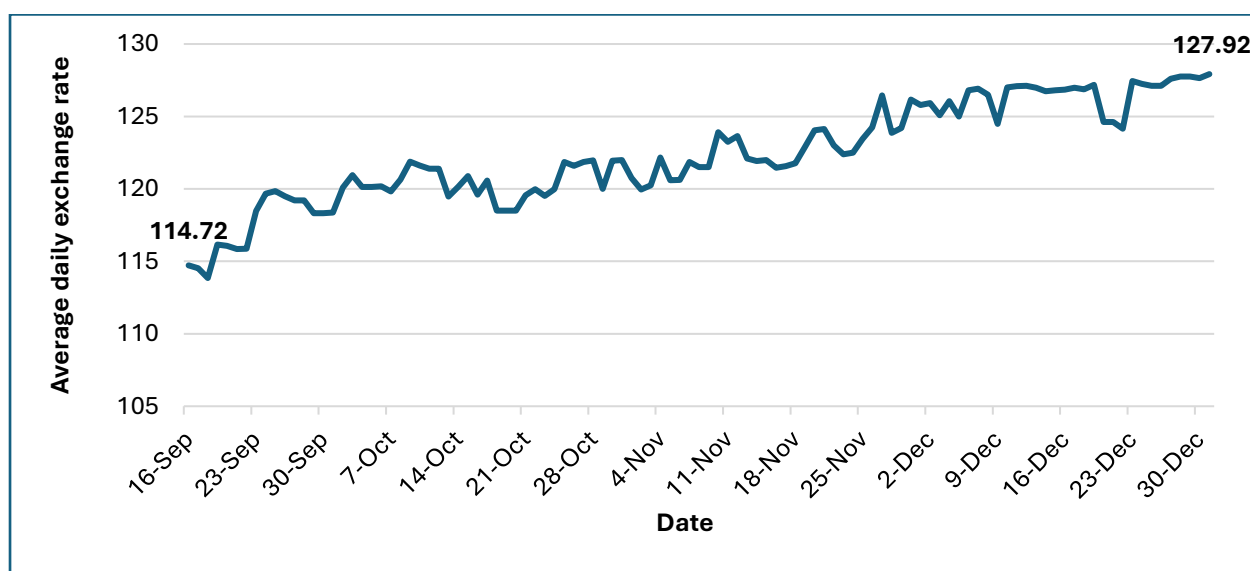
Source: Based on Exchange Rates UK data[1] (2024); see https://www.exchangerates.org.uk/USD-ETB-spot-exchange-rates-history-2024.html.

---

[1] The average daily exchange rate in this report is calculated by taking the daily mid-market rates available from the Exchange Rates UK website. This rate is derived from the average of various exchange rate quotations sourced from a range of banks and financial institutions. These daily rates provide a general indication of the exchange rate trends and are used to smooth daily fluctuations across different sources.

September 2024: Initial Post-Reform Stabilization

Following the implementation of the exchange rate reform, the ETB stood at 114.72 ETB/USD on September 16. Over the next two weeks, the exchange rate exhibited modest fluctuations, peaking at 119.85 ETB/USD by September 25, a depreciation of approximately 4.5%. By September 30, the rate had stabilized around 118.32 ETB/USD, reflecting the foreign exchange market's initial adjustment to the new policy framework. Speculative behavior may have initially driven the depreciation, as market participants anticipated further weakening of the currency. However, the exchange rate eventually stabilized as the market began to absorb the implications of the reform.

The stability in September may partly be attributed to reduced demand for foreign exchange by importers. The ongoing economic slowdown and inflation have dampened consumer demand, discouraging traders from importing goods despite lower forex rates. Concerns over unsold inventory and unprofitable investments, coupled with Ethiopia's tight monetary policy, further constrained forex access. High interest rates aimed at curbing inflation led to a liquidity crunch, making it difficult for businesses to secure local currency for foreign exchange payments. As a result, many traders either lacked the necessary funds or were hesitant to take on the risks posed by the volatile economic environment.

October 2024: Acceleration in Depreciation

October marked a shift in the rate of depreciation. The exchange rate crossed the 120 ETB/USD threshold early in the month and continued to increase steadily. By October 31, the exchange rate had reached 121.99 ETB/USD, a notable depreciation from the start of the month. The depreciation of approximately 3.06% for the month could potentially be attributed to several factors. Many market participants may have anticipated further depreciation of the ETB due to ongoing inflationary pressures and structural issues in the Ethiopian economy. For instance, the month-to-month headline inflation rose from 1.2% in August to 2.4% in September. This speculation could have exacerbated the depreciation, as businesses and individuals may have rushed to acquire foreign currency in anticipation of further weakening. By the end of October, the exchange rate had experienced an average daily depreciation of approximately 0.01%, signaling growing difficulty about the stability of the currency.

November 2024: Sharp Depreciation and Market Disruption Amid Policy Shifts

November 2024 saw a sharp depreciation of the Ethiopian Birr, with the exchange rate rising from 121.99 ETB/USD at the start of the month to 126.46 ETB/USD by November 27, marking a 3.7% depreciation in less than a month. One possible factor that might have contributed to this decline could be the Ethiopian government's decision to ban the Franco Valuta system on November 7, 2024. While the ban was effective immediately, importers were given a two-week grace period to finalize ongoing transactions.

The Franco Valuta system allowed importers to source foreign currency independently, without relying on the official forex market. It had been introduced during a period of severe currency instability, when the Ethiopian Birr lost over 100% of its value, as a temporary measure to stabilize

the market and ensure the availability of essential imports. However, the government decided to abolish the system, citing improved foreign currency availability through banks and its broader macroeconomic reform agenda aimed at creating sustainable trade and import practices. This decision aligns with ongoing FX reforms as part of the broader economic policy framework.

Counterfactual Analysis

To conduct a counterfactual analysis, an Interrupted Time Series (ITS) model can be used to quantify the impact of the Franco Valuta ban by comparing exchange rate volatility before and after the ban. The model can be specified as follows:

$$Y_t = \alpha + \beta_1. Time_t + \beta_2. Intervention_t + \beta_3. (Time_t. Intervention_t) + \varepsilon_t$$

Where, Y_t represents the outcome variable at time t (e.g., exchange rate volatility), while $Time_t$ is the time variable that increases over time. The variable $Intervention_t$ is a binary variable, which takes the value of 1 after the intervention and 0 before it. The term $Time_t. Intervention_t$ is the interaction term, capturing the change in the slope of the trend after the intervention. α is the intercept, and ε_t is the error term. The coefficient β_1 (coefficient of the time trend) represents the pre-intervention trend of the outcome variable. β_2 (coefficient of the intervention dummy) indicates the immediate level change in the outcome variable after the intervention. Finally, β_3 (coefficient of the interaction term) reveals whether the trend changes post-intervention. A significant positive or negative value of β_3 suggests that the intervention caused a change in the rate of change (the slope) of the outcome variable.

The regression analysis indicates that, prior to the Franco Valuta ban, exchange rate volatility in Ethiopia was steadily decreasing over time, with a 0.0398% decrease in volatility per unit of time ($p < 0.001$). The immediate effect of the Franco Valuta ban was a notable reduction in volatility, with a 2.754% decrease ($p = 0.0306$), suggesting that the intervention initially contributed to stabilizing exchange rate fluctuations. However, this effect was temporary. The positive and statistically significant interaction term (0.039% increase per unit of time after the intervention, $p < 0.001$) suggests that, following the intervention, volatility began to rise again, indicating a reversal in the trend. The model accounts for approximately 41.3% of the variation in exchange rate volatility ($R^2 = 0.4134$), demonstrating its robustness as a predictor of volatility changes.

Economically, these findings indicate that while the Franco Valuta ban had an immediate stabilizing effect, it may have introduced new market uncertainties that led to increased volatility in the long run. This could be due to forex shortages, speculative activities, or shifting demand towards informal currency markets. Policymakers should consider complementary measures, such as enhanced foreign exchange management and monetary policy adjustments, to mitigate the rising volatility trend and ensure long-term stability in Ethiopia's exchange rate market.

Figure 2: Exchange Rate Volatility over Time (7-Day Rolling Standard Deviation) (July 29, – December 31, 2024)
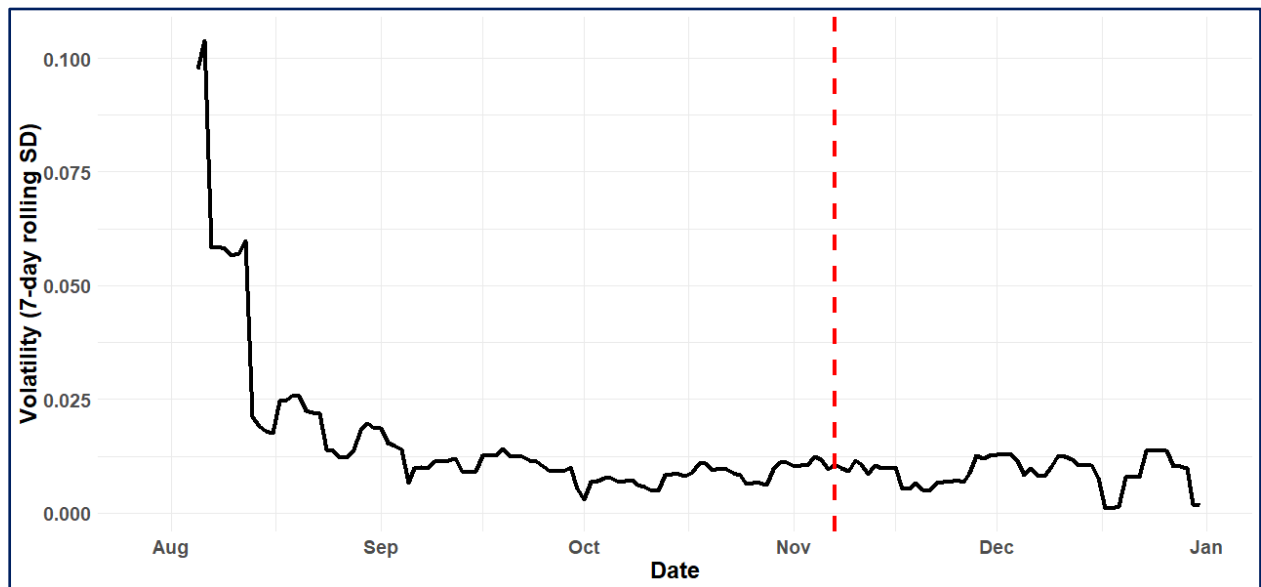
Note: The black line indicates the overall trend of volatility, and the red dashed vertical line reveals the intervention date of the Franco Valuta ban on November 7, 2024.

December 2024: Stabilization at Higher Levels

In December 2024, the depreciation of the ETB began to stabilize. The exchange rate fluctuated between 124.49 ETB/USD and 127.76 ETB/USD, with the final value recorded at 127.92 ETB/USD on December 31. While the market saw less volatility compared to previous months, the overall trend remained downward, reflecting the persistent challenges of managing the exchange rate amidst structural imbalances in the economy.

A key factor behind this stabilization may have been that much of the depreciation had already been absorbed by the market. By December, both businesses and consumers appeared to have adapted to the new exchange rate levels. As speculative behavior possibly declined, market participants seemed to accept the more volatile exchange rate environment, gradually adjusting their strategies and expectations accordingly.

In conclusion, the ETB depreciated substantially between mid-September and December 2024, reflecting both market dynamics and the ongoing economic challenges faced by the country. The figure illustrates how the exchange rate reforms, though necessary for aligning the currency with market fundamentals, have introduced significant volatility and inflationary pressures, particularly in the short term.

This depreciation has had critical macroeconomic implications. On the one hand, it may have improved Ethiopia's export competitiveness. However, on the other hand, it has made imports more expensive, contributing to inflation and increasing the cost of living. The ongoing depreciation of the local currency drives inflation, as Ethiopia relies heavily on imports of essentials like cooking oil, fuel, and other inputs (Deloitte, 2023). Moreover, the depreciation has likely exacerbated the country's external debt burden, as the value of foreign-denominated debts

has increased in local currency terms. Ethiopia's external debt stood at approximately $28.9 billion as of June 2024, underscoring the challenges posed by the increased debt servicing costs due to currency depreciation (EEA, 2024c).

Looking ahead, the NBE's ability to manage these exchange rate fluctuations will be crucial for stabilizing the economy. Measures aimed at boosting foreign currency supply, such as increasing exports, attracting foreign direct investment, and improving remittance inflows, will be essential to maintaining a more stable exchange rate in the medium to long term.

2.2. Disparities in Exchange Rates for Buying and Selling

The exchange rate reform in Ethiopia has notably reshaped the competitive environment for foreign currency transactions among the country's banks. The introduction of a market-based exchange rate system has provided banks with the flexibility to set their own rates, intensifying competition to attract customers amid a persistent shortage of foreign currency. Against this backdrop, Figure 3 below illustrates the disparities in buying rates across Ethiopian banks, reflecting how individual institutions leverage this newfound flexibility to position themselves in the market.

The disparities in buying rates among Ethiopian banks are highlighted, showcasing significant variations in how financial institutions operate in the foreign exchange market. The buying rates range from 123.60 ETB (CBE) to 125.97 ETB (Tsehay Bank), revealing a gap of 2.37 ETB. While this range may appear moderate, it reveals differing strategies adopted by banks, influenced by factors such as liquidity requirements, market positioning, and competitive objectives. The observed variations provide opportunities for customers to optimize their foreign currency transactions by selecting banks offering more favorable rates.

At the higher end of the spectrum, Tsehay Bank offers the most competitive buying rate at 125.97 ETB, followed closely by Ahadu Bank (125 ETB) and Zamzam Bank (124.99 ETB). These banks appear to employ competitive strategies aimed at attracting clients, particularly exporters and remittance recipients. Such strategies likely reflect a greater need for foreign currency reserves or an effort to increase their market share in a competitive banking environment. On the other hand, lower rates are observed at CBE (123.60 ETB) and NIB Bank (123.62 ETB), which may indicate a more measured approach. As a dominant state-owned bank, CBE likely relies on its established client base and extensive operations to secure foreign currency inflows, rather than competing aggressively on buying rates.

A substantial number of banks cluster in the mid-range, with buying rates between 124.7 ETB and 124.9 ETB, including institutions such as Awash, Zemen, Oromia, DBE, and Dashen banks. These banks maintain balanced rates, suggesting a strategy to remain competitive without significantly altering profitability. The slight variations within this range may result from differences in access to foreign currency reserves, operational efficiencies, and customer profiles. This balanced approach positions these banks to attract a steady stream of clients while maintaining stable margins.

The observed disparities in exchange rates in the figure have significant implications for Ethiopia's banking sector. On the one hand, competitive rates can attract customers, increase market share, and enhance foreign currency inflows. On the other hand, banks offering higher rates may face challenges in maintaining liquidity, particularly during periods of high demand for foreign currency. Conversely, banks with lower rates risk losing clients to competitors, potentially affecting their share of foreign exchange transactions.

Figure 3: Comparative Ranking of Banks by Buying Rates (ETB/USD) on December 31, 2024
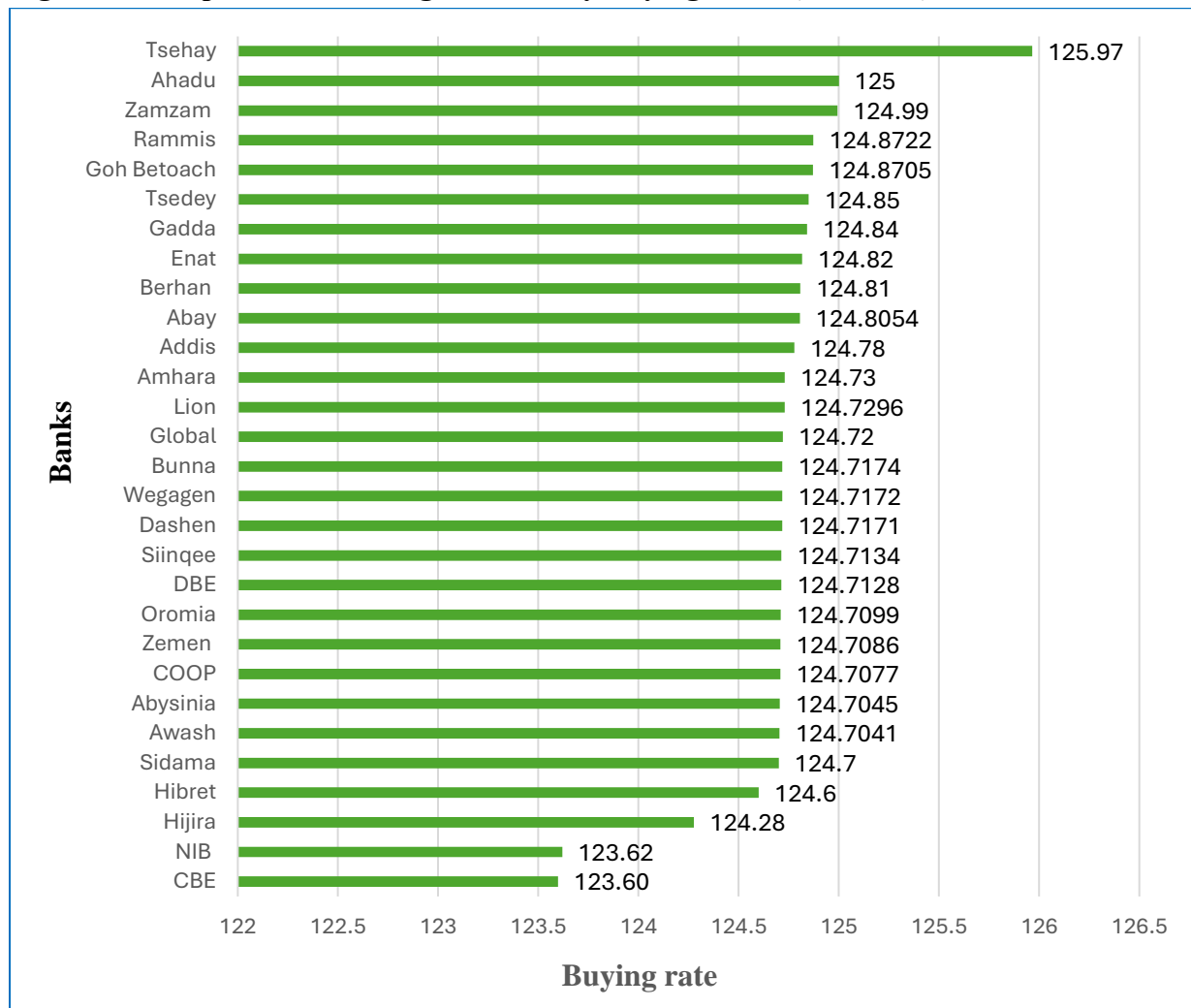
Source: Computed using Ethioexchange data (2024), retrieved from http://www.ethioxchange.com/currency/usd (2024).

The foreign currency selling rates for Ethiopian banks, as shown in Figure 4 below, reveal a relatively narrow range, fluctuating between 126.07 ETB (CBE) and 128.48 ETB (Tsehay). Most banks' selling rates are clustered within a small spread, between 127 and 127.5 ETB per unit of foreign currency. This suggests a relatively stable and competitive foreign exchange market, with most banks offering similar rates, indicating effective market regulation. Following the introduction of a new policy by the NBE on 16 October 2024, which limits the spread between banks' buying and selling rates for foreign exchange transactions to 2%, this stability is expected

to be further reinforced. The policy aims to reduce market volatility, enhance transparency, and minimize excessive profit margins, contributing to greater efficiency in foreign exchange transactions in the banking sector.

The CBE, with a selling rate of 126.07, offers the lowest rate, making it a more favorable option for customers looking to buy foreign currency. In contrast, Tsehay Bank, with the highest rate of 128.48, stands out as an outlier, offering a significantly higher selling price. This premium rate could be due to various strategic reasons, such as controlling demand, limited supply, or higher operational costs. The Zamzam and Ahadu banks also offer slightly elevated rates compared to the central cluster of banks, though their difference from CBE is not as large as Tsehay's.

Most of the banks in Figure 4 exhibit selling rates that are very similar, with several banks having rates that differ by only a fraction of a point. These banks include Awash (127.1982), Abyssinia (127.1986), COOP (127.2019), and Zemen (127.2028), among others. The close proximity of these rates suggests a level of market standardization, where competition among banks leads to similar pricing strategies. This could be a result of the banks trying to maintain market share by aligning their rates with the broader market conditions.

Figure 4: Comparative Ranking of Banks by Selling Rates (ETB/USD) on December 31, 2024

In conclusion, the figure shows a more balanced foreign exchange market across Ethiopian banks, with reduced volatility compared to previous periods. However, the variability in the selling rates across different banks points to different strategies being employed to manage foreign currency demand and supply. Banks with higher rates may be reflecting factors like scarcity of supply or market positioning, while those with lower rates may be focused on customer acquisition or increased liquidity. The broader trend suggests a well-functioning market where slight differences in rates may influence customer choice, but overall, the rates remain relatively close within the market.

2.3.   Foreign Exchange Bid-Ask Spread

The period between September 16 and December 31, 2024, offers valuable insights into the evolution of the average daily exchange rate spreads of Ethiopian banks under the floating exchange rate regime. The bid-ask spread—the difference between the buying (bid) and selling (ask) rates—serves as a crucial indicator of market liquidity, pricing efficiency, and overall confidence among participants in the foreign exchange market.

Figure 5: Short run dynamics of the average daily exchange rate spread among banks (ETB/USD) (Sept. 16 to Dec. 31, 2024)
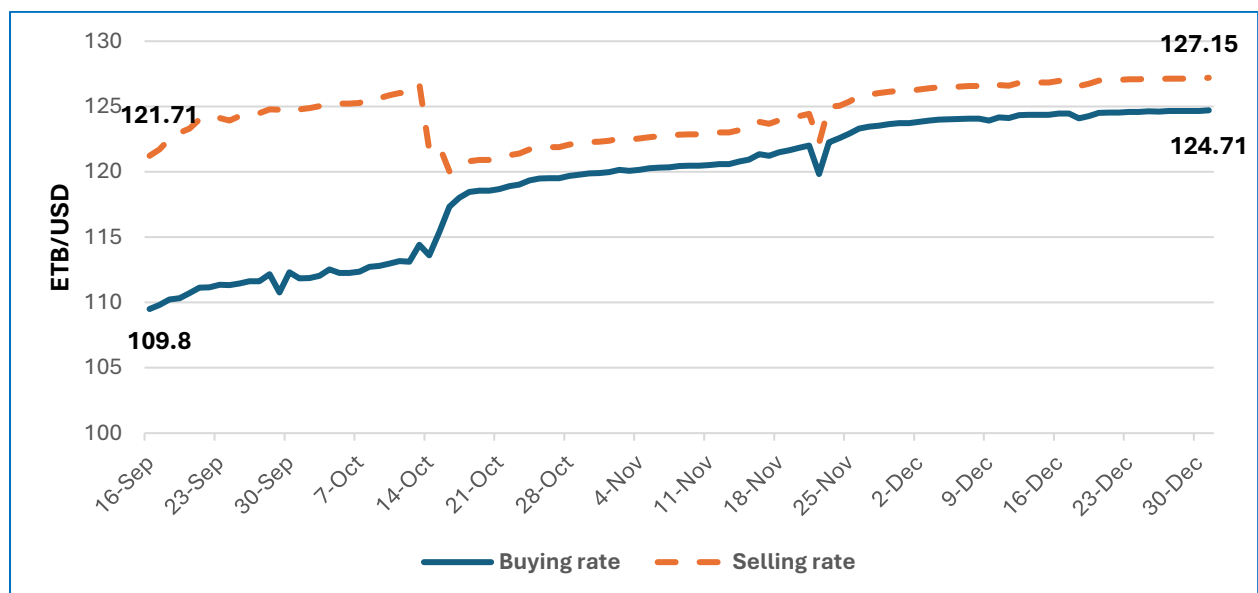
Source: Computed using data from Ethioxchange (2024), which can be accessed at *http://www.ethioxchange.com/currency/usd (2024).*

Early Transition Period: Mid-September to October 2024

As depicted in Figure 5 above, the exchange rate spreads were exceptionally wide during the initial weeks following September 16, ranging from 11 to 13 ETB. This period of high volatility underscores the significant uncertainty that characterized the market during the early stages of the floating regime. Banks adopted a cautious approach to setting bid and ask rates, reflecting concerns over potential losses, the absence of a clear equilibrium exchange rate, and the desire to

safeguard profitability. A key issue contributing to the wide spreads was the NBE's policy requiring banks to include all foreign exchange fees and commissions within their trading spreads. This bundling inflated spreads, created a lack of transparency, and allowed banks to increase profit margins in response to market uncertainty.

In addition to the policy constraints, speculative behavior likely played a significant role. With the floating regime in its infancy, market participants, including banks, engaged in speculative activities that drove volatility and further widened spreads. Foreign exchange liquidity constraints may have also exacerbated the situation, as a limited supply of foreign exchange, combined with heightened demand, made banks reluctant to narrow their spreads. Moreover, the uncertainty surrounding market dynamics during the transition to a floating regime prompted banks to adopt conservative pricing strategies for foreign exchange transactions, with wider spreads helping to cushion potential losses and boost profits during this volatile period.

Gradual Stabilization: Mid-October to Early November 2024

As shown in Figure 5, a notable shift occurred by mid-October 2024, when exchange rate spreads began to narrow, fluctuating between 3 and 4 ETB. A key factor behind this narrowing of spreads was likely to be a policy adjustment by the NBE to enhance transparency and discipline in foreign exchange trading. Previously, banks were required to include all foreign exchange fees and commissions within their trading spreads, which contributed to wider spreads. In response to industry feedback and lessons learned, the NBE introduced a new policy mandating that banks separately disclose their trading spreads, which must not exceed 2% of posted rates. Several other countries have similar regulations. In Uganda, Central Bank regulations limit the bid-ask spread to 10 shillings; anything beyond that is penalized. In Malawi, maximum spreads between buying and selling exchange rates are set at 2% for Telegraphic Transfer (TT) and 3% for cash. In Zambia, the difference between the buying price (bid price) and the selling price (ask price) of a currency should not exceed 0.05 Zambian Kwacha. Additionally, FX-related fees and commissions must be transparently disclosed and reported to the NBE. This change, effective immediately and fully implemented by October 16, 2024, helped foster market confidence and accountability, leading to a notable reduction in exchange rate spreads.

Sustained Stability: November to December 2024

By November 2024, the exchange rate spreads shown in Figure 5 exhibit a clear trend toward sustained stability. By the end of December, the spreads had consistently narrowed to an average range of 2.50–3.20 ETB. This stabilization reflects a maturing foreign exchange market under the floating regime, with banks and market participants operating more efficiently.

The sustained narrowing of spreads during this period indicates several positive developments.

- First, there was enhanced market liquidity. The greater availability of foreign exchange, possibly due to improved export performance or foreign capital inflows, allowed banks to operate with tighter spreads.

- Second, speculative pressures were reduced. With the initial shock of the floating regime dissipating, speculative activities that had driven early volatility subsided.

- Lastly, there was improved pricing efficiency. Banks demonstrated increased confidence in determining bid and ask rates, reducing transaction costs for market participants.

Implications and Broader Context

The narrowing of exchange rate spreads, as shown in Figure 5, is a positive sign of progress in Ethiopia's transition to a floating exchange rate regime. Narrower spreads are indicative of greater pricing efficiency, improved liquidity management, and a reduction in market uncertainty. However, the earlier challenges—such as wide spreads and high volatility—show the complexities of implementing such a significant policy shift.

From a broader perspective, such trends have at least three important implications for Ethiopia's economy.

1. The stabilization of spreads reflects growing confidence in the foreign exchange market, which is essential for attracting investment and supporting economic growth.

2. The narrowing spreads suggest that measures taken by policymakers to mitigate volatility, such as improving transparency and supporting liquidity, have been effective.

3. Despite these positive developments, sustaining long-term stability will require ongoing efforts to address structural issues, such as persistent foreign exchange shortages and dependence on a narrow export base.

To summarize, the trend in average daily exchange rate spreads from September 16 to December 31, 2024, reflects Ethiopia's gradual adaptation to the floating exchange rate regime. While the initial period was marked by high volatility and wide spreads, the gradual stabilization indicates progress toward a more efficient and resilient foreign exchange market. Continued policy support and structural reforms will be critical to maintaining this momentum and ensuring the long-term success of the floating regime.

2.4.   The Dynamics of Official and Parallel Market Exchange Rates

The government's decision to liberalize the currency market was aimed at reducing the gap between the official and parallel market exchange rates, with the goal of aligning the official rate with market forces. From mid-September to end of December 2024, exchange rate dynamics demonstrated a complex interaction between the official and parallel markets, both of which saw continued depreciation. Throughout this period, the parallel market consistently exhibited a premium over the official rate, indicating the challenges posed by policy adjustments, such as changes in government interventions, the liberalization of the currency market, and alterations in foreign exchange controls, as well as broader economic pressures. This analysis explores the trends, possible underlying drivers, and broader implications of these movements, as illustrated in Figure 6 below.

Figure 6: Official and Parallel Exchange Rates (ETB/USD) on Selected Dates from Mid-September to December 2024
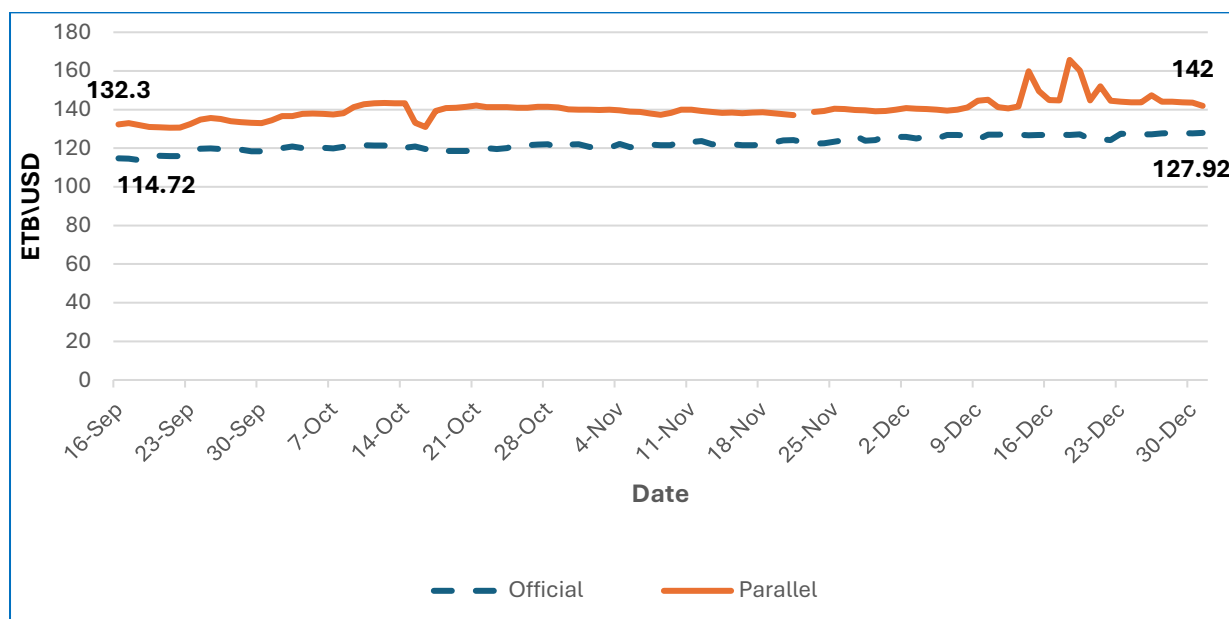
Overall Trends and Divergence

From mid-September, the official exchange rate showed a gradual yet consistent upward trend, rising from 114.72 ETB/USD on September 16 to 127.92 ETB/USD by December 31. This trajectory may reflect ongoing market adjustments, possibly aimed at bringing the official rate closer to market realities. In contrast, the parallel market exhibited greater volatility, with rates starting at 132.3 ETB/USD on September 16, peaking at 165.7 ETB/USD on December 18, before ending at 142 ETB/USD on December 31. The persistent premium in the parallel market could suggest inefficiencies in official channels and unmet demand for foreign exchange, potentially linked to bureaucratic constraints, limited forex reserves, or capital flight.

Key Periods of Dynamics

The period can be broadly divided into four phases.

- In the initial phase, spanning mid-September to the end of October, the gap between the official and parallel exchange rates widened significantly. For instance, on 10 October, the parallel market rate reached 142.7 ETB/USD, compared to an official rate of 121.61 ETB/USD, marking a premium of nearly 20%. This divergence indicates increased pressure on the unofficial market, likely driven by capital flight and speculative activities. However, following the introduction of a new policy by the NBE on 16 October 2024, which limited

---

[2] The 'Ethio Black Market' exchange rate data used in this report may have reliability issues due to its unofficial nature. Variations across sources and the lack of formal oversight could affect data consistency. Alternative web-based sources for parallel market rates are limited, and caution is advised when interpreting this data.

the spread between banks' buying and selling rates for foreign exchange transactions to 2%, some adjustments were observed. By this date, the parallel market rate declined to 131 ETB/USD, suggesting a possible short-term impact of the policy in curbing speculative behavior or narrowing the premium. While this measure may have momentarily reduced arbitrage opportunities, the broader divergence persisted due to continued supply constraints in the official forex market.

- During November, a temporary convergence between the two markets was observed. The parallel market rate stabilized within the range of 137.1 to 140.4 ETB/USD, while the official rate increased steadily from 120.24 ETB/USD on 1-November to 126.16 ETB/USD on 30-November. This stability may have been the result of policy measures aimed at reducing the black market's attractiveness, such as increased forex injections or stricter enforcement against informal trading. However, the temporary nature of this convergence exhibits the fragility of these interventions.

- In December, the parallel market exhibited heightened volatility, with rates spiking dramatically mid-month. On 18 December, the parallel market rate peaked at 165.7 ETB/USD, likely reflecting speculative trading or increased demand for foreign exchange, possibly driven by pressures associated with the festive season. By the end of the month, however, the gap between the official and parallel markets began to narrow, with the official rate reaching 127.92 ETB/USD and the parallel rate declining to 142 ETB/USD. This convergence suggests a partial restoration of stability, potentially influenced by seasonal adjustments in forex demand. The 14.08 ETB difference between the official and parallel exchange rates is significant, but not unusual in countries experiencing volatility and speculative pressures. Similar discrepancies in other African countries, such as Nigeria and Ghana, have taken several months to narrow following policy reforms.

Structural Drivers of the Dynamics

The persistent premium in the parallel market reflects deep-rooted structural challenges in the foreign exchange system. Factors such as limited forex reserves and capital flight may have contributed to sustained pressure on formal channels, pushing demand toward informal markets where supply is less constrained. Seasonal demand factors, such as heightened import demand during festive seasons, may have further intensified these pressures. Additionally, speculative behaviors in the parallel market significantly contributed to volatility, particularly during December, as traders capitalized on expectations of further currency depreciation. Bureaucratic inefficiencies and policy uncertainty may have also played a role in making access to foreign exchange through official channels more difficult. Inflationary expectations likely compounded these challenges, eroding confidence in formal channels and widening the gap between official and parallel market rates.

A potential use of funds in Ethiopia's parallel market is capital flight, where individuals and businesses move money out of the country to safeguard wealth or hedge against economic instability, such as high inflation. This behavior is often driven by uncertainty about the exchange

rate and concerns over investor confidence. Additionally, some Ethiopians abroad may prefer to send remittances through informal channels due to more favorable exchange rates compared to official systems. Informal cross-border trade may also depend on the parallel market for currency conversion, particularly in regions with limited access to formal banking services. Kiguel and O'Connell (1995) argue that the parallel exchange rate influences the economy through illegal trade and price distortions. These dynamics suggest that, despite reforms in the official FX system, the parallel market may continue to play a significant role in Ethiopia's economy.

Implications for Economic Policy

The sustained divergence between the official and parallel market rates has significant implications on the Ethiopian economy. The depreciation in both markets signals rising costs of imports, which could further exacerbate inflationary pressures and erode purchasing power. The persistent premium in the parallel market shows FX scarcity and inefficiencies in the official forex allocation system and this underscores the need for structural reforms. Enhancing forex supply, improving allocation mechanisms, and addressing underlying economic challenges such as inflation and forex shortages are critical to bridging this gap.

Moreover, structural policies associated with the macroeconomic reform should also be launched to realize the expected shortrun and longrun benefits of the FX reform. The temporary narrowing of the gap between the FX rates in the two markets in November suggests that targeted policy measures, such as increased forex injections or enforcement against black market activities, can yield short-term benefits. However, sustained improvements will require broader reforms, including enhancing export revenues, attracting foreign investment, and restoring confidence in the official exchange rate system. Without comprehensive reforms to address forex supply constraints, speculative activities, and inflationary pressures, the divergence between the two rates is likely to persist, undermining economic stability and growth prospects.

3.   Inflation Dynamics

This section provides a comprehensive analysis of Ethiopia's inflation dynamics during the first quarter of the Ethiopian Fiscal Year (EFY) (July to September 2024). It examines the likely drivers of inflation, including trends in food and non-food price indices and exchange rate fluctuations. The report also dissects inflation across food and non-food categories and regions, highlighting variations in price pressures. Additionally, it explores the impact of foreign exchange (FX) reforms on inflation to determine whether FX adjustments contribute to rising prices. By addressing these factors, the analysis offers a nuanced understanding of inflation trends and their possible underlying determinants during the review period.

3.1.   Overview of Inflation Trends

This subsection analyzes Ethiopia's inflation trends during the first quarter of the Ethiopian Fiscal Year (EFY) 2024, from July to September. It examines monthly inflation rates to capture short-term fluctuations, revealing periods of sharp price increases, seasonal patterns, and temporary stability. Special attention is given to the disparities between food and non-food inflation, including the subcategories of food inflation (such as cereals, vegetables, and meat) and non-food inflation (covering items like fuel, housing, and transportation), exhibiting variations in price pressures. The analysis further links these trends to domestic and global economic developments, including supply chain disruptions, policy changes, and external shocks, offering insights into the broader factors driving inflation during this period.

Figure 7 below illustrates the monthly inflation trends in Ethiopia from September 2023 to September 2024. Headline inflation reveals notable fluctuations and seasonal patterns. Inflation began at 2.1% in September and October, followed by a decline to 1.2% in November and further to 0.7% in December, indicating reduced price pressures. However, January saw a rebound to 1.8%, potentially driven by holiday demand, while February stabilized at 1%.

March 2024 saw a sharp rise in inflation, reaching 4%, marking the peak for the year. This was followed by a deflationary dip in April at -0.7%, suggesting a potential correction or a slowdown in demand. By May and June, inflation rates stabilized at 0.5% and 0.9%, respectively, indicating a period of relative price stability after the initial fluctuations. Inflation then gradually increased again, reaching 1.5% in July, 1.2% in August, and peaking at 2.4% in September. This upward trend toward the end of the first quarter of 2024 (July to September) may reflect increased seasonal demand and the ongoing effects of the exchange rate policy shift.

Figure 7: Headline Inflation (%, Month-to-Month), September 2023 - September 2024
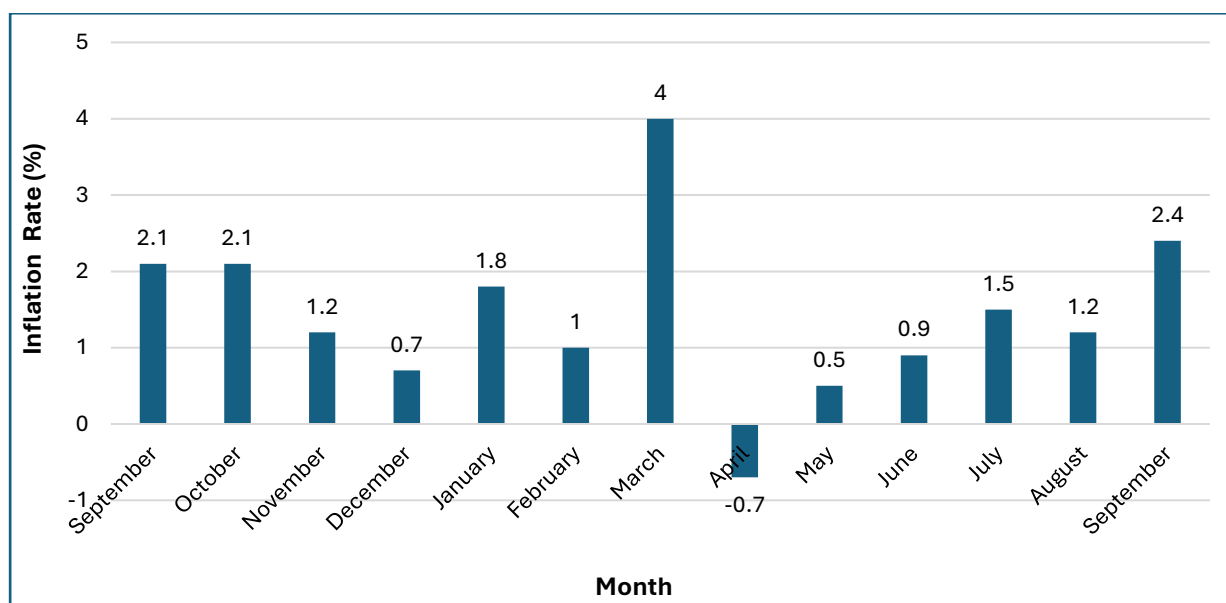
Source: Computed using ESS data[3].

Figure 8 below presents monthly inflation rates for food and non-food categories in Ethiopia from September 2023 to September 2024. Food inflation exhibits significant volatility, with sharp increases in some months and negative inflation in others. Notably, food inflation spikes in January 2024 (2.73%) and March 2024 (4.92%), likely driven by seasonal factors, supply chain disruptions, and external shocks. Global commodity price fluctuations—partly influenced by geopolitical tensions such as the Russia-Ukraine conflict—have played a key role in shaping both food and energy prices. Numerous studies have emphasized the impact of global price shocks on domestic inflation and volatility across sub-Saharan African countries (Minot, 2011; Rapsomanikis and Mugera, 2011; Headey and Fan, 2008; Conforti, 2004). Conversely, food inflation turns negative in December 2023 (-0.01%) and April 2024 (-0.34%), possibly reflecting seasonal declines in food prices. From May onward, inflation remains relatively stable, with moderate increases from June to September 2024, suggesting a gradual return to higher price levels.

In contrast, non-food inflation is generally more stable compared to food inflation, with less pronounced fluctuations throughout the year. The highest recorded non-food inflation occurred in March 2024, at 2.58%, indicating that external factors, such as increases in fuel prices or other imported goods, might have driven up costs during that period. Non-food inflation also saw a decline in April 2024, dropping by -1.23%, which could be linked to price corrections or reductions in demand for non-food items. Following this deflationary month, non-food inflation

---

[3] ESS releases monthly inflation data without subsequent adjustments, based on the CPI derived from a household consumption survey in 120 urban and semi-urban market centers. The sampling is purposive, covering 11 regions (including Addis Ababa and Dire Dawa), with two market centers per zone selected based on population size and economic activity. Prices for 640 items are collected from the 1st to the 15th of each month, with two price points per item.

remains fairly steady, with modest increases throughout the rest of 2024, peaking again in July at 1.68% before slightly tapering off in August and September.

Food prices tend to be more volatile than non-food prices. In several months - specifically October 2023, January 2024, March 2024, and September 2024 - food inflation surpassed non-food inflation, likely due to seasonal fluctuations in supply and domestic agricultural conditions. This heightened volatility suggests that Ethiopia's food market is particularly sensitive to shocks, whether from supply disruptions, weather conditions, or external price changes. Studies have widely documented food price volatility in developing countries (Gerard *et al.,* 2011; G20, 2011), a pattern that is also believed to apply to Africa, as indicated by stakeholder consultations (OECD, 2011).

A closer look at supply-side factors may help explain these fluctuations. Bottlenecks in agricultural production such as limited access to modern farming techniques, insufficient irrigation infrastructure, and a heavy reliance on rain-fed agriculture could contribute to periodic supply shortages. Similarly, transportation challenges, including poor road infrastructure and rising fuel costs, might disrupt the movement of food from rural areas to urban markets, potentially leading to price spikes. Inefficiencies in food distribution networks, such as inadequate storage facilities and delays in supply chains, may also play a role in exacerbating price volatility, particularly during peak demand periods.

Both categories of inflation, food and non-food, exhibit deflationary months, specifically in December 2023 for food and in April 2024 for both categories. These periods of deflation indicate price corrections, potentially driven by supply exceeding demand or external factors temporarily reducing prices.

Looking at the overall trend, there appears to be a gradual stabilization of inflation rates after the significant volatility in the earlier months of 2024. From May to September 2024, both food and non-food inflation remain at relatively lower levels, suggesting that inflationary pressures may have been contained to some extent.

Food price instability could heighten the cost of living, particularly for lower-income households that spend a larger share of their income on food, putting pressure on the broader economy. In 2024, Ethiopia has the third-highest cost of living index (43.1) among African countries (Numbeo, 2024). Similarly, Afrobarometer (2024) reported that Ethiopians perceived higher poverty levels and worsening economic conditions in 2023 compared to 2020.

Figure 8: Food and Non-Food Inflation (%, Month-to-Month), September 2023 – September 2024
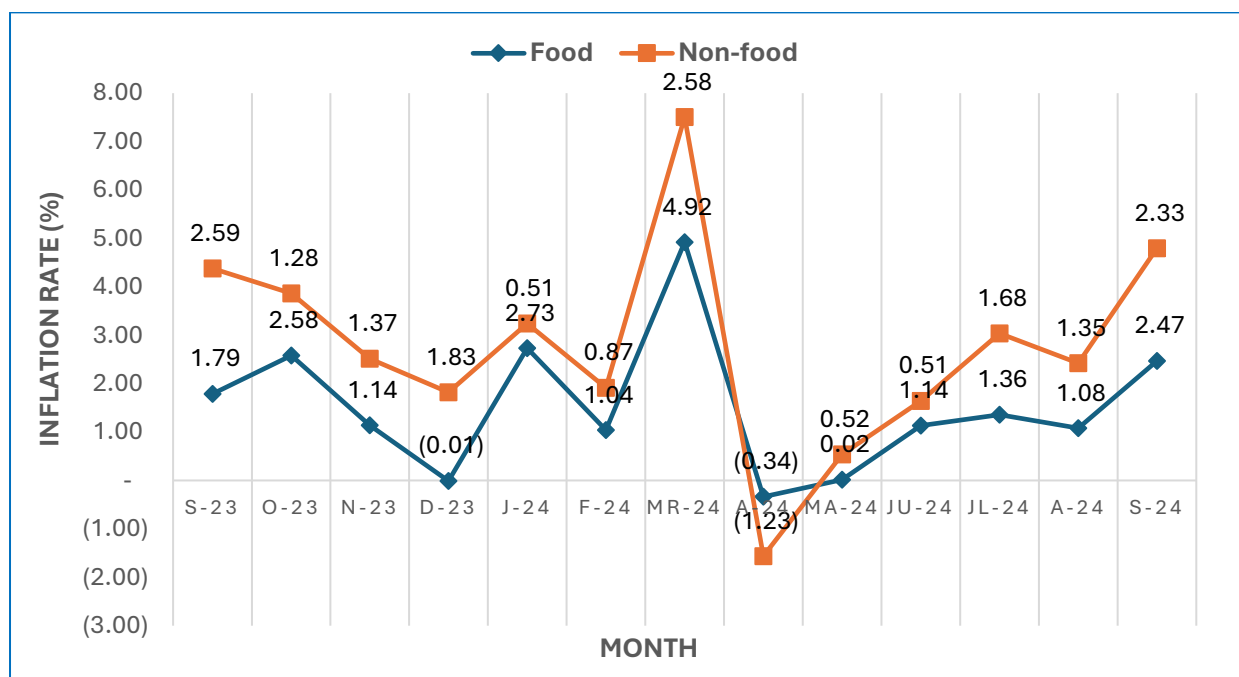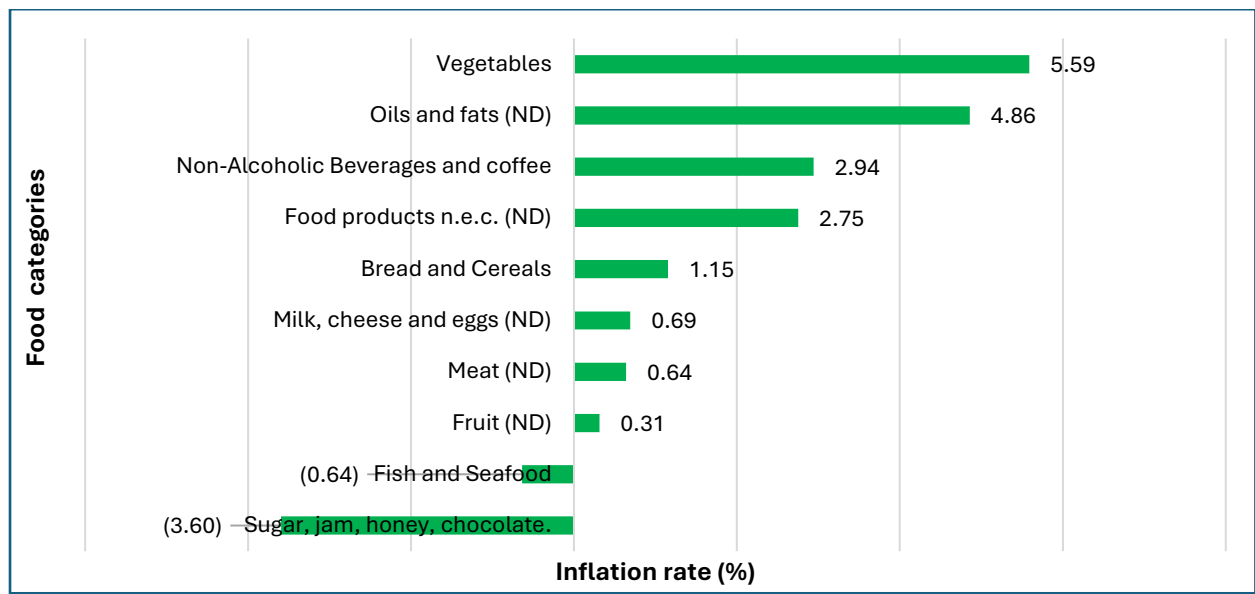

Source: Computed using ESS data.

Given the volatility in both food and non-food prices, it is clear that external factors, such as global commodity prices, climate conditions, and geopolitical events, continue to play an important role in shaping Ethiopia's inflation trajectory. However, food inflation remains particularly volatile due to its dependence on domestic production, which is highly susceptible to climate shocks, seasonal fluctuations, and supply chain inefficiencies. Unlike many non-food items, which can be imported to stabilize prices, food supply constraints often lead to sharper price swings. In contrast, non-food inflation tends to be more stable but is still affected by global and local supply conditions, especially for tradable goods that are sensitive to exchange rate fluctuations.

Figure 9 below displays month-to-month food inflation categories for September 2024, showing significant variation across different food groups. The highest monthly inflation is observed in vegetables (5.59%) and oils and fats (4.86%), indicating that these categories have experienced substantial price increases. The sharp rise in vegetable prices may be driven by supply-side disruptions, including seasonal fluctuations, adverse weather conditions, local conflicts, and logistical bottlenecks, all of which can contribute to shortages. Notably, the Amhara region, a key vegetable-producing area, experienced intensified insurgencies by the Fano militia in 2024, disrupting agricultural activities and supply chains, which, along with broader insecurity, has impeded the recovery of food prices despite ongoing harvests. Similarly, the increase in oils and fats could be influenced by global commodity price changes or constraints in domestic production.

Following these, categories like non-alcoholic beverages and coffee (2.94%) and food products not elsewhere classified (food products n.e.c.) (2.75%) also show notable inflation, suggesting moderate price increases in these sectors. The relatively higher prices in non-alcoholic beverages and food products may be driven by increased consumer demand or rising production costs mainly

related to imports and exchange rates. Meanwhile, more moderate inflation is observed in bread and cereals (1.15%), milk, cheese, and eggs (0.69%), meat (0.64%), and fruit (0.31%), indicating that these essential food items are experiencing mild price increases, likely due to normal market dynamics or modest supply constraints. Interestingly, the figure also reveals categories with negative inflation, including sugar, jam, honey, and chocolate (-3.60%) and fish and seafood (-0.64%). The price reductions in these categories may reflect decreased demand.

**Figure 9: Food Inflation Categories (%, Month-to-Month, September 2024)**

Source: Computed using ESS data.

Figure 10 below illustrates significant month-to-month non-food inflation in September 2024, with notable increases in education (11.58%), restaurants and hotels (8.72%), and transport (6.79%). The rise in education costs is likely due to tuition fee adjustments and higher operational expenses in educational institutions. Inflation in the hospitality sector is attributed to rising food and service costs, driven by increased consumer demand and supply chain disruptions. High transport inflation is likely a result of fluctuating fuel prices, increased maintenance costs, and potential policy-driven fare adjustments.

Following these, moderate inflation is observed in health (3.25%), clothing and footwear (2.42%), and communication (1.75%), reflecting steady but contained price increases. The miscellaneous goods and services category also experienced moderate inflation at 1.59%. The housing, water, electricity, gas, and other fuels category shows mild inflation (1.44%), suggesting stable utility pricing and controlled rental adjustments. Furnishings, household equipment, and routine maintenance (1.05%) also recorded slight price increases, which could be due to relatively stable consumer demand and production costs.

On the lower end, recreation and culture (0.50%) experienced minimal price increases, likely due to subdued consumer demand or stable supply conditions. Interestingly, alcoholic beverages and tobacco saw a decrease (-2.79%), indicating a drop in prices for this category, which may be due to reduced demand caused by dropping purchasing power of citizens.

Figure 10: Non-Food Inflation Categories (%, Month-to-Month, September 2024)
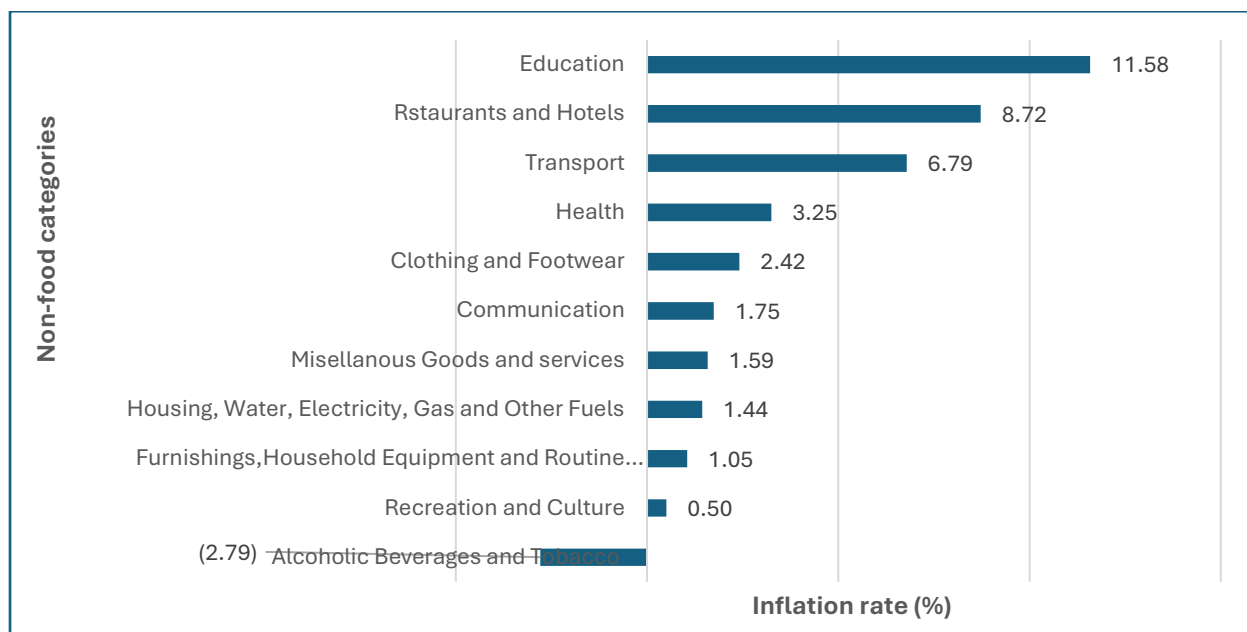
Source: Computed using ESS data.

In summary, the fluctuations in inflation, including periods of sharp increases and relative stability, emphasize the need for comprehensive policy measures to maintain price stability. Addressing both demand- and supply-side factors—such as managing exchange rate impacts and enhancing domestic production—will be essential in curbing inflationary pressures. Given the persistent volatility, continued monitoring and timely policy interventions will be necessary to sustain stability.

The macroeconomic implications of these trends are significant, particularly for monetary policy. The NBE may need to adopt a more flexible approach, adjusting interest rates or intervening in currency markets as needed. Structural reforms, including improving agricultural productivity, strengthening food supply chains, and reducing reliance on imported essentials like fuel, could help mitigate inflationary pressures. Targeted interventions, such as subsidies or regulatory measures, may also be required to protect households from sustained price increases, especially in essential food categories. A coordinated and adaptive policy response will be crucial for managing inflation effectively and ensuring long-term economic stability.

3.2.   Dynamics of Regional Inflation

This sub-section presents the quarterly update on regional-level inflation and discusses the trends of regional inflation by consumption bundles. In this report, eight regional states of Ethiopia and two city administrations are included while Tigray[4] regional state was excluded from the analysis. Examining the dynamics of regional inflation provides pertinent updated information and policy insights about inflation trends at regional level. This report shows the importance of regional and consumption-specific details in understanding inflation trends in Ethiopia. The discussion is based

---

[4] This report does not provide an update on Tigray Regional State inflation statistics since ESS has not collected data from the region since 2012 EFY.

on quarterly inflation rate estimated using 12-month moving average and month-to-month inflation statistics at the regional level.

3.2.1. Regional Quarterly Inflation (July – Sep 2024)

We present the quarterly inflation rates observed in each regional state of Ethiopia disaggregated by months and consumption bundles (food and non-food consumption). This allows us to understand the variation in inflation rate not only across different regions but also by consumption lines that might give policy insights into the economic conditions faced by households living in across different regional states of Ethiopia.

Headline Inflation

As can be seen in Figure 11, the average quarterly (July-Sep 2024) regional headline inflation ranges between 17.2% (Harari) and 31% (Benishangul-Gumuz) with close to 14 percent disparity. The highest average quarterly inflation registered in Benishangul-Gumuz Regional State (31%) closely followed by Amhara Regional State (30.5%). In these two regions, transportation networks, distribution systems, and the mobility of people, goods, and services are severely disrupted due to political unrest and armed conflicts. In the latter region, in particular, transportation and supply lines are almost completely blocked, likely contributing to relatively higher inflation rates. The lowest average quarterly inflation rate was recorded in Harari Regional State at 17.2%.

Figure 11: Headline Inflation (%, Monthly and Quarterly 12-Month Moving Averages), July–September 2024
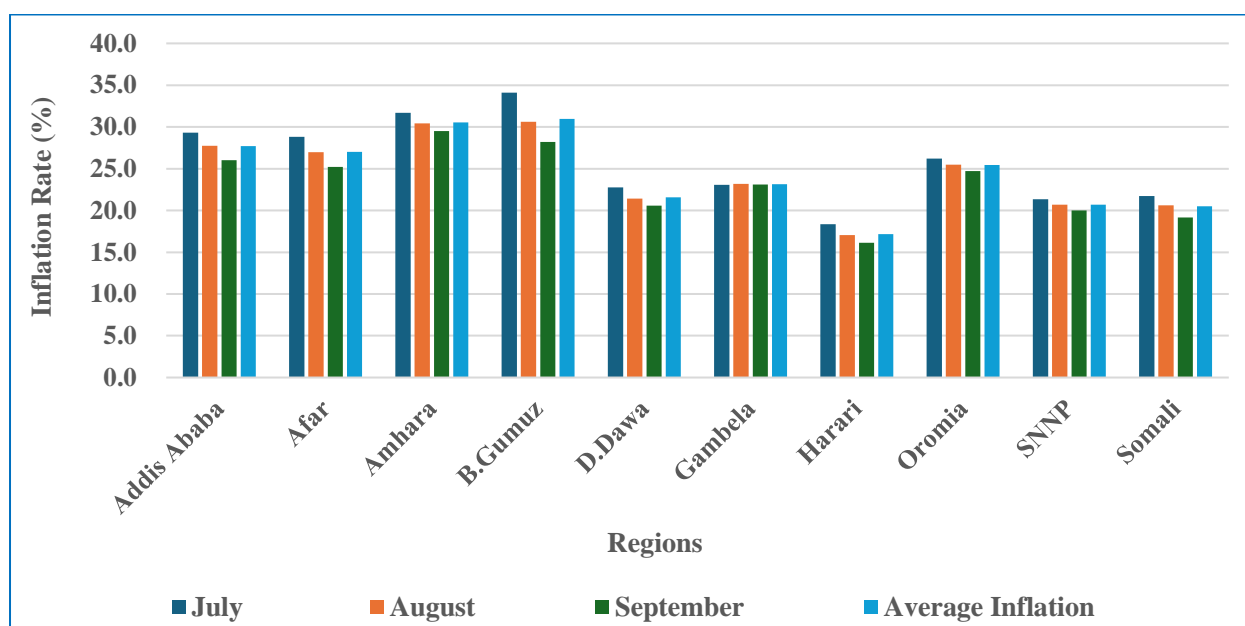
Source: Computed using ESS data, with December 2016 as the base year (CPI = 100).

Looking at the monthly inflation rate, except Gambella Regional State, relatively higher inflation rate was recorded in the July in all regions with 34.1 percent in Benishangul-Gumuz region and 31.7 percent in Amhara region. The quarterly regional inflation showed declining trends within three months as we move from July to September compared to the last 12 months average inflation rate.
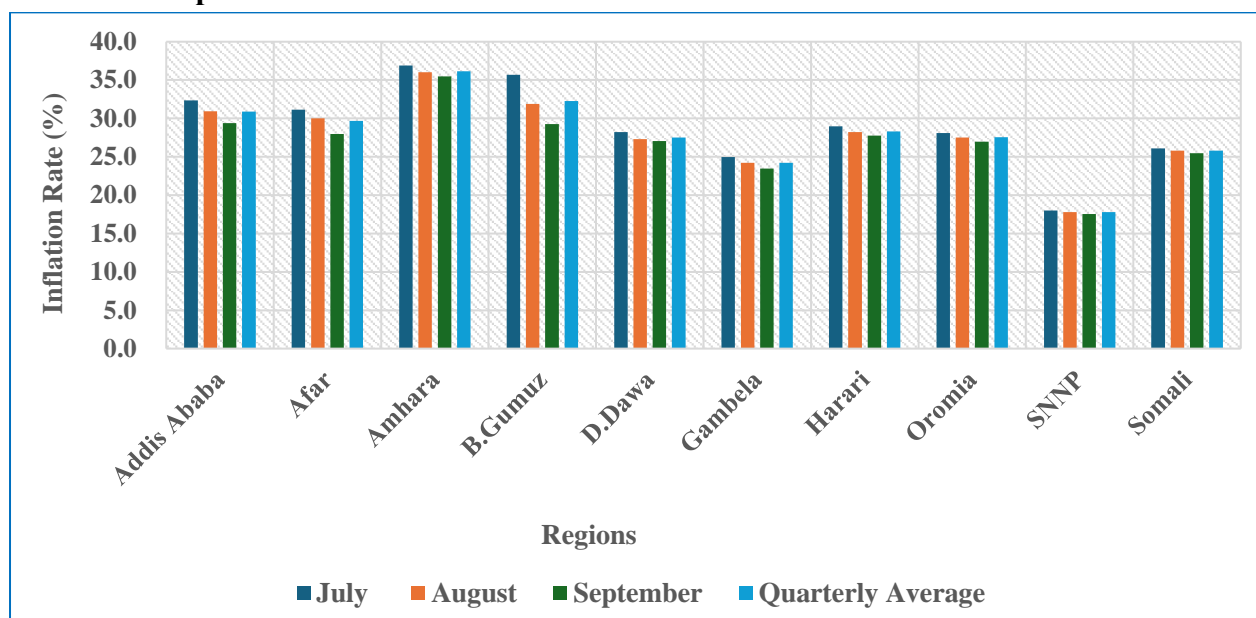
Food Inflation

During this review period, food inflation was highest in the Amhara region as it increased by 36.1% compared to the 12-month average and the lowest inflation rate was recorded in former Southern Nations, Nationalities and People Regional State[5] with 17.8 % as shown in Figure 12. Again, except for the change in order, the Amhara and Benishangul-Gumuz Regional States experienced the highest food inflation during the first quarter of EFY (July–September 2024) compared to other regional states of Ethiopia. In the remaining seven regional states, food inflation during the review period was between 24.2% in Gambella and 29.7% in Afar Regional States. On the other hand, when examining the monthly food inflation rates across the regional states, the highest food inflation was recorded in July followed by August and September in that order. It was expected that in these three months, food prices were relatively higher since it was a period of ploughing or cultivation. In August and September, certain agricultural products like beans and peas might have been ready for consumption, which could have helped increase supply and ease the pressure on food price inflation compared to the 12 months average inflation rate.

Furthermore, the decline in the food price inflation rate over the three months, when compared to the 12-month average, may be attributed to the NBE's strict credit controls and the tight monetary policy implemented since August 2023. These measures, aimed at curbing inflation, likely contributed to reduced demand pressures and improved stability in the food sector. Hence, limiting the availability of credit and tightening the money supply might effectively restrain excessive spending and borrowing. However, it is important to recognize the potential trade-offs involved in such policies. While these monetary measures have played a role in moderating food inflation, they could also have slowed overall economic growth by restricting access to credit, thus impacting consumer spending and business investments. As a result, the combination of these monetary policies may have moderated inflationary trends in the food market during the review period, but at the cost of potentially slower economic activity.

---

[5] Now, this region has been divided into four regions: Central Ethiopia, Sidama, Southern Ethiopia, and Southeast Ethiopia Regional States.

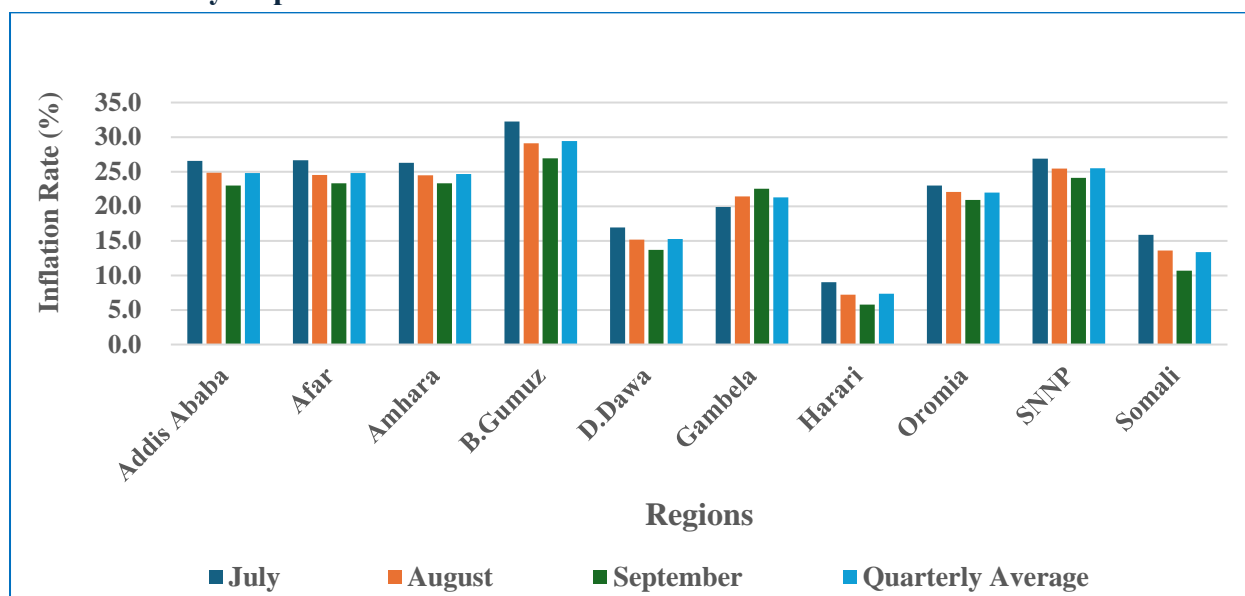**Figure 12: Food Inflation (%, Monthly and Quarterly 12-Month Moving Averages), July–September 2024**

Source: Computed using ESS data

Non-Food Inflation

Given close to 48%[6] of Ethiopia's households' income is spent on non-food consumption items like housing, transportation, and healthcare, hence, understanding non-food inflation trends across regions is equally relevant for decision makers. Accordingly, as illustrated in Figure 13, Benishangul-Gumuz Regional State (29.4%) experienced higher non-food inflation and was followed by SNNPRS (25.5%). Like food inflation rate, the lowest non-food inflation rate recorded in Harari Reginal State (7.3%) and followed by Somali (13.4%) Regional State. Substantial disparity in non-food inflation has been observed across different regional states of Ethiopia. Remarkably, the Eastern part of Ethiopia; Harari and Somali Regional States, and Dire Dawa City Administration had the lowest non-food inflation compared to the other regional states of Ethiopia. This could be due to the fact that these regions being near the border, and informal cross-border trade allows the residents to access non-food items at relatively lower prices. Moreover, non-food price inflation had a declining trend in this review period in all regions of Ethiopia compared to the 12-month average inflation rate except for Gambella Regional State. A landmark policy shift, i.e., liberalization of exchange market was announced on July 29, 2024, and in the following months (August and September), at least theoretically, one could expect an increase in non-food prices due to higher import prices and speculative behavior of agents. However, the opposite occurred. This could be mainly linked to the expected contraction in aggregate demand for imports after the foreign exchange rate reform. It may also be associated with the credit limits set by the NBE, which created liquidity constraints in the market.

---

[6] Household-Consumption-Expenditure-Survey-2016.pdf

Figure 13: Non-Food Inflation (%, Monthly and Quarterly 12-Month Moving Averages), July–September 2024

Source: Computed using ESS data

Quarterly Average Regional Inflation

Quarterly average regional inflation data offers insights into the varying inflation trends across different regions, reflecting local economic conditions and consumption dynamics. Figure 14 illustrates the quarterly average headline, food and non-food inflation at regional level.

Figure 14: Average Inflation by Consumption Categories (%, Quarterly 12-Month Moving Average), July–September 2024.
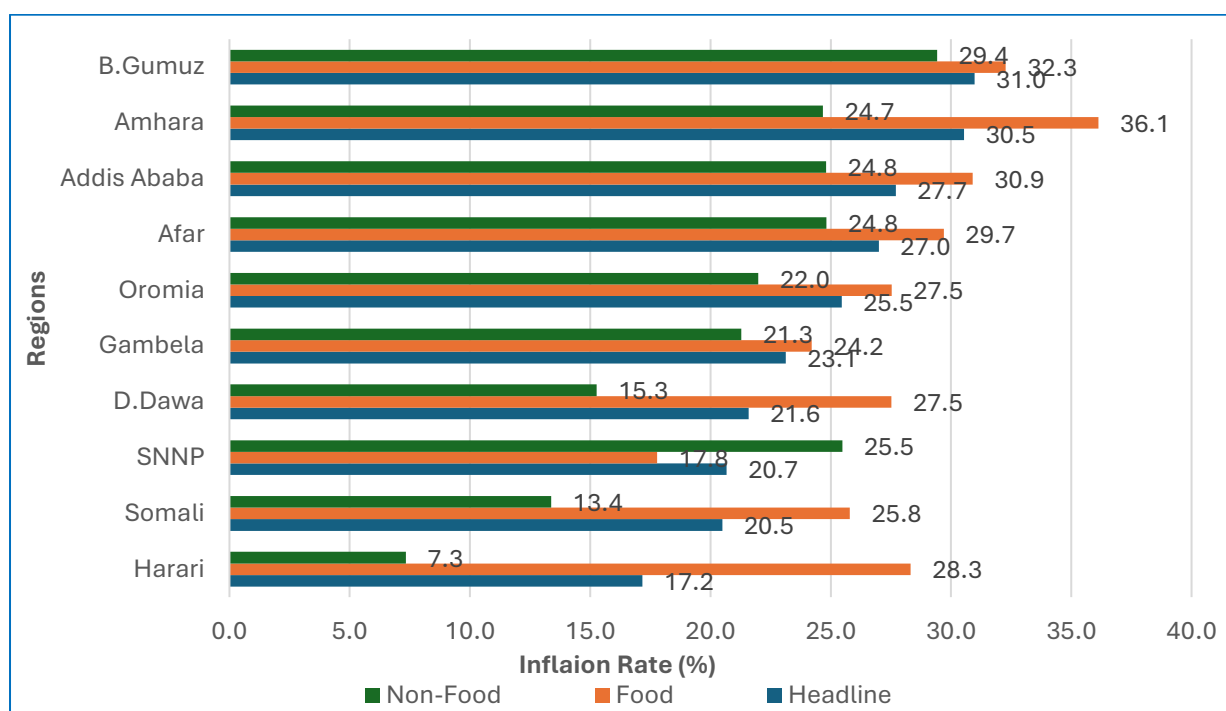
Source: Computed using ESS data

Food price inflation was higher than the headline inflation rate during this review period, except in the SNNP Regional State, where the non-food inflation rate (25.5%) surpassed the food inflation rate (17.8%), and the headline inflation rate stood at 20.7%. In the Amhara Regional State, quarterly food price inflation increased by 36.1%, while non-food price inflation rose by 24.7%, resulting in an overall inflation rate of 30.5%, compared to the 12-month period average. Therefore, food price inflation was the primary driver of inflation across most regional states in Ethiopia. For example, in Harari Regional State, food price inflation was 28.3%, nearly four times higher than the non-food price inflation rate of 7.3%.

3.2.2. *Month-to-Month Inflation*

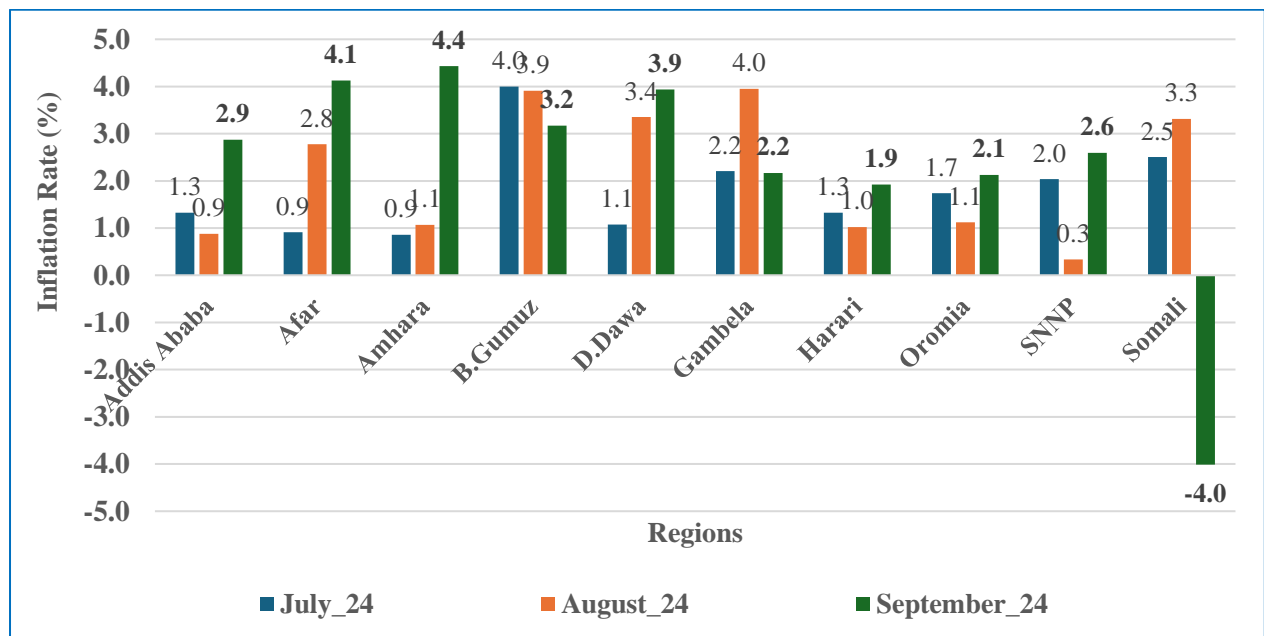Figure 15 illustrates the month-to-month inflation rates across the regional states of Ethiopia. This figure exhibits the variations in inflation from one month to the next which provides a clear picture of how inflation trends shift monthly. The month-to-month inflation rate enables us to track the changes in inflation levels relative to the previous month and provides valuable insights into short-term economic fluctuations. The month-to-month inflation rate also helps identify the patterns and potential factors that influence the inflation rate at regional level throughout the year.

Figure 15: Regional Inflation (%, Month-to-Month), July–September 2024

Source: Computed using ESS data

As shown in Figure 15, the month-to-month general inflation rate has been grown across all regions over the past three months (July-Sep 2024) with varying rates of inflation. The month-to-month inflation rate registered for July 2024 in the regional states of Benishangul-Gumuz (4.0%), Somali (2.5%), Gambella (2.2%), and Oromia (1.7%) were higher than the national average, which stood at 1.5% for the same month[7]. Prices have consistently risen from month to month, but the rate of increase varies by regions and months. Apart from Benishangul-Gumuz and

---

[7] CPI_July_2024.pdf

Gambella, the highest month-to-month inflation growth occurred in September 2024. Specifically, the inflation rate in September increased by 4.4% in the Amhara region and by 4.1% in the Afar region compared to what have been observed in August 2024. On the other hand, Somali region experienced a negative month-to-month inflation rate in September, standing out as an outlier in comparison with other regional states. Additionally, Harari region recorded the lowest month-to-month inflation rate stood at just 1.9%. These trends clearly indicate a general upward trajectory in inflation rate over the short-term period.

Building on these regional inflation insights, it is crucial for both local and federal governments to take decisive actions to address supply-side constraints and minimize the impact of food price inflation. Ensuring peace and security is essential for sustaining production and facilitating the smooth distribution of goods and services across the country, ultimately enhancing price stability over time and across regions. Furthermore, improving access to agricultural inputs by addressing policy and bureaucratic hurdles, as well as overcoming market failures, is key to fostering greater agricultural productivity. These measures should be supported by strategic government policies that promote private sector growth, ensure efficient market operations, and lay the foundation for sustainable economic development.

Given the volatility of inflation, it is essential for policymakers to address the underlying structural challenges that may be driving inflationary pressures. These include ongoing conflicts, supply chain disruptions, and limited access to agricultural inputs, which can exacerbate price instability. Strengthening local production capabilities, ensuring the security and stability of key economic regions, and improving access to critical resources will be key to reducing vulnerabilities to external shocks and fostering long-term economic resilience. By addressing these foundational issues, it will be possible to mitigate the adverse effects of inflation and lay the groundwork for sustained growth and price stability.

### 3.3.   The Link between Inflation and Exchange Rate

This sub-section explores the interrelationship between inflation trends and exchange rate movements in Ethiopia from September 2023 to September 2024. Given the significant policy shift towards a floating exchange rate regime since July 29, 2024, understanding how these dynamics influenced consumer prices provides important insights into the welfare effects of the FX reform and the broader economic environment. We assess monthly inflation trends, with its components (headline, food, and non-food inflation), alongside exchange rate fluctuations over the period. Special attention is given to the potential impact of exchange rate depreciation on inflation, particularly food prices, and how other factors such as domestic supply and policy interventions may have mitigated inflationary pressures despite a rising exchange rate.

The correlation[8] presented in Figure 16 below indicates moderate linear relationships between inflation components (headline, food, and non-food inflation) and the exchange rate, with varying levels of statistical significance. The correlation between headline inflation and the exchange rate

---

[8] The correlation results should be interpreted with caution, as they are based on a small sample size.

is 0.66, indicating that exchange rate fluctuations was moving with overall inflation during the period. Similarly, the correlation between food inflation and the exchange rate is 0.63, also showing a statistically significant positive relationship, implying a notable effect of exchange rate changes on food inflation.

Figure 16: LOWESS Fit: Exchange Rate vs. Inflation Components (Monthly Inflation Levels and ETB/USD), September 2023 - September 2024
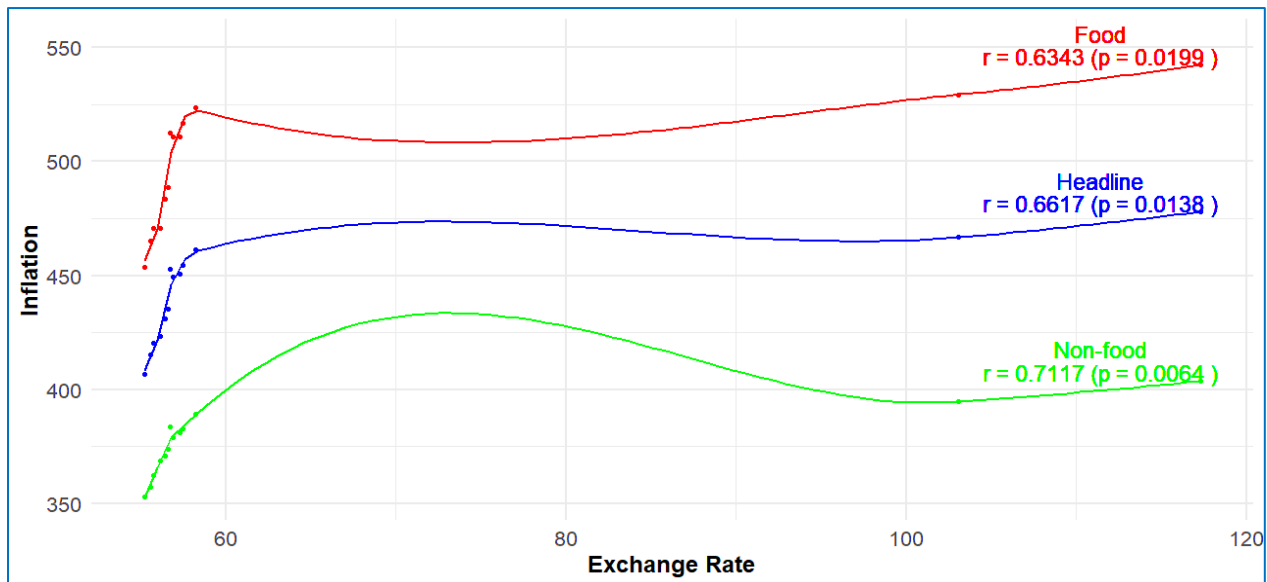
Source: Computed using ESS data.

The correlation between non-food inflation and the exchange rate is 0.71, indicating a stronger positive relationship compared to headline and food inflation. This suggests that exchange rate movements had a more substantial influence on non-food inflation during this period. To sum up, the positive correlations observed between the exchange rate and inflation components suggest that exchange rate fluctuations did play a role in driving inflation, particularly in the non-food sector.

The Locally Weighted Scatterplot Smoothing (LOWESS) fit in the figure, maps the relationship between the exchange rate (ETB/USD) and inflation components over the period from September 2023 to September 2024. It offers a detailed visualization of how currency fluctuations may have influenced inflationary trends in Ethiopia. By applying LOWESS, the figure reveals underlying patterns that might not be immediately apparent through a simple linear analysis. Given that exchange rate depreciation often translates into higher import costs, which, in turn, fuel inflation, the direction and curvature of the fit serve as crucial indicators of this dynamics.

The figure demonstrates a gradual increase in headline inflation at lower exchange rate levels, but as the exchange rate depreciates further, inflation accelerates at a faster pace. This non-linearity suggests that while moderate exchange rate fluctuations may not immediately translate into sharp inflationary spikes, larger depreciations create inflationary pressures that reinforce themselves over time. The steepening of the curve at higher exchange rate levels could be attributed to several

factors. First, imported inflation becomes more pronounced when the local currency depreciates significantly, as Ethiopia is highly dependent on imported goods, particularly fuel and essential commodities. Second, inflation expectations among businesses and consumers may amplify price increases. As the exchange rate worsens, businesses may preemptively adjust prices upwards to hedge against future cost increases, exacerbating the inflationary trend.

As to food inflation, the curve exhibits the strongest response to exchange rate movements, indicating a significant exchange rate pass-through to food prices. The fit highlights a clear non-linear trend, where food inflation initially rises at a moderate pace but accelerates more rapidly as the exchange rate surpasses certain thresholds. This suggests that small depreciations in the exchange rate may have a limited impact, but as depreciation intensifies, food prices experience sharper and more pronounced increases.

This pattern can be attributed to two key mechanisms. First, cost-push inflation occurs as importers face higher costs due to currency depreciation, which are then passed on to consumers in the form of higher food prices. Since Ethiopia imports substantial food items such as wheat, edible oil, and sugar, and substantial parts of food items produced domestically are partly imported inputs (fertilizer, fuel, and chemicals), fluctuations in the exchange rate directly influence domestic food prices. Second, supply chain disruptions play a crucial role in amplifying inflation adversely affecting the production, and smooth distribution of products. Exchange rate instability often leads to delays in import transactions, hoarding behavior, and market speculation, all of which further exacerbate food price increases. As businesses anticipate further depreciation, they may increase prices preemptively, contributing to inflationary pressures.

The non-food inflation curve also demonstrates a clear positive relationship with exchange rate movements, but its response differs from that of food prices. The fit suggests a more gradual trend, where non-food inflation increases steadily rather than exhibiting sharp spikes. This indicates that non-food prices adjust to exchange rate fluctuations at a slower pace, reflecting structural and market-specific dynamics.

Unlike food prices, which are highly volatile and directly linked to import costs, non-food inflation would be influenced by multiple factors beyond the exchange rate. While imported goods such as fuel, household items, and industrial equipment are more affected by currency depreciation, other determinants play a crucial role. Local production costs, government policies, and supply chain constraints significantly impact non-food price adjustments. The smoother curve suggests that non-food inflation may experience lagged effects, meaning that price adjustments occur over time rather than instantaneously. This gradual increase reflects the fact that businesses may absorb short-term currency fluctuations before adjusting prices, or that policy interventions may temporarily cushion the impact.

A notable feature in the figure is the sharp shift at the far end of the exchange rate axis, where the ETB/USD exchange rate surges beyond 100. This is accompanied by an accelerated upward movement in the inflation curves, indicating heightened inflationary pressure. The particularly sharp rise in food inflation suggests that currency depreciation beyond a certain threshold may trigger nonlinear inflationary effects.

To summarize, the analysis underscores the significant link between exchange rate depreciation and inflation, with food inflation exhibiting the highest sensitivity. Given the disproportionate impact of exchange rate movements on food prices, policymakers should consider targeted interventions such as strategic foreign exchange reserves for food imports, temporary tariff reductions on essential food items, and food price stabilization measures. Most importantly, boosting domestic food production and managing staple crop exports can help mitigate inflationary pressures. A proactive policy approach that integrates exchange rate management with broader monetary and fiscal policies will be essential for ensuring economic stability and food security.

Beyond short-term inflation control, the persistent rise in non-food prices due to currency depreciation highlights the need for long-term strategies to reduce vulnerability to exchange rate fluctuations. Even if immediate policy measures prove effective, currency instability could continue to drive inflation upward over time. Strengthening local production capabilities, diversifying import sources, and reinforcing supply chains will be crucial in ensuring stable pricing mechanisms. By addressing these structural weaknesses, Ethiopia can reduce its reliance on foreign markets and mitigate the long-term inflationary effects of exchange rate instability.

4. Concluding Remarks

In 2024, Ethiopia's exchange rate and inflation dynamics reflect deep-seated challenges within the economy. The ETB's steady depreciation against the US Dollar, with an 11.5% decline between mid-September and December, signals the need for adapting to a market-driven exchange rate system. The gradual depreciation reflects the complexities of aligning domestic currency values with global market forces, a transition that often involves short-term volatility as the economy adjusts. However, the narrowing of the official-parallel exchange rate gap, from as wide as ETB 65 in July to ETB 14 by December, suggests positive strides toward improving market efficiency and liquidity. These adjustments, driven by policy changes, are steps in the right direction, but the persistence of the exchange rate gap underscores the need for broader macroeconomic reforms. Addressing key supply-side constraints—such as low export capacity, limited foreign exchange reserves, and weak industrialization—will be essential for long-term currency stability. Strengthening foreign exchange market transparency and efficiency will further reduce uncertainty, build confidence, and support broader economic stability.

Inflation trends over the year reveal the complex interplay between exchange rate movements, domestic supply constraints, and structural vulnerabilities. Significant positive correlations between exchange rate fluctuations and inflation components—particularly non-food inflation—suggest that currency depreciation has been a significant driver of inflation, beyond just monetary and demand-side factors. This indicates that inflation is not merely a reflection of monetary conditions but also a consequence of deeper structural challenges, including supply-side rigidities and external cost pass-through effects.

A key finding is that once the exchange rate surpasses 100 ETB/USD, food inflation accelerates sharply, indicating that currency depreciation at higher levels disproportionately impacts food prices. This reveals the economy's vulnerability to imported inflation, particularly in essential food commodities. Given that, a significant portion of Ethiopia's food supply is either imported or influenced by global commodity prices, this underlines the importance of a balanced exchange rate policy. While exchange rate adjustments may be necessary for competitiveness and addressing external imbalances, excessive depreciation can amplify inflationary pressures, eroding purchasing power and worsening food insecurity.

Non-food inflation, though relatively more stable, reflects shifts in consumer demand and cost pressures in key service sectors such as education, hospitality, and transportation. The increases observed in these sectors suggest that businesses are passing on higher costs - stemming from currency depreciation, rising import prices, and operational expenses - to consumers.

The variation in inflation across regions also emphasizes the uneven distribution of economic pressures in Ethiopia. Regions more integrated into national and international markets experience different inflationary trends compared to those with higher local self-sufficiency. Areas with greater reliance on imports or weaker supply chains tend to see sharper food price increases and lower price increases in non-food items, while those with stronger agricultural productivity exhibit more stable inflation patterns. Addressing these disparities requires decentralized policy approaches that account for regional economic conditions, rather than relying solely on broad nationwide measures.

Ultimately, Ethiopia's inflation and exchange rate dynamics highlight the broader economic transition the country is undergoing. While short-term adjustments are necessary, the long-term solution lies in enhancing productive capacity, fostering a more resilient economic structure, and ensuring that monetary, fiscal, and structural policies are well-aligned. Without addressing the underlying supply-side constraints and improving economic diversification, macroeconomic stability will remain fragile, and inflationary pressures will persist, particularly in response to external shocks and currency fluctuations.

Based on the findings, the following specific policy recommendations are suggested:

1. **Enhance FX Market Stability:** Narrow the official-parallel exchange rate gap by enhancing transparency in the foreign exchange market. This can be achieved by reducing administrative controls, improving reserve management through export promotion, incentivizing remittances, and attracting foreign direct investment (FDI). Additionally, support measured liberalization to reduce volatility and promote a more efficient currency market.

2. **Targeted Inflation Management:** To address inflation drivers beyond monetary policy, focus on improving supply chain efficiencies by enhancing transport and logistics networks, such as upgrading road and rail connections and streamlining customs procedures at key ports like Djibouti. Modernizing warehousing and cold storage will help reduce post-harvest losses, particularly for perishables. Additionally, supporting domestic production, ensuring peace and security, and tailoring responses to regional inflationary trends will help control price pressures and reduce reliance on imports.

3. **Mitigate FX-Inflation Spillovers:** Stabilize inflation arising from exchange rate depreciation through a mix of well-managed floating exchange rate policies, including interventions to smooth excessive volatility when necessary. Strengthening foreign exchange reserves by diversifying export markets, reducing import dependency, and improving access to concessional financing. Additionally, minimize transactions and logistical costs for essential imports like food and fuel, while implementing broader cost-control measures to address inflationary pressures.

4. **Structural Reforms for Economic Resilience:** Reduce import dependency and external vulnerability by promoting local industrialization, boosting agricultural productivity through targeted investments in irrigation, technology adoption, and market access, diversifying exports by shifting from raw commodity exports (e.g., coffee, sesame) to higher-value processed goods, and easing logistical bottlenecks to lower inflationary pressures and enhance competitiveness.

5. **Integrated Policy Framework for Stability:** Strengthen coordination between monetary, fiscal, and structural policies to ensure that exchange rate adjustments, inflation control, and economic diversification efforts are aligned for sustainable stability. Enhance institutional capacity and regulatory oversight to support effective policy implementation and maintain investor confidence.

References

Afrobarometer. (2024). *Afrobarometer Round 9 Survey in Ethiopia: Summary of results*. Afrobarometer.

Conforti, P. (2004). *Price transmission in selected agricultural markets* (FAO Commodity and Trade Policy Research Working Paper No. 7). Food and Agriculture Organization (FAO).

Central Statistical Agency (CSA). (2018). *The 2015/16 Ethiopian Household Consumption–Expenditure (HCE) Survey*. Statistical Bulletin 585. http://www.statsethiopia.gov.et/wp-content/uploads/2019/06/Household_Consumption-Expenditure-Survey-2016.pdf

Deloitte. (2023). *East Africa Macroeconomic Outlook Volume IV*. Nairobi: Deloitte.

Ethiopian Economics Association (EEA). (2024c). *Quarterly Macroeconomic Updates on the Ethiopian Economy*, Vol. 9, No. 3, October 2024. EEA.

Ethiopian Statistical Service (ESS). (2024). *Inflation Report*, Statistical Bulletin, Issue No. 13/2017. https://ess.gov.et/wp-content/uploads/2024/09/CPI_July_2024.pdf

Gerard, F., Alpha, A., Beaujeu, R., Levard, L., Maitre d'Hotel, E., Rouille d'Orfeuil, H., Bricas, N., Daviron, B., Galtier, F., & Boussard, J. M. (2011). Managing food price volatility for food security and development. *Groupe de Recherche et d'Echange sur la Régulation des Marchés Agricoles (GREMA)*. www.gret.org/wp-content/uploads/Livre-volatility-food-security-and-development-version-corr.pdf

G20 (Group of 20). (2011). *Action Plan on Food Price Volatility and Agriculture*. Ministerial Declaration, Meeting of G20 Agriculture Ministers, June 22–23. Paris. http://agriculture.gouv.fr/IMG/pdf/2011-06-23_-_Action_Plan-_VFinale.pdf

Headey, D., & Fan, S. (2008). Anatomy of a crisis: The causes and consequences of surging food prices. *Agricultural Economics, 39*(S1), 375–391. https://doi.org/10.1111/j.1574-0862.2008.00345.x

Kiguel, M. A., & O'Connell, S. A. (1994). Parallel exchange rates in developing countries: Lessons from eight case studies. *Policy Research Working Paper No. 1265*.

Minot, N. (2011). Transmission of world food price changes to markets in Sub-Saharan Africa (IFPRI Discussion Paper No. 1059). International Food Policy Research Institute (IFPRI).

Numbeo. (2024). *Cost of living rankings by country*. Retrieved from https://www.numbeo.com/cost-of-living/rankings_by_country.jsp?title=2024&region=002

Organisation for Economic Co-operation and Development (OECD). (2011). *Agriculture and food price volatility: African views and perspectives*. G20 Outreach Session, Paris, June 14–15. www.oecd.org/swac/events/agriculturalandfoodpricevolatilityafricanviews.htm

Rapsomanikis, G., & Mugera, H. (2011). Price transmission and volatility spillovers in food markets of developing countries. In I. Piot-Lepetit & R. M'Barek (Eds.), *Methods to analyse agricultural commodity price volatility* (pp. 165–179). Springer.