Inflation Dynamics in Bangladesh
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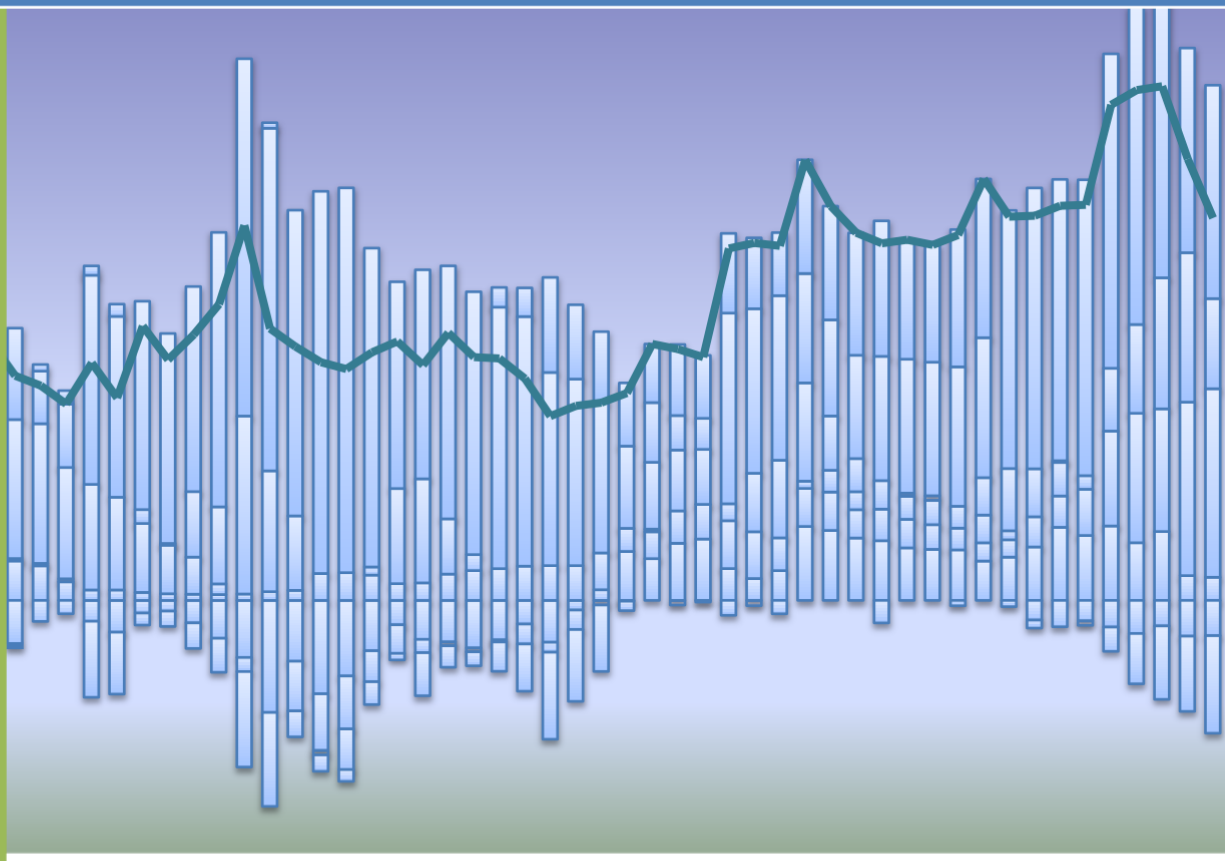

Economic Modeling and Forecasting Wing
Research Department
Bangladesh Bank

Inflation Dynamics in Bangladesh

October–December 2024 (Q2:FY25)

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1 Introduction

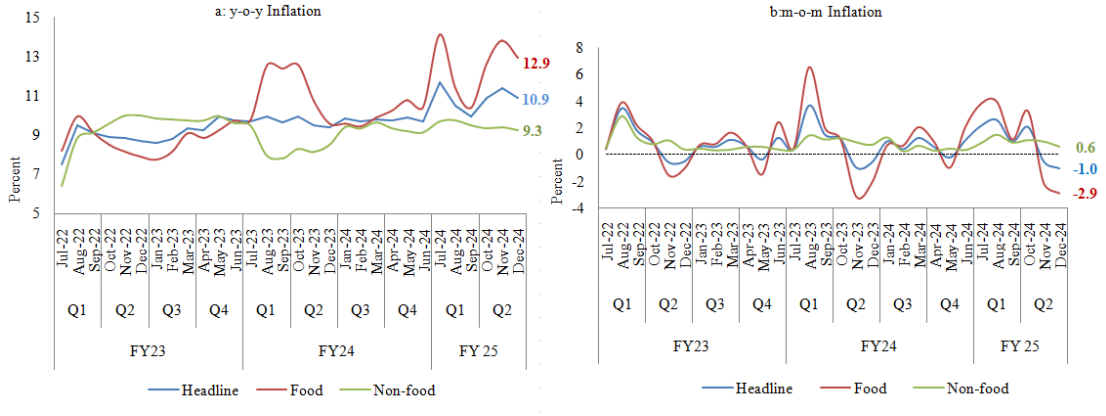
Bangladesh Bank's utmost priority is to maintain stable inflation to support sustainable economic growth and ensure financial stability. A comprehensive understanding of the underlying determinants of fluctuations in consumer prices and wage levels is essential for formulating effective monetary policy. The Bangladesh Bureau of Statistics (BBS) provides various indices that reflect the dynamics of price movements within the economy. This report analyzes the key drivers of Consumer Price Index (CPI) inflation and wage trends[2] *in Bangladesh, providing a detailed examination of the factors shaping the country's macroeconomic conditions.*

In Q2:FY25, Bangladesh's year-on-year Consumer Price Index (CPI) headline inflation remained elevated, averaging at around 11.1%. At the start of FY25, headline inflation peaked at a 12-year high of 11.7%. By November 2024, inflation had reached 11.4%, marking the second-highest level of FY25. Although inflation eased slightly in December 2024, due to slightly eased food inflation, it remained elevated at 10.9% (Figure 1a). Food inflation reached a peak in November 2024, recording the second-highest level in 13 years, before moderating slightly in December, though it continued to exceed double digits. Non-food inflation saw a modest decline, averaging 9.3% in Q2:FY25, compared to 9.6% in Q1:FY25.

[2]Currently, the Bangladesh Bureau of Statistics (BBS) compiles the Consumer Price Index (CPI) following the Classification of Individual Consumption by Purpose (COICOP) of the United Nations Department of Economic and Social Affairs, using 2021–22 as the base year, with weights derived from the Household Income and Expenditure Survey (HIES) 2016–17. Similarly, the Wage Rate Index (WRI) is based on the same period, with weights from the BBS Labour Force Survey (LFS) 2016–17. This report includes CPI data up to December 2024 from BBS. Numbers are rounded to one decimal. Q2:FY25 represents October-December, 2024.

Month-on-month (m-o-m) headline inflation declined in Q2:FY25 from the previous quarter, averaging at 0.2%. After a moderate rise in October 2024, m-o-m food inflation (Figure 1b) turned negative in the subsequent two months. Similarly, non-food m-o-m inflation followed a downward trajectory toward the end of Q2:FY25.

FIGURE 1: CPI Inflation



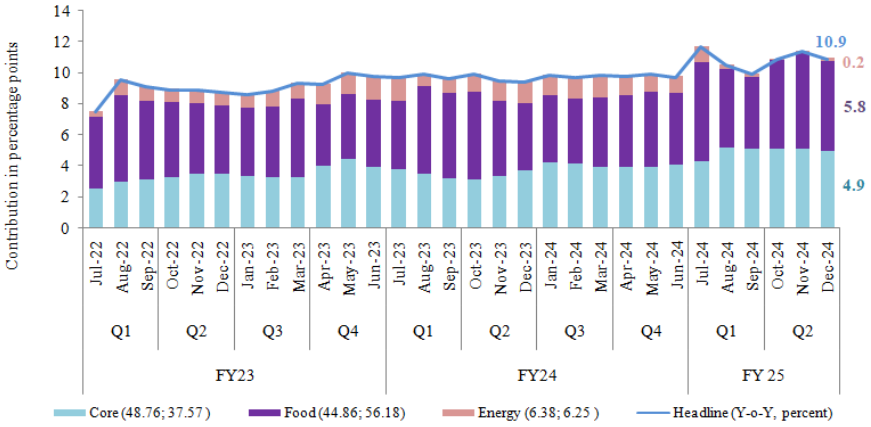
Source: Bangladesh Bureau of Statistics (BBS)

According to the Asian Development Outlook (ADO) of December 2024, headline inflation is expected to subside in the latter half of FY2025, driven by anticipated declines in global fuel and commodity prices, alongside the effects of tight monetary policy (Asian Development Bank, 2024). However, the International Monetary Fund (2025) (IMF) in its January 2025 World Economic Outlook highlighted that while global headline inflation is projected to decrease over the next few years, advanced economies are expected to experience this decline earlier than emerging markets and developing economies. Nonetheless, the gradual easing of labor markets, coupled with the anticipated drop in energy prices, offers optimism for a reduction in headline inflation in developing economies.

2 Decomposition of Headline Inflation

More than half of the headline inflation stemmed from food items during Q2:FY25. Conversely, the average contribution of energy inflation declined. The contribution of food prices to headline inflation increased to 53% in Q2:FY25, up from 50% in the previous quarter. Meanwhile, core and energy items accounted for around 45% and 1%, respectively (Figure 2).

FIGURE 2: Decomposition of Headline Inflation

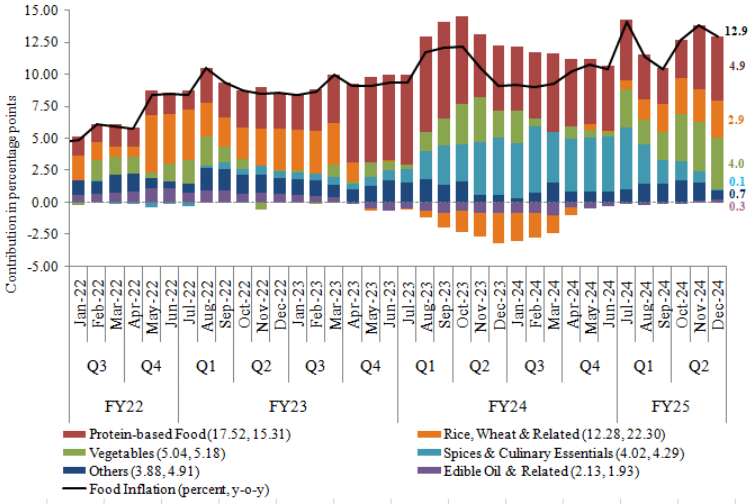


Notes & sources: Numbers in parenthesis represent weights in current and previous baskets, respectively; current weights started from April 2023. BBS and EMFW estimates.

2.1 Decomposition of Food Inflation

Protein-based items [3] **(38.35%), vegetables (30.23%), and cereals (22.87%)** continued to be the primary drivers of food inflation in Q2:FY25 (Figure 3).

FIGURE 3: Decomposition of Food Inflation



Notes & sources: Figures in parenthesis represent weights in current and previous baskets, respectively. Current weights and base 2021-22=100 was started from April 2023, prior to that previous base 2005-06=100 has been rebased to 2021-22=100 based on previous weight. BBS and EMFW estimates.

The rise in inflation in Q2:FY25 compared to previous quarter was mainly driven by the protein-based items, staples (rice, wheat), and vegetables. The contribution

[3] Protein-based food items include milk, cheese, fish (fresh and dry), egg, meat (beef, mutton, duck, hen), peas, lentils etc.

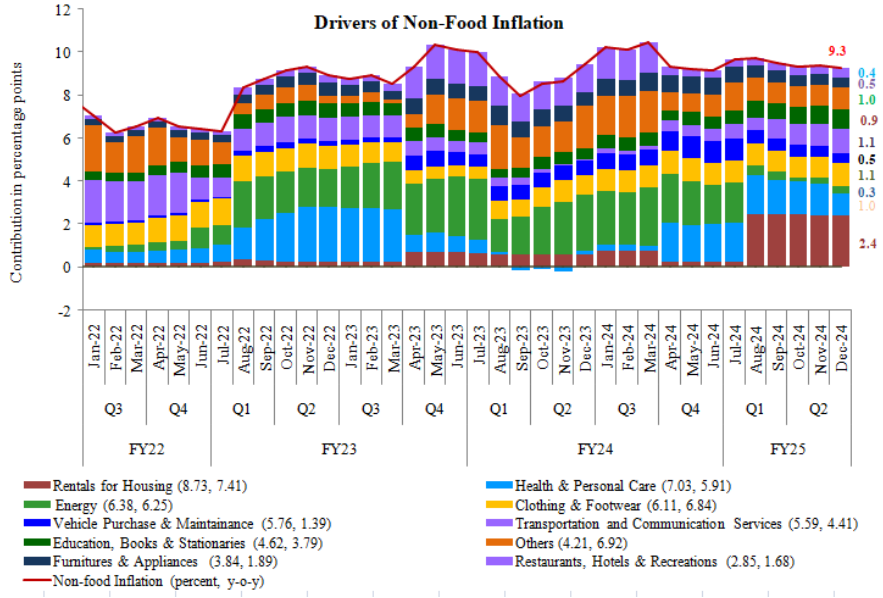
of cereals, which emerged significantly in Q1:FY25, continued and became even more pronounced in Q2:FY25.

However, the spices and culinary essentials have experienced a significant drop in Q2:FY25, contributing on an average 6.13% compared to 26.16% in Q1:FY25. The other categories, such as edible oil and related products, had lesser impacts on persistently high overall food inflation in this quarter.

2.2 Decomposition of Nonfood Inflation

Nonfood inflation has decreased to 9.26% in Q2:FY25 from 9.50% in Q1:FY25. Energy which had been a major factor in nonfood inflation since mid-2022 started to decline from Q1:FY25, contributing approximately 3.26% in December 2024 which was 27.30% in December 2023 (Figure 4).

FIGURE 4: Decomposition of Nonfood Inflation



Notes & sources: Figures in parenthesis represent weights in current and previous baskets, respectively. BBS and EMFW estimates.

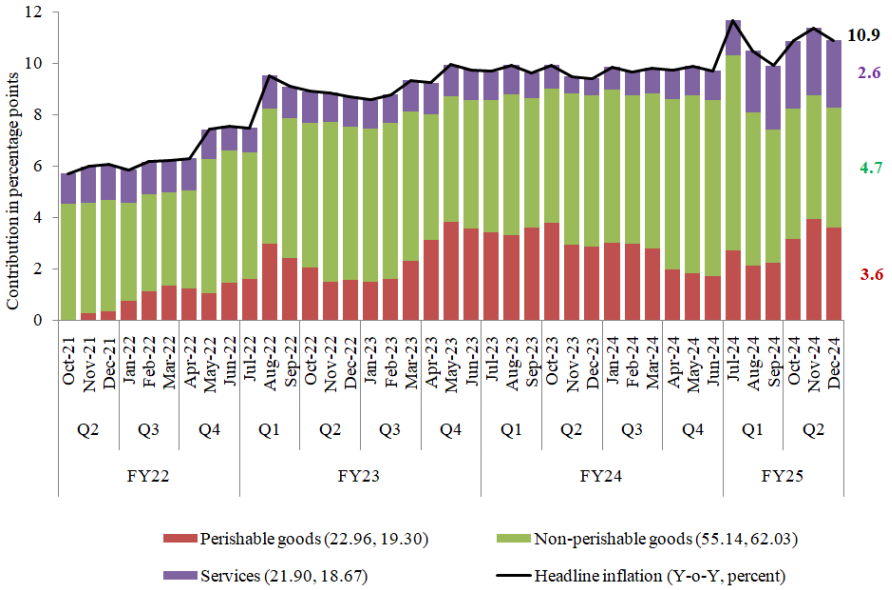
However, Rental costs for housing began contributing significantly from August 2024, with a more pronounced impact on rural rentals than urban. This upward trend appears to have persisted in subsequent months. Meanwhile, the remaining categories have exhibited relative stability throughout Q1 and Q2 of FY25.

3 Product Wise Drivers of Headline Inflation

3.1 Goods (Perishable and Non-perishable) and Services

Compared to services and non-perishable goods, contribution of perishable goods[4] to headline inflation increased during Q2:FY25.

FIGURE 5: Contribution of Goods and Services



Notes & sources: Figures in parenthesis represent weights in current and previous baskets, respectively; current weights started from April 2023. BBS and EMFW estimates

In December 2024, the contribution of perishable goods to headline inflation stood at 33%, which was 23% in September 2024. Meanwhile, in December 2024, the contribution of services and non-perishable goods to headline inflation declined to 24% and 43%, from 25% and 52% respectively in September 2024 (Figure 5).

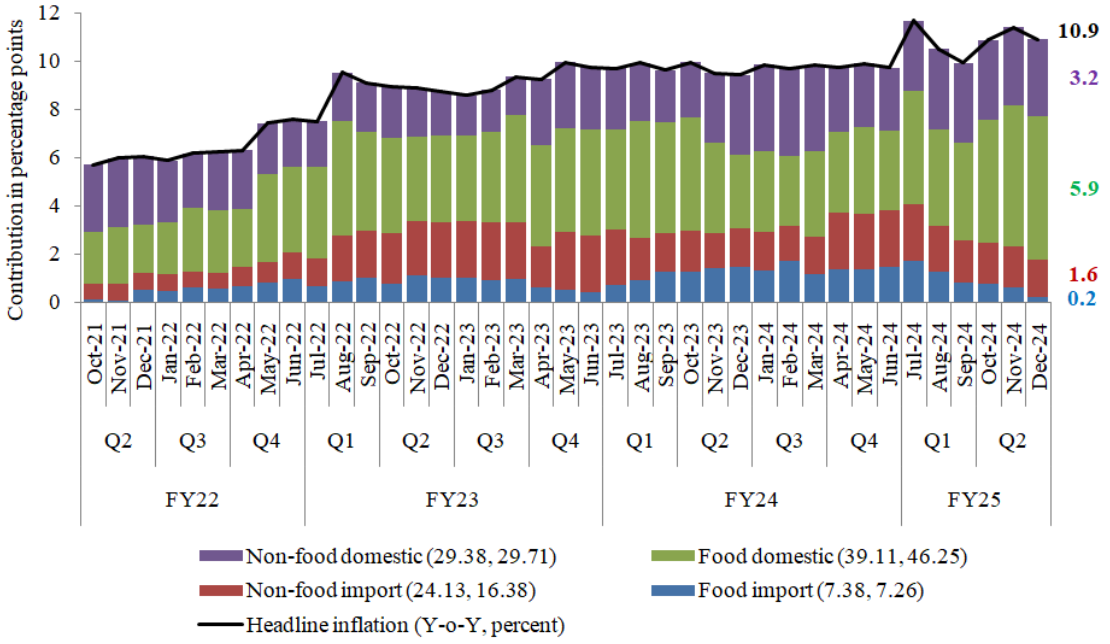
3.2 Import-concentrated Items

Contribution of import-concentrated items[5] to inflation started to increase in August 2022, mainly due to the rise in international prices. In December 2024, the contribution of import-concentrated items to inflation decreased to 16% from 26% in September 2024 (Figure 6). Meanwhile, the contribution of domestic items to inflation increased to 84% from 74% in September 2024.

[4] Perishable goods are those that begin to spoil without refrigeration or freezing within seven days.

[5] Items which are fully or partially imported are classified as import-concentrated items.

FIGURE 6: Contribution of Import-concentrated Items



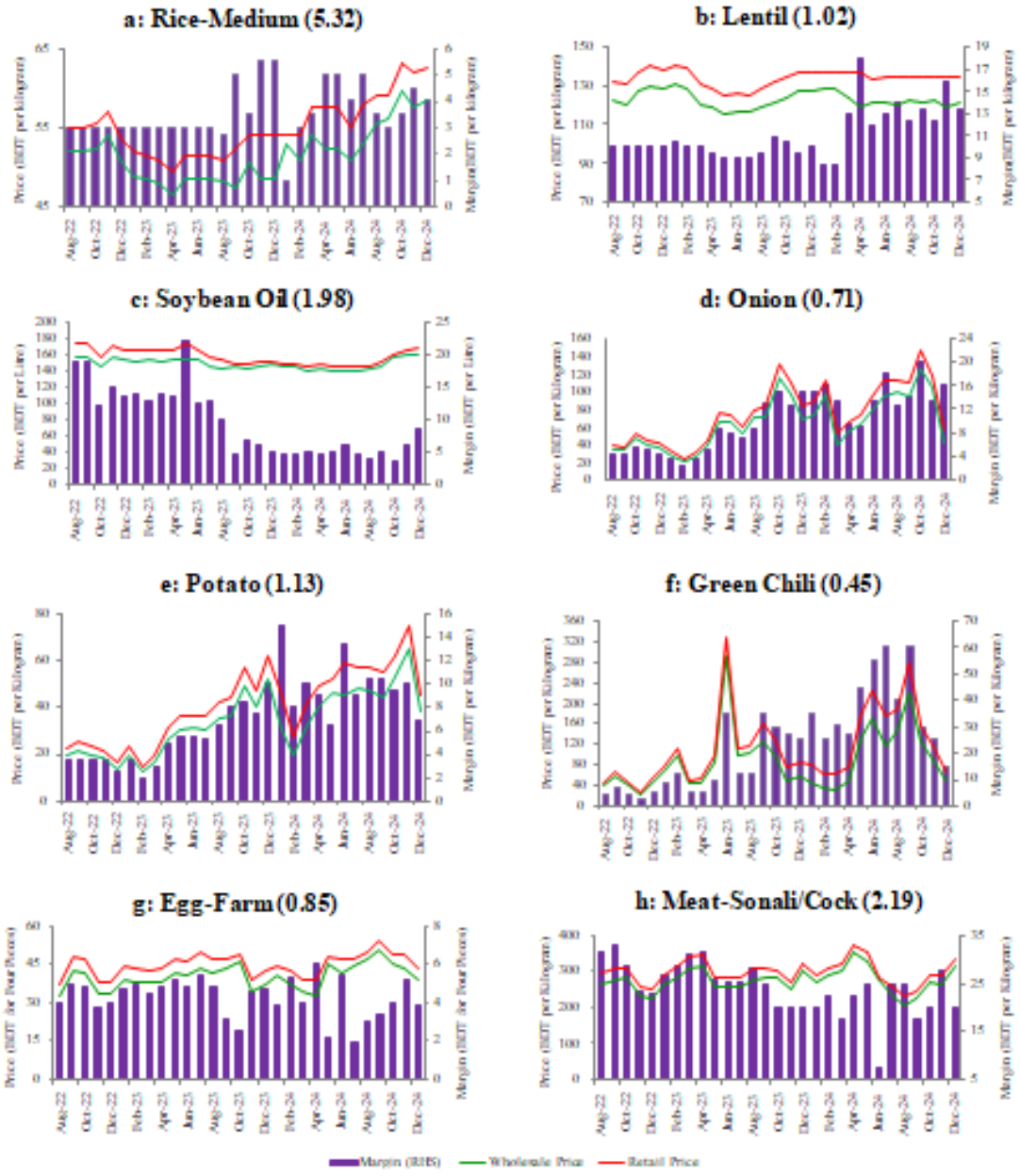
Notes & sources: Figures in parenthesis represent weights in the current and previous baskets, respectively; current weights started from April 2023. BBS and EMFW estimates.

4 Retail and Wholesale Prices of Selected Commodities

The margins[6] for some selected commodities alongside their retail and wholesale prices are presented in Figure 7. In Q2:FY25, vegetables recorded an overall price decline compared to Q1:FY25. Notable price reductions were observed in green chili, onion, and potato. Conversely, prices in the meat market remained elevated, with *Sonali* chicken experiencing an upward trend during the quarter. Meanwhile, the prices of lentils and soybean oil remained largely stable over the past few months, maintaining this pattern throughout the quarter.

[6] Margins are the difference between retail and wholesale prices.

FIGURE 7: Retail and Wholesale Prices of Selected Commodities

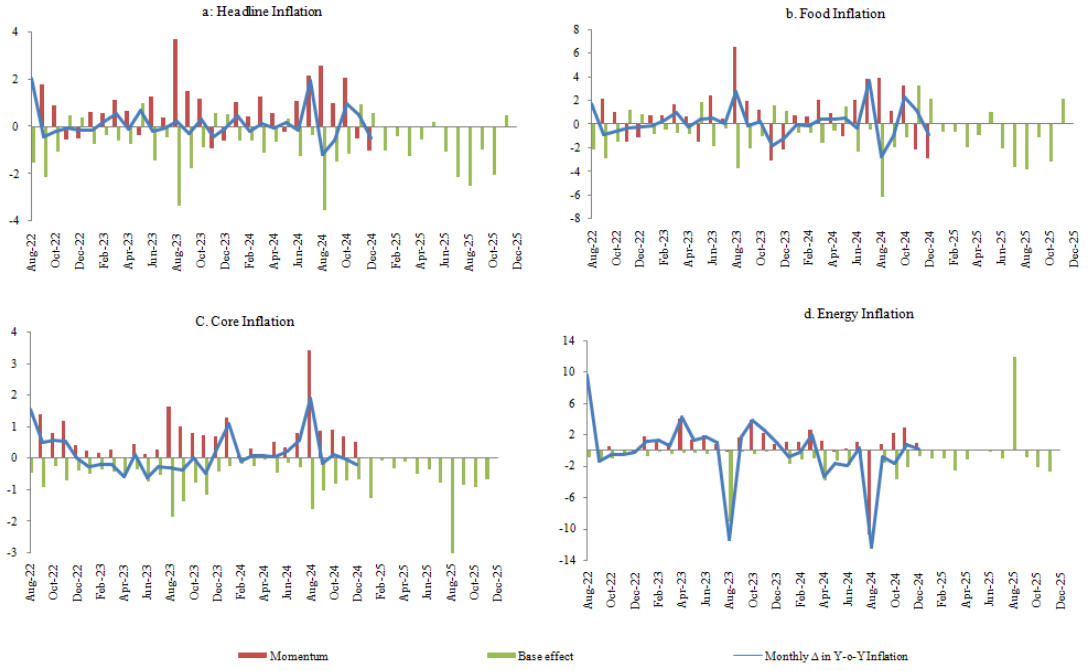


Notes & sources: Margin= Retail Price–Wholesale Price. Figures in parentheses denote the corresponding weight in the current basket. Department of Agricultural Marketing (DAM).

5 Base and Momentum Effects, Diffusion Index and Kernel Density Estimates of Inflation

In Q1:FY25, large price momentum dominated base effects[7] which exhibited rising inflation rate in Bangladesh across all categories.

FIGURE 8: CPI Inflation–Momentum and Base Effects



Sources: BBS and EMFW estimates

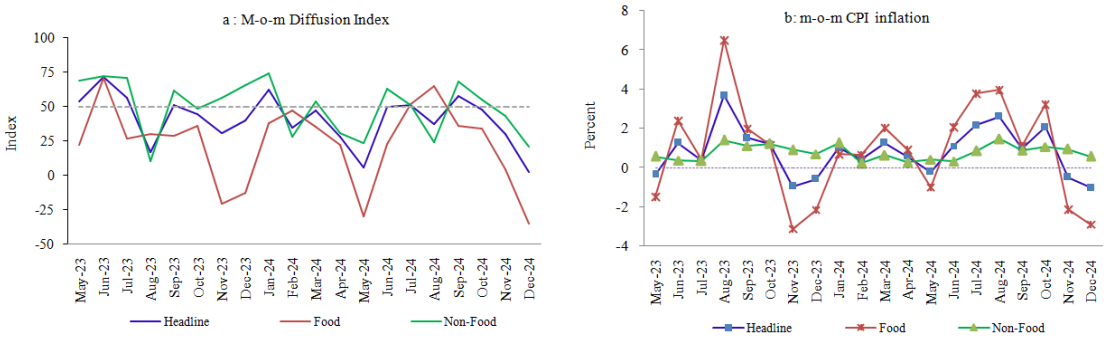
During Q2:FY25, inflation eased slightly but has yet to moderate fully. In October 2024, the positive momentum effect remained prevalent across all categories, causing a sharp increase in inflation at the beginning of the quarter. However, in the subsequent two months, headline and food inflation experienced negative momentum effects. Core inflation was primarily influenced by a favorable base effect, while energy inflation saw a slight increase due to a positive momentum effect. By December 2024, both base and momentum effects were favorable across all inflation categories.

Looking ahead, all four types of inflation will continue to exhibit favorable base effect in the next twelve months aside from a few exceptions.

[7] See Bangladesh Bank (2024a),European Central Bank (2005) and Bangladesh Bank (September 2021) for details.

Diffusion indices[8] for all categories declined in Q2:FY25. This fall in diffusion indices indicates that a larger number of items within the overall CPI basket experienced price decreases(Figure 9). Consequently, month-on-month headline and food inflation turned negative during this quarter. In December 2024, items with declining prices accounted for approximately 33% of the total weight, while within the food category, such items represented around 73% of the total weight.

FIGURE 9: Diffusion Indices



Notes & sources: A value above 50 of diffusion index indicates a broader expansion or generalization of price increases, whereas a reading below 50 indicates a broader drop in prices across items. BBS and EMFW estimates.

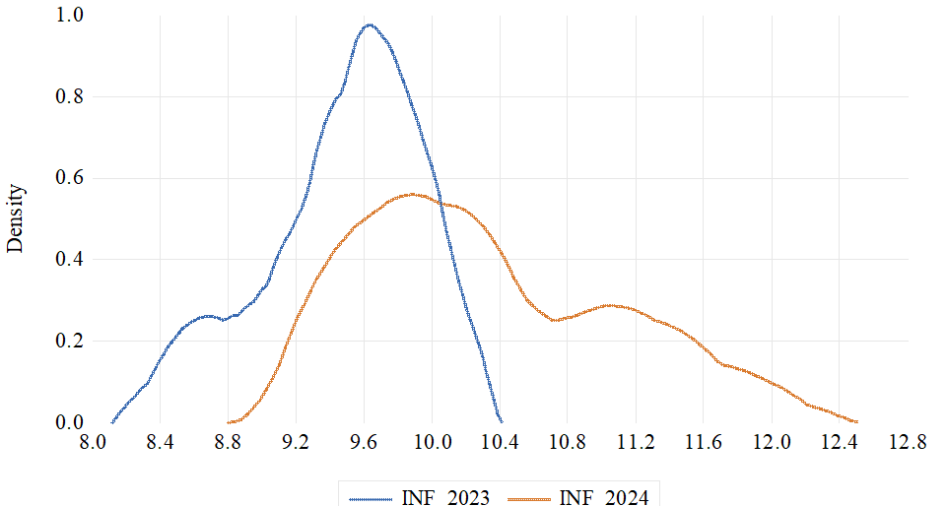
The Kernel Density Function (KDF[9]) for y-o-y headline inflation in 2024 shows a rightward shift, with inflation rates mainly concentrated around 10%, reflecting higher and more sustained inflation levels compared to 2023.

In 2023, the distribution was narrower with a peak around 9.5%, indicating that inflation rates were more concentrated around this level. The broader spread of values suggests higher variability in inflation rates throughout this year. On the other hand, in 2024, the distribution shifted rightward, reflecting a higher mean inflation rate. While most inflation values were concentrated around 10%, the distribution also shows additional peaks around 10.5% and 11.7%, indicating that inflation was more persistent at higher levels. The standard deviation appears smaller in 2024 than in 2023, suggesting reduced variability but at elevated inflation levels.(Figure 10).

[8]The CPI diffusion index (m-o-m), a measure of dispersion of price changes, categorises items in the CPI basket according to whether their prices have risen, remained stagnant or fallen over the previous month. See Reserve Bank of India (April 2024) and Bangladesh Bank (July 2024) for details.

[9]A KDF shows the distribution of data, indicating where the data is concentrated (steep parts) and how far it spreads out (tail length). Steeper parts indicate higher density and mean value, and longer tails show spread or variation of the data. See Bangladesh Bank (2024b) for details.

FIGURE 10: Kernel Density Estimates



Sources: BBS and EMFW estimates.

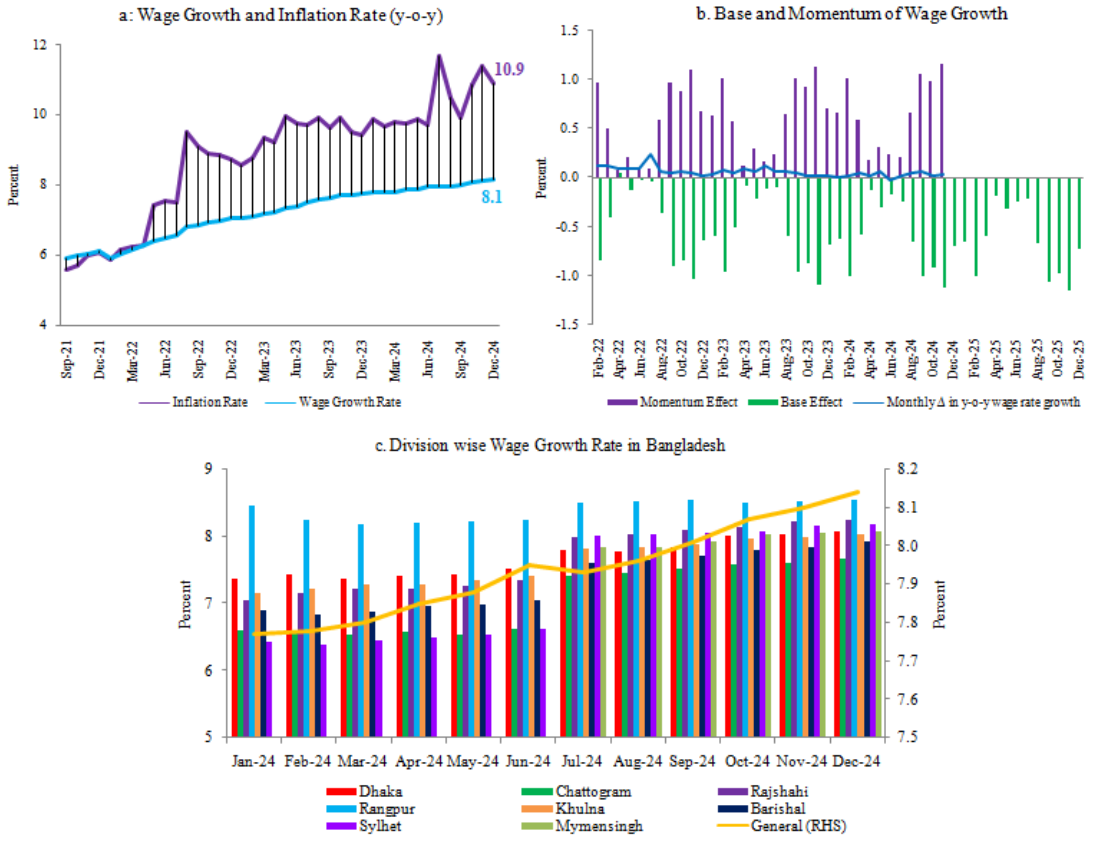
6 Wage Dynamics

Since April 2022, inflation has consistently outpaced wage growth, leading to reduced purchasing power for consumers and a subsequent fall in real income (Figure 11.a). This trend persisted in Q2:FY25, with inflation reaching 10.9% in December 2024, while wage growth stood at 8.1%, maintaining a significant gap that constrained purchasing power. The negative base effect continued to suppress wage growth throughout the quarter, despite occasional fluctuations in the momentum effect(Figure 11.b), resulting in sluggish wage growth progression.

However, general wage growth exhibited a slightly upward trajectory, reaching approximately 8.2% by December 2024. Among divisions, Rangpur and Rajshahi recorded relatively higher wage growth, while other regions experienced moderate increases (Figure 11.c).

Despite these improvements, wage growth remained insufficient to keep pace with inflation, thereby limiting real income gains and sustaining pressure on household purchasing power.

FIGURE 11: Wage Dynamics



Sources: BBS and EMFW estimates

7 Conclusion

Inflation in Bangladesh reached a 12-year high in the first quarter of FY25. In the second quarter, inflationary pressures persisted, with headline inflation averaging around 11.1%. Food inflation was the primary contributor during this period, driven by rising prices of protein-based items and cereals. Perishable goods also played a significant role in sustaining inflation. While non-food inflation showed a slight reduction, it remained elevated, continuing to exert pressure on households. The impact of imported goods on inflation declined, offering some relief, but domestic food and service prices remained high. Additionally, slow wage growth continued to limit real incomes and household purchasing power. By the end of the quarter, the gap between inflation and wage growth had narrowed slightly, though real incomes remained under significant pressure. Despite some signs of stabilization, inflation remains high, presenting an ongoing challenge for the economy.

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