

Inflation Dynamics in Bangladesh July-September 2024

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Inflation Dynamics in Bangladesh July–September 2024 (Q1:FY25)

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Inflation Dynamics in Bangladesh

1 Introduction

Bangladesh Bank's foremost priority is maintaining low and stable inflation to ensure sustained economic growth and financial stability of the Bangladesh economy. Understanding the underlying causes of fluctuations in consumer prices and wage levels is essential for the development of effective monetary policy. The Bangladesh Bureau of Statistics (BBS) provides several indices that reflect the price dynamics within the economy. This report delves into the key drivers of inflation and wage trends in Bangladesh, offering insights into the factors shaping the country's economic landscape.

In Q1:FY25, Bangladesh's year-on-year Consumer Price Index (CPI) headline inflation surged to about 10.7%.² July 2024 saw inflation reach a 12-year high at 11.7%, and in September 2024, it remained high at 9.9%, compared to 9.6% in September 2023(Figure 1a). This persistent inflation was fueled by high commodity and energy prices, as well as currency depreciation (Asian Development Bank, 2024). Food inflation peaked at 14.1% in July 2024, the highest in 13 years, before gradually decreasing to 11.4% in August and 10.4% in September, though it remained in double digits. Non-food inflation increased modestly, averaging 9.6% in Q1:FY25, up from the previous quarter. International Monetary Fund

²At present, based on the Classification of Individual Consumption by Purpose (COICOP) of the United Nations Department of Economic and Social Affairs, BBS produces the Consumer Prices Index (CPI) of Bangladesh's economy, considering 2021-22 as base and weights are derived from the Household Income and Expenditure Survey (HIES) 2016-17 of BBS. Likewise, the Wage Rate Index (WRI) is prepared by BBS with the same base period as CPI and associated weights are obtained from the BBS Labour Force Survey (LFS) 2016–17. This report includes CPI data up to September 2024 of BBS. Numbers are rounded to one decimal point. Q1:FY25 represents July–September, 2024.

(2024) in its latest World Economic Outlook (July 2024) highlighted slower global disinflation due to higher-than-average services price inflation, tempered somewhat by stronger disinflation in goods prices.



FIGURE 1: CPI Inflation

Source: Bangladesh Bureau of Statistics (BBS)

Month-on-month (m-o-m) headline inflation slightly moderated at the end of Q1:FY25. After a sharp increase in August 2024, m-o-m food inflation decreased in September 2024 (Figure 1b) while non-food m-o-m inflation also showed similar downward movement at the end of Q1:FY25.

2 Decomposition of Headline Inflation

More than half of the headline inflation stemmed from food items during Q1:FY25. Conversely, the average contribution of energy inflation declined. The contribution of food prices to headline inflation stood at 51% in September 2024, while the contributions of core and energy items were 45% and 5%, respectively (Figure 2).

2.1 Decomposition of Food Inflation

Cereals and vegetables emerged as the significant contributors of the food inflation during Q1:FY25 along with protein-based³ food items. In Q4:FY24, food inflation was primarily driven by protein-based items and spices & culinary essentials. However, in Q1:FY25, inflation in rice, wheat and related, and

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



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.

vegetables partially offset the decrease in inflation for protein-based items and spices & culinary essentials, resulting in persistently high overall food inflation (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.

2.2 Decomposition of Nonfood Inflation

Nonfood inflation increased at approximately 9.5% in Q1:FY25 from 9.15% in Q4:FY24. However, the impact of energy prices declined, which had been a major factor in nonfood inflation since mid-2022 (Figure 4). Rental for housing started contributing prominently from August 2024, contributing approximately 26% in September 2024. Besides, health and personal care expenses continued to exert significant inflationary pressure on nonfood items, contributing approximately 17%.



FIGURE 4: Decomposition of Nonfood Inflation

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

3 Product Wise Drivers of Headline Inflation

3.1 Goods (Perishable and Non-perishable) and Services

Compared to non-perishable goods, contribution of services and perishable goods⁴ to headline inflation increased during Q1:FY25. In September

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

2024, the contribution of services and perishable goods to headline inflation stood at 25% and 23% respectively, which was 12% and 18% in June 2024. Meanwhile, the contribution of non-perishable goods to headline inflation declined to 52% in September 2024 from 70% in June 2024 (Figure 5).



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

3.2 Import-concentrated Items

Contribution of import-concentrated items⁵ to inflation started to increase in August 2022, mainly due to the rise in international prices. In September 2024, the contribution of import-concentrated items to inflation decreased to 26% from 39% in June 2024 (Figure 6). Meanwhile, the contribution of domestic items to inflation increased to 74% from 61% in June 2024.

⁵Items which are fully or partially imported are classified as importconcentrated 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

Margins⁶ for some selected commodities are reported in Figure 7 along with their retail and wholesale prices. In Q1:FY25, on average most commodities experienced a price increase compared to Q4:FY24. The price of green chili remained substantially elevated throughout this period. Furthermore, the price of onion surged in July 2024 before experiencing a slight decline by the end of the quarter. During the quarter, the margins for medium rice and onion initially increased before subsequently decreasing. The margin for green chili surpassed its June 2024 peak, then declined, and then increased again. Meanwhile, the margin for eggs (farm) first declined before stabilizing, while meat-sonali/cock experienced a steady increase from June 2024 and remained stable thereafter. Potatoes, soybean oil, and lentils maintained a steady margin during Q1:FY25.

⁶Margins are defined as 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 FY24, large food and core price momentum dominated over their respective base effects⁷ which exhibited rising inflation rate in Bangladesh.



FIGURE 8: CPI Inflation–Momentum and Base Effects

Sources: BBS and EMFW estimates

During Q1:FY25, both the base and momentum effects exhibited significant volatility, marked by a sharp increase in inflation at the beginning of the quarter. In July 2024, headline, food and core inflation spiked as large adverse momentum effect dominated the base effect. In the subsequent month, favorable base effect outweighed the momentum effect in case of headline and food inflation leading to a reduction in both. Moreover, energy inflation saw a sharp decline in August 2024, driven by a substantial negative momentum effect. In contrast, core inflation surged as a large momentum effect dominated the beneficial base effect.

⁷See Bangladesh Bank (2024a) and European Central Bank (2005) for details.

In September 2024, a favorable base effect was dominant across all three categories: food, core, and energy inflation leading to a decline in headline inflation.

Looking ahead, all four types of inflation will continue to exhibit favorable base effect in the next twelve months aside from a few exceptions. However, positive momentum effect still remains more pronounced in case of food and core inflation.

Diffusion indices⁸ for headline and non-food picked up at the end of Q1:FY25. The rise in diffusion indices indicates that more items from the overall CPI basket saw a price rise (Figure 9).





Notes \mathcal{C} 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 headline inflation in 2023 shows a broader distribution with a larger standard deviation indicating inflation rates were spread over a wide range with a peak around 9.5%.

The shape of the Kernel Density Function has shifted in 2024, with a larger mean value and a smaller standard deviation compared to 2023. Although inflation

⁸The CPI diffusion index, 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) for details.

⁹A 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. Kernel density estimation is a useful statistical tool for creating a smooth curve given a set of data. See Bangladesh Bank (2024b) for details.

rates were mostly concentrated around 10% in 2024, there were some values that remained around 10.5% and 11.7%, represented by the smaller peaks in 2024 (Figure 10).



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). The momentum effect of the Wage Rate Index (WRI) was offset by the base effect, causing slower wage growth since August 2023 (Figure 11.b). However, in May 2024, the momentum effect marginally outweighed the base effect, indicating a modest uptick in wage growth. The projected base effects following July 2024 indicate substantial negative magnitudes, signifying adverse implications for wage growth, whereas April and May 2025 exhibit favorable base effects. Among the overall wage growth rates of seven divisions in Bangladesh Figure 11.c), Dhaka and Rangpur stand out with the highest wage growth rates in September 2024.



FIGURE 11: Wage Dynamics

Sources: BBS and EMFW estimates

7 Conclusion

Bangladesh continued to face persistent inflationary pressures during Q1:FY25, with headline inflation reaching 11.7% in July 2024, the highest in 12 years, before moderating to 9.9% in September 2024. Food inflation surged, hitting 14.1% in July 2024 before decreasing to 10.4% by the end of the quarter. Non-food inflation remained steady, rising slightly to 9.5% in Q1:FY25 from 9.2% in Q4:FY24. Perishable goods contributed more to inflation, increasing from 18% to 23%, while the impact of import-concentrated items dropped from 39% to 26%. This provided some relief but didn't fully offset the rise in food and service prices. Additionally, wage growth remained sluggish, with real income continuing to decline as inflation outpaced wage increases since April 2022. However, there was a slight uptick in wage growth in September 2024, particularly in the Dhaka and Rangpur divisions, providing a modest glimmer of hope for improving purchasing power.

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