



NATIONAL RESERVE BANK OF TONGA

Tonga Inflation Nowcast

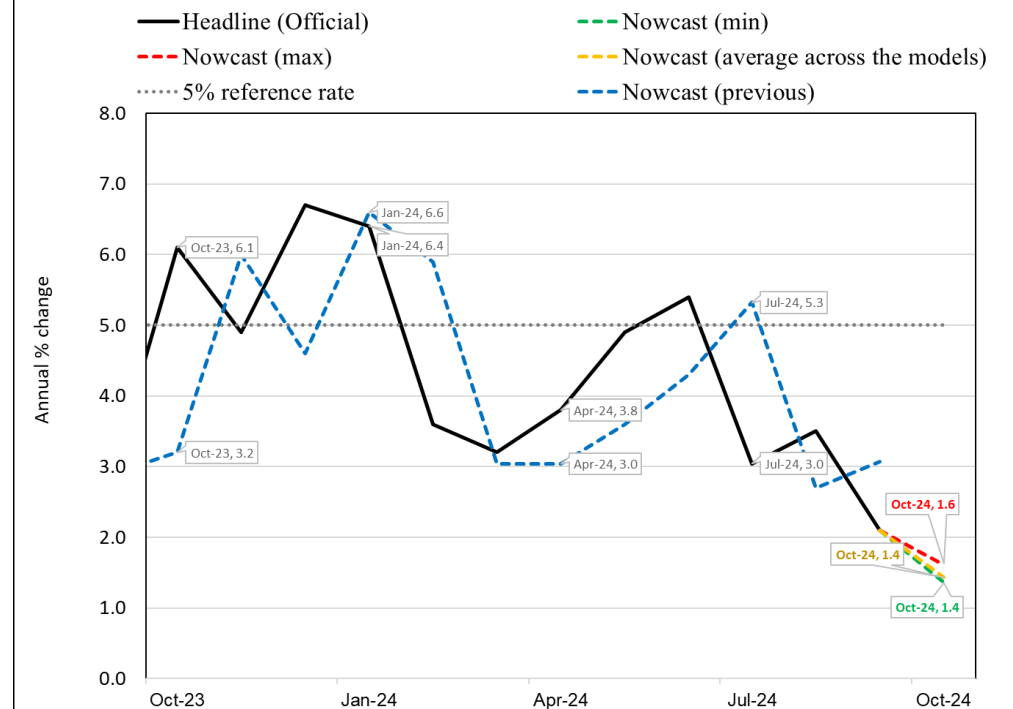
The Tonga Inflation Nowcast report is not the official forecast of the National Reserve Bank of Tonga. Rather, it is solely an econometric model-based estimates using the latest available data. The explanatory variables in the models are chosen based on their statistical significance, randomness property, stationarity, and appropriateness in explaining inflation in the current forecasting period thus they are subject to change. The variables used for estimation are:

- Domestic food inflation
- Imported food inflation
- New Zealand dairy products inflation
- New Zealand construction inflation
- Oil price inflation
- Nominal Effective Exchange Rate
- Lags of inflation

Given the different frequency and lag in data release (i.e. NZ construction quarterly data), another model is estimated without the NZ construction data to ensure consistency in the nowcast, and enable the decomposition of the inflation nowcast and changes in the inflation nowcast. Nonetheless, the other high frequency indicators are generated for the nowcasting period by using the *Automatic ARIMA method*.

The econometric estimations are however independent from any subjective views of the Banks's staff and its Board's members.

Figure 1: Inflation Nowcast for 2024M10



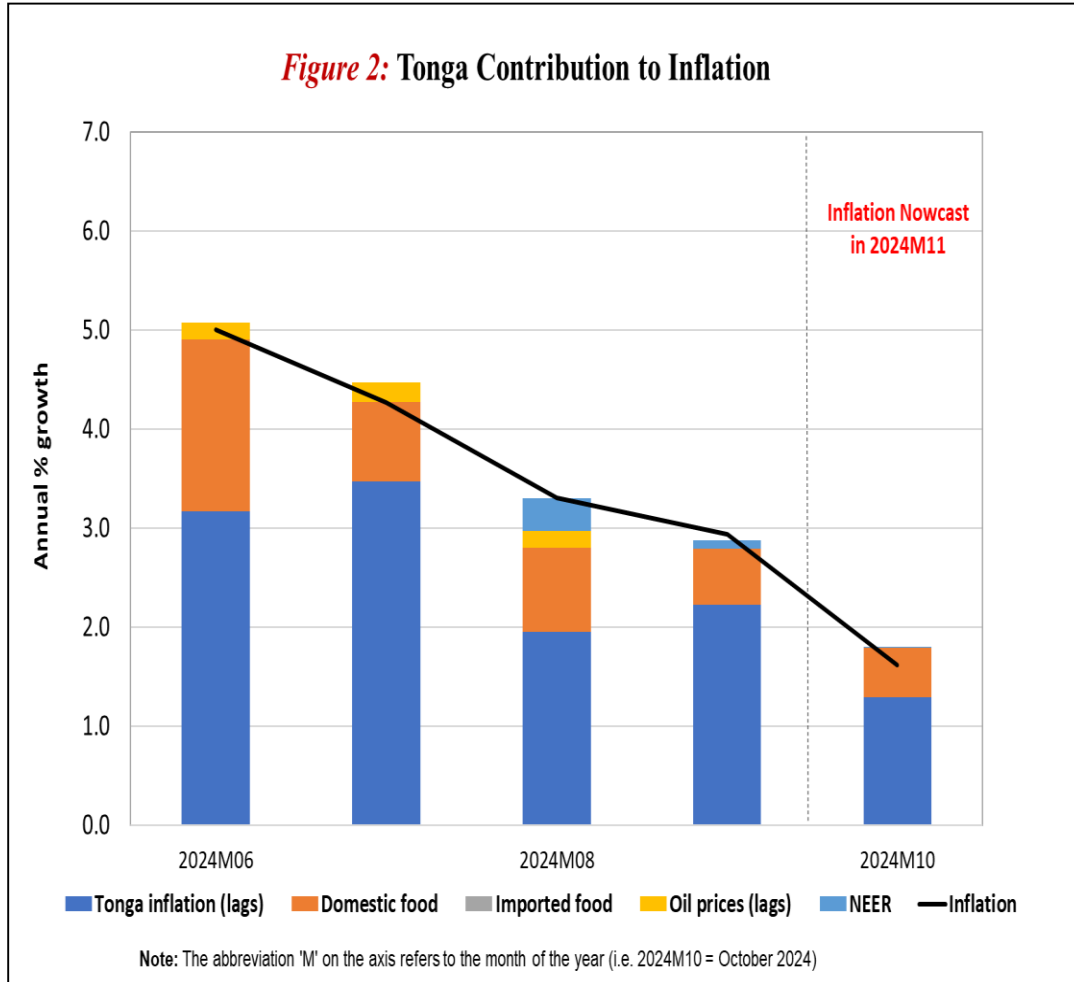
Source: Tonga Statistics Department; National Reserve Bank of Tonga.

Notes: High frequency (HF) data is available until 202409. Nowcast was generated in 202411 upon the release of HF data.



Contribution to Inflation Nowcast

Figure 2: Tonga Contribution to Inflation

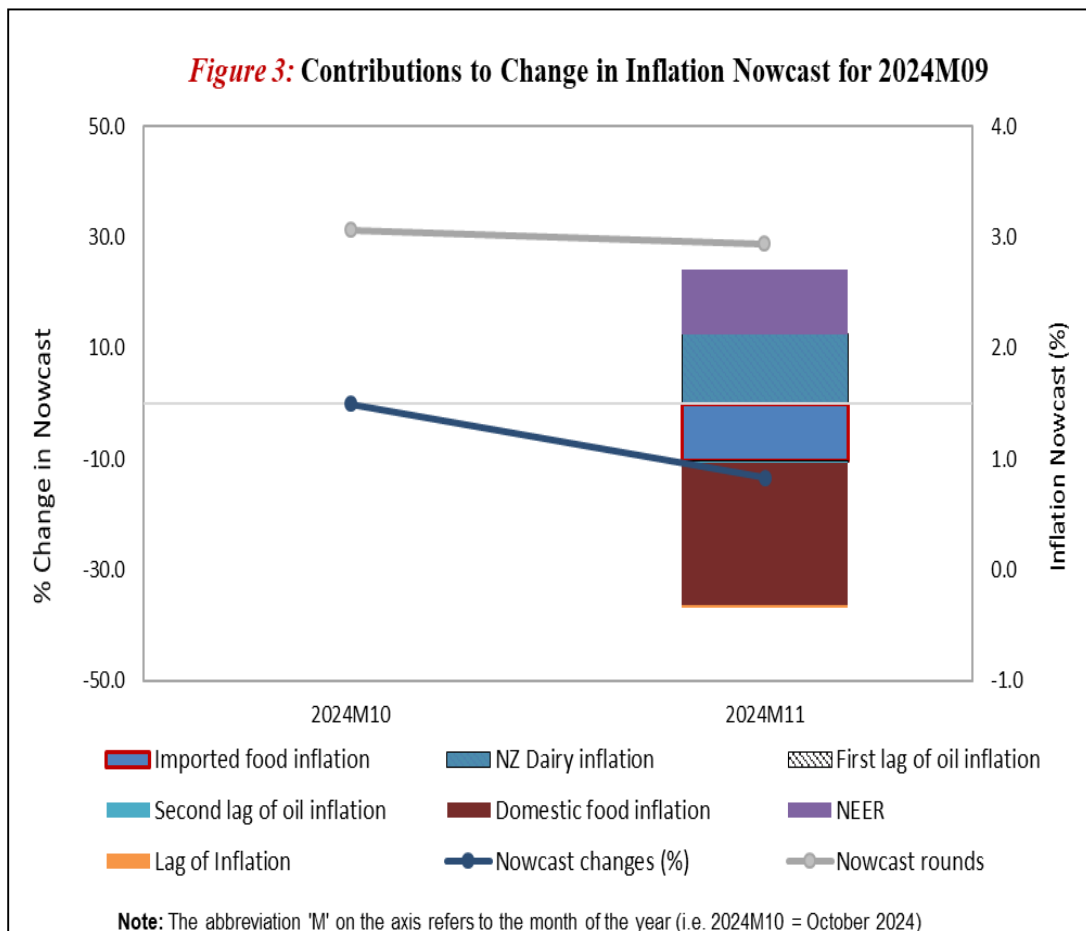


- The inflation nowcast for **2024M10** with the latest available data September 2024, shows that the headline inflation will remain below **the 5% reference rate**. The main contributors to the headline inflation in the upcoming month will be:
 - ✓ Lags of inflation (persistence of inflation)
 - ✓ Domestic food prices.
- Based on the econometric model, the main contributors to the headline inflation in September 2024 were lags of inflation, domestic food inflation, and NEER.
- Domestic food prices continued to fall in September 2024 however prices are still relatively high compared to the pre-pandemic level. Overall, domestic food prices contributed approximately 1.3 percentage points (pps) to the headline inflation in September 2024.
- Demand and consumption decreased after the festive season ends, easing some inflationary pressures. Even though the local supply improves due to the current harvest season of various root crops and vegetables, the inflationary pressures are expected to rise during the Christmas Holiday season as demand and consumption resurface. At the same time, the current cyclone season and high vulnerability to other natural hazards pose risk to the local food supply and prices.
- On the other hand, uncertainties and risks are skewed to the downside given the potential ripple effect of the escalating Israel-Hamas war on the energy markets, and the global supply and distribution of commodities.



Change in Inflation Nowcast for 2024M09

Figure 3: Contributions to Change in Inflation Nowcast for 2024M09



- **The main contributors to the change in the inflation nowcast for September 2024 are:**
 - ✓ Domestic food inflation
 - ✓ Imported food inflation (including NZ Dairy productions inflation)
 - ✓ NEER
- The annual rate of change in price levels (headline inflation) dropped to its lowest in September 2024 since the 1.3% in January 2021, indicative of a moderate decline in the cost of living. Nonetheless, the cost of living still remains relatively high compared to pre-pandemic levels, further highlighting the broad-based inflationary pressures and accumulation of inflationary effects over the years.
- Domestic food prices increased over the year as projected, but at a gradual pace for September 2024. The elevated food prices further indicate the lingered impacts of the El Nino event on the local food supply from 2023 to 2024, along with the stronger demand and consumption levels compared to the same period in the previous year. At the same time, it is reflective of the high cost of living that chain local suppliers (largely in the informal sector) to keep prices at high level.
- The overall inflation for imported food and NZ dairy products however decreased at a slower rate, although domestic demand and consumption slowed down as the festive season ended. This is reflective of the escalating risks and pressures on commodity prices, as well as the shipping logistics and freight charges resulting from the ongoing war.
- NEER declined in September 2024 as the Tongan Pa'anga depreciated against all major currencies except the USD.