

In the current period, amid robust actual economic activity, financial market participants have significantly revised their short-term growth expectations upward compared to the previous quarter. It is noteworthy that their long-term growth expectations have also been adjusted upward.

tively. In the long-term outlook, the median forecast for real GDP growth in 2026 has increased by 0.2 pp to 5.5%, while the average rose by 0.1 pp to 5.4% (see Figure 2.4.3).

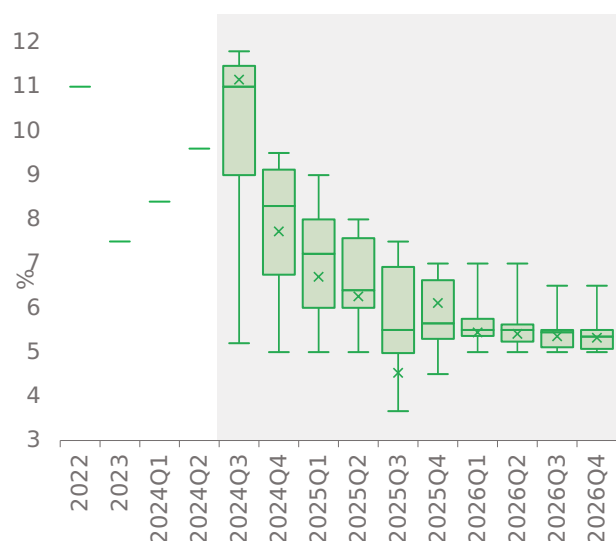


Figure 2.4.3. Actual real GDP growth (2022-2024Q2) and the distribution of market participants' forecasts for 2024Q3-2026Q4

Source: NBG, financial market participants, GeoStat

BOX 3. ESTIMATION OF THE NEUTRAL RATE IN GEORGIA

How tight is the monetary policy of the National Bank? What is the expected interest rate that economic participants should anticipate in the long run, after the dissipation of cyclical shocks?

Under an inflation-targeting regime, an assessment of the neutral rate can address such critically important questions. In the economic literature, the neutral rate is defined as the equilibrium rate that is formed in the market when cyclical factors in the economy are dissipated, output is at its potential, and inflation is maintained at the target level. Accordingly, if the monetary policy rate exceeds its neutral level, the stance of monetary policy is considered tight; whereas if it is lower, it stimulates aggregate demand and, all else being equal, accelerates inflation. In turn, it is the neutral rate that determines the optimal level of the monetary policy rate. Thus, inflation-targeting central banks, including the National Bank of Georgia, which primarily base their decisions on the Taylor-type monetary policy reaction function, consider the neutral rate to be a key variable (see FPAS documentation).¹¹ However, the neutral rate is an unobservable variable that needs to be estimated accordingly. When discussing it, it is important to consider its components. According to the Fisher equation, the nominal neutral rate can be expressed as follows:

$$\text{Nominal neutral interest rate (i}^N\text{)} = \text{Inflation expectations (}\pi^e\text{)} + \text{Real neutral interest rate (r}^*\text{)}$$

In turn, there are long-term and relatively short-term definitions for both inflation expectations and the real neutral rate. Specifically, regarding inflation expectations, under a credible monetary policy, we consider the inflation target to be a reliable proxy for long-term inflation expectations, while the expected year-over-year inflation after four quarters serves as a proxy for short-term inflation expectations. As for the real neutral rate, we refer to its relative long-term indicator as the natural or equilibrium (steady-state r^*) rate. It should be noted that, according to neoclassical economic growth theory, the natural real rate equates the demand and supply of savings in the long term and is driven by fundamental factors such as demographic conditions, technological progress, productivity, and others. In the relatively short term, the trend of the real neutral rate is more flexible in response to economic shocks.

¹¹ Tvalodze, S., Mkhatriashvili, S., Mdivnishvili, T., Tutberidze, D., & Zedginidze, Z. (2016). The National Bank of Georgia's forecasting and policy analysis system. Available at: <https://nbg.gov.ge/fm/fpas/nbg-wp-2016-01.pdf?v=8htvn>

It should be noted that the estimation of the real neutral rate can be approached in different ways. One such approach is the real uncovered interest rate parity (real UIP), which is often used by inflation-targeting central banks. UIP is essentially a no-arbitrage condition, which implies that, given exchange rate expectations, risk-adjusted returns should be equal in both domestic and foreign equity markets. According to the uncovered interest rate parity, the neutral interest rate can be expressed as follows:

$$r^* = r^{*,\text{foreign}} + \text{Equilibrium of the Country Risk Premium} +$$

Expected Trend Change of RER

The estimation of the neutral rate depends on assessing the equilibrium levels of various unobservable variables, such as the foreign neutral interest rate, the country's risk premium, and the expected changes in the real exchange rate. In the case of Georgia, the evaluation of these variables is grounded in both empirical and theoretical foundations and is as follows:

- In the case of **the foreign equilibrium interest rate**, the dynamics of US interest rates are considered due to their significance to both the Georgian and global economies. The estimate of the US neutral rate aligns with the communications of the US Federal Reserve System and the long-term expectations of US financial markets. In particular, recently, as a result of the pandemic and post-pandemic shocks, the estimate of the neutral rate in the US has been revised upward, and the current estimate of its equilibrium level is within the range of approximately 0.5-1.5%. In turn, considering capital mobility, a high neutral rate in the US also pushes the domestic real neutral rate to increase.
- **The UIP risk premium**, on the other hand, includes both Georgia's sovereign risk and GEL exchange rate risks. The evaluation of the sovereign risk premium is carried out using the bond index of developing countries (the EMBI Index), which has been improving since 2009. As for the exchange rate risk premium, since this is an unobservable variable, we estimate it using GEMO and empirical methods. Finally, the long-term equilibrium level of the UIP risk premium is in the range of 3.5%, while the short-term trend of the premium is around 3-3.5% and is characterized by relatively high volatility (see Figures 2.4.4. and 2.4.5.).
- **The expected change in the exchange rate** is an important component of the real neutral rate. A strengthening of the exchange rate reduces the real neutral rate, while depreciation has the opposite effect. It should be noted that, after 2022, Georgia's real exchange rate against the dollar and other main trading partner currencies strengthened significantly. This can be explained by both cyclical and fundamental factors. In particular, against the backdrop of strong foreign inflows and structural changes to the economy, as revealed by significantly increased productivity in the trade sector, the long-term equilibrium level of the exchange rate has in-

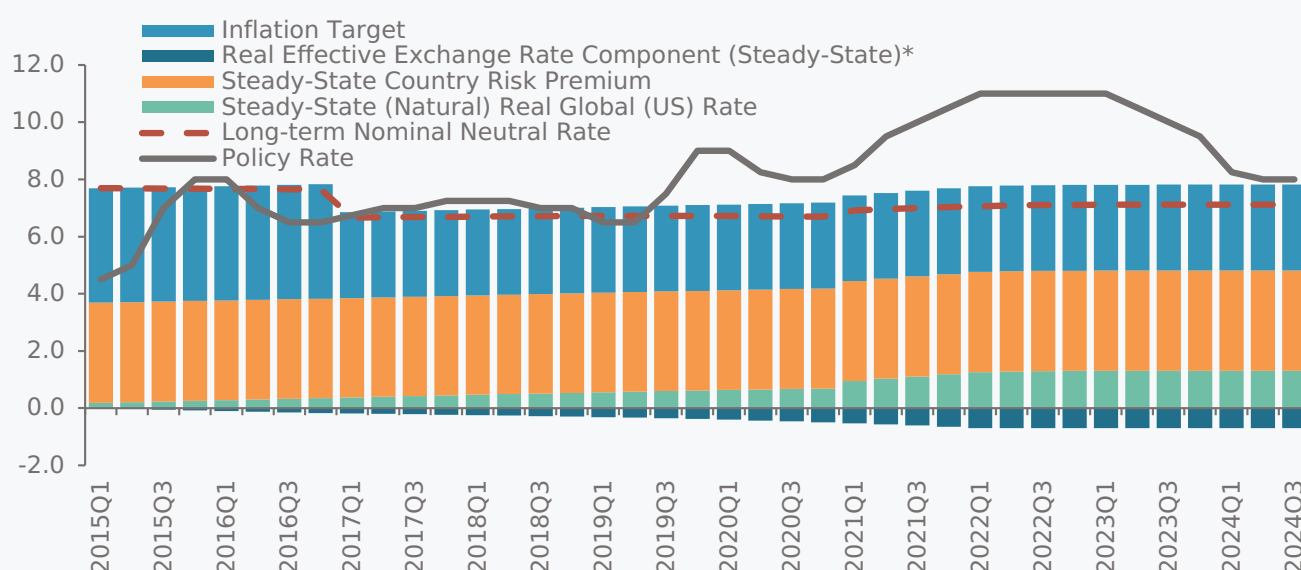


Figure 2.4.4. Decomposition of the long-term neutral rate¹²

Source: NBG

¹² *Based on the Real Effective Exchange Rate (REER) of the real UIP, we assume that the trend depreciation of the currencies of trading partners against the US dollar is zero. A strengthening REER lowers the neutral rate, while depreciation increases it.

creased and is currently estimated to be within the range of 0.5-1% appreciation. However, it should be noted that both geopolitical and internal risks, as well as the normalization of productivity, contribute to high uncertainty surrounding the exchange rate.

Based on the above reasoning and considering that the inflation target is 3%, the nominal long-term neutral rate is approximately 7% (see Figure 2.4.4).

Over the relatively short-term horizon, in consideration of cyclical factors, inflation expectations after four quarters, and the assessment of short-term trends in the aforementioned variables, the neutral rate is much more volatile. Currently, the short-term neutral rate is also estimated to be around 7% (see Figure 2.4.5).

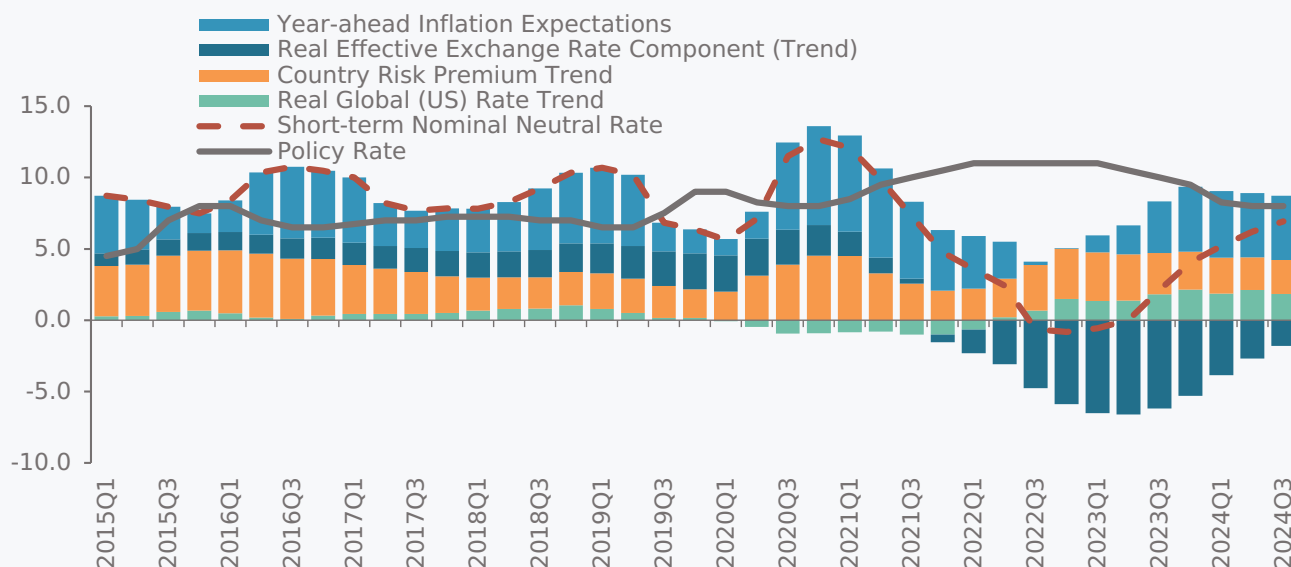


Figure 2.4.5. Decomposition of the short-term neutral rate

Source: NBG