

BOX II.2:

The neutral monetary policy rate

The neutral monetary policy rate —NMPR— is defined as the value to which the MPR is expected to converge once the effects of temporary shocks have dissipated, consistent with GDP on its trend equilibrium path and inflation at target. The estimated rate corresponds to the trend value of a real short-term rate that does not include risk or term premiums. This variable is not observable in practice and must be proxied using different methodologies.

Due to several factors, the NMPR estimate has been revised up in recent years. Between <u>December 2022</u> and <u>December 2023</u>, he nominal NMPR spot value was adjusted from 3.5% to 4%, and the range of values compatible with the NMPR was widened from half a percentage point to one percentage point, reflecting greater uncertainty about it. In <u>September 2024</u>, the latest revision was made, maintaining the values estimated at the end of 2023: a range between 3.5% and 4.5%, using its midpoint, 4%, as the point value for the purposes of the projection scenario.

In an open economy such as Chile's, the NMPR is influenced not only by local conditions, but also by global developments that affect international neutral rates.

In the Board's opinion, today there exists a combination of factors at the global level, which would justify a revision of Chile's NMPR:

- 1. A reduced influence of demographic factors that encourage saving and exert downward pressure on the NMPR, such as increased life expectancy and declining fertility'/;
- 2. Expectations of higher productivity resulting from the adoption of Al in production processes, and its consequent impact on increased investment;
- 3. Prospects for higher fiscal deficits, and therefore lower public savings, in developed economies²/.

Furthermore, increased geopolitical tensions could reverse the processes of international financial integration observed in recent decades, making capital flows more expensive and driving up the NMPR.

The Board's vision is complemented by the updating of the empirical models that are normally used to estimate the NMPR. These models are based on observed data, so they do not necessarily incorporate the factors mentioned above. However, they allow historical developments to be captured and offer a measure of the degree of uncertainty in NMPR estimates. On this occasion, for methodological reasons, the method of Holston, Laubach and Williams (2023)—widely used by other central banks—was included, and the Taylor Rule and Habitual Consumption models were excluded³/. The sample used spans up to the third quarter of 2025. Table II.5 shows that the update yields an average and median of 1.2 for the real NMPR, with an estimation range between 0.9 and 1.7.

^{1/} See Carvalho et al. (2016) for a description of the mechanisms associated with demographic changes that affect real interest rates.

²/ The expected increase in fiscal deficits is explained by higher social security spending, defense spending, and investments in the green transition. See <u>Box I.1</u> f the September 2025 IPoM for a discussion of the increase in defense spending in developed economies, its impact on fiscal deficits and financial conditions.

³/ The Holston, Laubach, and Williams model is estimated using Bayesian methods, in line with <u>Berger and Kempa (2019)</u>. See <u>Arias et al. (2025)</u> for a description of the methodologies. Taylor Rule models are excluded because they give equal weight to past and recent information. The Habitual Consumption model, meanwhile, is excluded because it consistently yields atypical estimates.



TABLE II.5 ESTIMATES OF THE REAL NEUTRAL INTEREST RATE (percent)

Method	Real NMPR
Stochastic trend - BCP10	0.8
Stochastic trend - Convenience yield	0.9
Term premium correction	1.2
Interest rate parity (dots)	1.7
Interest rate parity (U.S. models)	2.2
Common stochastic trend model	1.4
Reduced-form model (dots)	0.9
Reduced-form model (U.S. models)	1.1
Holston, Laubach & Williams	1.4
Median (1)	1.2
Mean (1)	1.2
Range (1)	[0.9 – 1.7]

(1) Excludes lowest (0.8) and highest (2.2) estimates.

Source: Central Bank of Chile.

Conclusion

Based on this background, the Board revised the range of estimated values for the neutral MPR to 3.75%-4.75% in nominal terms. For the purposes of the projection scenarios, the midpoint of this range, 4.25%, is used as a methodological assumption. Beyond the changes in the values of the different quantitative methodologies, this revision is based mainly on the assessment of the factors that are most likely to affect real rates in the long term, as a result of the changes in the aforementioned trends and their impact on the savings-investment balance in the global and local economies.