



## BOX II.2:

### The neutral monetary policy interest rate

The neutral MPR —NMPR— is defined as the value to which the MPR is expected to converge once the short-term effects of shocks have dissipated, consistent with GDP on its trend equilibrium path and inflation at the target. The estimated rate corresponds to the trend value of a risk-free short-term real rate, which includes neither risk nor term premiums. It is a fundamental concept for the conduct of monetary policy that allows to evaluate the degree of contraction/expansion of monetary policy by providing the benchmark value of the MPR.

After two consecutive increases in the level of the NMPR in [December 2022](#) and [December 2023](#), in this update the mean and median of the NMPR remain around 1%, with an approximate range between 0.5% and 1.5% in real terms (Table II.6). In nominal terms, and given the 3% inflation target, the mean and median estimates are close to 4%. This update extends the sample to the second quarter of 2024 and maintains the methodologies used in December 2023, since the conditions of global uncertainty persist, which motivated having an extensive battery of models and a wider range<sup>1/</sup>.

**TABLE II.6** ESTIMATES OF THE REAL NEUTRAL INTEREST RATE  
(percent)

Method	Real NMPR
Stochastic trend – BCP10	1.1
Stochastic trend – Convenience yield	0.9
Term premium correction	1.1
Taylor rule	0.9
Taylor rule – expectations	0.6
Interest rate parity (dots)	1.6
Interest rate parity (U.S. models)	2.3
Consumption model with habits	-0.1
Common stochastic trend model	1.4
Reduced-form model (dots)	0.9
Reduced-form model (U.S. models)	1.2
<b>Median (*)</b>	<b>1.1</b>
<b>Mean (*)</b>	<b>1.1</b>
<b>Range (*)</b>	<b>0.6 – 1.6</b>

(\*) Excludes lowest (-0.1) and highest (2.3) estimates.  
Source: [Arias et al. \(2024\)](#).

This benchmark rate is affected by low-frequency movements in various factors. For example, falls in the rate of productivity or population growth, or increased preference for safe and liquid assets, tend to produce falls in the NMPR. On the other hand, a greater supply of risk-free assets—for example, in the face of greater public indebtedness—or greater investment cutting down the demand for these assets would tend to reduce their price and raise their yield, which would tend to increase the NMPR. Finally, changes in the neutral rates of other countries may affect the local NMPR in a context of integrated financial markets.

<sup>1/</sup> Before the December 2022 update, the estimated range was 0.5pp. In 2023 it was increased to 1pp, a magnitude that is maintained in this update. See [Arias et al. \(2024\)](#).



The same as in December 2023, those models based on external neutral rates, such as the interest rate parity, yield more than the midpoint of the range. This is in line with the upward revisions that have been made for other economies, which have generally been very small (Table II.7)<sup>2/</sup>. Other methodologies reported with local rates give lower estimates, between 0.6% and 1.1%, except for the common stochastic trend model. Among other factors, this is influenced by the lower trend growth ([Arias et al., 2024](#)).

**TABLE II.7** LATEST UPDATES OF THE NMPR FOR OTHER ECONOMIES (1)  
(basis points)

Method	LW	HLW	LM	FS	Other (3)	SEP
United States	+7	=	+15	+1	+20	+30
Eurozone		-21 (2)		+1		
Canada		=		+2	+25	
United Kingdom				+2		
Japan				+3		
New Zealand					+	

(1) LW: [Laubach and Williams \(2003\)](#). HLW: [Holston, Laubach and Williams \(2023\)](#), considers change between 2023.Q4 and 2024Q1. LM: [Lubik-Matthes \(2015\)](#), Richmond Fed. FS: [Ferreira and Shousha \(2023\)](#), considers change between second half 2023 and first half 2024. [Ferreira](#) estimates as of 28 August 2024. SEP: Summary of Economic Projections, [Federal Reserve Board](#), median, change between December 2023 and June 2024. LW, HLW, LM and FS methodologies consider revised data available from official sources. (2) Change between 2023.Q3 and 2023.Q4. (3) For the United States: [Del Negro et al. \(2024\)](#); change in NY Fed DSGE projection to 2027 between March and June 2024. For Canada: [Adjalala et al. \(2024\)](#), Bank of Canada. For New Zealand: [Castaing et al. \(2024\)](#); update is marginally upward.

Sources: Central Bank of Chile and U.S. Federal Reserve banks.

<sup>2/</sup> Table II.7 shows the available NMPR updates published by other central banks in the last year. Different methods are shown for different countries and the change in the estimated parameter in basis points.