

The economic impact of uncertainty: transmission channels and modelling issues underpinning Argentina's new monetary framework

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1. Introduction

This note illustrates how uncertainty affects the monetary policy framework along three dimensions – model structure, macroeconomic inputs and policy reaction – and highlights the central role of the foreign exchange (FX) channel in a bi-monetary economy like Argentina's. It provides a context by highlighting the impact of uncertainty stemming from the election cycle on money demand and the policy response to this adverse shock.

This source of cyclical uncertainty and its effect on monetary management is analysed in consideration of structural sources of uncertainty, namely the process of change in monetary regime. While monetary aggregate targeting was adopted in 2024, important steps were taken to improve the M2 targeting framework in 2025. This transition involved incorporation of greater FX and interest rate flexibility. Recent developments reveal a promising decline of real interest rate levels and volatility alongside the preservation of well-anchored inflation expectations.

2. Dealing with sources of uncertainty

In 2025, the Central Bank of Argentina (BCRA) adopted an M2 monetary aggregate target compatible with FX flexibility within bands and market-determined overnight interest rates. Uncertainty affects multiple aspects of monetary policy: defining the rules that govern the model framework, projecting the macroeconomic outlook that guides expectations and exercising discretion when managing event risk. This note considers all three dimensions and conceptually describes the monetary channels through which uncertainty transmits to macroeconomic outcomes. The understanding of the relative importance of different monetary channels (interest rate and FX market) is complemented by quantifying recurring empirical shocks (eg elections and droughts).

The first consideration is the recognition that mapping and managing uncertainty always depends on context and that different paradigms are useful for different contexts. In a standard environment, it is useful to consider uncertainty in the following simple paradigm: "equilibrium, disturbance, response, convergence". In other situations, for example crisis resolution or regime transition, uncertainty is better understood and managed considering a different paradigm: "disequilibrium,

¹ Based on remarks at the meeting of the BIS CCA Consultative Group on Monetary Policy in Mexico City on 2–3 October 2025. All views expressed are the author's own and do not necessarily represent those of the Central Bank of Argentina.

unsustainability, adjustment, convergence", in which the interaction of monetary policy with other policies, and not monetary policy alone, becomes important.

The second consideration is the importance of distinguishing multiple sources of uncertainty. Uncertainty affecting the model framework is different from the uncertainty affecting macroeconomic inputs and the uncertainty affecting economic policy decisions.

The first pillar of monetary policy, establishing the model structure (ie the basic rules), is subject to two sources of uncertainty: (i) the robustness of parameters within the regime – reducing uncertainty surrounding the unobserved values of model parameters requires efforts to update and refine best-fit estimations – and (ii) if regime switching is relevant, authorities additionally face uncertainty over the changes of model parameters across different states of the economy or policy regimes.

Second, defining a baseline macroeconomic outlook is important for guiding market expectations. In selecting macro variables as inputs, we distinguish two sources of uncertainty related to predictability and the size of the impact. Variables may have well-behaved probability distributions and an "epsilon-size" impact on the path of monetary equilibrium and be easily incorporated into models. In contrast, variables or binary events that constitute tail risks can generate a "sigma-size" impact on the path of monetary equilibrium – that is, shocks with low probability but of large size. This uncertainty cannot be easily incorporated into models.

Third, monetary policy is affected by uncertainty when, given a central bank's reaction function, authorities exercise judgment and policy discretion. In real-time decision-making, many factors can bring uncertainty to policy actions: statistical measurement issues, signal extraction problems and policy trade-offs. This uncertainty increases when policy is required to respond to event risk. Therefore, monetary policy requires discretionary risk management response to rapidly unfolding developments.

The BCRA's current monetary framework is based on targeting a monetary aggregate (M2) as the nominal anchor and involves flexibility (within a widening band) in the FX market and overnight interest rate market, introduced in April and July 2025, respectively. The BCRA relies on a set of models calibrated to project real money demand, including projections of liquidity, fiscal performance, the credit market and the external sector. Graph 1 provides a schematic representation.

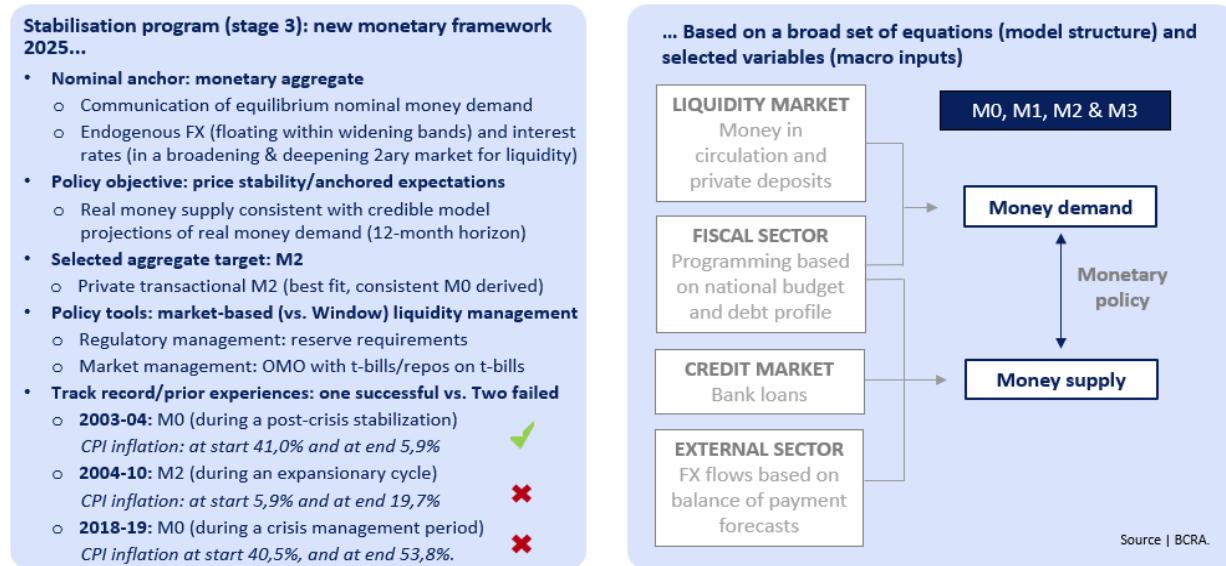
When incorporating macroeconomic outlook assumptions into the model, the BCRA must deal with two types of uncertainty:

- Epsilon-size (bounded) uncertainty: shocks with limited dispersion that can be incorporated within the model's baseline and represented in a fan chart (eg small fluctuations in circulation or sight deposits). This uncertainty is represented in model outputs.
- Sigma-size (tail-risk/unbounded) uncertainty: low-probability, large-impact events (fat tails) that may lie outside the model's forecast distribution. Examples for Argentina are major weather shocks (droughts) affecting agricultural exports and political/election events that, given the bi-monetary nature of the economy, may trigger abrupt portfolio rebalancing to the Argentine peso (ARS) and away from the US dollar (USD) or vice versa. These events must be treated as contingencies and embedded into the policy

reaction function, as incorporating them into baseline projections would render model outputs impractical.

A schematic representation of the BCRA's monetary framework

Graph 1

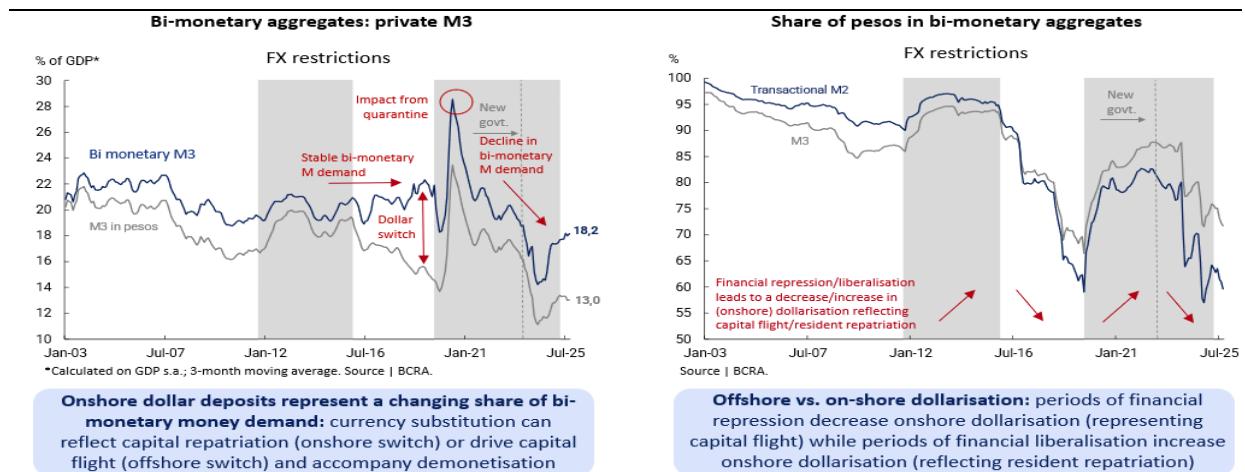


Source: Central Bank of Argentina (BCRA).

An important feature of a bi-monetary regime that imposes an additional constraint on monetary policy management is the unconventional response of money demand to risk aversion (Graph 2). Faced with rising uncertainty, domestic currency-based economies tend to experience an increase in money demand: "cash is king" drives portfolio decisions. In contrast, in bi-monetary economies the opposite occurs: "dollar is king" drives portfolio rebalancing, implying that local money demand declines. This inverse relationship between uncertainty and local currency demand in Argentina highlights the importance of distinguishing uncertainty affecting variables that are well behaved from uncertainty affecting variables that define binary scenarios.

Key features of the BCRA's bi-monetary regime

Graph 2



Source: Central Bank of Argentina (BCRA).

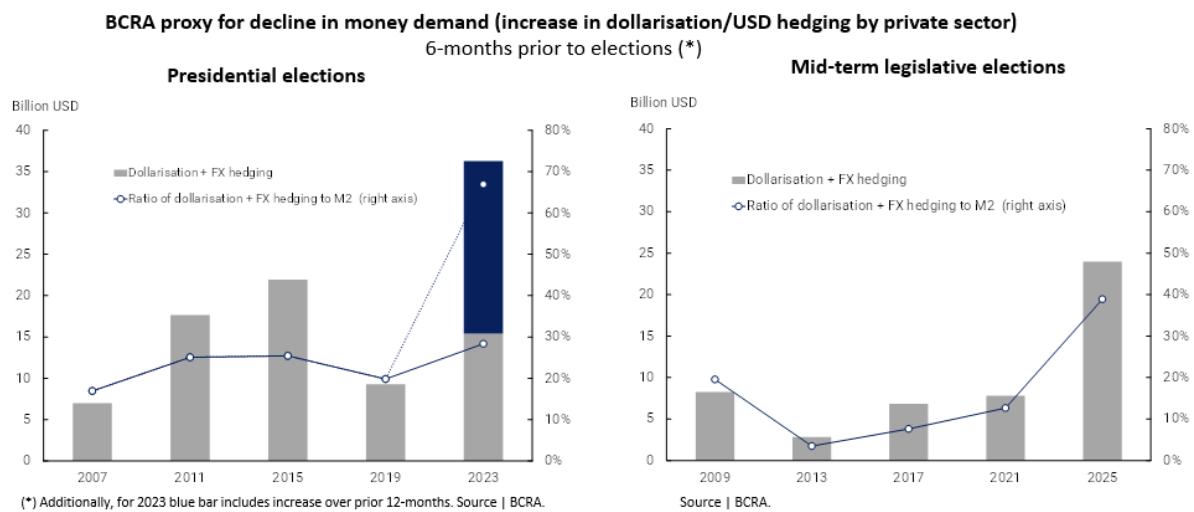
3. Transmission channels: the pivotal role of FX in a bi-monetary economy

Considering the substitution of ARS by USD as a “safe asset”, the impact of uncertainty through the FX market and the transmission channel of monetary policy is of foremost importance. Uncertain event risk in Argentina can alternatively affect the expected supply of or demand for foreign currency.

- FX demand channel (currency rebalancing of portfolios): elevated uncertainty (political or macro) shifts private portfolios towards USD, reducing peso money demand. Graph 3 summarises empirical estimates where mid-term election episodes typically reduce peso transactional M2 by 15–30%; notably, the 2025 mid-term negative shock is estimated at about 40% of M2 (a measure that includes dollarisation through the spot FX market and other forms of hedging demand, like FX futures and USD-linked securities. These magnitudes materially alter the monetary equilibrium and have required out of the ordinary policy responses.
- FX supply channel (currency availability from export flows): adverse weather shocks lower foreign exchange inflows from agricultural exports (about 36% share of exports), compressing FX supply and reinforcing currency substitution through expectations of lower national income and limited smoothing via external markets (Graph 4). Commodity price volatility also imposes significant uncertainty.

FX demand channel

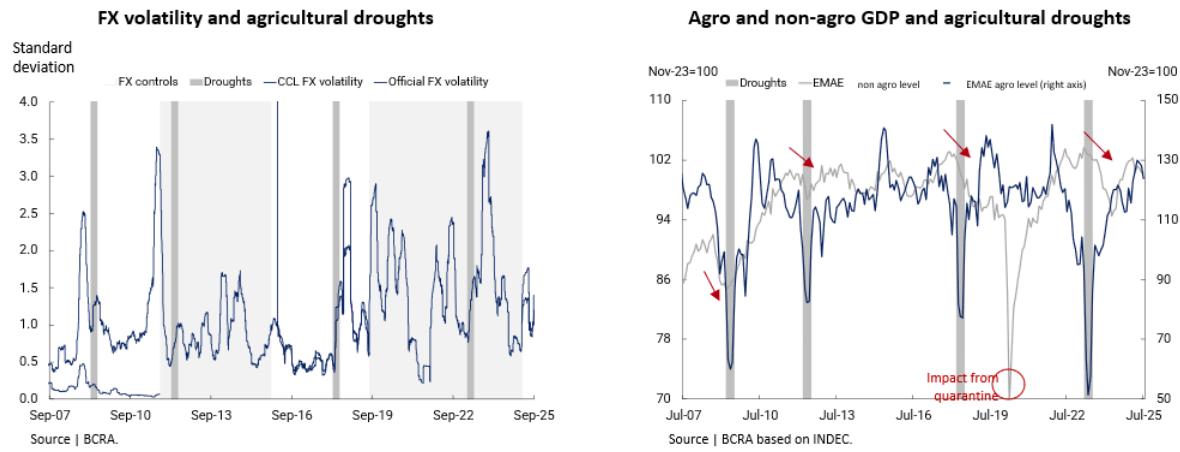
Graph 3



Source: Central Bank of Argentina (BCRA).

FX supply channel

Graph 4



Source: Central Bank of Argentina (BCRA).

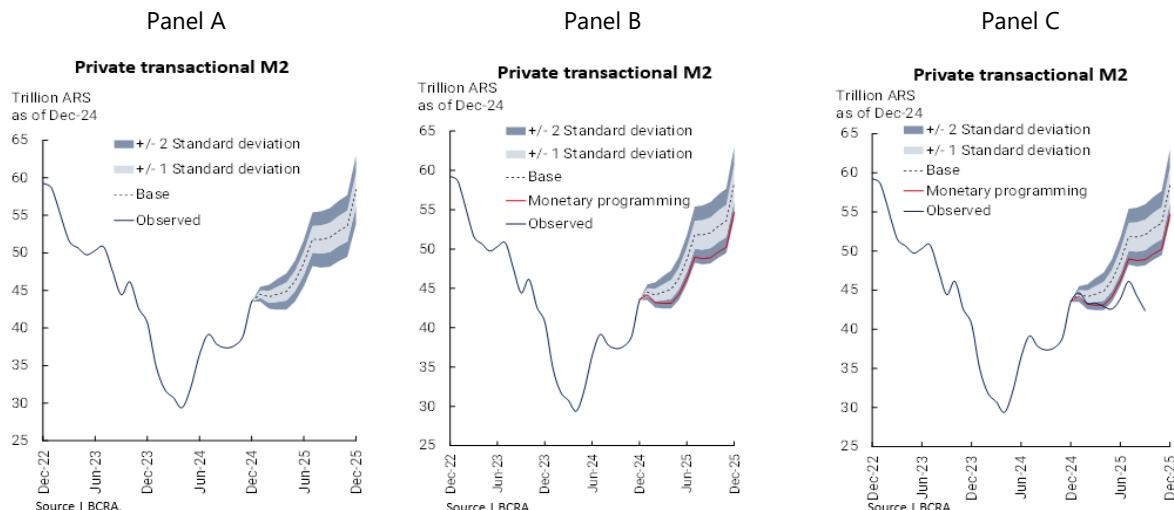
4. The monetary policy framework under uncertainty: features, evolution and results

The monetary policy framework inaugurated at end-2023 and the management of monetary policy in 2025 can be explained within the context of the preceding discussion on the impact of economic uncertainty.

Uncertainty affecting the path for the nominal anchor: The BCRA defined a monetary aggregate target (private transactional M2) to communicate the equilibrium path for nominal money demand over a 12-month horizon (Graph 5.A). This communication was based on a baseline model output for money demand with the standard depiction of bounded uncertainty.

The BCRA's monetary aggregate target

Graph 5



Source: Central Bank of Argentina (BCRA).

In consideration of uncertainty around model projections of money demand, the BCRA also provided forward guidance of a tight policy bias (ex ante): given the objective of furthering the disinflation process, the BCRA additionally communicated an ex ante path for money supply compatible with a tight monetary policy bias – two standard deviations below the path for baseline money demand (Graph 5.B).

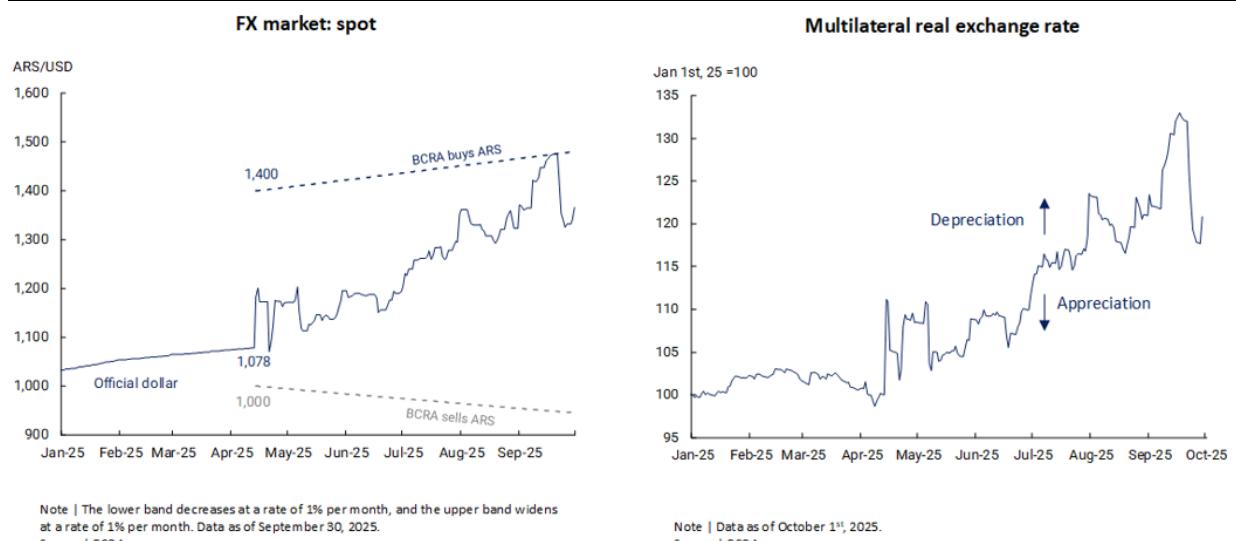
Uncertainty stemming from regime transition (more flexible FX and interest rate policy): In April 2025, the BCRA adopted greater FX flexibility within a widening FX band regime and in July 2025 it adopted greater interest rate flexibility. The former required International Monetary Fund support (primarily to boost the BCRA's gross reserve position), while the latter required the development of a secondary market for liquidity between private financial entities (Graph 6).

The more flexible FX regime has helped the economy cushion the shocks from both external ("tariff wars") and domestic (election risk) sources of uncertainty, allowing for a depreciation of the real exchange rate – additionally reflecting the appreciation of our main trading partner with respect to USD.

In contrast, the impact of the BCRA's shift away from a passive sterilisation window (reverse repos) with a fixed policy interest rate to active sterilisation through open market operations (repos, simultáneas²) in an overnight market where interest rates are market-driven produced an initial sharp increase in the level and volatility of nominal and real interest rates. Political developments (election uncertainty) additionally contributed to the upswing and volatility of interest rates.

The BCRA's FX regime

Graph 6



Source: Central Bank of Argentina (BCRA).

Uncertainty affecting interest rate transmission channels: The BCRA's policy tools evolved during 2025, and liquidity management was carried out through two

² "Operaciones Simultáneas" (Simultaneous Operations) are a trading modality in the Argentine financial market that allows, within a single transaction, the agreement of a purchase and a sale of the same instrument with different settlement terms, in an integrated manner and guaranteed by a central counterpart.

main channels: reserve requirements (RRs) were sharply raised and complemented with sterilisation through open market operations (OMOs) in overnight markets using T-bills/repos rather than a standard window facility. Uncertainty was affected by disintermediation trends, and the BCRA responded with innovation and the adoption of complementary instruments to carry out liquidity operations with non-bank entities, like broker-dealers.

Uncertainty affecting the policy response (event risk) and the importance of the FX channel: The path of money demand was estimated, and the path of money supply was established, in correspondence to the most probable macroeconomic scenario envisioned by the BCRA in early 2025. However, the surfacing of tail-risk uncertainty (election) led to a significant deviation in the ex post policy response. The evolution of M2 traced a path significantly below two standard deviations from the baseline (Graph 5.C). That decline in money demand and the deviation of money supply from the baseline projections reflect the private sector's cash portfolio rebalancing towards USD and away from ARS.

The BCRA's efforts to sterilise pesos and therefore accommodate the sharp increase in demand for dollars exceeded adjustments to banks' RRs and OMOs that largely determine the observed level of M2. It also included supplying the market with hedging (USD futures contracts) and, when the currency hit the top of the FX band, selling USD reserves in the official spot market. Private sector demand for USD was further satisfied indirectly through Treasury auctions of USD-linked securities subscribed in ARS.

Implementation has therefore been challenging, but two recent developments are worth highlighting:

- **Interest rate and yields:** Money market interest rates and the yield curve were sharply but temporarily impacted by uncertainty. Subsequent action from both the central bank (in the money market) and the Treasury (in the bond market) have contributed to normalising the short-term funding interest rate and the yield curve slope.
- **Inflation expectations:** The significant monetary tightening ahead of the election in 2025 has resulted in very well anchored inflation expectations. Expectations in late 2023 on 2024 inflation were almost double the inflation ultimately observed in 2024 thanks to fiscal and monetary consolidation. Despite changes to refine the monetary targeting regime and elections, in 2025 Argentina delivered the lowest monthly inflation reading of the last five years (1.9% monthly in August). Importantly, inflation expectations (as measured by the BCRA survey of analysts' forecasts, REM) have remained well anchored. This achievement is very relevant for an economy that operates a bi-monetary regime and has adopted a more flexible FX regime. Current estimates of exchange rate pass-through to domestic prices are around a third of their late 2023 level.

5. Concluding remarks

Argentina's recent stabilisation programme and monetary regime transition make mapping and managing uncertainty much more challenging than is the case when monetary policy is tasked to manage uncertainty related to the business cycle. In our case, identifying, distinguishing and measuring uncertainty within a new monetary framework has implied dealing with conventional uncertainty (in modelling: parameter robustness, regime switching and forecast errors in baseline macro scenarios). Beyond the latter, the materialisation of event risk has required a credible discretionary risk management response to rapidly unfolding developments. The BCRA's 2025 M2 targeting framework has offered a coherent response that pairs a nominal monetary anchor with a more flexible FX regime and multiple market liquidity tools. This framework has made it possible to consolidate progressive disinflation, with lower exchange rate pass-through and more anchored inflation expectations.