# Monetary and Exchange Rate Regimes in Mexico: 1925-2025\*†

Colloquium: Banco de México, 100 years since its foundation

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Good morning, everyone. I would like to thank Armando Sánchez Vargas, director of the Institute of Economic Research at the Universidad Nacional Autónoma de México, for inviting me to participate in this colloquium celebrating the 100<sup>th</sup> anniversary of the founding of Banco de México.

The history of this institution can be explored from various perspectives. On this occasion, I will focus on the monetary and exchange rate regimes through which Banco de México has transitioned since its foundation up to the present day. This perspective is particularly relevant since Mexico is a small, open economy and, as such, monetary policy is closely intertwined with the exchange rate regime.

During the early years of Banco de México, as in many other economies, the gold standard prevailed in our country. Later, with the introduction of fiat money, a prolonged period followed in which predetermined exchange rate regimes were maintained. Within this framework, several modalities emerged, notably, the fixed exchange rate regime that prevailed until the 1970s. In addition, we had controlled exchange rate, crawling peg, and exchange rate band regimes. Finally, in the 1990s, a free-floating exchange rate regime was adopted.

<sup>\*</sup> The ideas expressed herein are solely those of the author and do not necessarily reflect the institutional view of Banco de México.

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#### Gold standard

During Banco de México's early years, the gold standard prevailed worldwide. This regime involved a system of globally fixed exchange rates. In the face of accumulative external imbalances and insufficient downward price flexibility, the adjustment mechanism became extremely costly in terms of economic activity and employment. Under this regime, monetary policy was procyclical. In response to the Great Depression, central banks, including Banco de México, abandoned the gold standard.

The Great Depression, which originated in the United States, had adverse consequences on the Mexican economy. Lower external demand for Mexican products, a deterioration in the terms of trade, and the imposition of tariffs by US authorities significantly affected Mexican exports and, consequently, economic activity and employment. In addition, procyclical macroeconomic policies were implemented, further deepening the economic contraction. As a result, in 1932, Gross Domestic Product declined 15 percent.

Lower exports resulted in an external deficit, which, in turn, led to an outflow of gold from the country. This had an impact on the amount of money in circulation. Although Mexico formally operated under a gold standard regime, in practice a bimetallic system prevailed, since both gold and silver coins were in use.

Given the decline in the relative price of silver, and to prevent a depreciation of the silver peso, the authorities reduced the minting of coins made from that metal. This further contracted the money supply, exacerbating the decline in economic activity. In response to this adverse scenario, the authorities enacted the demonetization of gold and, years later, of silver. As a result, Mexico transitioned from a metallic standard to a fiat money system with a fixed exchange rate.

Amid the shortage of means of payment, exacerbated by the monetary contraction, the population eventually began to use the banknotes issued by Banco de México. During the Mexican Revolution, different revolutionary factions issued their own banknotes, which led to inflation and a loss of public confidence in paper money. As a result of the monetary disorder stemming from the Revolution, the country's population became reluctant to accept banknotes. In the early years of Banco de México, this posed significant

challenges to the monetary regulation entrusted to this central bank. At that time, minting metallic coins was practically the only monetary policy instrument available.

### **Predetermined exchange rate**

In the 1940s, the Bretton Woods agreements established a new international monetary system. Under this system, countries pegged their exchange rates to the US dollar, while the US government set a fixed parity for the dollar and gold. Thus, some of the countries participating in these agreements had fixed exchange rates. However, these could be adjusted in the event of an external imbalance deemed fundamental that justified an adjustment of the exchange rate parity.

Mexico was among the first nations to devalue its currency under the new regime. This occurred in 1948 and again in 1954. In both cases, military conflicts, first World War II and later the Korean War, boosted Mexican exports. International reserves increased and, with them, the money supply, which fueled a rebound in inflation. Under the fixed exchange rate regime, this resulted in an appreciation of the real exchange rate. Following the end of both military conflicts, exports declined. Combined with the real exchange rate appreciation, this led to a growing current account deficit and a fall in international reserves. In this context, the authorities devalued the Mexican peso first in 1948 and, subsequently, in 1954.

In a context of fiscal and monetary discipline, a fixed exchange rate regime could prove credible and, therefore, serve as a nominal anchor for the economy, guiding inflation expectations. This was the case in Mexico during the so-called "stabilizing development period" between 1954 and 1970, when inflation remained at moderate levels.

In 1971, the US authorities decoupled the dollar from gold and devalued it. Following the collapse of the Bretton Woods system, floating exchange rates were established among advanced economies. However, Mexico chose to keep its currency pegged to the US dollar. This meant that the Mexican peso was devalued against the currencies of other advanced economies. In the following years, several shocks, including increases in international oil prices, contributed to a rebound in global inflation. This international context

coincided with the adoption of expansionary macroeconomic policies in Mexico.

After maintaining moderate fiscal deficits throughout the stabilizing development period, Mexico implemented expansionary fiscal and monetary policies during the 1970s. Thus, the fixed exchange rate regime coexisted with both periods of fiscal discipline and expansionary policies.

The fiscal deficit was financed through monetary expansion and external debt. Although economic activity initially expanded, inflation began to rise. Under a fixed exchange rate regime, and with inflation in Mexico higher than in the United States, the real exchange rate appreciated. Said real exchange rate appreciation, together with excess absorption over output, led to an increasing current account deficit. This contributed to a decline in international reserves. The perception that the exchange rate parity was unsustainable accelerated the fall in international reserves through capital outflows.

Finally, the situation became unsustainable. Faced with the impossibility of maintaining the parity of 12.50 pesos per US dollar, which had prevailed since 1954, the authorities were compelled to devalue the Mexican peso in 1976. These events serve as an example of a first-generation balance of payments crisis (Krugman, 1979).

Thereafter, the authorities maintained a controlled exchange rate regime indicating that they would intervene only in the event of abrupt fluctuations in the exchange rate parity. Although it was not formally a fixed exchange rate, the value of the Mexican peso remained stable. During this period, following the discovery of significant oil fields, the authorities once again implemented expansionary fiscal policies financed by monetary expansion and external borrowing. This was done under the expectation that oil prices would remain high. In this environment, macroeconomic imbalances accumulated once more, leading to higher inflation, a real exchange rate appreciation, and a widening external deficit.

In the early 1980s, international interest rates rose, the US economy entered a recession, and oil prices dropped. In response to these external shocks, concerns about the sustainability of the current account deficit and the parity of the Mexican peso against the US dollar grew, which led to capital flights. As

a result, in 1982 Mexico experienced a balance of payments crisis more severe than that registered in 1976.

The country's authorities, including Banco of México, faced major challenges. These included correcting the excess of domestic absorption over output and the current account deficit, as well as addressing the issue of external debt. The authorities implemented stabilization programs, including fiscal adjustments and monetary discipline. At this stage, a crawling peg exchange rate policy was adopted, aimed at achieving a real exchange rate depreciation that would contribute to an external surplus, which, in turn, would provide the foreign currency needed to service the foreign debt.

Although inflation initially decreased, it remained at high levels. In the mid-1980s, oil prices fell again, undermining macroeconomic stabilization. The periodic adjustments in the nominal exchange rate also contributed to higher inflation. Moreover, inflation became more inertial due to price and wage indexation practices. In this context, inflation accelerated, reaching triple-digit levels. Given the inflationary inertia, traditional fiscal and monetary restraint policies were complemented by price and wage agreements between the public sector, businesses, and labor unions. This eventually led to a decline in inflation to single-digit levels in 1993.

In the early 1990s, external imbalances built up once again. This time mainly due to the behavior of the private sector. The renegotiation of the foreign debt and, subsequently, prospects of a North American Free Trade Agreement generated optimism and capital inflows. The current account deficit widened due to higher private spending, primarily on consumption. This deficit was financed through short-term capital inflows.

A system of exchange rate bands was adopted in 1991, featuring a crawling ceiling that adjusted over time. In 1994, in the face of rising international interest rates and certain political events, the exchange rate was close to the ceiling of the band, while international reserves were declining. Finally, the band regime proved unsustainable and, by the end of 1994, the Mexican peso devaluated sharply and inflation rose significantly. These events led to the forced adoption of a floating exchange rate system.

### Flexible exchange rate

The abandonment of predetermined exchange rate regimes and the adoption of a free-floating exchange rate resulted from an extreme event: the 1994-1995 financial crisis. In this regard, there is a parallel with the abandonment of the gold standard and the implementation of predetermined exchange rate regimes under fiat money, beginning in the 1930s. That transition similarly stemmed from an extreme event: the Great Depression.

In the mid-1990s, doubts remained about the desirability of a flexible exchange rate regime for an emerging economy, such as Mexico. Guillermo Ortiz, Secretary of Finance during the transition to the flexible exchange rate, pointed out in 2013 that:

".. the decision to adopt a free-floating exchange rate regime was not a choice among alternative regimes, but a necessity, since Banco de México had exhausted its international reserves. At that time, we were not fully convinced of the convenience of adopting a flexible exchange rate regime, given the structural fragility of the peso with respect to the US dollar."

There were concerns regarding potential adverse effects on inflation and financial stability. However, these concerns diminished as the new monetary regime, namely the inflation targeting regime that prevails today, was consolidated.

As a precedent to the adoption of this regime, in 1993 the Mexican Congress approved a constitutional reform granting autonomy to Banco de México. The Congress also established the stability of the purchasing power of the national currency as Banco de México's primary mandate. In December 1994, as mentioned earlier, a free-floating exchange rate regime was adopted.

In 1997, Banco de México began publishing the expected trajectory of the monetary base for the year, consistent with the annual inflation target. In this regard, during the 1970s and 1980s, several central banks in advanced economies had set quantitative targets for monetary aggregates as an intermediate objective, with the goal of creating an environment conducive to low and stable inflation.

However, the instability in the demand for money led these central banks to abandon the monetary aggregates' targets and instead adopt a short-term

interest rate as a monetary policy instrument. In this context, Mexico's experiment of setting targets for monetary aggregates proved to be short-lived.

In 2000, multi-year inflation targets were announced, and in 2001 the formal adoption of the inflation targeting framework in Mexico was announced. In 2002, a permanent target of 3 percent was set for the National Consumer Price Index, with a 2-4 percent variability range. Likewise, a calendar for monetary policy decisions was introduced, and these decisions would be communicated through press releases explaining the rationale behind each decision.

An inflation targeting framework was thus established in Mexico, with the free-floating exchange rate regime as a fundamental component of this system. Concerns regarding the adequacy of exchange rate flexibility for an emerging economy were mitigated by the results of the new framework.

As inflation decreased, the pass-through of the exchange rate to prices was also significantly reduced. In previous decades, the correlation between devaluations of the Mexican peso and inflation had been high. However, in an environment of price stability, exchange rate movements no longer led to generalized price increases, but rather reflected changes in relative prices between tradable and non-tradable goods. In addition to the above, financial derivatives markets for the Mexican peso were developed, enabling economic agents to hedge against exchange rate risk.

Next, I will make some remarks on two of the main benefits attributed to exchange rate flexibility. On the one hand, this regime acts as a mechanism to dampen adverse shocks, and, on the other hand, it allows for an independent monetary policy; that is, one that focuses on the domestic inflationary outlook. Since 1953, Milton Friedman had emphasized such attributes of the exchange rate flexibility regime. However, at that time, Friedman focused on advanced economies, as he had concerns about the suitability of this regime for developing economies (Edwards, 2020).

# Flexible exchange rate as a shock absorber

The first rationale in favor of exchange rate flexibility is that an adjustment in the exchange rate serves as a shock absorber. Under a fixed exchange rate regime, adjustments are made through greater fluctuations in output, which implies high costs, as was the case under the gold standard. In turn, under a free-floating regime, exchange rate adjustments lead to changes in the relative prices of domestic and foreign goods, which helps absorb shocks. An example of this is the case of Mexico between 2014 and 2016. During those years, the national economy faced a series of adverse shocks that led to a greater restriction of external funding.

Among these shocks, a relevant one was the deterioration in the terms of trade due to the decline in international oil prices starting in the second half of 2014. In addition, the downward trend in oil production became more pronounced in 2014. These shocks led to a sharp deterioration in the oil trade balance, which went from a surplus to a deficit in 2015.

The Mexican economy was also affected by uncertainty about the future of the trade relations with the United States and Canada, as well as by the normalization of the US Federal Reserve's monetary policy. In that environment, financial inflows from abroad fell significantly.

The adjustment of the economy implied reducing the current account deficit, in order to make it consistent with the lower availability of external financial funding. Given the difficulty of reversing the trend of the oil trade balance, an adjustment in the non-oil trade balance was needed, specifically, to move from a deficit to a surplus. In this regard, the economy's response to achieve this adjustment was through a depreciation of the real exchange rate. This depreciation modified the relative prices between tradable and non-tradable goods, helping the economy to adapt to the new environment. This episode illustrates how exchange rate flexibility functions as a mechanism to absorb real shocks.

Nevertheless, the economy is also subject to financial shocks. For example, episodes of global risk aversion can trigger excessive financial volatility and market illiquidity, leading to disorderly dynamics in financial markets, including the foreign exchange market. In response to episodes of this type, central banks in emerging economies, including Banco de México, maintain international reserves to ensure they can provide liquidity in foreign currency if necessary, even under a free-floating exchange rate regime. Banco de México successfully implemented measures to stabilize domestic financial markets in light of the shocks of the global financial crisis (Sidaoui, Ramos-Francia, & Cuadra, 2010) and the COVID-19 pandemic (Alba, Cuadra, & Ibarra, 2023).

### Flexible exchange rate and independent monetary policy

The monetary trilemma, proposed by Mundell (1963) and Fleming (1962), sustains that policymakers face having to choose between three objectives: i) implementing an independent monetary policy focused on achieving domestic goals; ii) allowing the free movement of capital; and iii) maintaining a stable exchange rate. However, only two of these three objectives can be mutually consistent, and thus countries must decide which objective to forgo. In this regard, Mexico has opted to abandon fixed exchange rate schemes.

A second argument in favor of a flexible exchange rate regime is that, in an environment of free capital mobility, it enables an independent monetary policy. In contrast, under a fixed exchange rate regime, monetary policy becomes dependent on the monetary conditions of the country whose currency serves as the exchange rate anchor, historically, the United States. In this context, exchange rate flexibility is important, since Mexico may have to adjust its monetary policy stance independently, even if the United States does not need to make similar adjustments.

As a first approach to the independent implementation of monetary policy by Banco de México, we can analyze the actions of this institution during the monetary cycles of the Federal Reserve. In this regard, there have been periods in which Banco de México adjusted its reference rate in the same direction as the Federal Reserve, although not necessarily by the same magnitude. In principle, this does not mean that Banco de México has mechanically followed the Federal Reserve. It is possible that both economies have faced common shocks, which made it appropriate for both central banks to adjust their reference rates in the same direction.

An example of the above is the inflationary episode associated with the shocks from the COVID-19 pandemic and the war in Ukraine. Disruptions in global production and distribution chains led to shortages of multiple inputs and serious supply chain problems. In addition, international prices of various commodities increased significantly. In most countries, including Mexico and the United States, inflation reached levels unseen in a long time. In response, Banco de México and the Federal Reserve, like many other central banks around the world, implemented a cycle of monetary tightening.

In addition to the above, the co-movement of interest rates may also be due to the transmission of shocks from the US economy to the Mexican economy. In this regard, Carrillo, Elizondo, and Hernández (2020) analyze the transmission of macroeconomic shocks from the United States to Mexico using structural autoregressive vector models. These authors find that, an increase in aggregate demand in the United States leads to higher economic activity, inflation, and interest rates. In turn, stronger economic activity in the United States raises demand for Mexican products, which boosts economic activity and exerts upward pressure on prices in Mexico. This prompts monetary policy in Mexico to respond by raising the reference rate.

An example of the above also occurred during the pandemic. The US economy experienced a dynamic recovery, driven primarily by the fiscal stimulus implemented in that country. Given the United States' weight in the global economy, these fiscal measures, such as transfers to households, contributed to an expansion of global demand for goods. Owing to the high degree of trade integration between Mexico and the United States, the Mexican manufacturing sector faced strong external demand.

Although the correlation between the federal funds rate and Banco de México's reference rate is positive, it is not perfect. For instance, during the inflationary episode triggered by the pandemic, Banco de México began its monetary tightening cycle in June 2021, whereas the Federal Reserve did so in March 2022.

On this point, advanced economies, including the United States, unlike emerging economies such as Mexico, had maintained inflation levels and inflation expectations below their targets for a prolonged period. This allowed their monetary authorities, including the Federal Reserve, to be patient in withdrawing from accommodative stances. In contrast, central banks in emerging economies, such as Banco de México, with a more limited track record of price stability, had to act swiftly. Given the magnitude and generalized nature of the inflationary shocks, timely action was essential to keep longer-term inflation expectations anchored.

In view of the progress in disinflation, the monetary authorities cut their reference rates. During 2025, Banco de México cut its reference rate by 250 basis points, whereas the Federal Reserve left it unchanged from December 2024 to September 2025. In this regard, economic activity, which is a determinant of inflation, and its outlook have been weaker in Mexico than in

the United States. Moreover, at the beginning of the year, Mexico's reference rate was at particularly high levels relative to its historical values. Considering their historical distributions, core inflation was at the 50<sup>th</sup> percentile, while the ex-ante real rate was at the 100<sup>th</sup> percentile. In view of this, Banco de México implemented a process of calibrating its monetary policy stance.

An independent monetary policy means that the central bank sets its reference rate based on domestic macroeconomic conditions. These conditions, in turn, can be influenced by external factors. However, the central bank, in assessing the appropriate monetary policy stance, does not respond directly to external factors. These are considered only insofar as they affect the domestic macroeconomic environment.

An independent monetary policy not only means that the central bank makes its decisions based on the domestic macroeconomic outlook, but it also requires monetary policy actions to have an impact on Mexico's financial conditions. For example, during a rate hiking cycle, domestic financial conditions should indeed reflect a tightening of monetary policy.

The literature on the global financial cycle emphasizes the co-movement of financial asset prices, credit, and capital flows at the global level. Rey (2013) argues that the driving force behind this cycle is the monetary policy of the Federal Reserve, which influences the risk appetite of international investors. In this context, the author states that:

"The monetary policy trilemma is actually a dilemma, as open economies have no monetary autonomy from U.S. policy or the global financial cycle unless they impose capital controls."

De Leo, Gopinath, and Kalemli-Ozcan (2022) find that in emerging economies there is a disconnect between the reference rate and short-term market rates due to fluctuations in global financial conditions. This is illustrated by the 2013 Taper Tantrum. The anticipation that the Federal Reserve would begin to normalize its monetary policy stance led to a tightening of international financial conditions and a deterioration in the global economic outlook. Given the weakening economic activity, several central banks in emerging economies lowered their reference rates. However, market interest rates, including short-term ones, rose rather than declined, moving in line with the monetary policy rate. This was due to increased risk aversion at the global level. The authors

argue that this disconnect between monetary policy rates and market rates is also observed during periods of low financial market volatility.

In this context, it is important to assess the impact of monetary policy in Mexico on the country's financial conditions. In this regard, the results of the analysis of the pass-through from the reference rate to government securities rates suggest that Banco de México, by adjusting its target rate, influences interest rates along the yield curve (Banxico, 2022). However, the degree of the pass-through decreases as maturities lengthen. For short-term rates, the pass-through is immediate and complete, which can be explained by financial arbitrage. In contrast, for longer-term rates, such as the 10-year yield, the impact of the reference rate remains positive, albeit of smaller magnitude.

In addition to the above, the analysis of the pass-through from the reference rate to bank lending rates shows that it is also positive and statistically significant (Banxico, 2024a). In the case of interest rates on loans issued by commercial banks to businesses, the short-term pass-through is partial. However, over time, the degree of the pass-through increases and, after one year, it is nearly complete. In contrast, for long-term housing loans, the pass-through is also positive but significantly lower.

In sum, when Banco de México adjusts its reference rate, other interest rates in the economy tend to move in the same direction. However, the effect is smaller for long-term rates. In a small open economy such as Mexico, longer-term interest rates can also be influenced by global factors. This is not unique to Mexico, as it is also observed in other emerging economies.

Regarding bank credit, recent studies such as those by Chinguil-Rojas, Esquivel, and Leal (2024), as well as Mena, Tobal, and Werner (2025), find that monetary policy in Mexico affects the growth rate of bank lending. Although policy rate decisions influence other interest rates and credit, their effect on aggregate demand through these channels is smaller in Mexico than in other economies. This is largely due to the low level of credit penetration in Mexico compared with that observed in other countries, including other Latin American economies.

The exchange rate plays a key role in the transmission of monetary policy in Mexico. One common approach to analyze monetary policy's transmission mechanism is through vector autoregressive models. These show that in

Mexico the impact of monetary policy is greater on core goods (merchandise) inflation than on inflation in other categories (Banxico, 2024b). This is consistent with the idea that the most relevant transmission channel is the exchange rate. Merchandise refers to tradable goods, whose prices are more sensitive to international references and to fluctuations in the exchange rate.

In recent years, Banco de México's monetary policy actions have influenced the value of the Mexican peso. In particular, during 2023 and the first months of 2024, the reference rate and the interest rate spread with the United States remained elevated relative to their historical values. At the time, this contributed to a significant appreciation of the Mexican peso. Alongside the fading of global shocks, especially the normalization of supply chains, these factors supported the disinflation process.

Finally, it is important to note that the evolution of the exchange rate is influenced not only by the central bank's monetary policy but also by a variety of other factors. In the second half of 2024, the Mexican peso depreciated due to a combination of external and idiosyncratic factors. In 2025, even though the interest rate differential with the United States narrowed, the national currency appreciated once again. This was driven by various factors, including the broad weakening of the US dollar. Hence, while monetary policy actions affect the exchange rate, they do not determine it, as it can be also influenced by other forces.

## **Concluding remarks**

Throughout its history, Banco de México has gone through different exchange rate regimes, which have shaped the way monetary policy is conducted in the country. The less flexible the exchange rate regime, the greater the constraints imposed on monetary policy.

Critical events, such as financial crises and economic contractions, prompted the abandonment of certain regimes and the adoption of others. By the end of the 20<sup>th</sup> century, a flexible exchange rate regime was adopted in Mexico, which has served as a mechanism to absorb shocks.

Under this regime, Banco de México conducts a monetary policy that can be classified as independent. Decisions are based on domestic macroeconomic conditions, while external factors are relevant only insofar as they affect the

domestic inflation outlook. The central bank's decisions also influence domestic financial conditions, although the impact across financial variables is heterogeneous.

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