



CEMLA

XV Meeting of Monetary Policy Managers: Monetary Policy in EMEs, Current Challenges^{*/}

September 26th and 27th, 2019



^{*/} The opinions/points of view herein stated are the author's responsibility and do not necessarily represent the institutional views of Banco de México or its Governing Board.

Índice

1

The GFCs' Aftermath, UMPs, and Capital Inflows

2

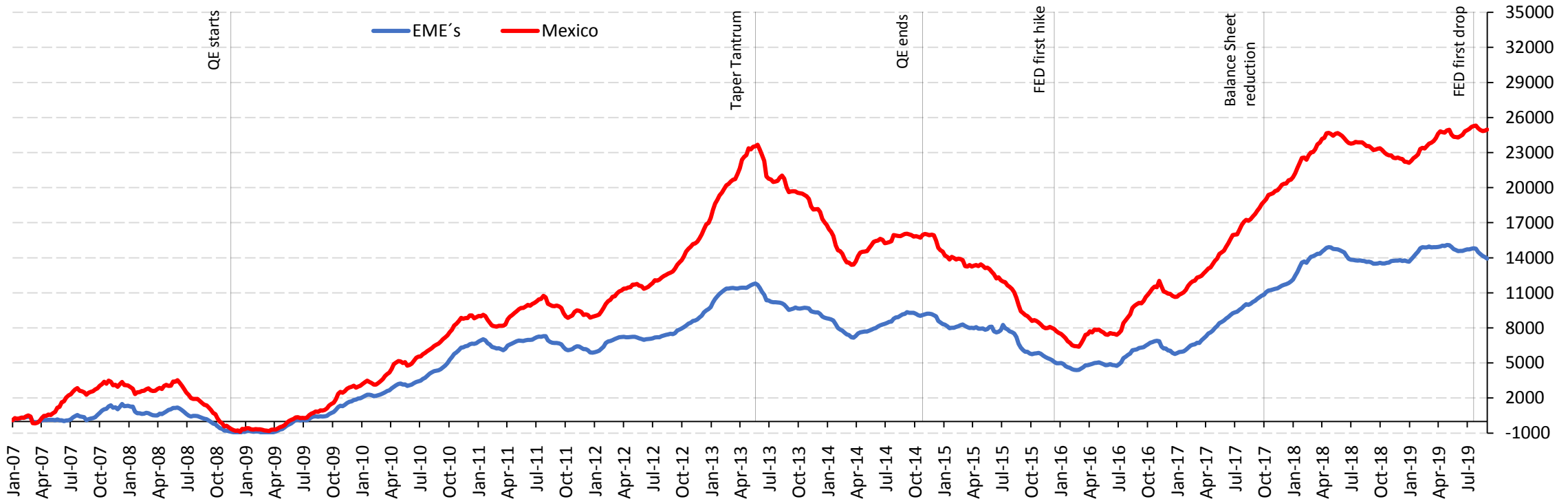
The “Taper Tantrum” and Capital Outflows

3

A Low Interest Rates Environment and EMEs Policy Outlook

- **Unconventional Monetary Policies (UMP) in Advanced Economies (AEs), stimulated capital flows to Emerging Market Economies (EMEs).** In some cases generating mispricing in local asset markets, including the foreign exchange market and increasing financial stability risks, which opened the door for potential sudden capital flow reversals.
- The pace of capital inflows to Mexico was above the total for EMEs, though mitigated by both an appropriate policy mix (fiscal, monetary and financial) and a **floating exchange rate regime**.

**Accumulated Capital Flows to EME's and Mexico
(Debt and Shares)**
Index Jan-07 = 100

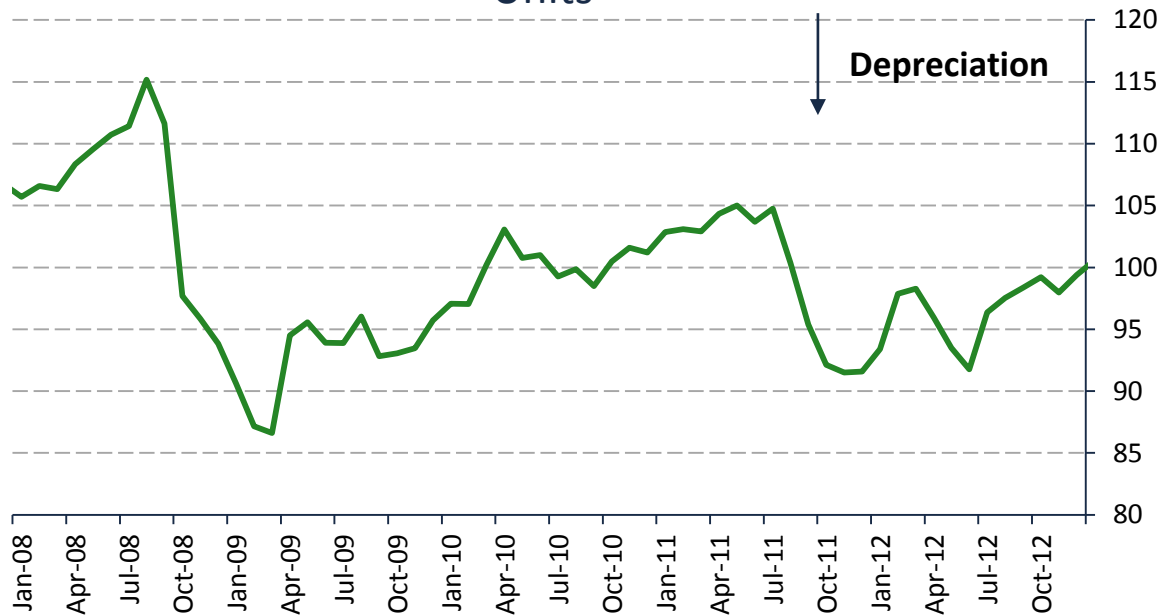


Source: Emerging Portfolio Fund Research.

Regarding spillovers from capital inflows, a currency appreciation did not translate into a worsening of the trade balance or lower economic growth since:

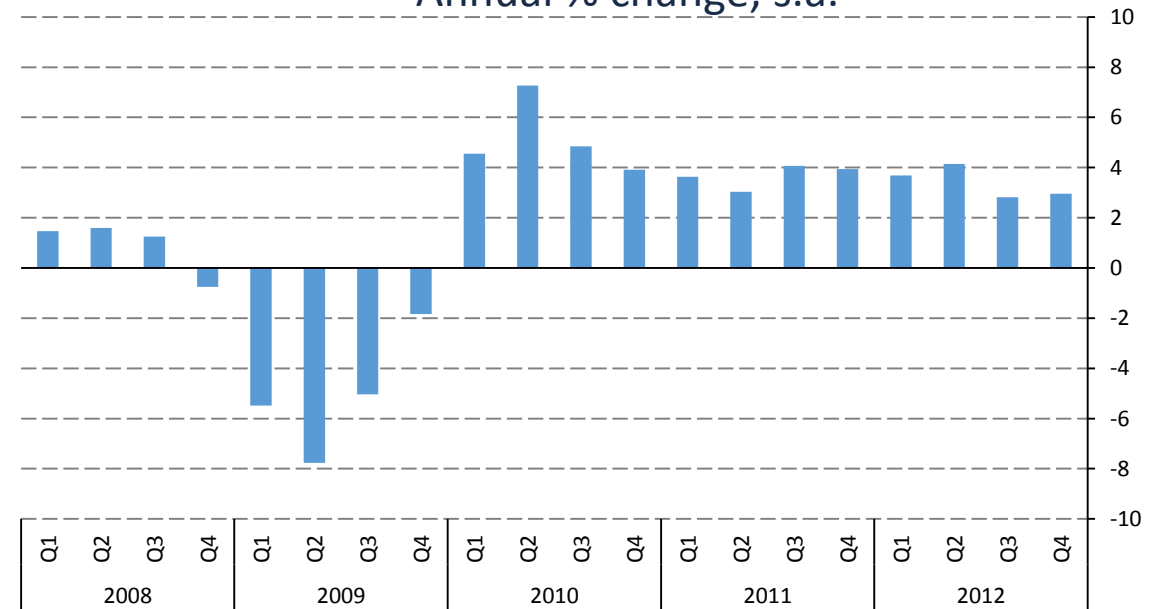
- *The exchange rate remained below its pre-crisis level.*
- *The competitiveness of Mexican exports was not compromised, reflecting the high degree of integration of Mexican manufacturing sector, which relies heavily on imported intermediate goods, with the US industrial production chain.*
- *As a result, Mexican exports expanded and the economic activity recovered at a healthy pace.*

Real Effective Exchange Rate of Mexico
Units



Note: The Real Effective Exchange Rate, Consumer Price Index is used.
Source: International Monetary Fund.

Gross Domestic Product
Annual % change, s.a.

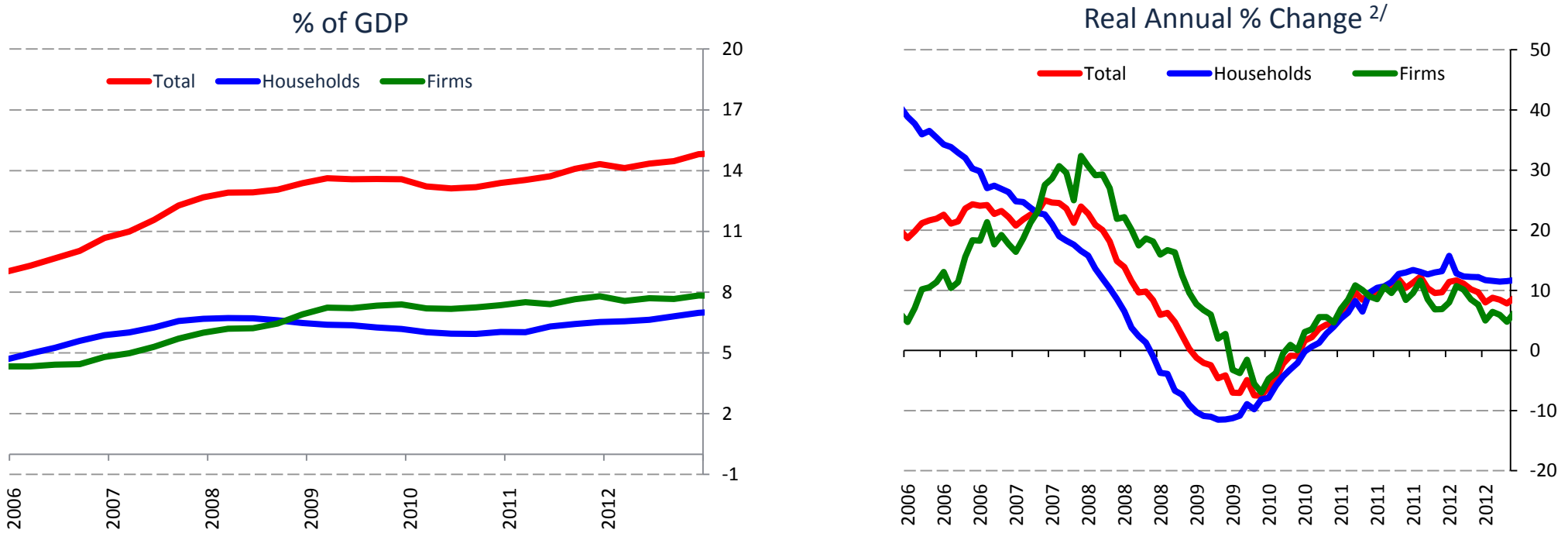


s.a. Seasonally adjusted figures.
Source: INEGI.

A further consequence of capital inflows may be asset price bubbles, but the Mexican banking system remained sound with moderate household and corporate leverage reflecting:

- *An adequate banking regulation and supervision, inherited from the aftermath of the Tequila crisis in 1995.*
- *Implementation of the Basel III prudential regulations ahead of the international schedule.*
- *As a result, banks maintained strong capital and liquidity positions, while banking credit was able to recover, amid improving lending conditions*

Banking Credit to the Private Non-Financial Sector ^{1/}



1/ Includes the balance of the regulated Sofomes (SOFOMER) of banking institutions and financial groups.

2/ Numbers are adjusted so as not to be distorted by the effect of the transfer of the UDIS Trust portfolio to the commercial banking balance sheet and by the reclassification of loans in direct portfolio to ADES. It is also adjusted for the incorporation of some regulated Sofomes.

Source: Bank of Mexico.

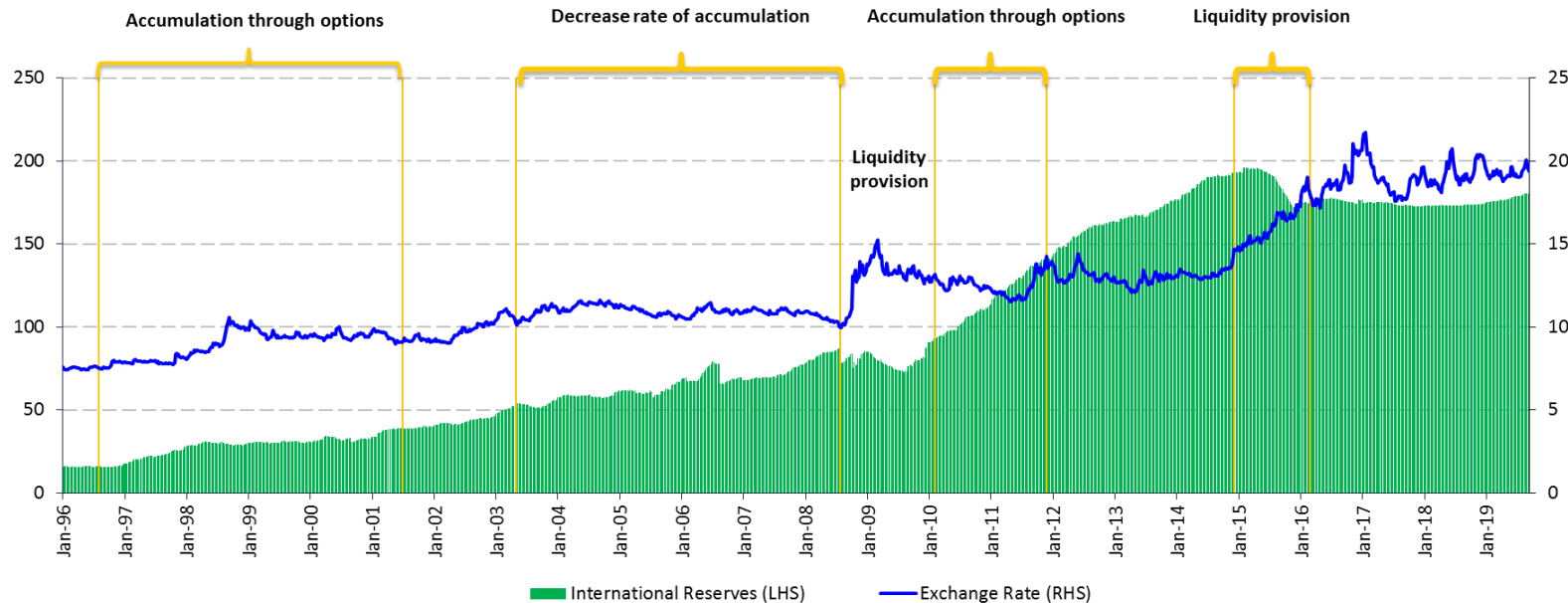
- **From the start of the GFC, Mexican economy's adjustment relied heavily on exchange rate, with limited FX intervention.**
- **The Foreign Exchange Commission (FEC)**, in charge of determining FX policy in Mexico, had normally used pre-announced rule-based mechanisms to achieve the desirable level of international reserves without distorting the performance of the exchange rate market.
 - ✓ *In particular, during the GFC among the mechanisms used was the auction of US dollars, when a predetermined percentage change in the exchange rate took place.*
- **Nevertheless, there were some changes in the FX intervention rules and in the international reserves approach in the aftermath of the GFC (listed below).**
- **Additionally, in 2009, the IMF granted the Flexible Credit Line (FCL) to Mexico**, providing additional liquidity support. The FCL is only granted to countries with sound policies which may be affected by external shocks and volatile conditions in capital markets.
 - ✓ *This line signaled strong macroeconomic fundamentals and became an additional shield for the Mexican economy, given the tight conditions in international capital markets that prevailed.*

■ Regarding FX intervention and international reserves:

- From April 2008 to July 2009 FX interventions amounted to more than \$30 billion. The net **de-accumulation** was of around 14.4% (equivalent to \$12.2 billion) of its total international reserves. **To restore international reserves**, from February 2010 to November 2011 the FEC **implemented a reserve accumulation mechanism**, under which the central bank sold US dollar put options to the market through monthly auctions accumulating \$9.1 billion (or 20% of the total reserve accumulation during that period, which amounted to \$46.5 billion). High oil prices, and an appreciation trend, enabled said accumulation.
- Since then, **the FEC doesn't use a single rule to decide the adequate amount and timing to intervene**. The decision is based on several factors such as liquidity and volatility operation conditions in the foreign exchange market and the daily turnover of the Mexican peso. Based on this information, the FEC decides to intervene on a case-by-case basis.
- It is worth noting that **FX interventions' main objectives** are to provide liquidity and to decrease volatility in the FX market. They **do not seek to attain any particular level of the exchange rate**.

Bank of Mexico's International Reserves and the Mexican Peso Exchange Rate

Billions of US dollars and Pesos per US dollar

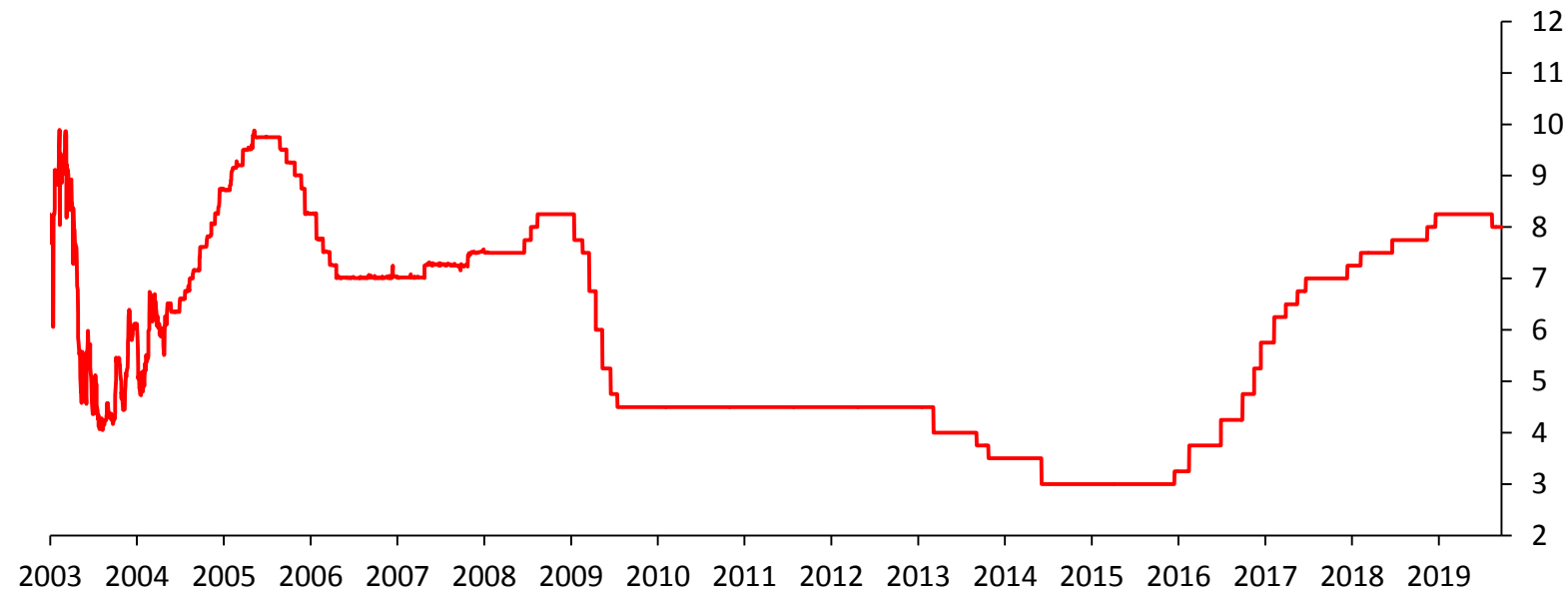


Source: Cano Et. Al. (2018) "Mexico: Free-Floating Exchange Regime" in "Foreign Exchange Intervention in Inflation Targeters in Latin America" in Chamon, et.al (eds.) *Foreign Exchange Intervention in Inflation Targeters in Latin America*. IMF.

- The spillover effects stemming from UMP in AEs contributed to create a challenging backdrop in terms of the implementation and design of emerging markets' monetary policy.
- In this sense, central banks in EMEs had to weigh on both internal and external determinants of inflation, since these could require opposite policy actions.
- For Mexico in particular, macroprudential measures implemented after the 1995-Tequila Crisis helped to maintain financial stability. This, in turn, allowed the monetary policy transmission mechanisms continue to operate adequately, in fact allowing the loosening policy cycle during 2009 to accommodate the sharp negative economic downturn. At the time, inflation was descending forecasts.

Target for the Overnight Interbank Interest Rate ^{1/}

%



1/: The overnight interbank interest rate is shown until January 20, 2008.

Source: Banco de México.

Índice

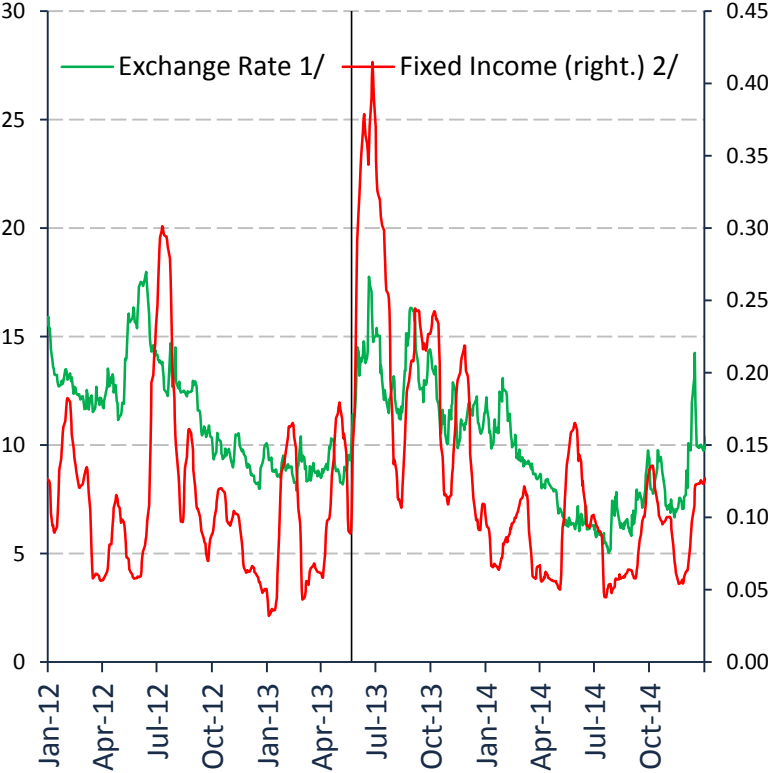
1 The GFCs' Aftermath, UMPs, and Capital Inflows

2 The “Taper Tantrum” and Capital Outflows

3 A Low Interest Rates Environment and EMEs Policy Outlook

As it is well known, the “Taper Tantrum” episode in 2013 prompted **high volatility** on asset prices and **capital outflows** in EMEs. Mexico was not the exception.

Volatility in Mexican Financial Markets
Percentage



1/ Refers to the implied volatility of options at one month of the Mexican peso.
2/ Refers to the standard deviation of a 30-day moving window of 10-year interest rates in Mexico.

Source: Bloomberg and Proveedor Integral de Precios (PiP).

Exchange Rate
Pesos per Dollar



Source: Banco de México.

Interest Rates in Mexico
Percentage



Source: Banco de México and Proveedor Integral de Precios (PiP).

- In particular, the adopted **policy mix** to handle the bout of financial volatility after the “Taper Tantrum” allowed:
 - *The flexible exchange rate to act as the main shock absorber dealing with capital outflows, reaffirming the long standing commitment to open capital markets.*
 - *Mexico’s relatively deep domestic financial markets to accommodate the portfolio rebalancing caused by capital flows.*
 - *Renewals of the FCL with the IMF, reflecting the confidence on Mexico’s policy framework and enhancing the backstop provided by the level of international reserves.*

- On the **macroprudential front**, there was no need to resort to additional changes, as the country had already advanced in that way:
 - *As mentioned above, after the 1995 Tequila Crisis a myriad of reforms strengthened the country’s banking regulation and supervision.*
 - *After the GFC, a series of measures were implemented, including macroprudential tools with the objective of increasing the resilience of the financial system. In particular, the Council of the Financial System was created and Basel III rules were implemented ahead of international schedule.*

- Starting in the second half of the 90's, the country has implemented macroprudential measures focused on increasing the resilience of the financial system as a whole and limiting systemic risk such as:^{1/}
 - *Higher capital requirements (both in terms of quality and quantity).*
 - *Leverage limits.*
 - *Liquidity requirements.*
 - *Strengthening of the risk management framework and corporate governance of financial institutions.*
 - *Stricter than Basel III requirements for systemic institutions.*
 - *Strengthening of the derivatives markets.*
 - *Strengthening of the financial culture and of the ethics in market practices.*
 - *Improvement of the resolution regimes.*
 - *More efficient international coordination mechanisms for the cooperation and management of cross border crisis.*

1/ Banco de México's Financial Stability Report, October 2018.

- **The sound macroprudential framework allowed Banco de México to reduce its policy rate two times in 2013 after the “Taper Tantrum”,** in spite of such complex scenario. This was in response to the economic slowdown and did not compromised the convergence of inflation to its target.
 - *This is, monetary policy was able to address domestic economic conditions, without facing the policy tradeoff associated to the UMPs since, in absence of the macroprudential framework, a rise on interest rates may have been the adequate policy response to financial volatility.*
- In sum, **macroprudential policies,** that favored the sound development of the financial system, **served as a complement for monetary policy.**
- Over time, the result was that investors differentiated EMEs based on their macroeconomic fundamentals. **In this sense, Mexico’s sound macroeconomic framework helped in reducing the volatility of its assets, in comparison to other EMEs, while the banking system remained resilient.**
- **The use of capital controls, which have been labelled as macroprudential measures, were avoided in Mexico.** The main reasons are:
 - *Specific laws and different tax policies across countries may complicate the investment in markets that apply such type of measures.^{1/}*
 - *They can be circumvented and lead to policy uncertainty.^{2/}*
 - *There is a risk of over-stating the efficacy of capital controls.^{2/}*
 - *The increasing financial integration across economies suggests that there are significant benefits related to capital mobility for economic agents.^{2/}*

1/ IMF advice on unconventional monetary policies (2019).

2/ Sidaoui, Ramos Francia, Cuadra (2011), “Global liquidity, capital flows and challenge for policymakers: the Mexican experience”. BIS Papers No. 54.

Índice

1 The GFCs' Aftermath, UMPs, and Capital Inflows

2 The “Taper Tantrum” and Capital Outflows

3 A Low Interest Rates Environment and EMEs Policy Outlook

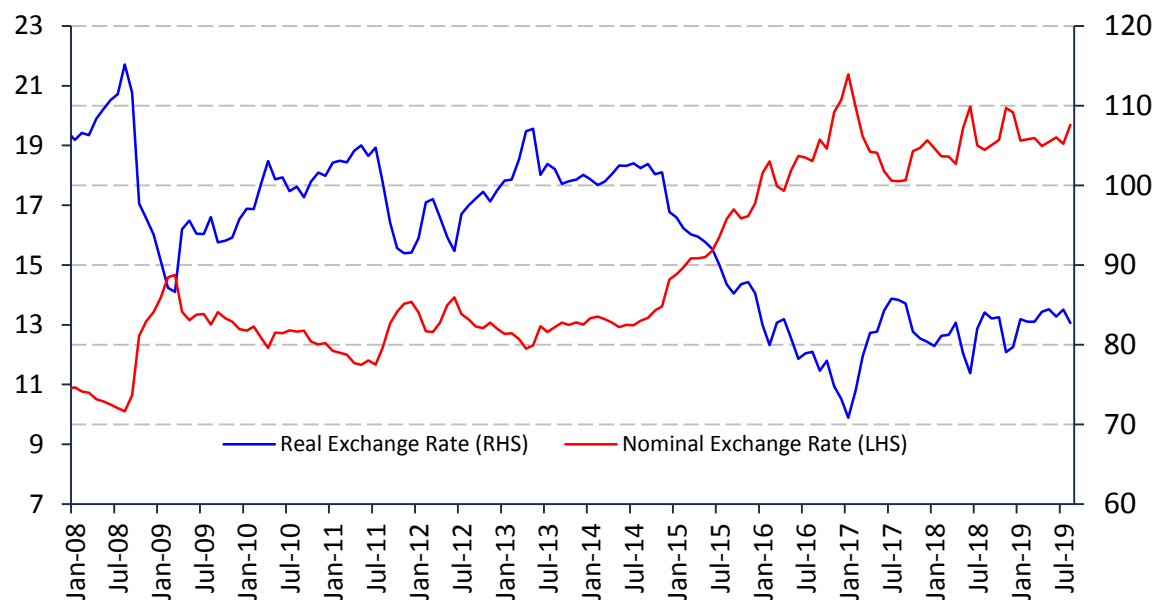
- **In the aftermath of the GFC, economic growth observed in AEs has been underwhelming. Which, in turn, explains why UMPs have been in place ever since.** More recently, trade tensions, slower than expected growth in the Euro Area and Geopolitical risks explain why AEs have adopted a more accommodative monetary stance, with lower interest rates and even higher asset purchases, intensifying the search for yield in EMEs.
- As a consequence, **the tradeoffs faced by policymakers have been at the forefront of the policy debate.** Empirical evidence suggests that the US monetary policy may signal the risk stance of global financial markets through its positive correlation with uncertainty measures, such as the VIX. Changes in the VIX, in turn, signal a larger or smaller risk appetite. Hence, for example, a smaller level of the Federal Funds Rate and the corresponding low level of the VIX may cause a large inflow of capital into EMEs.^{1/}
- **Against this backdrop, a floating exchange rate is the best contributor to the macroeconomic and financial stability in EMEs** through two main channels:
 - *Deter excessive capital inflows.*
 - *Allow domestic monetary policy to pursue stabilization of domestic economic variables.*
- Interconnectedness of financial markets around the world has **increased the importance of monitoring the evolution of capital flows, in particular those related to UMPs.** In this context, in recent years Banco de México has conducted monetary policy monitoring closely:
 - i. Global economic activity, inflation and their outlook.
 - ii. Monetary policy stances in major AE's.
 - iii. Geopolitical risks.
 - iv. Risk sentiment in global financial markets.
- **In particular, Banco de México pays special attention to monetary policy relative stance to that of the U.S.**

^{1/} See, for example, Kalemlı- Özcan (2019). "U.S. Monetary Policy and International Risk Spillovers", Prepared for the Jackson Hole Economic Policy Symposium Federal Reserve Bank of Kansas City August 23-25.

- **Monetary Policy:** Starting in 2014, the Mexican economy has faced a sequence of adverse shocks. These required a real exchange rate adjustment.
- In particular, the smaller current account deficit was a necessary condition to accommodate the reduction of external sources of finance. The process entailed a re-composition of the external accounts.
 - *The trade balance displays an oil-trade deficit and a non-oil trade surplus, in contrast to the previous observed trend.*
- Monetary policy contributed to the orderly adjustment of the real exchange.
 - *The significant real exchange-rate depreciation observed since 2014 has had a low pass-through to prices. This, in turn, reflects an improved functioning of the nominal economic variables.*

Real Effective Exchange Rate and Nominal Exchange Rate

Units and Pesos per US Dollar

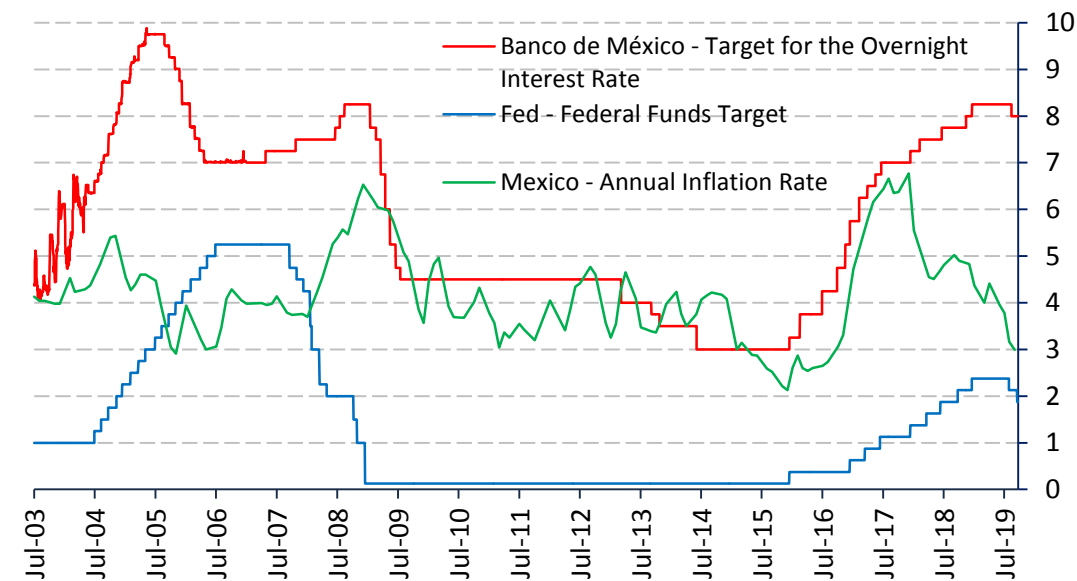


Note: The Real Effective Exchange Rate, Consumer Price Index is used. An upward movement of the real exchange rate means a real appreciation, whereas for the nominal exchange rate a nominal depreciation.

Source: International Monetary Fund and Banco de México

Target for the Overnight Interbank Interest Rate, Fed Funds Rate and Headline Inflation

Percentage



Source: Banco de México, U.S. Department of the Treasury and INEGI

- In this context, **an enhanced policy mix is needed to face the current global outlook since conventional monetary policy transmission channels face new trade-offs.** Consequently, monetary policy in Mexico has been complemented with:
 - *A clear communication strategy,*
 - *Exchange rate intervention policies, and*
 - *Macroprudential policies.*
- These measures have contributed to an orderly adjustment of Mexican financial markets, during the shift in the global monetary cycle, and to allow monetary policy transmission mechanisms to operate more efficiently.
- **Communication strategy:** Banco de México has implemented a wide-range of changes in its communication strategy in order to increase transparency and accountability.
 - *In 2017 it started publishing its point forecasts for quarterly inflation in the Quarterly Reports, which facilitates the evaluation of a central bank's performance that conducts the monetary policy to attain a given inflation target in a certain time frame.*
- **Exchange rate intervention policies:** As mentioned above, established pre-announced rules to intervene in the FX markets were eventually replaced by discretionary interventions, allowing the rebuilding of the stock of International Reserves.
 - *Recently, main source of international reserves accumulation dried up as Pemex's trade balance turned negative. As a response, Banco de México implemented auctions of non-deliverable forwards settled in Mexican pesos, with which international reserves are not used.*

- **Macroprudential policies**: As mentioned previously, these gained relevance after the GFC. Mexican financial authorities have implemented a series of measures focused on increasing the resilience of the financial system as a whole and limiting systemic risk.
- In recent years, the strengthening of these macroprudential policies has been reflected in Mexico with the application of measures as the ones listed in session 2.
- The current environment continues to pose significant medium- and long-term risks that could affect the country's macroeconomic conditions, its ability to grow, and the economy's price formation process.
 - Hence, there are several **risks and challenges** for economic growth and inflation that could affect monetary policy.

■ **With respect to the economic growth risks**, the following are worth noting:

Downside risks:

- *Uncertainty about trade disputes worldwide.*
- *Longer delay in the ratification of USMCA in the United States and Canada.*
- *Episodes of volatility in international financial markets.*
- *A greater than expected deceleration of global economy and trade.*
- *Domestic uncertainty that has affected investment and consumption.*
- *Additional deterioration of both the sovereign's and Pemex's credit ratings.*

Upside risks:

- *That USMSCA is formalized.*
- *A greater than expected dynamism of US industrial production.*
- *A higher than expected dynamism of aggregate demand.*
- *Boost to growth stemming from measures announced by the Ministry of Finance and Public Credit.*

■ **With respect to inflation risks**, the following are worth noting:

Upside risks:

- *That core inflation continues to show persistence.*
- *That the peso exchange rate comes under pressure stemming from external or domestic factors.*
- *The imposition of tariffs by the United States, although this risk has mitigated somewhat.*
- *That energy prices revert their trend or that agricultural and livestock product prices increase.*
- *Weak public finances.*
- *Given the magnitude of several wage revisions, that cost-related pressures arise, insofar as such revisions are above productivity gains.*

Downside risks:

- *That the peso exchange rate appreciates.*
- *That the prices of certain goods included in the non-core sub index register lower rates of exchange.*
- *That slack conditions widen more than anticipated.*

■ Banco de México's has reaffirmed its commitment to maintain a prudent monetary policy stance under the current environment of uncertainty. In particular, **to guide its actions**, it will follow closely:

- *The potential pass-through of exchange rate fluctuations to prices.*
- *Mexico's monetary policy stance relative to that of the U.S. –in an external environment that is still subject to risks- and the behavior of slack conditions and cost-related pressures in the economy.*



BANCO DE MÉXICO

www.banxico.org.mx