Outline

1 Introduction

2 Monetary Policy in 2014-15
   a. The External Environment
   b. Domestic Conditions

3 Beyond 2015
Since 2001, monetary policy in Mexico is implemented under an inflation targeting regime.

In this context:

- A permanent inflation target of 3 percent, with a variability interval of +/- 1 percent, has been set.

- A systematic analysis of inflation and its determinants is carried out, on the basis of a wide range of indicators and tools.

- The efficient convergence of inflation to the target (i.e. at the lowest possible cost in terms of economic activity) is sought.

It is also worth noting that in the aftermath of the global financial crisis, the Banco de México, in coordination with other authorities, is attaching increasing relevance to financial stability.
With the support of major efforts on the fiscal side, such a strategy has allowed continued progress in the reduction of inflation...

**Headline Inflation and Overnight Interbank Interest Rate**

**Annual %**

![Graph showing headline inflation and overnight interbank interest rate from 1993 to 2014.](image)

Source: Banco de México.

1/ Target for the overnight interbank interest rate adopted on 21 January 2008.
...and to maintain stable medium and long term inflation expectations even in the presence of substantial shocks.

Inflation Expectations and Inflation Shocks

Annual %

Sources: Banco de México and INEGI.
Outline

1. Introduction

2. Monetary Policy in 2014-15
   a. The External Environment
   b. Domestic Conditions

3. Beyond 2015
Since Mexico’s economy is very open, the implementation of monetary policy is heavily influenced by external developments.

**Trade Openness**
Exports and Imports as % of GDP, 2013

**Financial Openness**
Chinn-Ito Index\(^1\), 2012

---

**Source:** Own calculations with data from World Economic Outlook and Direction of Trade Statistics, IMF.

---

1/ Measures a country’s degree of de jure capital account openness (0-1 scale), based on the IMF’s Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER).

The recent behavior of the world economy and its projected evolution for the rest of 2014 and in 2015 favors the expansion of Mexican exports.

Major Economies: Real GDP
Index 4Q-2007 = 100, s.a.

- United States
- Japan
- China
- Eurozone
- United Kingdom

Mexican Exports by Country of Destination
% of Total, 2013

- U.S., 78.8
- Other, 11.4
- Japan, 0.6
- China, 1.7
- U.K., 0.4
- Eurozone, 4.4
- Canada, 2.8

s.a./ Seasonally adjusted.
Source: Haver Analytics.

Source: INEGI.
In particular, analysts estimate US GDP growth above potential.

US: Real Gross Domestic Product
Quarterly annualized rate, s.a.

s.a./ Seasonally adjusted.
1/ Mid-point of the central tendency interval of FOMC participants’ projections for the long-run change in real GDP.
Sources: BEA, Federal Reserve and Blue Chip.
On the other hand, the expected increase in interest rates in the US will pose additional challenges for monetary policy in Mexico and other emerging market economies. Risks are enhanced by the continued search for yield...

Volatility indexes for selected financial assets

Yield to maturity of selected fixed income securities

Source: Banco de México with data from Bloomberg
1/ MOVE (Merrill Option Volatility Estimate).
2/ VIX (“CBOE Volatility Index”).
3/ CVIX: 3-month implicit volatility of the most operated currencies.
4/ Actual volatility of the CRB index (index composed of 19 commodity futures contracts).

Source: Bank of America - Merrill Lynch.
*Bonds with credit rating lower than BBB-.
... and the fact that markets seem to be overly optimistic about the pace of interest rate adjustments in the US.

Federal Funds Rate Futures and FOMC Projections

- FFR Futures 30-Jun-14
- FFR Futures 08-Oct-14
- Median FOMC Dec-13
- Median FOMC Mar-14
- Median FOMC Jun-14
- Median FOMC Sep-14

Source: Bloomberg and FOMC Economic Projections.

Federal Funds Rate Implicit in the OIS\(^1\) Curve and FOMC Projections

- FFR implicit in OIS curve
- Median FOMC Dec-13
- Median FOMC Mar-14
- Median FOMC Jun-14
- Median FOMC Sep-14

Source: FOMC’s projections and own calculations with data from Bloomberg.

1/ Overnight Index Swap.
However, it is important to note that markets have differentiated across countries.

![Emerging Markets: Credit Default Swaps](chart)

Emerging Markets: Credit Default Swaps $^1/$

Index 01-Jan-2013 = 100

1/ 5-year CDS.

Source: Bloomberg, with data through 8 October 2014.
Outline

1. Introduction

2. Monetary Policy in 2014-15
   a. The External Environment
   b. Domestic Conditions

3. Beyond 2015
Economic activity showed clear signs of recovery during the first half of 2014.

**Real Gross Domestic Product**
Annual % and Quarterly Annualized Rate, s.a.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual %</th>
<th>Quarterly Annualized Rate, s.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>-4.7</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>2012</td>
<td>4.0</td>
<td>1.4</td>
</tr>
<tr>
<td>2013</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>2014 I</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>2014 II</td>
<td>4.2</td>
<td></td>
</tr>
</tbody>
</table>

s.a./ Seasonally adjusted.
Source: INEGI.
Exports were the main factor behind the expansion of economic activity, but a revival of domestic demand was also observed...

Aggregate Supply and Demand
Quarterly %, s.a.

GDP: 1.0, 1.4; Imports: 0.1, 0.2; Private Consumption: 1.4, 0.2; Govt. Consumption: 1.7, 0.2; Private Investment: 3.9, 1.7; Govt. Investment: 0.2, -1.2; Exports: 1.0, 3.9

s.a./ Seasonally adjusted.
Source: Banco de México and INEGI.
...which has continued in more recent months.

**Retail Sales**
Index 2003=100, s.a.

**Imports of Consumption Goods**
1/ and Domestic Sales of Light Vehicles
Index 2007 = 100 and Thousands of annualized units, s.a.

**Gross Fixed Investment**
Index 2008 = 100, s.a.

---

**Retail Sales**
Index 2003=100, s.a.

**Imports of Consumption Goods**
1/ and Domestic Sales of Light Vehicles
Index 2007 = 100 and Thousands of annualized units, s.a.

**Gross Fixed Investment**
Index 2008 = 100, s.a.

---

s.a. / Seasonally adjusted data.
Source: Banco de México with data from INEGI.

1/ Excludes oil and automobile imports.
Source: Banco de México and AMIA (Mexican Association of the Automobile Industry).

---

s.a. / Seasonally adjusted data.
Source: INEGI.
Nonetheless, substantial slack persists.

**National and Urban Unemployment Rates**

% of EAP, s.a.

- **Urban**
- **National**

**Output Gap**

% of potential output, s.a.

EAP/ Economically Active Population.

s.a./ Seasonally adjusted.

Source: National Employment Survey (Encuesta Nacional de Ocupación y Empleo), INEGI.

s.a./ Calculated with seasonally adjusted data.

Note: The shaded area is the 95% confidence interval of the output gap.

Source: Calculated by Banco de México with data from INEGI.
In the case of inflation, some upward pressures have been observed recently.

Consumer Price Index
Annual %

Sources: Banco de México and INEGI.
However, they result from factors of a temporary nature, and are not demand-driven.

Sources: Banco de México and INEGI.
Consequently, medium and long term inflation expectations remain well anchored.

Headline Inflation Expectations
Median, %

Looking forward:

• Strong external demand;

• Expansionary monetary policy;

• Fiscal stimulus; and

• Increasing levels of confidence.

... give support to Banco de México’s expectation of 2-2.8% GDP growth in 2014 and 3.2-4.2% in 2015, implying an expansion above potential in 2H-2014 and in 2015.
A strong cyclical upturn during the rest of this year and the next is expected to coincide with the convergence of inflation to the 3% target in 2015 given:

1. A negative although gradually closing output gap.

2. Gasoline price increases based on inflation expectations.

3. A favorable base effect after the tax reform.
This scenario is subject to a number of risks:

1. Uncertainty related to estimates of the output gap.
2. Faster closing of the output gap if the recovery of economic activity is stronger than currently foreseen.
3. Additional shocks deriving from the behavior of non-core inflation or other factors.
Monetary policy normalization in the US represents another risk for the Mexican economy.

- Increased financial market volatility and uncertainty.
- Tighter external financing.
- Potential impact on peso exchange rate and inflation.

Risks have increased as the beginning of interest rate hikes draws closer.
The Mexican economy has solid macroeconomic and financial stability bases to resiliently sail through the process.

**Strong macroeconomic position:**
- Credible monetary and fiscal policies.
- Flexible exchange rate regime.
- Low current account deficit.
- Record high international reserves.
- FCL with the IMF.
- Relatively low public debt.

**Financial stability in the context of enhanced policy framework.**

**Favorable growth prospects after a major structural reform effort:**
- Education: September 2013.
- Competition: May 2014.
- Telecommunications: July 2014.
Outline

1. Introduction

2. Monetary Policy in 2014-15
   a. The External Environment
   b. Domestic Conditions

3. Beyond 2015
Inflation targeting has proved its merits in Mexico and other countries before, during and in the aftermath of the global financial crisis.

However, the crisis has highlighted a number of issues whose implications for inflation targeting regimes will have to be carefully assessed.

One of them is the need to better understand the role of monetary policy and other instruments in preserving financial stability.

Nonetheless, this does not imply a substantial modification of the fundamental structure of these regimes, nor does it raise question marks on their usefulness to anchor inflation expectations.
Beyond 2015, monetary policy is likely to operate in an environment characterized by world economic growth below that observed before the crisis...

GDP Growth Projections
Annual %

Source: IMF’s World Economic Outlook, October 2014.
...and an upward trend in international interest rates, which underlines the importance of strengthening the domestic sources of growth.

Federal Funds Rate
Annual %

Federal Funds Rate
FOMC
OIS-impied
Futures
Blue Chip

Sources: FOMC, Bloomberg and Blue Chip.
Even before considering the key measures approved in 2014 (financial, competition, telecommunications and energy), Mexico’s efforts of structural reform were deemed to be among the most ambitious in the world. Contrary to other experiences, this was not propelled by an economic crisis.

Economic Reform Responsiveness

Share of OECD reform recommendations with significant action taken during 2012-2013

The latter should allow the economy to grow at faster rates without pressures on prices.

- More flexible and competitive product and input markets
- More efficient resource allocation
- More and better human and physical capital
- More incentives for technological change
- Stronger institutional framework

Productivity gains

Higher economic growth

Lower inflationary pressures

Main challenges: adequate implementation of structural reforms, tackling other major structural obstacles to growth, continuous strengthening of economic fundamentals.