Challenges for Monetary Policy Implementation in Mexico

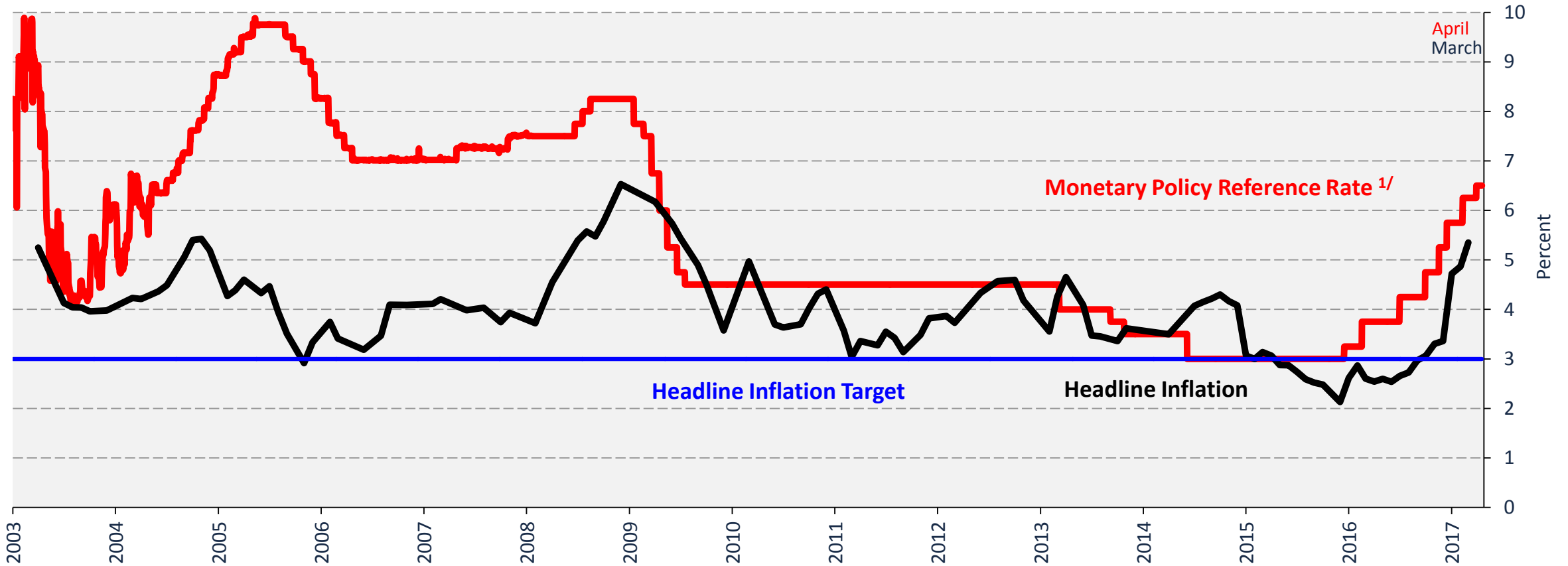**Agustín Carstens**

April, 2017

BANCO DE MÉXICO

Introduction

- During the last several years, the discussion about monetary policy has been monopolized by advanced economies' unconventional monetary policy actions.

- Some debate has arisen in the context of emerging markets economies. In particular, in those that are subject to a floating exchange rate (ER) regime and whose monetary policy is conducted under an inflation targeting (IT) scheme.

- Expected results under this framework:

  ✓ *With a floating ER regime, real exchange rate flexibility would be an efficient shock absorber when there is a consistent macroeconomic framework.*

  ✓ *A credible IT scheme should provide assurance of appropriate monetary policy.*

- From the above, it follows that central banks should not react to ER dynamics. Otherwise, the integrity of the flexible exchange rate regime would be compromised.

Mexico's experience: during the last years monetary policy has been reacting to ER developments to the extent that they could de-anchor inflation expectations, so it is my conviction that this has not converted us into an ER targeter.

# Monetary Policy Rate and Inflation
%

April
March

Monetary Policy Reference Rate [1]

Percent

Headline Inflation Target

Headline Inflation

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

1/ Before January 20, 2008 it refers to the observed Overnight Interbank Interest Rate.
Source: INEGI and Banco de México.

Consumer Price Index
Annual incidences in percentage points [1]

Core
Non-core without gasoline

Headline

Gasoline

March
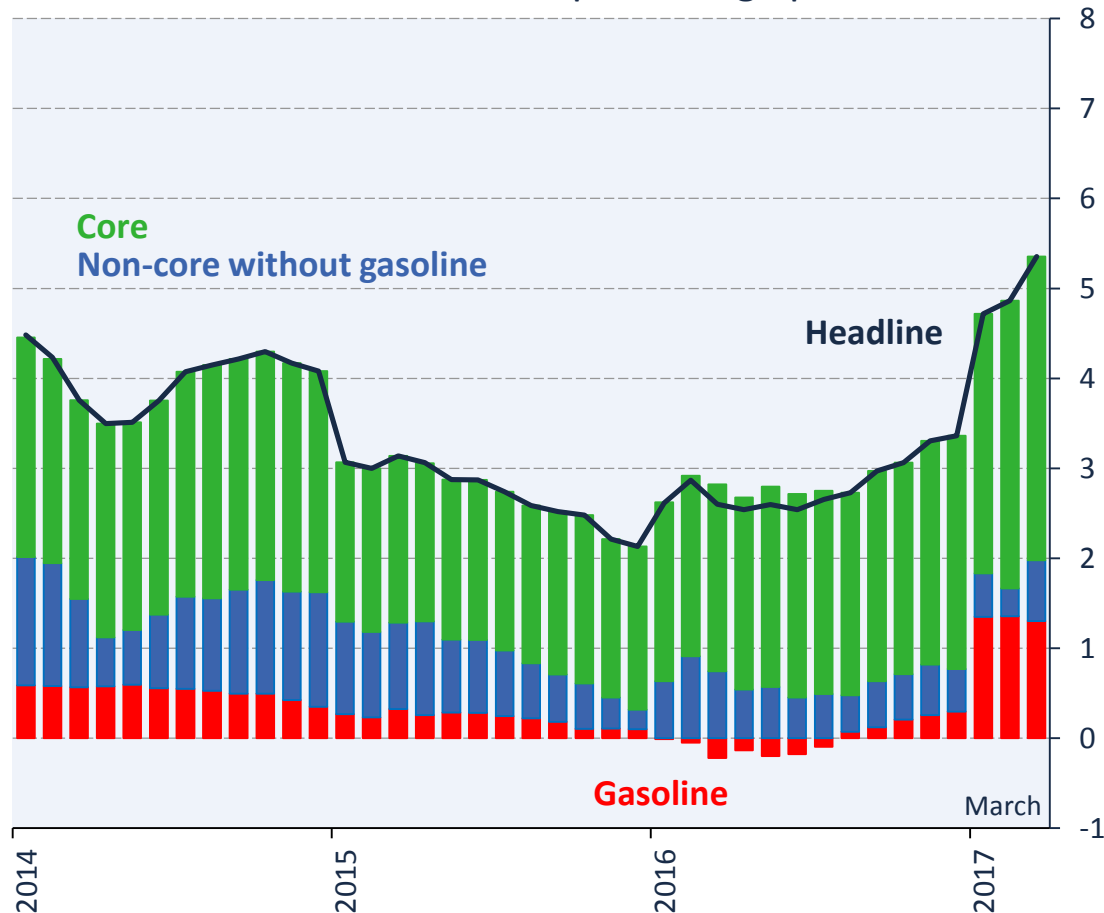
1/ Incidence refers to the contribution of each component of the CPI on percentage points to the general inflation. In some cases the sum of the respective components may have some discrepancy due to rounding effects. Source: Elaborated by Banco de México with data from INEGI.
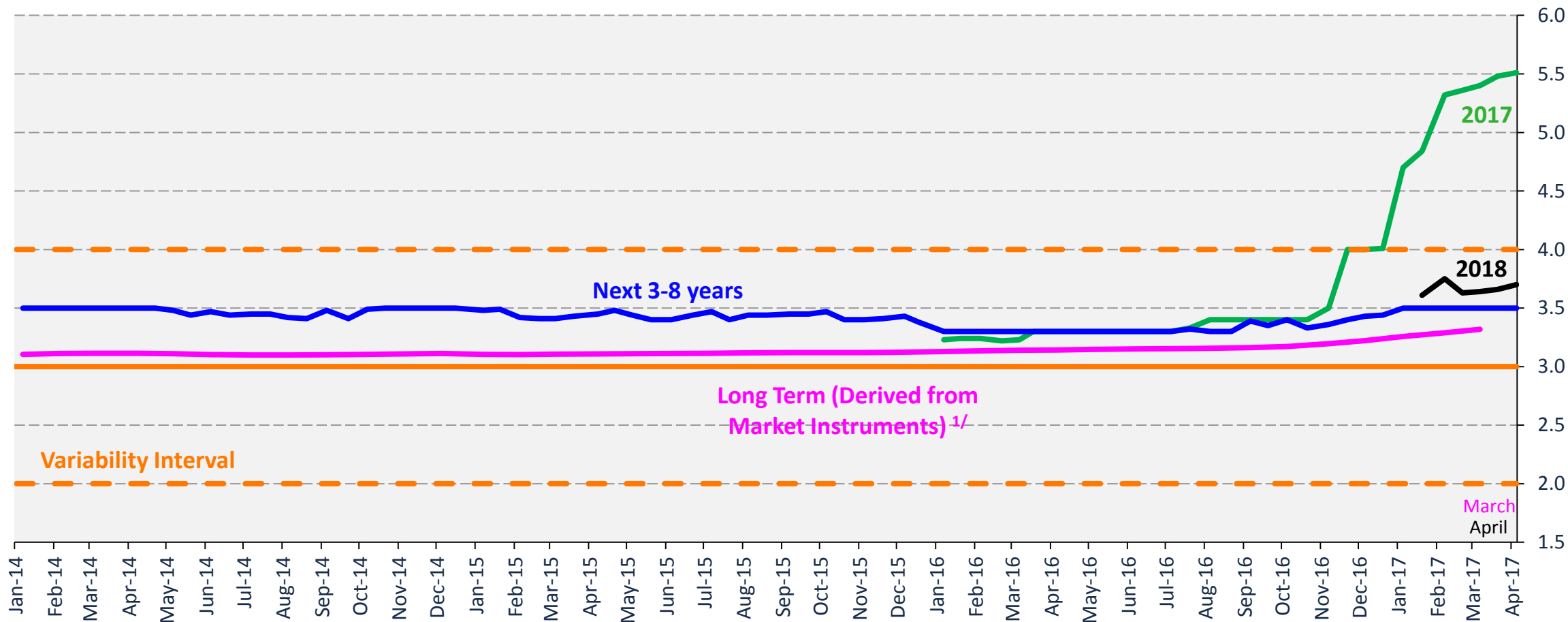
Nominal Exchange [2]
Pesos per USD

↑ Depreciation

April
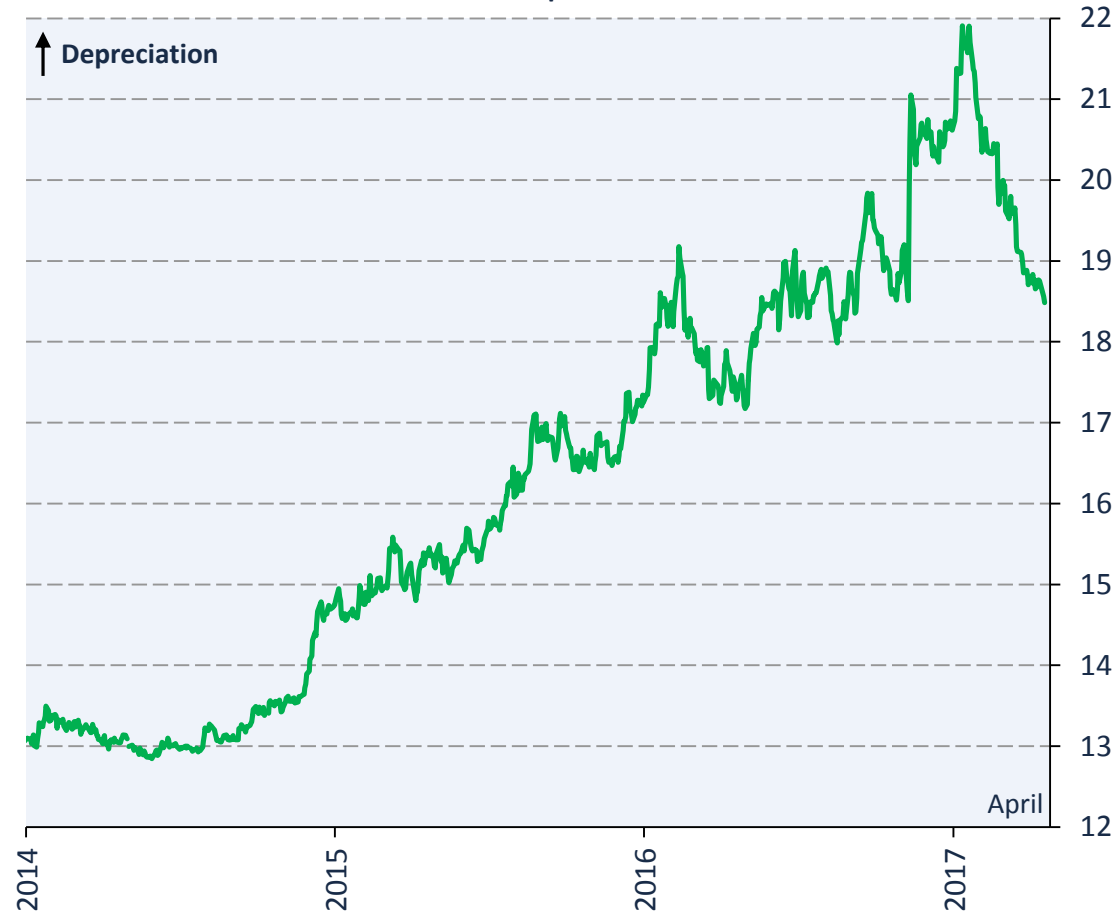
2/ Refers to FIX Exchange rate.
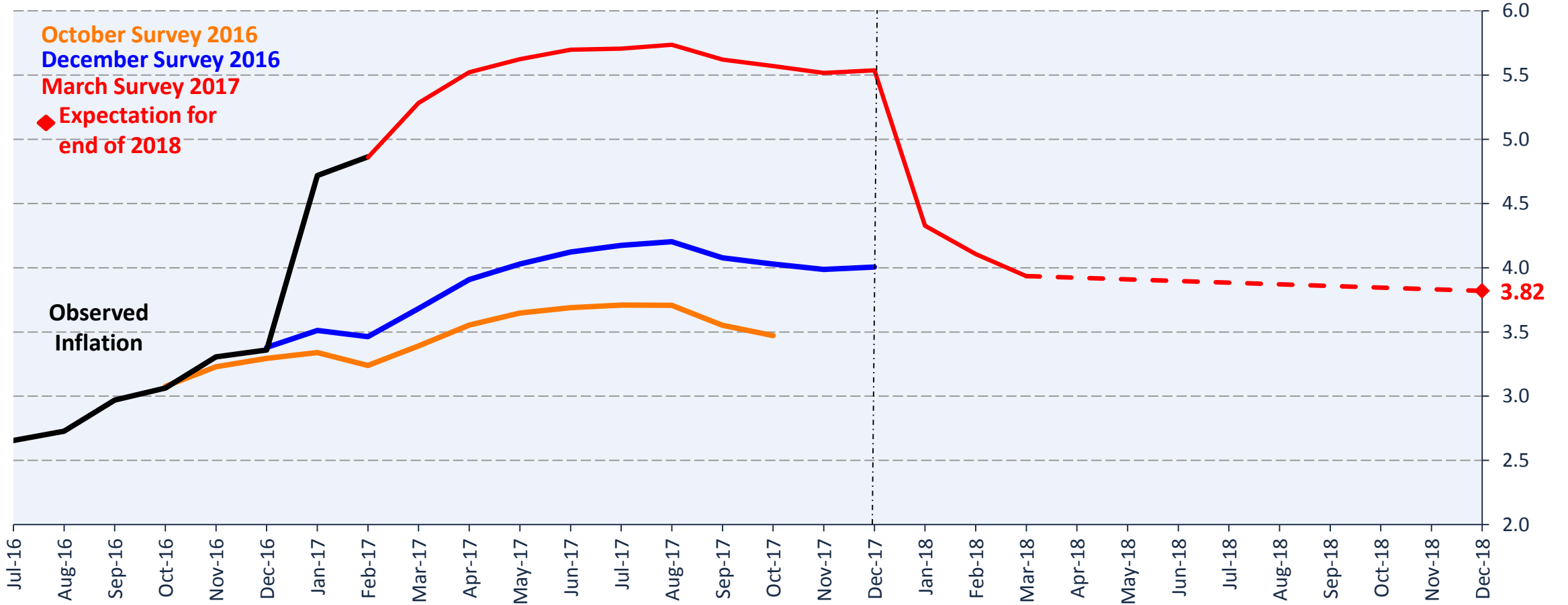Source: Banco de México.

Inflation Expectations
Median, %

1/ For a description of the estimation of log-term inflation expectations, see the Box "Decomposition of Break-even Inflation" in the Quarterly Report, October – December 2013. For the current Report, the estimate was updated by including data as of December 2015.
Source: Banco de México and Citibanamex Survey (fortnightly periodicity).

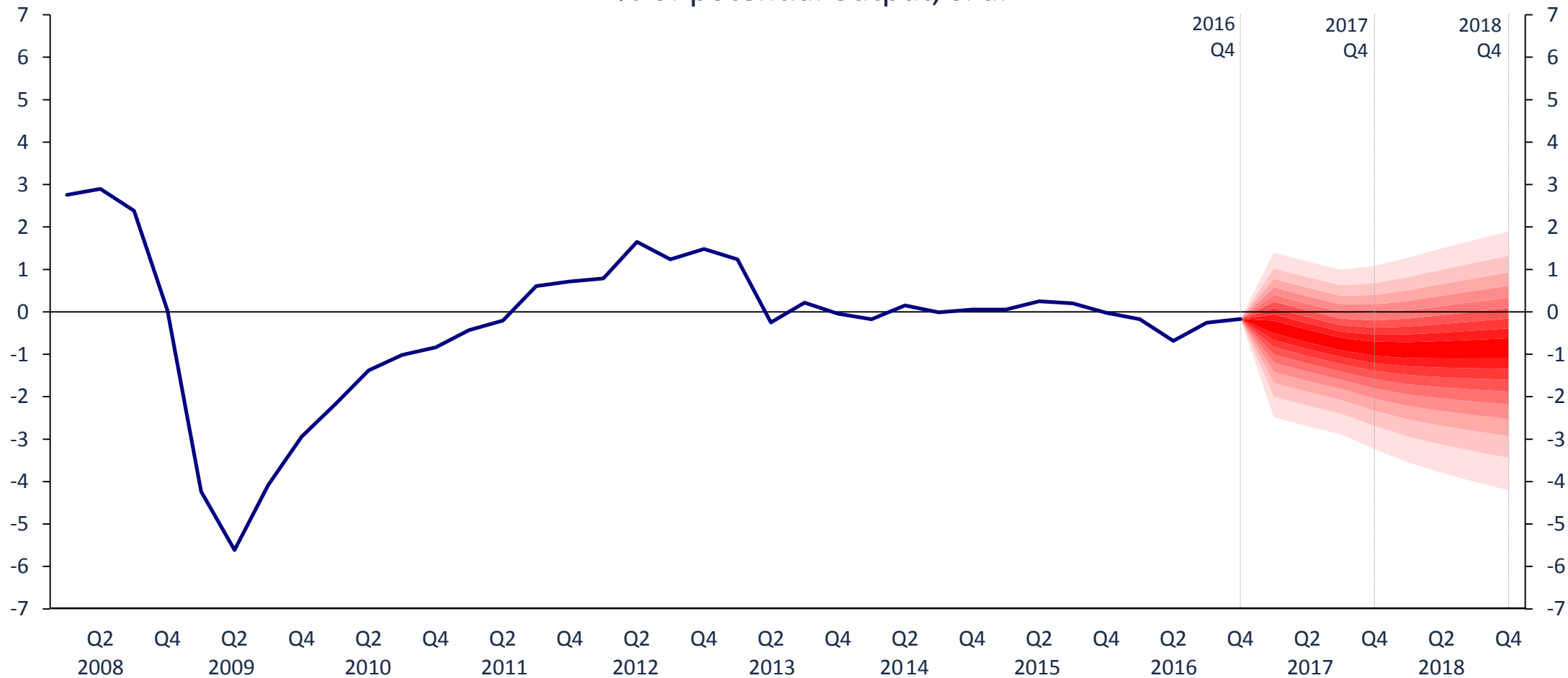Monthly Annual Inflation Expectations
%

October Survey 2016
December Survey 2016
March Survey 2017
◆ Expectation for end of 2018

Observed Inflation

3.82

Source: Banco de México Survey, INEGI.
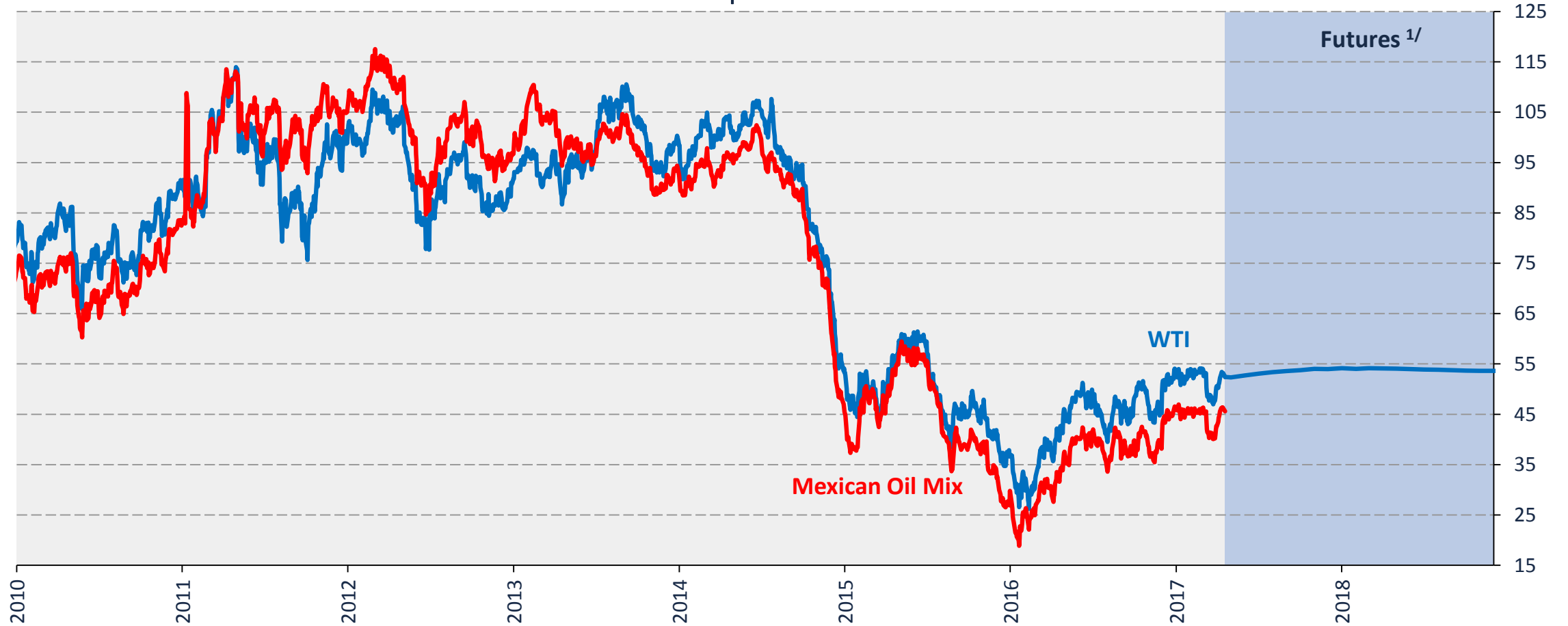
Fan Chart: Output Gap
% of potential output, s. a.

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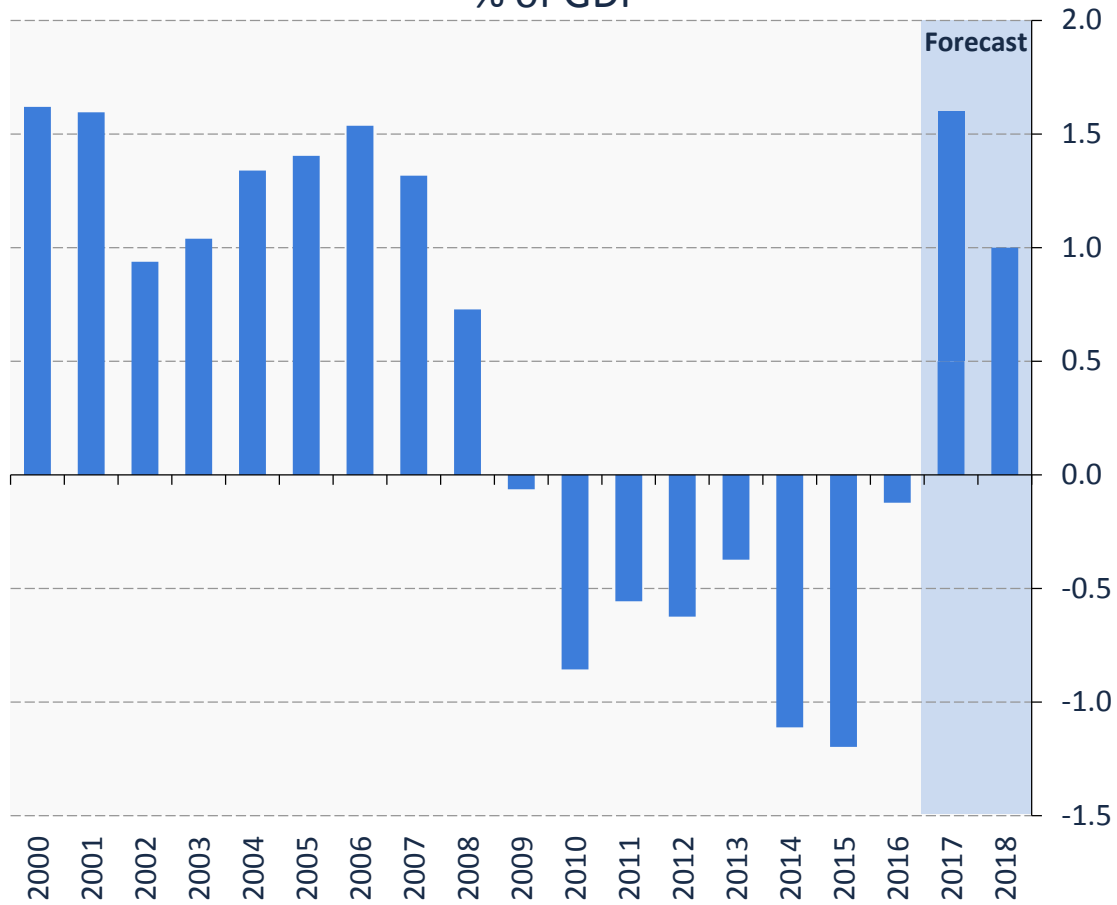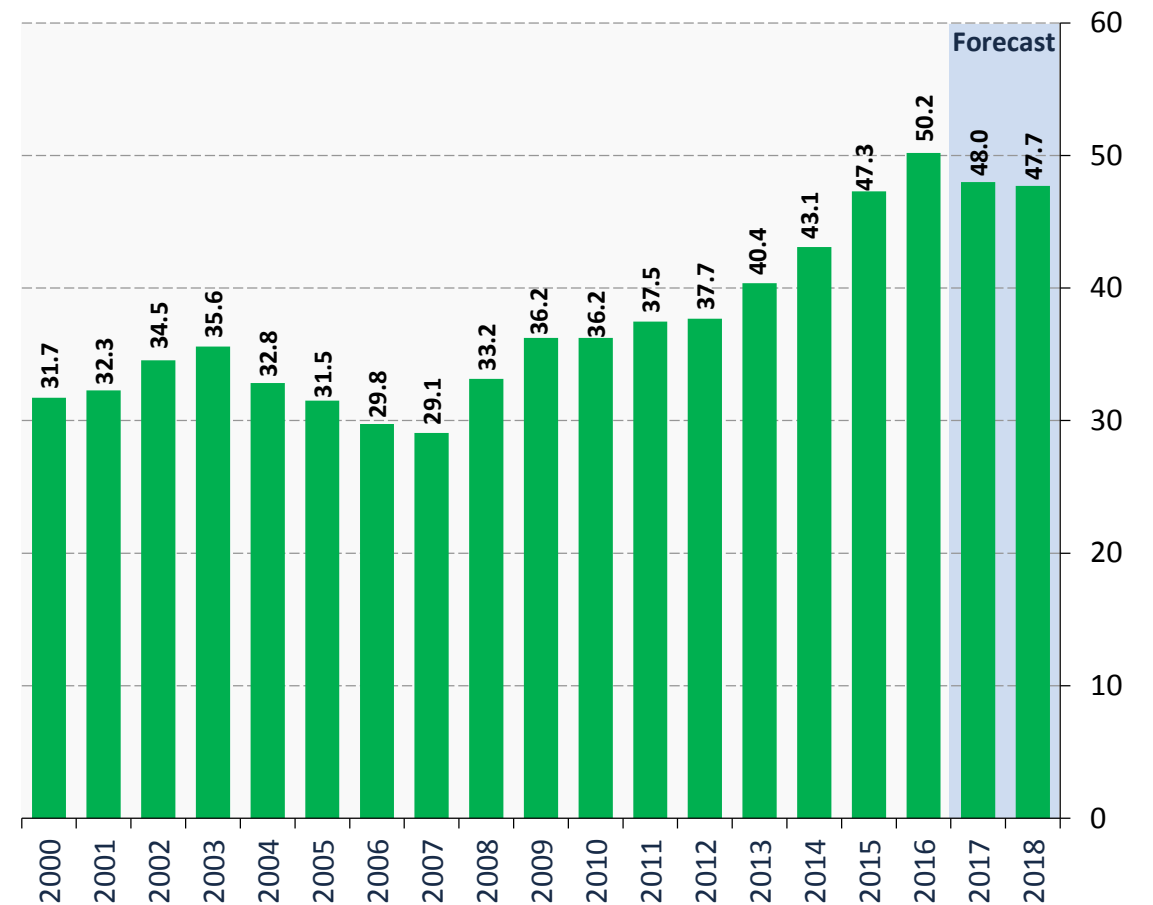Source: Banco de México.

Crude Oil Prices
USD per barrel

1/ Data up to April 18, 2017.
Source: Bloomberg.

Public Sector Primary Balance [1]
% of GDP

# Public Debt [2]
% of GDP

1/ Negative (positive) data indicate a deficit (surplus). From 2000 to 2008, public expenditure includes the physical investment of Pemex through the Pediregas scheme.
Source: SHCP and Pre CGPE 2018.

2/ Refers to the Historical Balance of Public Sector Borrowing Requirements.
Source: SHCP and Pre CGPE 2018.

Trade Balance
USD millions

Current Account
% of GDP

Oil

Total

Non-Oil

1Q-2017 [1]
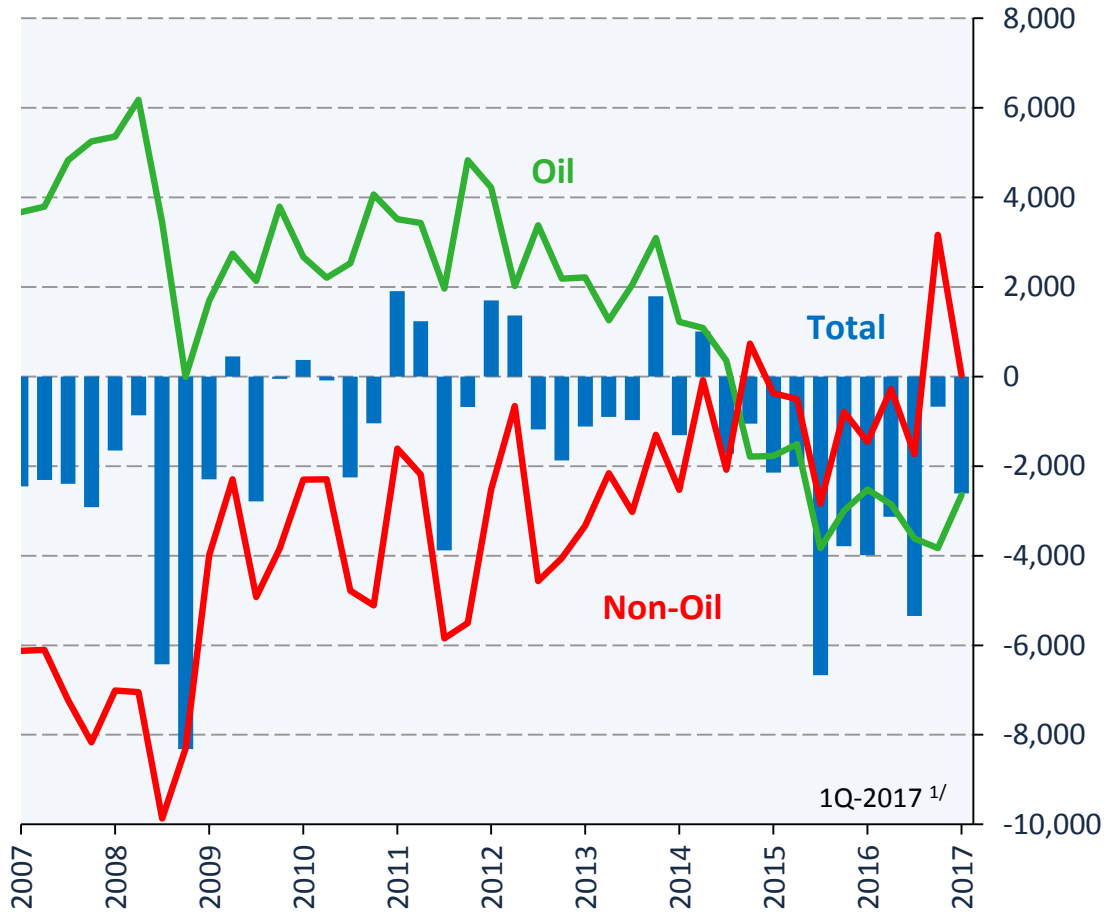
1/ It refers to the January-February period.
Source: SAT, SE, Banco de México, INEGI. Merchandise trade balance of Mexico. SNIEG. Information of National Interest.
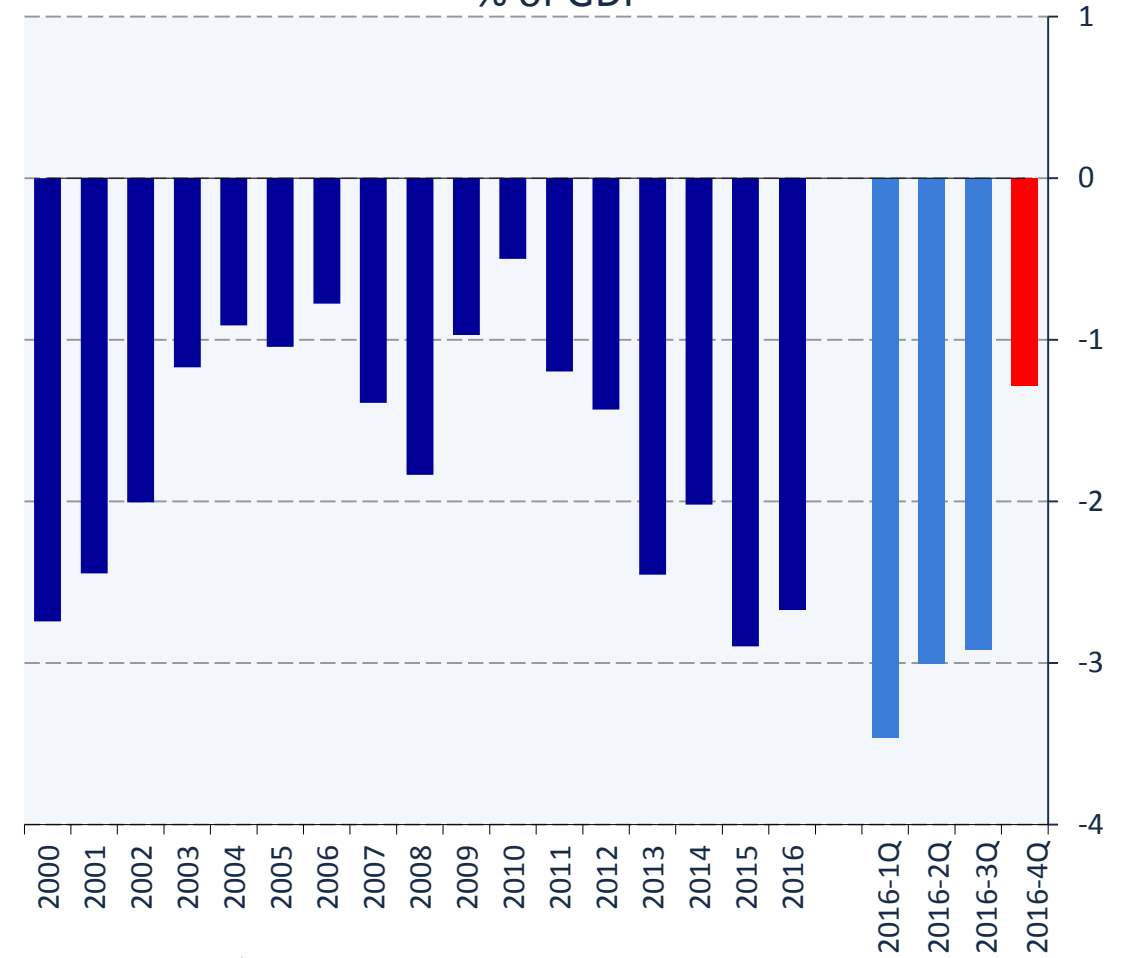
Source: Banco de México and INEGI.
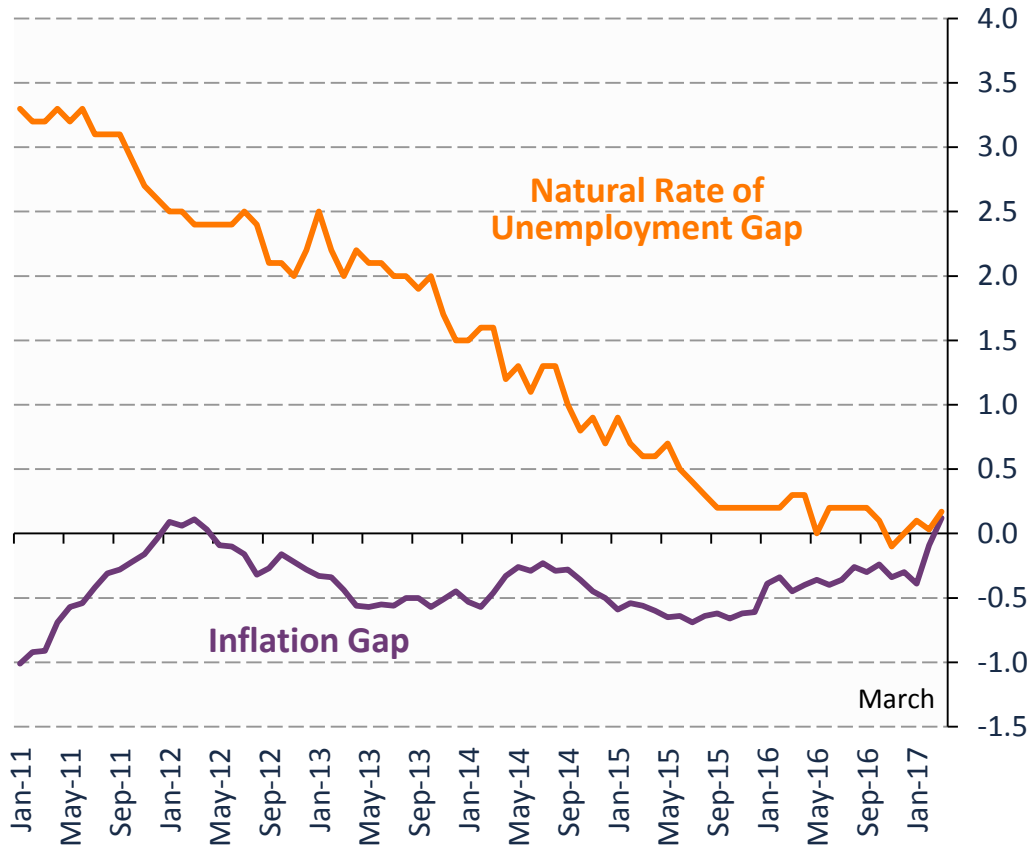
United States

Inflation and Unemployment Gaps
%


Natural Rate of Unemployment Gap

Inflation Gap

March

Note: The inflation gap is relative to the Federal Reserve's objective of 2%. The unemployment gap is relative to the natural rate of unemployment estimated by the CBO.
Source: U.S. Department of Labor, Bureau of Labor Statistics; Congressional Budget Office (CBO).

Expected Federal Funds Rate Implicit in OIS Curve [1]
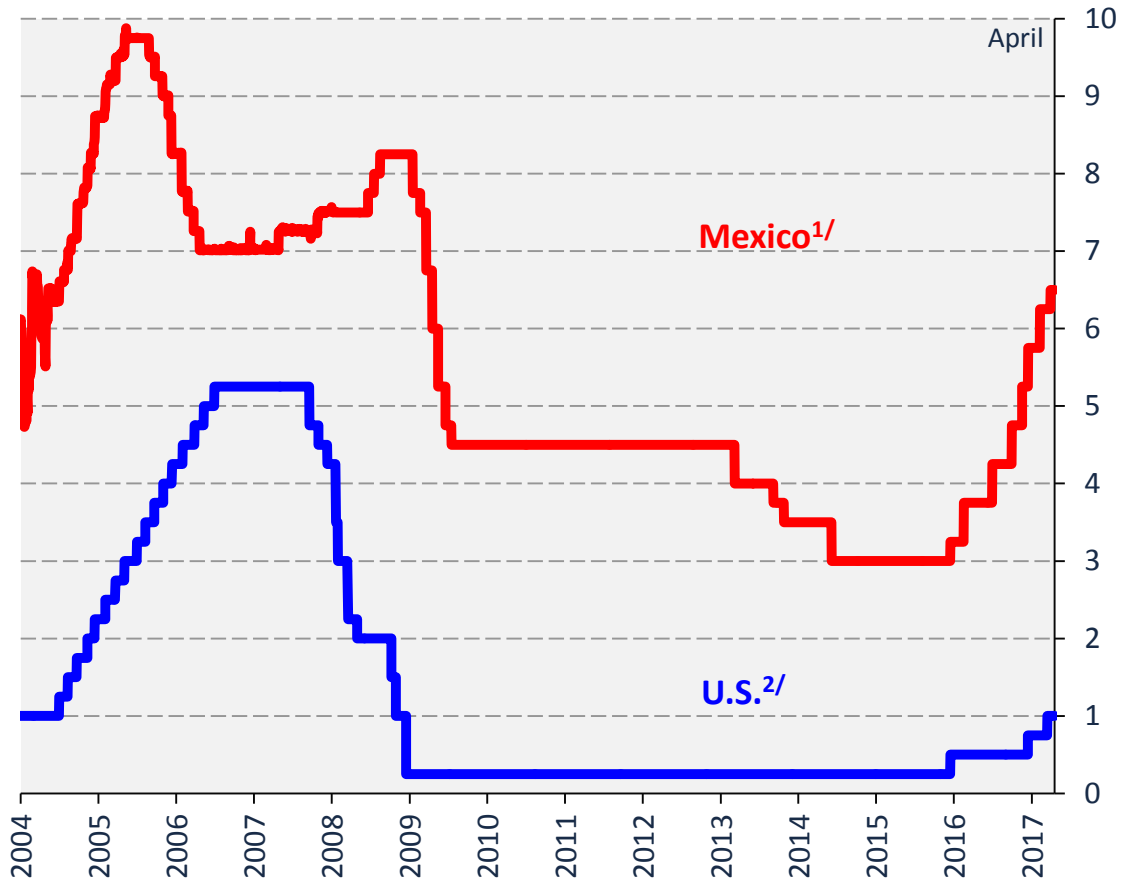### %

Dec.-17   Dec.-18

Market's Forecast
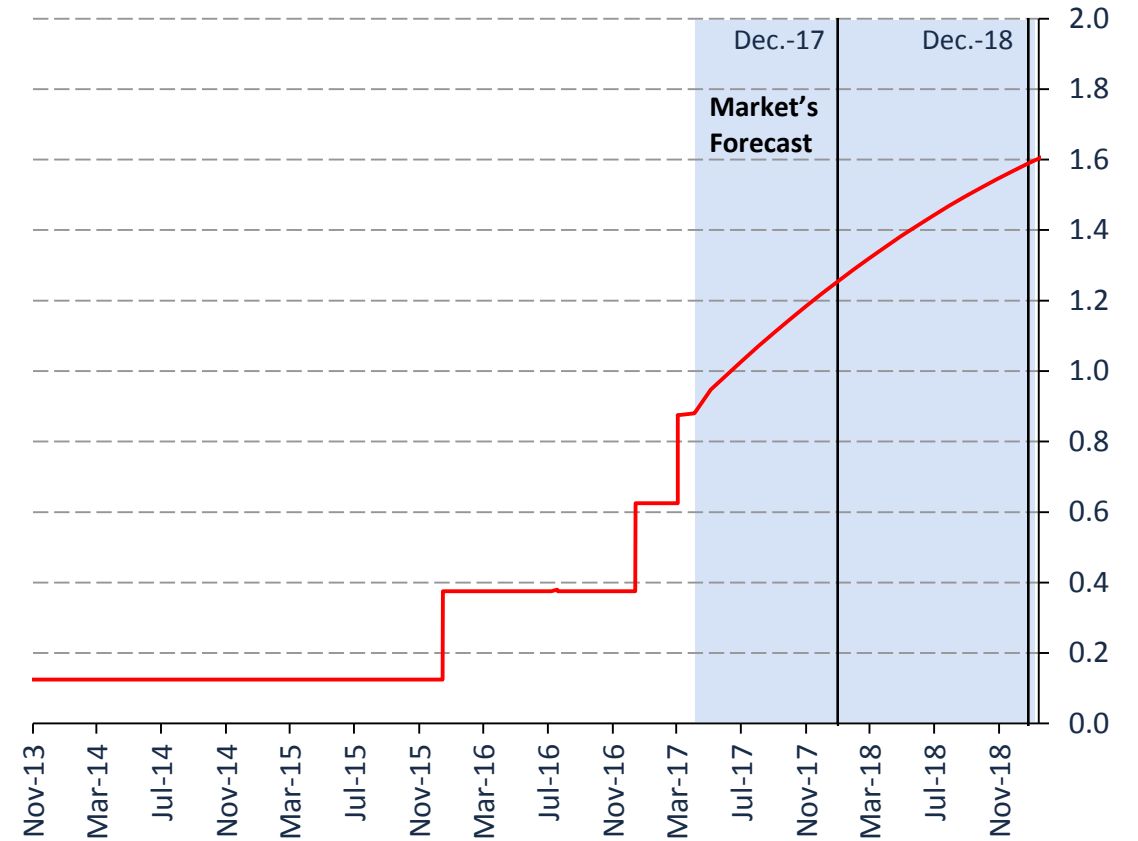
1/ OIS: Fixed-For-Floating swap where the fixed interest rate is the reference rate.
Note: Data for the observed federal funds rate corresponds to the average between the lower and upper bounds of the range (0.50% - 0.75%).
Source: Banco de México with data from Bloomberg.

Monetary Policy Reference Rates for Mexico and the U.S.
%

Mexico[1]

U.S.[2]

April

1/ It refers to Target for the Overnight Interbank Interest Rate. Before January 20, 2008 it refers to the observed Overnight Interbank Interest Rate.
2/ The upper limit of the target range for federal funds rate is showed.
Source: Federal Reserve and Banco de México.

Interest Rate Differential Adjusted by Risk for the Mexican Peso and Selected Emerging Market Currencies
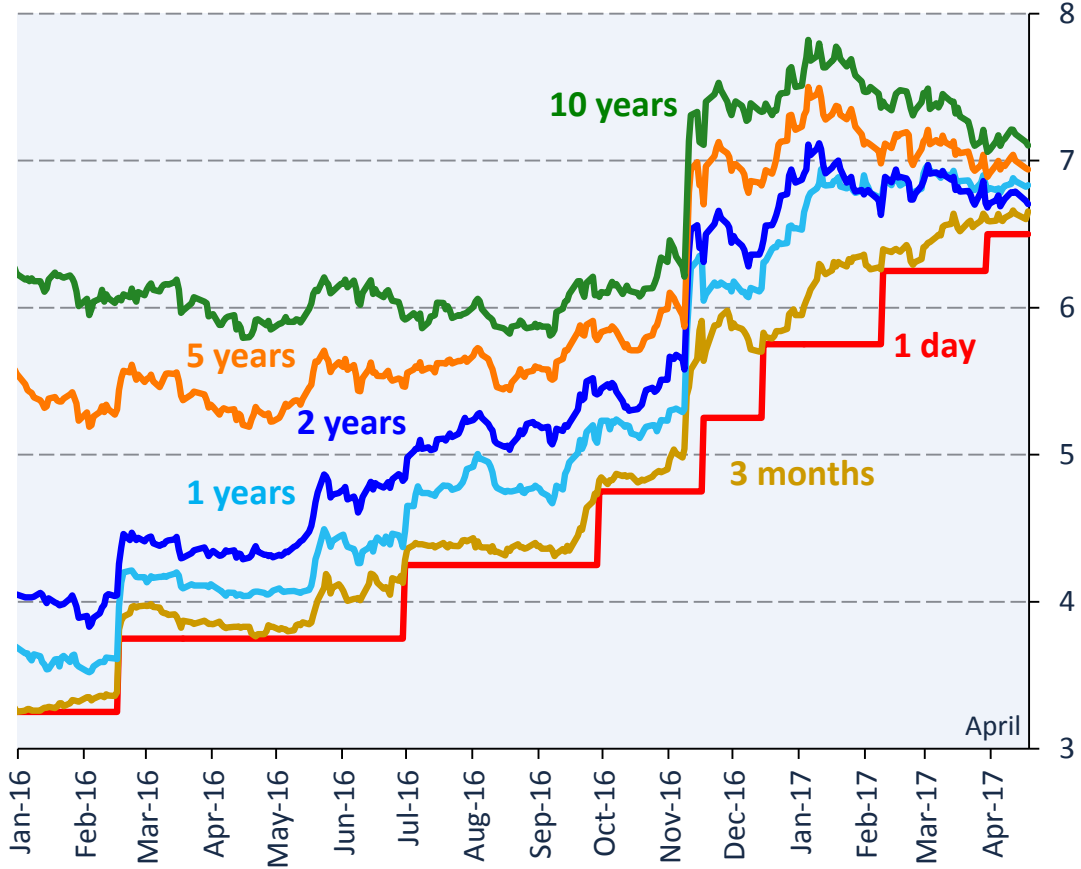Index

Mexico

Emerging Markets

April
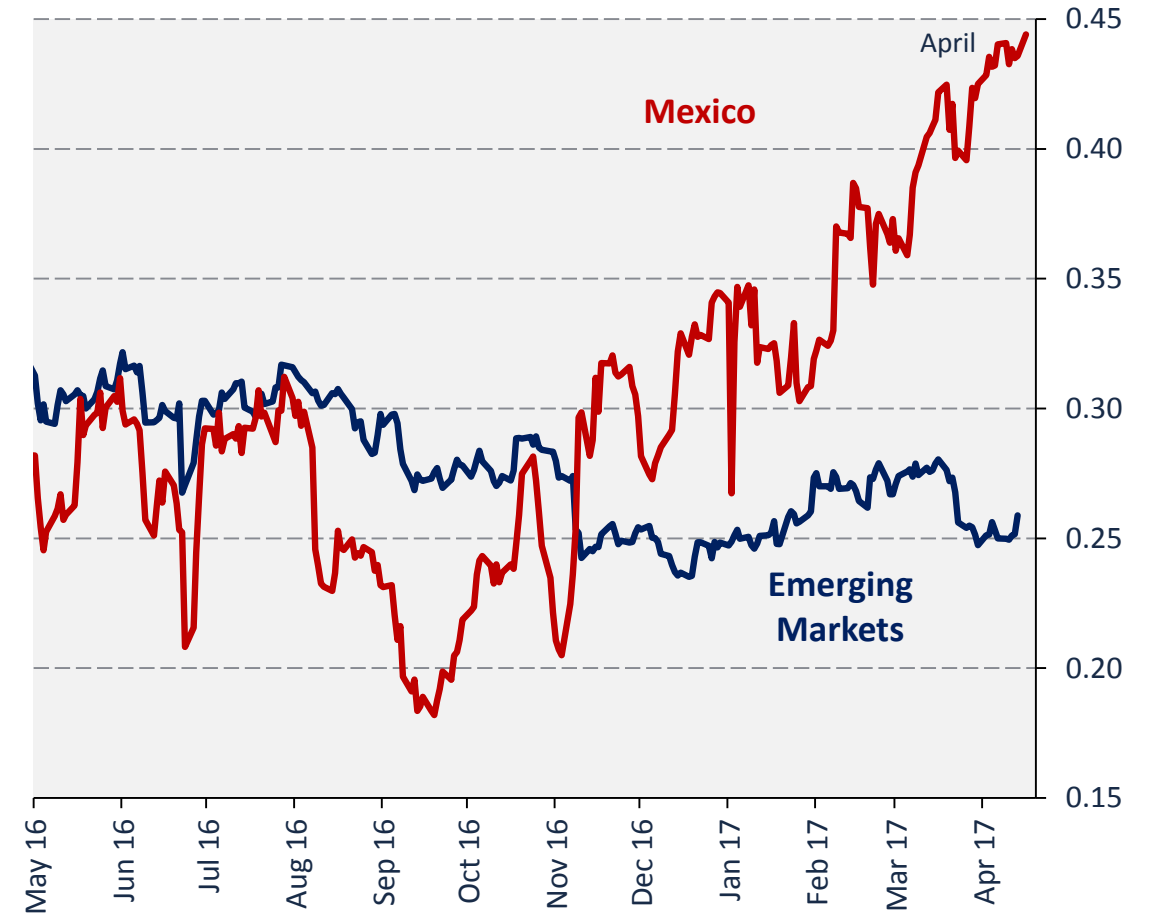
Note: The Emerging Markets Index is calculated with Brazilian real, Chilean peso, Colombian peso, Turkish lira, South African real, Korean won and Polish zloty.
Source: Bloomberg with Central Bank of Mexico calculations.
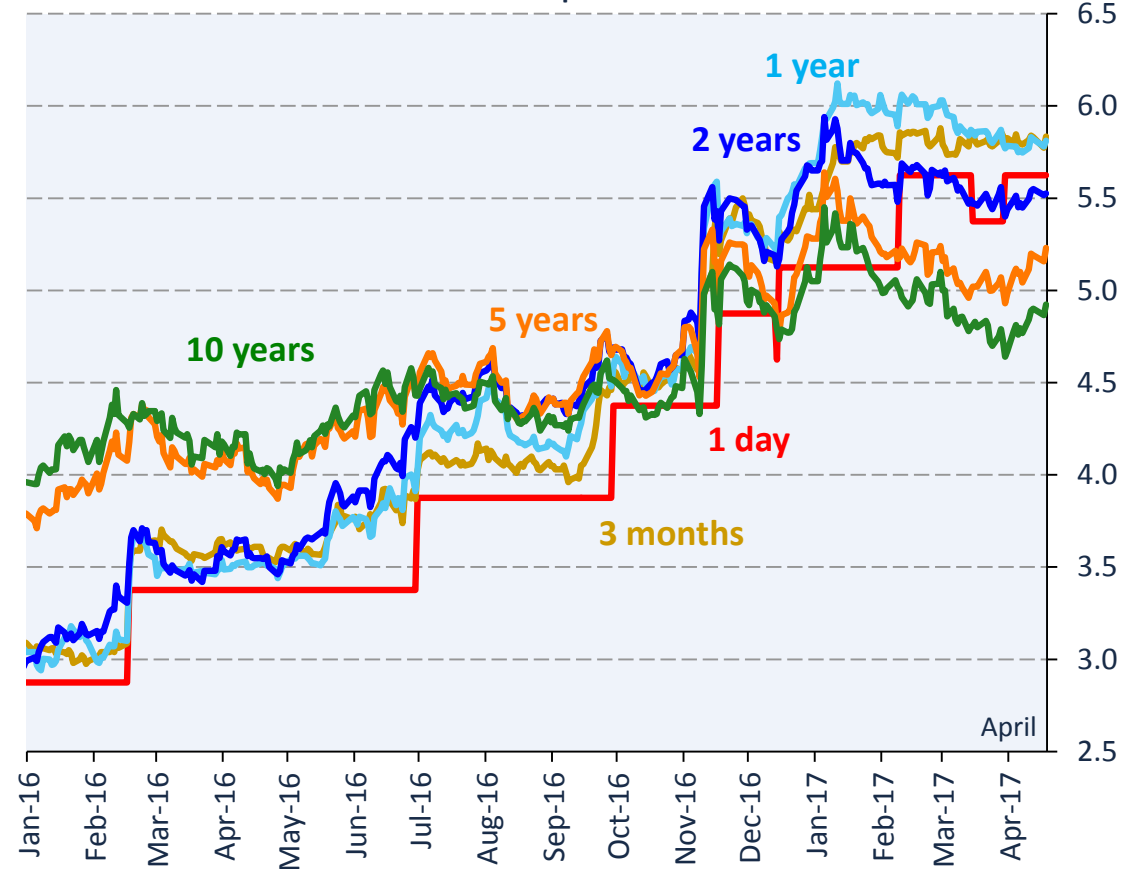
Government Bond Interest Rates
%

10 years · 5 years · 2 years · 1 years · 1 day · 3 months

April

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

Mexico and United States Interest Rate Spreads [1]
Percent points

1 year · 2 years · 10 years · 5 years · 1 day · 3 months

April

1/ The United States objective rate is the average of the interval considered by the Federal Reserve.
Source: Proveedor Integral de Precios (PiP) and U.S. Treasury Department.

Emerging Economies: Nominal Exchange Rate respect to US Dollar
Index 01-jan-2015 = 100

Depreciation

Brazil

Mexico

Colombia

South Africa

Korea

Chile

Dec-14 · Feb-15 · Apr-15 · Jun-15 · Aug-15 · Oct-15 · Dec-15 · Feb-16 · Apr-16 · Jun-16 · Aug-16 · Oct-16 · Dec-16 · Feb-17 · Apr-17

April
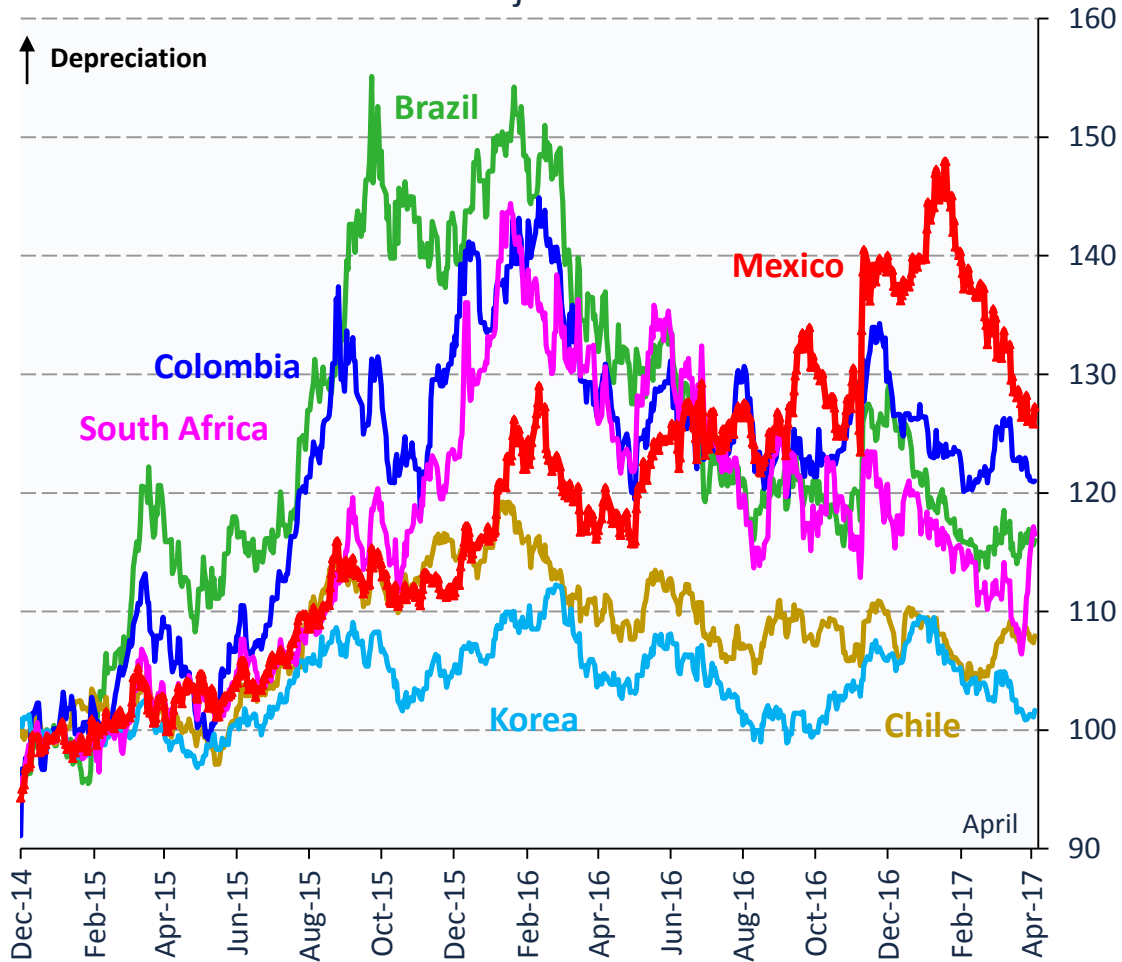
Source: Bloomberg.

Mexico: Government Securities' Holdings by Foreign Investors
MXN billion

Total [1]

Bonds

CETES

April

2008 · 2009 · 2010 · 2011 · 2012 · 2013 · 2014 · 2015 · 2016 · 2017
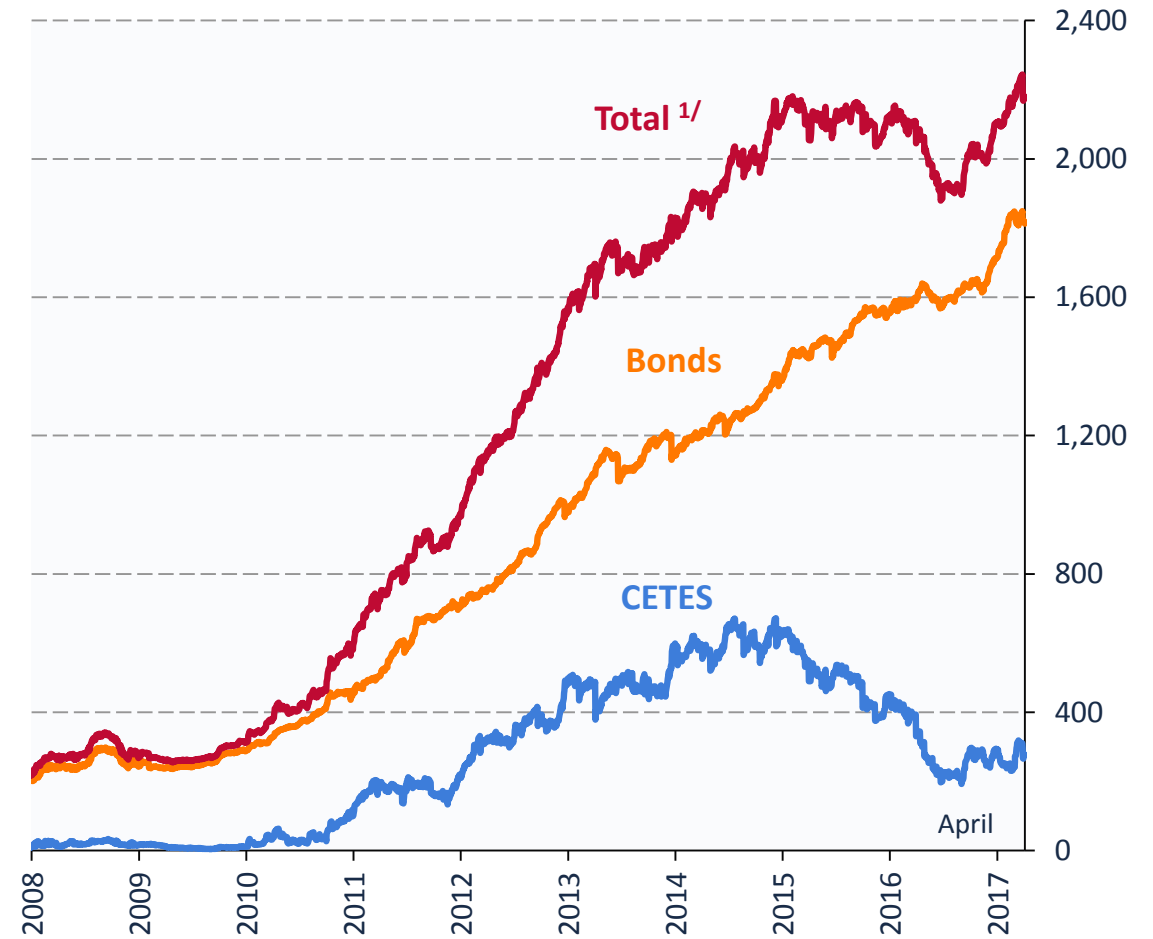
1/ The total includes CETES, bonds, udibonos, bondes and bondes D.
Source: Banco de México.

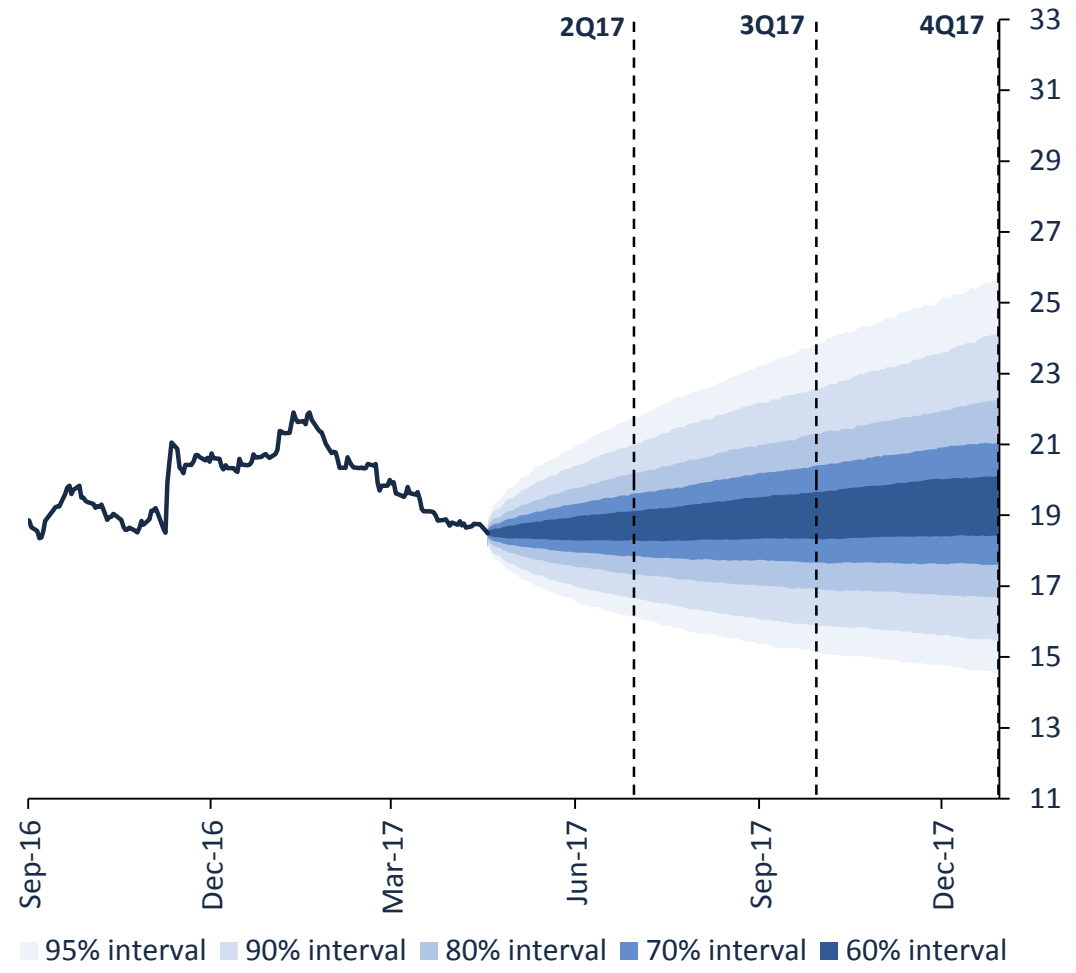# Mexican Peso Exchange Rate and Market Expectations
Mexican pesos per US dollar
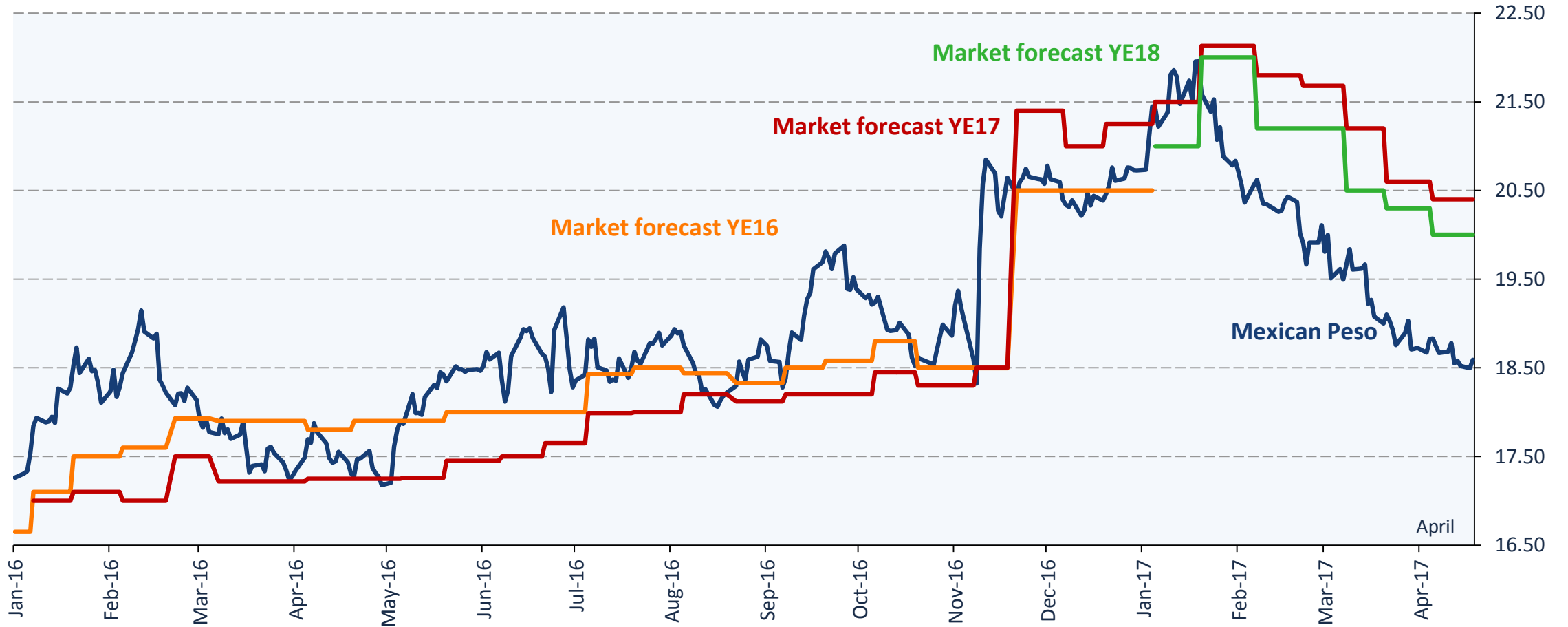
Source: Bloomberg and Citibanamex

Expected Range for the Mexican
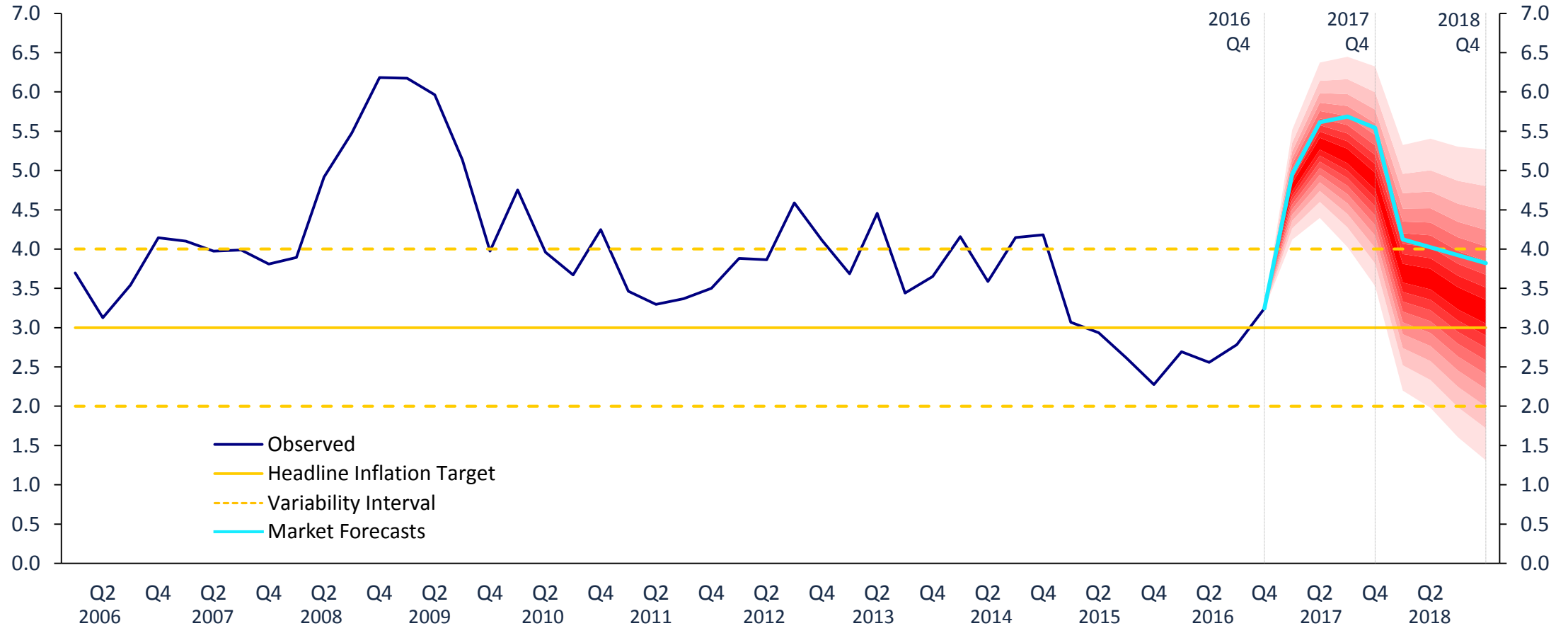# Peso Implied in FX Options
Mexican pesos per US dollar

Note: The dotted lines represent the end of quarter.
Source: Bloomberg with calculations from the Central Bank of Mexico

Fan Chart: Annual Headline Inflation [1]
Annual % variation

1/ Quarterly average of annual headline inflation.
Source: Banco de México, Banxico Expectation Survey and INEGI.

Final Considerations

- A key element of an IT scheme is to stabilize inflation expectations in the horizon in which monetary policy operates.

- ER dynamics can affect inflation expectations.

- Central banks that neglect ER developments could facilitate the transformation of transitory relative prices shocks into a generalized and sustained acceleration in prices.

- ER is a very important channel in the monetary policy transmission mechanism.

Therefore EM central banks cannot afford not to be vigilant of ER developments and should be ready to adjust monetary policy as appropriate, **specially when inflation expectations are affected by ER dynamics**.

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