



# **1** Monetary Policy and Inflation

# **2 Economic Activity and Financial Markets**

# **3** Forecasts and Final Remarks

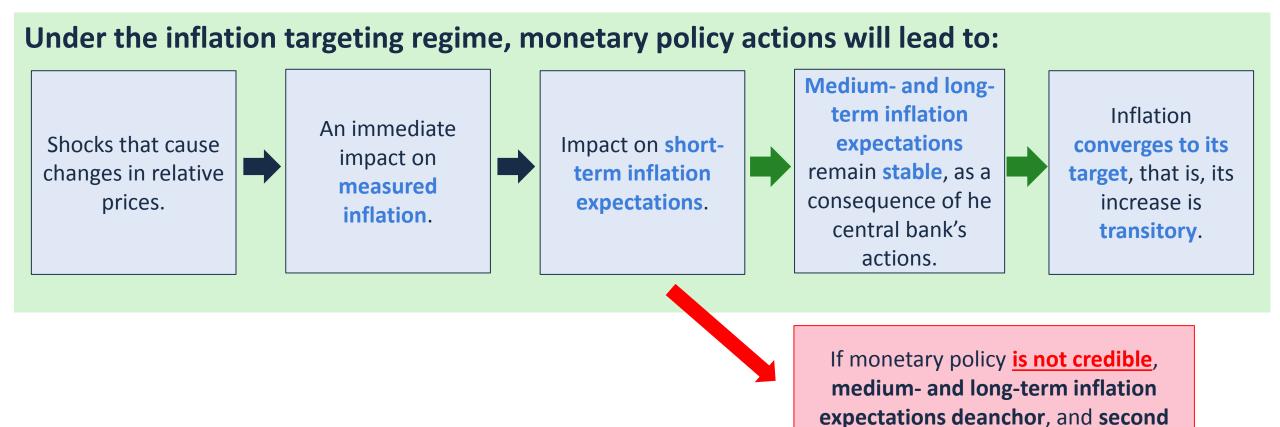
# As established in the Constitution, the primary goal of Banco de México is to ensure the stability of the national currency's purchasing power.

To fulfill this goal, in 2001 Banco de México adopted **an inflation targeting regime**, as its framework to conduct monetary policy:

- Institutional commitment with price stability.
- A quantitative target for inflation.
- Improving transparency and communication with the public.

Ensuring the fulfillment of this constitutional mandate represents the best contribution by Banco de México to social welfare, as it allows to generate an environment of price stability, and to prevent economic and social costs associated to a high and volatile inflation.

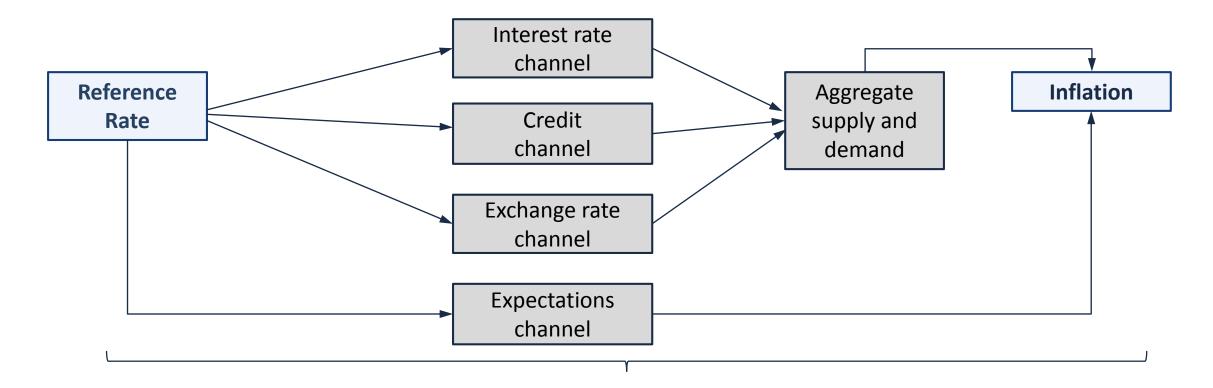
## **Conduction of Monetary Policy**



3

round effects arise.

In order to implement its monetary policy, the central bank adjusts its overnight interest rate target, known as the reference rate. This affects the economy via the transmission channels of monetary policy.



It takes certain time for these channels to operate.

Thus, the central bank <u>must take into account that monetary policy actions affect the</u> <u>economy with a certain lag</u>, especially regarding the evolution of prices.

- Therefore, the monetary authority should take decisions after a thorough assessment of the inflation outlook, among other factors.
- It is essential that the central bank's actions are timely and decisive, considering both the lags at which the monetary policy operates, and the nature of the shocks (whether these merely impact relative prices or generate widespread inflationary pressures).
- Through these actions, it prevents shocks in relative prices from turning into generalized inflationary pressures.

### • Since 2014, the Mexican economy has faced a number of shocks that could considerably affect inflation.

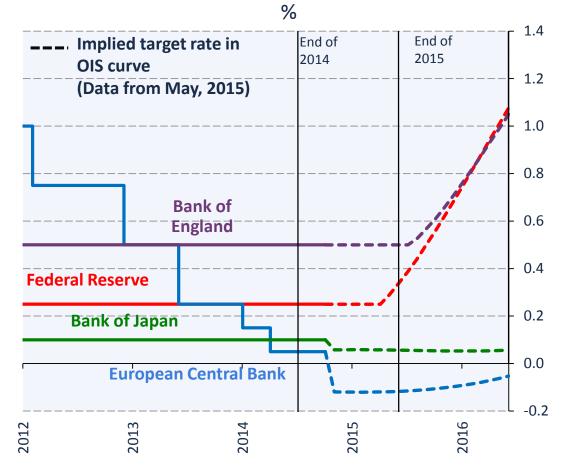
	Shocks	Effects of the Shocks	Inflation in Mexico
I Jul. 2014 – Dec. 2015	Prospects for the normalization of the monetary stance in the U.S. and U.S. dollar appreciation. Drops in oil prices.	Exchange rate depreciation and increased volatility.	<ul> <li>The beginning of the adjustment in relative prices.</li> <li>Fading effects of fiscal adjustments in 2014.</li> <li>Lower prices of telecommunication services and energy products.</li> <li>End of 2015: 2.13 percent (historic low).</li> </ul>
II Jan. 2016 – Oct. 2016	Oil prices remain low. The process and the outcome of the U.S. presidential election.	Further <b>exchange rate</b> <b>depreciation</b> and high volatility.	<ul> <li>An upward trend in core inflation starting from low levels.</li> <li>No more arithmetic favorable effect from the fading of shocks during the previous year.</li> <li>Lower reductions in telecommunication services' prices.</li> <li>End of 2016: 3.36 percent.</li> </ul>
III Nov. 2016 – 2017	Uncertain Mexico – U.S. relation. Higher <b>domestic energy prices</b> . An increment in the <b>minimum wage</b> . Higher agricultural products' prices and <b>public transport fares</b> .	<ul> <li>Exchange rate depreciation and higher volatility.</li> <li>Direct and indirect effects of energy prices.</li> <li>A moderate impact of a minimum wage increase.</li> </ul>	<ul> <li>Upward trend: over 10 consecutive months.</li> <li>1F May 2017: 6.17 percent.</li> </ul>

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#### Shocks

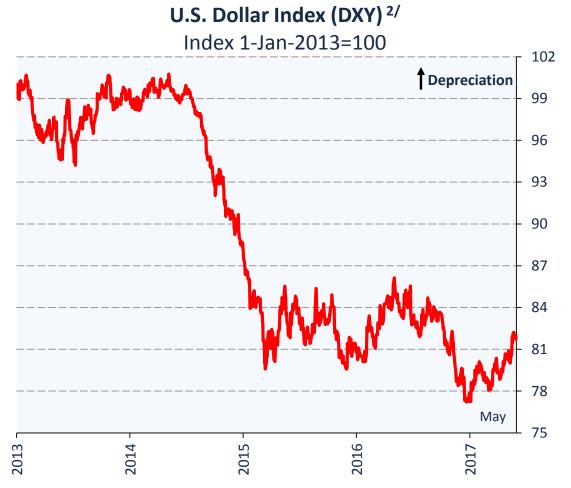
The prospects for the monetary policy normalization process of the Federal Reserve and the divergence in the expected monetary policy stance among the main advanced economies were reflected in a widespread U.S. dollar appreciation.

Expected Monetary Policy Rates Implicit in OIS Curve <sup>1/</sup>



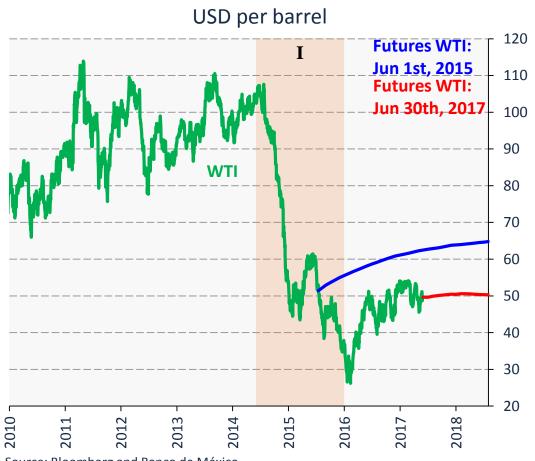
1/ OIS: Overnight Index Swap. Source: Banco de México with data from Bloomberg.

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2/ DXY index is estimated by the Intercontinental Exchange (ICE) based on the weighted geometric mean of the dollar's value compared with a basket of 6 other major currencies which are: EUR: 57.6%, JPY: 13.6%, GBP: 11.9%, CAD: 9.1%, SEK: 4.2% and CHF: 3.6%. Base=100. Source: Bloomberg.

The plunge in oil prices since 2014 caused a deterioration in the terms of trade. In addition, there was a decline in crude oil production.



**Crude Oil Prices** 

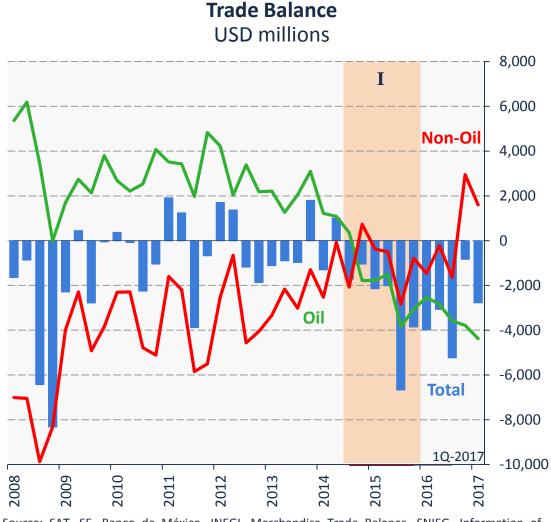
#### **Crude Oil Production Platform** Thousands of daily barrels; s. a.



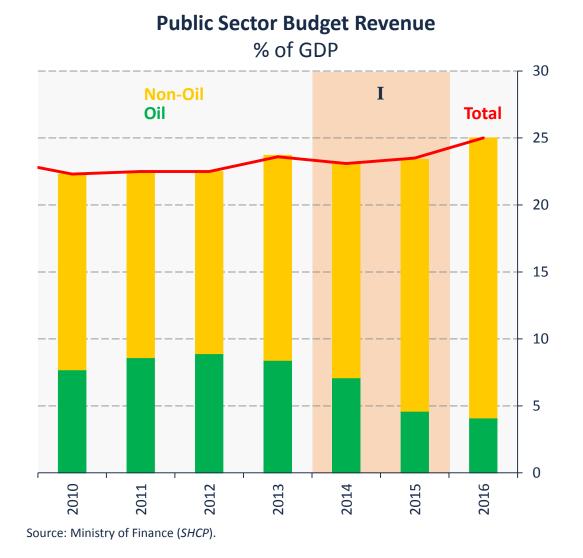
Source: Bloomberg and Banco de México.

#### Shocks

Such shocks caused a deterioration in the external accounts, mainly in the oil trade balance. Meanwhile, there was a decline in public sector's oil revenues.

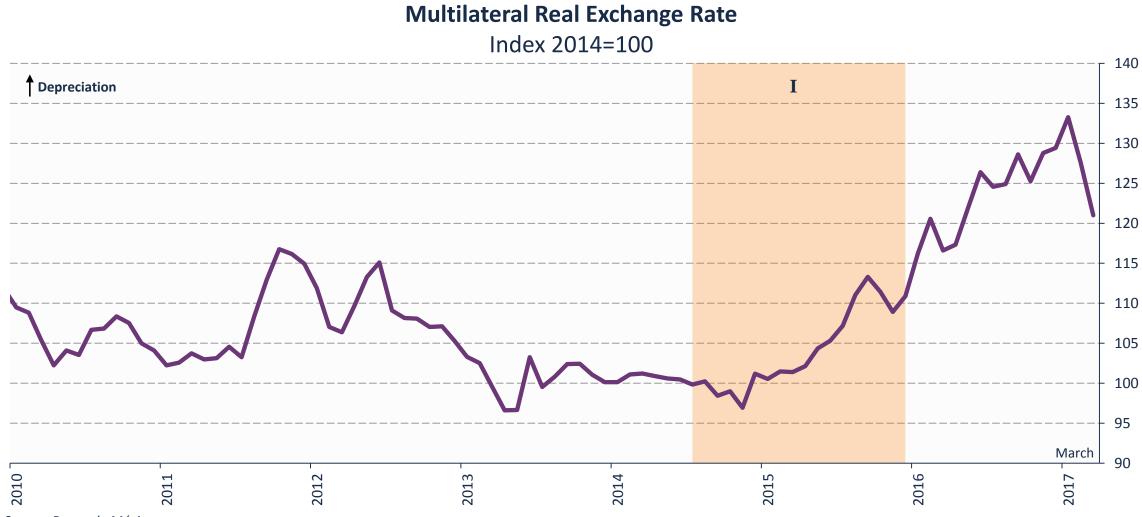


Source: SAT, SE, Banco de México, INEGI. Merchandise Trade Balance, SNIEG. Information of National Interest.



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Thus, the real exchange rate depreciated considerably.



Source: Banco de México.

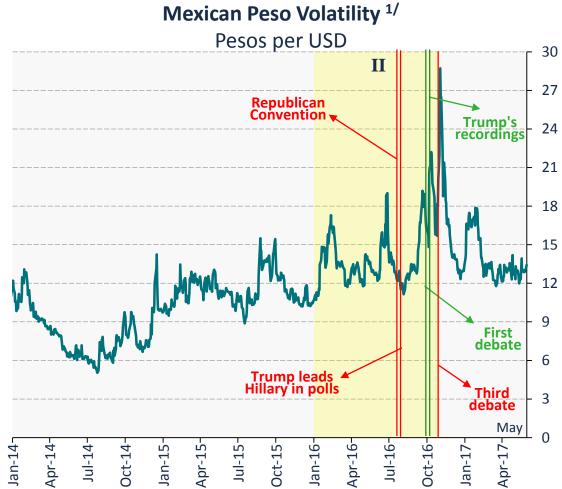
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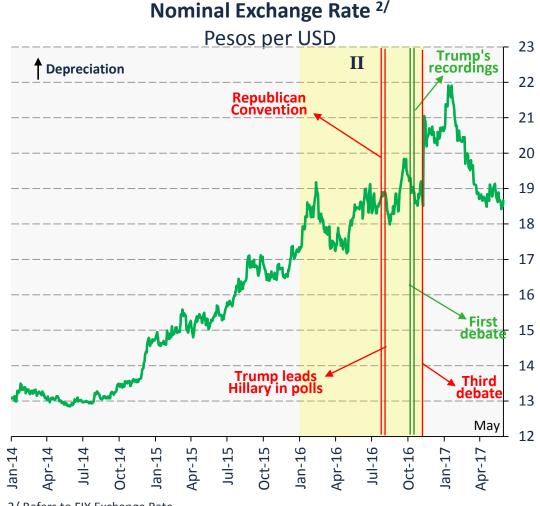
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### Shocks

In addition to the depreciation of the Mexican peso, resulting from the decrease in oil prices, a further drop of in the level of the national currency during the U.S. elections was observed. Likewise, during this process this variable presented high volatility.



1/ Refers to implied volatility in one-month options. Source: Banco de México.



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

#### Since 2014, the Mexican economy has faced a number of shocks that could considerably affect inflation.

Image: Status of the normalization of the normalization of the monetary stance in the U.S. and U.S. dollar appreciation.       Exchange rate depreciation and increased volatility.       Fading effects of fiscal adjustments in 2014.         Dec. 2015       Drops in oil prices.       Exchange rate depreciation and increased volatility.       Exchange rate depreciation and increased volatility.       Image: Comparison of the low of the communication services energy products.         Image: Comparison of the U.S. dollar appreciation.       Drops in oil prices.       Exchange rate depreciation and increased volatility.       Image: Comparison of the communication services energy products.         Image: Comparison of the U.S. dollar appreciation.       Further exchange rate depreciation and high volatility.       An upward trend in core inflation starting low levels.         Image: Comparison of the U.S. presidential election.       Further exchange rate depreciation and high volatility.       No more arithmetic favorable effect from fading of shocks during the previous year.         Image: Comparison of the U.S. presidential election.       Exchange rate depreciation and high volatility.       No more arithmetic favorable effect from fading of shocks during the previous year.         Image: Comparison of the U.S. presidential election.       Exchange rate depreciation and high volatility.       Uncertain Mexico – U.S. relation.       Image: Comparison of the comparison of the comparison of energy prices.       Image: Comparison of the comparison of energy prices.       Image: Comparison of the comparison of energy prices.       Image: Comparison		Shocks	Effects of the Shocks	Inflation in Mexico
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2017       Higher agricultural products' prices and public transport fares.       A moderate impact of a minimum wage increase.		Higher <b>domestic energy prices</b> . An increment in the <b>minimum wage</b> . Higher agricultural products' prices	higher volatility. Direct and indirect effects of energy prices. A moderate impact of a minimum	<ul> <li>Upward trend: over 10 consecutive months.</li> <li>1F May 2017: 6.17 percent.</li> </ul>

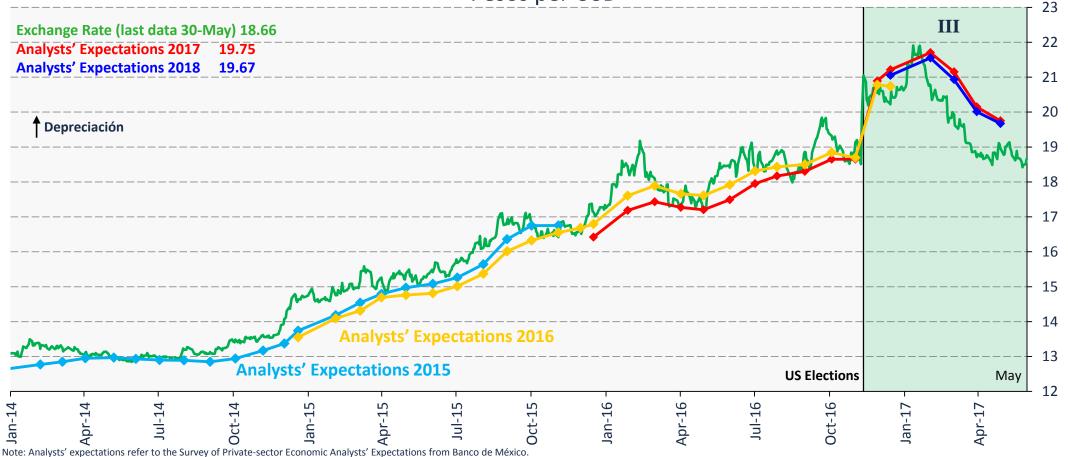
Shocks

III

In light of the outcome of the U.S. elections, the national currency further depreciated in addition to the accumulated depreciation that had been observed since mid-2014. However, as of the second half of January it appreciated considerably. Nevertheless, economic analysts' expectations have been adjusting with lags.

Nominal Exchange Rate <sup>1/</sup>

Pesos per USD



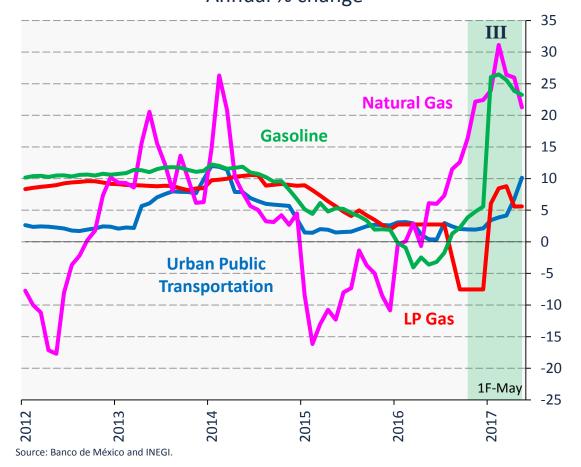
1/ Refers to FIX Exchange Rate. Source: Banco de México.

#### Shocks

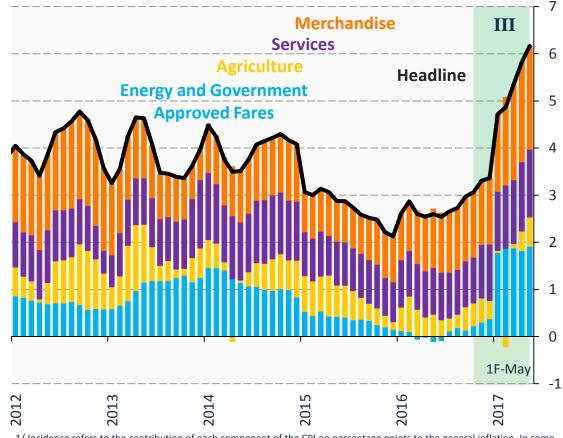
III

# In late 2016 and early 2017, simultaneous shocks of considerable magnitude were observed: 1) the Mexican peso further depreciated in the wake of the U.S. elections, 2) the liberalization process of some energy products' prices, 3) a minimum wage increase; 4) more recently, increases in public transport fares and some agricultural products' prices.

Transport Services and Selected Energy Prices Index Annual % change



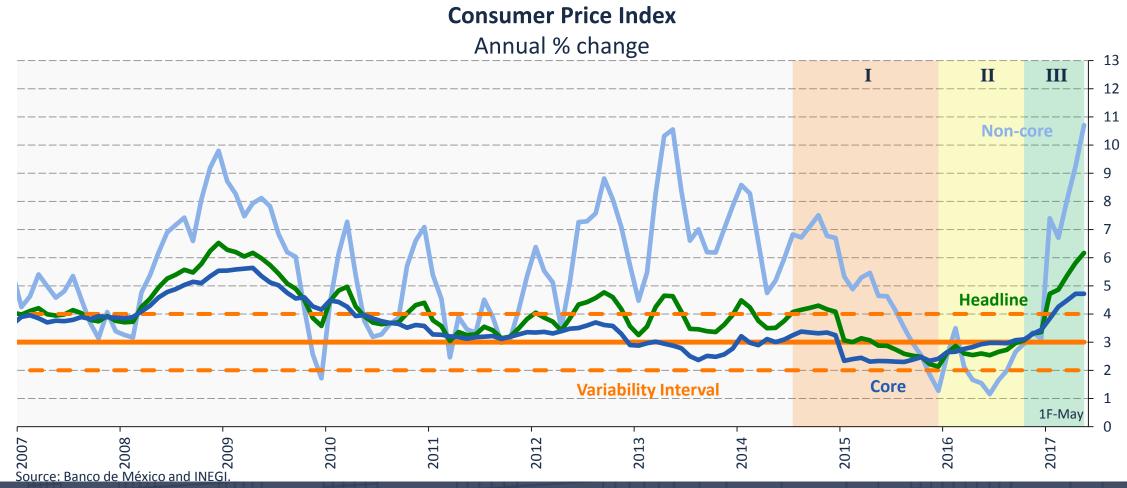
**Consumer Price Index** Annual incidences in percentage points <sup>1/</sup>



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.

### **Inflation in Mexico**

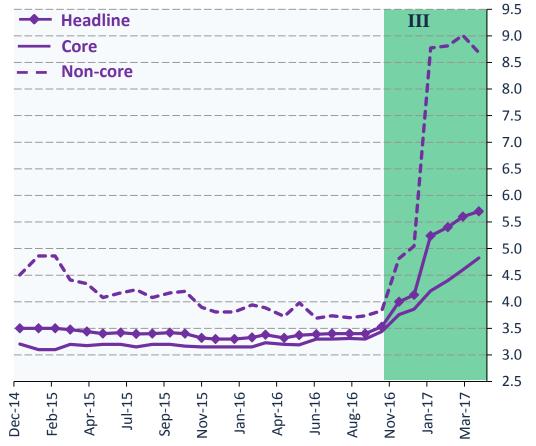
The inflation trajectory has been affected by different shocks. Thus, inflation has recently maintained an upward trend for over 10 consecutive months, as a result of the effects of the above mentioned shocks, which are expected to be transitory.



III

Despite a spike in short-term inflation expectations, these are anticipated to decrease in late 2017, and to adjust downwards significantly in January 2018 and in subsequent months.

Inflation Expectations End of 2017 Median, %



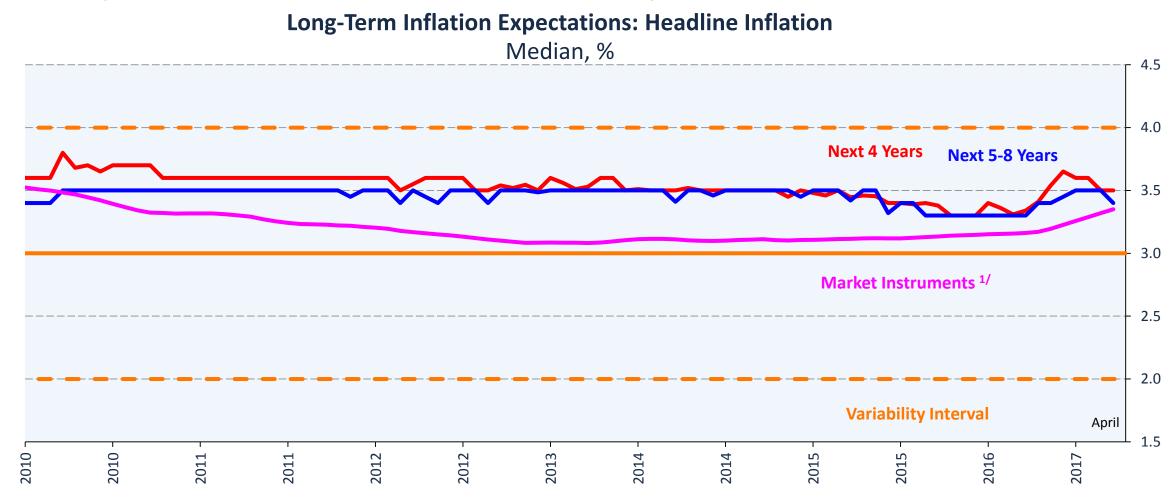
Source: Banco de México Survey (monthly periodicity).

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6.5 6.0 5.5 Observed 5.0 4.5 4.0 3.70 3.5 **December Survey 2016** 3.0 January Survey 2017 **April Survey 2017** 2.5 • - End 2018 2.0 Sep-18 Jan-18 Nov-18 Sep-16 Nov-16 Mar-18 May-18 Jul-18 Jul-17 Nov-17 Jan-17 Mar-17 May-17 Sep-17 Jul-16 Source: Banco de México and INEGI.

Annual Inflation Expectations %

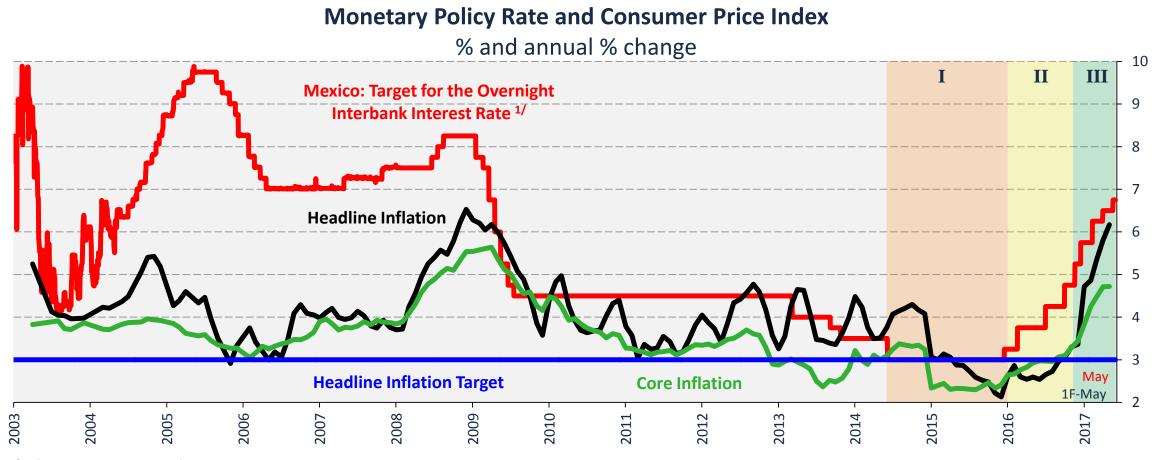
Despite the increment in short-term inflation expectations, long-term ones remained stable, reflecting the anticipation that the rise in inflation will be transitory.



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 Survey (monthly periodicity).

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Considering all of the above, between December 2015 and May 2017, Banco de México has increased the target for the Overnight Interbank Interest Rate from 3.00 to 6.75 percent.



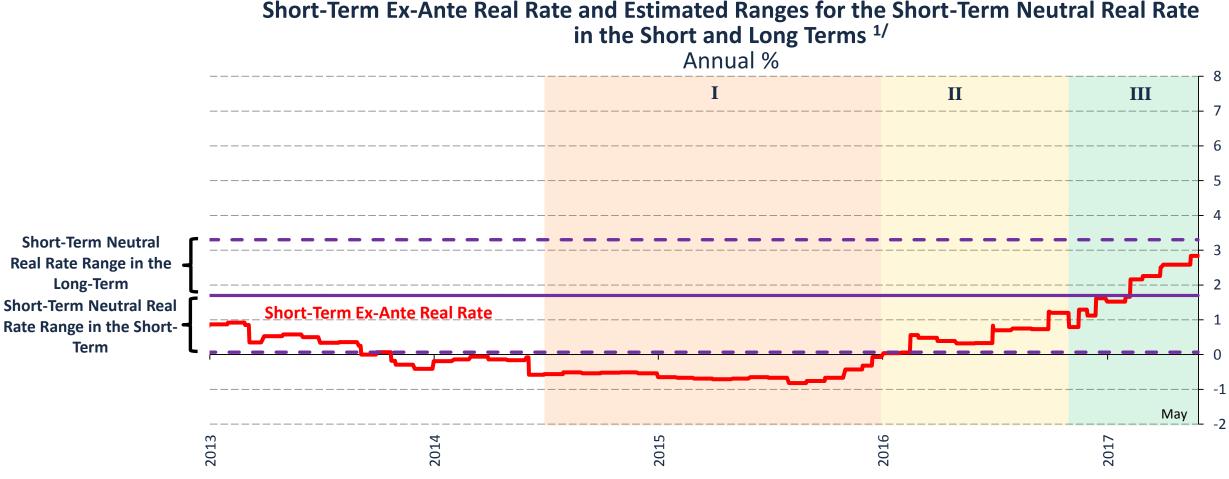
1/ Before January 20, 2008 it refers to the observed Overnight Interbank Interest Rate.

Source: INEGI and Banco de México.

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### **Monetary Policy**

The 375-basis-point increment fundamentally constitutes the withdrawal from the monetary stimulus that had prevailed over the previous period, as the current short-term ex-ante real rate seems to be close to the neutral level that is expected to be observed in the long term.



1/ For its construction is used the Target for the Overnight Interbank Interest Rate and 12-month inflation expectations from Banco de México Survey. Source: Banco de México.

### In particular, in 2017 so far:

February 2017	50 bp increment to 6.25 percent
March 2017	25 bp increment to 6.50 percent
May 2017	25 bp increment to 6.75 percent

The above decisions took into account:

- ✓ Mainly, the **inflation trend** in light of the transitory shocks in relative prices.
- The outlook of no expected aggregate demand-related pressures.
- Increments in the monetary policy rate carried out since 2015.
- ✓ The 25 bp increment in the target range for the U.S. Federal Reserve reference rate in its March meeting.

Regarding the decisions of March 30, 2017 and May 18, 2017, the Board of Governors agreed that, given the conditions prevailing at that moment, the expectation of **no aggregate demand-related pressures** on inflation, as well as the **increments** in the monetary policy rate **carried out since 2015**, the **required adjustment amounted to 25 basis points**.

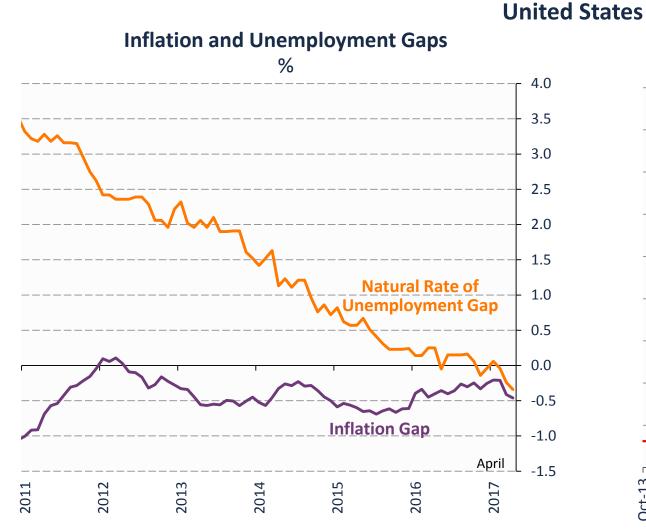


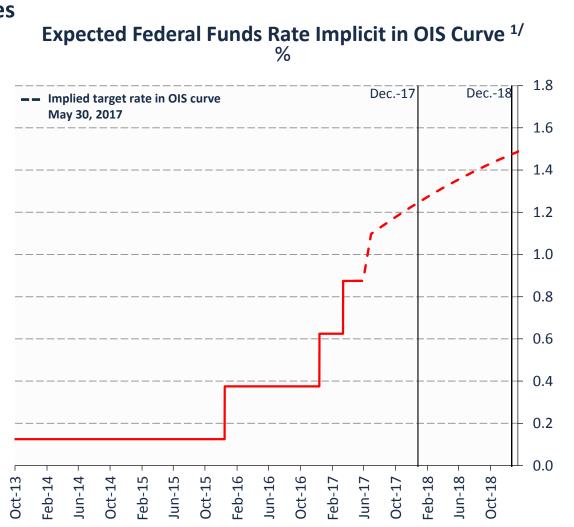


## **2 Economic Activity and Financial Markets**



The U.S. economy decelerated during 1Q 2017, even though it was due to transitory factors. The labor market continued strengthening and inflation slowed down as a result of temporary factors, and so it is expected to converge to its target in the future.





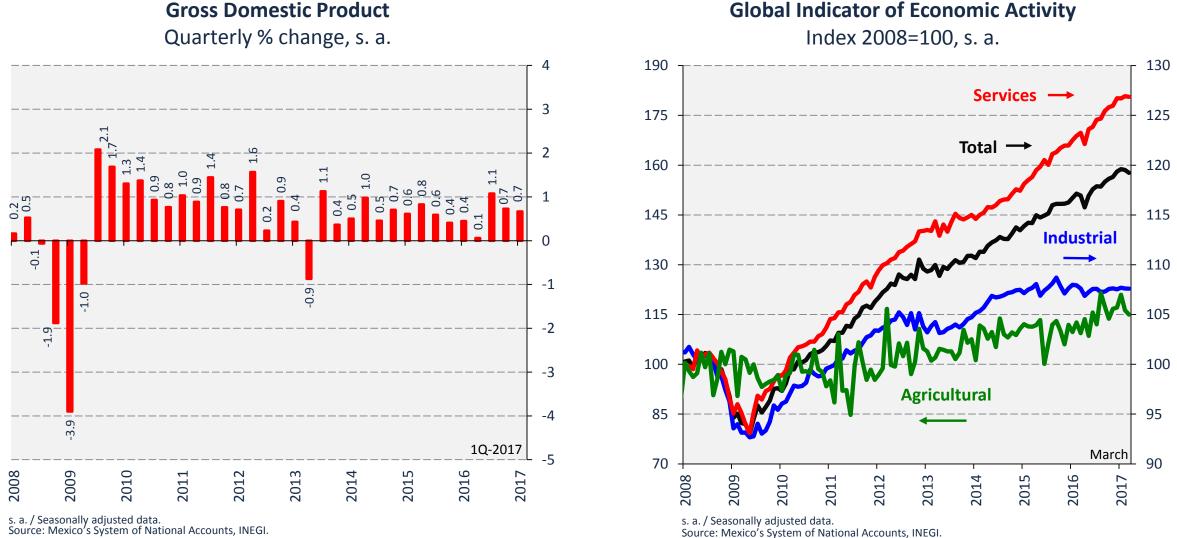
1/OIS: Fixed-For-Floating swap where the fixed interest rate is the reference rate. 2/ Data for the observed federal funds rate corresponds to the average between the lower and upper bounds of the range (0.75% - 1.00%). Source: Banco de México with data from Bloomberg.

Note: Inflation gap is relative to the Federal Reserve 2% objective. 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).

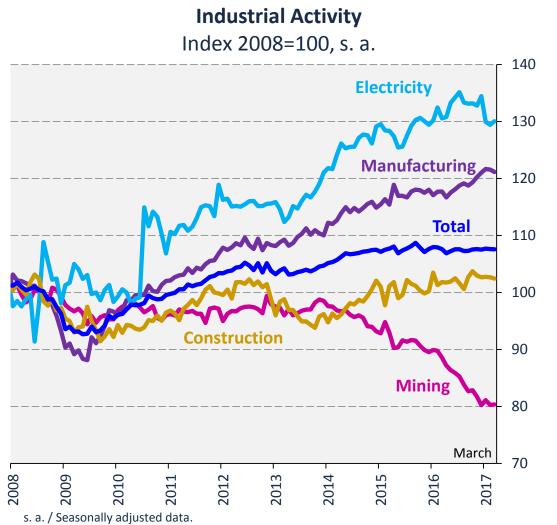
Quarterly Report January - March 2017

In 1Q 2017, the Mexican economy registered a similar growth rate to that observed in 4Q 2016, largely reflecting the dynamism in services.

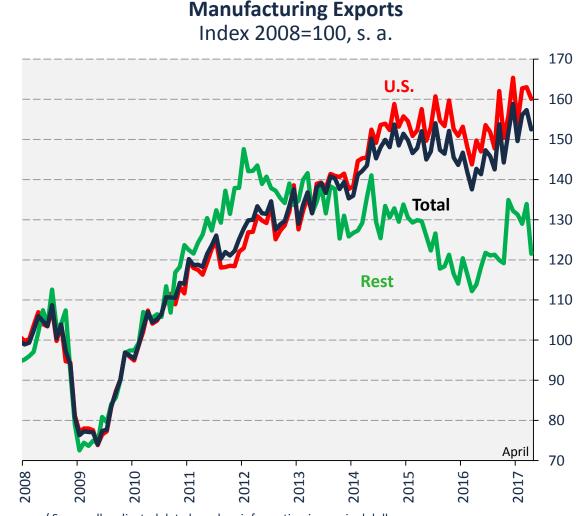


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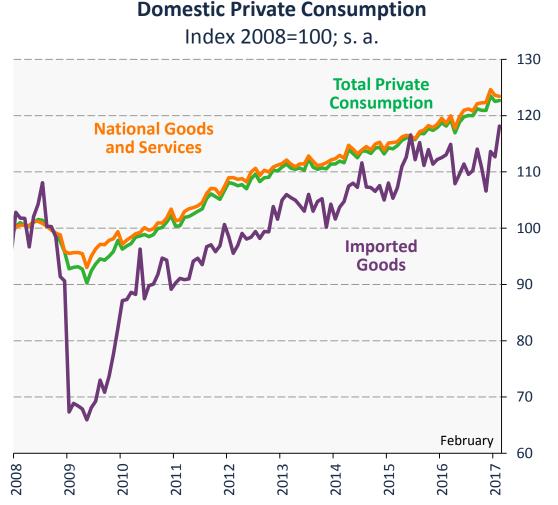
Manufacturing production kept expanding. Meanwhile, manufacturing exports continued to recover, encouraged by the depreciation of the real exchange rate and the gradual strengthening of global economic activity.



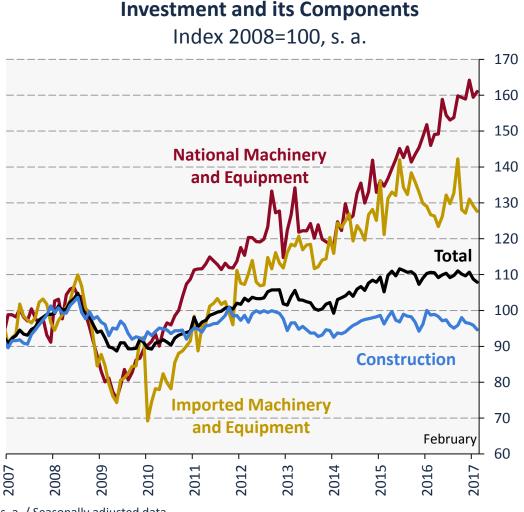
Source: Monthly Indicator of Industrial Activity, Mexico's System of National Accounts, INEGI.



s. a. / Seasonally adjusted data based on information in nominal dollars. Source: Banco de México with data from SAT, SE, Banco de México, INEGI. Merchandise Trade Balance, SNIEG. Information of National Interest. During the first two months of 2017, the monthly indicator of domestic private consumption kept a positive trend, even though recent data point to a certain slowdown. In turn, weakness in investment accentuated.

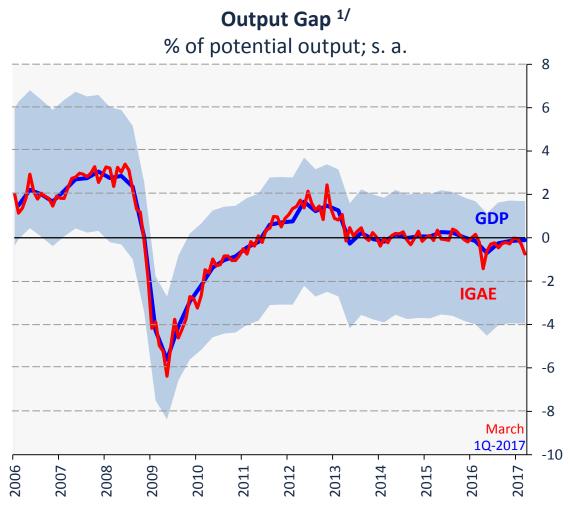


s. a. / Seasonally adjusted data. Source: Mexico's System of National Accounts, INEGI.



s. a. / Seasonally adjusted data. Source: Mexico's System of National Accounts, INEGI.

# Following the recent evolution of the economic activity, no significant aggregate demand-related pressures onto prices have been observed yet. On the other hand, labor market kept recovering.

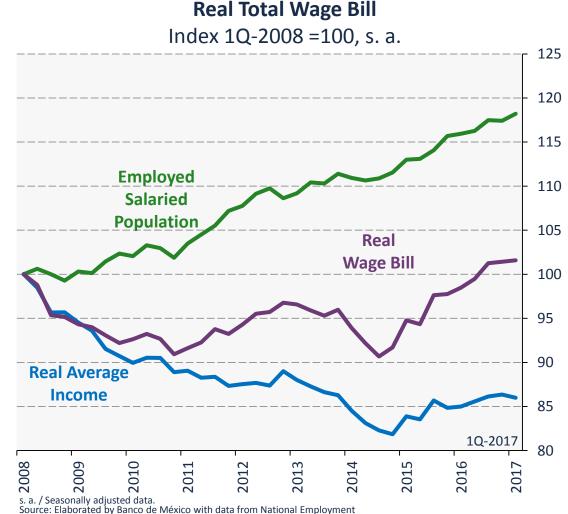


s. a. / Calculated with seasonally adjusted data.

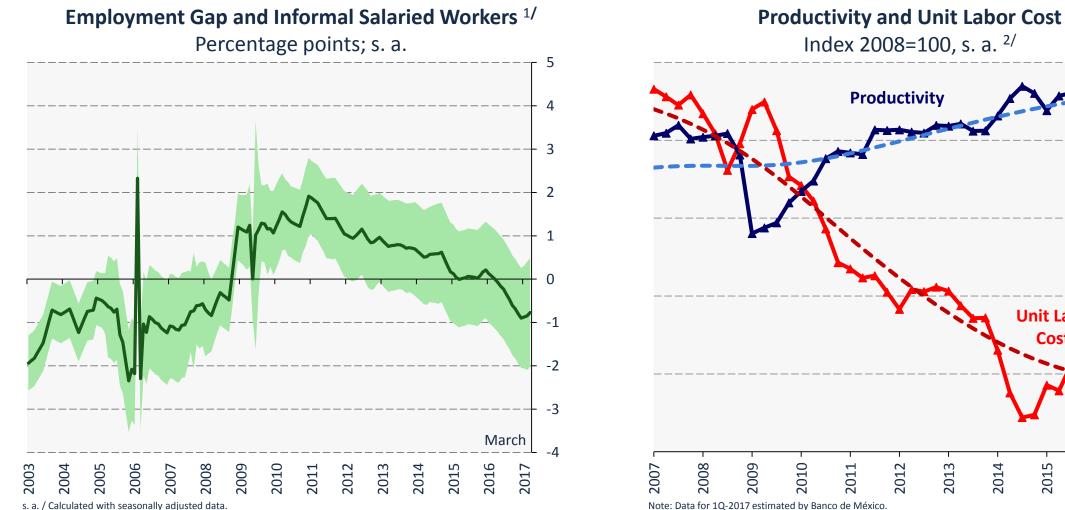
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1/ Estimated using the Hodrick-Prescott (HP) filter with tail correction method; see Banco de México (2009), "Inflation Report April-June 2009", p. 69. The shaded area is the 95% confidence interval of the output gap, calculated with an unobserved components method.

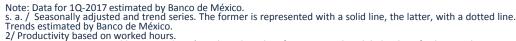
Source: Calculated by Banco de México with data from INEGI



Source: Elaborated by Banco de México with data from National Employment Survey (*Encuesta Nacional de Ocupación y Empleo*), INEGI. Thus, slackness in the labor market has been diminishing. In this context, an upward trend is still observed in unit labor costs, even though starting from low levels, so that they have not resulted in wage pressures.



1/ The shaded area represents the confidence interval, which corresponds to two average standard deviations among all estimates; see Banco de México (2017), "Quarterly Report, October-December 2016", pág.47. Source: Banco de México.



Source: Unit cost prepared by Banco de México based on data from INEGI. The Global Index of Labor Productivity in the Economy (IGPLE), as released by INEGI.

2017

1Q-2017

2016

105

100

95

90

80

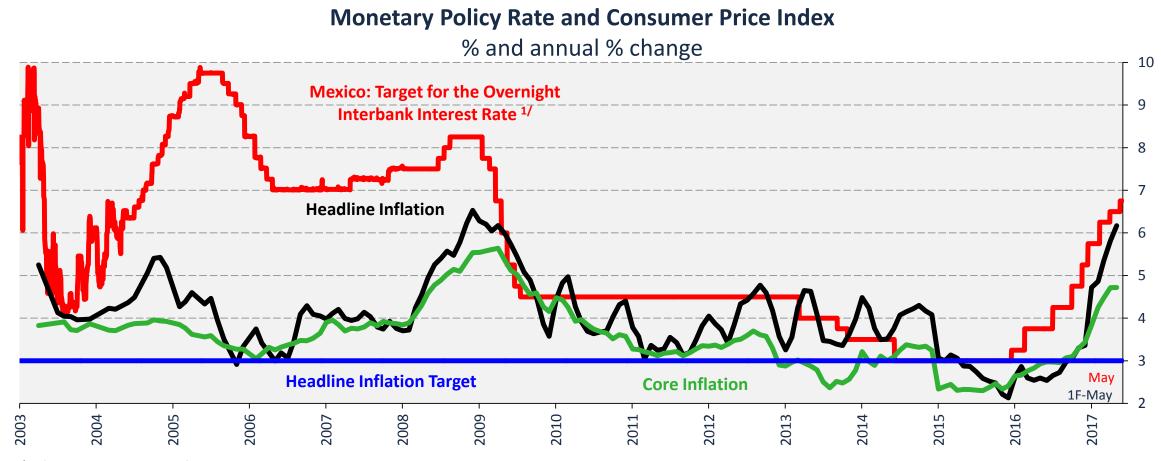
**Unit Labor** 

Costs

201

2014

The evolution of the economic activity and of the external sector has not generated inflation pressures. However, in order to prevent a contamination to the price formation process in the economy, to anchor inflation expectations and to strengthen the contribution of the monetary policy to the inflation convergence to its target, the reference rate has been adjusting.



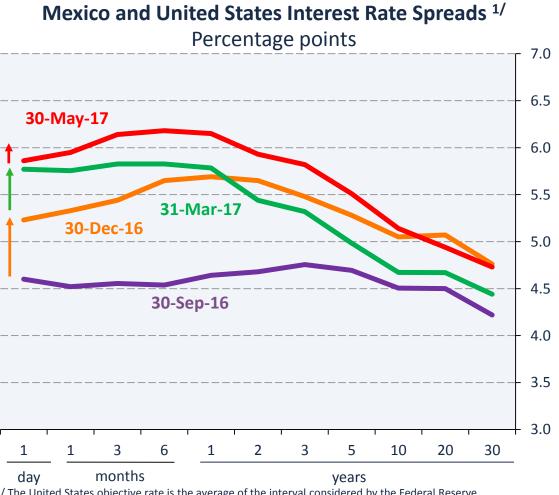
1/ Before January 20, 2008 it refers to the observed Overnight Interbank Interest Rate.

Source: INEGI and Banco de México.

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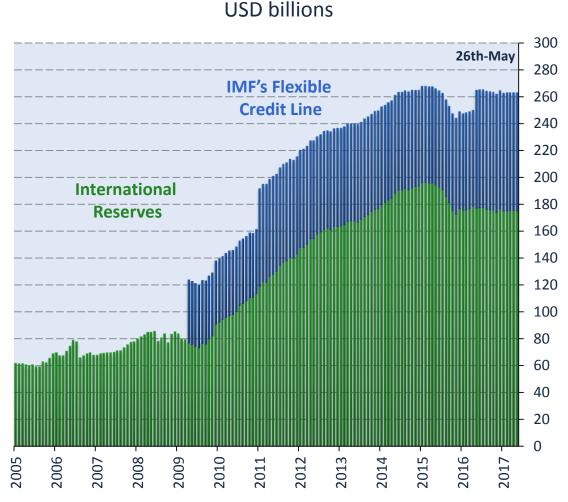
Short-term interest rates went up, reflecting the increments in the reference rate, while longer-term rates diminished. Thus, the yield curve has flattened, as a result of the measures set forth by Banco de México and those that it could implement. On the other hand, Mexico and U.S. interest rate spreads increased in their short-term horizons and remained stable in long-term ones.





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.

To propitiate a more orderly functioning in the foreign exchange market, the Foreign Exchange Commission instructed Banco de México to implement a foreign exchange hedging program, in a context where Mexico has a high level of international reserves.



International Reserves

Source: Banco de México and International Monetary Fund.

### Foreign Exchange Commission: Foreign Exchange Hedging Program

- Allows to offer up to USD 20 billion in currency hedges, without using international reserves.
- ✓ The Foreign Exchange Commission:
  - Reaffirmed its commitment to monitor the operating conditions in the foreign exchange market.
  - Does not rule out the possibility of taking additional actions if necessary.

#### **IMF: Flexible Credit Line**

- ✓ Ratified for USD 86 billion.
- The IMF recognizes the Mexican authorities' commitment to maintain strong economic fundamentals and to ensure financial stability.

# Outline



# **2 Economic Activity and Financial Markets**

## **3** Forecasts and Final Remarks

### **Economic Activity Outlook**

GDP Growth			
(%)			
Report	Previous	Revised	
2017	1.3 – 2.3	1.5 – 2.5	
2018	1.7 – 2.7	1.7 – 2.7	

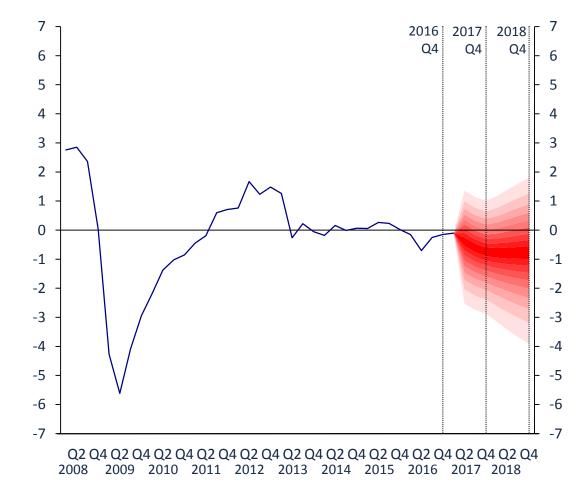
Increase in the Number of IMSS-insured jobs			
(Thousands)			
Report	Previous	Revised	
2017	580 - 680	650 – 750	
2018	620 - 720	640 - 740	

Current Account Deficit <sup>1/</sup> (% of GDP)			
Report	Actual		
2017	2.3		
2018	2.3		

1/ The forecasts for the current account deficit in the actual Report were elaborated considering the new balance of payments figures hat follow the methodology of the sixth edition of the Manual of the International Monetary Fund.

Fan Chart: Output Gap

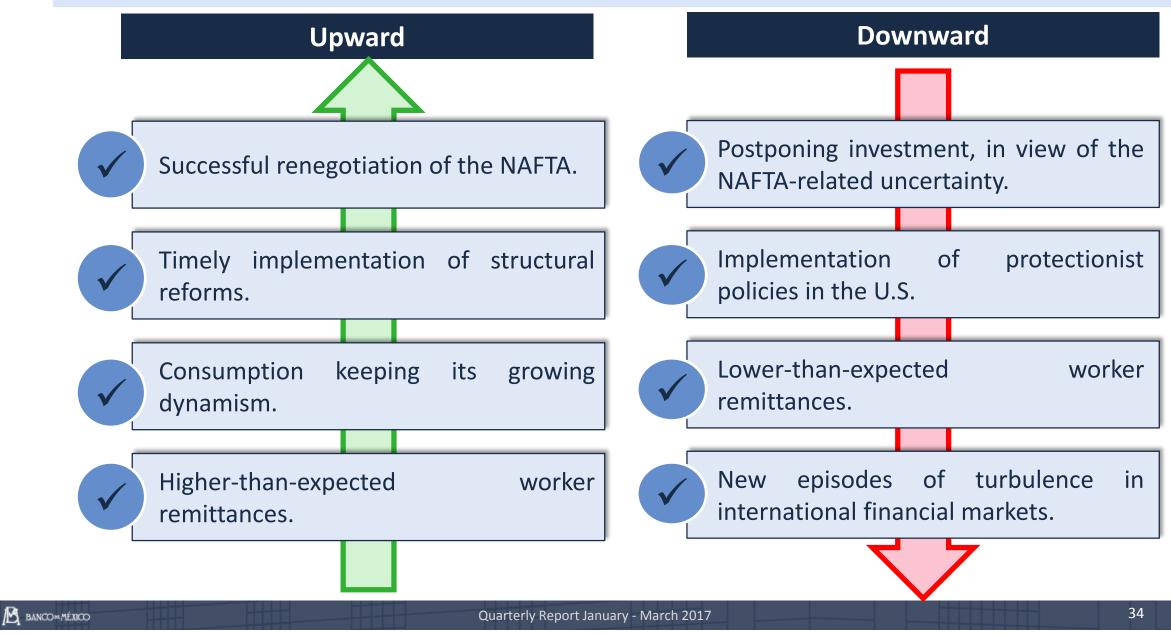
% of potential output, s. a.



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

## Risks to Growth Outlook

The balance is still biased to the downside:



### **Inflation Outlook**

### Headline inflation

### **Core inflation**

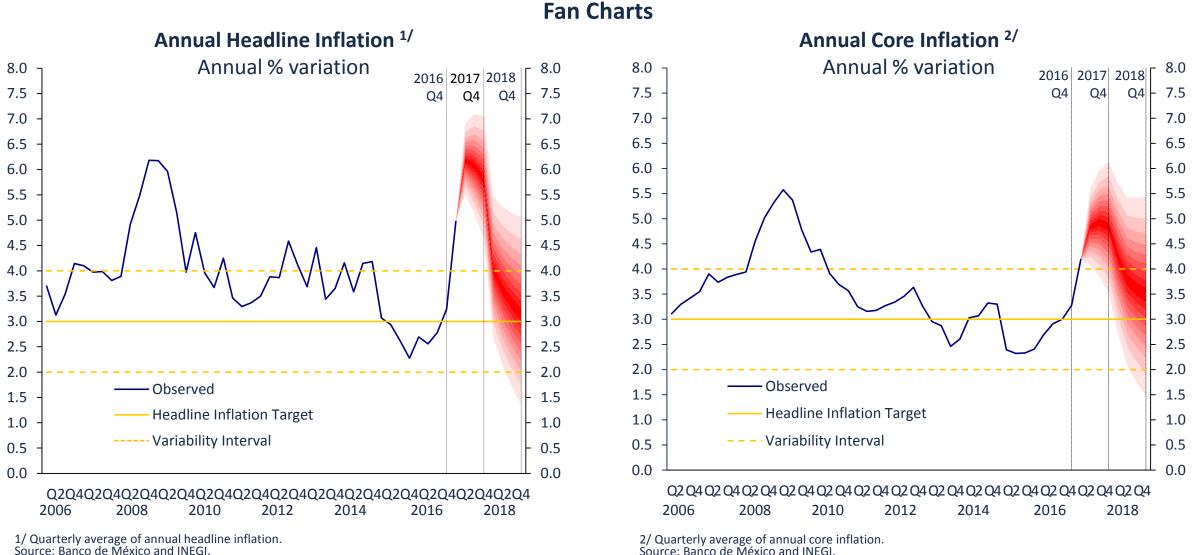
In 2017, it is expected to significantly exceed the upper limit of the variability interval, even though it is estimated that during the last months of 2017 and during 2018 it will resume its convergence trend to the 3 percent target and will attain such level at the end of that year.

In 2017, it is expected to persist above the variability interval, although considerably below the headline inflation trajectory, and at the end of 2017 and in early 2018 it is forecast to resume the convergence trend to its target.

The expected trajectories will be the result of a number of factors:

- $\checkmark$  The fading of the shocks that affected inflation.
- $\checkmark$  The reversal that the exchange rate has shown over the last months.
- ✓ The expected widening of the output gap into negative territory.
- ✓ The monetary policy stance.

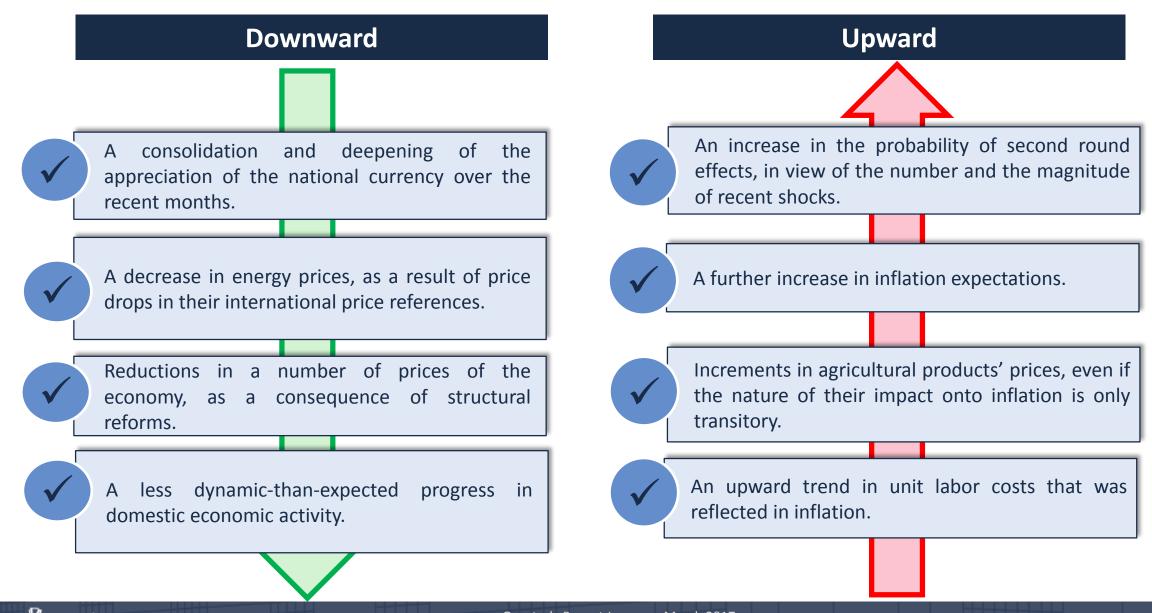
### Over the next months, inflation is expected to remain temporarily affected by the described shocks.



Source: Banco de México and INEGI.

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### **Risks to the Inflation Outlook**



### **Monetary Policy Stance**

In this context, in the future, the Board of Governors will closely monitor the evolution of all inflation determinants and its medium- and long-term expectations:

 Especially, the potential pass-through of exchange rate adjustments and of energy price increments on the rest of prices.

 $\checkmark$  The evolution of the monetary position of Mexico relative to the U.S.

 $\checkmark$  The evolution of the output gap.

→ This will be done in order to continue taking the necessary measures to consolidate the efficient convergence of inflation to its 3.0 percent target.

### **Strengthening Confidence in the Mexican Economy**

- In an environment in which the world economy recovered in a fragile and slow manner, the Mexican economy was resilient and grew continuously, although at a moderate rate.
- In the future, it is essential for Mexico to strengthen the fundamentals that have allowed the country to expand regardless of adverse international conditions, and to move forward in approving and implementing policies that would help to attain a faster and more sustained growth.
  - ✓ It is important to keep conducting monetary policy in a timely manner, along with measures aimed to a healthy functioning of financial markets, which would, in turn, enhance the effectiveness of monetary policy.
  - ✓ It is essential for the authorities to comply with the fiscal consolidation process, while encouraging the adequate implementation of structural reforms.
- In order to prevent insecurity and corruption from hampering economic growth, it is indispensable to strengthen the rule of law and to guarantee legal certainty.

