

## **Outline**

**1** External Conditions

**2** Evolution of the Mexican Economy

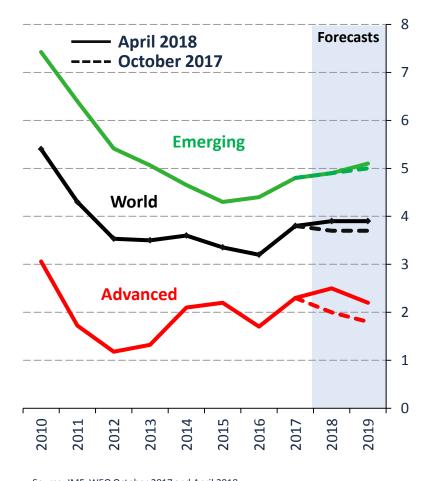
3 Inflation

4 Monetary Policy

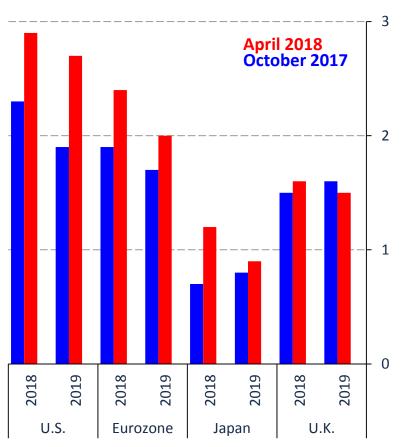
**5** Forecasts and Final Remarks

During Q1 2018, the world economy kept growing in a generalized manner. The outlook for the rest of 2018 and 2019 still suggests a recovery of world economic activity.

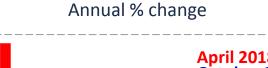
#### **GDP Growth Forecasts** Annual % change

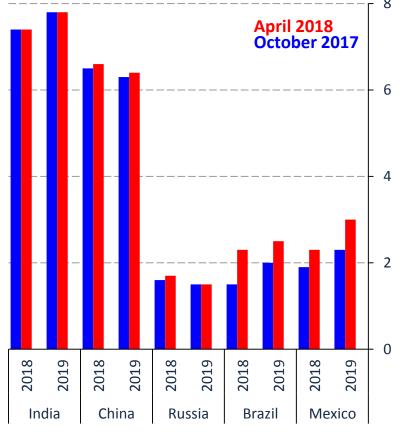


G4: 2018 and 2019 GDP Growth Forecasts Annual % change



**Emerging Economies: 2018 and 2019 GDP Growth Forecasts** 





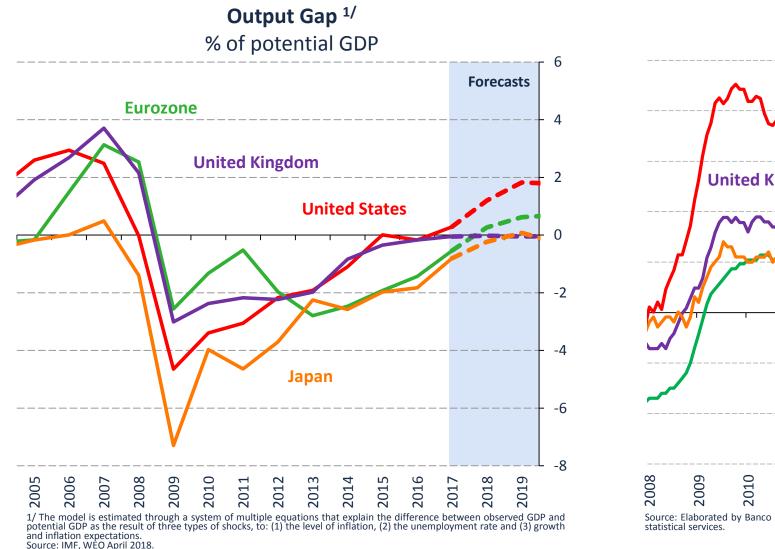
Source: IMF, WEO October 2017 and April 2018.

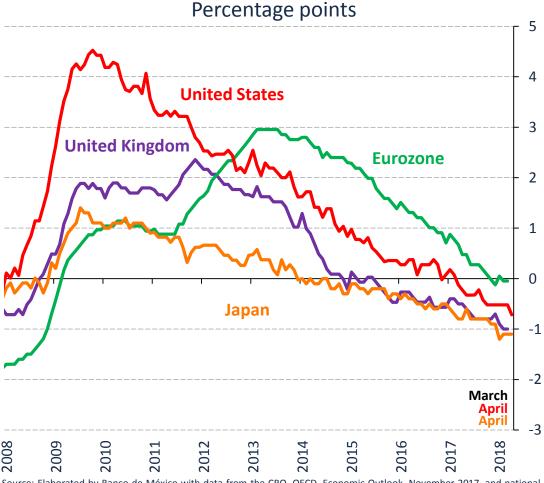
Source: IMF, WEO October 2017 and April 2018.

Source: IMF, WEO October 2017 and April 2018.

In this juncture, the slack in advanced economies continued to reduce and this has started to be reflected in several of them in gradual wage increases.

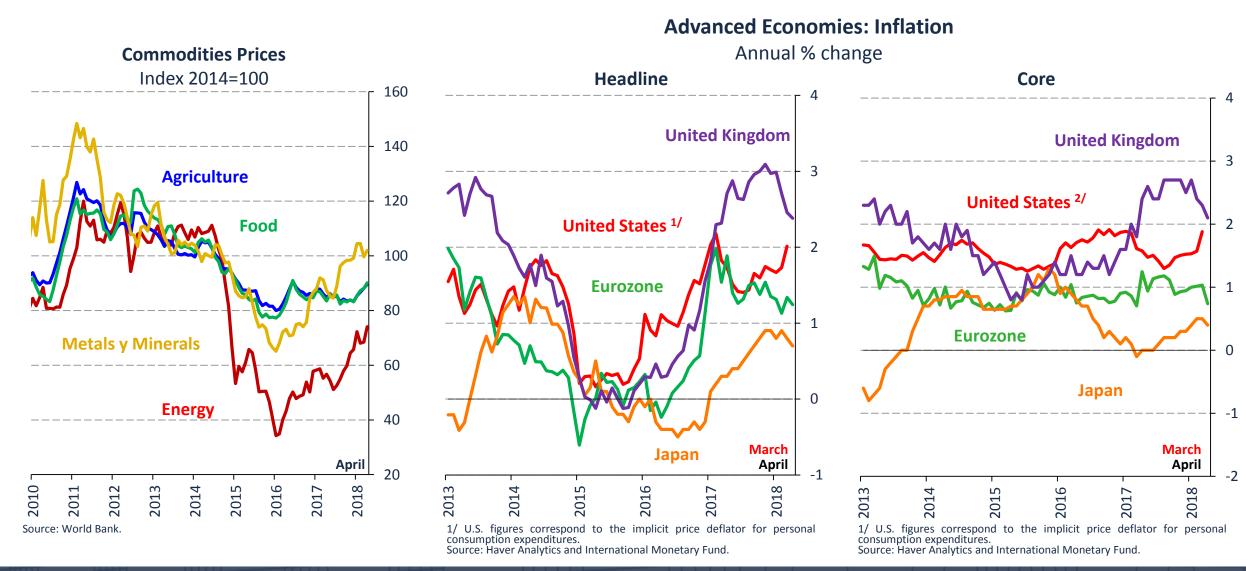
#### **Advanced Economies**





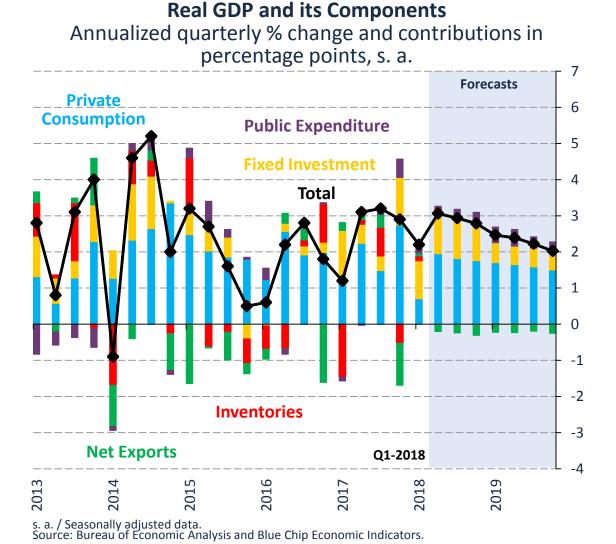
**Unemployment Gap** 

World economic expansion continued to foster the demand for commodities that, along with supply factors, has contributed to higher prices. This, combined with the reduction of slack in advanced economies, has started to be reflected in several of them in gradual increases in both inflation and inflation expectations.

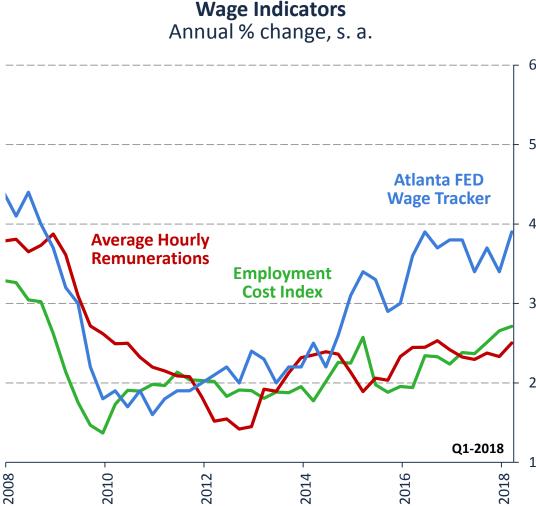


The U.S. economy's growth rate moderated in Q1 2018, although in the future it is still anticipated to register a solid expansion. In this environment, slack in the labor market continued declining and the wage growth rate increased.

#### **United States**



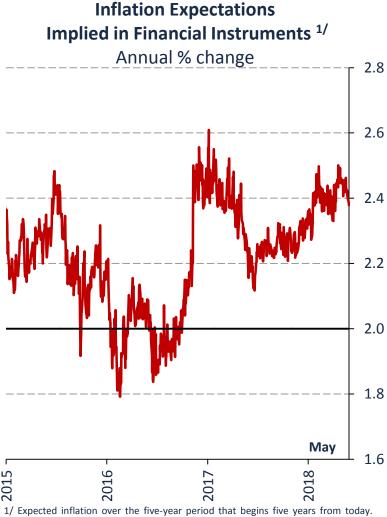


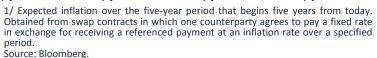


#### In this context, inflation continued to increase in the U.S.

#### **United States**



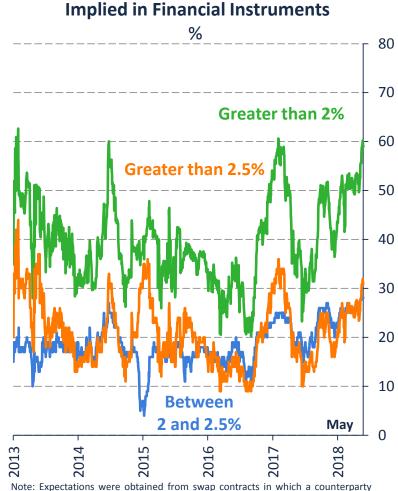




agrees to pay a fixed rate in exchange for a payment referenced to the inflation rate during a given period.

Source: Elaborated by Banco de México with data from Bloomberg.

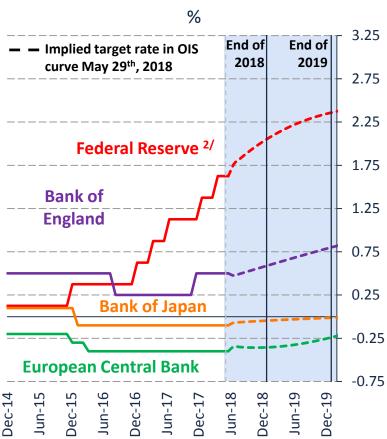
## **Distribution for 2-Year Inflation Expectations**



Source: Bureau of Economic Analysis.

Central banks of developed economies have adjusted their monetary policy stance at different paces, according to each country's cyclical position and inflationary pressures. In the U.S., such process is expected to continue being gradual, although faster than in other advanced economies. The greater uncertainty about the U.S.' inflation trajectory increased interest rates and strengthened the dollar.





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 (1.50% - 1.75%). Source: Bloomberg.

U.S.: 2-Year and 10-Year Government Rates

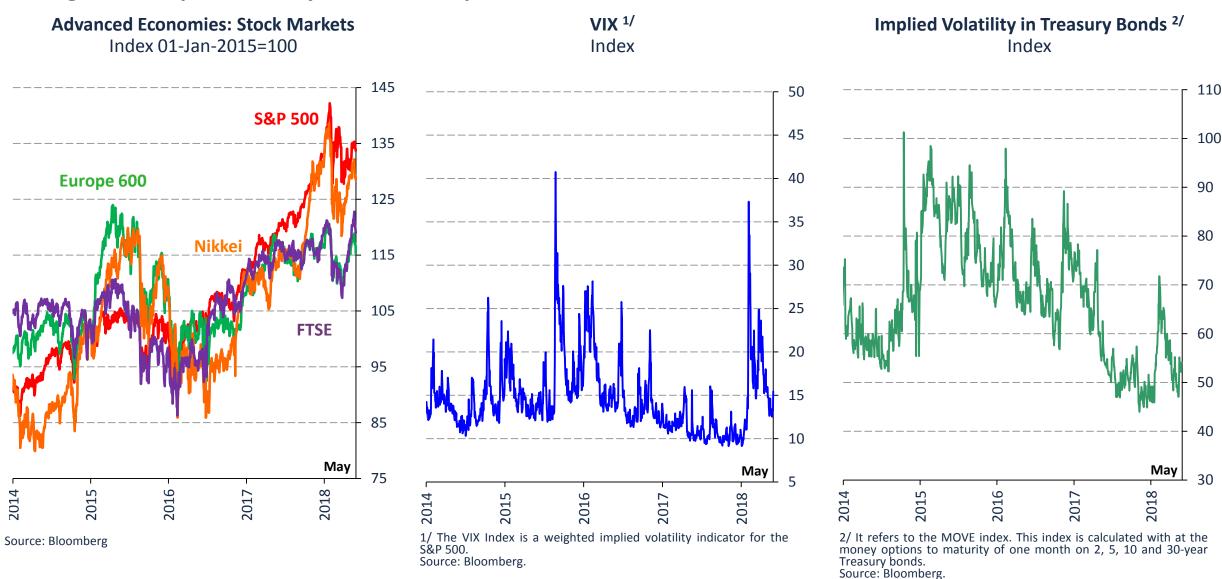


U.S.: DXY Index **Appreciation** 103 100 97 88 May May-17

#### **Risks to World Economic Outlook**

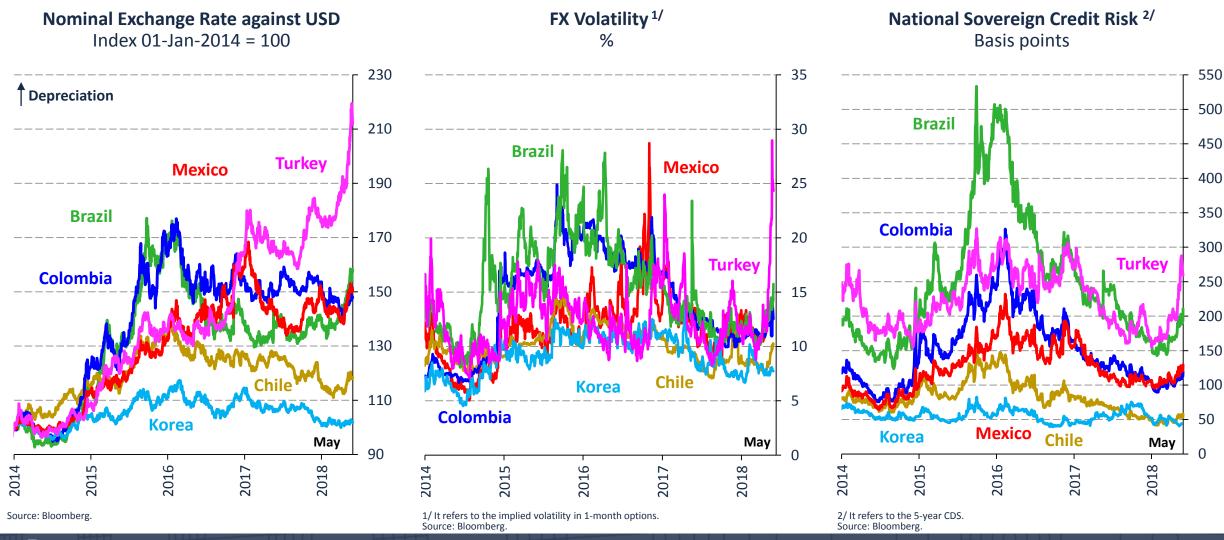
- Risks to the world economic outlook in the **short term** seem to be balanced. The expectation that the growth will continue is consistent with the fiscal impulse in the U.S. and the recent evolution of productive activity and global trade.
- However, for the **medium and long terms**, risks to growth have increased:
  - 1 A change to the regional and global integration model.
  - 2 Greater-than-expected deceleration of the Chinese economy.
  - 3 The occurrence of geopolitical events across different regions.
- There are risks that could generate an environment of higher volatility in international financial markets, which could further limit emerging economies' financing sources:
  - 1 An additional increase in uncertainty over the inflation evolution in some advanced economies, which could lead to higher interest rates than those currently expected.
  - 2 Deterioration in some financial intermediaries' balance sheets caused by a global environment of higher interest rates.
  - 3 High indebtedness levels of the private sector and macroeconomic imbalances in some emerging economies.
  - 4 That authorities do not adjust their economic policies in light of the risks currently faced to maintain growth and stability in international financial markets.

This perception of higher risks has been reflected in higher volatility in international financial markets throughout the period analyzed in this Report.



In this environment of lower risk appetite, emerging economies are facing tighter financing conditions, leading to a considerable depreciation across most of their currencies and an increase in their volatility.





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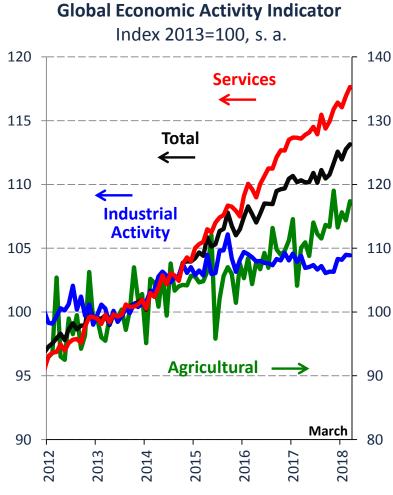
4 Monetary Policy

**5** Forecasts and Final Remarks

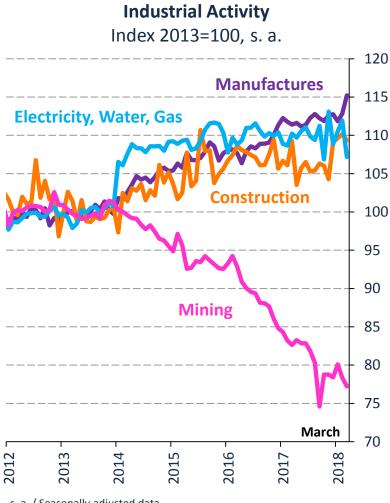
# In Q1 2018, economic activity continued recovering, especially driven by the dynamism of the services sector and the recovery of industrial activity.

# **Gross Domestic Product Quarterly** % change, s. a. Q1-2018 2018 2012 2013 2015 2016 2017 2014









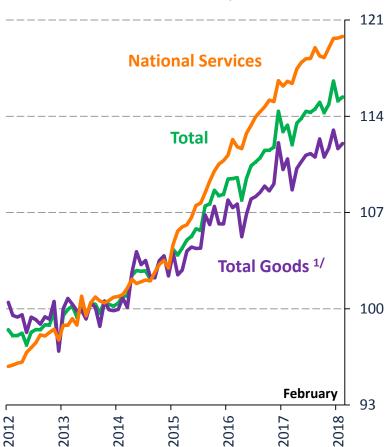
s. a. / Seasonally adjusted data.

Source: Monthly Industrial Activity Indicator, Mexico's National Accounts
System (SCNM), INEGI.

#### Private consumption continued growing, albeit at a slower pace than during previous quarters.

## Monthly Indicator of Private Consumption and its Components

Index 2013=100, s. a.



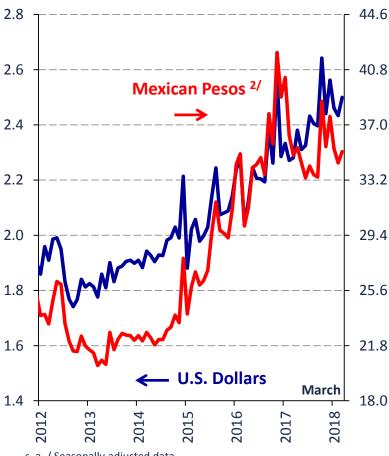
s. a. / Seasonally adjusted data.

1/ Prepared and seasonally adjusted by Banco de México. Includes national and imported goods.

Source: Mexico's National Accounts System (SCNM), INEGI.

#### **Workers' Remittances**

USD and constant pesos billions, s. a

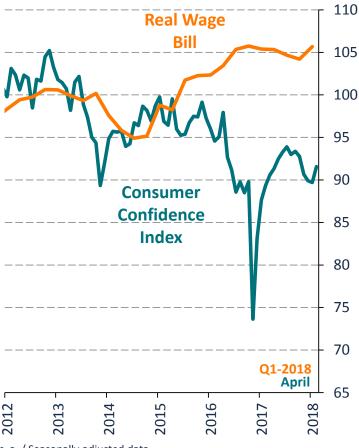


s. a. / Seasonally adjusted data. 2/ Prices as of the second fortnight of December 2010

Source: Banco de México and INEGI.

## Consumer Confidence Index and Total Real Wage Bill

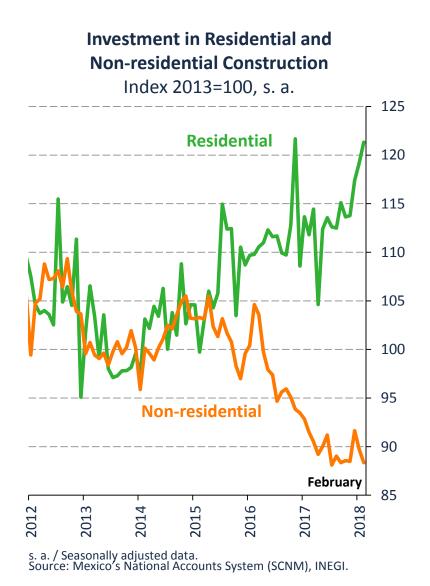
Index 2013 = 100, s. a.

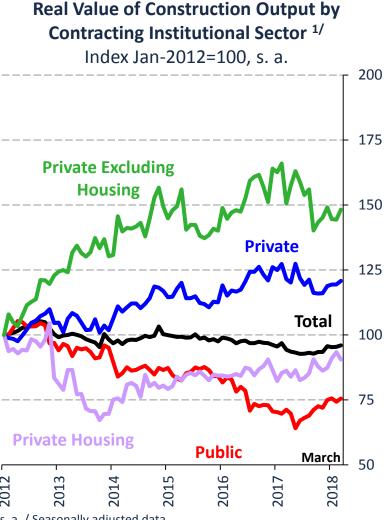


s. a. / Seasonally adjusted data. Source: Prepared by Banco de México with data from the National Employment Survey (ENOE), INEGI and National Consumer Confidence Survey (ENCO), INEGI and Banco de México.

In December 2017 and during the first two months of 2018, investment recovered relative to the weak performance it had registered since the end of 2015.

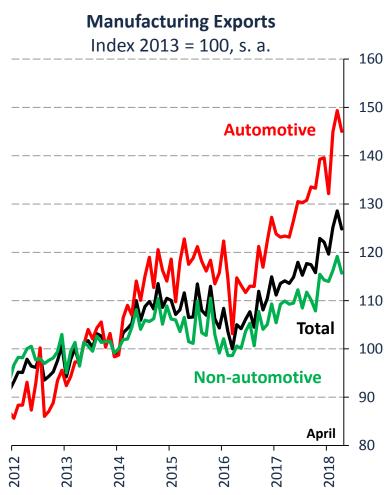
### **Investment and its Components** Index 2013=100, s. a. 135 **Domestic Machinery** 130 and Equipment **Imported Machinery** 120 and Equipment 115 Total 110 105 100 Construction **February** s. a. / Seasonally adjusted data. Source: Mexico's National Accounts System (SCNM), INEGI.



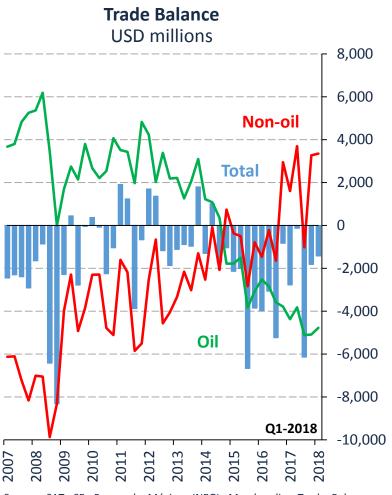


s. a. / Seasonally adjusted data. 1/ Seasonally adjusted by Banco de México, except for the total. Source: Prepared by Banco de México with data from ENEC, INEGI.

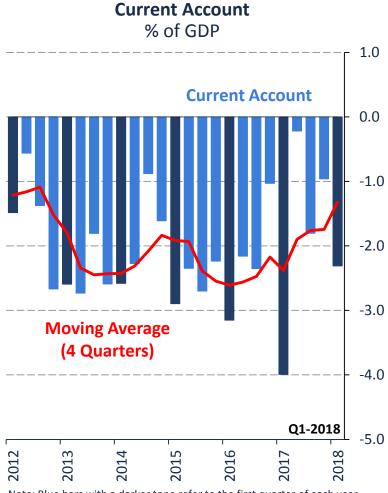
#### In Q1 2018 exports maintained a high dynamism.



s. a. / Seasonally adjusted data. Source: Banco de México with data from SAT, SE, Banco de México, INEGI. Merchandise Trade Balance. SNIEG. Information of National Interest.

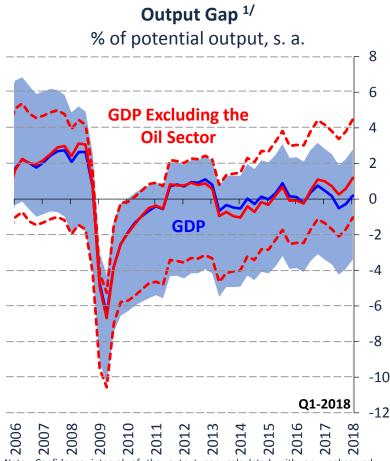


Source: SAT, SE, Banco de México, INEGI. Merchandise Trade Balance. SNIEG. Information of National Interest.



Note: Blue bars with a darker tone refer to the first quarter of each year. Source: Banco de México and INEGI.

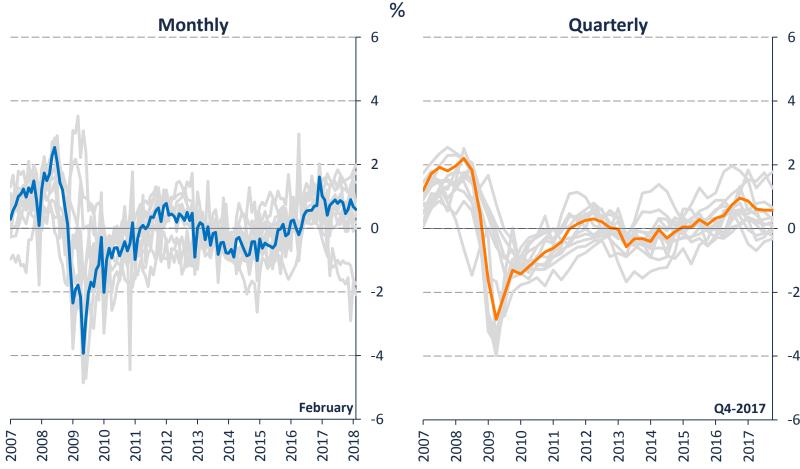
As for the economy's cyclical position, different indicators signal that slack conditions remained tight in early 2018.



Note: Confidence interval of the output gap calculated with an unobserved components method. The dotted line refers to the confidence interval for the gap calculated without the oil sector while the blue area is the interval corresponding to the total GDP.

Source: Estimated by Banco de México with data from INEGI and Banco de México.

#### Measures of Slack: Principal Component by Frequency of Indicators <sup>2/</sup>



2/ Indices constructed based on the Model Confidence Set (MCS) methodology; see Banco de México Inflation Report, October – December 2017, Box 3. Monthly and quarterly slack indices are based on the first principal component of sets that include 11 and 12 indicators, respectively. The first component represents 51% and 58% of joint variation of the monthly and quarterly indicators, respectively. Gray lines correspond to individual slack indicators used in the analysis of Principal Components.

Source: Own elaboration with data from INEGI and Banco de México.

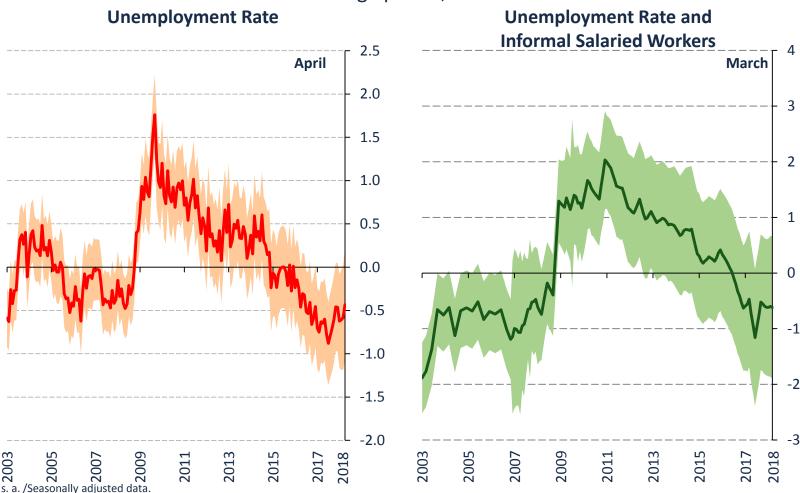
s. a. / Estimated with seasonally adjusted data.

<sup>1/</sup> Estimated using the Hodrick-Prescott (HP) filter with tail correction; see Banco de México Inflation Report. April- June 2009. p.69.

#### In particular, slack conditions in the labor market remained tight.

#### **Labor Market Gap**

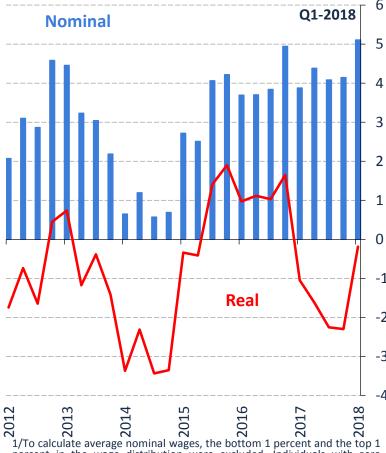
Percentage points, s. a.



Note: Shadow represent confidence bands. The interval corresponds to two average standard deviations among all estimates. Source: Banco de México with data from INEGI (ENOE).

# Average Wage of Salaried Workers according to the National Employment Survey (ENOE) 1/





1/To calculate average nominal wages, the bottom 1 percent and the top 1 percent in the wage distribution were excluded. Individuals with zero reported income or those who did not report it are excluded. Source: Calculated by Banco de México with data from INEGI (ENOE).

Sources of the economy's financial resources continued growing at relatively low rates, but higher than those of 2017. This is attributed to the increase in domestic sources which has offset tighter external financing in Mexico since late 2014.

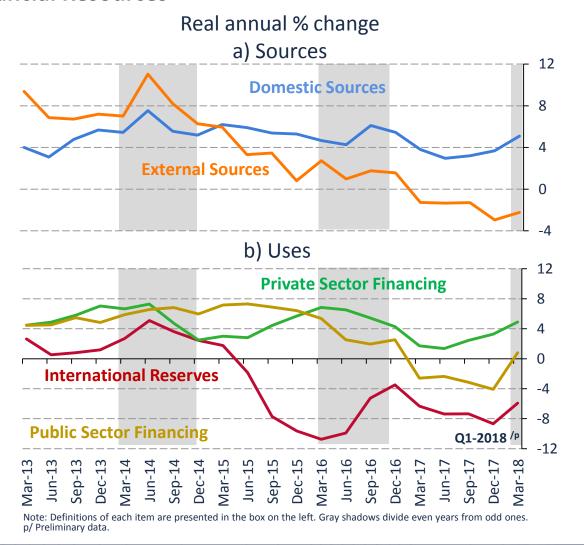
#### Sources and Uses of Financial Resources

Annual flows as % of GDP

	2013	2014	2015	2016	2017	Q1-2018
Total sources	10.0	9.7	5.8	7.4	7.9	7.4
Domestic sources 1/	5.7	5.6	4.6	5.5	6.6	6.4
External sources <sup>2/</sup>	4.2	4.1	1.2	1.9	1.3	1.0
Total uses	10.0	9.7	5.8	7.4	7.9	7.4
International reserves	1.0	1.3	-1.5	0.0	-0.4	-0.2
Public sector financing	4.1	4.7	4.2	2.9	1.1	2.6
Private sector financing 3/	4.2	2.6	3.1	3.0	3.9	3.9
Domestic	2.5	1.7	3.0	3.0	3.3	3.3
External	1.7	0.8	0.1	0.0	0.6	0.5
Other concepts 4/	0.7	1.2	0.1	1.6	3.2	1.0

Note: Figures expressed in percent of the nominal average annual GDP.

Source: Banco de México.



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<sup>1/</sup> Corresponds to the domestic financial assets aggregate F1, which includes the monetary aggregate M3 plus other instruments held by resident sectors that hold money that are not considered in the monetary aggregates.

<sup>2/</sup> Includes the monetary instruments held by non-residents (equivalent to the difference between M4 and M3) and other non-monetary external sources (the external debt of the Federal Government, the external debt of public agencies and companies, the external liabilities of commercial banks, external financing to the non-financial private sector, the raising of agencies, among others).

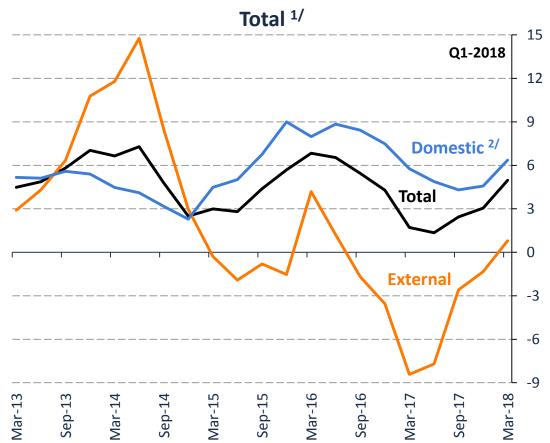
<sup>3/</sup> Includes the financial intermediaries credit, of the National Housing Fund (Infonavit) and Fovissste, the issuance of domestic debt and external financing of firms.

<sup>4/</sup> It includes capital accounts, and results and other assets and liabilities of commercial and development banks, non-bank financial intermediaries, of the National Housing Fund (Infonavit) and Banco de México –including the securities issued by this Central Institute for the purposes of monetary regulation, especially those related to neutralizing the monetary impact by the operational surplus—. Similarly, it includes non-monetary liabilities from the Institute for the Protection of Bank Savings (IPAB), as well as the effect of the change in the valuation of public debt instruments, among other concepts.

Domestic financing to firms has accelerated, as there has been some substitution of foreign liabilities by domestic ones. Credit to households grew at a moderate rate, although higher than in Q4 2017, which could be associated with the recovery of the economic activity and the real wage bill.

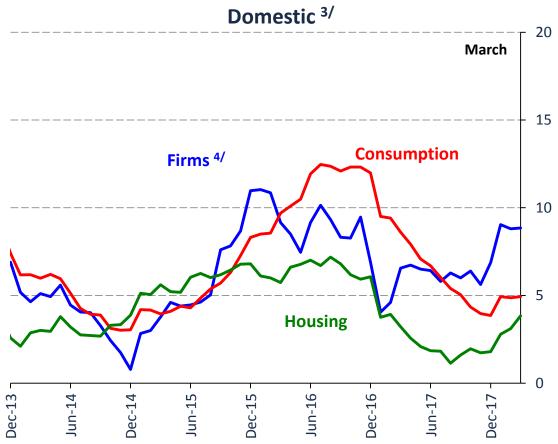
#### **Total Financing to the Non-Financial Private Sector**

Real annual % change



1/ Data adjusted due to exchange rate variations.

Source: Banco de México.



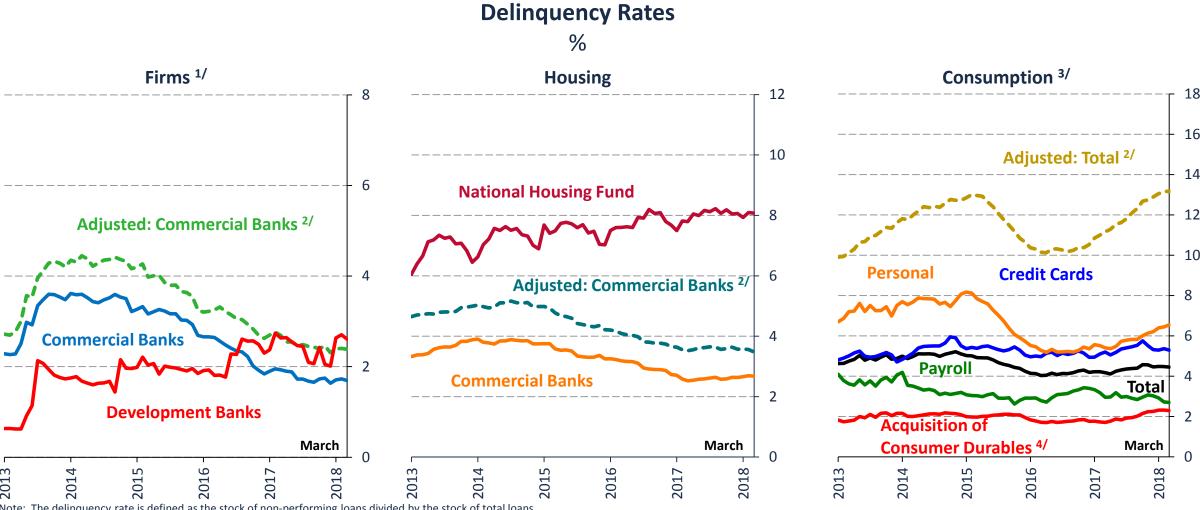
<sup>3/</sup> Data adjusted due to the withdrawal from and the incorporation of some financial intermediaries to the credit statistics.

Source: Banco de México.

<sup>2/</sup> Data adjusted due to the withdrawal from and the incorporation of some financial intermediaries to the credit statistics. Includes credit from commercial and development banks, as well as other non-bank financial intermediaries.

<sup>4/</sup> Data adjusted due to exchange rate variations.

During Q1 2018, the delinquency rates of credit to firms and housing have stabilized. In contrast, the delinquency rates of consumer credit presents an upward trend since October 2017.



Note: The delinquency rate is defined as the stock of non-performing loans divided by the stock of total loans. 1/ It refers to non-financial private firms.

Source: Banco de México.

<sup>1/</sup> It refers to non-infancial private infin.
2/ The adjusted delinquency rate is defined as the non-performing portfolio plus debt write-offs accumulated over the last 12 months divided by the total portfolio plus debt write-offs accumulated over the last 12 months.
3/ It includes the Sofomes ER subsidiaries of bank institutions and financial groups.
4/ It includes auto loans and credit for acquisition of other movable properties.

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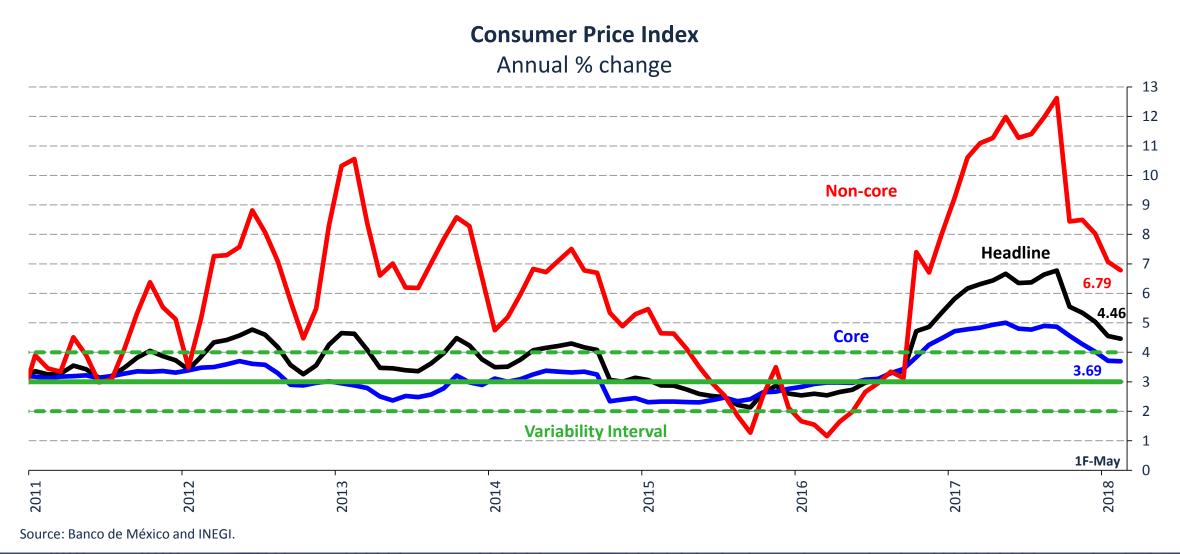
**2** Evolution of the Mexican Economy

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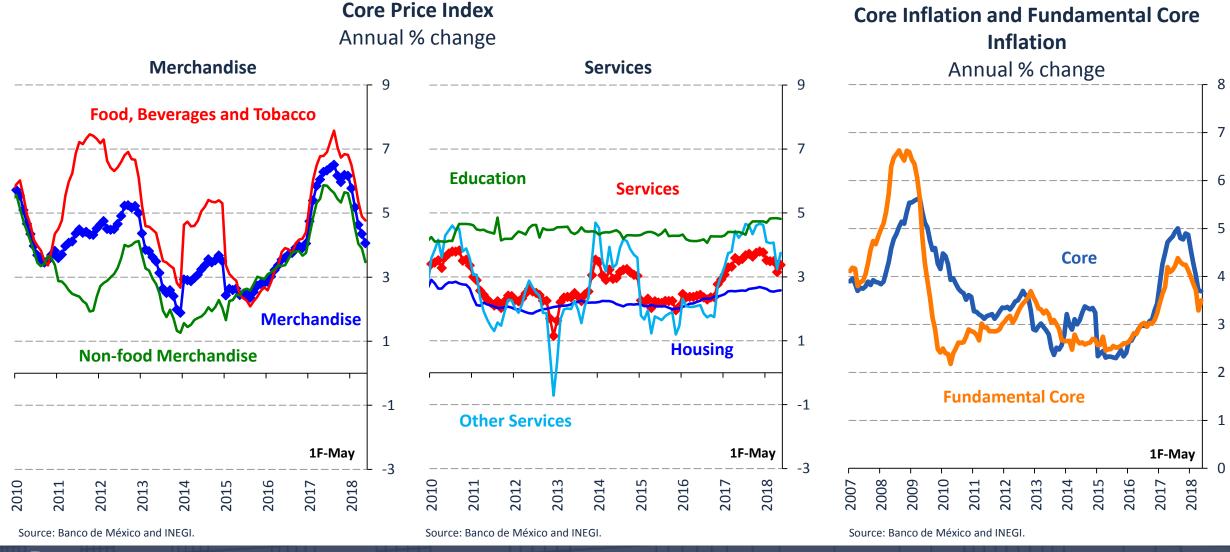
4 Monetary Policy

Forecasts and Final Remarks

During the first months of 2018, annual headline inflation exhibited a clear reduction, consistent with the forecast presented in the Oct-Dec 2017 Quarterly Report. This has been the result of the adopted monetary policy actions and the fading of shocks derived from last year increases in energy prices.



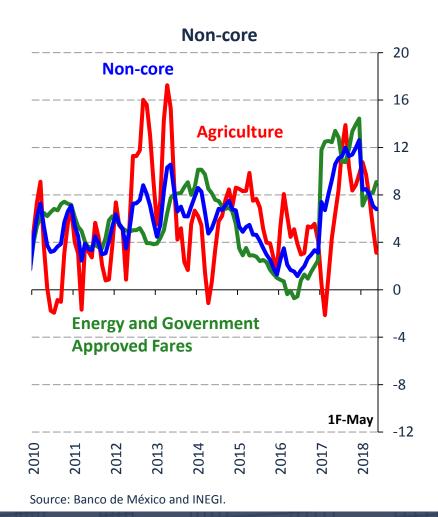
Core inflation and, in particular, the annual growth rate of merchandise prices presented a clear downward trend during the year. The growth rates of services prices have also declined. Meanwhile, the fundamental core inflation trajectory is consistent with the consolidation of a downward trend in inflation.

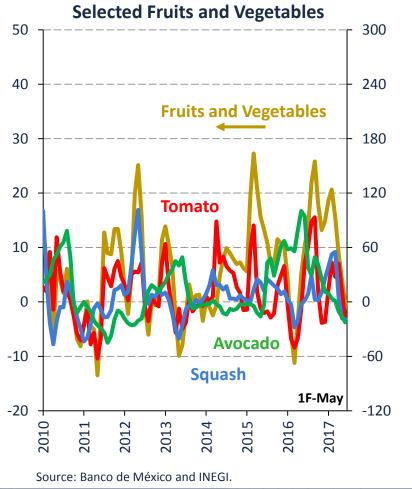


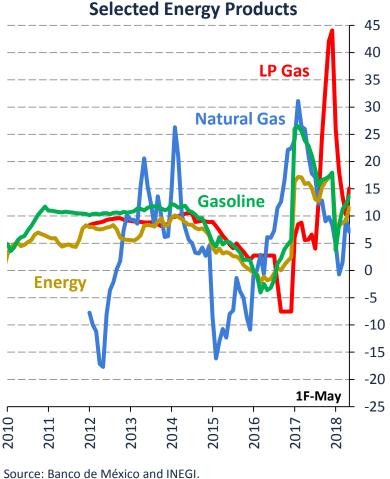
Annual non-core inflation decreased between Q4 2017 and Q1 2018. Lower growth rates of energy and fruits and vegetables prices were noteworthy.

#### Non-core Price Index

Annual % change

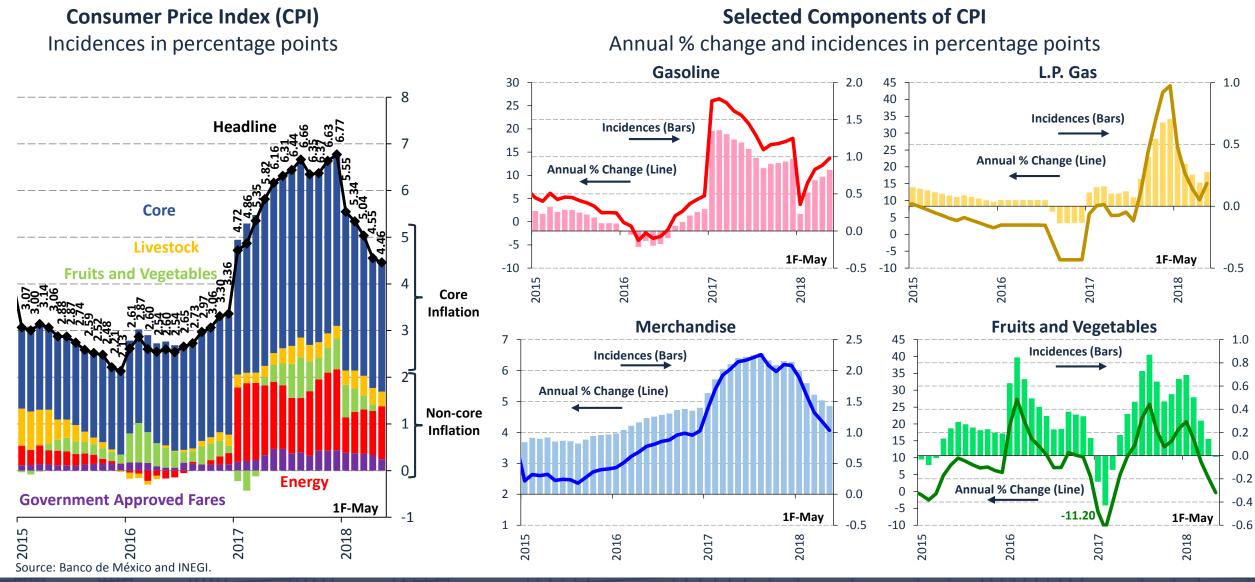






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Incidences of merchandise and services, as well as of non-core inflation on annual headline inflation have declined throughout the year.



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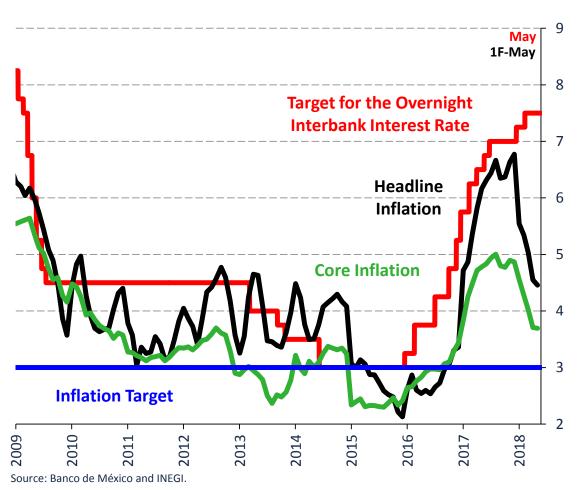
#### **Monetary Policy Stance**

- To guide its monetary policy actions, Banco de México's Governing Board closely follows the development of inflation vis-à-vis its anticipated trajectory, taking into account the monetary policy stance adopted and the horizon in which monetary policy operates, as well as available information on all inflation determinants and on medium- and long-term inflation expectations, including the balance of risks to such factors.
- In particular, the Governing Board will maintain a prudent monetary policy stance and will continue following closely:
  - ✓ The potential pass-through of exchange rate fluctuations on prices.
  - ✓ The monetary policy stance of Mexico relative to that of the U.S.
  - ✓ The evolution of slack conditions in the Mexican economy.
- In the presence of factors that may involve risks to both inflation and inflation expectations, if necessary, monetary policy will act in a timely and firm manner.

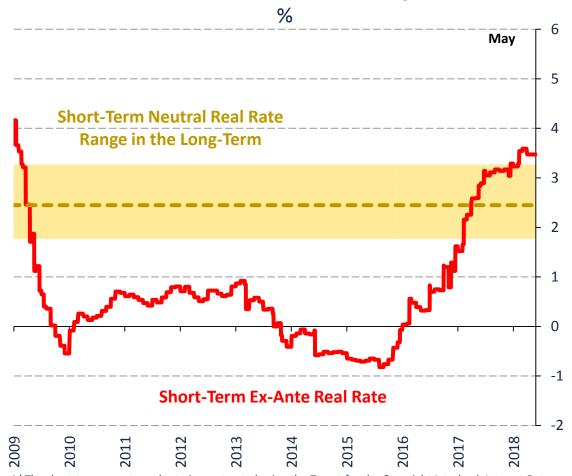
With these actions, the overnight interbank interest rate is at 7.50%. Consequently, the real ex-ante interest rate has reached a level close to 3.50%.

#### **Monetary Policy Rate and Consumer Price Index**

% and annual % change

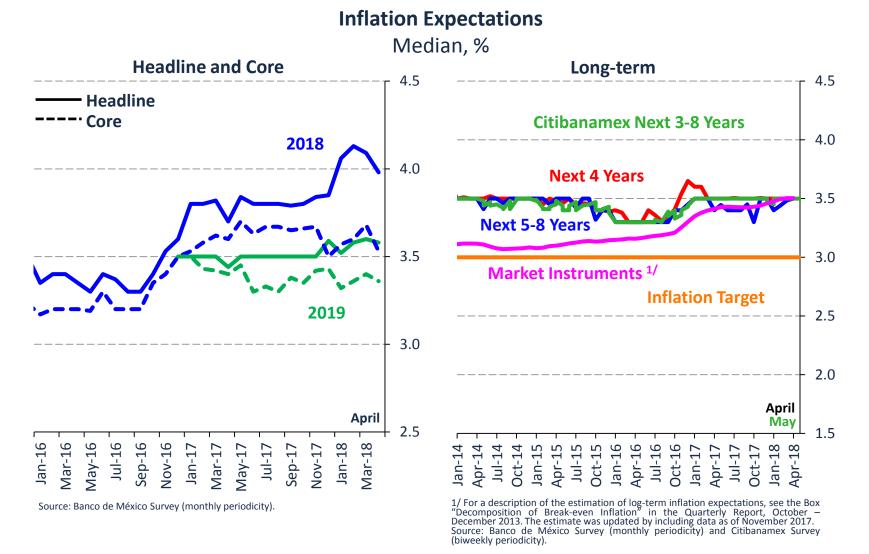


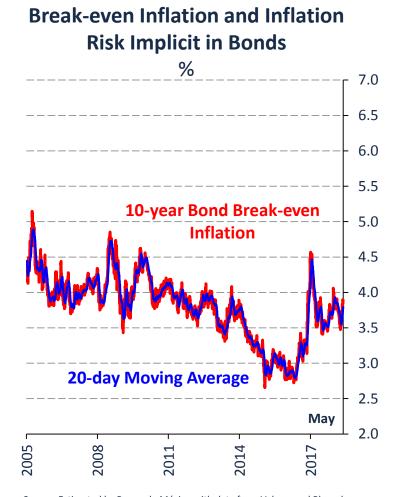
#### Short-Term Ex-Ante Real Rate and Estimated Range for the Short-Term Neutral Real Rate in the Long-Term <sup>1/</sup>



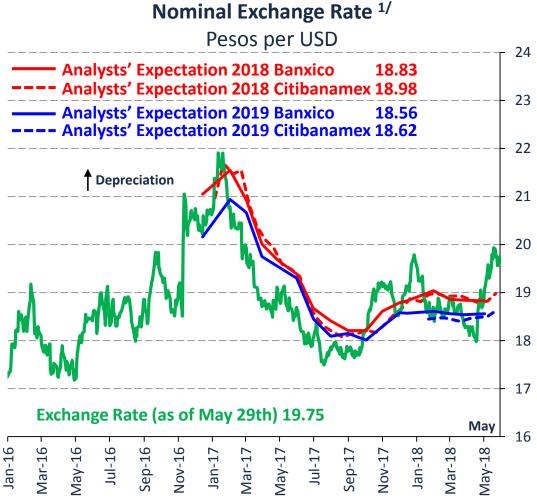
1/ The short-term ex-ante real rate is constructed using the Target for the Overnight Interbank Interest Rate and 12-month inflation expectations from Banco de México Survey. The dotted line corresponds to the midpoint of the range. For this Report, the estimate was updated to include data until December 2017. Source: Banco de México.

After the additional shocks to inflation in late 2017, between December and February inflation expectations for the end of the year were adjusted upwards. However, the median of analysts' inflation expectations declined due to the lower-than-expected observed inflation from February to April. The medians for medium- and long-term inflation expectations remained stable at 3.50%.



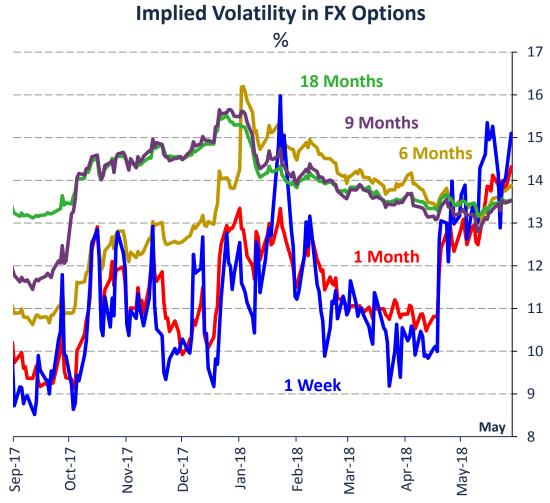


From January to mid-April, the Mexican peso appreciated against the U.S. dollar. However, since mid-April it has registered higher volatility and an important depreciation as a result of higher interest rates in the U.S., the generalized strengthening of the U.S. dollar and some domestic factors, such as the uncertainty over NAFTA and Mexico's elections.

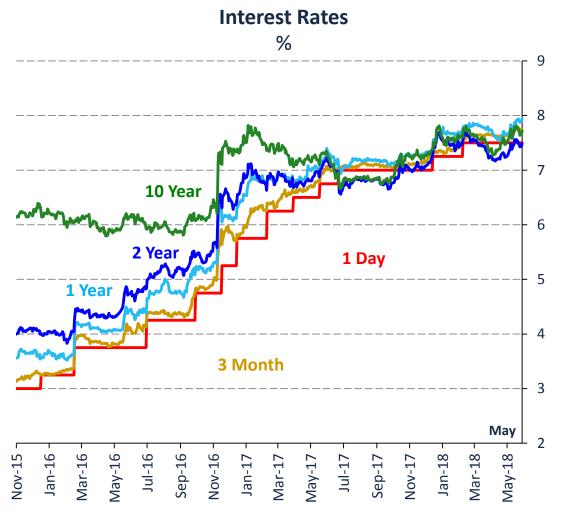


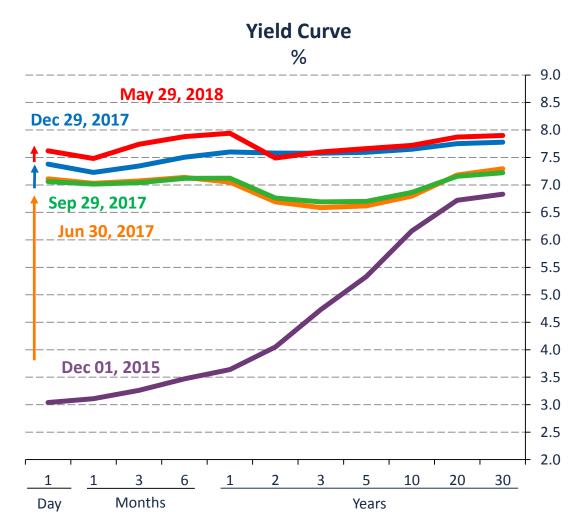
1/ Observed exchange rate refers to the daily FIX Exchange Rate. Numbers in front of expectations correspond to the averages of the Banco de México survey for April and the Citibanamex survey for May 22th, 2018.

Source: Banco de México.



Short-term interest rates increased in line with the rise in the overnight interbank interest rate. Although medium- and long-term interest rates closed the period at levels similar to those registered at the end of 2017, they declined from the beginning of the year to mid-April, and increased later.

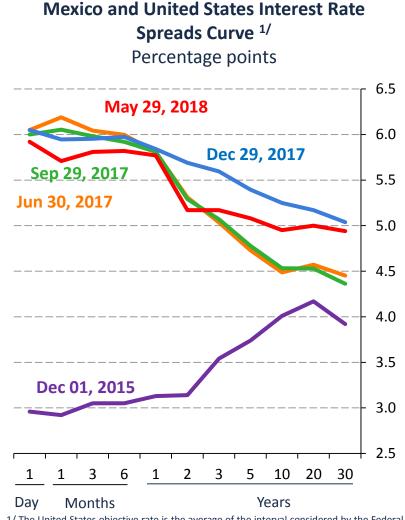




Source: Banco de México and Proveedor Integral de Precios (PiP).

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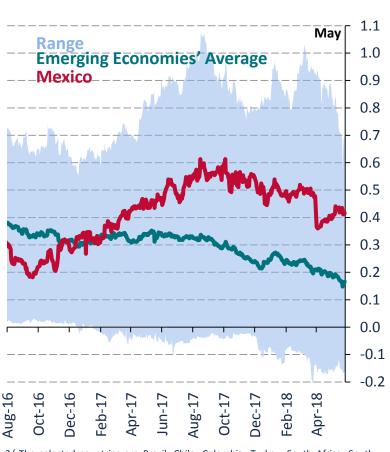
Interest rate spreads between Mexico and the U.S. have remained at high levels, especially shorter-term ones. However, considerable increases along the U.S. yield curve led to a decline in such spreads during the period covered in this Report.





Source: Proveedor Integral de Precios (PiP) and U.S. Treasury Department.

#### **Volatility-adjusted 3-month Interest Rate** Spread for Selected Emerging Countries <sup>2/</sup> Index



2/ The selected countries are Brazil, Chile, Colombia, Turkey, South Africa, South Korea and Poland. Source: Bloomberg.

#### **Government Securities' Holdings by Foreign Investors**



3/ The total includes CETES, bonds, udibonos, bondes and bondes D. Source: Banco de México.

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#### **Economic Activity Outlook**

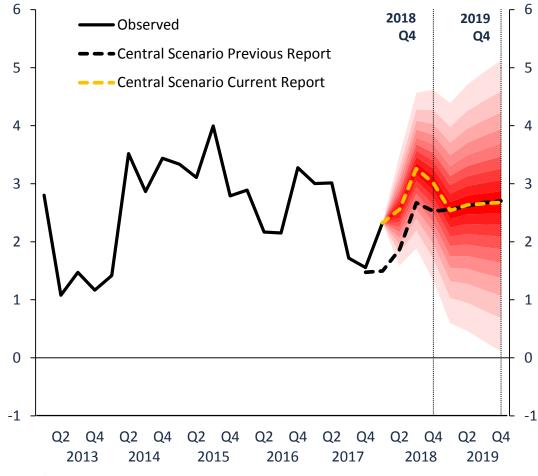
GDP Growth			
	(%)		
Report	Oct-Dec 2017	Jan-Mar 2018	
2018	2.0 - 3.0	2.0 - 3.0	
2019	2.2 – 3.2	2.2 - 3.2	

Increase in the Number of IMSS-insured Jobs				
(Thousands)				
Report	Oct-Dec 2017	Jan-Mar 2018		
2018	680 – 780	680 – 780		
2019	690 – 790	690 – 790		

Current Account Deficit				
(% of GDP)				
Report	Oct-Dec 2017	Jan-Mar 2018		
2018	2.1	2.1		
2019	2.3	2.3		

#### **Fan Chart: GDP Growth**

Annual percent, s. a.



s. a. / Seasonally adjusted data.

Source: INEGI and Banco de México.

# **Forecast Horizon**

# Medium- and Long-Term

# Risks to Growth Outlook Balance of risks to growth remains biased to the downside.

#### **Upward:**



That the uncertainty over NAFTA renegotiations is resolved, allowing investment to have a sustained recovery.

#### **Downward:**



That the uncertainty over NAFTA and the electoral process causes a delay in private investment plans or a reduction in consumers' spending.



That bouts of volatility in international financial markets are observed.



That NAFTA renegotiation is not favorable for the Mexican productive sector, or that it leads to its cancellation.

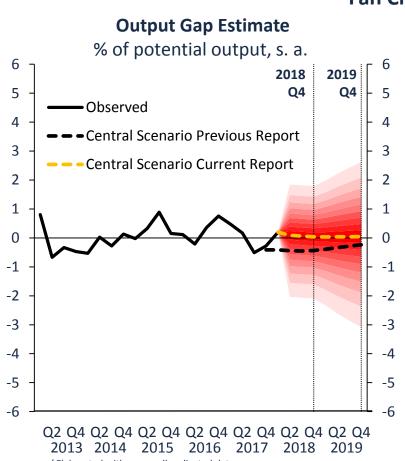


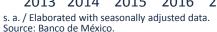
That protectionist measures are escalated worldwide.



That competitiveness of the Mexican economy is affected by a number of external and domestic factors.

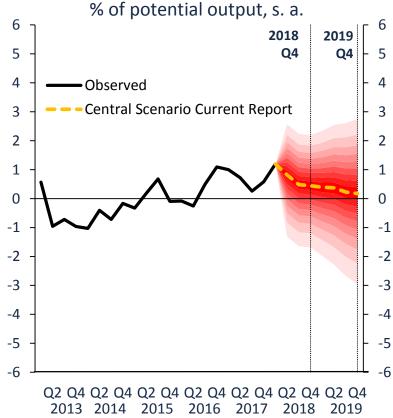
Given that the economic activity forecast considers growth close to its potential, and with a balance of risks biased to the downside, the tight conditions of the economy are expected to relax throughout the forecast horizon. Therefore, in this horizon, no additional tightening is expected to affect inflation significantly.





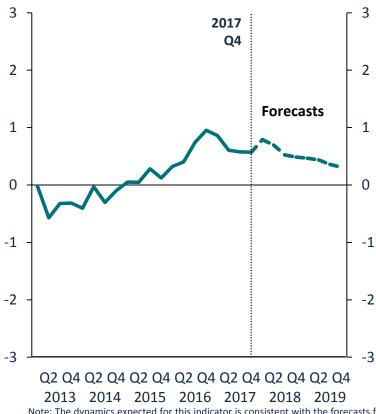
#### **Fan Charts**

#### Output Gap Estimate Excluding the Oil Sector



s. a. / Elaborated with seasonally adjusted data. Source: Banco de México.

#### **Quarterly Slack Index**



Note: The dynamics expected for this indicator is consistent with the forecasts for the output that excludes the oil sector. It is not feasible to calculate a fan chart for because of the nature with which the forecast was constructed. Source: Banco de México.

#### **Central Scenario for Inflation**

# Headline Inflation

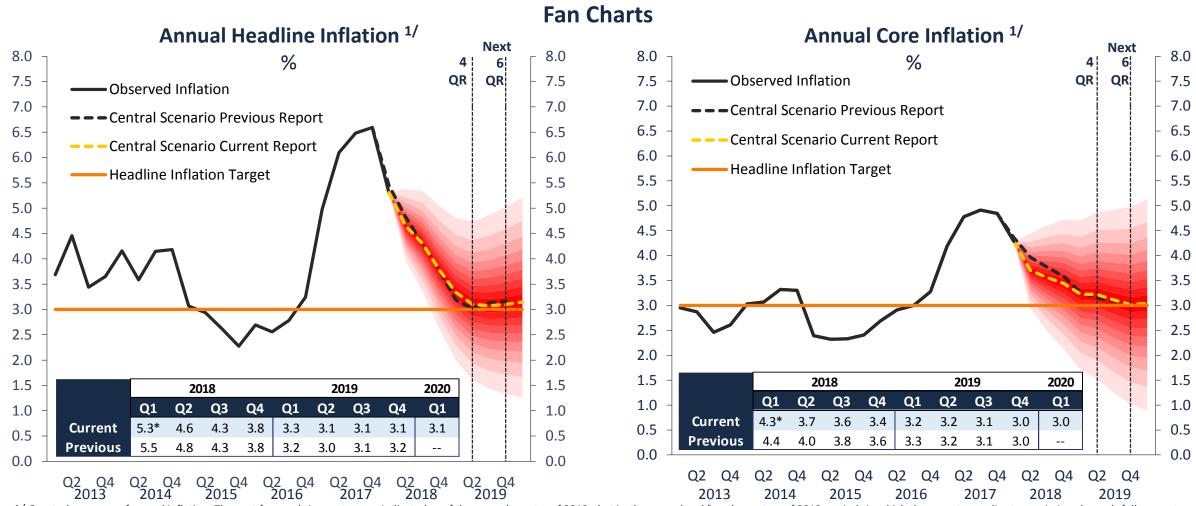
 Annual headline inflation is expected to continue declining, approaching its 3.0% target throughout the year, and remaining at levels close to the target in 2019.

# Core Inflation

• Annual core inflation is estimated to **continue decreasing gradually** to consolidate its convergence to the 3.0% target during 2019.

- These forecasts consider:
  - ✓ An **orderly performance** of the exchange rate.
  - ✓ Absence of labor market-related pressures.
  - ✓ That non-core inflation keeps declining in the remainder of 2018 at the expected rate.

Based on the available information and considering the current monetary stance, in the horizon in which monetary policy operates, inflation performance is estimated to remain similar to that published in the previous Report.



<sup>1/</sup> Quarterly average of annual inflation. The next four and six quarters are indicated as of the second quarter of 2018, that is, the second and fourth quarters of 2019, periods in which the monetary policy transmission channels fully operate.

Source: Banco de México and INEGI.

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

The balance of risks for inflation relative to its expected path remains biased upwards associated with diverse risks, amid a highly uncertain environment.

#### **Upward:**



That the national currency continues to be under pressure due to an environment of higher external interest rates and the U.S. dollar's strength, as well as uncertainty associated with both the NAFTA renegotiation and Mexico's elections.



That shocks in agricultural product prices and upward pressures in the prices of certain energy goods are observed.



Given the economy's cyclical conditions, unit labor costs could lead to upward inflationary pressures.

#### **Downward:**



A possible appreciation of the peso if NAFTA negotiations are favorable.

In the presence of factors that, by their nature, may involve risks to both inflation and inflation expectations, if necessary monetary policy will act in a timely and firm manner to attain the convergence of inflation to its 3% target and to strengthen the anchoring of medium- and long-term inflation expectations to reach the target.

#### Adjustments to Banco de México's Communication Strategy

- It is relevant to stress that **transparency** regarding Banco de México's actions is key to generate **confidence and credibility** on its actions to **comply with its constitutional mandate** of procuring price stability.
- The Governing Board announced a number of adjustments to its communication strategy:
  - ✓ The Minutes of the Monetary Policy Decisions will include the voters' identity and, in case of dissent during vote, it will have an explanation of the reasons behind it.
  - ✓ The **transcripts** of the meetings in which monetary policy decisions are made will be released to the **public three years after** the respective meeting (a shorter period as compared to other central banks).
  - ✓ The Press Release of the Announcement of the Monetary Policy Decision and the Minutes will be published in Spanish and English simultaneously on the corresponding dates.
  - ✓ Speeches and public presentations given by the Governing Board members will be published on Banco de México's web page.
- These adjustments will contribute to **greater transparency and accountability** among the Governing Board members, with regard to both the **collegial body** and **individually**.
- In addition, it is worth noting that the Governing Board recently published the "Policies for the Public Consultation of the General Provisions Issued by Banco de México" that establish additional communication channels with citizens.

#### **Final Remarks**

- The strengthening of the Mexican macroeconomic framework (monetary and fiscal stance, and resilience of the financial system) has placed the country in a better position to face a complex outlook, while considerable risks in the short and medium terms persist. However, to take on the possible challenges and to increase the economy's ability to face adverse shocks, it is key for Mexico to strengthen further its macroeconomic stance.
- Similarly, steps should be implemented to improve competitiveness across the country and to foster greater productivity of the economy.
- In addition, it is important to implement profound reforms and actions that would allow to have better public safety conditions, legal certainty and economic competition, which would grant favorable conditions to investment and growth, in an environment of low and stable inflation for the benefit of the Mexican population.

#### Annex – Boxes

- 1 The Phillips Curve in the Center of Global Debate.
- Recent Evolution of Spending on Gross Fixed Investment in Mexico.
- Impact of International Price Dynamics on the Volume of Agricultural Goods Exports.
- 4 Alternative Measures of Labor Underutilization.
- 5 Interbank Electronic Payment System (SPEI).
- 6 Information on Attacks on Users of Interbank Electronic Payment System (SPEI).
- 7 Recent Evolution of Financial Markets in Mexico.
- Improvements in the Communication Strategy, Transparency and Accountability of Banco de México.

#### Annex – Boxes

- 5 Interbank Electronic Payments System (SPEI).
  - 1. What is SPEI?
  - 2. How does SPEI work?
  - 3. Use of SPEI
- 6 Information on Attacks on Users of Interbank Electronic Payments System (SPEI).
  - 1. Introduction
  - 2. Summary of the Log of Operational Events in April and May
  - 3. Response Protocol to Cybersecurity Incidents
  - 4. Cybersecurity Requirements Applicable to Users
  - 5. Communication with Participants and the Public
    - ✓ Communication with Participants
    - ✓ Communication with the Public
  - 6. Risk Mitigation
    - ✓ Technological Actions
    - ✓ Operational Actions
    - ✓ Regulatory Actions

