



# Quarterly Report

July – September 2014

November 19, 2014



BANCO DE MÉXICO

# Outline

**1**

**Monetary Policy**

**2**

**External Conditions**

**3**

**Economic Activity in Mexico**

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**Inflation Determinants**

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**Forecasts and Balance of Risks**

# Monetary Policy Conduction

By constitutional mandate, the monetary policy in Mexico seeks to ensure the stability of the national currency's purchasing power.

As a result, significant progress in curbing inflation has been made:

- Reduced **level** and **volatility**.
- Absence of **second round effects** derived from changes in relative prices.
- **Better-anchored** inflation expectations.
- Decrease in the inflation **risk premium**.

## Over the last 2 years:

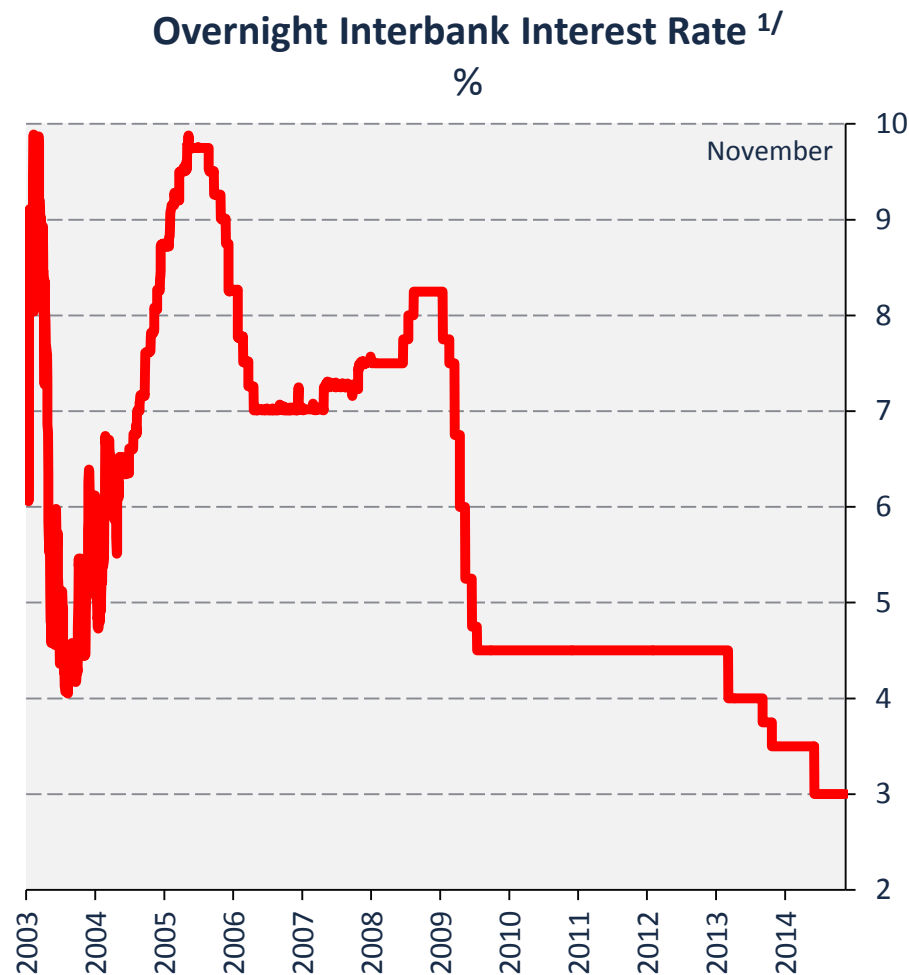
In light of a favorable inflation environment, well-anchored medium- and long-term inflation expectations and slack conditions in the economy:

- ✓ The Board of Governors took advantage of the circumstances **to adjust the monetary policy stance and to support the recovery of the economic activity.**
- ✓ Thus, between March 2013 and June 2014 **the Board reduced the reference interest rate by 150 basis points**, without compromising the process of inflation convergence towards the 3 percent target.

## In 3Q 2014, the Board of Governors maintained the target for the Overnight Interbank Interest Rate at 3 percent.

This considering:

- The transitory effect on inflation as a result of shocks in agricultural products prices.
- That inflation expectations remained well-anchored.
- That a considerable decline in inflation in late 2014 and its convergence to the 3 percent target in mid-2015 are anticipated.



1/ Since January 21, 2008, the Overnight Interbank Interest Rate is shown.

Source: Banco de México.

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# External Conditions

## Global Situation in 3Q 2014

### Growth

- ✓ *World economy kept presenting signs of weakness:*
  - ➔ **Advanced Economies**: In Japan and the Euro zone economic activity remained weak, while in the U.S. and the U.K. it kept expanding.
  - ➔ **Emerging Economies**: Lower dynamism of economic activity was observed.

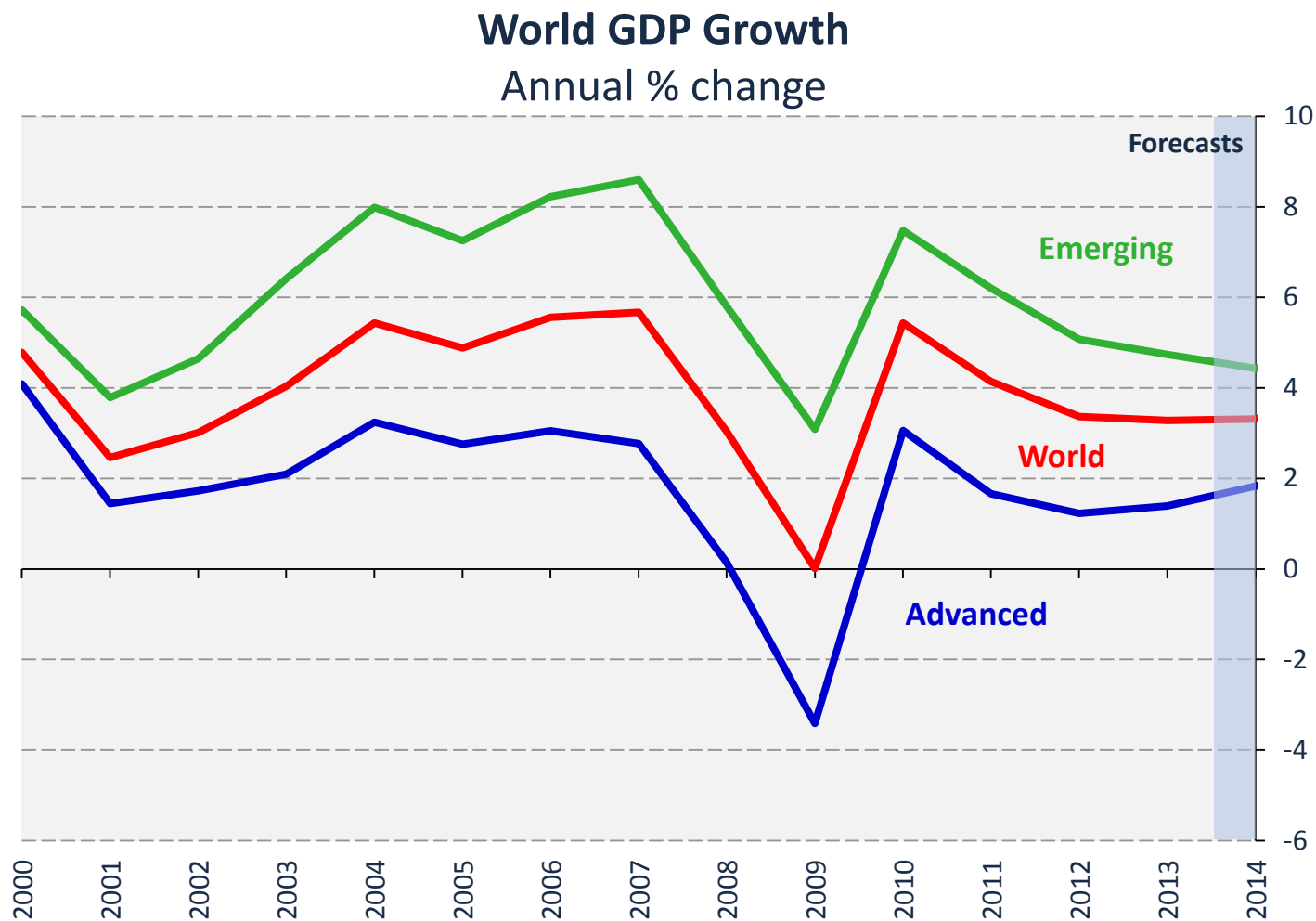
### Inflation

- ✓ A reduction observed worldwide.

### Monetary Policy

- ✓ Expectations for the monetary policy stance in main advanced economies took opposite directions.
  - ➔ The Federal Reserve confirmed its strategy of a gradual withdrawal of the monetary stimulus.
  - ➔ The European Central Bank and the Bank of Japan announced additional monetary easing measures.
- ➔ **In general, accommodative monetary stances are expected in most economies, including the emerging ones.**

## World economy kept presenting signs of weakness in 3Q 2014.

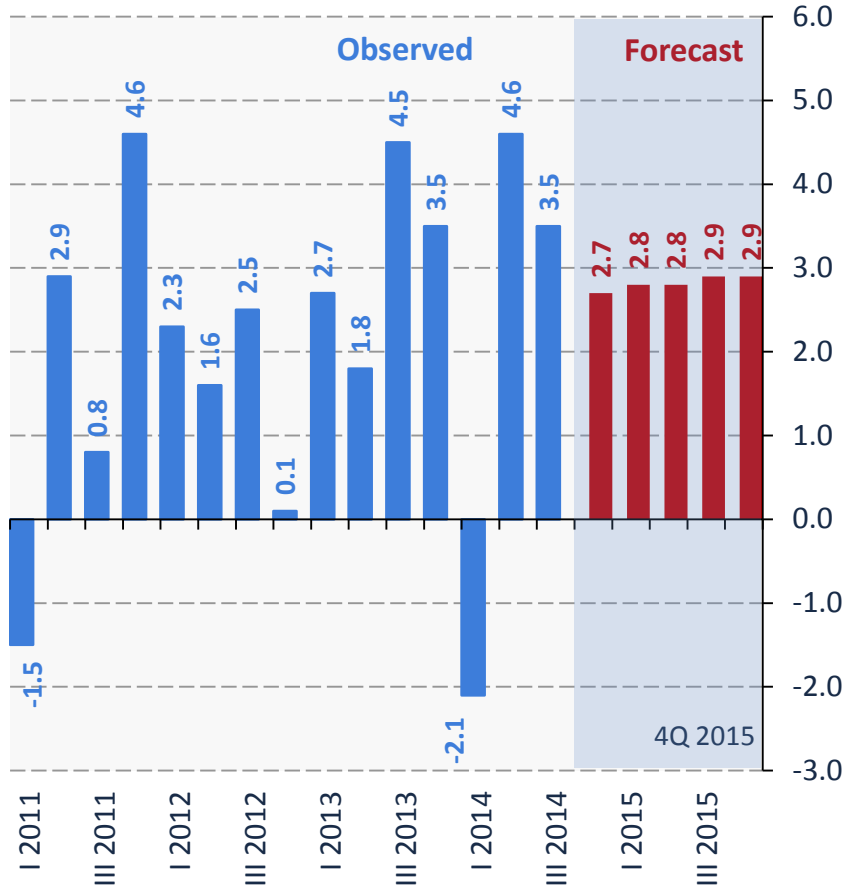


Source: World Economic Outlook, International Monetary Fund.



**In the U.S., the recovery of economic activity kept consolidating, following a strong expansion in 2Q 2014. Likewise, labor market conditions continued to strengthen gradually.**

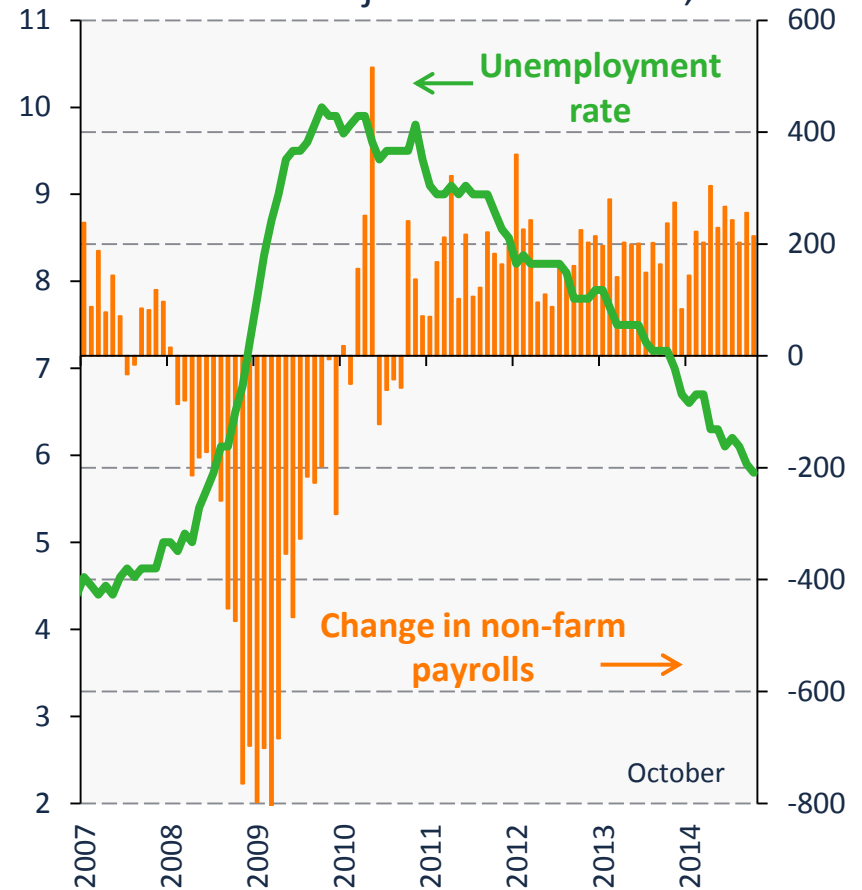
**Gross Domestic Product**  
Quarterly % change at annual rates, s. a.



s.a./ Seasonally adjusted data.

Source: Bureau of Economic Analysis and Blue Chip.

**Change in Non-farm Payrolls and Unemployment Rate**  
Thousands of jobs and % of EAP, s. a.

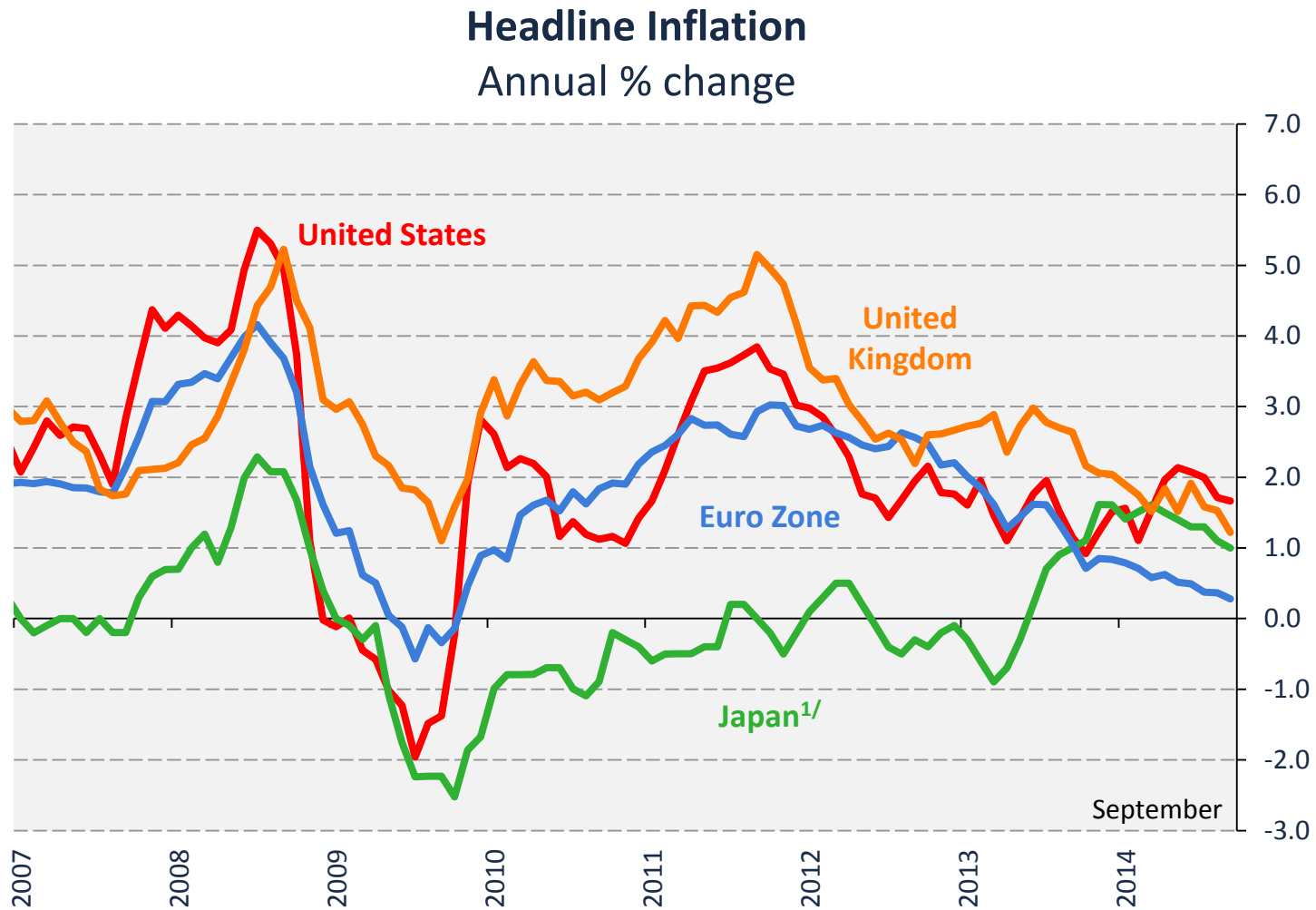


EAP/ Economically Active Population.

s.a./ Seasonally adjusted data.

Source: Bureau of Labor Statistics.

In 3Q 2014 inflation declined worldwide, both due to lower international prices of energy and food products, and due to prevailing slack conditions, particularly in most advanced economies.



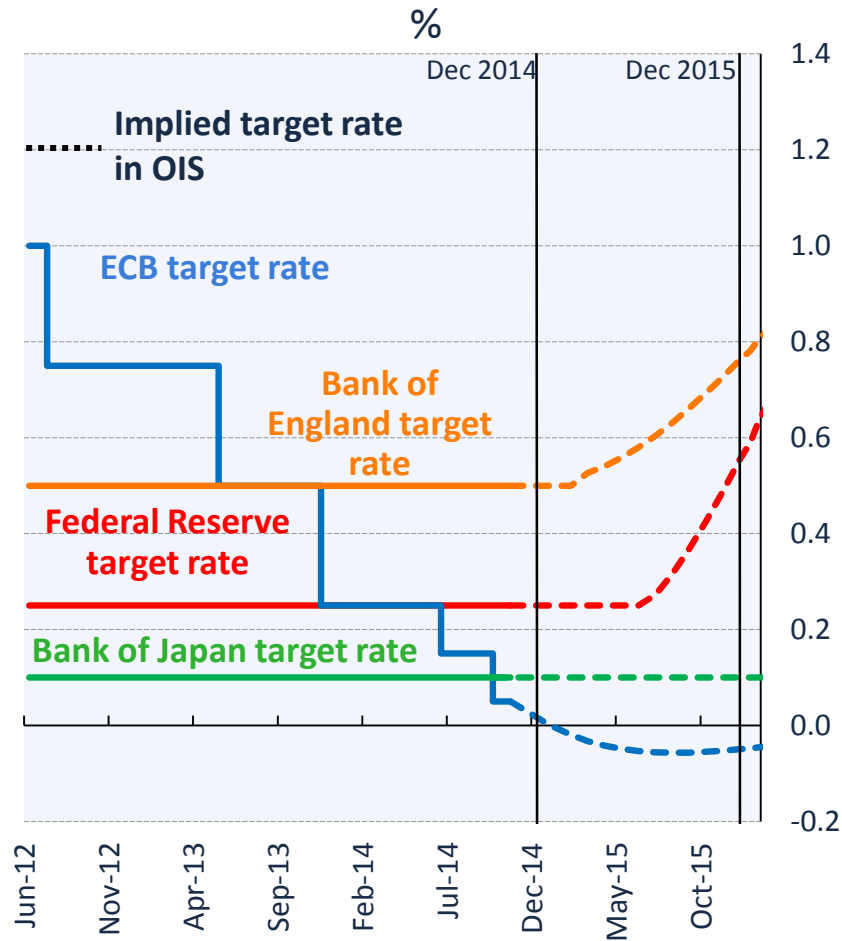
1/ Exclude the effects of the consumption tax rise.

Source: Haver Analytics and JP Morgan.

Considering the environment of weak growth and low inflation worldwide, the monetary policy stance in most economies is expected to remain accommodative over the next quarters.

## Advanced Economies

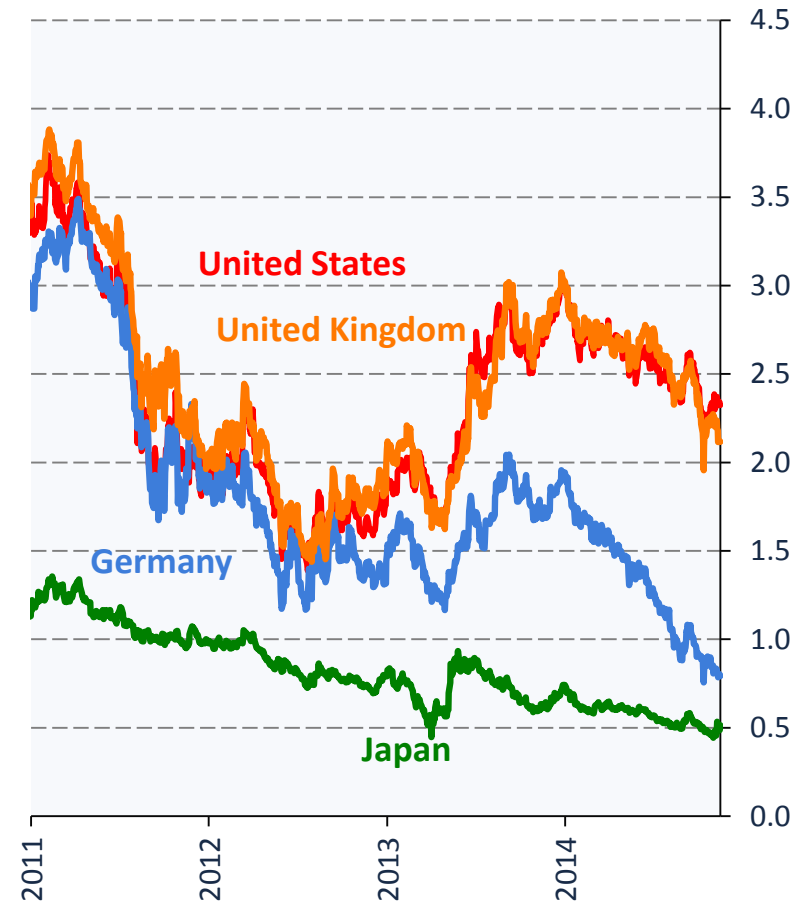
Implied Monetary Policy Rates in  
OIS Curves<sup>1/</sup>



1/ OIS: Overnight Index Swap.

Source: Bloomberg with estimates of Banco de México.

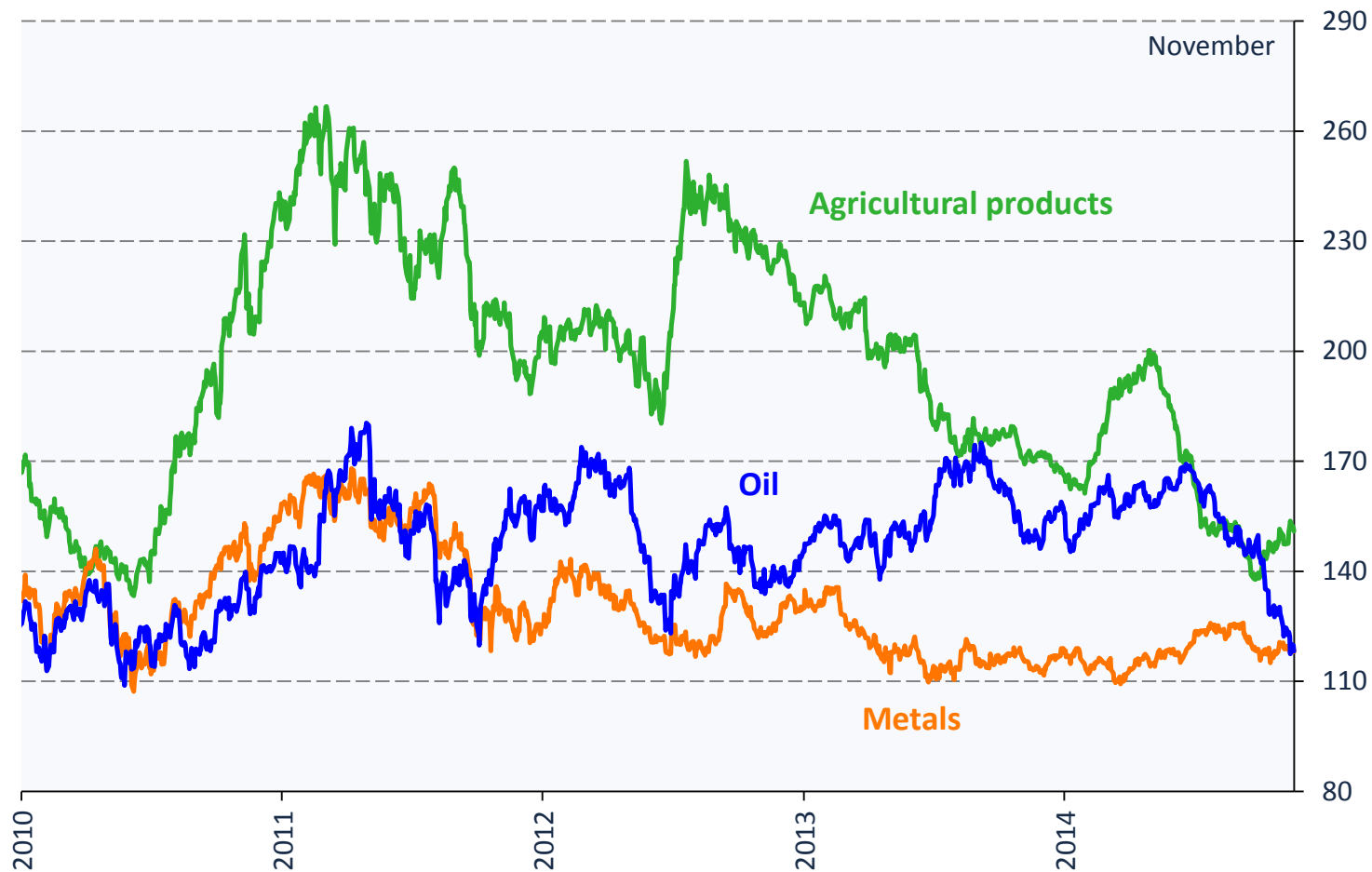
10-Year Interest Rates  
%



Source: Bloomberg.

Commodity prices have dropped, as a reflection of a weak global demand, of supply factors, and the USD appreciation.

### Commodities Prices Index 03-Jan-2006 = 100



Source: Standard & Poor's.

As indicated before, the USD exchange rate against the main currencies appreciated significantly.

## Advanced Economies: Nominal Exchange Rates



1/ 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%.  
Source: Bloomberg.



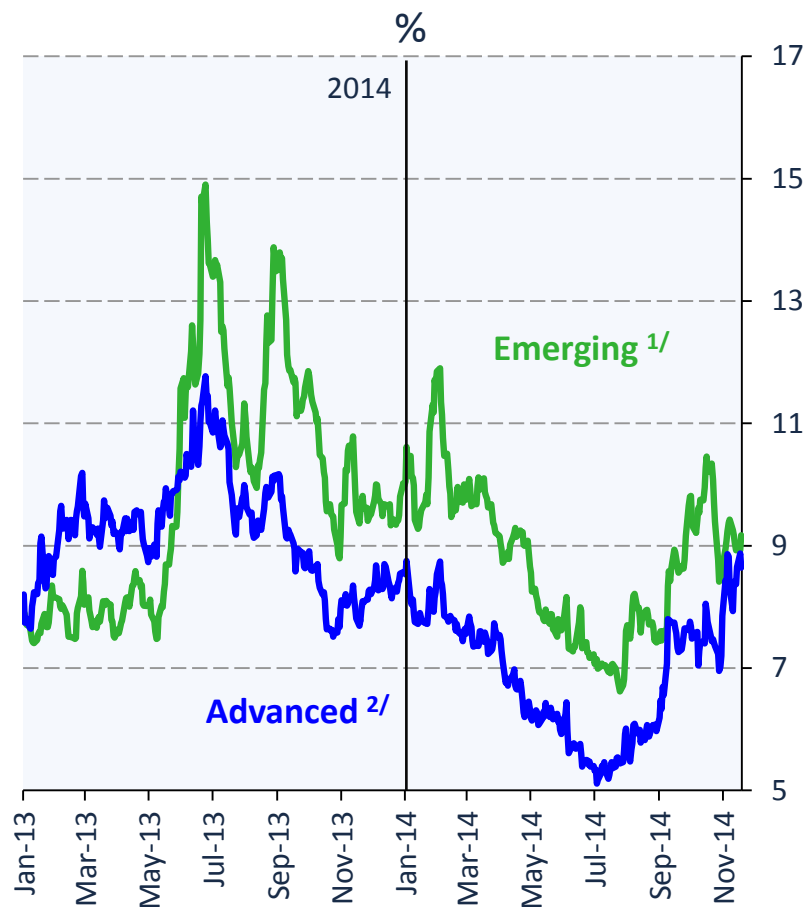
Source: Bloomberg.



Source: Bloomberg.

Concern over the world economic outlook and uncertainty regarding a possible response of the monetary policy in advanced economies generated a strong rebound in volatility in international financial markets and currency depreciations in emerging economies.

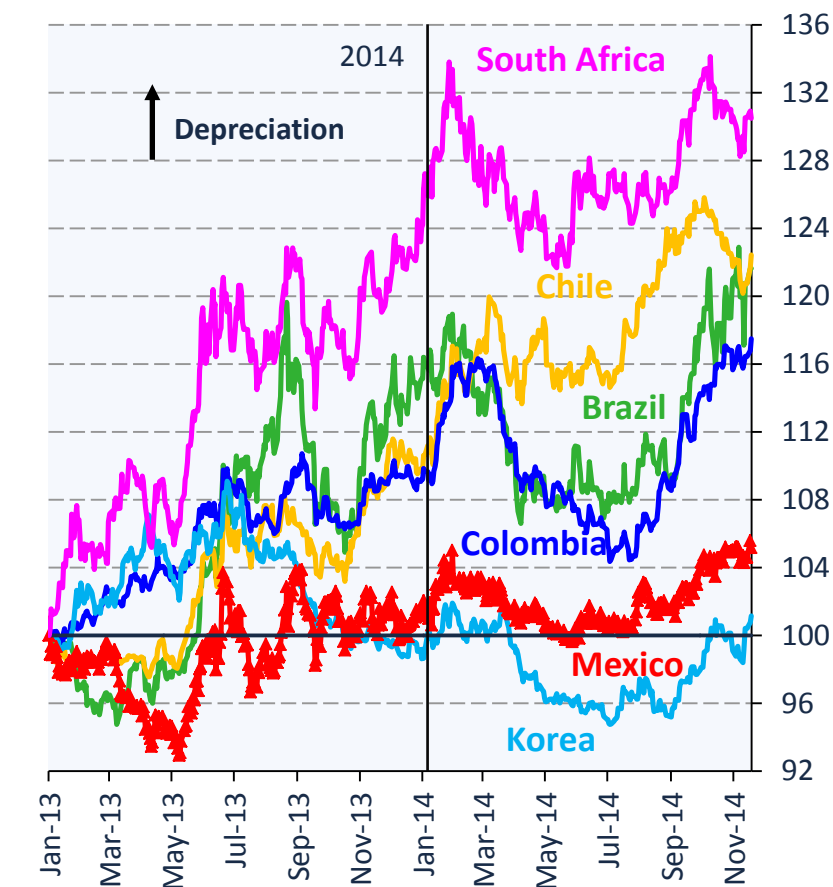
### Implied Volatility in Exchange Rate Options



1/ Simple average of the implied volatility of one month exchange rate put options for: Brazil, Chile, Korea, India, Mexico, Peru, Poland, South Africa and Turkey. 2/ JP Morgan's FX implied volatility index for G7 countries (Canada, France, Germany, Italy, Japan, U.K. and U.S.). Source: Bloomberg.

### Nominal Exchange Rate against USD

Index 01-Jan-2013 = 100



Source: Bloomberg.

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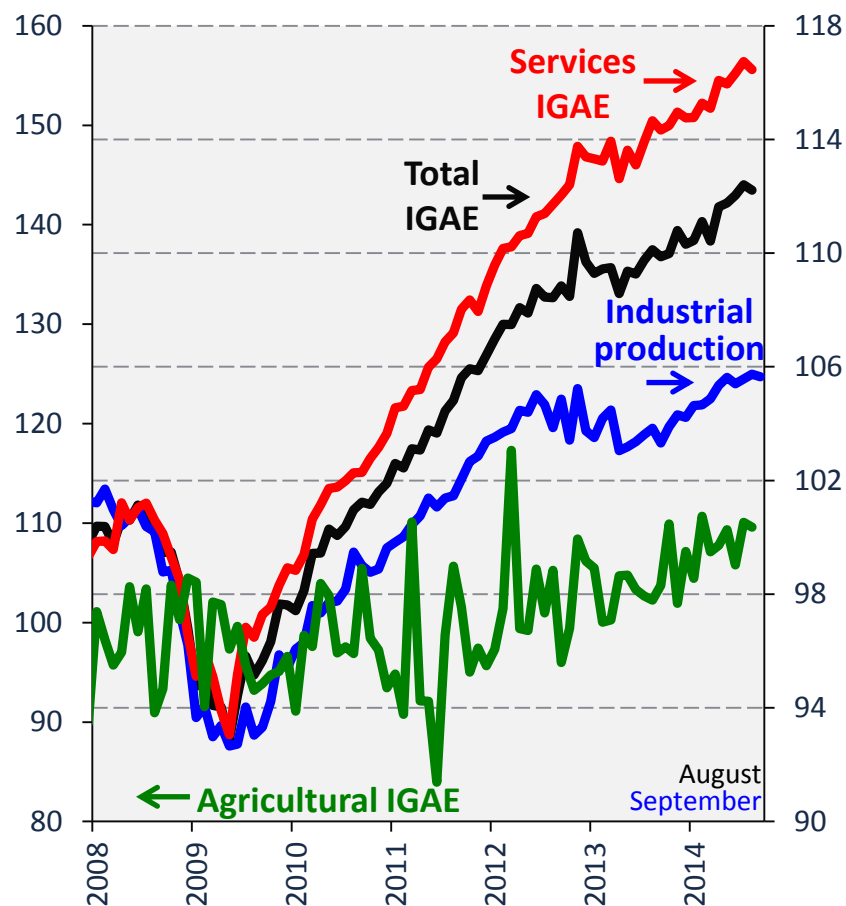
**4** **Inflation Determinants**

**5** **Forecasts and Balance of Risks**

In 3Q 2014, economic activity in Mexico continued recovering, although at a more moderate pace with respect to 2Q 2014.

### Economic Activity Indicators

Index 2008 = 100, s.a.

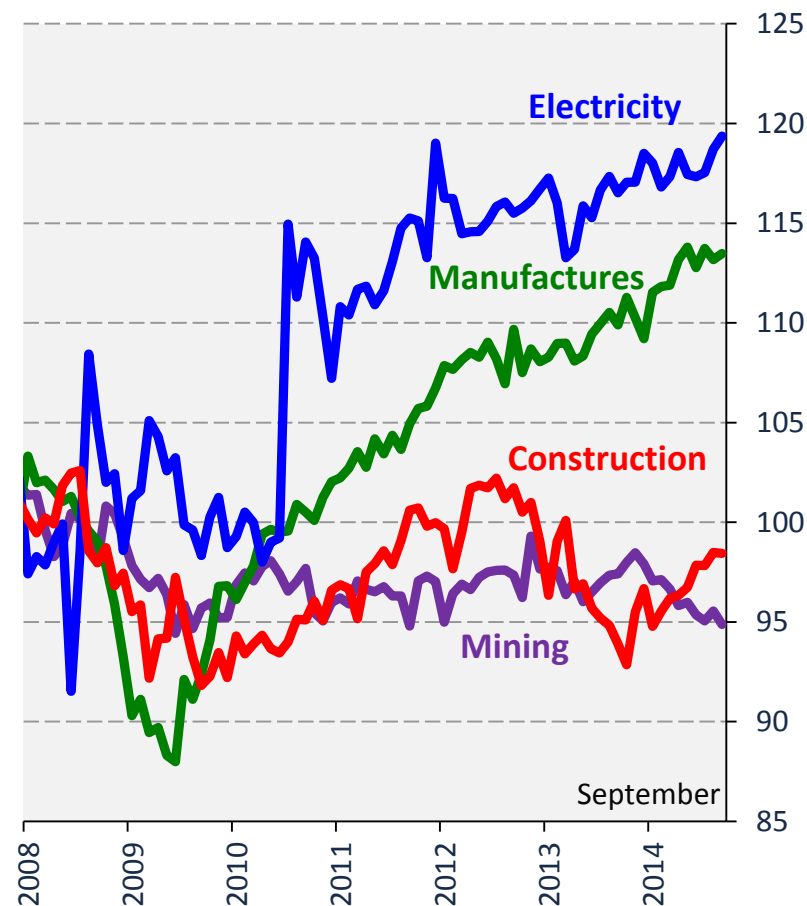


s.a./ Seasonally adjusted data.

Source: Mexico's System of National Accounts (*Sistema de Cuentas Nacionales*), INEGI.

### Industrial Activity

Index 2008 = 100, s.a.



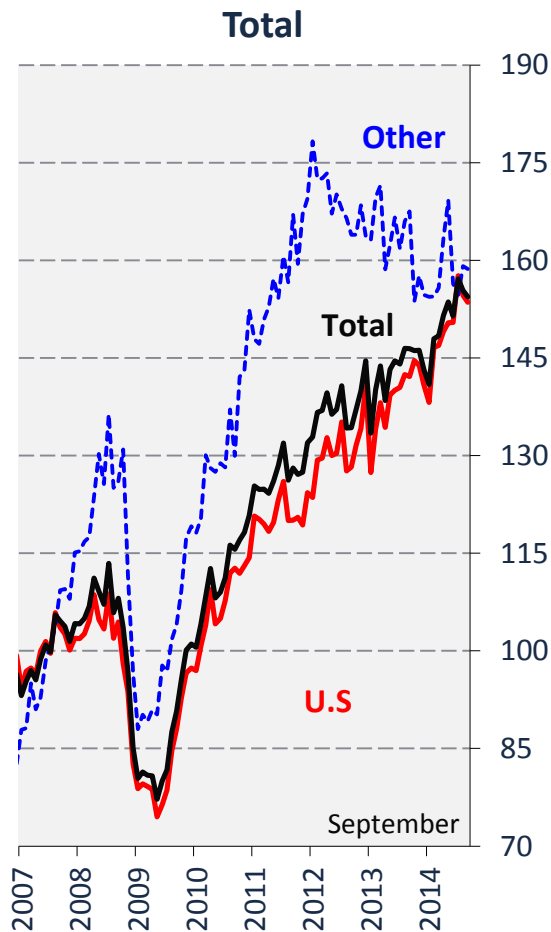
s.a./ Seasonally adjusted data.

Source: Mexico's System of National Accounts (*Sistema de Cuentas Nacionales*), INEGI.

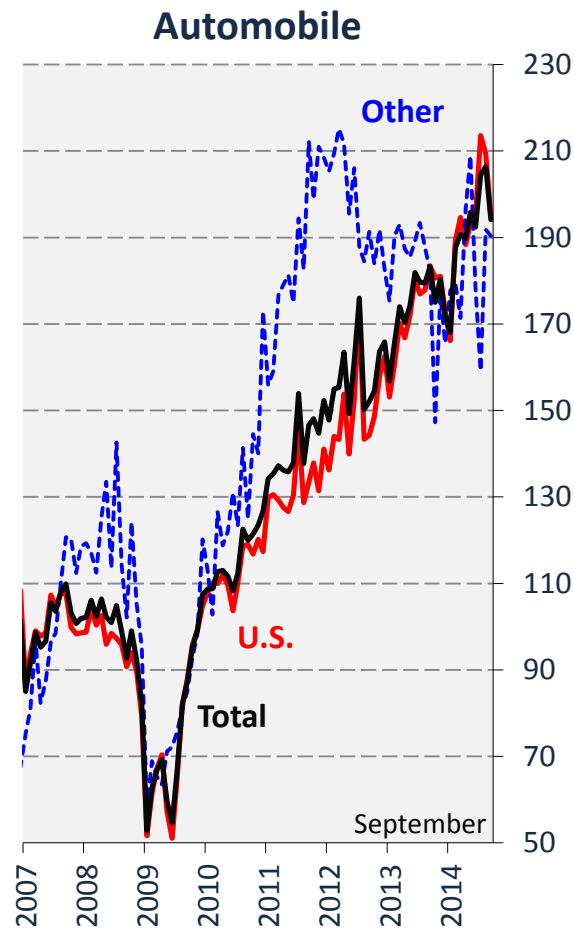


This performance mainly reflects the dynamism of external demand coming from the U.S.

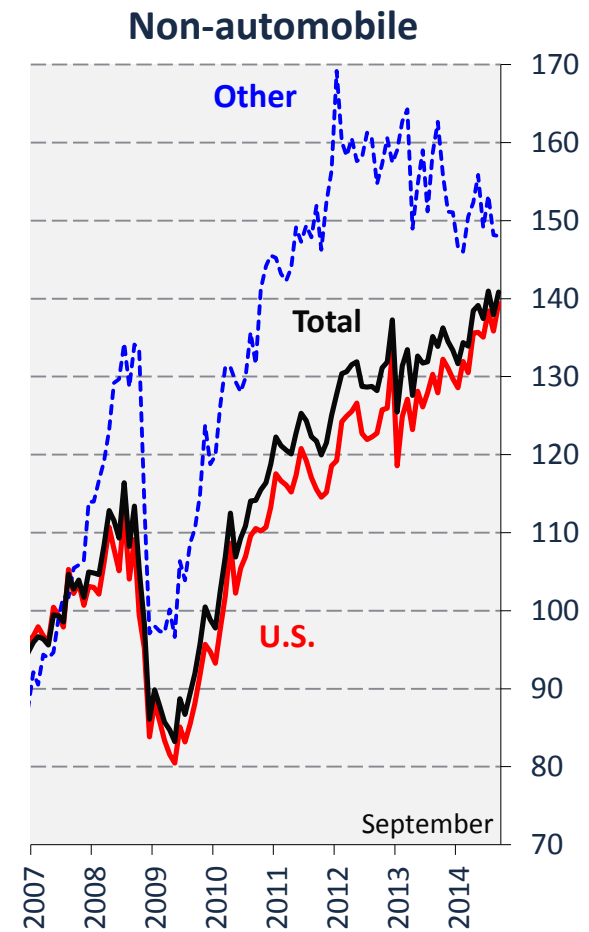
## Manufacturing Exports Index 2007=100, s.a.



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



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



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

## During 3Q 2014, domestic demand observed a weak improvement.

**Monthly Indicator of Private Consumption in the Domestic Market**

Index 2008=100, s.a.



s.a./ Seasonally adjusted data.  
Source: INEGI.

**Workers' Remittances**  
USD billion, s.a.



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

**Consumer Confidence**  
Index Jan-2003=100, s.a.

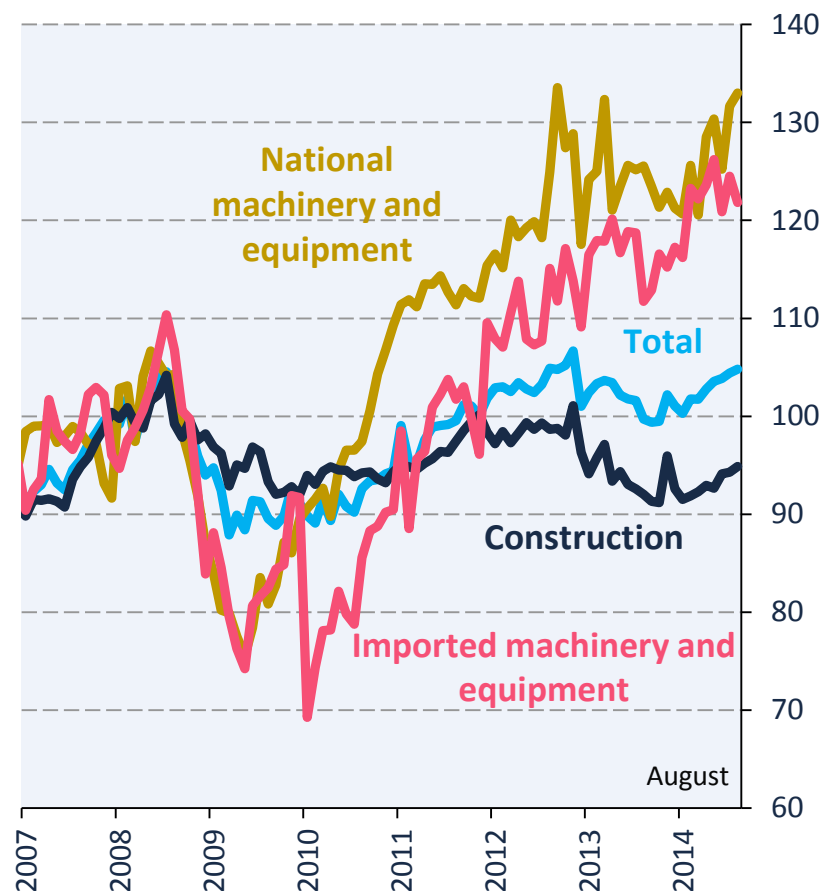


s.a./ Seasonally adjusted data.  
Source: Banco de México and INEGI.

**Gross fixed investment continued increasing mostly as a result of the dynamism of investment in national machinery and equipment.**

### Investment and its Components

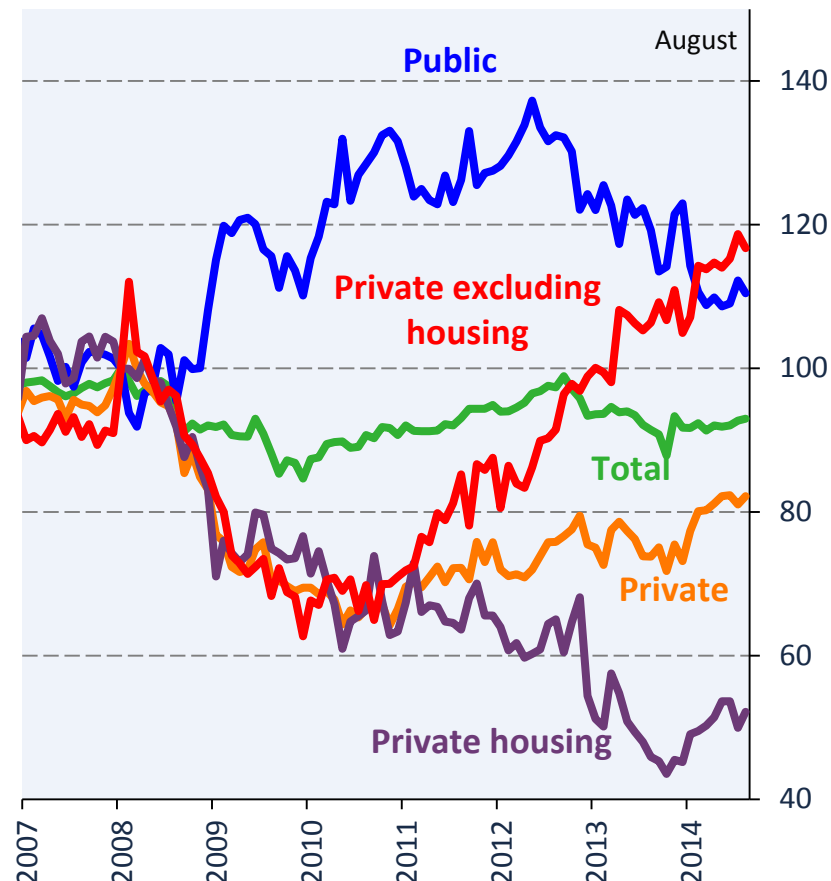
Index 2008=100, s.a.



s.a./ Seasonally adjusted data.  
Source: INEGI.

### Real Value of Production in Construction

Index Jan-2008=100, s.a.

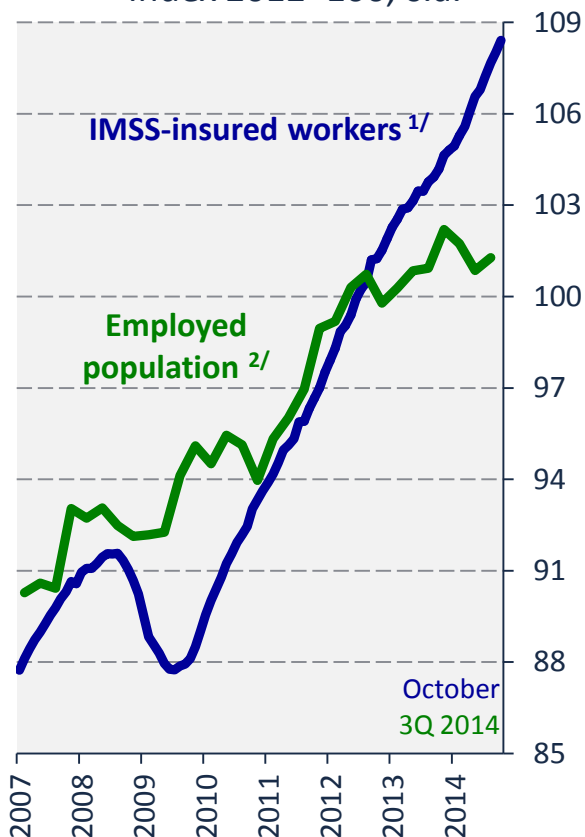


s.a./ Seasonally adjusted data.  
Source: INEGI and seasonally adjusted by Banco de México in the case of public and private construction (private housing and private excluding housing).

Despite the gradual reactivation of economic activity, slack conditions persisted in the labor market, although they seem to be decreasing.

### IMSS-insured Workers and Employed Population

Index 2012=100, s.a.



s.a./ Seasonally adjusted.

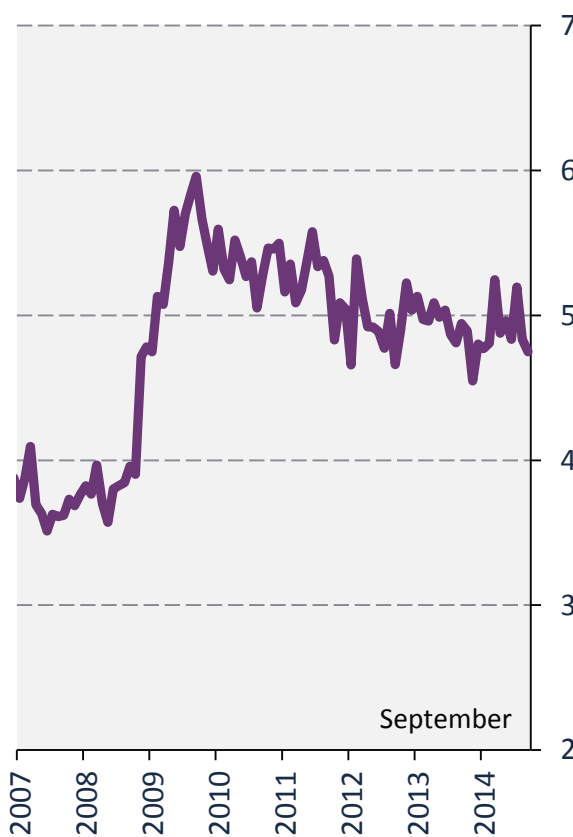
1/ Permanent and temporary workers in urban areas. Seasonally adjusted by Banco de México.

2/ Calculated by Banco de México with data from INEGI.

Source: IMSS and INEGI (SCNM and ENOE).

### National Unemployment Rate

% of EAP, s.a.



EAP/ Economically Active Population.

s.a./ Seasonally adjusted.

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

### Labor Informality Rate

% of employed population, s.a.

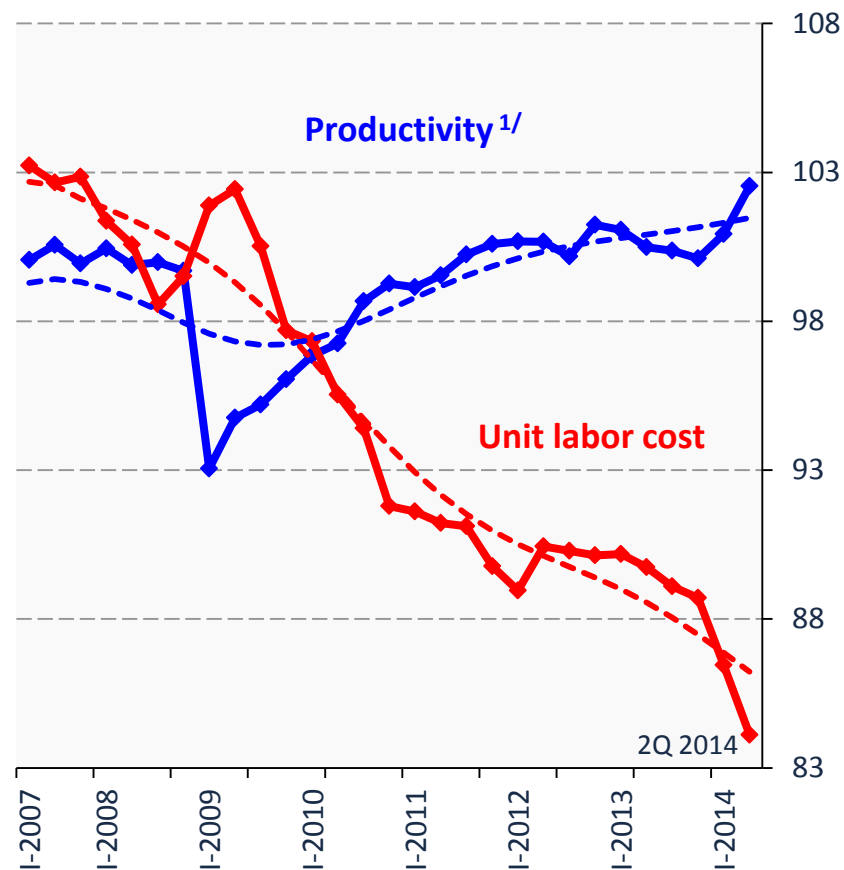


s.a./ Seasonally adjusted.

Source: Seasonally adjusted by Banco de México with data from the National Employment Survey (*Encuesta Nacional de Ocupación y Empleo*), INEGI.

Notwithstanding, unit labor costs in the economy as a whole keep declining.

**Productivity and Unit Labor Cost  
in the Economy**  
Index 2008=100, s.a.

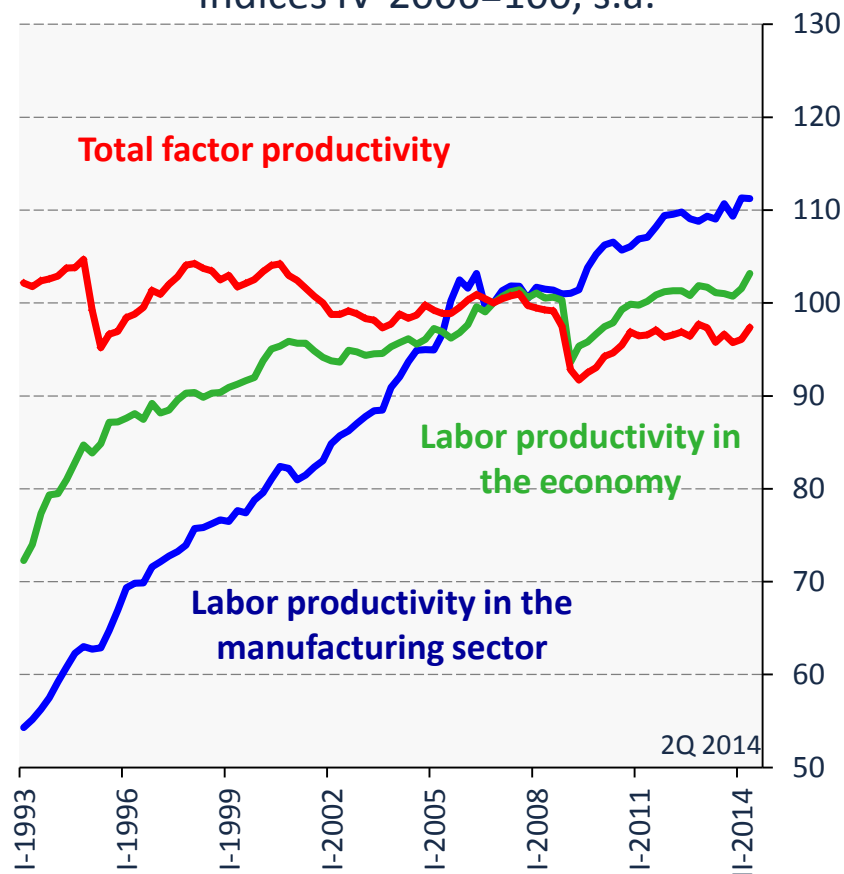


s.a./ Seasonally adjusted and trend data.

1/ Productivity based on the amount of hours worked.

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

**Total Factor Productivity and  
Labor Productivity in the Economy and in  
the Manufacturing Sector<sup>2/</sup>**  
Indices IV-2006=100, s.a.



s.a./ Seasonally adjusted and trend data.

2/ The total factor productivity was estimated as the Solow residual of a regression in logs of GDP versus labor and capital stock. Labor productivity is based on the amount of hours worked. Source: Prepared by Banco de México with data from IGPLE, EMIM and industrial activity data from Mexico's System of National Accounts (*Sistema de Cuentas Nacionales*), INEGI.

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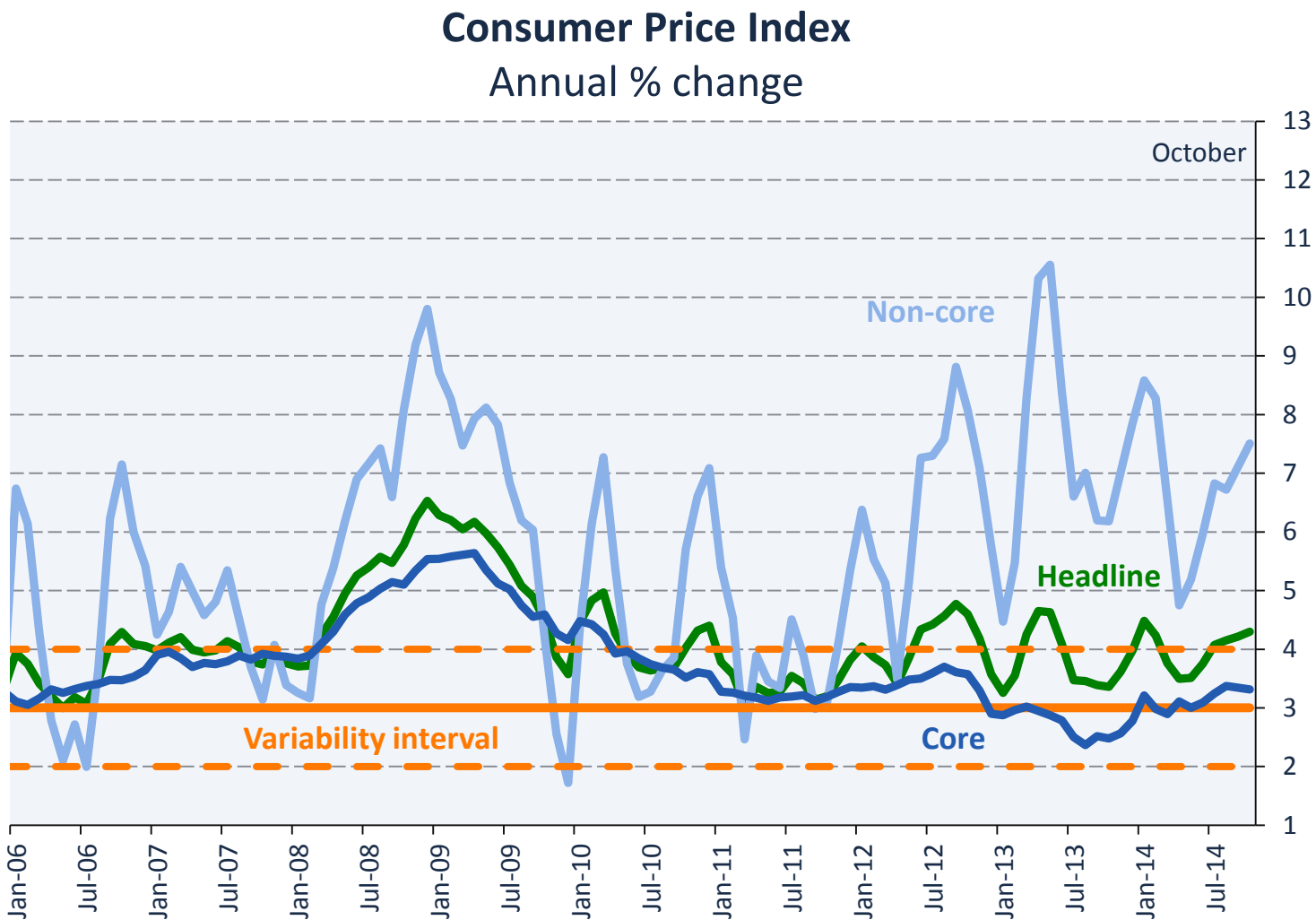
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**Inflation Determinants**

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**Forecasts and Balance of Risks**

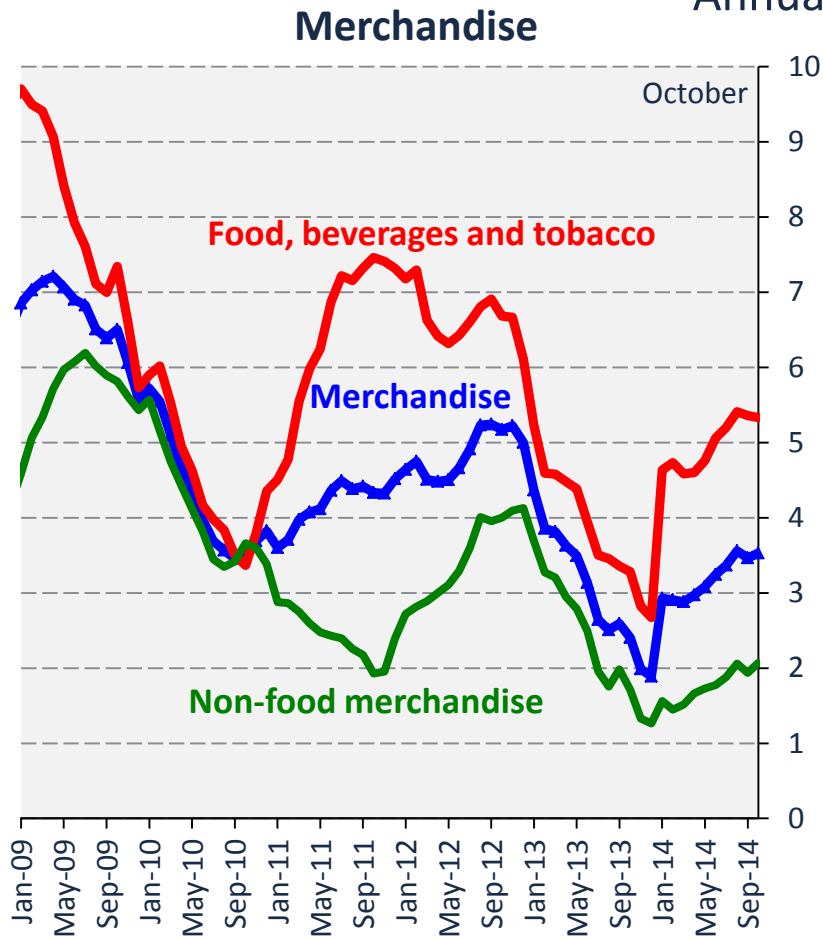
In 3Q 2014, annual headline inflation exceeded 4 percent triggered by transitory shocks.



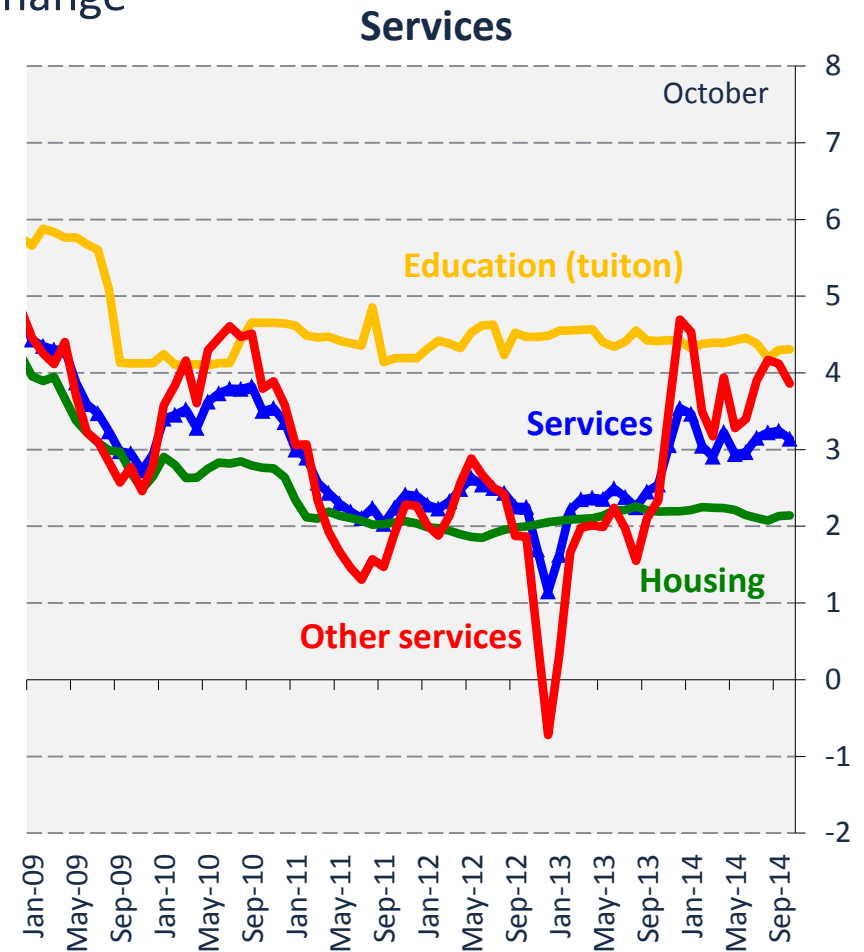
Source: Banco de México and INEGI.

Core inflation increased, mostly due to the performance of the food merchandise group, given that some goods derived from livestock products increased their prices.

**Core Price Index**  
Annual % change



Source: Banco de México and INEGI.



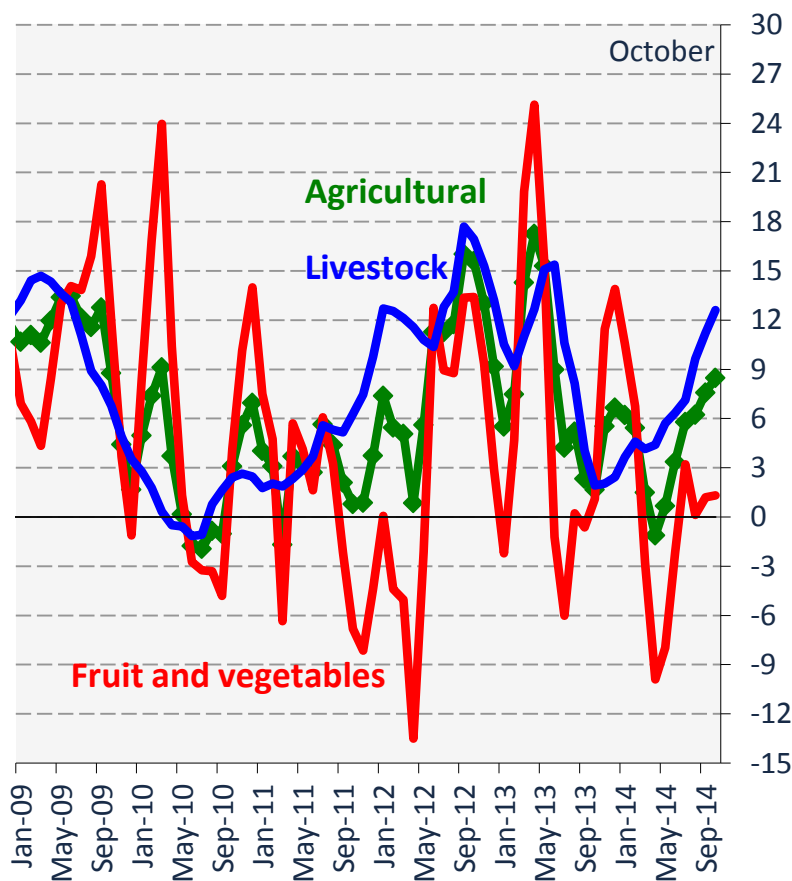
Source: Banco de México and INEGI.



The fading of the high comparison base effect in the subindex of fruits and vegetables, together with higher prices of some meat products generated an increment in non-core inflation in 3Q 2014.

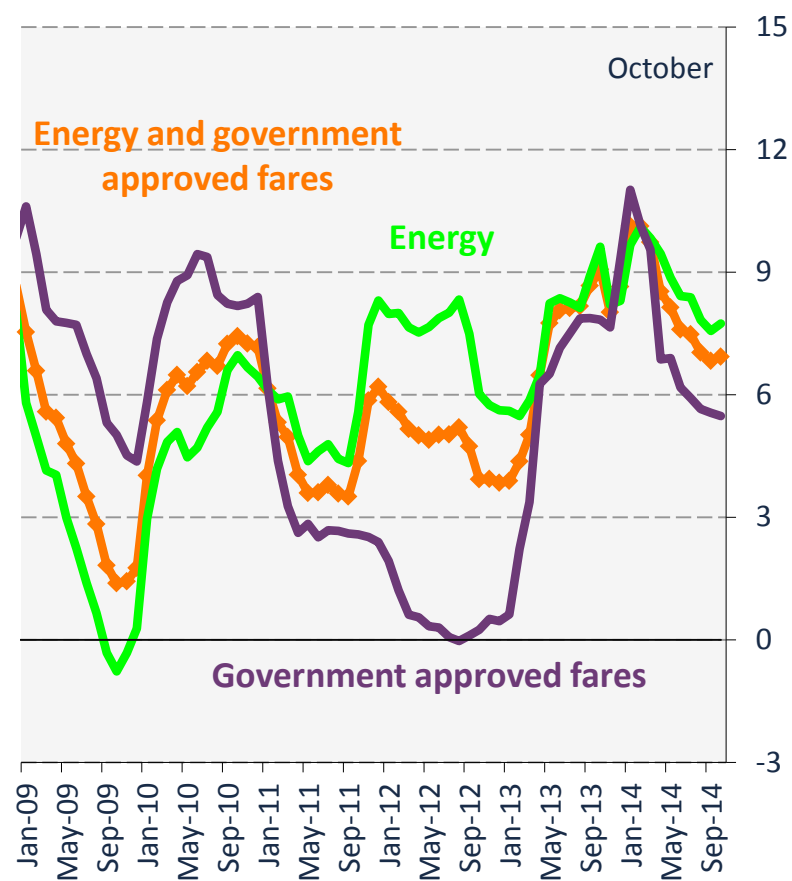
## Non-core Price Index Annual % change

### Agricultural



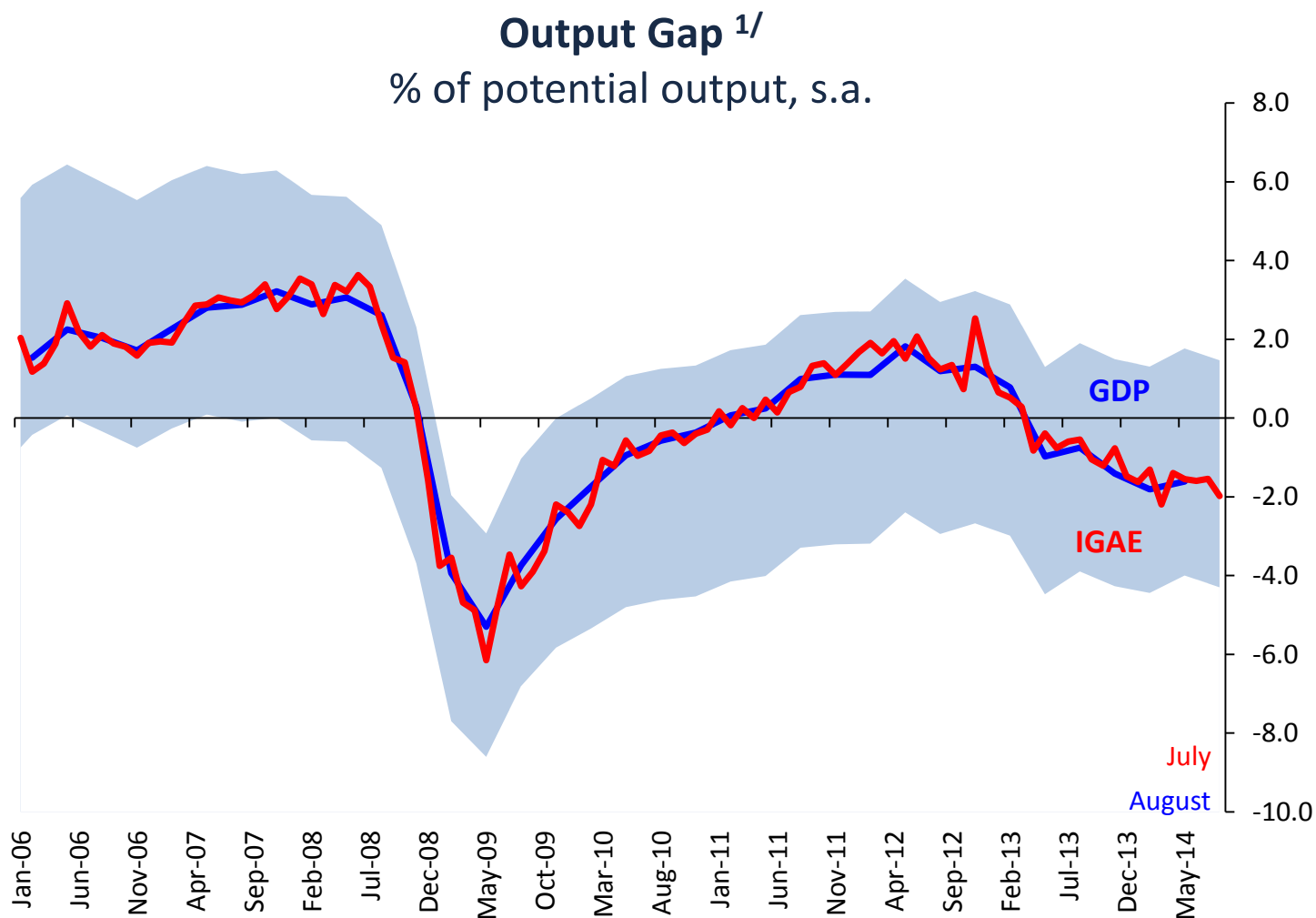
Source: Banco de México and INEGI.

### Energy and Government Approved Fares



Source: Banco de México and INEGI.

As a result of the evolution of economic activity the output gap, that persists at negative levels, is estimated to continue closing over the next quarters.



s.a./ Calculated with seasonally adjusted data.

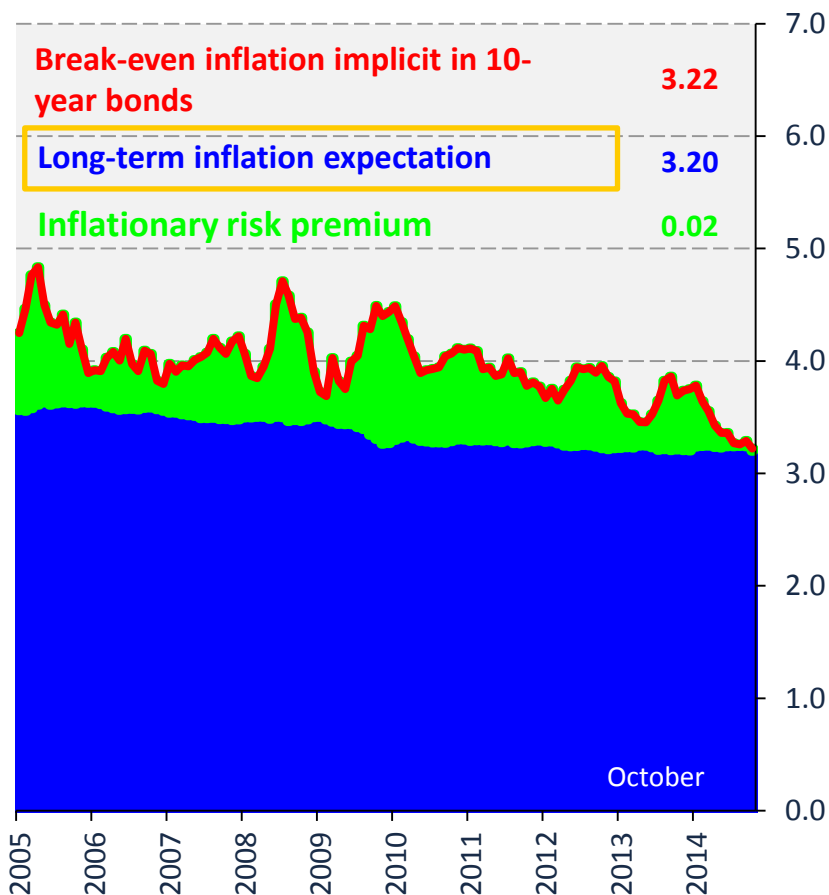
1/ Estimated using the Hodrick-Prescott (HP) filter with tail correction method; see Banco de México (2009), "Inflation Report April-June 2009", p.69.

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.

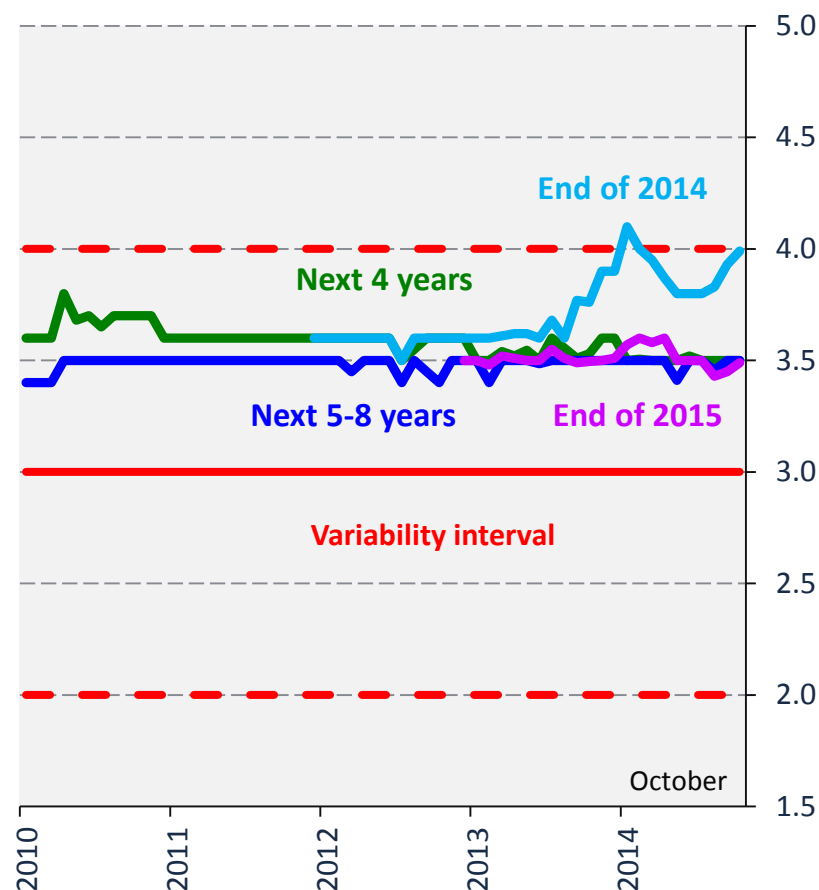
# Long-term inflation expectations implicit in market instruments remain around 3 percent, while those based on surveys are stable.

## Break-even Inflation Decomposition<sup>1/</sup> %



1/ The inflation risk premium is calculated with an affine model as described in Aguilar, Elizondo and Roldán (2014) with data from Valmer and Bloomberg.

## Annual Headline Inflation Expectations Median, %



Source: Banco de México's Survey.

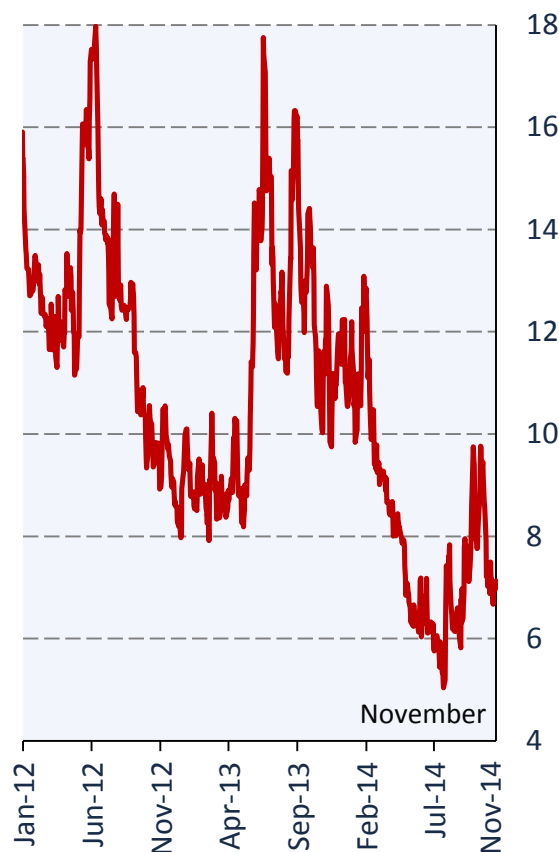
# The exchange rate has adjusted in an orderly manner, despite higher volatility in financial markets.

**Exchange Rate and its Expectations for the End of 2014 and 2015 <sup>1/</sup>**



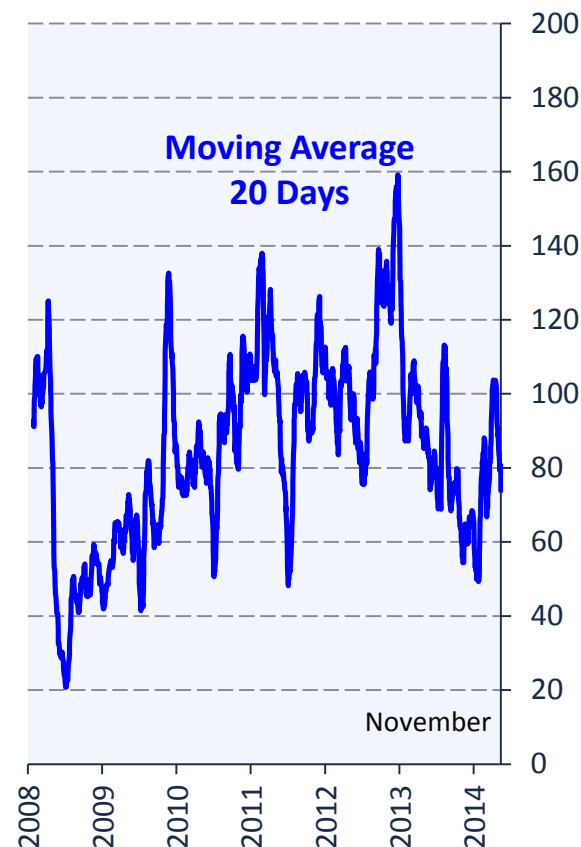
1/ The observed exchange rate is the daily FIX exchange rate. The latest data for the observed exchange rate is November 18, 2014, and the foreign exchange rate forecasts is October 2014.  
Source: Banco de México and Banamex survey.

**Implied Volatility in Foreign Exchange Rate Options <sup>2/</sup>**



2/ It refers to implied volatility in 1-month options.  
Source: Bloomberg.

**Traded Volume in the Foreign Exchange Market**  
Index 02-Jul-2008=100



Source: Banco de México and Reuters.

# Interest rates and their spreads between Mexico and the U.S. increased marginally for practically all terms.

## Interest Rates of Government Securities <sup>1/</sup> %



<sup>1/</sup> Since January 21, 2008, the overnight interest rate corresponds to the target for the Overnight Interbank Interest Rate.

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

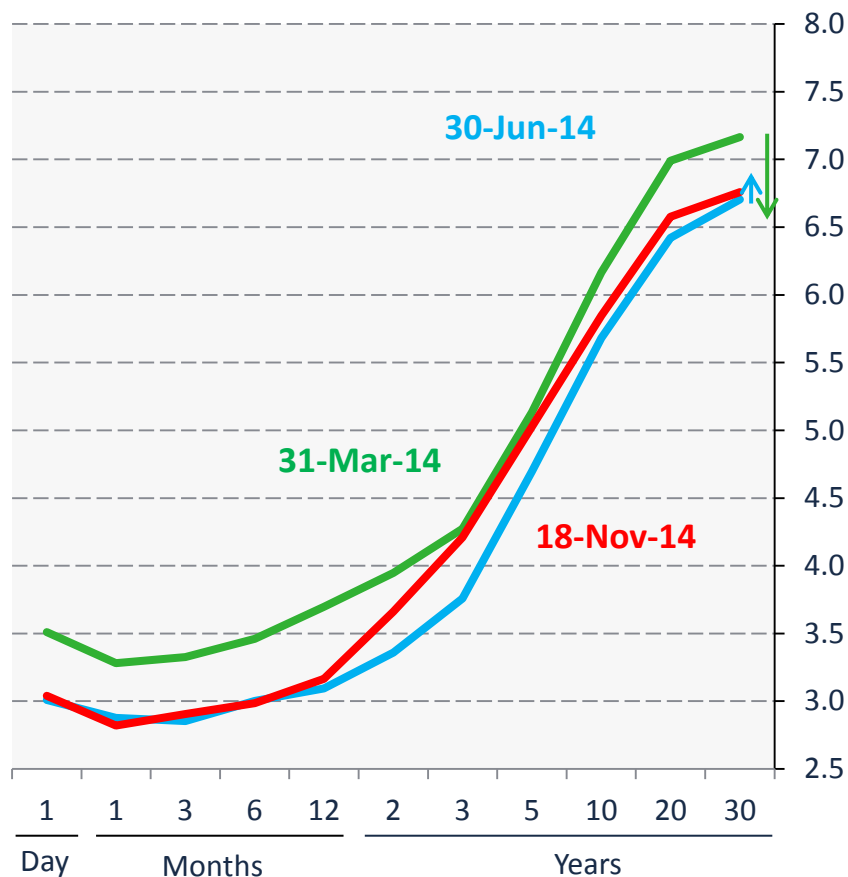
## Spread between Mexico and U.S. Interest Rates Percentage points



Source: Banco de México, Proveedor Integral de Precios (PiP) and U.S. Department of the Treasury.

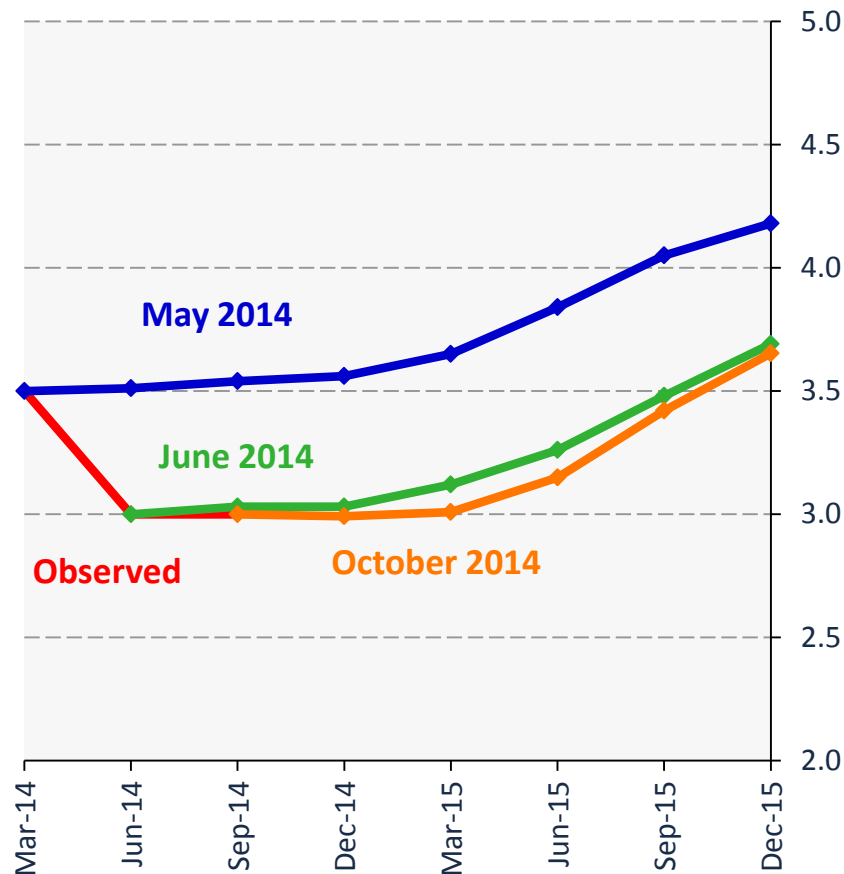
The above has been reflected in a slight steepening of the yield curve, particularly derived from higher medium- and long-term rates.

**Government Bond Yield Curve**  
%



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

**Expectations for the Overnight Interbank Interest Rate**  
%



Source: Banco de México' survey.

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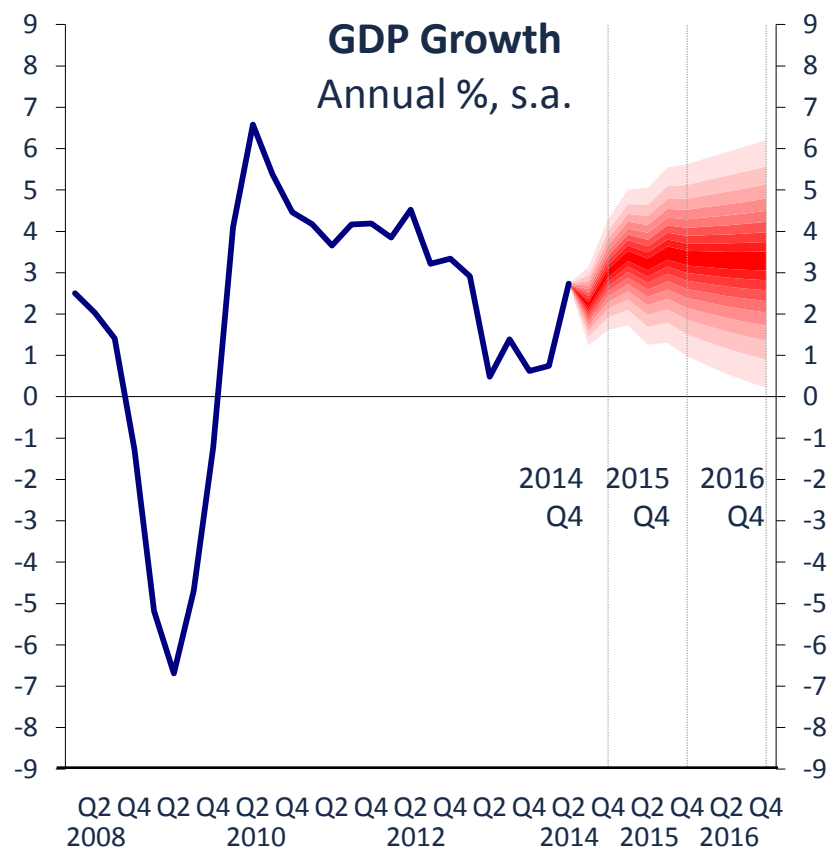
**Forecasts and Balance of Risks**

# Economic Activity Outlook

GDP Growth	
2014	Between 2.0 and 2.5%
2015	Between 3.0 and 4.0%
2016	Between 3.2 and 4.2%

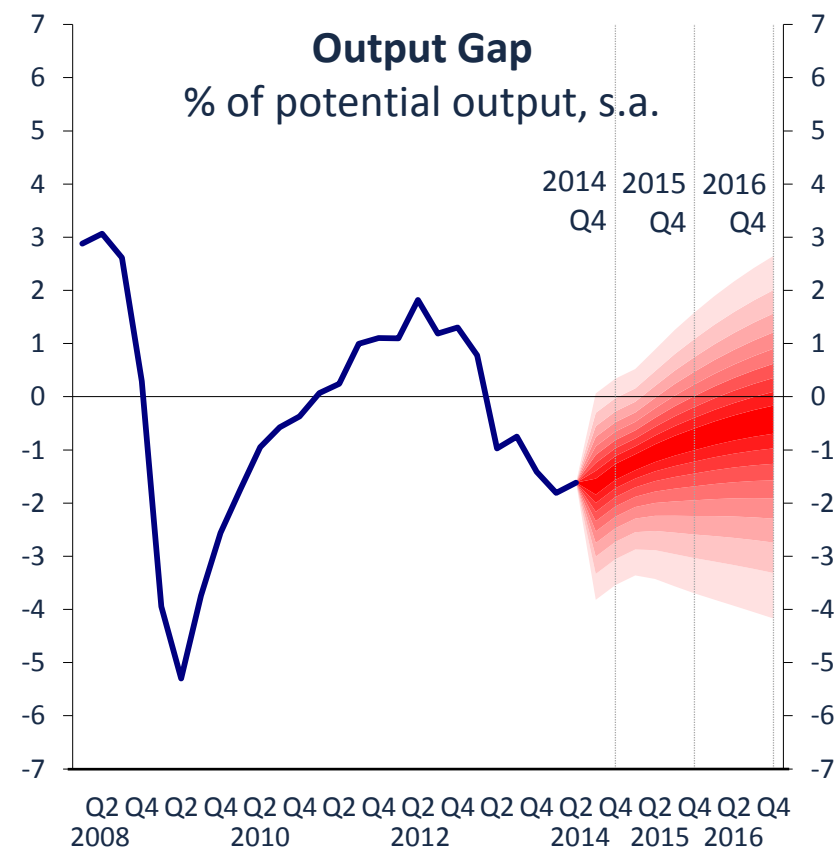
Increase in the number of IMSS-insured workers	
2014	Between 640 and 710 thousand
2015	Between 620 and 720 thousand
2016	Between 640 and 740 thousand

## Fan Charts



s.a./ Seasonally adjusted data.

Source: INEGI and Banco de México.



s.a./ Seasonally adjusted data.

Source: INEGI and Banco de México.



## Risks to the Growth Outlook:

### Upward:



A more vigorous than anticipated economic recovery in the U.S.



A rapid implementation of the first stages of structural reforms, in particular the energy reform, could propitiate a greater than anticipated investment.

### Downward:



Lower than foreseen expansion of the world economy, particularly in the U.S.



Risk that oil production platform does not stabilize and continues falling.



Increased uncertainty in international financial markets.



Uncertainty generated by recent social events that could affect economic activity.

# Inflation Outlook

## Headline Inflation

## Core Inflation

2014

Recent transitory impact by shocks in relative prices. Annual headline inflation is expected to decline in November and December and to conclude the year **around 4 percent**.

It is anticipated to remain **close to 3 percent** for the rest of 2014.

2015

In early 2015, annual headline inflation is expected to reduce considerably and to **remain around 3 percent** from the middle of the year onwards.

It is expected to lie **below 3 percent** in 2015.

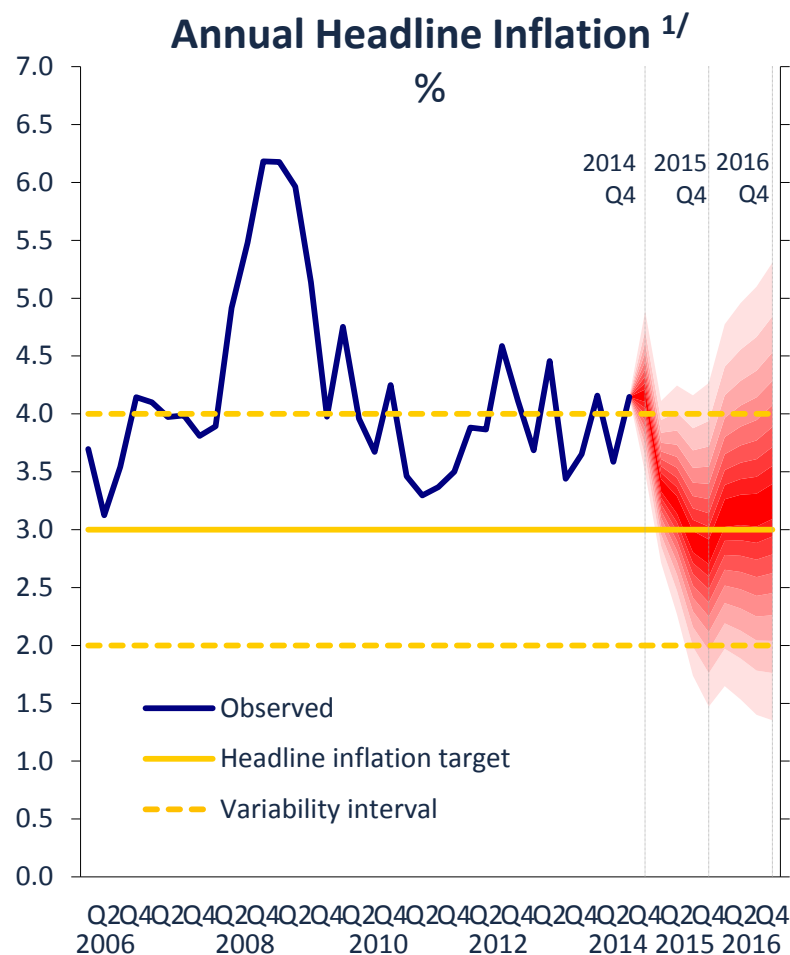
2016

It is anticipated to locate **at levels close to 3 percent**.

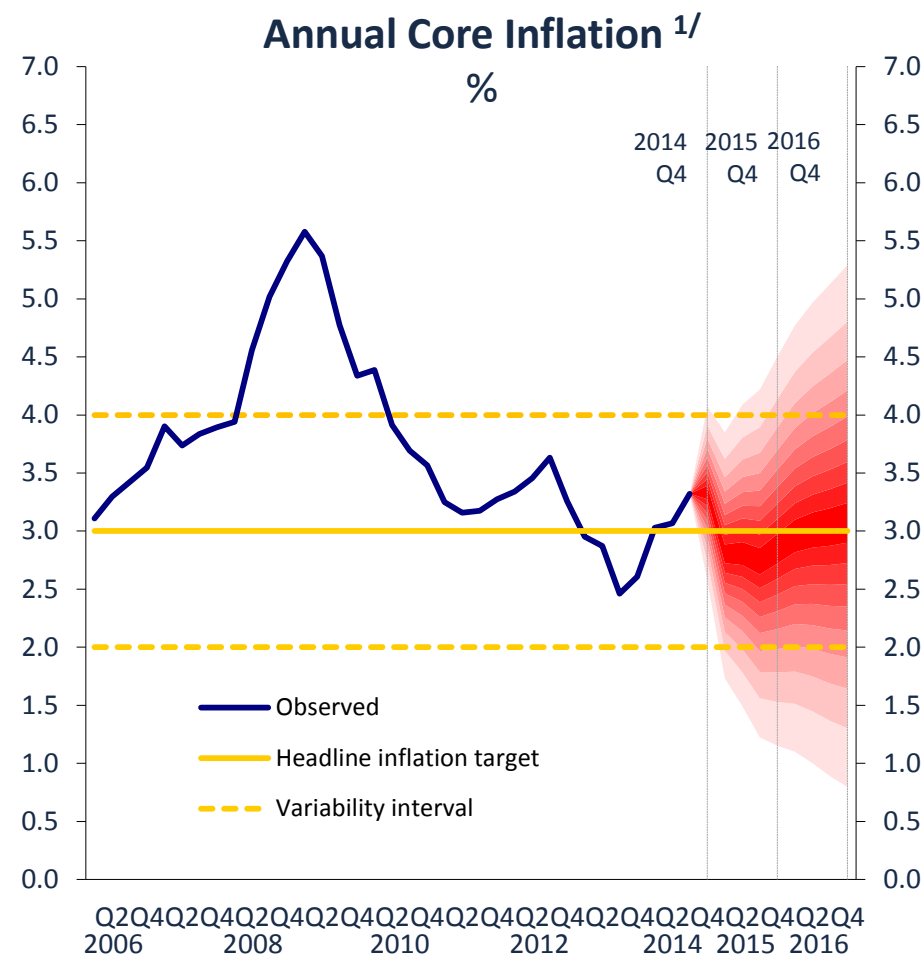
It is estimated to be **close to 3 percent**.

The monetary policy stance, as well as the fading of the effect derived from the fiscal changes in 2014, the elimination of the long-distance national phone charges and a lower increment in gasoline prices will contribute to the fact that inflation will lie at levels around 3 percent from mid-2015 onwards.

## Fan Charts



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



2/ Quarterly average of annual core inflation.  
Source: INEGI and Banco de México.

## Inflation trajectory could be affected by certain risks:

### Downward

✓ A lower than anticipated recovery of economic activity.

✓ Greater decreases in the prices of telecommunication services.

### Upward

✓ Episodes of higher volatility in international financial markets.

✓ Increments in minimum wages that are higher than the expected inflation and the increase in productivity.

# Monetary Policy Stance

- The Board of Governors maintained the target for the Overnight Interbank Interest Rate at 3.0 percent, by virtue of the fact that it estimated the monetary policy stance to be congruent with the efficient convergence of inflation to its 3 percent target.
- In the future, the Board will monitor the performance of all determinants of inflation, as well as its expectations for the medium and long terms. In particular, the Board will monitor:
  - ✓ *The evolution of the degree of slack in the economy in light of the foreseen recovery, including the possible effects of the implementation of structural reforms on aggregate supply and demand of the Mexican economy.*
  - ✓ *The monetary policy stance of Mexico relative to that of the U.S.*

➤ **All of the above to reach the referred inflation target.**

**It is encouraging that the legislative stage of the recent process of structural reforms has concluded.**

- It is necessary to guarantee their proper implementation.
- However, currently it is particularly important to significantly **improve the institutional framework of Mexico** in order to:
  - ✓ *Improve the efficiency of the economy in general.*
  - ✓ *Enhance the beneficial effects of the structural reforms on the potential growth, employment and welfare of the population.*
- This requires **an institutional transformation that would improve the rule of law, legal certainty and, in general, the strength of the institutions**, which will result in:
  - ✓ *Greater social harmony.*
  - ✓ *A more appropriate use of the benefits derived from structural reforms.*
  - ✓ *Better distribution of the said benefits in the society.*



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