

# Inflation Report

April-June 2012

August, 2012



BANCO DE MÉXICO

# Outline

## 1. External Conditions

## 2. Economic Activity in Mexico

## 3. Monetary Policy and Inflation Determinants

## 4. Forecasts and Balance of Risks



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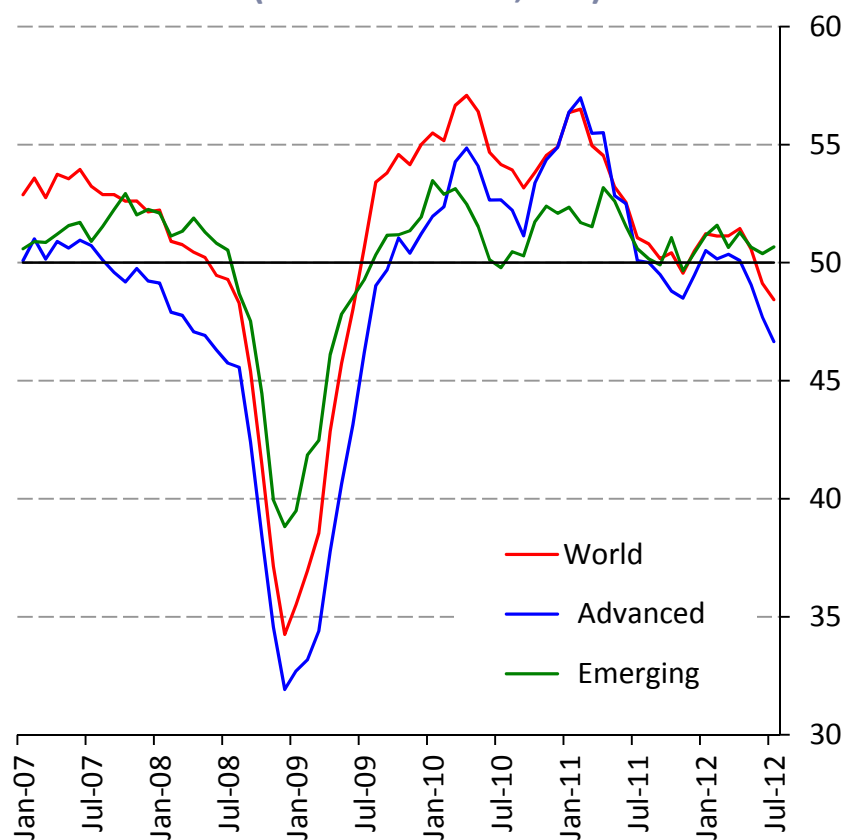
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# External Conditions

- Global economic growth slowed down during the second quarter of the year:
  - ✓ *In the U.S., a more modest than anticipated recovery was observed and job creation has not been able to consolidate.*
  - ✓ *In the Euro zone, the negative feedback loop among the weakening of economic activity, banks' vulnerability and the difficult access of some governments to financial markets has accentuated.*
  - ✓ *The economic performance in some emerging economies has slowed down significantly.*
- In this context, most countries anticipate the following:
  - ✓ *Inflation levels in 2012 and 2013 below those registered in 2011 and very low levels of inflation in advanced economies.*
  - ✓ *Even more accommodative monetary policy stances, resulting in unprecedented levels of lassitude.*

# Prospective indicators point to a lower dynamism of the world economic activity.

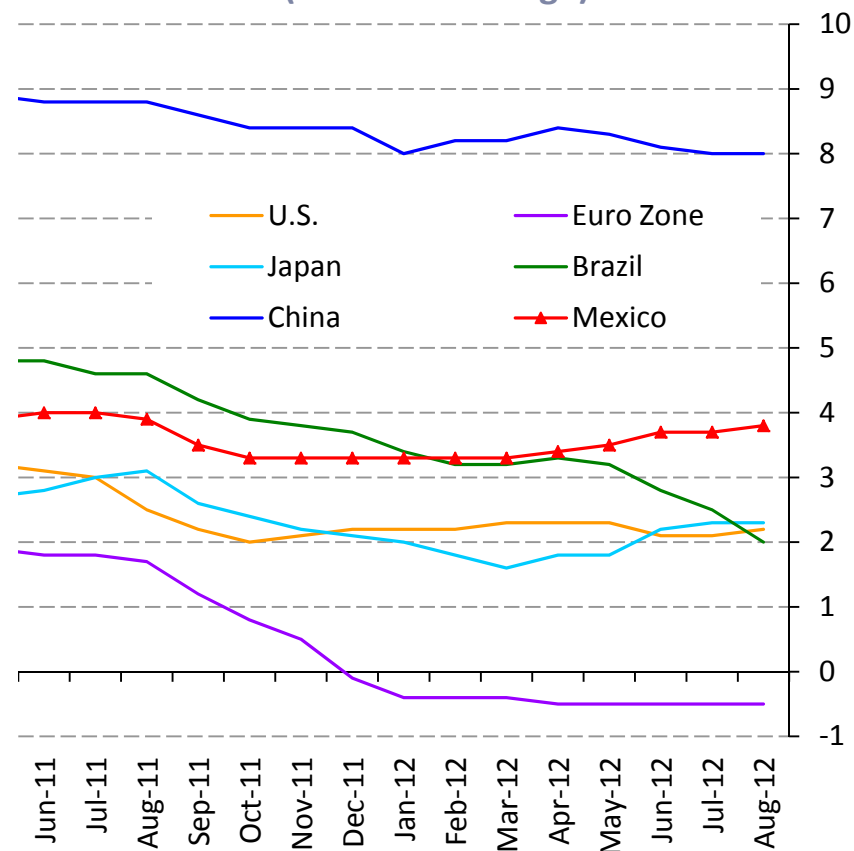
**Manufacturing Purchasing Managers Index (PMI)**  
(Diffusion index; s.a.)



s.a./ Seasonally adjusted.

Source: Prepared by Banco de México with data from International Monetary Fund, Institute for Supply Management, and Markit.

**Selected Economies: GDP Growth Forecasts for 2012**  
(Annual % change)



Source: Blue Chip.



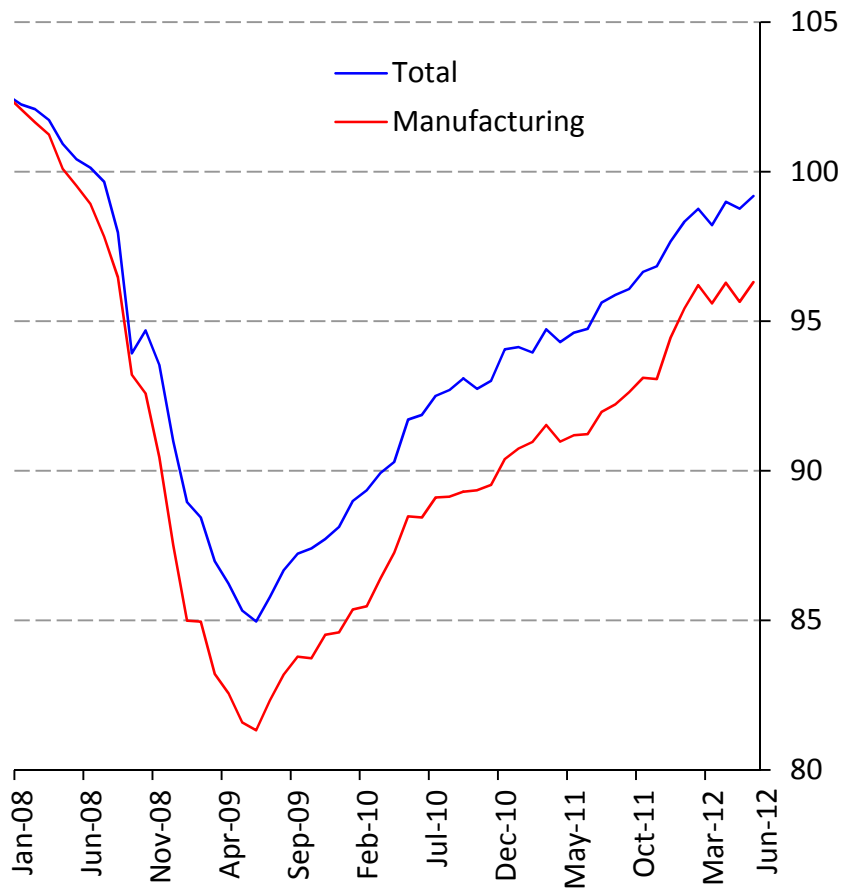
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# In the U.S., industrial production growth has moderated and job creation has not consolidated.

U.S.:

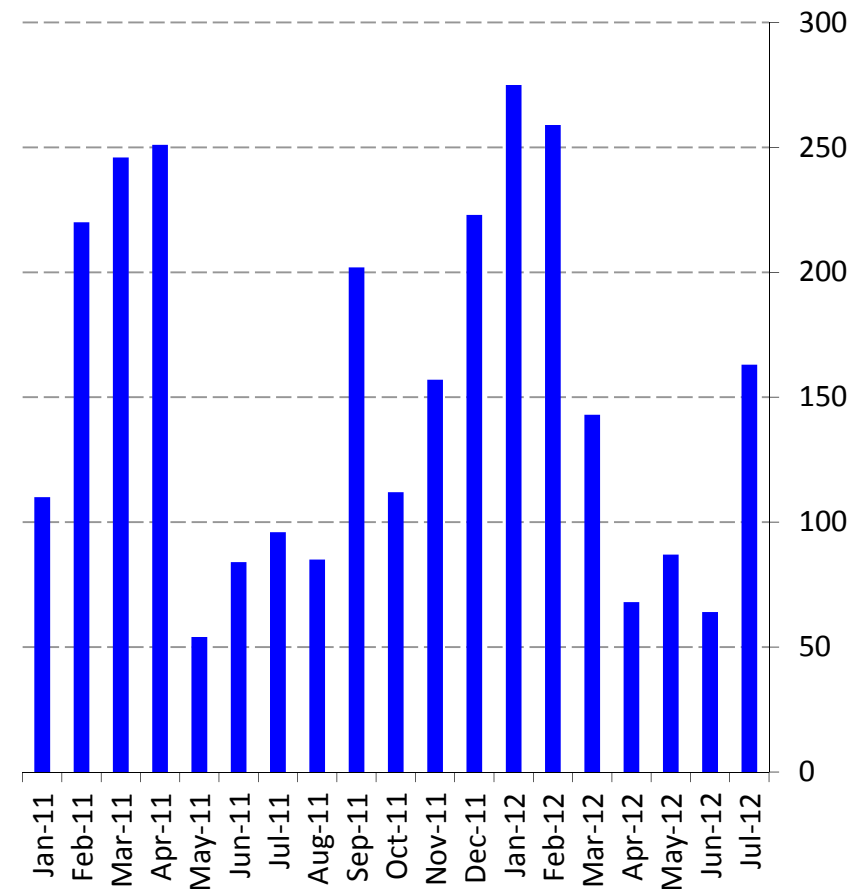
**Industrial and Manufacturing Production**  
(Index Jan-2007=100; s.a.)



s.a./ Seasonally adjusted.  
Source: U.S. Federal Reserve.

U.S.:

**Non-farm Payroll Monthly Change**  
(Thousand jobs; s.a.)



s.a./ Seasonally adjusted.  
Source: Bureau of Labor Statistics.

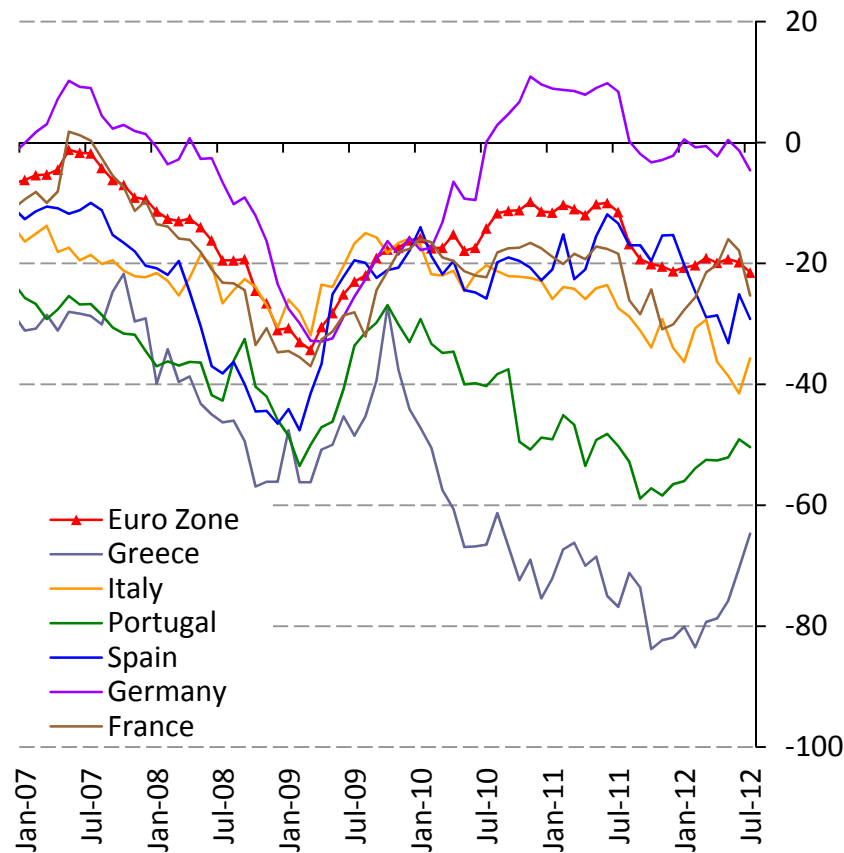


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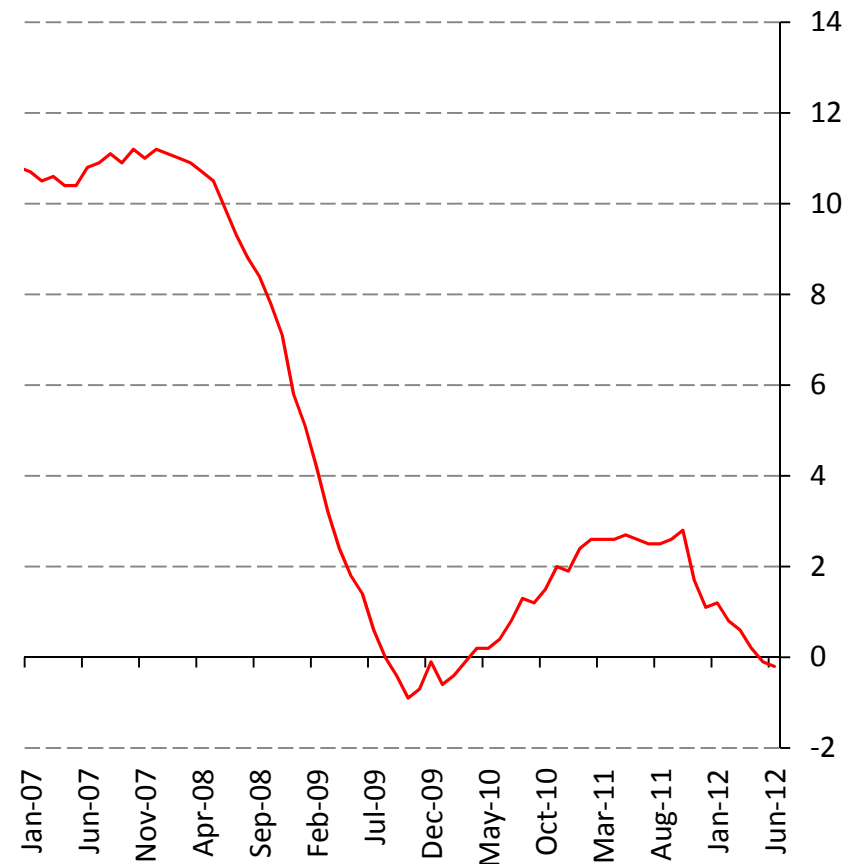
**In the Euro zone, the deleveraging process and absence of a definite solution to fiscal and banking problems have weakened economic activity.**

**Euro Zone:  
Consumer Confidence**  
(Diffusion index; s.a.)



s.a./ Seasonally adjusted.  
Source: European Commission.

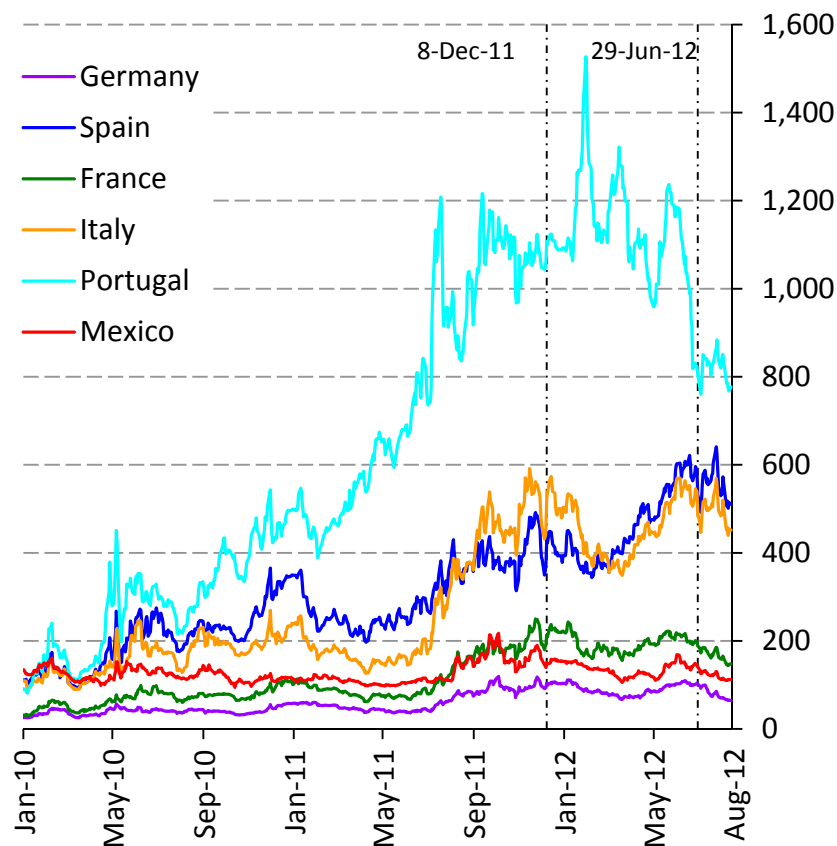
**Euro Zone:  
Credit of Financial Institutions to Private Sector**  
(Annual % change; s.a.)



s.a./ Seasonally adjusted.  
Source: European Central Bank.

# International financial market conditions have deteriorated, registering high volatility given intensified difficulties in the Euro zone.

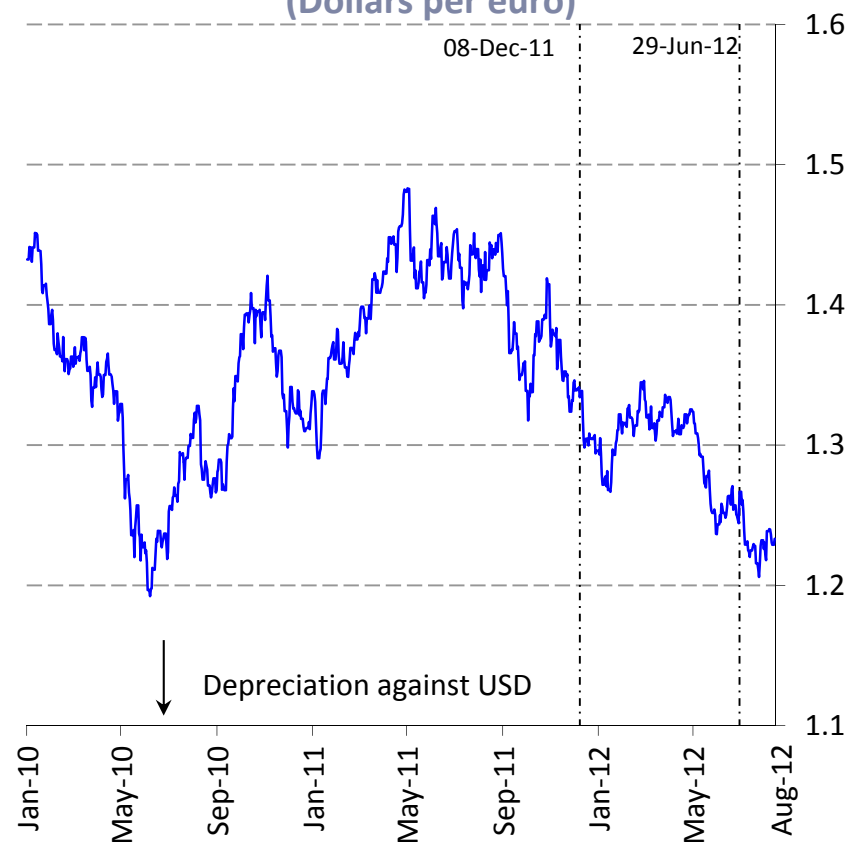
**Credit Default Swaps <sup>1/</sup>**  
(Basis points)



1/ 5-year CDS. On December 8, the ECB announced unconventional measures. On June 29, 2012 reforms to strengthen the institutional framework of the euro area and support mechanisms were announced.

Source: Bloomberg.

**Euro Zone:  
Exchange Rate <sup>2/</sup>**  
(Dollars per euro)



2/ On December 8, the ECB announced unconventional measures. On June 29, 2012 reforms to strengthen the institutional framework of the euro area and support mechanisms were announced.

Source: Bloomberg.



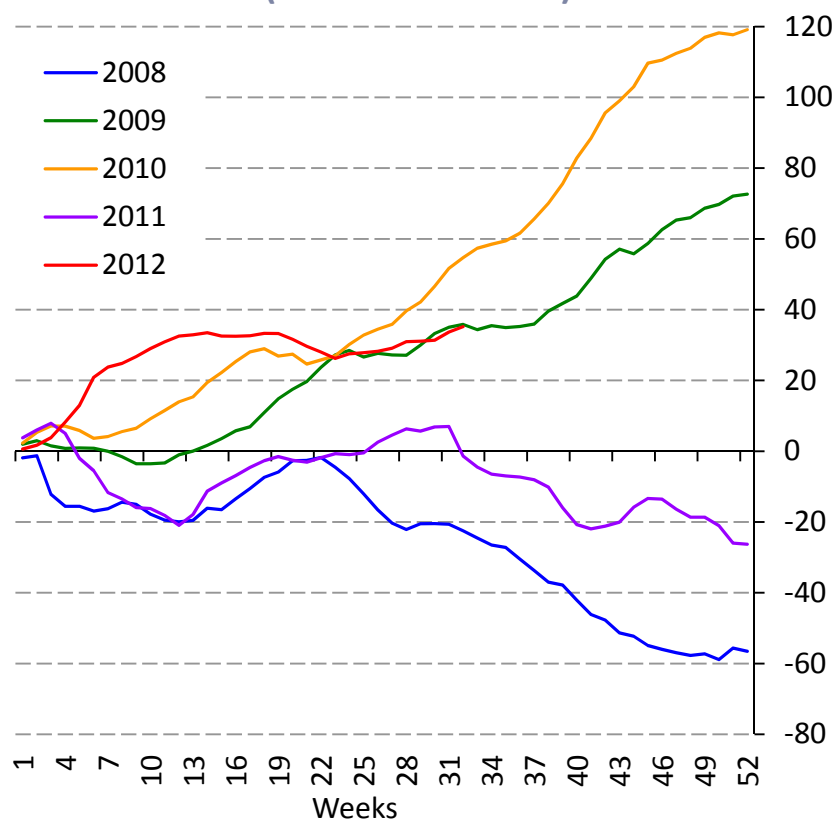
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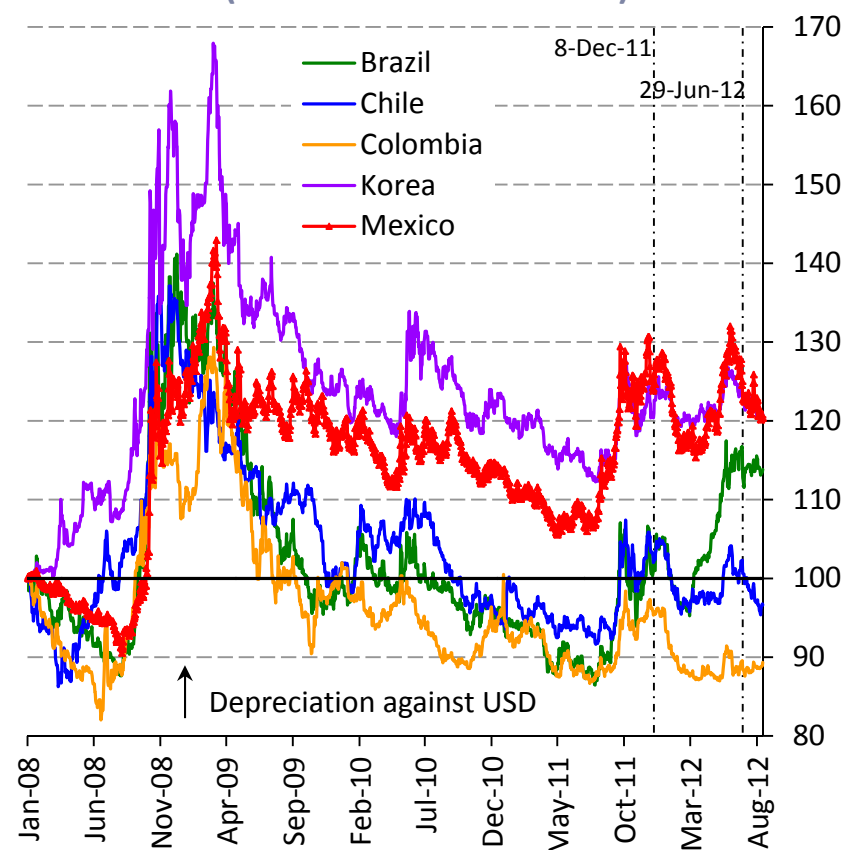
# Emerging economies faced greater volatility in their capital flows and, in general, a depreciation of their currencies during the second quarter.

**Emerging Economies: Accumulated Capital Flows (Debt and Equity)**  
(Billions of dollars)



Source: Emerging Portfolio Fund Research.

**Emerging Economies: Exchange Rate <sup>1/</sup>**  
(Index 01-Jan-2008=100)

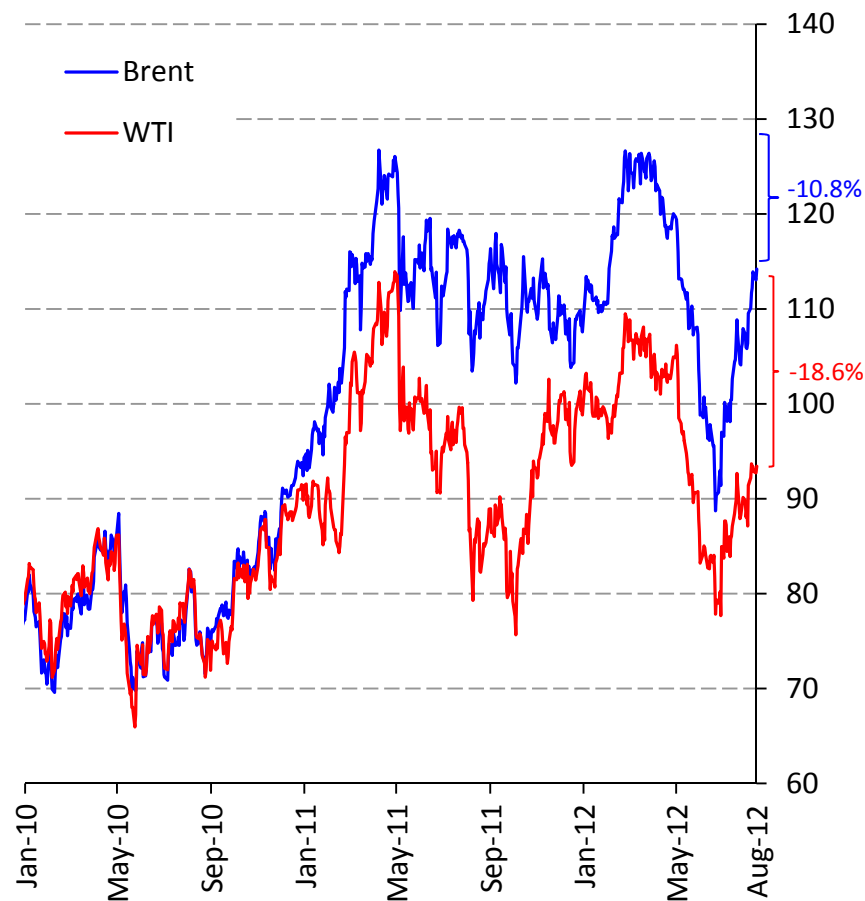


1/ On December 8, the ECB announced unconventional measures. On June 29, 2012 reforms to strengthen the institutional framework of the euro area and support mechanisms were announced. Source: Bloomberg.



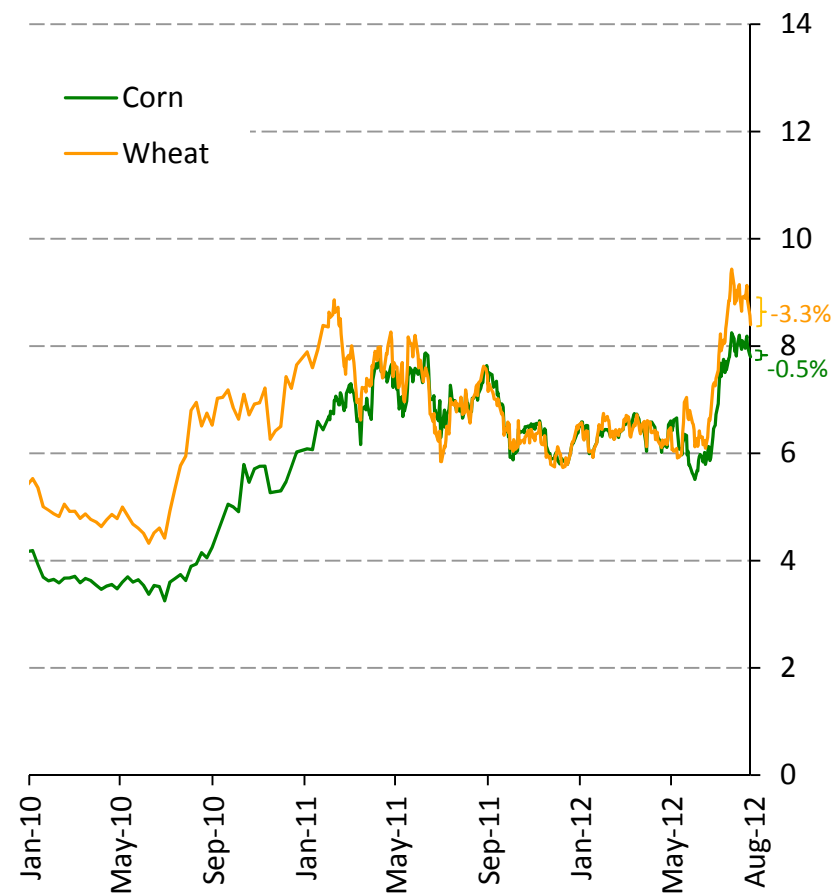
**As a result of the world economic slowdown, main commodity prices, with the exception of grains, decreased significantly.**

**International Price of Crude Oil <sup>1/</sup>**  
(Dollars per barrel)



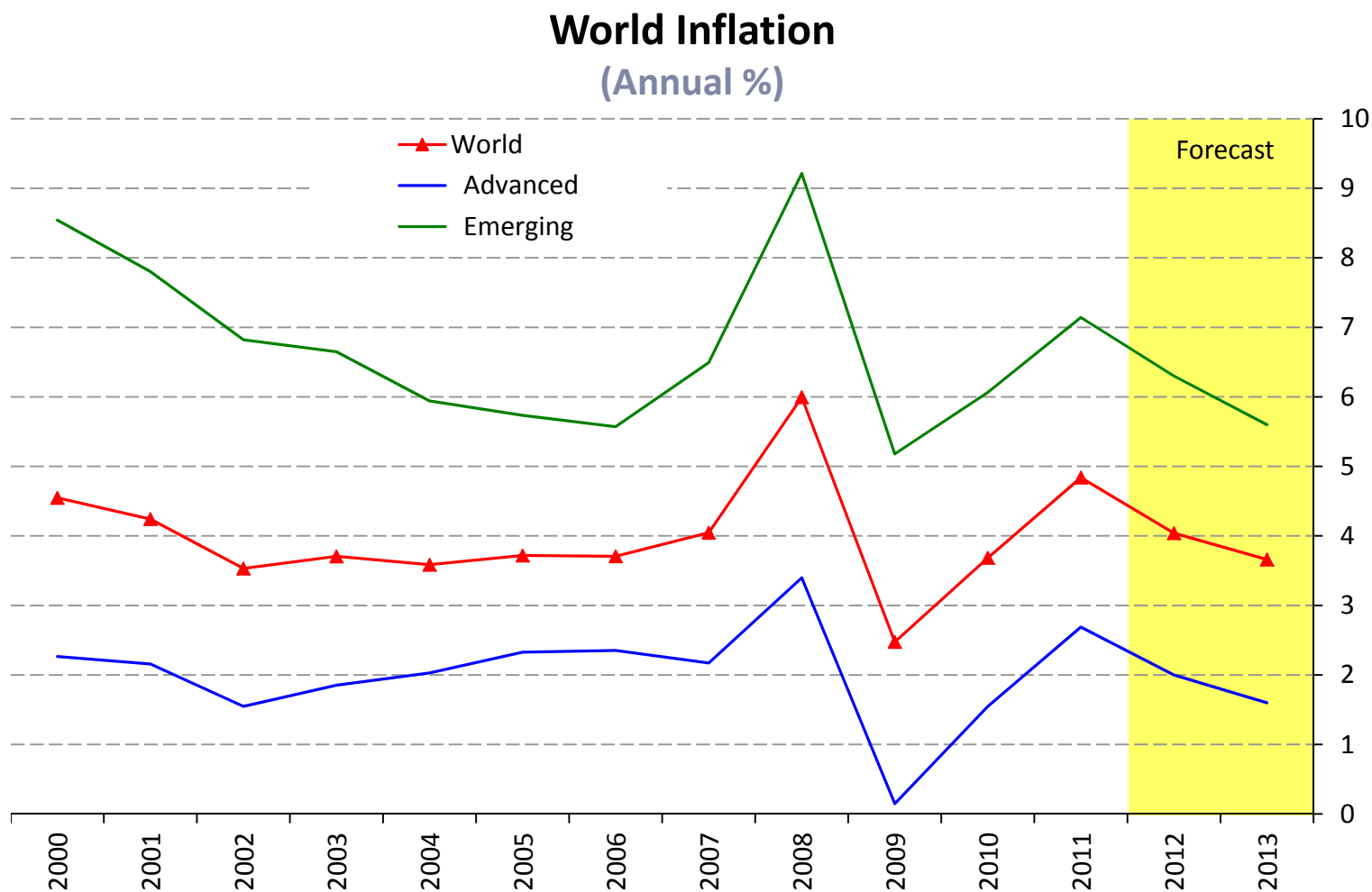
1/ The figure in brackets represents the percent change from the peak reached in 2011. Source: Bloomberg.

**International Price of Grains <sup>2/</sup>**  
(Dollars per bushel)



2/ The figure in brackets represents the percent change from the peak reached in 2011. Source: Bloomberg.

**Most countries anticipate lower inflation levels in 2012 and 2013 as compared to 2011 and very low levels in the case of advanced economies.**



Source: International Monetary Fund.

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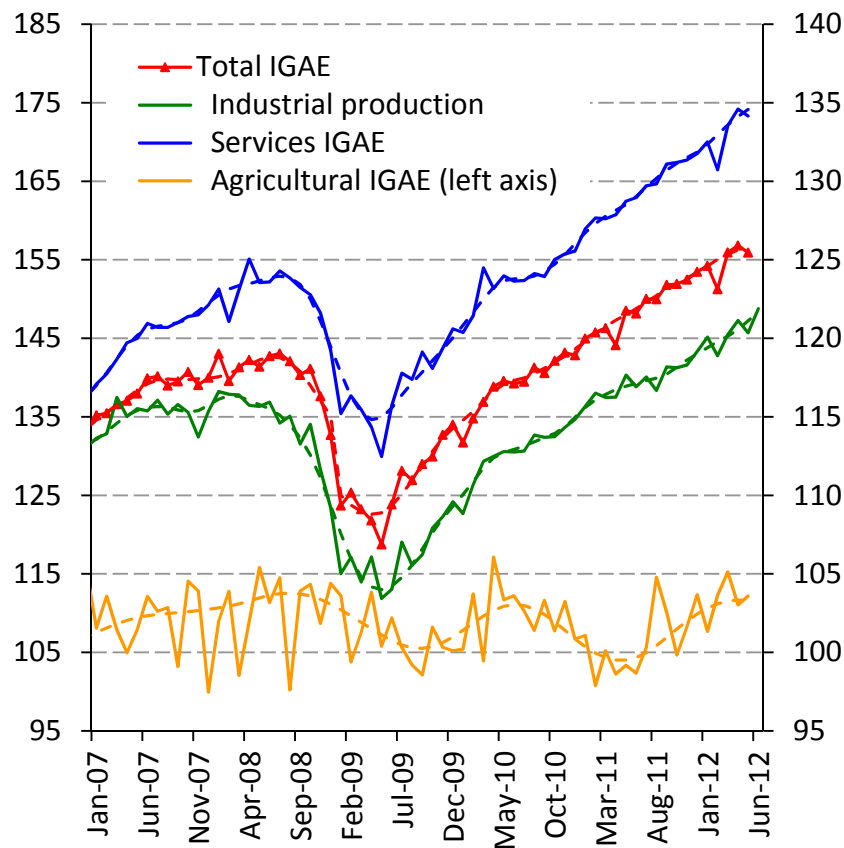


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# Productive activity and external demand presented a favorable evolution.

**Economic Activity Indicators <sup>1/</sup>**  
(Index 2003=100; s.a.)

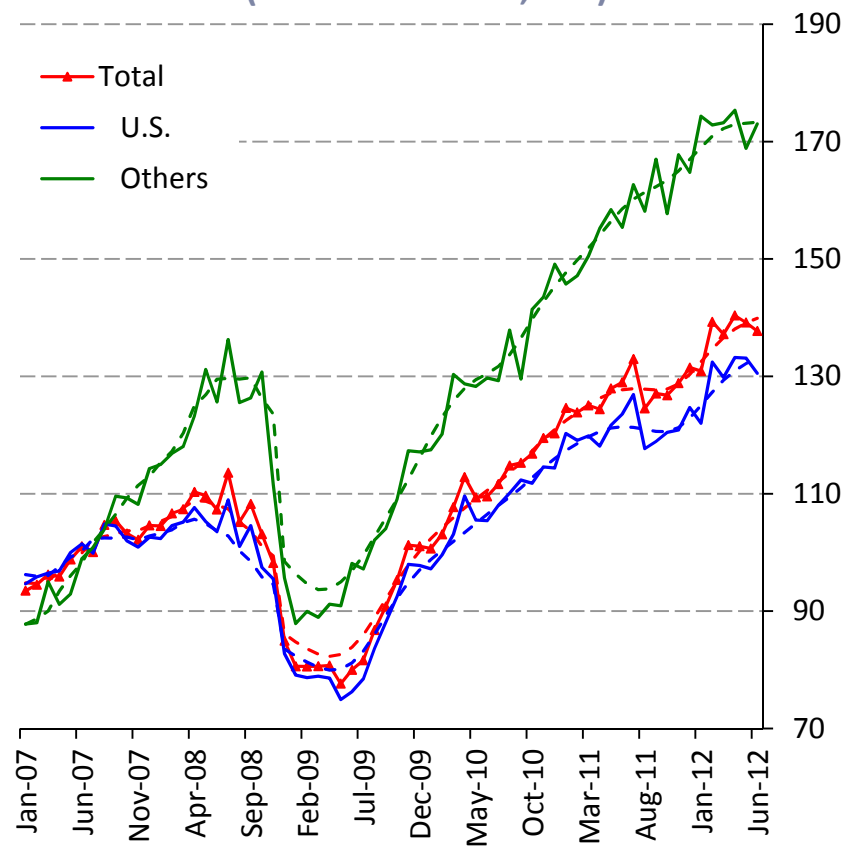


s.a./ Seasonally adjusted and trend data.

1/ Industrial production up to June 2012. Total IGAE, services and agricultural data up to May 2012.

Source: INEGI.

**Manufacturing Exports by  
Region of Destination**  
(Index 2007=100; s.a.)

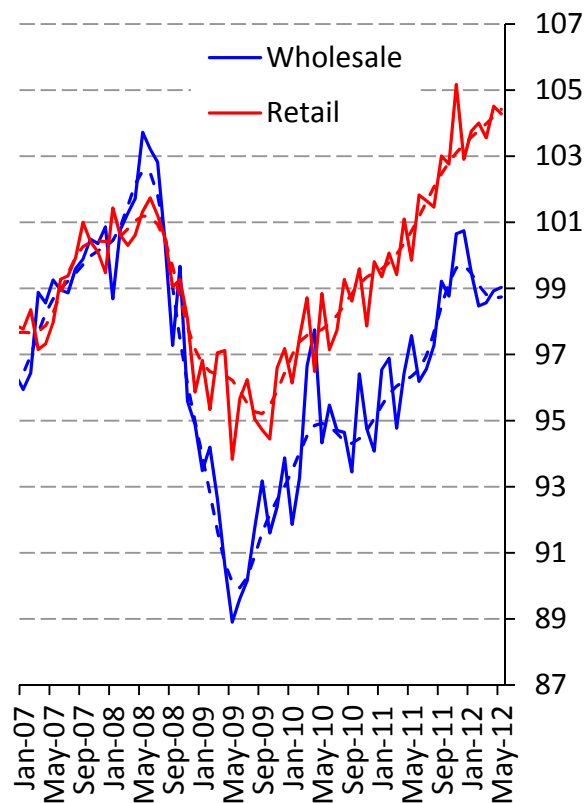


s.a./ Seasonally adjusted and trend data.

Source: Banco de México.

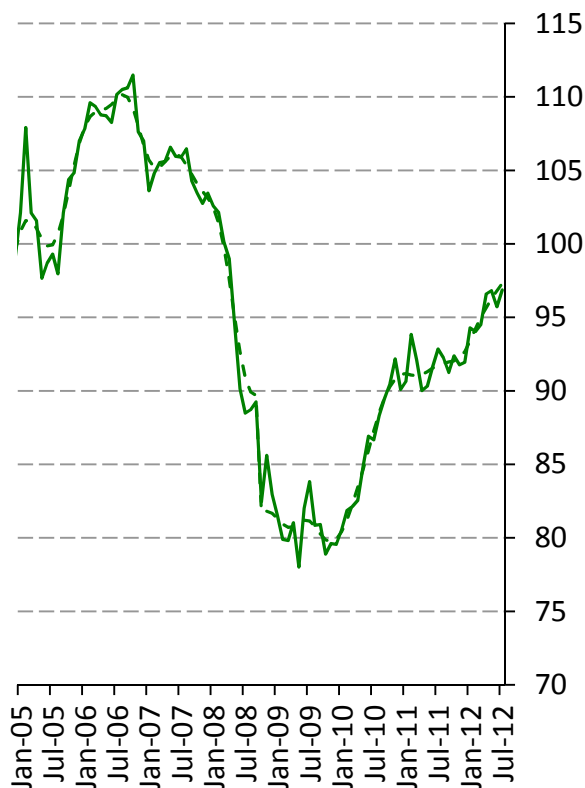
# Private consumption continued its positive trend, supported, among other factors, by bank credit.

**Commercial Establishments' Sales**  
(Index 2008=100; s.a.)



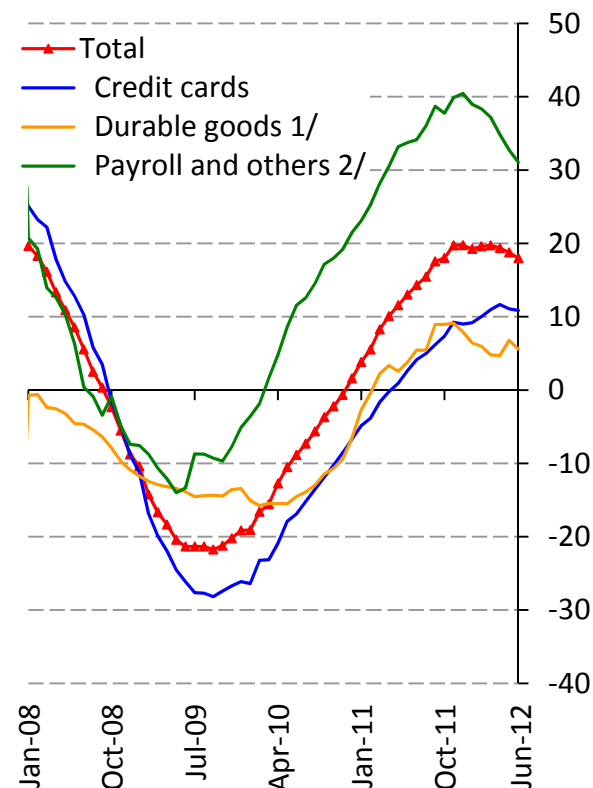
s.a./ Seasonally adjusted and trend data.  
Source: INEGI.

**Consumer Confidence**  
(Index Jan-2003=100; s.a.)



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

**Commercial Banks' Performing Credit for Consumption**  
(Real annual % change)

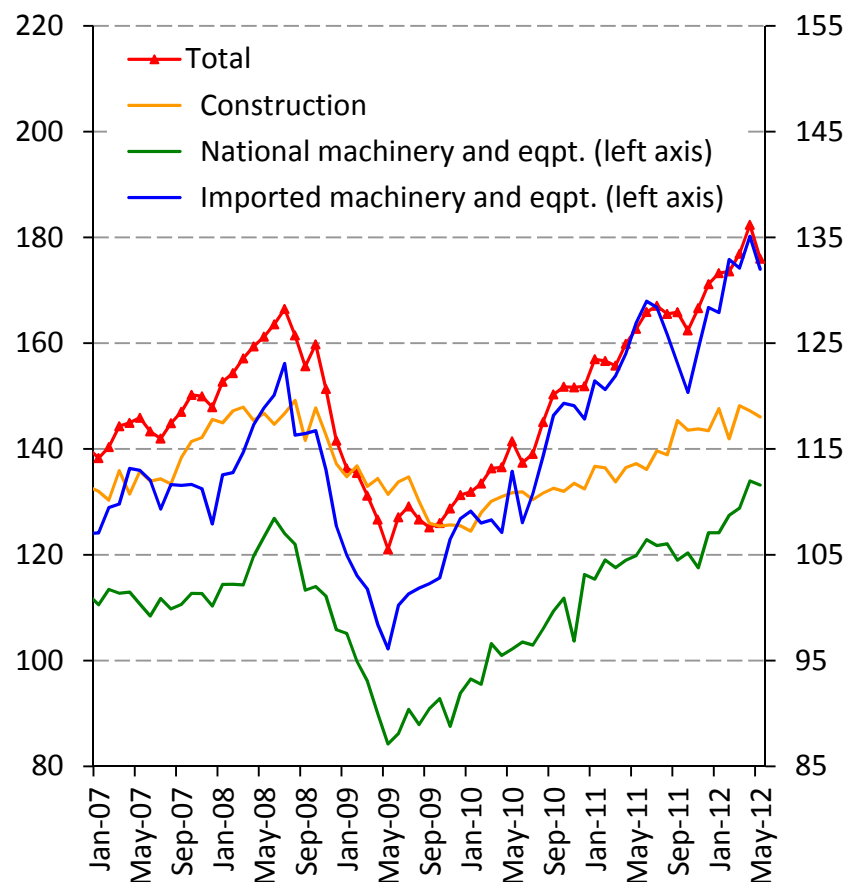


1/ Includes credit for the acquisition of property and automobile credits.  
2/ "Others" refers to personal credits, credit for payable leasing operations and other consumption credits.  
Source: Banco de México.

# Gross fixed investment and domestic financing to non-financial private firms keep expanding.

## Investment and its Components

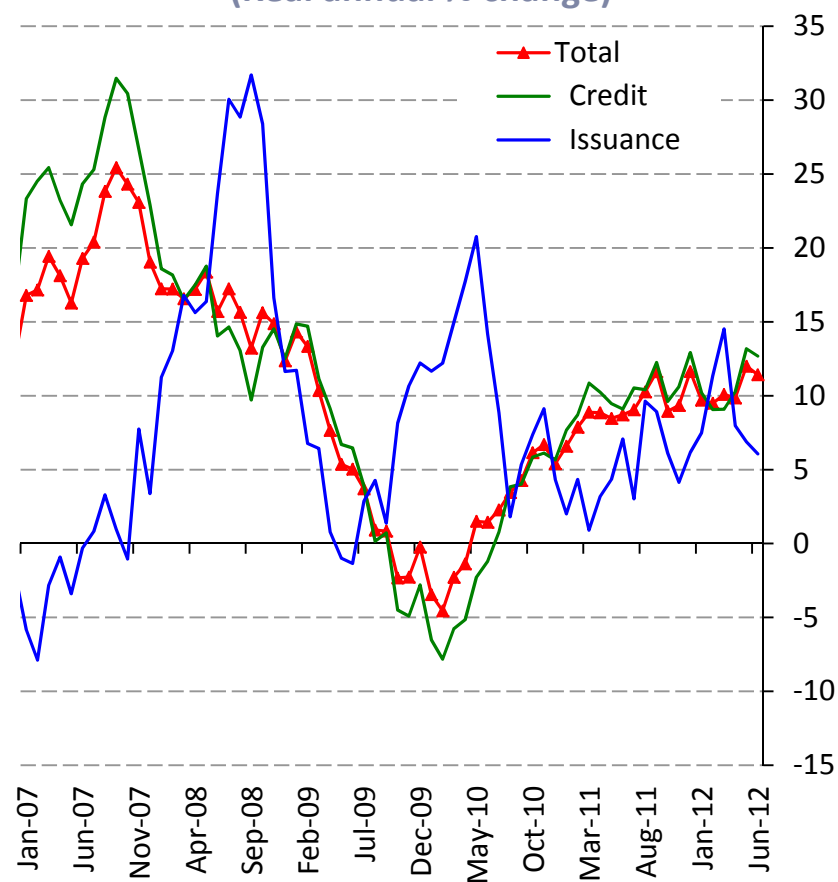
(Index 2005=100; s.a.)



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

## Domestic Financing to Non-financial Private Firms

(Real annual % change)



Source: Banco de México.

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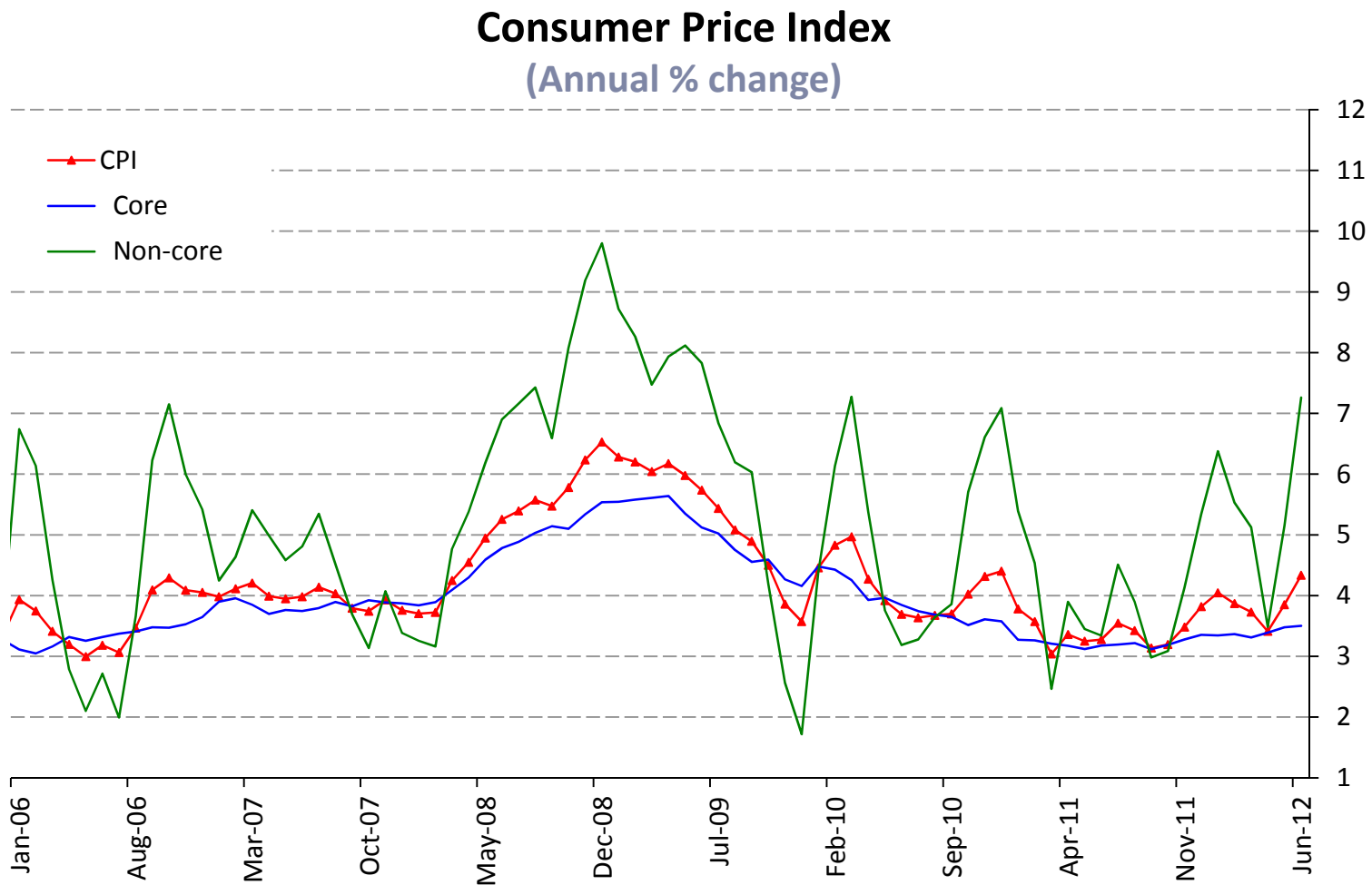
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# Monetary Policy and Inflation Determinants

- The Board of Governors maintained the Overnight Interbank Interest Rate at 4.5 percent during the period analyzed in this Inflation Report, taking into account that:
  - ✓ *The economic activity continues its positive trend.*
  - ✓ *The output gap practically closed, although no pressures on prices in the input markets, nor on external accounts are perceived.*
  - ✓ *The impact of relative price adjustments on inflation, given exchange rate adjustments, has been moderate and is expected to be temporary.*
  - ✓ *The non-core inflation rebound is anticipated to be temporary.*
  - ✓ *These relative price adjustments are expected to remain without causing second round effects on the price formation process.*

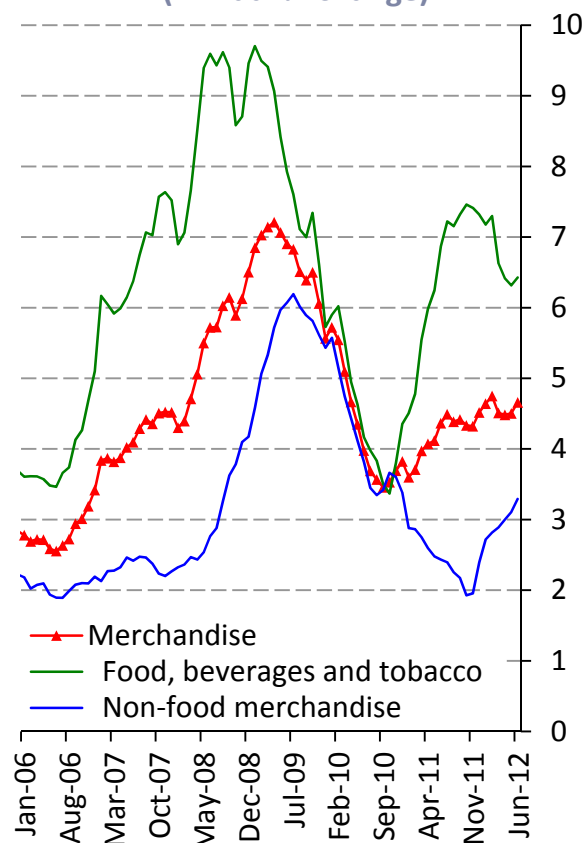
The increase in annual headline inflation in the second quarter of the year was mainly due to higher inflation in the non-core price index.



Source: Banco de México and INEGI.

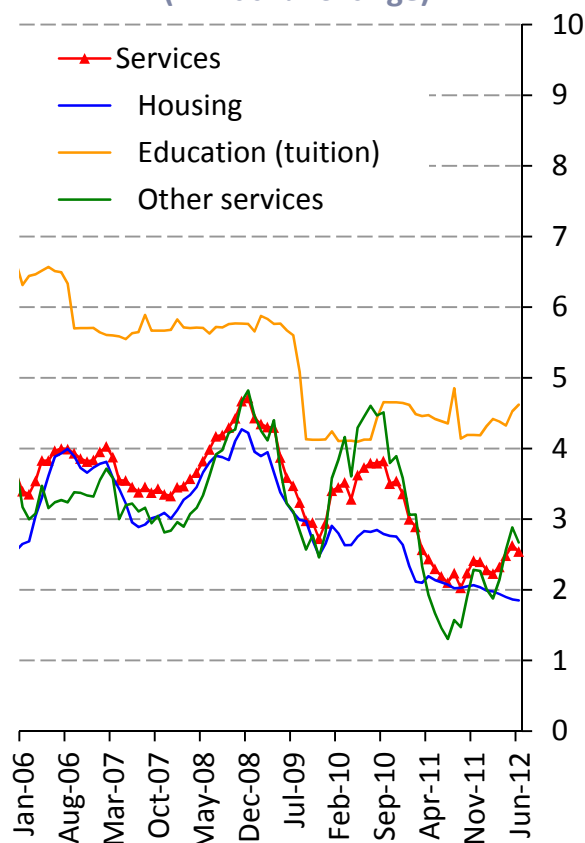
# Within core inflation, the increase in the relative price of merchandise as compared to services has continued.

**Subindices of Core Merchandise Prices**  
(Annual % change)



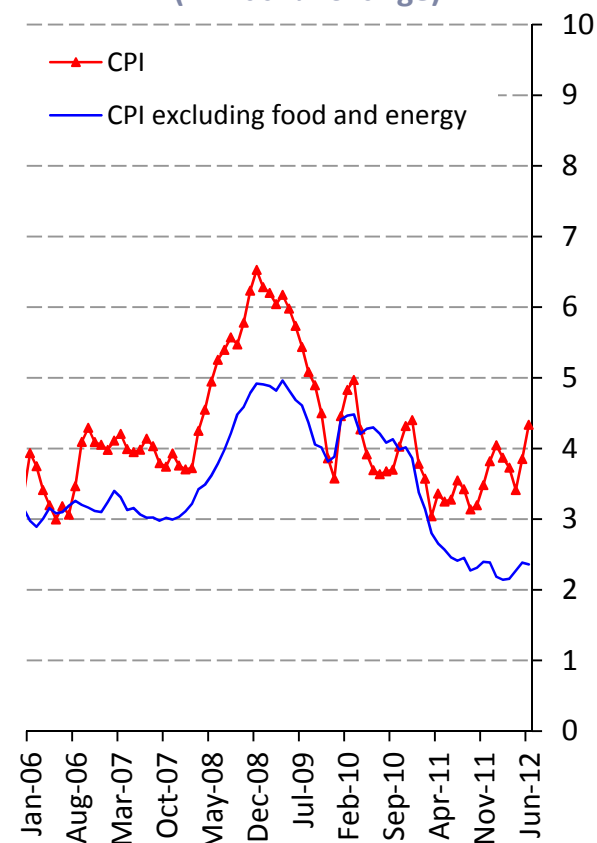
Source: Banco de México and INEGI.

**Subindices of Core Services Prices**  
(Annual % change)



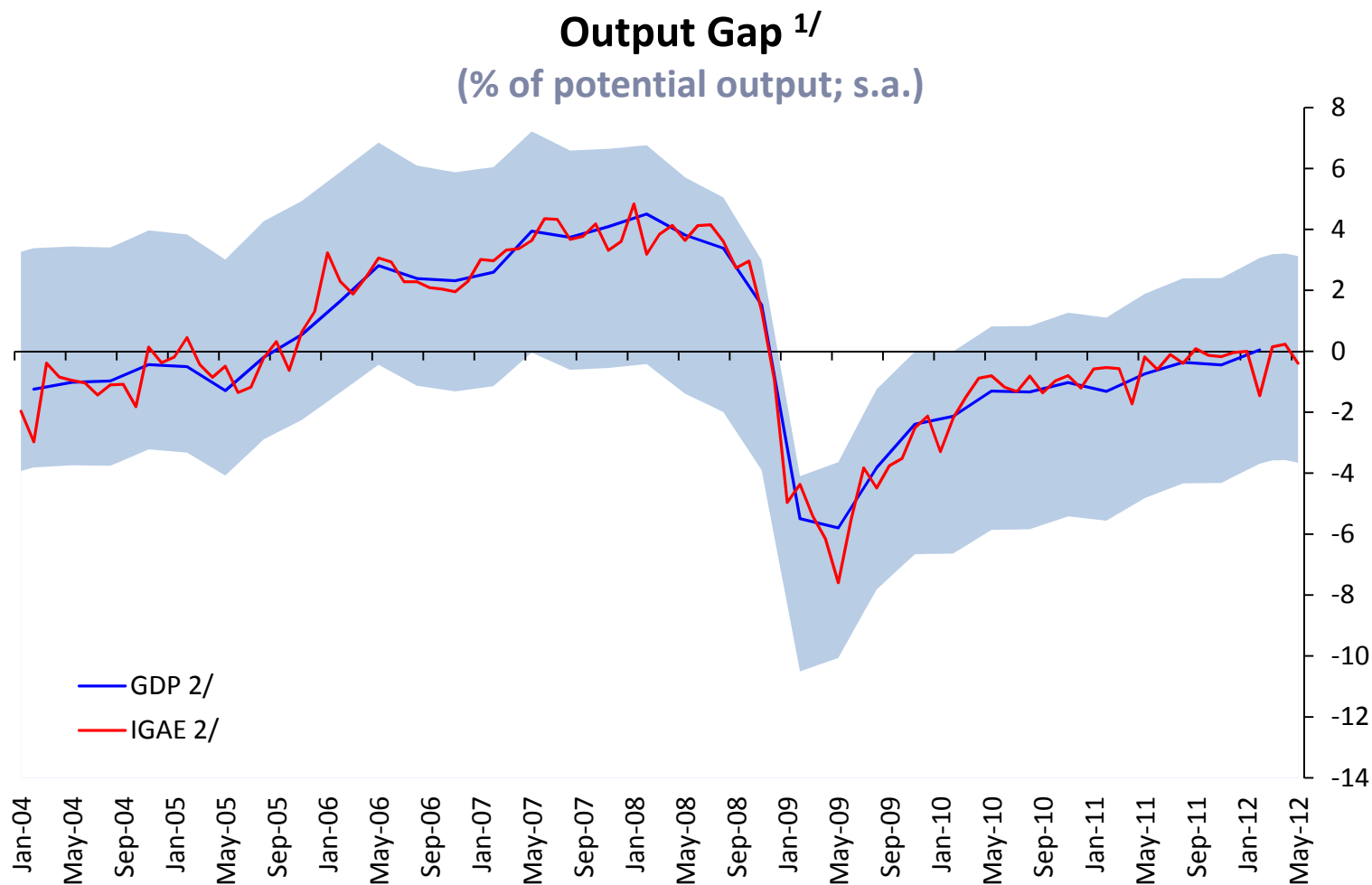
Source: Banco de México and INEGI.

**CPI Excluding Food and Energy <sup>1/</sup>**  
(Annual % change)



<sup>1/</sup> Excluding food at home (raw and processed foods and non-alcoholic beverages), food outside home, and energy.  
Source: Banco de México and INEGI.

The output gap practically closed, being at levels close to zero.



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 the unobserved components method.

2/ GDP figures up to the first quarter of 2012; IGAE up to May 2012.

Source: Calculated by Banco de México with data from INEGI.

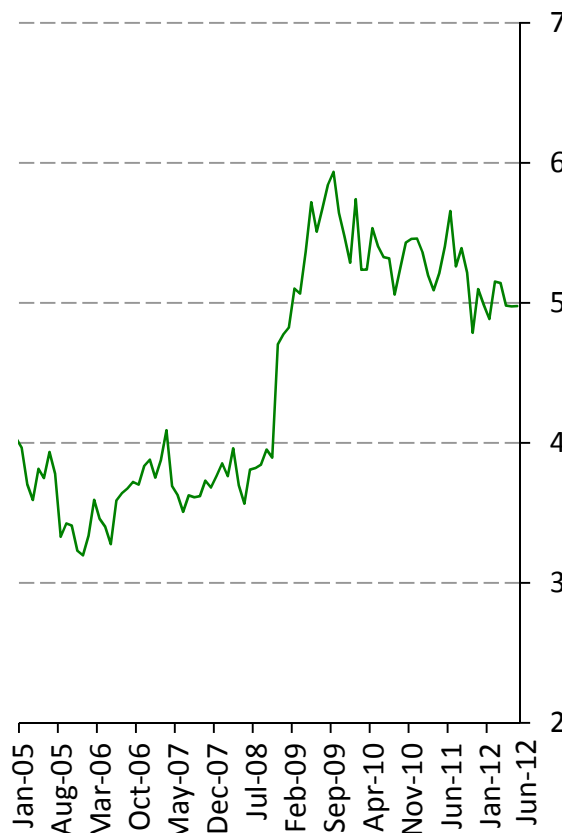
# However, no labor-cost related pressures on prices are observed.

**IMSS-insured Workers <sup>1/</sup>**  
(Million workers)



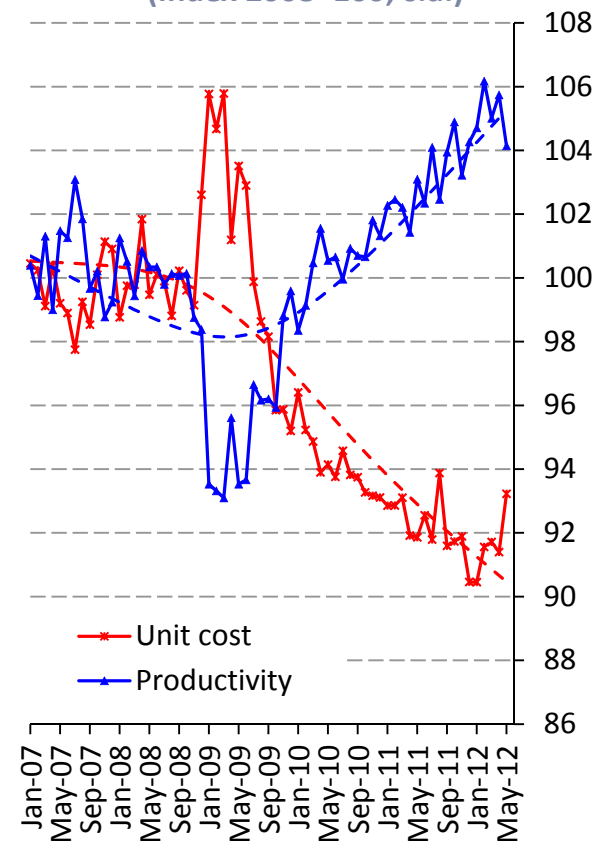
<sup>1/</sup> Permanent and temporary workers in urban areas.  
Source: IMSS and seasonally adjusted by Banco de México.

**National Unemployment Rate**  
(%; s.a.)



s.a./ Seasonally adjusted.  
Source: National Employment Survey (*Encuesta Nacional de Ocupación y Empleo*), INEGI.

**Productivity and Unit Cost of Labor Force in the Manufacturing Sector**  
(Index 2008=100; s.a.)

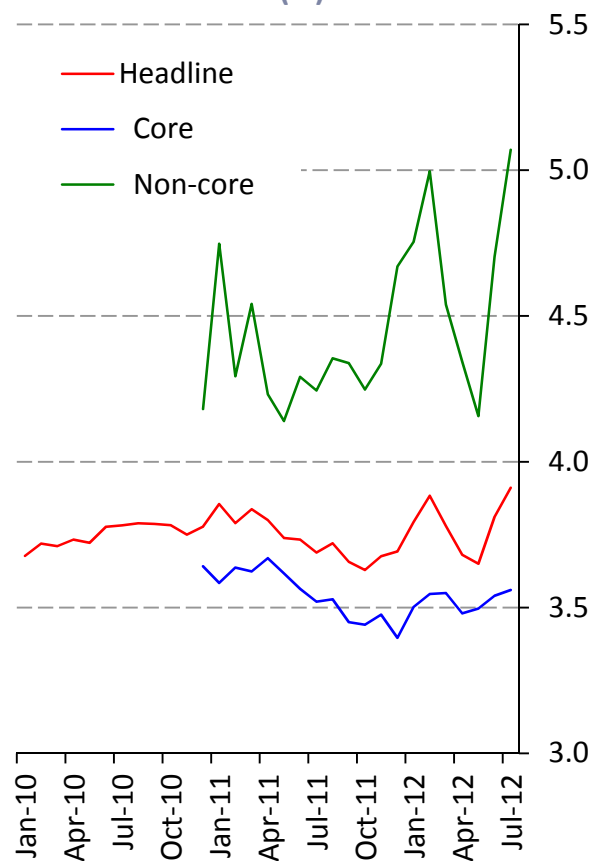


s.a./ Seasonally adjusted and trend data.  
Source: Prepared by Banco de México with seasonally adjusted data from the Extended Industry Survey (*Encuesta Industrial Ampliada*), INEGI.

# Inflation expectations have remained anchored.

**Inflation Expectations for the End of 2012**

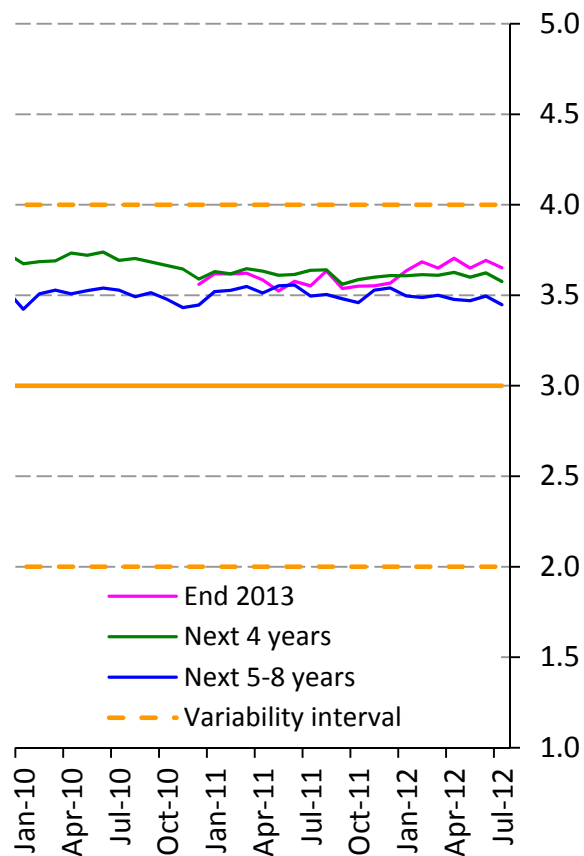
(%)



Source: Banco de México's survey.

**Headline Inflation Expectations**

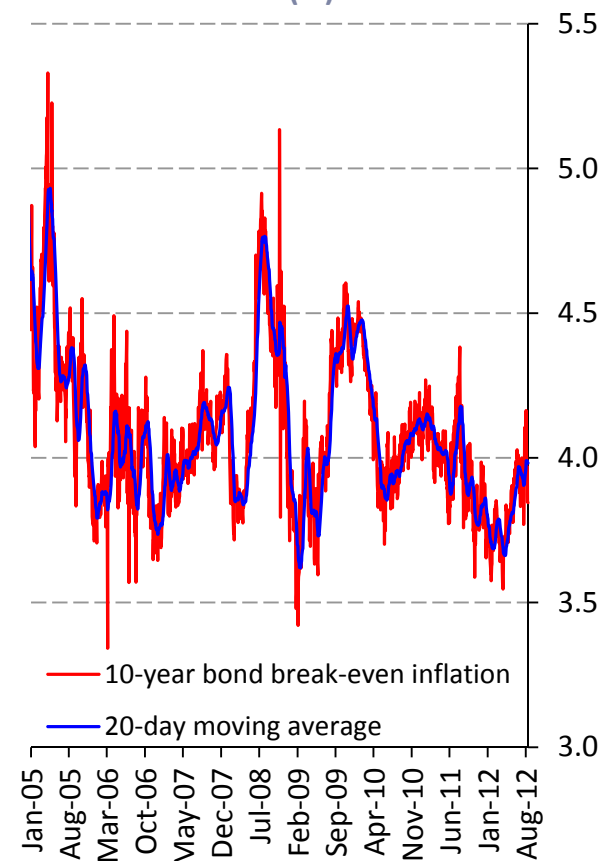
(%)



Source: Banco de México's survey.

**Break-even Inflation and Inflationary Risk <sup>1/</sup>**

(%)



<sup>1/</sup> The break-even inflation and inflationary risk implicit in 10-year bonds is calculated based on nominal and real interest rates of the secondary market.

Source: Banco de México estimate with data from Bloomberg.

The exchange rate is expected to continue offsetting part of the depreciation registered at the beginning of the second quarter, period characterized by an increase in volatility.

### Exchange Rate and its Expectations for the End of 2012 and 2013 <sup>1/</sup>

(Pesos per dollar)



1/ The observed exchange rate is the daily FIX exchange rate. The latest data for the observed exchange rate is August 13, 2012 and the foreign exchange rate forecasts is August 6, 2012.

Source: Banco de México and Banamex survey.

### Implied Volatility in Foreign Exchange Options <sup>2/</sup>

(%)



2/ Refers to one month options.

Source: Bloomberg.



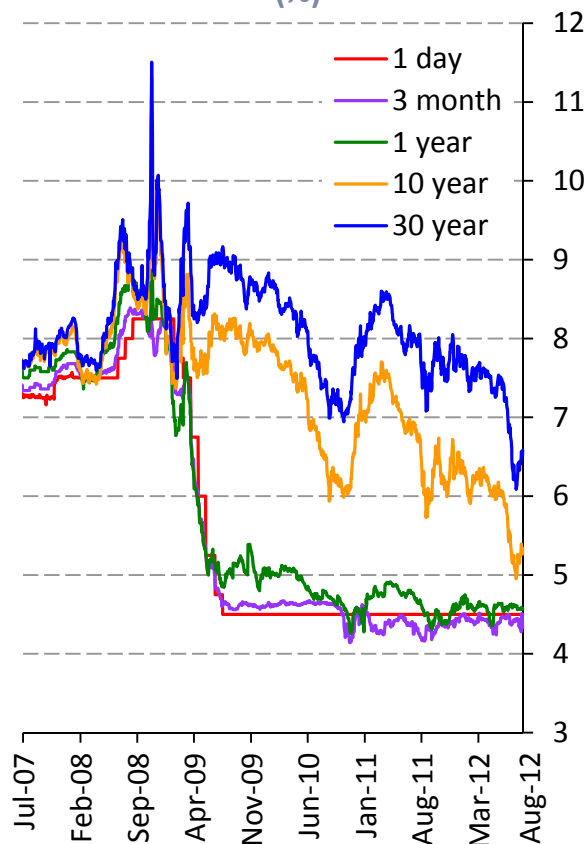
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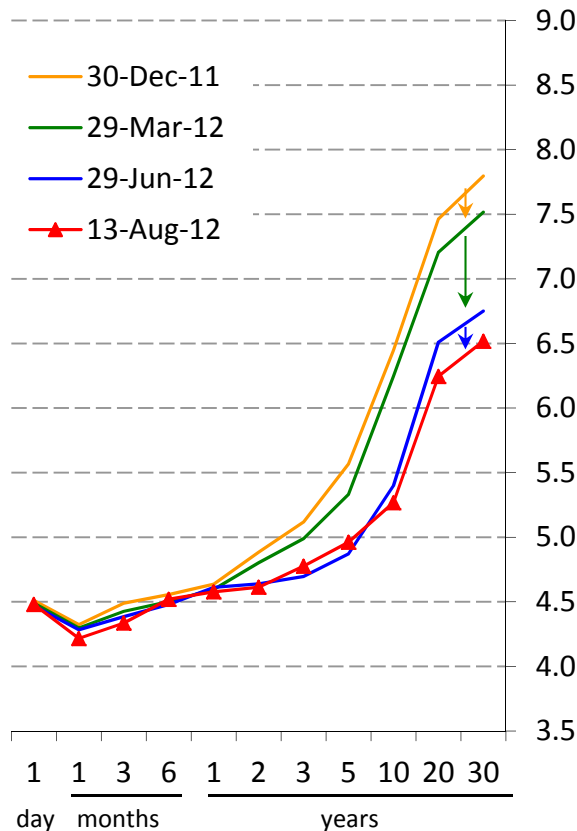
Reflecting solid macroeconomic fundamentals, domestic interest rates evolved favorably and government securities holdings abroad increased further.

**Interest Rates of Government Securities <sup>1/</sup>**  
(%)



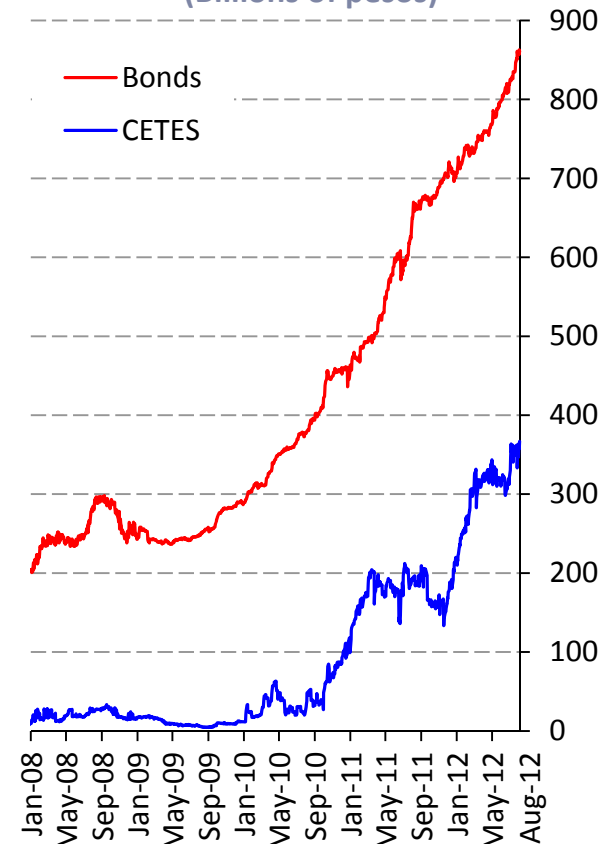
1/ Since January 21, 2008, the one-day (overnight) interest rate corresponds to the target for the Overnight Interbank Interest Rate. Source: Banco de México and *Proveedor Integral de Precios* (PiP).

**Mexico's Yield Curve**  
(%)



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

**Government Securities Holdings by Foreign Investors**  
(Billions of pesos)



Source: Banco de México.



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# Monetary Policy and Inflation Determinants

- Based on the analysis of inflation determinants, no generalized pressures on prices in the economy have been observed.
- As previously forecast, the change in the relative prices of merchandise as compared to services has not contaminated the price formation process and this situation is expected to remain so. This forecast is primarily based on the following factors:
  - ✓ *The expectation of the nominal exchange rate to continue offsetting part of the depreciation registered at the beginning of the second quarter.*
  - ✓ *Absence of generalized price adjustments by firms in response to exchange rate variations.*
  - ✓ *Empirical evidence of a low exchange rate pass-through to inflation.*
- There have been some major adjustments in prices of some agricultural products, though their effect has been limited to a small group of commodities, and these adjustments are expected to reverse in the near future.

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## Forecasts for the Mexican Economy:

### GDP growth:

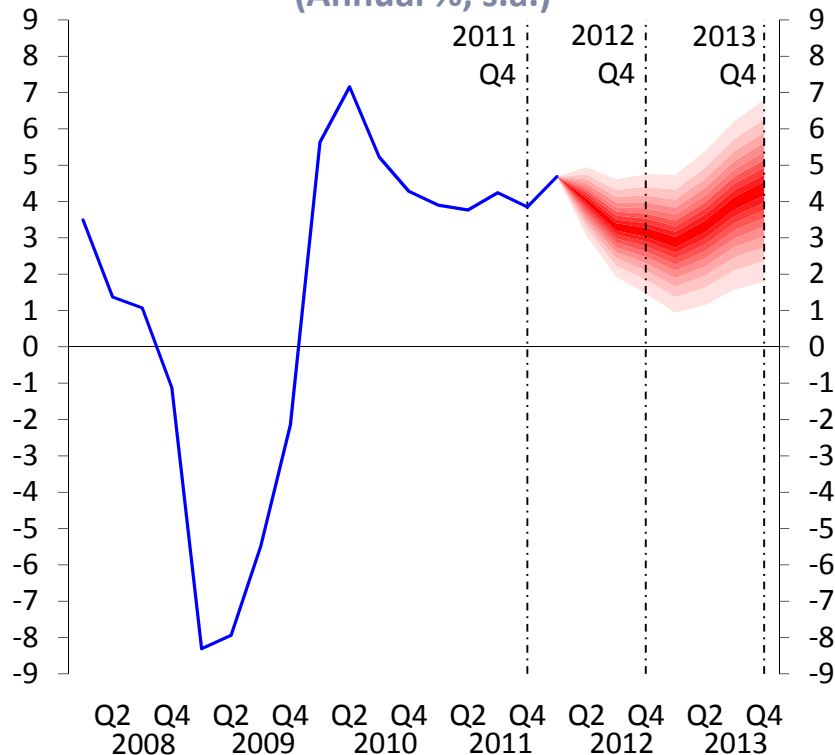
- ✓ Between 3.25 and 4.25% in 2012.
- ✓ Between 3.0 and 4.0% in 2013.

### Increase in the number of IMSS-insured workers:

- ✓ Between 540 and 640 thousand in 2012.
- ✓ Between 500 and 600 thousand in 2013.

**Fan Chart: GDP Growth**

(Annual %; s.a.)

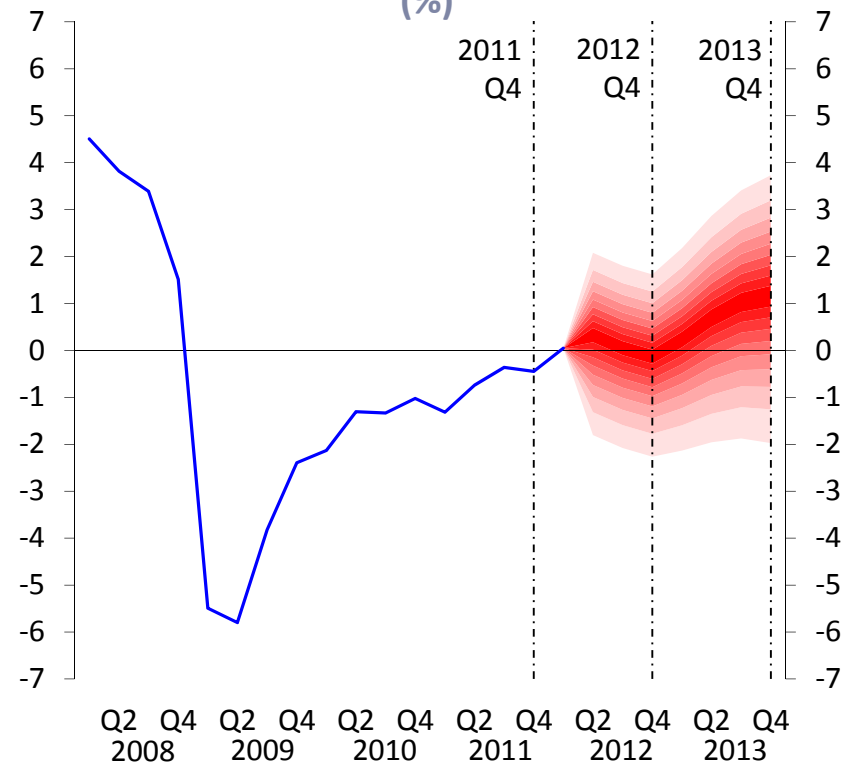


s.a./ Seasonally adjusted.

Source: INEGI and Banco de México.

**Fan Chart: Output Gap <sup>1/</sup>**

(%)



<sup>1/</sup> Calculated with seasonally adjusted data.

Source: Banco de México.

The worsening of the world economic outlook has led to a deterioration of the balance of risks for growth in Mexico as compared to the previous Inflation Report.

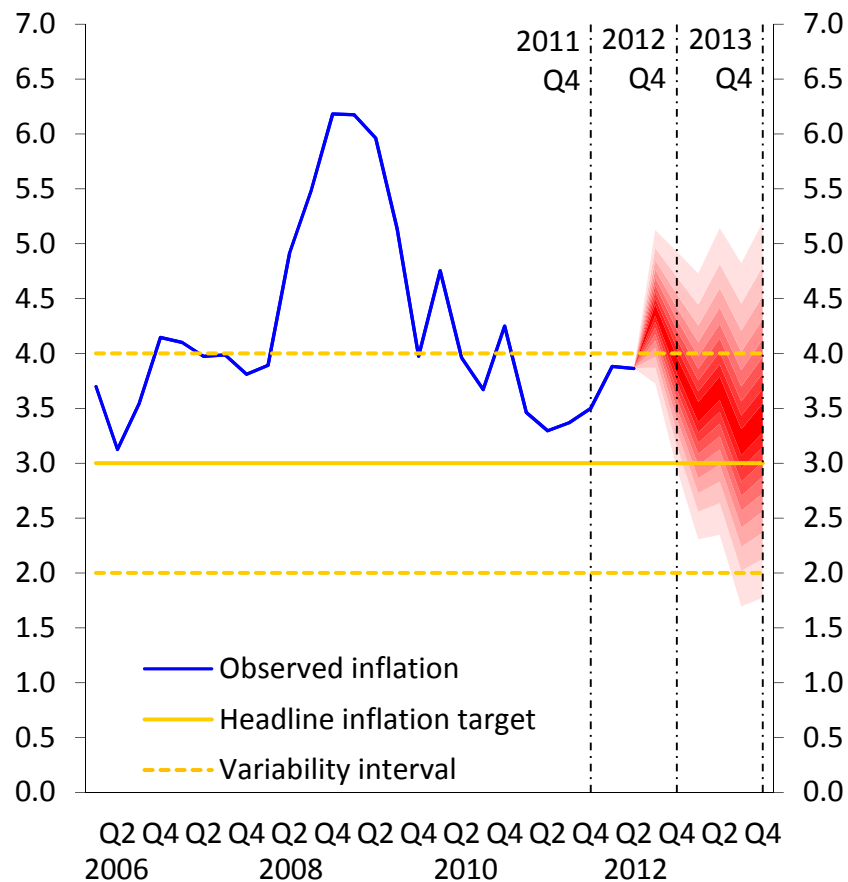
*Among the downward risks stand out :*

- ✓ *A weaker evolution of the U.S. economy.*
- ✓ *A new increase in uncertainty and financial volatility derived from fiscal and financial difficulties in the Euro zone.*
- ✓ *The situation in Europe could boost the investors' search for safe haven assets, leading to a reduction in capital flows to economies like the Mexican.*
- ✓ *The slowdown of emerging economies could intensify the deterioration of global demand.*

# Headline inflation will most likely lie within an interval of 3 and 4 percent in 2012 and 2013.

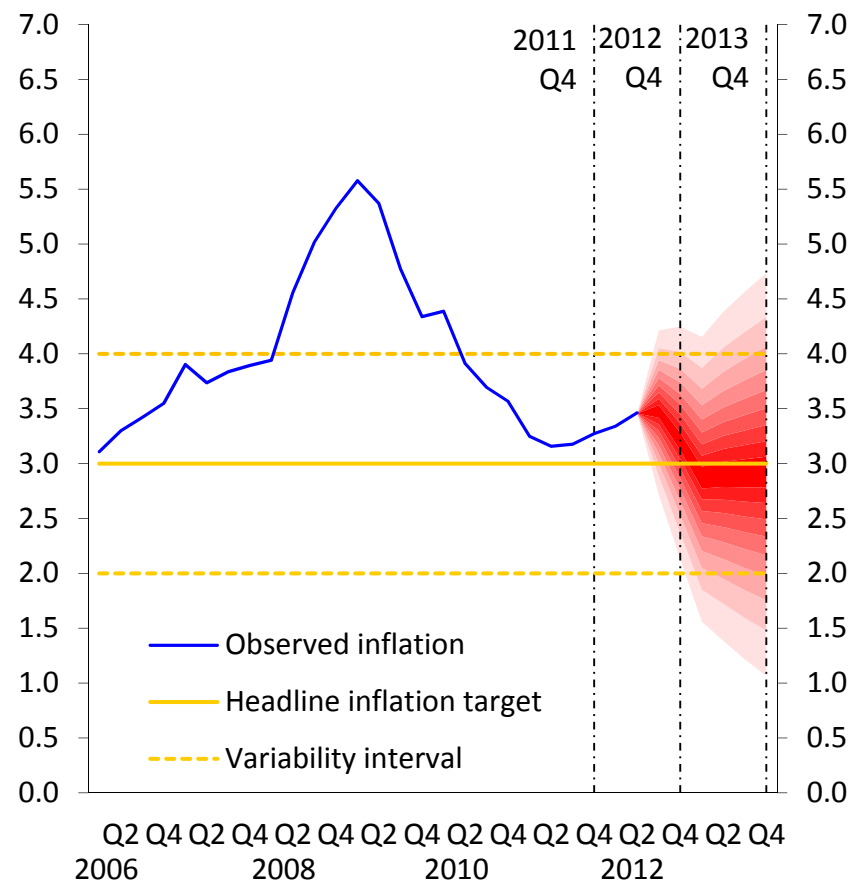
## Fan Charts

**Annual Headline Inflation**  
(Annual %)



Source: INEGI and Banco de México.

**Annual Core Inflation**  
(Annual %)



Source: INEGI and Banco de México.

## The risks to the inflation forecast have changed in the recent quarter.

- In the short term, upward risks increased due to:
  - ✓ *Unfavorable climatic conditions for the production of some vegetables, and the possible effect of the avian influenza on livestock production in the country. Downward revisions of global production estimates for corn and other grains are also a matter of concern.*
  - ✓ *The possibility of increased instability in financial markets that could induce exchange rate volatility.*
- However, in the medium term, downward risks intensified:
  - ✓ *The possibility of a major weakening of both external and domestic demand increased.*
  - ✓ *The recent exchange rate appreciation could contribute to reducing inflation pressures.*



## **The recent monetary policy stance is conducive to attaining the 3 percent permanent inflation target.**

- Even though inflation is expected to be above 4 percent in the short term, the fact that the Central Institute has not modified the monetary policy stance should not be interpreted as a sign of indifference regarding an inflation increase.
- The movement of inflation above 4 percent is due to transitory and reversible factors, so it is expected to return to levels below 4 percent in a couple of months and, thus, to continue its convergence process to the 3 percent permanent target.
- Thus, restricting the monetary policy stance has not been considered as convenient.

## The Board of Governors will remain attentive to all inflation determinants.

- In the future, the Board of Governors:
  - ✓ *Will continue to monitor the evolution of all inflation determinants, given that their performance could make it advisable to adjust the monetary policy stance to make it more or less restrictive, depending on the scenario that arises.*
  - ✓ *In any case, it will pursue at all times the convergence of inflation to its 3 percent permanent target.*
- Special attention will be paid so that relative price changes do not generate second round effects on inflation dynamics. These relative price changes derive from both agricultural products and exchange rate fluctuations.

## It is necessary to strengthen the sources of domestic growth.

- The solid macroeconomic fundamentals are a necessary but not a sufficient condition to attain the growth rate Mexico requires to reach higher development levels.
- It is essential to also strengthen domestic sources of growth from a microeconomic perspective, which is particularly important in light of an unfavorable external environment.
- For that, it is necessary to bring forward structural reforms in the economy that:
  - ✓ *Promote flexibility in the country's resource allocation towards their most productive use.*
  - ✓ *Increase competition in the markets.*
  - ✓ *Secure an incentive structure that leads to increased productivity.*