

INFLATION REPORT
OCTOBER - DECEMBER 2010



BANCO DE MÉXICO

February, 2011

1. External Conditions

2. Economic Activity in Mexico

3. Inflation Determinants

4. Forecasts and Balance of Risks

1. External Conditions

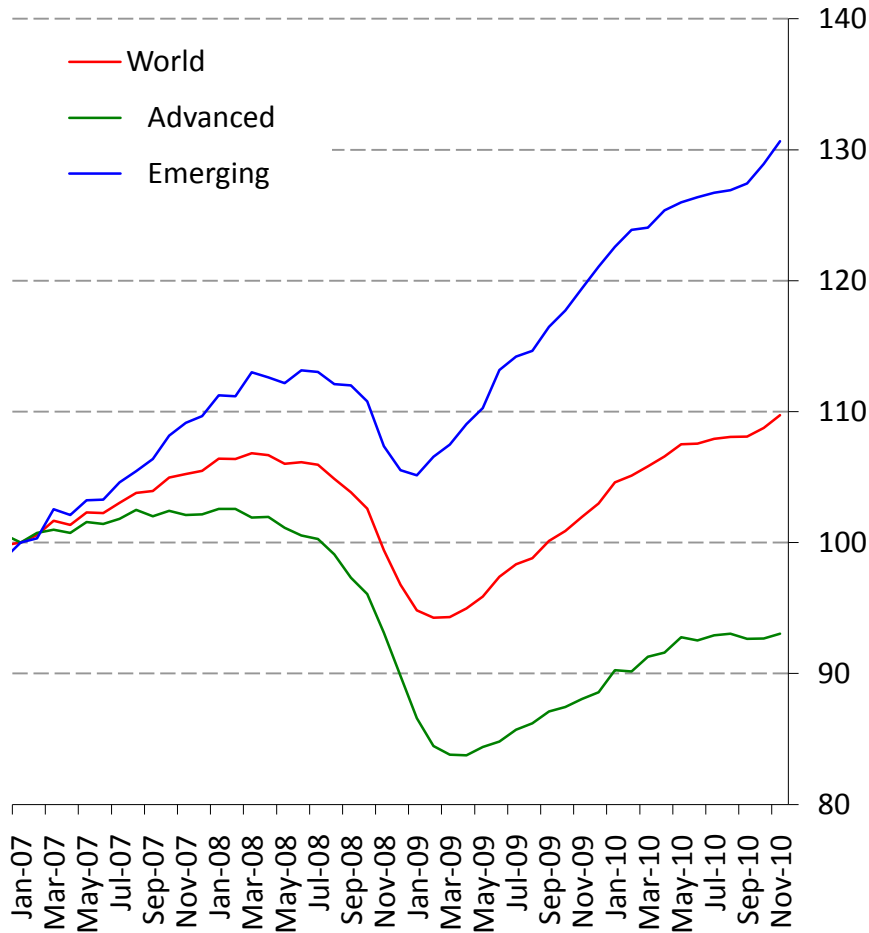
- The world economy's **growth** prospects for 2011 have improved:
 - ✓ *Recovery of a wide range of indicators in the U.S. and other major advanced economies.*
 - ✓ *Strong growth in emerging economies.*
- However, in a significant number of advanced economies structural factors may restrict growth in the coming years.
- Core **inflation** remains low in advanced economies, while in emerging economies it has been increasing. In some of the latter, the interaction of higher commodity prices and the dynamism of domestic demand are leading to inflationary pressures.



1. External Conditions

Industrial Production

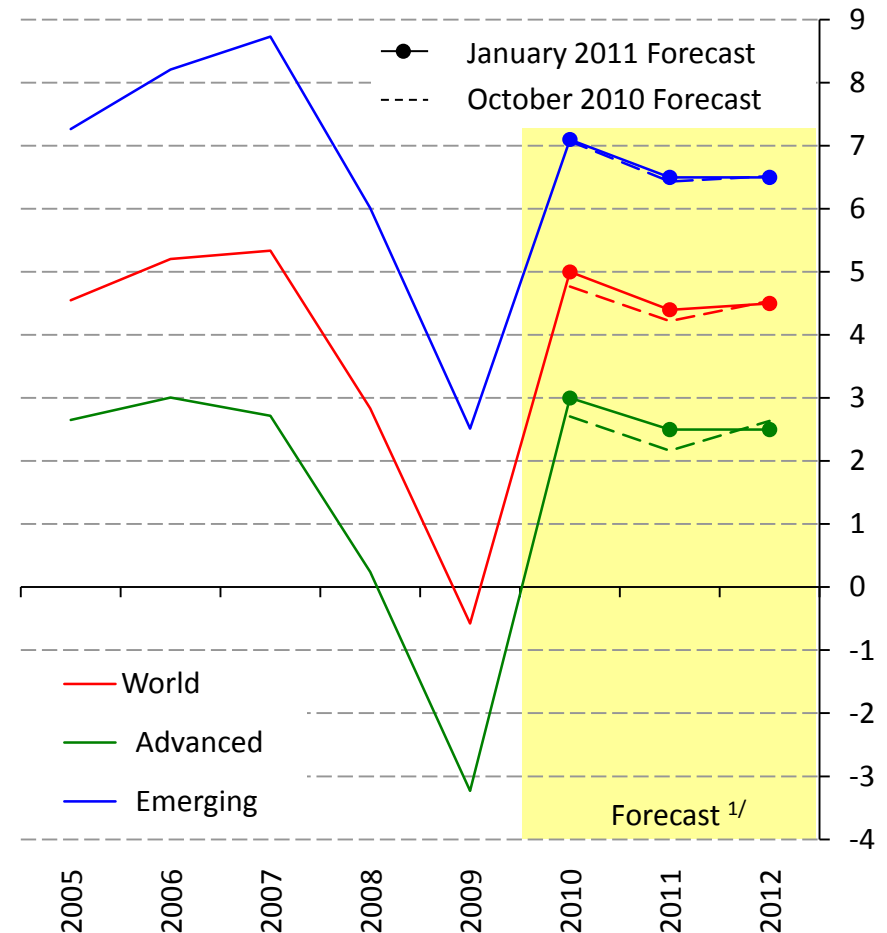
(Index Jan-2007=100; s.a.)



s.a./ Seasonally adjusted.
Source: CPB Netherlands.

Gross Domestic Product

(Annual % change)



1/ The dotted lines show the forecast published in October 2010 and the solid lines show the forecast from January 2011.

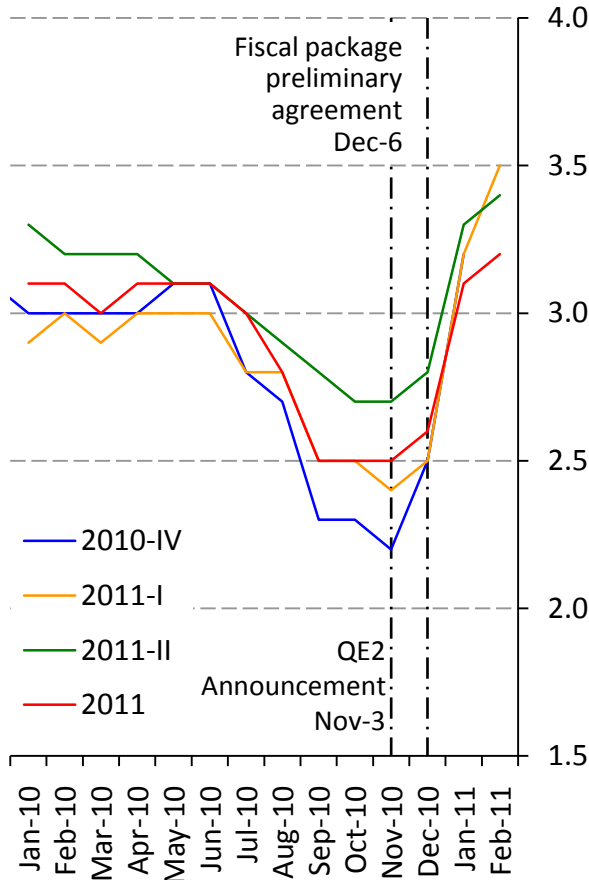
Source: IMF, WEO. October 2010 and January 2011 Update.



1. External Conditions

U.S.: Real Gross Domestic Product Forecasts

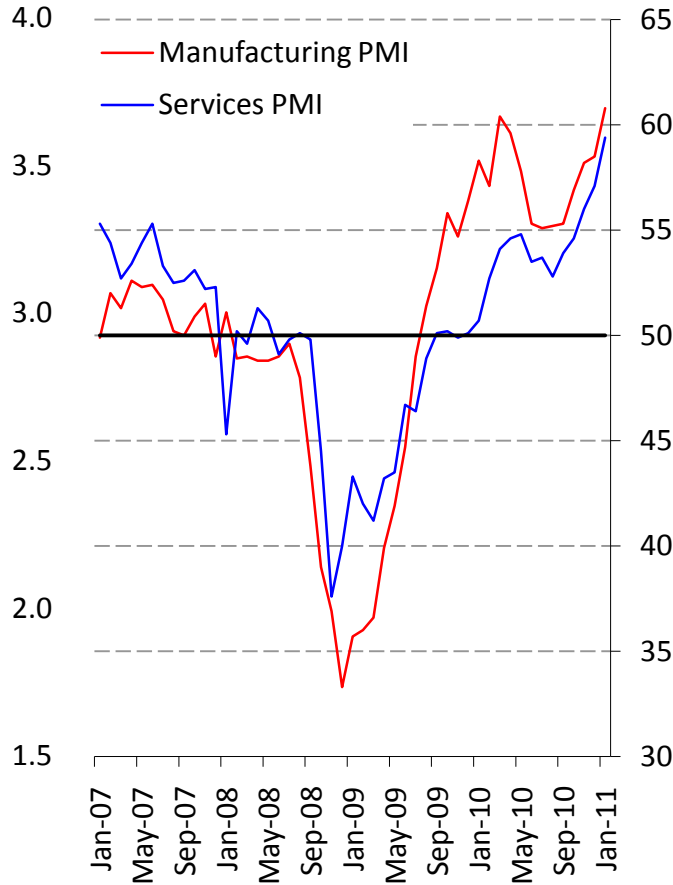
(Quarterly annualized % change and annual % change)



Source: Blue Chip.

U.S.: Manufacturing and Services PMI

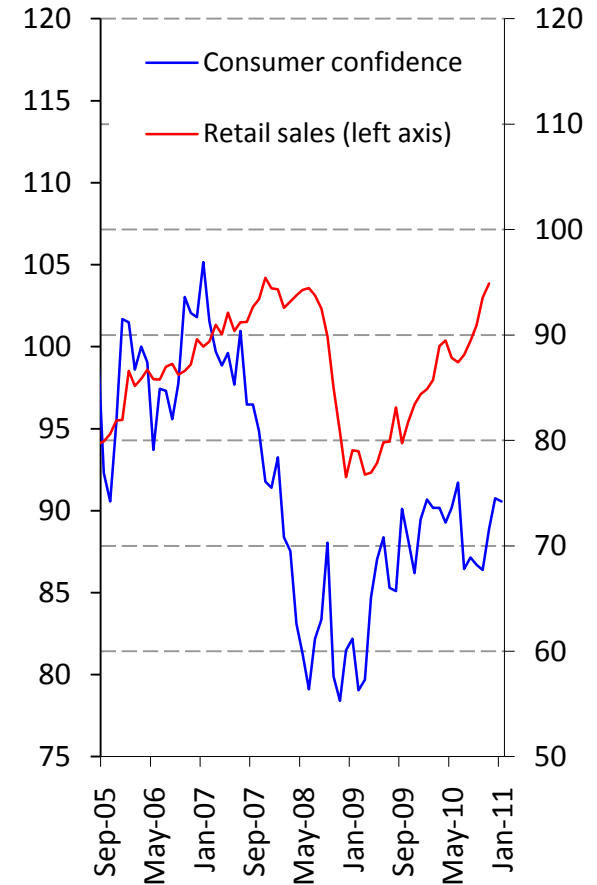
(Indices)



Source: Institute for Supply Management.

U.S.: Retail Sales and Consumer Confidence

(Index Jan-2007=100 and Index)



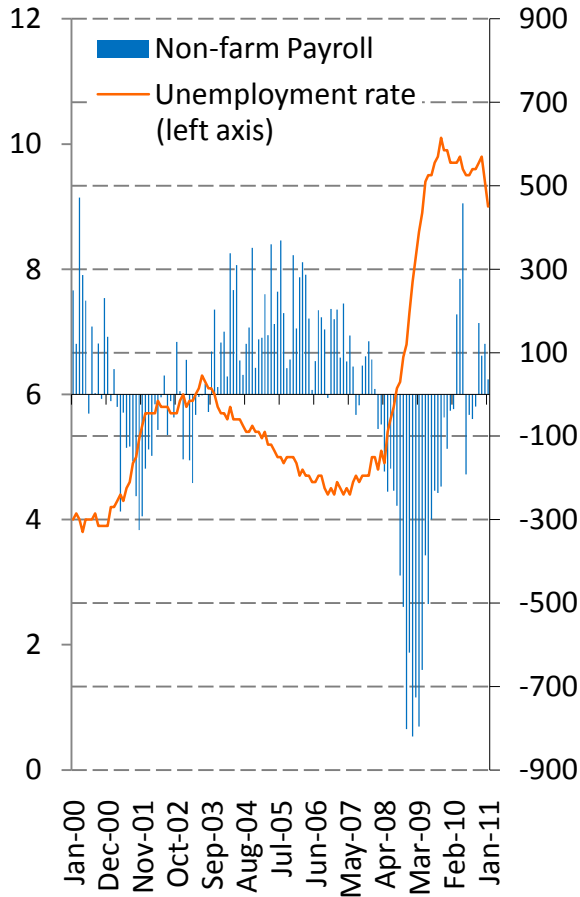
Source: U.S. Census and Michigan University.



1. External Conditions

U.S.: Non-Farm Payroll and Unemployment Rate

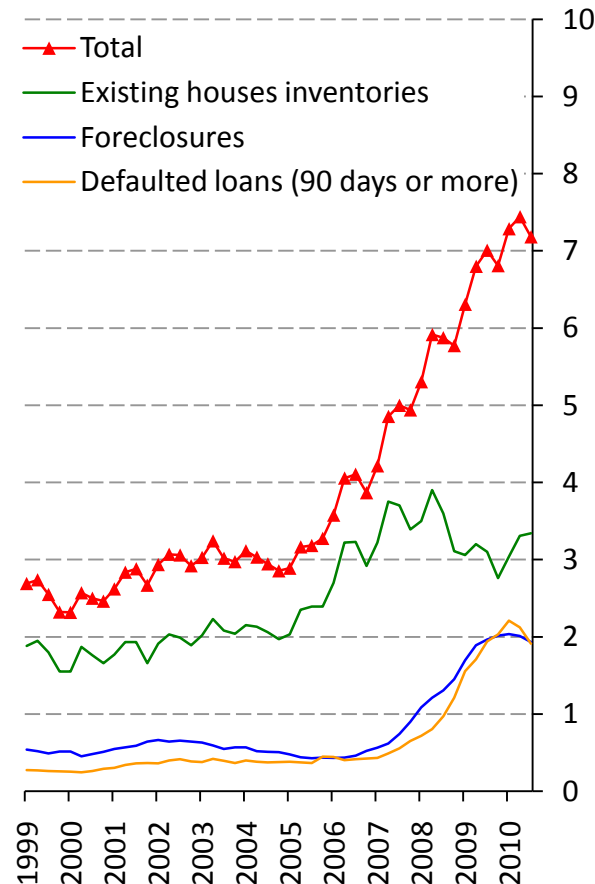
(Change in thousand of jobs and %; s.a.)



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

U.S.: Existing Houses Inventories, Defaulted Loans and Foreclosures

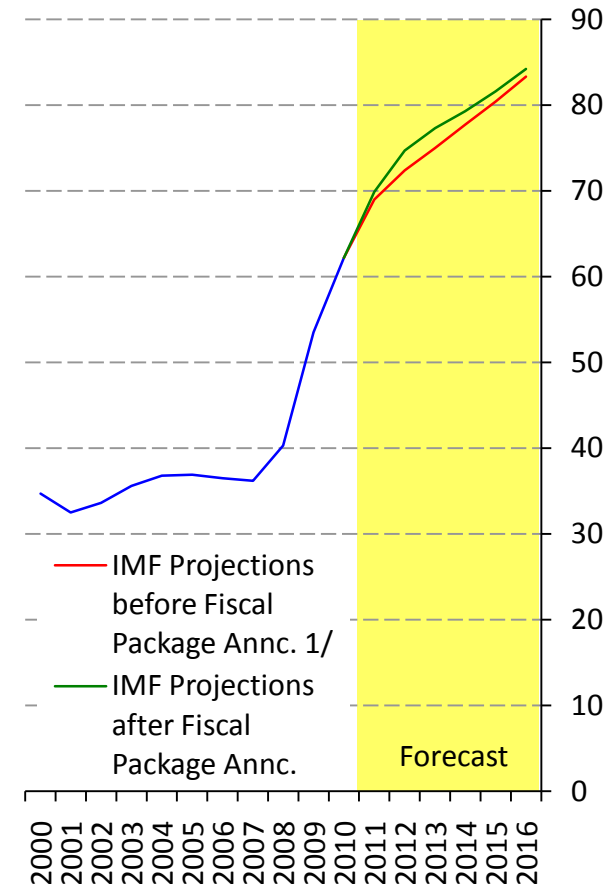
(Millions of houses)



Source: MBA and NAR.

U.S.: Public Sector Total Debt

(% of GDP, Fiscal Year)

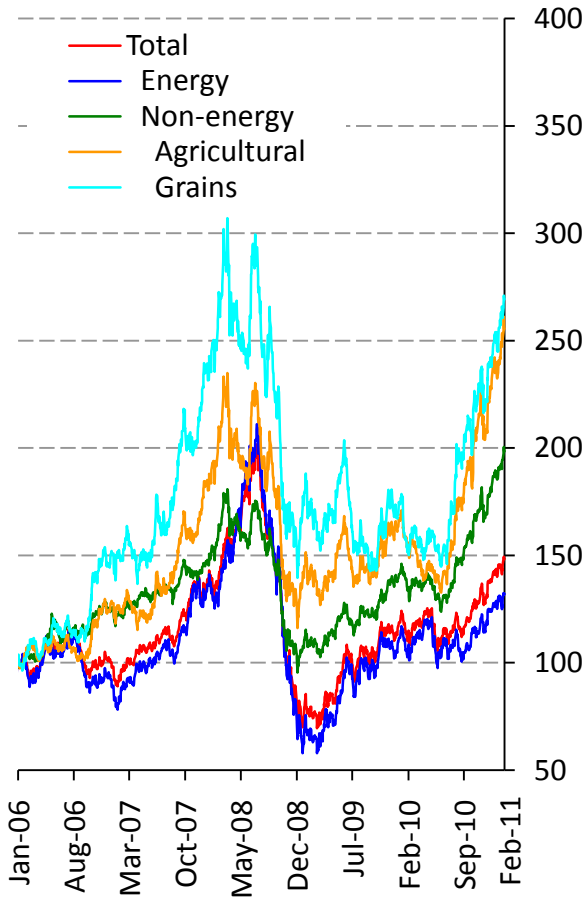


1/ Staff report, July 2010 and IMF projections.
Source: IMF.



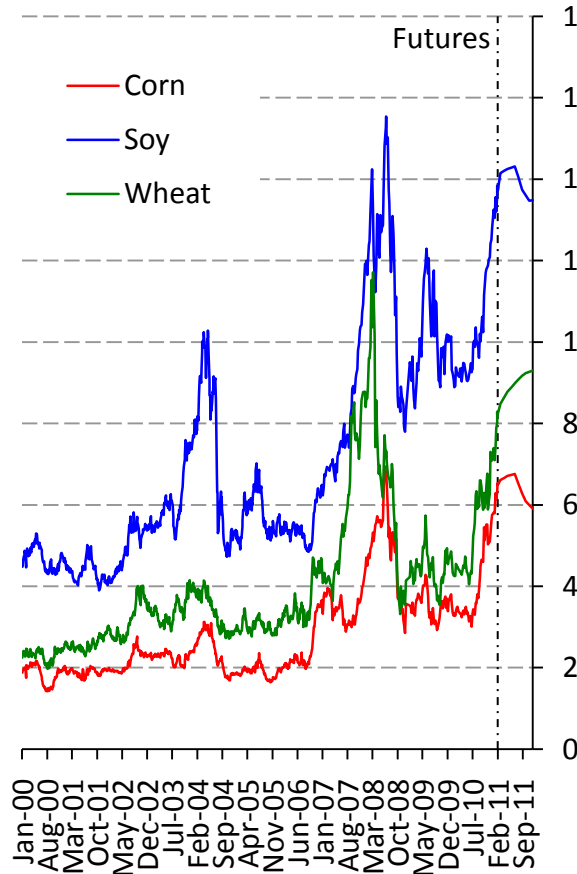
1. External Conditions

Commodities Prices
(Index Jan-2006 = 100)



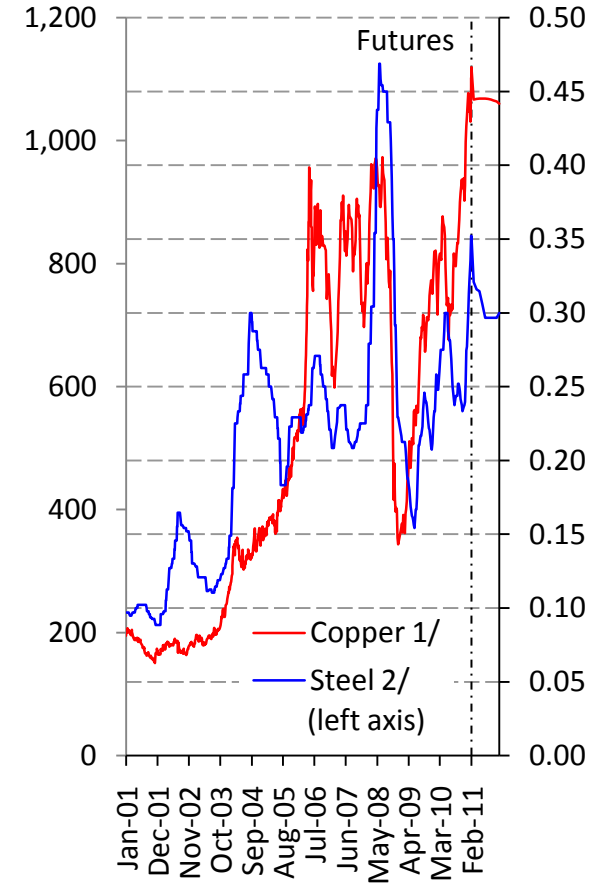
Source: S&P.

International Prices of Grains
(Dollars per bushel)



Source: United States Department of Agriculture (USDA) and Chicago Board of Trade (CBT).

International Prices of Metals
(Dollars per pound and Dollars per ton)

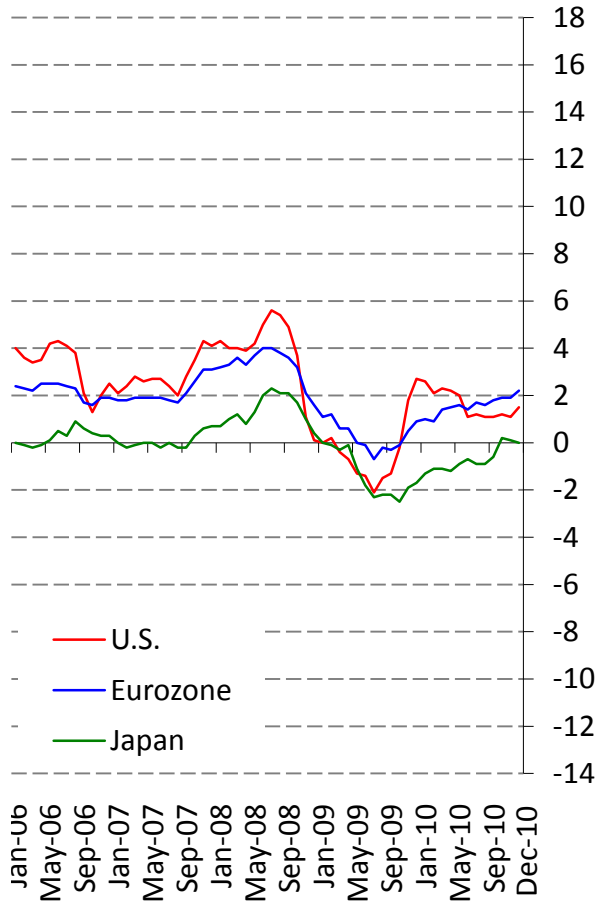


1/ Dollars per pound.
2/ Dollars per short ton.
Source: Metal Bulletin, Commodity Exchange Inc. (CMX) and Chicago Mercantile Exchange (CME).



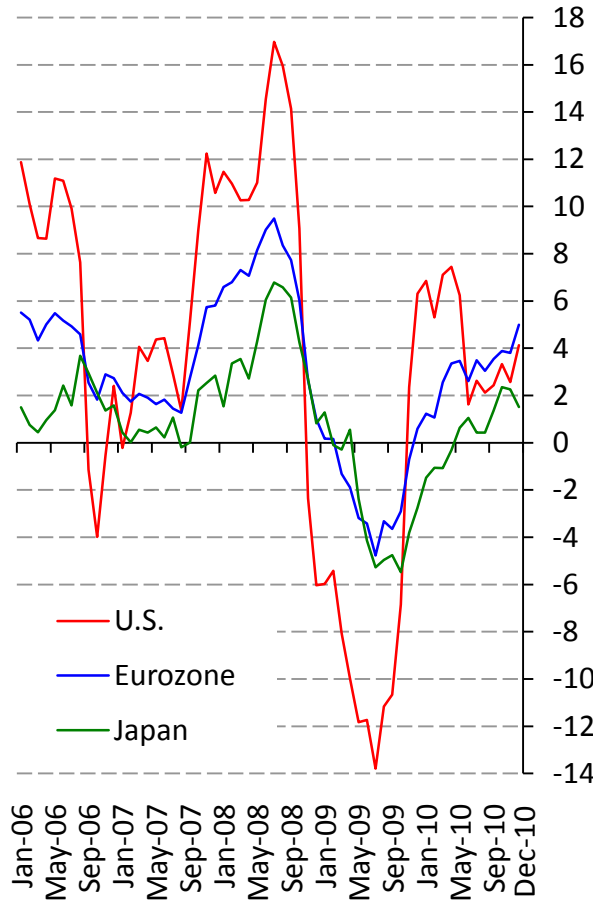
1. External Conditions

G3: Headline Inflation
(Annual %)



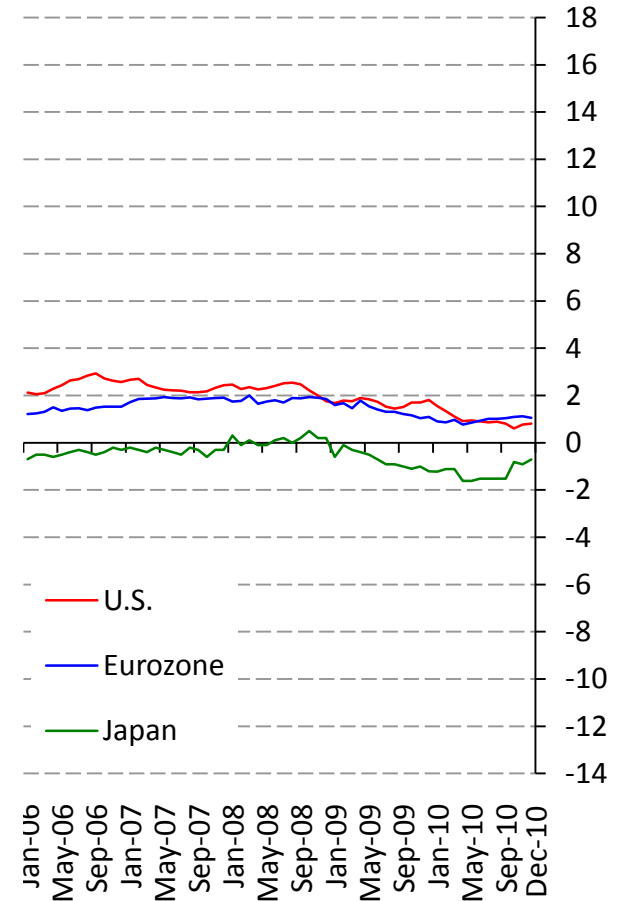
Source: BLS, Eurostat and Japan Statistics Bureau.

G3: Food and Energy Inflation
(Annual %)



Source : BLS, Eurostat and Japan Statistics Bureau.

G3: Inflation Excluding Food and Energy
(Annual %)

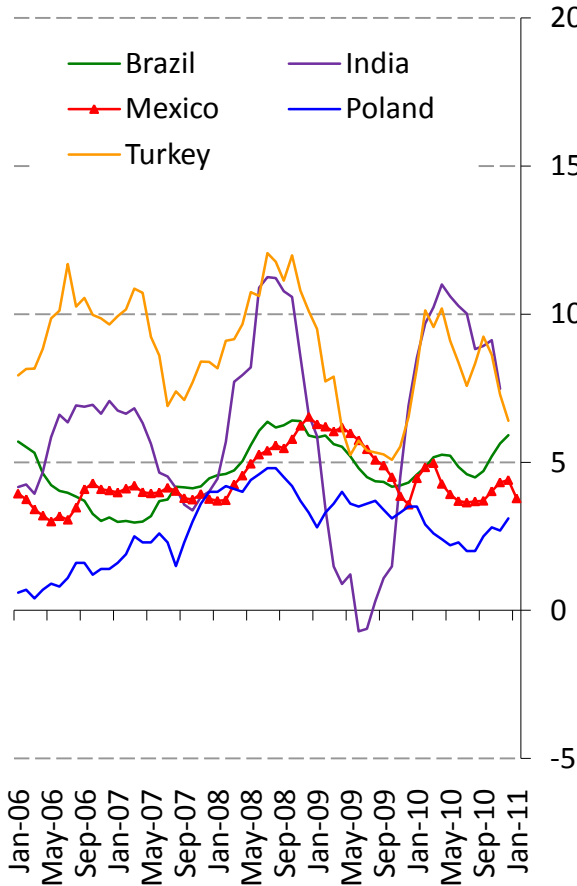


Source : BLS, Eurostat and Japan Statistics Bureau.



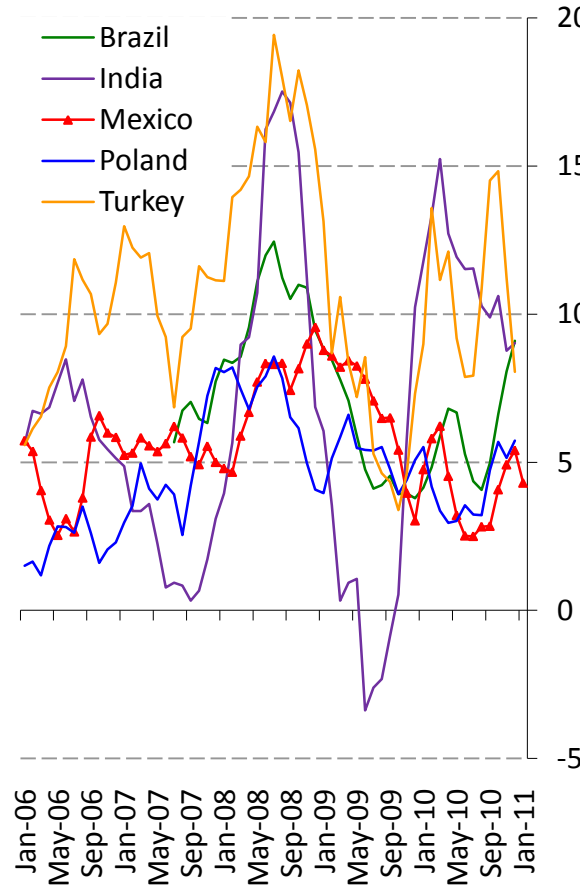
1. External Conditions

**Emerging Economies:
Headline Inflation ^{1/}**
(Annual %)



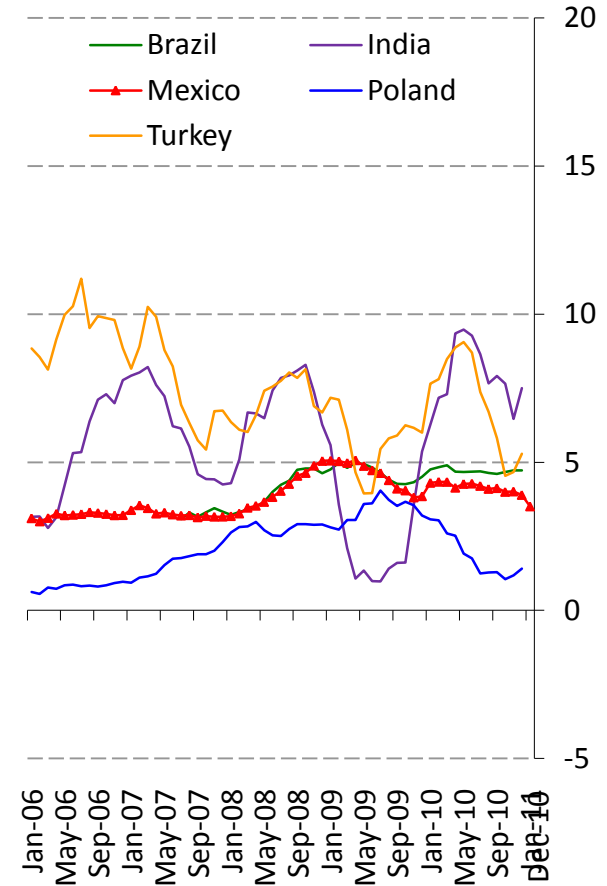
1/ For Mexico, the latest available data is for January 2011.
Source: Bloomberg and Banco de México.

**Emerging Economies: Food
and Energy Inflation ^{2/}**
(Annual %)



2/ For Mexico, the latest available data is for January 2011. Excluding tobacco.
Source: Bloomberg and Banco de México.

**Emerging Economies:
Inflation Excluding Food and
Energy ^{3/}**
(Annual %)



3/ For Mexico, the latest available data is for January 2011.
Source: Bloomberg and Banco de México.

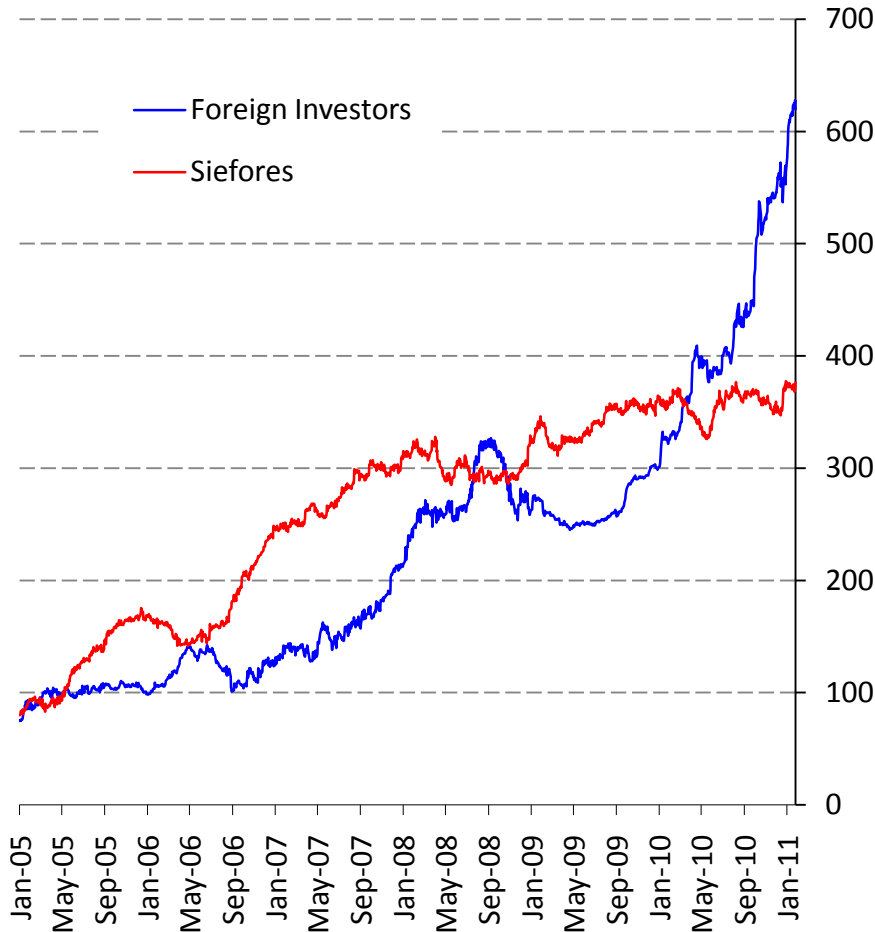
1. External Conditions

- The increase in capital flows, which in 2010 reached their highest level during at least the last 10 years, is explained mainly by:
 - ✓ *Search for yield, attributable to the global environment of high liquidity.*
 - ✓ *Improved fundamentals in emerging economies.*
- In November 2010, this process was temporarily interrupted by the fiscal and financial problems in some European countries and the corresponding increase in risk aversion.
- However, over the last two months capital flows to emerging economies have shown a new surge.



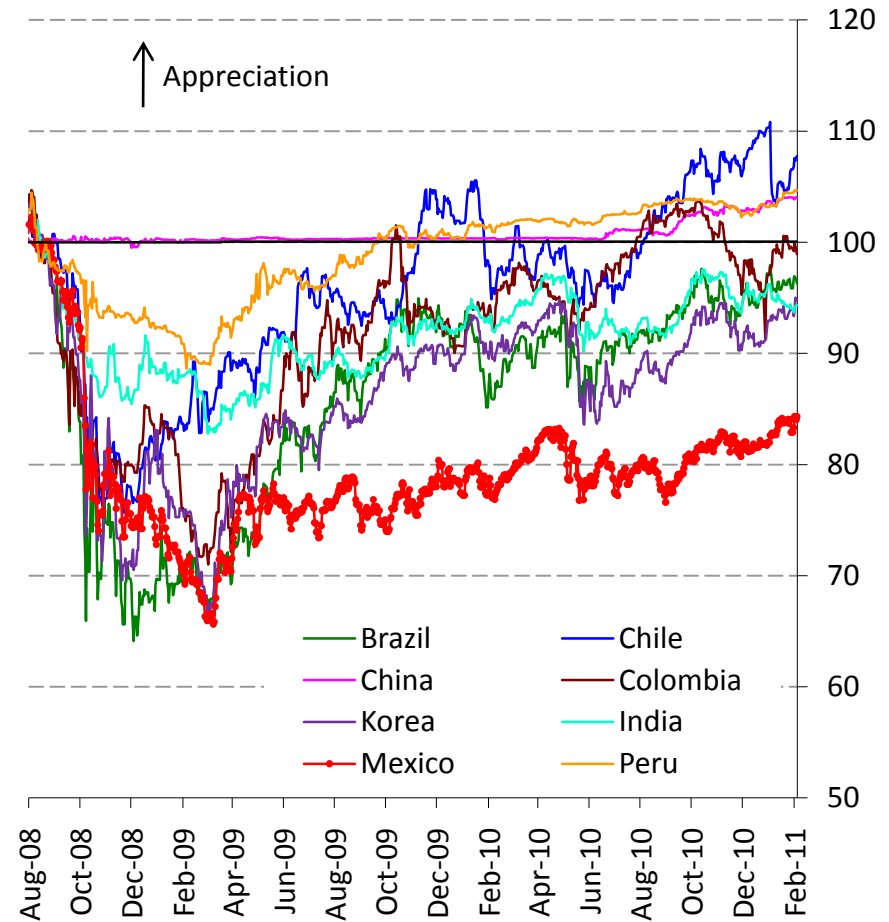
1. External Conditions

Mexico: Government Securities Holdings (Billions of Pesos)



Source: Banco de México.

Exchange Rate in Emerging Economies vs. U.S. Dollar ^{1/} (Index Aug-2008=100)



^{1/} Exchange rates in relation to USD. An increase implies an appreciation.
Source: Bloomberg.

1. External Conditions

- The size and speed of capital flows to emerging economies have generated concerns:
 - ✓ *They could induce a “non-equilibrium” appreciation of local currencies.*
 - ✓ *Formation of “bubbles” in asset prices.*
 - ✓ *But, above all, there is a risk of an abrupt reversal of flows.*
- Under this environment, in some emerging economies the monetary authorities have been facing a dilemma:
 - ✓ *On the one hand, an appreciation of their currency.*
 - ✓ *On the other, inflationary pressures, requiring a tightening of the monetary stance. This, in turn, can exacerbate the exchange rate appreciation.*

1. External Conditions

2. Economic Activity in Mexico

3. Inflation Determinants

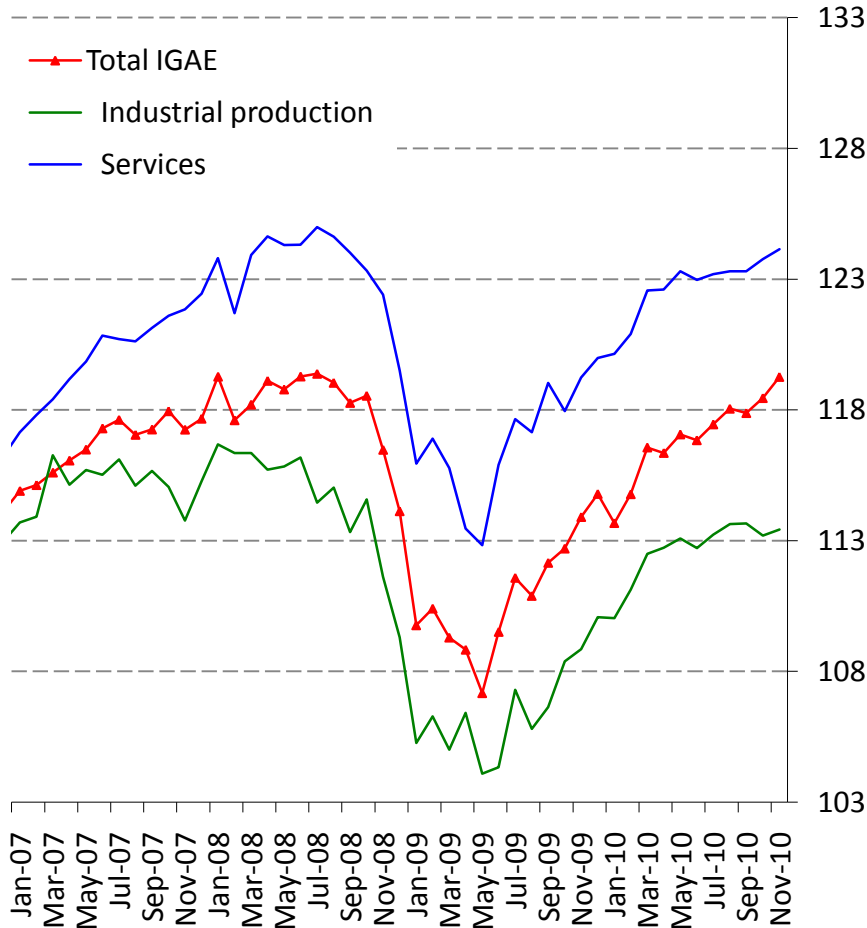
4. Forecasts and Balance of Risks



2. Economic Activity in Mexico

Economic Activity Indicators

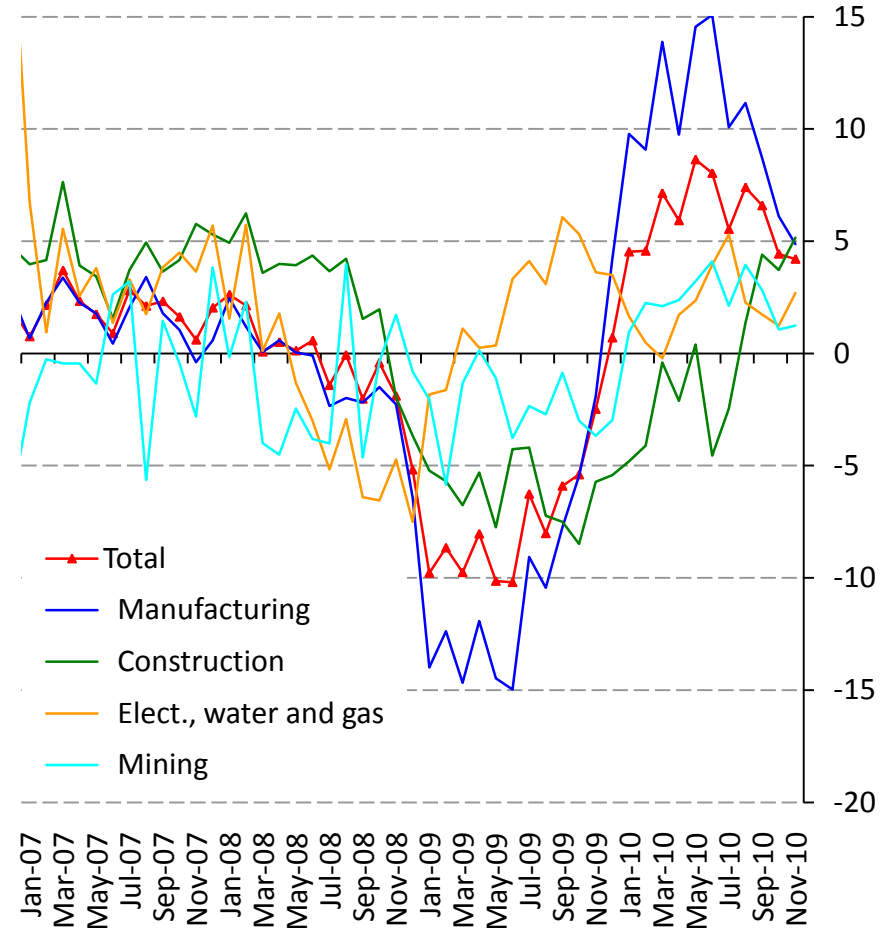
(Index 2003=100; s.a.)



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

Industrial Production

(Annual % change)

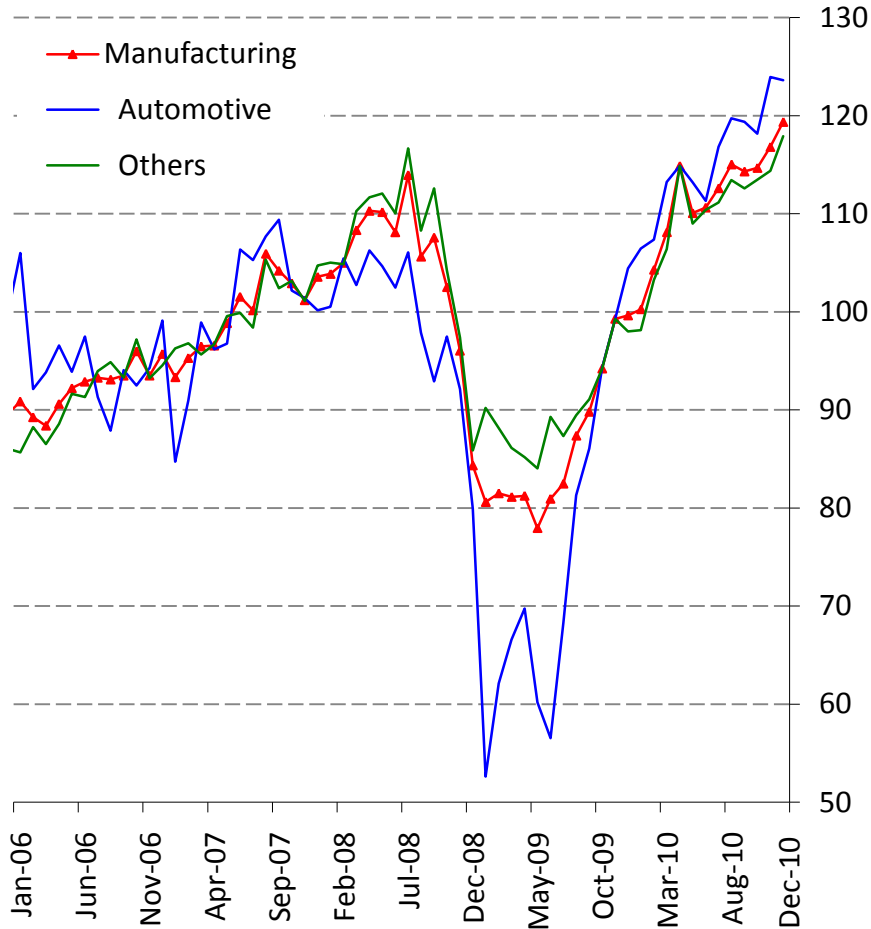


s.a./ Seasonally adjusted.
Source: INEGI.



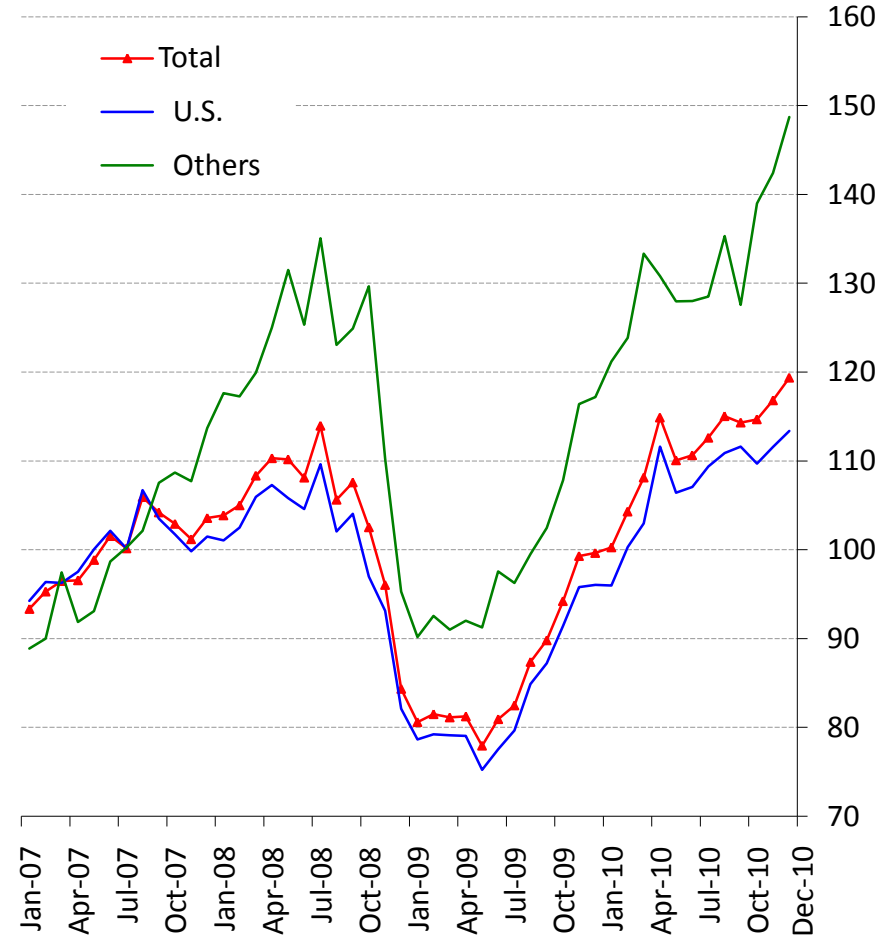
2. Economic Activity in Mexico

Manufacturing Exports (Index 2007 = 100; s.a.)



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

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



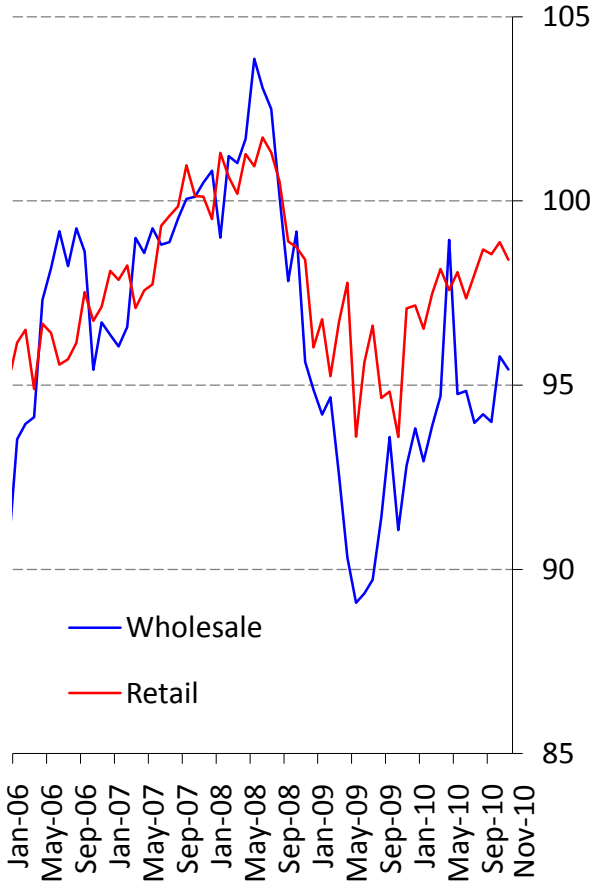
s.a./ Seasonally adjusted.
Source: Banco de México.



2. Economic Activity in Mexico

Sales in Commercial Establishments

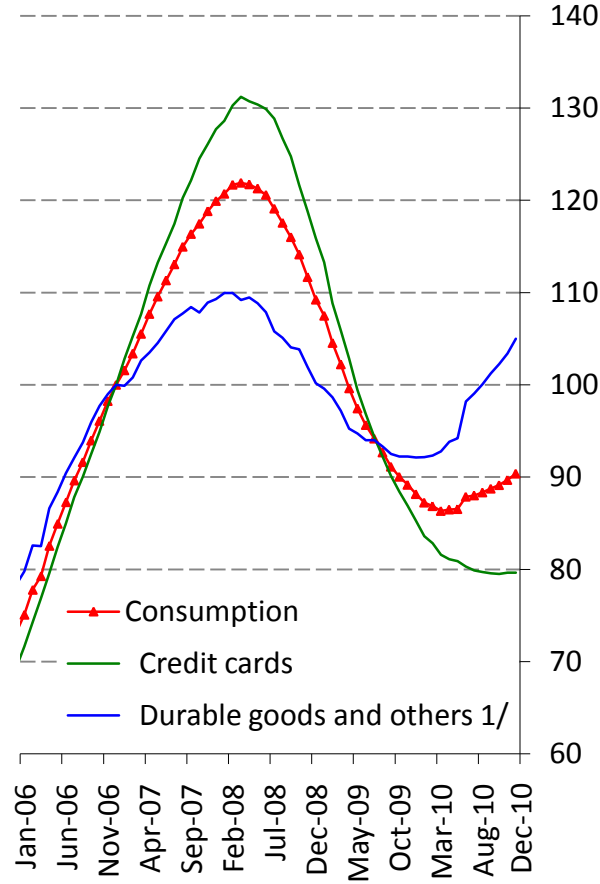
(Index 2008=100; s.a.)



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

Commercial Banks' Credit to Consumption

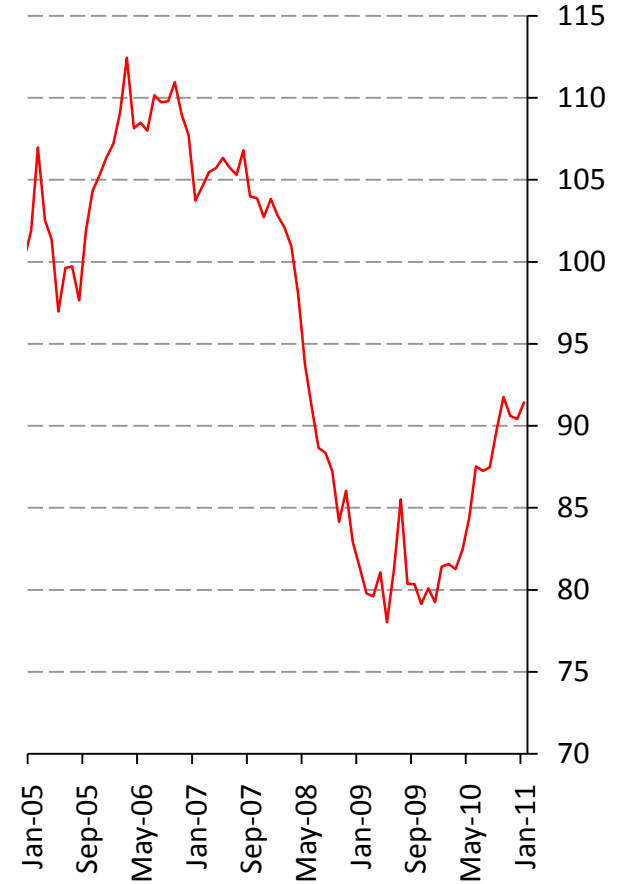
(Index Dec-2006=100; s.a.)



s.a./ Seasonally adjusted.
1/ Includes credits for automobile and real estate acquisition, for capitalized leasing, personal, and other consumption credits.
Source: Banco de México.

Consumer Confidence Index

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



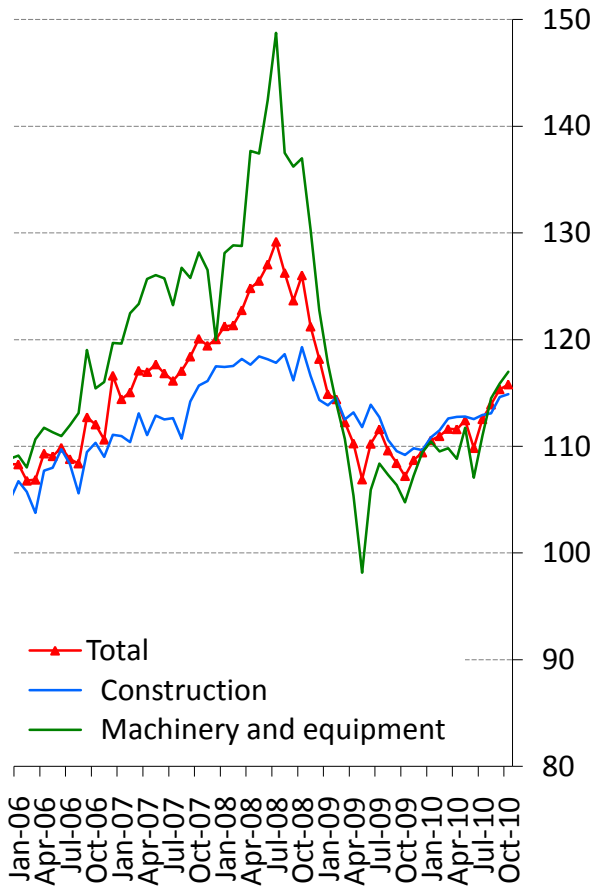
s.a./ Seasonally adjusted.
Source: Consumer Confidence National Survey, INEGI and Banco de México.



2. Economic Activity in Mexico

Gross Fixed Investment and Components

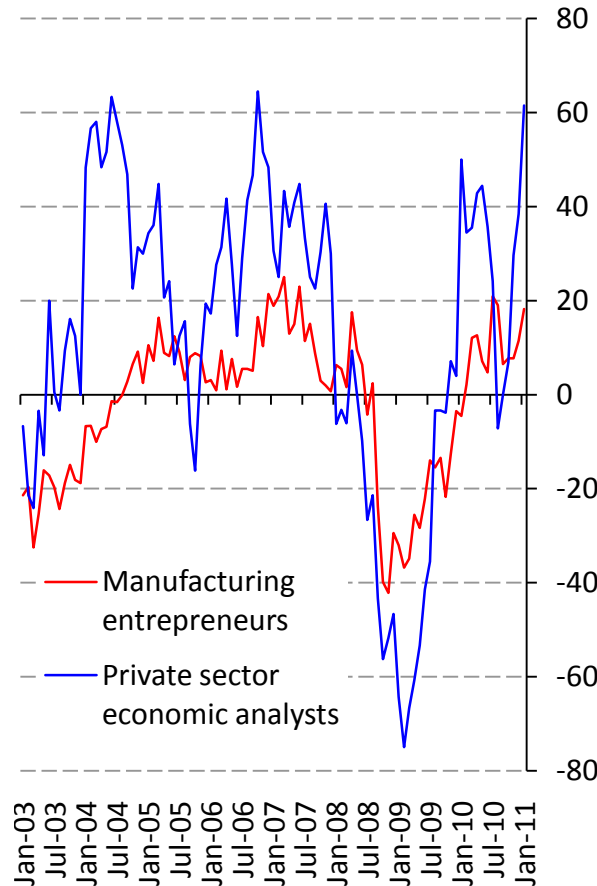
(Index 2005=100; s.a.)



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

Current Situation for Investments ^{1/}

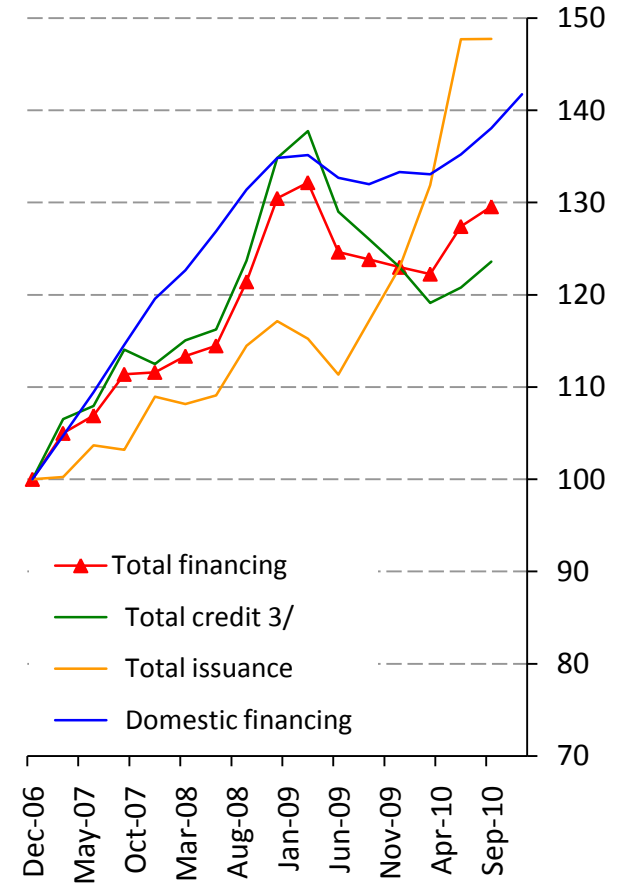
(Balance of responses: %)



1/ The balance refers to the percentage of those considering the current situation as a good moment to invest, minus the percentage of those who believe the opposite. Source: Banco de México.

Total Financing to Non-financial Private Firms ^{2/}

(Real Index Dec-2006=100; s.a.)

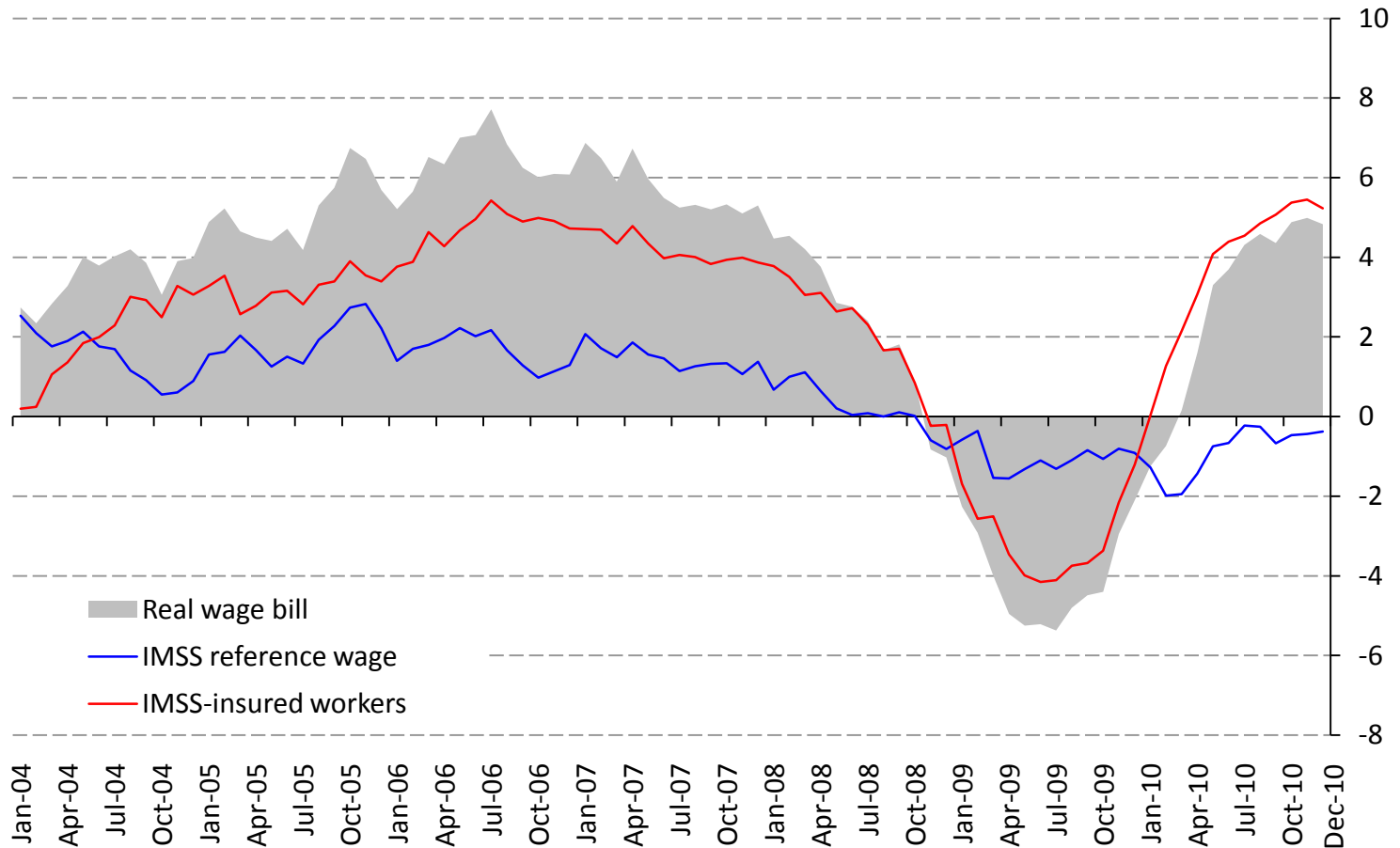


s.a./ Seasonally adjusted.
2/ Includes financing, credit and external and internal issuance.
3/ Includes credit to commercial banking, development banking and other non-financial intermediaries, as well as direct financing from foreign banks, suppliers, Ex-Im Banks and other foreign institutions.
Source: Banco de México.



2. Economic Activity in Mexico

Formal Sector Real Wage Bill
(Annual % change)



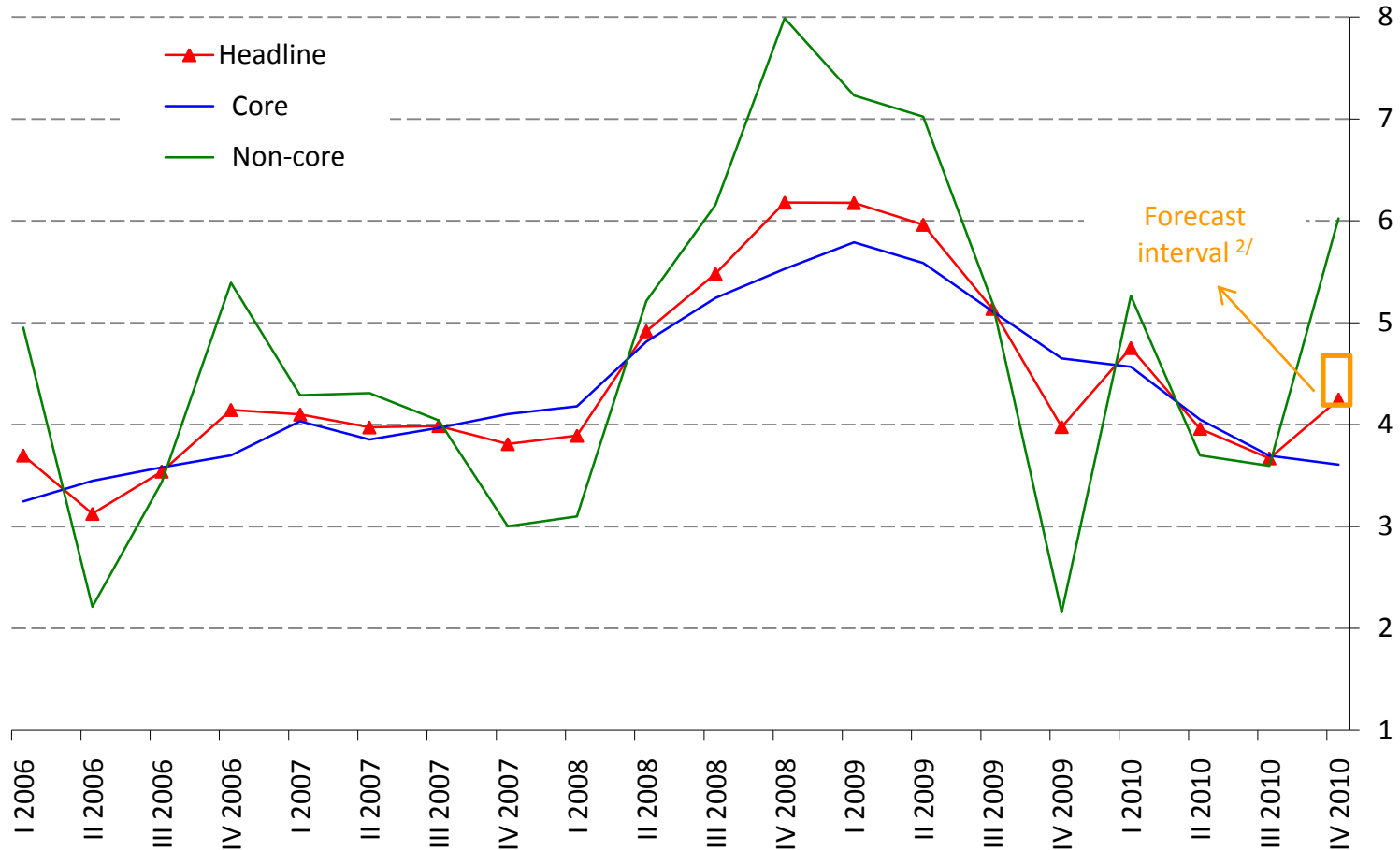
Source: Calculations by Banco de México with data from IMSS.

1. External Conditions
2. Economic Activity in Mexico
- 3. Inflation Determinants**
4. Forecasts and Balance of Risks



3. Inflation Determinants

Annual Inflation
(Quarterly average in %) ^{1/}



1/ Quarterly average of annual inflation.

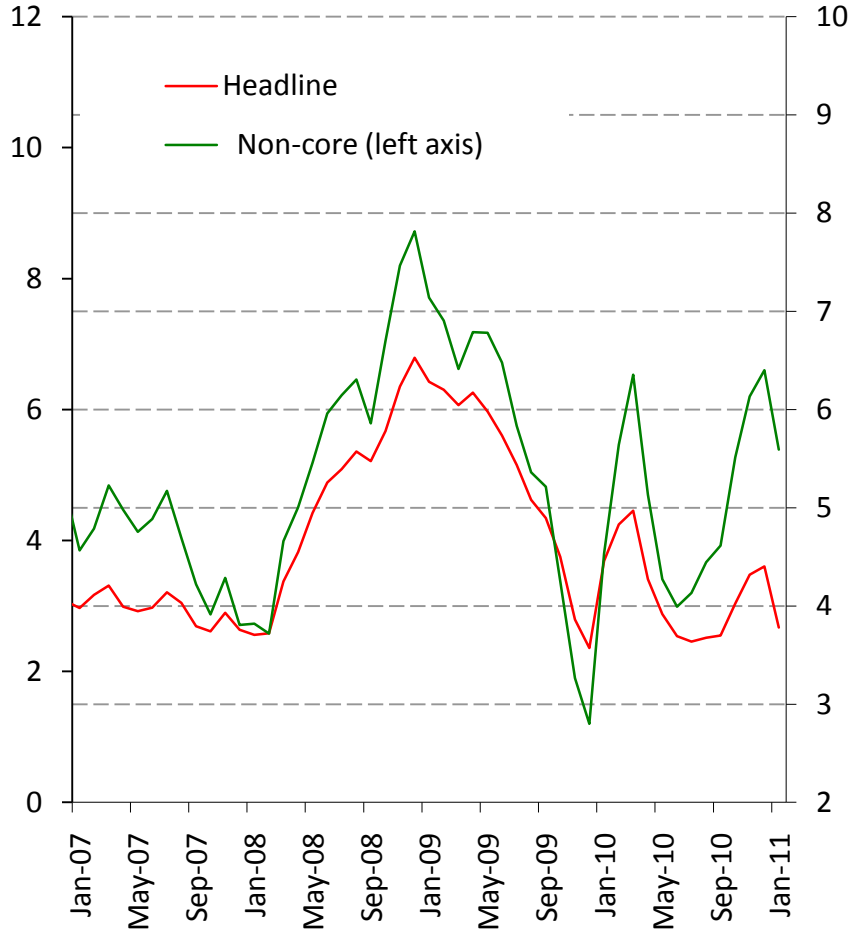
2/ Forecast published on July-September 2010 Inflation Report.

Source: Banco de México.



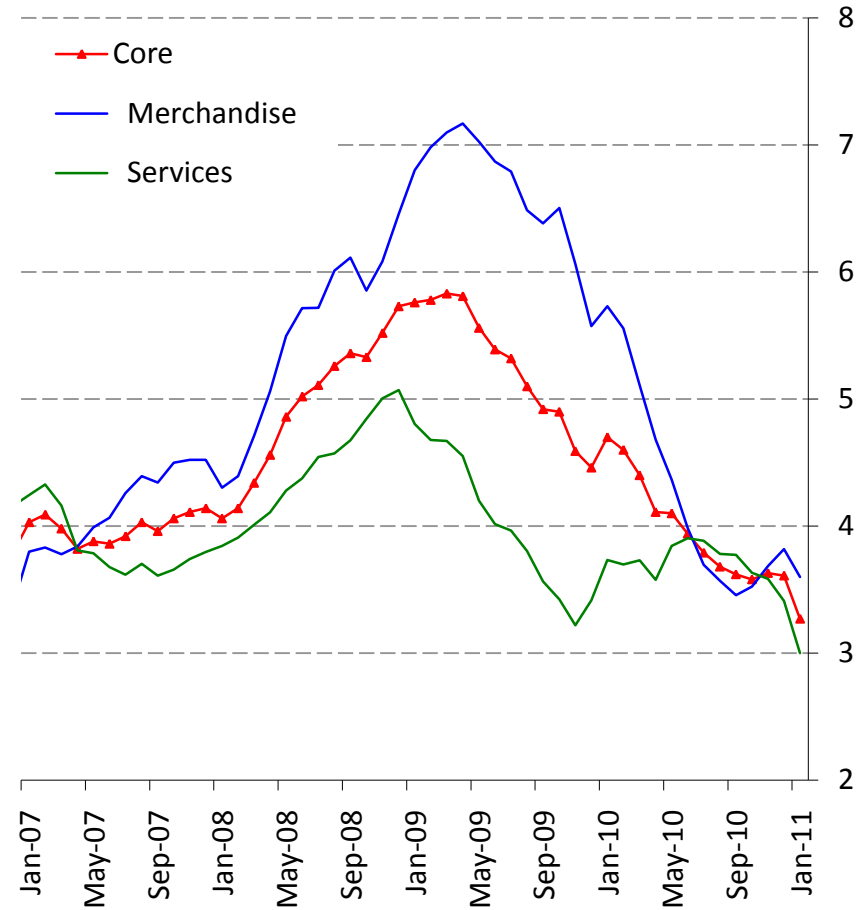
3. Inflation Determinants

Annual Inflation (%)



Source: Banco de México.

Core Annual Inflation (%)

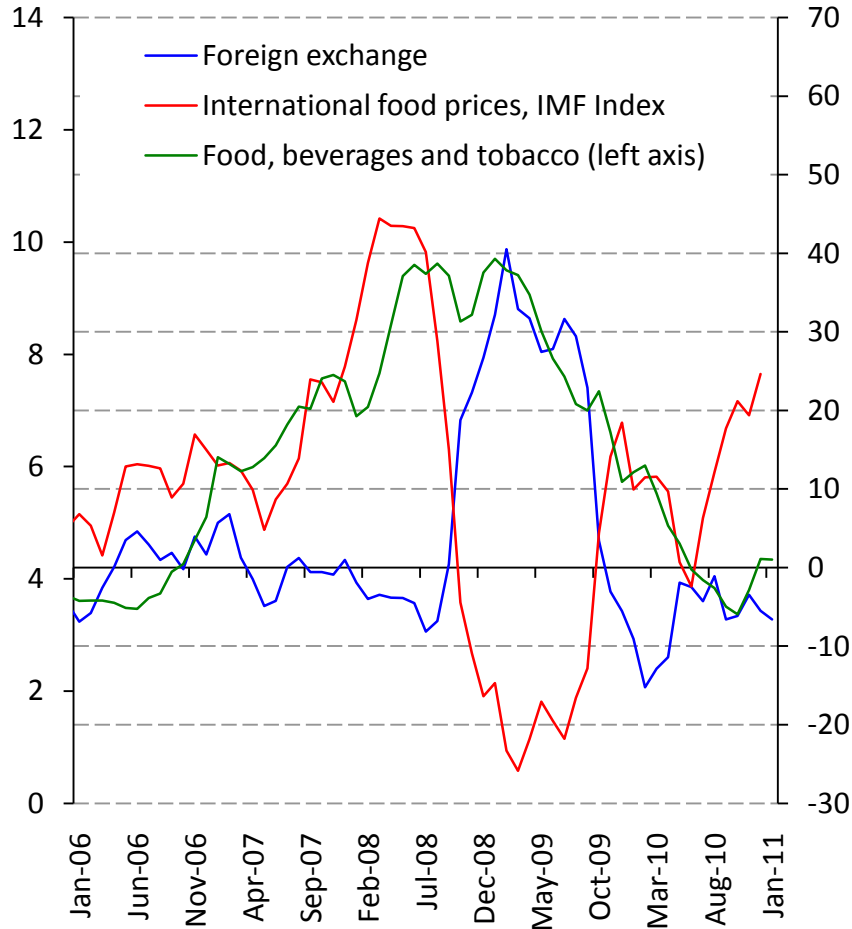


Source: Banco de México.



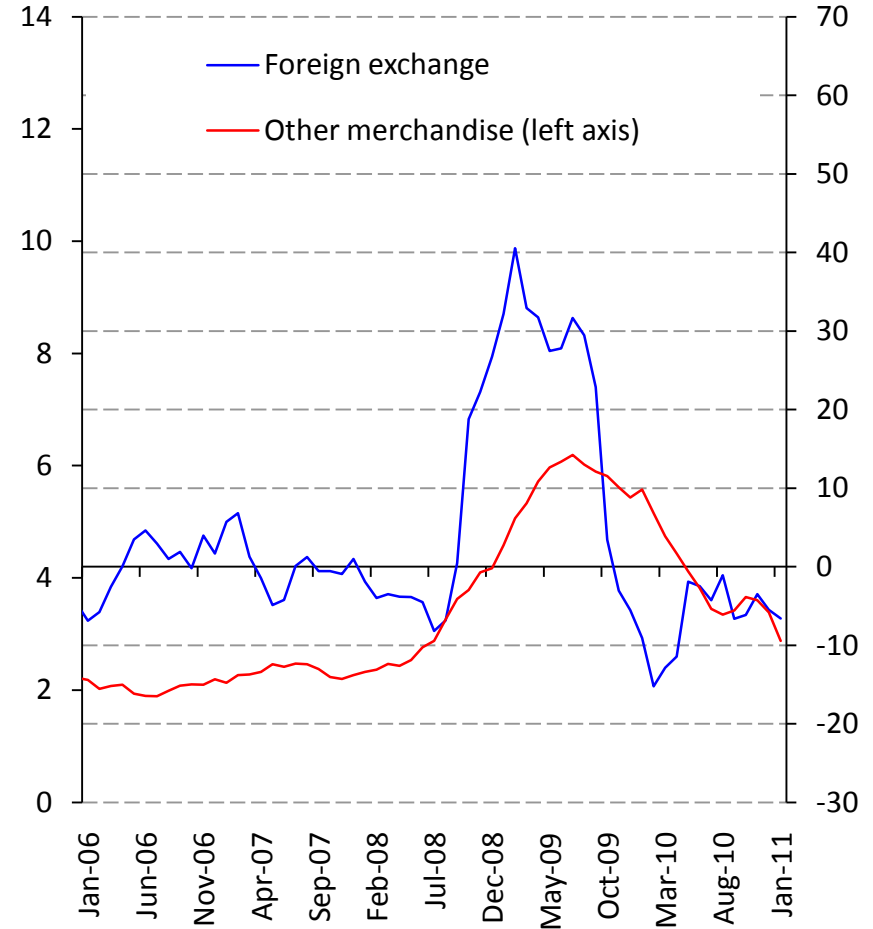
3. Inflation Determinants

Food Inflation and Foreign Exchange (Annual % change)



Source: IMF and Banco de México.

Other Merchandise Inflation and Foreign Exchange (Annual % change)



Source: Banco de México.



3. Inflation Determinants

- During 2010, CPI inflation was lower than expected at the beginning of the year. In turn, expected levels of inflation for 2011 are well below those observed in 2010.
 - ① *Moderate wage increases.*
 - ② *Moderate expansion of credit to the private sector.*
 - ③ *Negative output gap.*
 - ④ *Even though the recent increase in the international price of grains has affected the prices of foods derived from wheat and corn, this tendency has not spread to the rest of foods.*



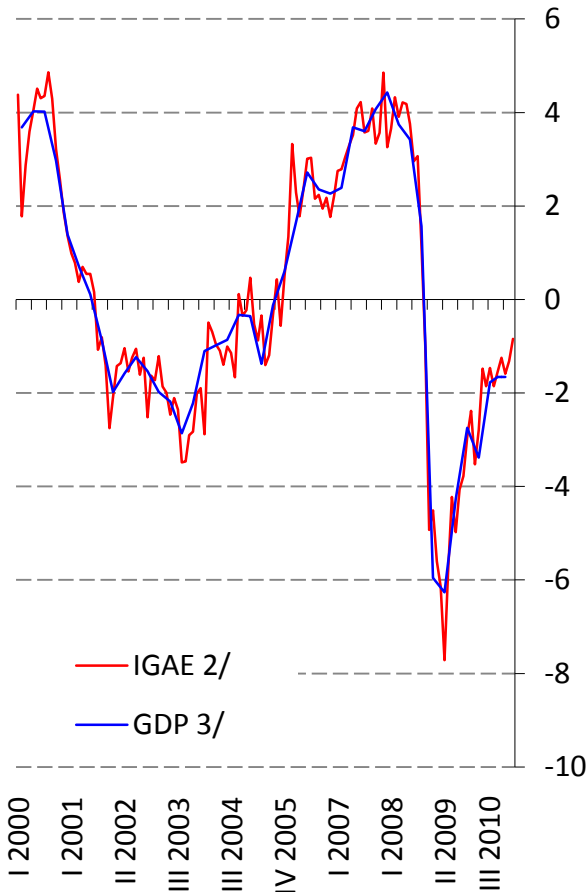
3. Inflation Determinants

- ⑤ *Reduced deficits in the external accounts.*
 - ⑥ *The appreciation of the national currency has softened the impact of the increase in international commodities .*
 - ⑦ *The longer-term inflation expectations remain anchored.*
- Indeed, the evolution of the inflation determinants has limited itself to an environment where the monetary stance is consistent with the convergence of the inflation towards its target.

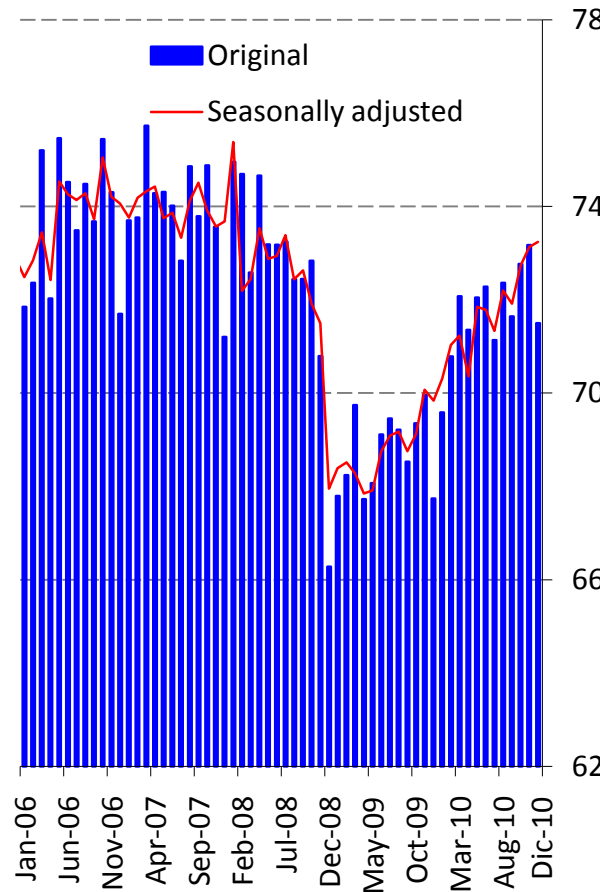


3. Inflation Determinants

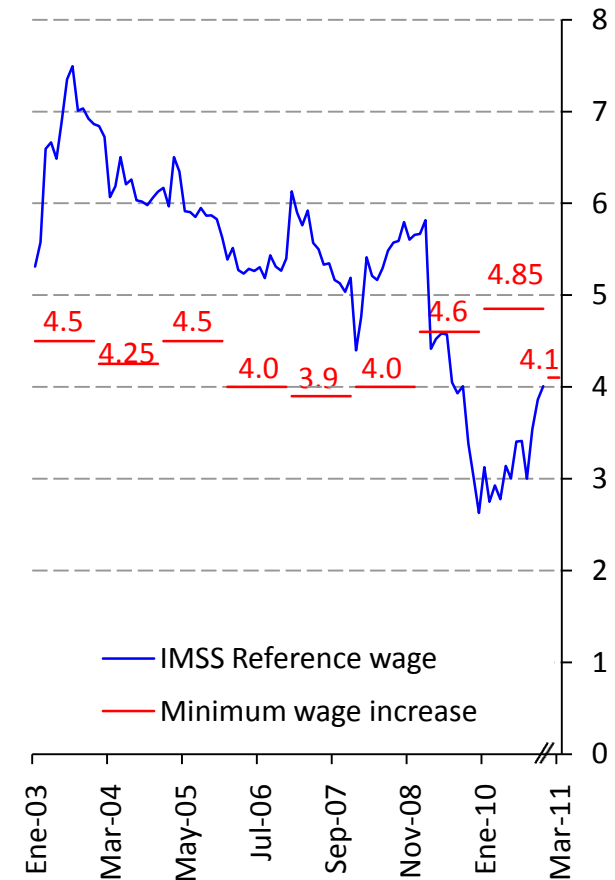
Output Gap ^{1/} (% of Trend)



Installed Capacity Utilization (%)



IMSS Reference Wage And Minimum Wage (Annual % change)



1/ The output gap was estimated using the Hodrick-Prescott (HP) method with tail corrections; see Banco de México (2009), "Inflation Report April-June," p.69.
2/ Data up to November, 2010.
3/ Data up to the third quarter of 2010.
Source: Banco de México.

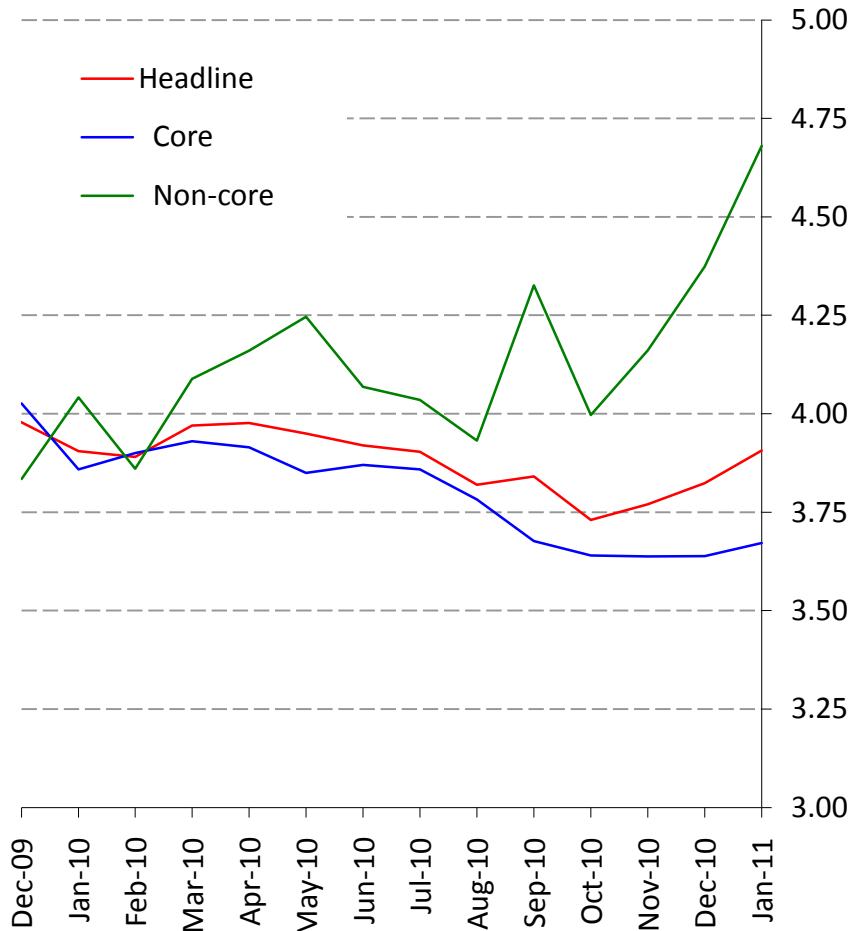
Source: Banco de México.

Source: Calculations by Banco de México with data from IMSS and Minimum Wage National Commission.



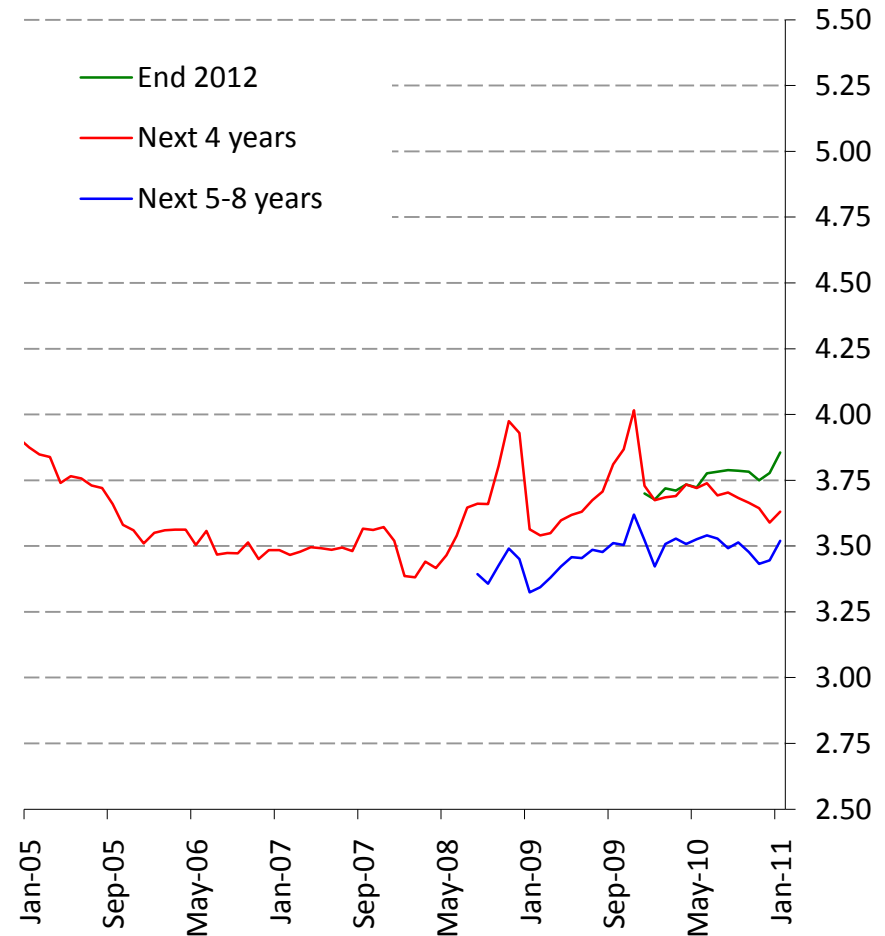
3. Inflation Determinants

Inflation Expectations for 2011 (Annual %)



Source: Banco de México's survey.

Headline Inflation Expectations (Annual %)



Source: Banco de México's survey.



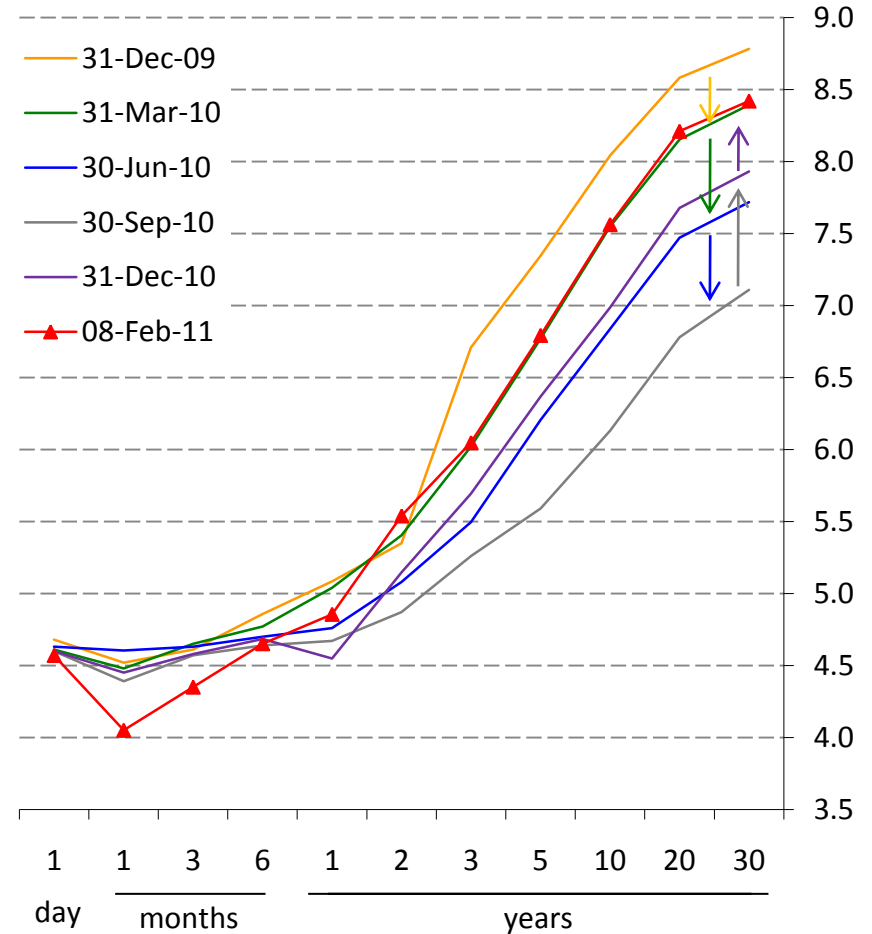
3. Inflation Determinants

Mexico's EMBI (Basis points)



Source: JP Morgan.

Mexico's Yield Curve (%)



Source: Banco de México and Proveedor Integral de Precios.



Outline

1. External Conditions
2. Economic Activity in Mexico
3. Inflation Determinants
- 4. Forecasts and Balance of Risks**



4. Forecasts and Balance of Risks

- The fundamental inflation determinant is the monetary policy stance. It operates through various channels in order to lead inflation towards its target. In this context, it is worth mentioning four elements that are expected to be relevant for the evolution of inflation and its expectations in 2011.
 - ✓ *Fading away of the impact associated to fiscal changes and fares at a federal and local level observed in the previous year.*
 - ✓ *A slower growth pace expected in the services prices, especially housing and tourism.*
 - ✓ *Absence of pressures on labor costs faced by firms.*
 - ✓ *Exchange rate performance.*



4. Forecasts and Balance of Risks

- Based on the previous considerations, the inflation forecast is:
 - ✓ *For 2011-Q1 the interval is revised downwards from 3.75-4.25% to 3.0-4.0%.*
 - ✓ *For 2011-Q2 the inflation is forecasted to be located between 3.0 and 4.0%.*
 - ✓ *From 2011-Q3 onwards the inflation is expected to converge to levels consistent with the permanent inflation target of 3%, considering the variability interval of +/- 1 percentage point.*
- The variability interval was defined given the uncertainty associated to the accurate and timely fulfillment of the 3% target. This reflects the wide range of factors that influence the development of inflation and are beyond the control of the monetary authority, in addition, as known, monetary policy affects inflation with long and variable lags.
- However, the interpretation of this interval should not be perceived as indifference on the part of the monetary authority towards different realizations of the inflation rate within it.



4. Forecasts and Balance of Risks

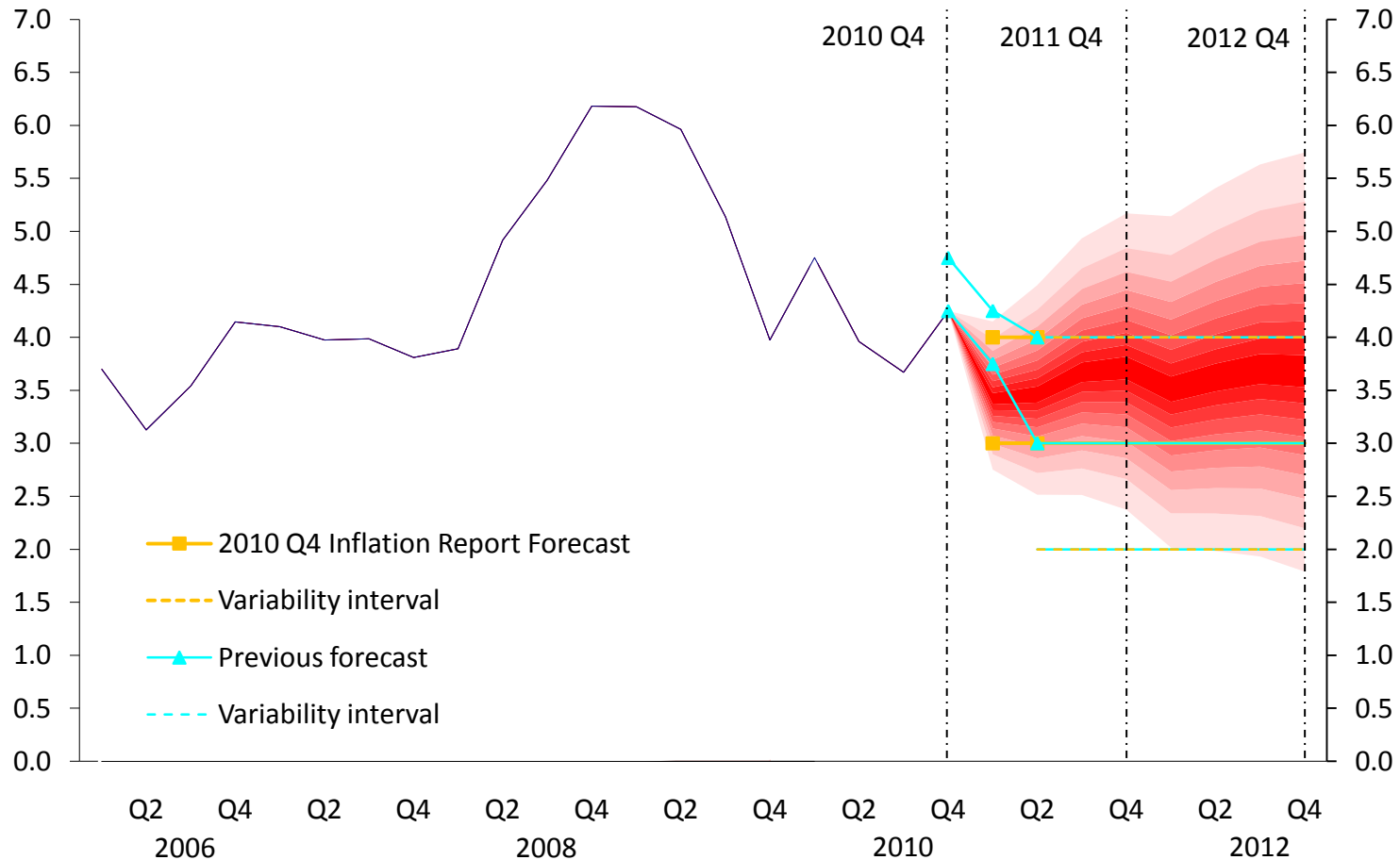
- The inflation forecast is subject to various risks:
 - ✓ *Increases higher than those forecasted in international grain prices.*
 - ✓ *The growth rate of goods and services prices, whose fares are determined by local governments.*
 - ✓ *Higher vulnerability to costs shocks, in an environment where the output gap has been closing.*
 - ✓ *Exchange rate volatility due to a reversal of capital flows.*

- The uncertainty of the inflation forecast is illustrated by the Fan Charts for the headline and core inflation.



4. Forecasts and Balance of Risks

Fan Chart: Headline Annual Inflation ^{1/}
(Quarterly average in %)



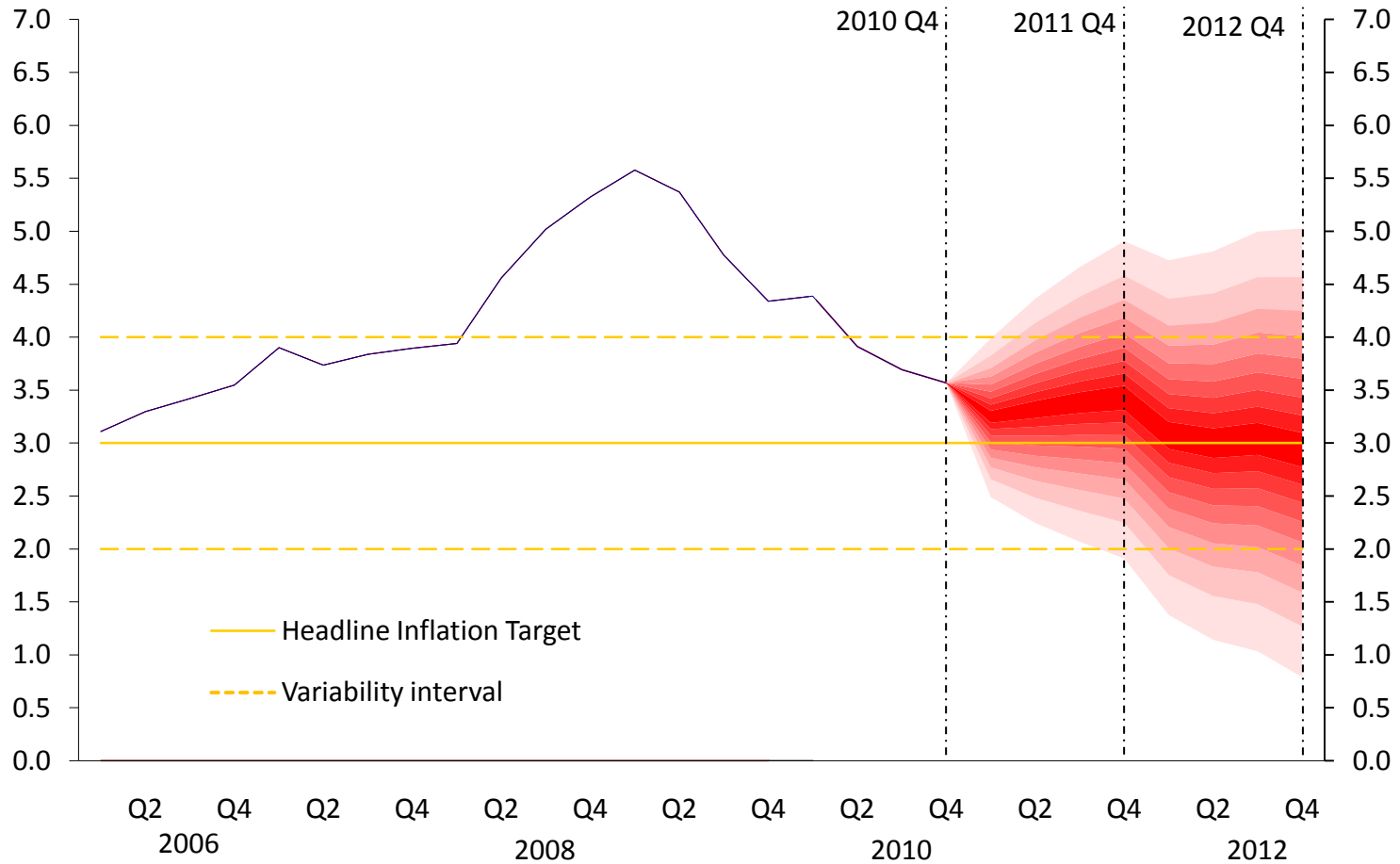
1/ The Fan Chart illustrates the probability of realization of the annual headline inflation forecasts along the forecasted horizon. The darker shaded area represents the forecast with the highest probability of realization. The bands on each side of the same color but in lighter shades accumulate together 10 percent of probability. Thus, each pair of bands with increasingly lighter shades accumulates an additional 10 percent successively, until reaching 90 percent of probability.

Source: Banco de México.



4. Forecasts and Balance of Risks

Fan Chart: Core Annual Inflation ^{1/}
(Quarterly average in %)



1/ The Fan Chart illustrates the probability of realization of the annual core inflation forecasts along the forecasted horizon. The darker shaded area represents the forecast with the highest probability of realization. The bands on each side of the same color but in lighter shades accumulate together 10 percent of probability. Thus, each pair of bands with increasingly lighter shades accumulates an additional 10 percent successively, until reaching 90 percent of probability.

Source: Banco de México.



4. Forecasts and Balance of Risks

- In sum, it is expected that:
 - ✓ *Headline inflation will hover between 3 and 4% in 2011 and 2012.*
 - ✓ *Core inflation will be located under 3.5% in 2011 and around the headline inflation target of 3% during 2012.*
- The difference projected in the trajectories of the headline and core inflation is due to the non-core component:
 - ✓ *The policy of increments of energy prices aimed at reducing the existing gap between these and their international references, given the increase of the latter ones. This policy strengthens public finances, which are essential to maintain a low inflation environment.*
 - ✓ *Revisions of different fares authorized by local governments.*
 - ✓ *Contribution of fruit and vegetables prices, given the biannual pattern they show.*



4. Forecasts and Balance of Risks

■ GDP Growth:

- ✓ *The economy is expected to have registered an expansion of 5.4% in 2010.*
- ✓ *GDP growth is expected to be between 3.8 and 4.8% in 2011 and 2012.*

■ Employment:

- ✓ *The creation of between 600 and 700 thousand new formal jobs is estimated for 2011.*
- ✓ *For 2012, the generation of between 600 and 700 thousand new formal jobs is expected.*

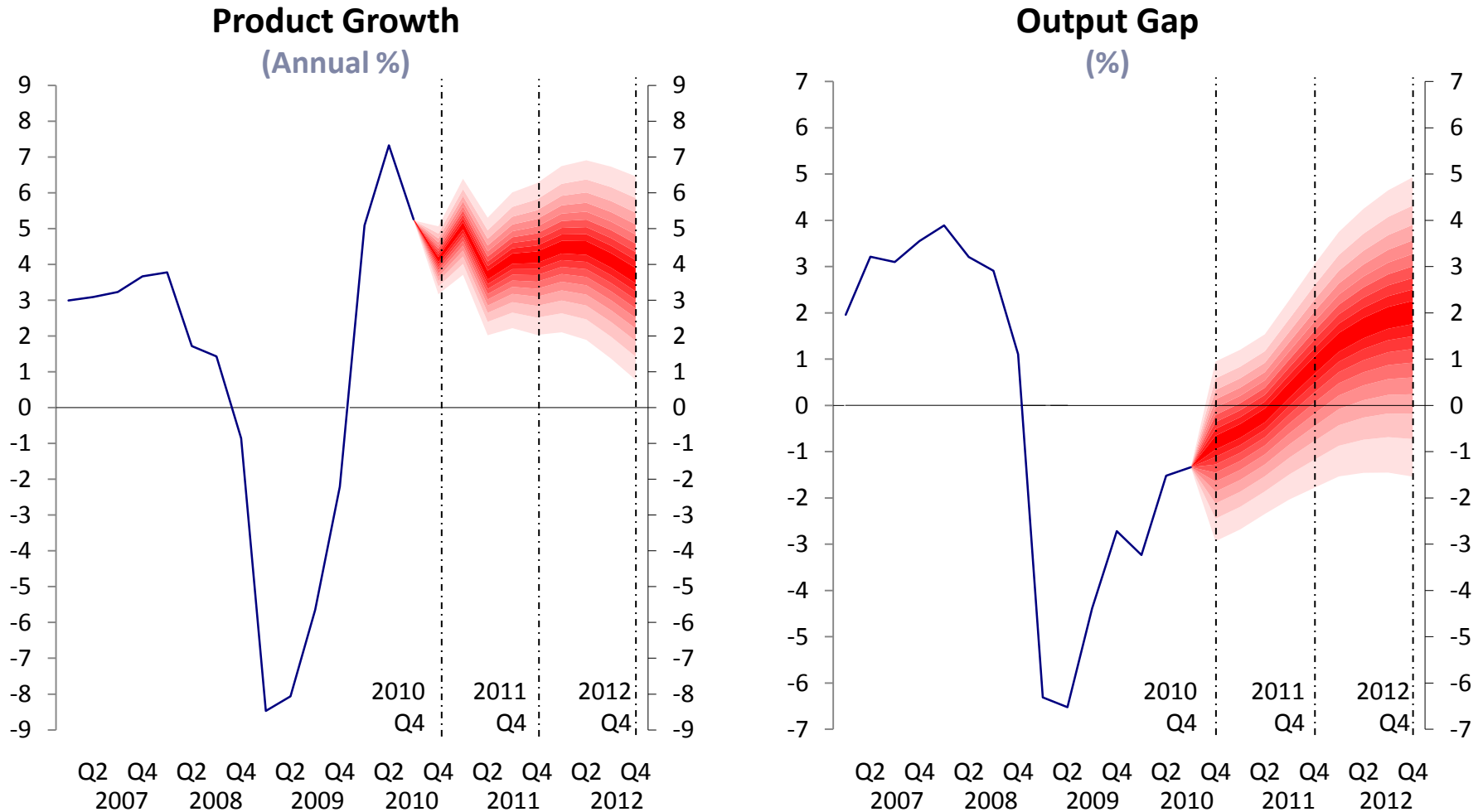
■ Current Account:

- ✓ *For 2010, a 5.4 billion USD deficit is estimated (0.5% of GDP).*
- ✓ *For 2011, a 14.2 billion USD deficit is estimated (1.2% of GDP).*



4. Forecasts and Balance of Risks

Fan Chart ^{1/}



1/ The Fan Chart illustrates the probability of realization of the annual growth and output gap forecasts along the forecasted horizon. The darker area represents the forecast with the highest probability of realization. The bands on each side of the same color but in lighter shades accumulate together 10 percent of probability. Thus, each pair of bands with increasingly lighter shades accumulates an additional 10 percent successively, until reaching 90 percent of probability.

Source: Banco de México.



4. Forecasts and Balance of Risks

- Despite the improvement of a number of economic indicators, the external conditions have continuously changed and important risks remain:
 - ✓ *Fiscal vulnerability in some European countries.*
 - ✓ *The financial system still depends on the economic stimulus in the major advanced economies.*

- Mexico has maintained sound macroeconomic policies and has taken steps in order to strengthen its financial position:
 - ✓ *Fiscal stance consistent with low and stable inflation.*
 - ✓ *Monetary policy conducive to the convergence of inflation towards the target of 3%.*
 - ✓ *International reserves accumulation.*
 - ✓ *Renewal of the Flexible Credit Line (FCL) with the IMF.*



4. Forecasts and Balance of Risks

- A complicated scenario in the coming years for global economic growth is foreseen.

- Therefore, it is necessary to strengthen the internal sources of growth with domestic public policies that favorably affect the productivity.
 - ✓ *Labor reform*

 - ✓ *Reform in Anti-trust regulation*

 - ✓ *Telecommunications reform*

 - ✓ *Energy sector reform*



4. Forecasts and Balance of Risks

- The Board of Governors will continue monitoring the performance of inflation expectations, output gap, public prices, particularly grain prices, as well as other inflation determinants that might signal unexpected and widespread pressures on prices.
- In such eventuality, the Central Institute will adequately adjust its monetary stance in order to reach the permanent 3% inflation target.