BBVA Research

# Mexico Economic Outlook

## Fourth Quarter 2011

Mexico City. November 9, 2011

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# Deterioration of the global environment since the summer

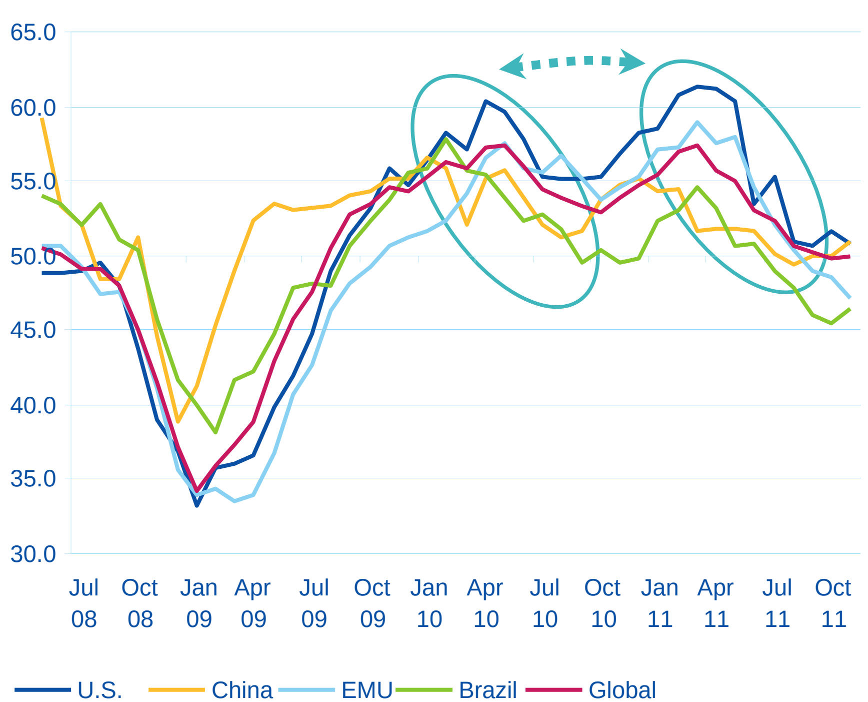
Since the summer there has been a **general slowdown in economic activity**, above all in the **most advanced economies**.

Despite the fact that it was due in part to **temporary factors** (the Japanese earthquake, the upturn in oil prices), **it increased uncertainty** about the cyclical prospects as it coincided with the **problems in resolving the European debt crisis** and the lack of a fiscal agreement in the U.S.

Title

**Expectations of economic activity (PMI)**

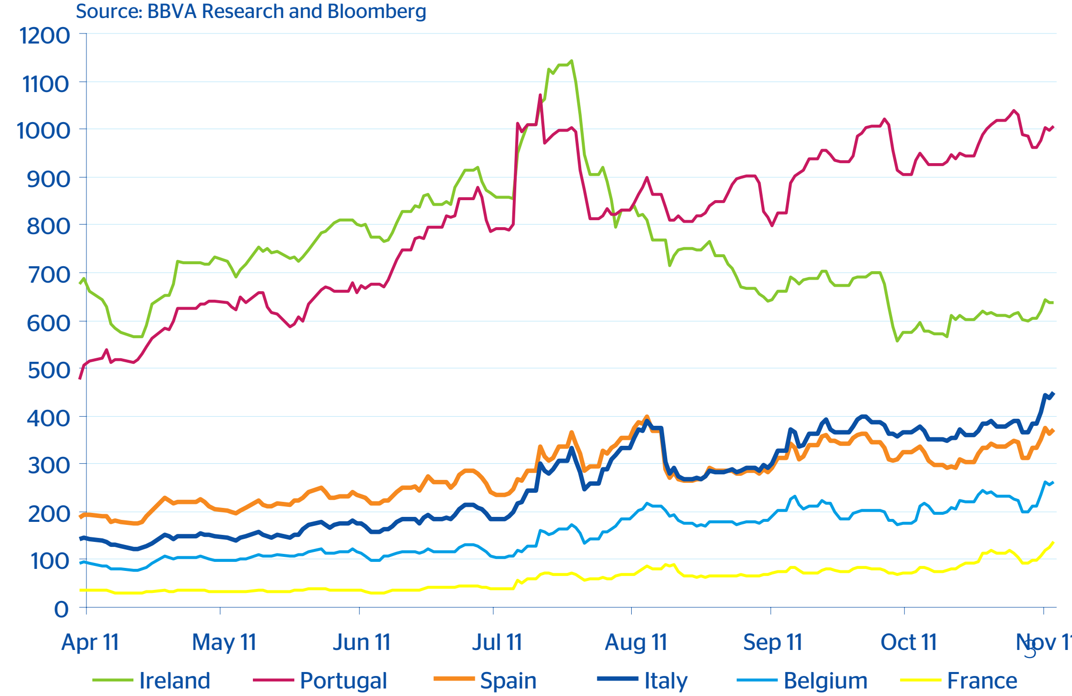
Source: BBVA Research and Bloomberg




**Sovereign risk in Europe**

**Spread with the German 10-year Bund**

Source: BBVA Research and Bloomberg

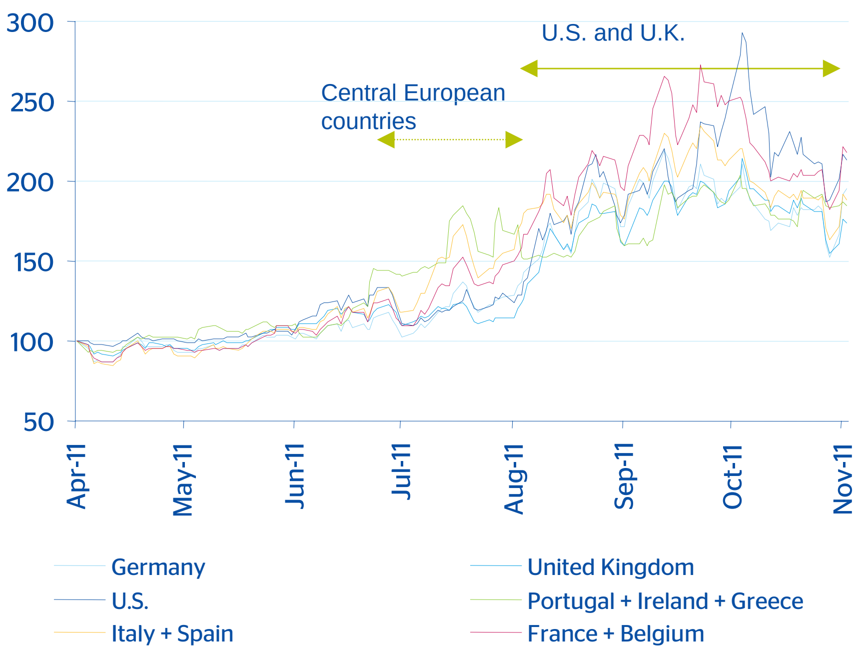


# Deterioration of the global environment since the summer

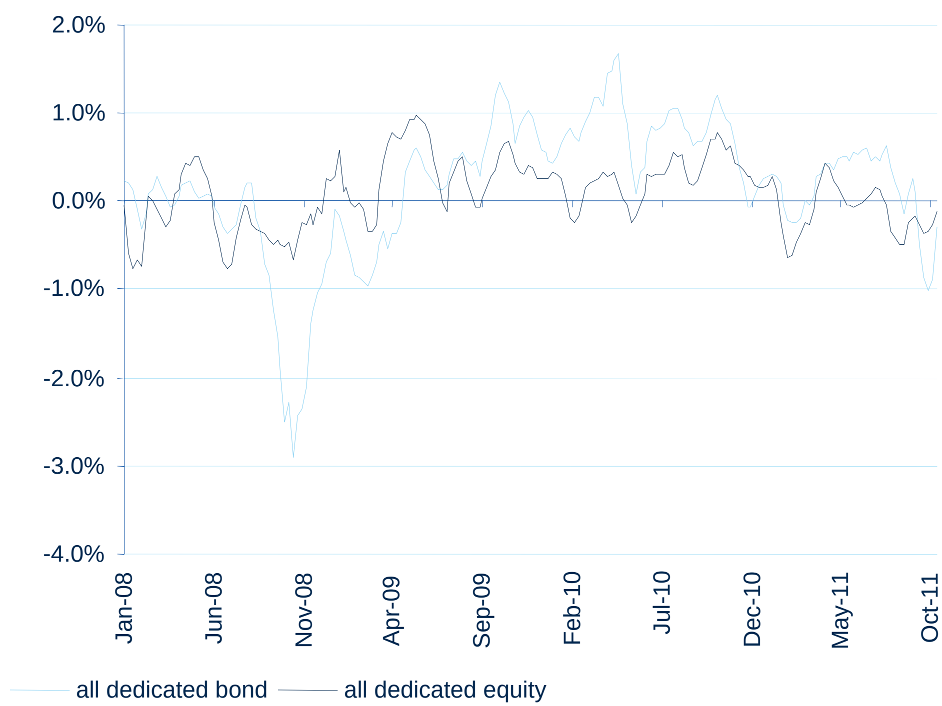
The **lack of a resolution to the sovereign debt crisis** in Europe has increased **bank risk** in a vicious circle that at the same time increases the **risk of a cyclical downturn** due to a lack of credit supply and the negative shock on the confidence of economic agents.

**Risk aversion** in the most developed economies **reduces flows to emerging markets**. This deteriorates their financing conditions.

### Banks' Financial Risk
CDS Spread, change since April 1, 2011
April 1 = 100
Source: BBVA Research and Datastream




### Fund flows to emerging economies
Percentage of assets under management, four-week average
Source: BBVA Research and EPFR



# Global growth will continue to be supported mainly by emerging economies

The weak macro data since the summer imply a **downward review of the forecasts in the core growth scenario**, above all in developed economies.

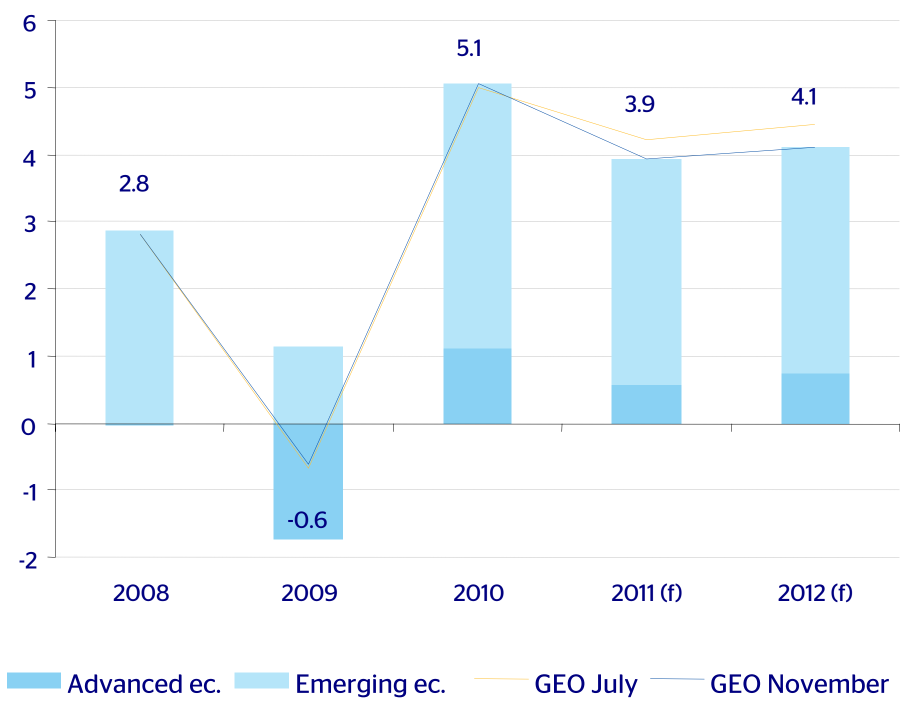
- There is a greater possibility of a risk scenario due to the European crisis

**Emerging economies** are registering corrections in their financial markets, although confidence does not appear to be affected.

- The deterioration in the foreign environment is a check on emerging economies, but it reduces the previous risks of overheating. **A "soft landing"** continues to be the base scenario in Latin America and China

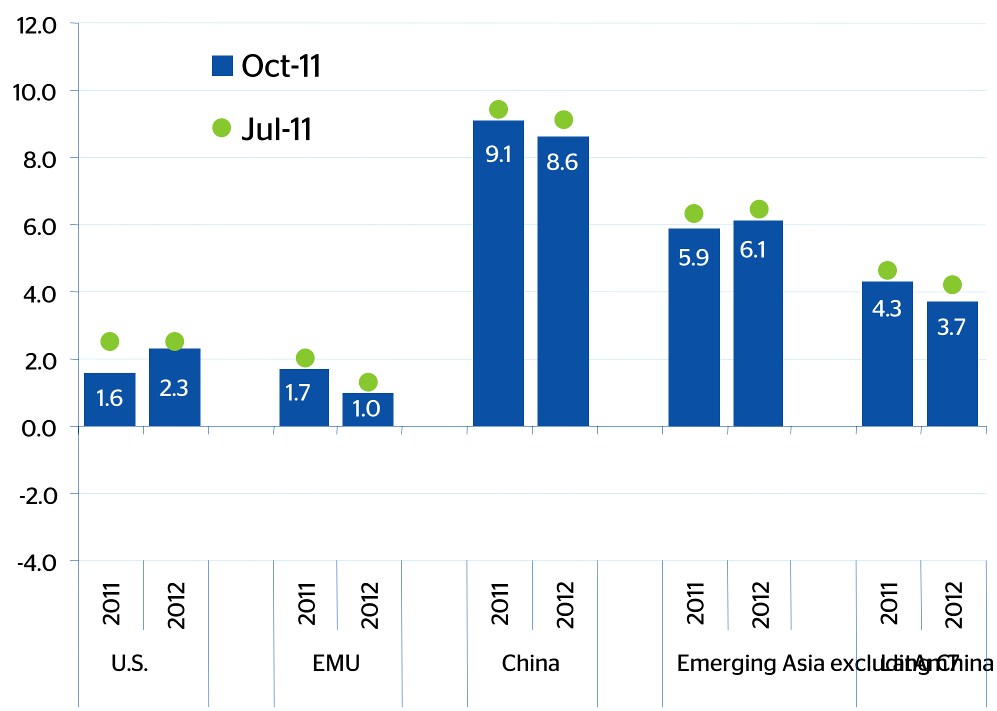
## Contribution to global growth

Source: BBVA Research




## GDP growth (y/y %)

Source: BBVA Research



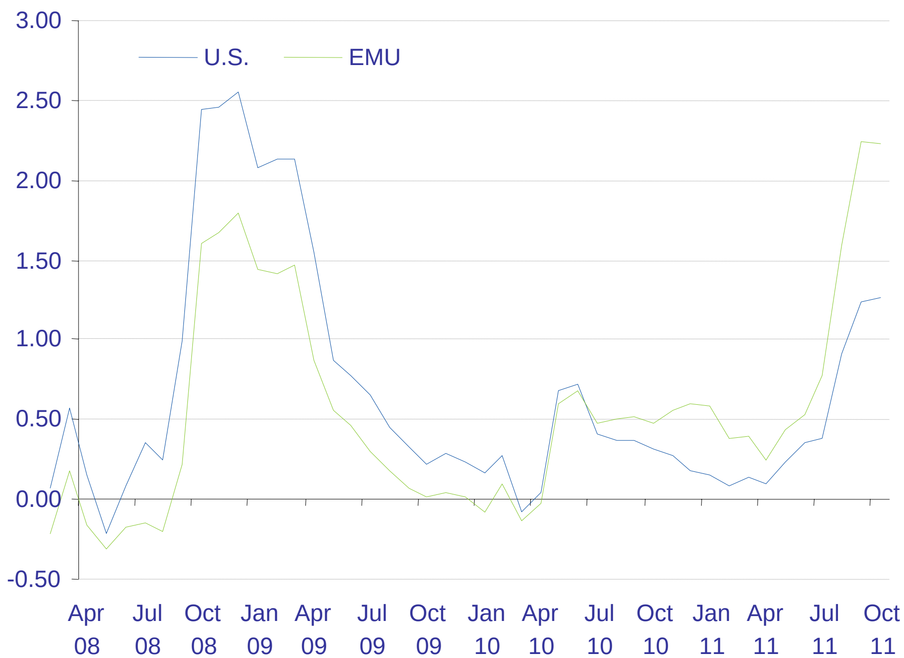
# Some elements of a risk scenario are already in place

**Greater financial tensions** contribute to **reducing growth** with a time lag of up to a year behind the U.S. and EMU.

Consistently high financial tensions at October levels may **cut US growth more than a percentage point in 2012 (*)**.

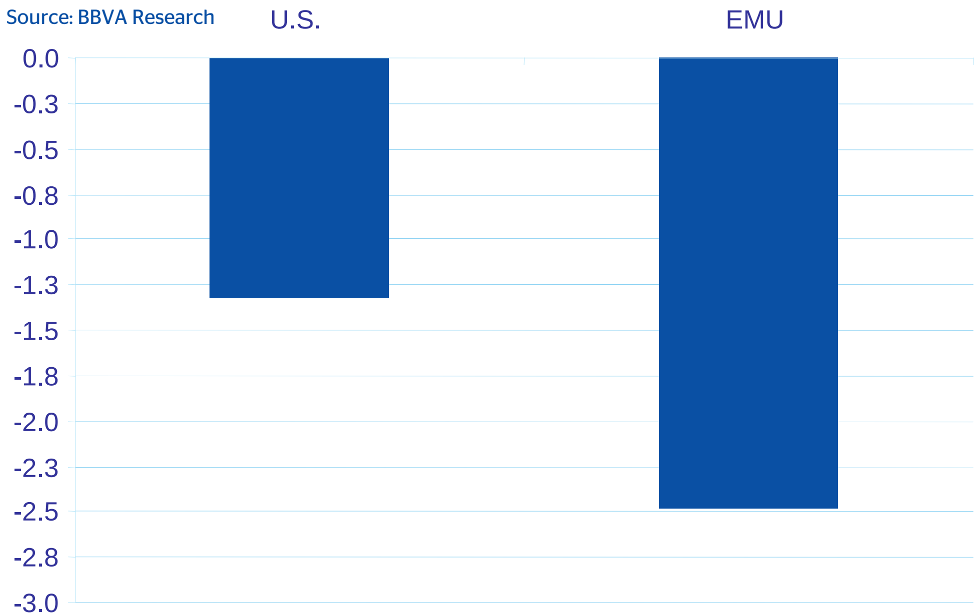
## BBVA Index of Financial Stress

Source: BBVA Research




## Impact on GDP in 2012 of a permanent shock on the BBVA Index of Financial Stress

Source: BBVA Research




(*) The impact noted in the chart is not the potential downward revision of the forecasts in a risk scenario, as the base scenario already includes part of the increase in financial tension

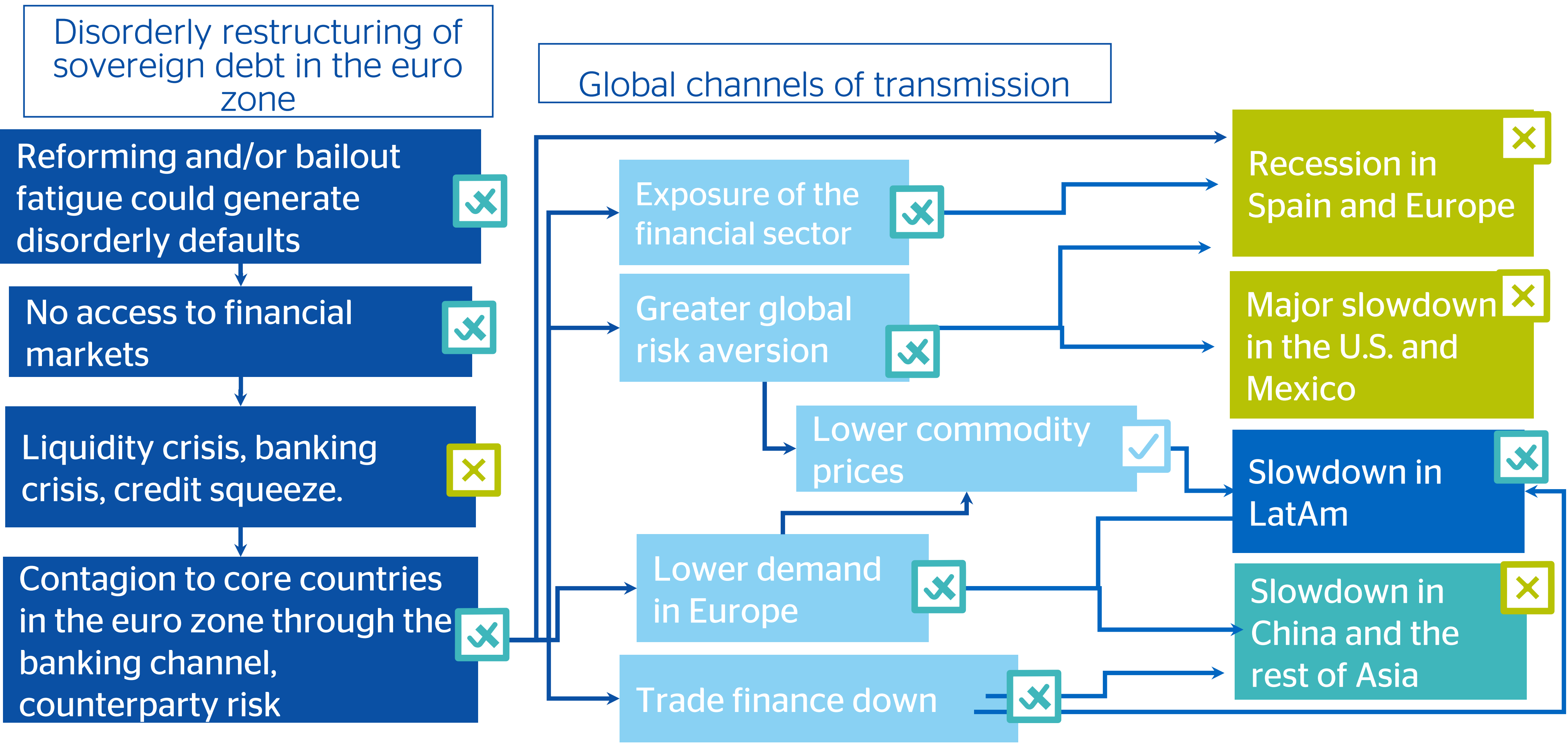
# Some elements of a risk scenario are already present

The sovereign debt crisis, aggravated by management that leaves great room for improvement, challenges the viability of monetary union and represents a very significant negative global impact.

Materialized

Materialized in part

Not materialized



# The European sovereign debt crisis is still the main risk for the global scenario

The recent agreements in Europe were only a **partial solution** to the three main issues under discussion: **the solvency of the Greek debt**, **improvement** of the temporary crisis resolution mechanism (**EFSF**) and **bank recapitalization**.

**Uncertainty with respect to the final** implementation of these issues remain high. Reform or bailout fatigue will maintain financial tension in Europe high.

| What was expected | Achieved? | Result |
|---|---|---|
| Clear response to the sustainability of Greek government debt | | Greater participation by the private sector (PSI), 50% haircut. Doubts about external participation |
| Stronger barriers against financial contagion to other peripherals | | The EFSF is leveraged as a guarantee fund and an investment vehicle. There are doubts about its real capacity |
| Boost to economic reforms | | Pressure on Italy for necessary reforms. Doubts about their implementation |
| Strengthening of the banking sector (capital and liquidity) | | A general recapitalization is inefficient |
| Progress in governance in the euro area | | No plan to achieve fiscal unity and no mention of eurobonds |

# The measures required to solve the European debt crisis

The sovereign debt crisis and its deficient management challenge the viability of monetary union.
In the **short term**, the euro zone has to **separate insolvent countries from illiquid ones** and **isolate the latter**.
In **the long term** the least risky approach could be to make progress towards **fiscal union**, with a reduction of individual sovereignty in this respect.

## Necessary short-term measures

- Distinguish liquidity from solvency. Isolate and reform the most exposed economies, such as Italy
- Solve liquidity problems by breaking the vicious circle between banks and sovereign debt
- Restructure the banks' balance sheets

Restructure the Greek debt. Isolate the problem of solvency

EFSF: conditional support to economic reforms

ECB: lender of last resort

Focused stress tests

## Possible long-term solutions

- In any event, greater public and private supervision
    1. **Develop the existing treaty**
    2. **Fiscal union**: a major agreement to transfer fiscal sovereignty
- **Risk scenario**: break-up of the euro

**It is mainly a political decision**

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# Slowdown due to external factors...

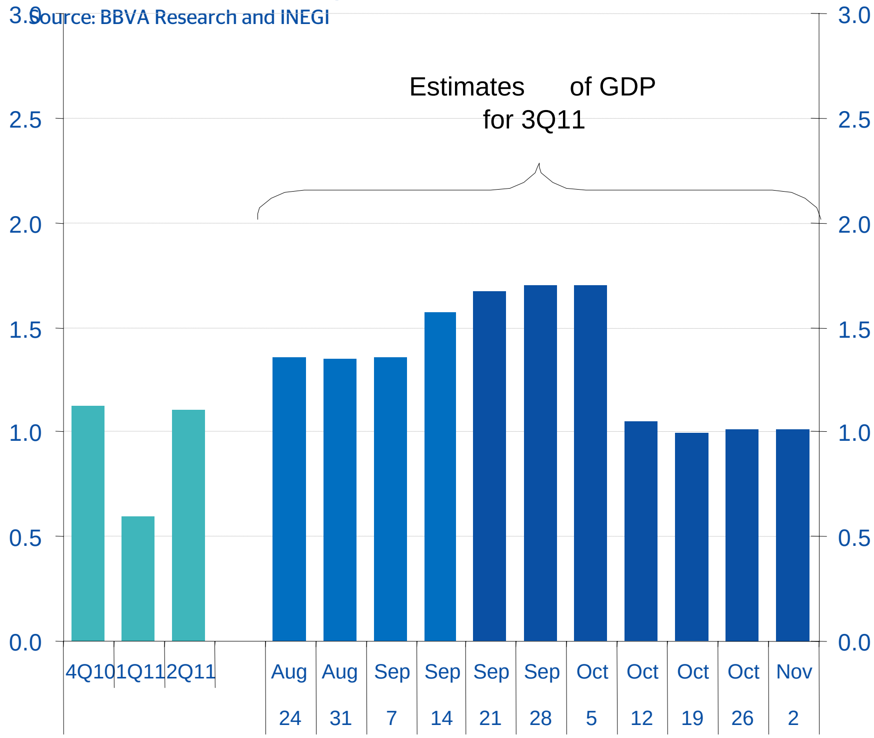
**Economic activity** in Mexico remains positive, with the trend towards **moderation**:

- The BBVA Research "real time" indicator suggests that GDP growth in 3Q11 will be around 1%, and slightly below this in 4Q11.

The indicators most exposed to **foreign demand** are those that are registering the **biggest slowdown**

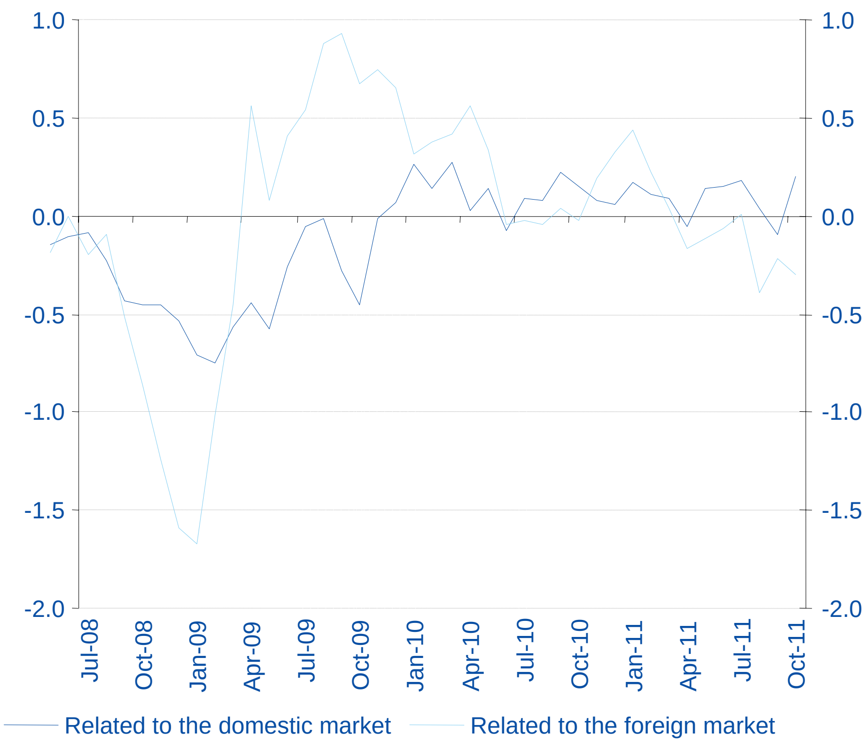
**BBVA-MICA: forecast for Mexican GDP (q/q % change)**

Source: BBVA Research and INEGI




**Indicators (m/m %, standardized)**

Source: BBVA Research and IMF

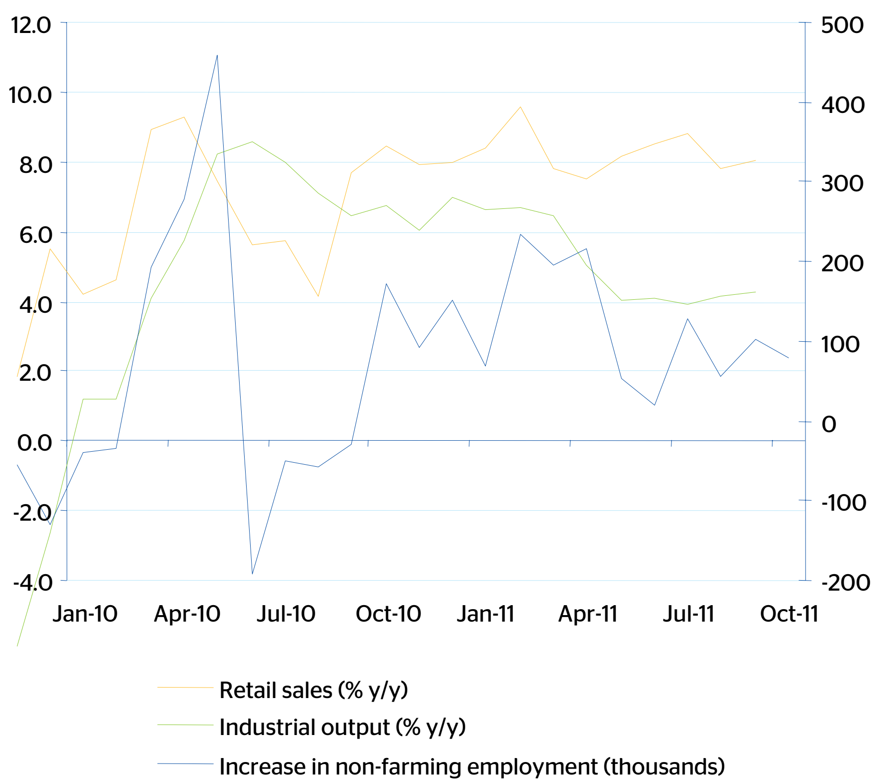


# … with downside risks in the U.S.

- The **signs of improvement** in economic activity in 3Q11 were **temporary**. The contraction of confidence points to lower growth in 4Q11.
- The U.S. continues to be undergoing a process of **household deleveraging,** which is consistent with historically moderate growth and **downside risks** linked to doubts about whether an agreement will be reached for the necessary **fiscal consolidation.**

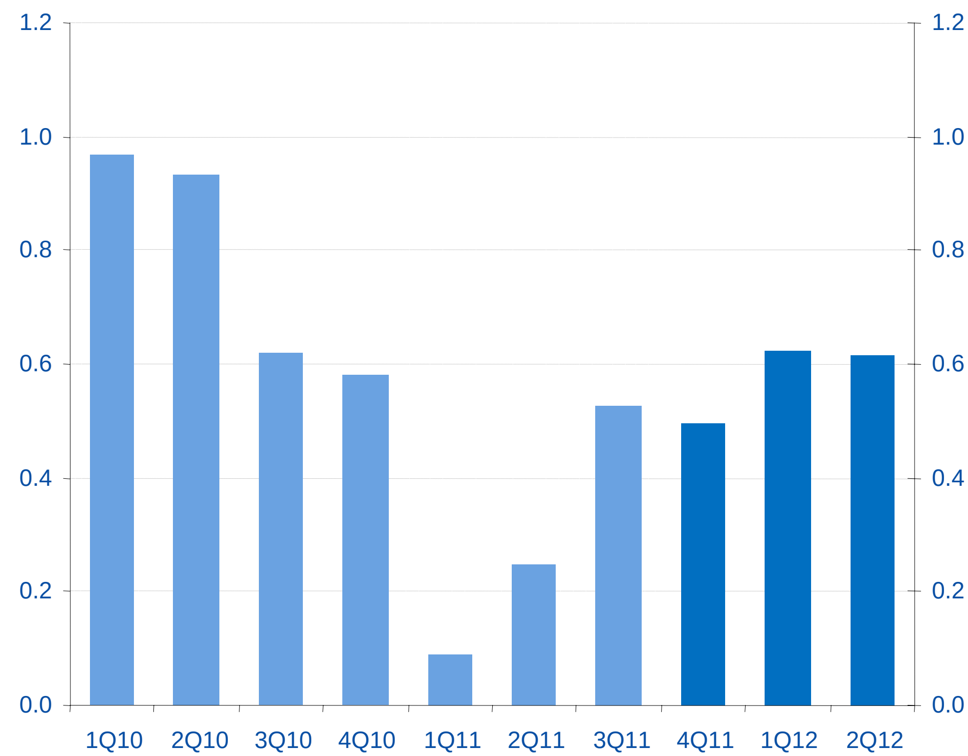
## US: employment, sales and industrial output

Source: BBVA Research and INEGI




## US: GDP q/q % change

Source: BBVA Research and INEGI

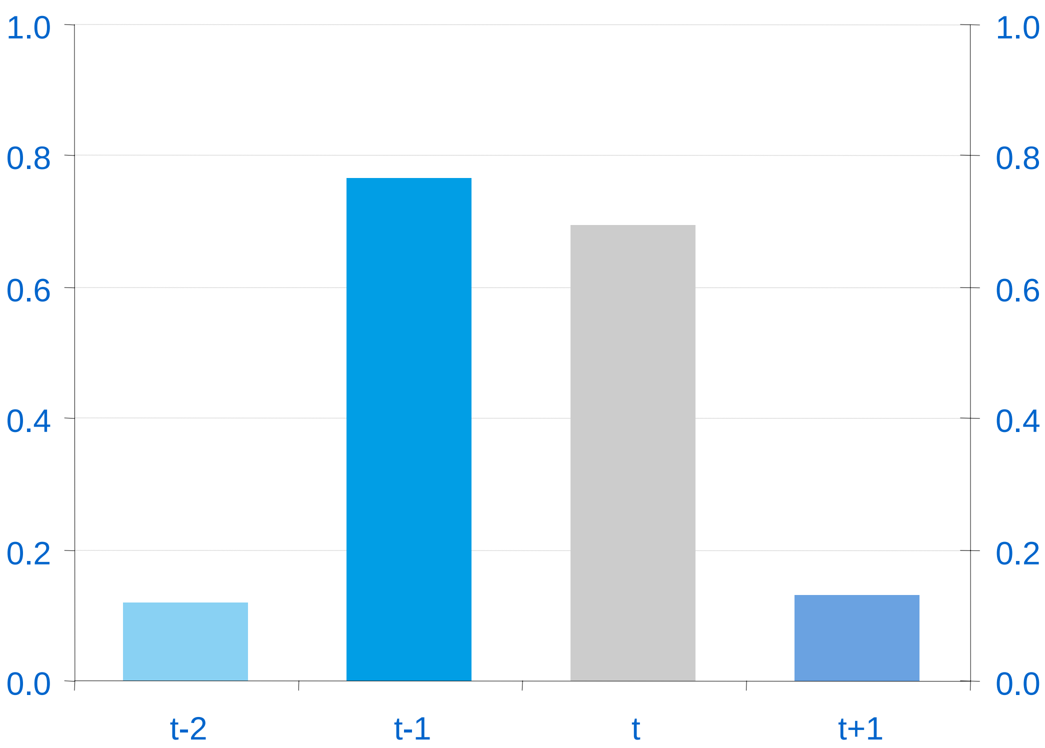


# … which are mitigated by the temporary boost from consumption and public investment

The **upturn in public demand** from consumption and investment linked **to the end of the six-year presidential term** will lead to a **temporary easing** of the slowdown throughout the first half of 2012

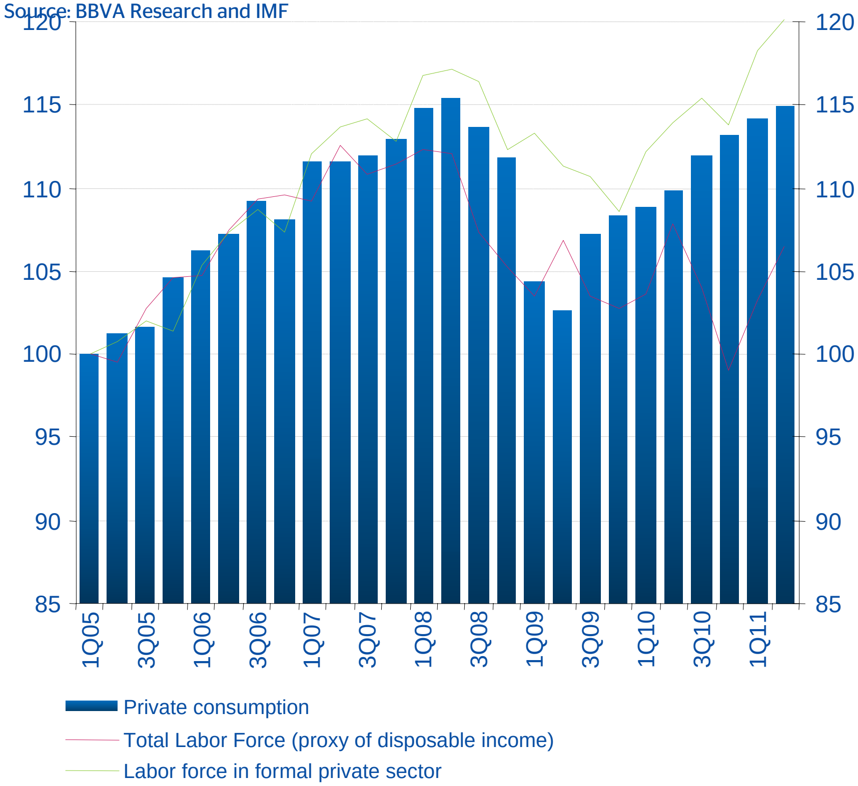
**Sustained job creation in the formal sector**, as well as the incipient improvement in real wage growth, have helped maintain the level of **household spending**.

**Contribution of public demand to growth, t=election year (2000, 2006)** Source: BBVA Research and INEGI




**Private Consumption and the Labor Force (1Q05=100)**

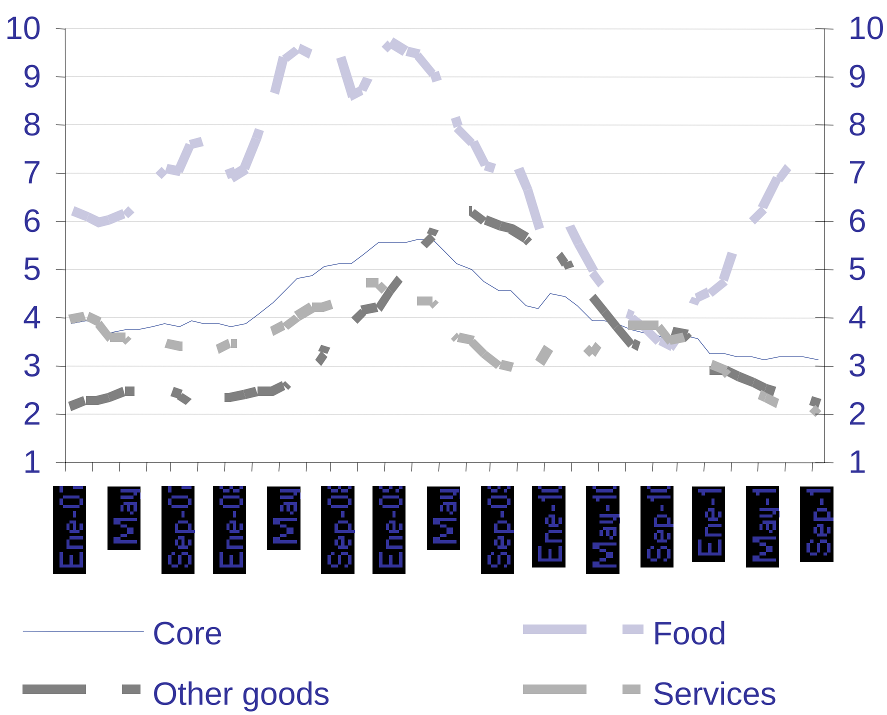
Source: BBVA Research and IMF



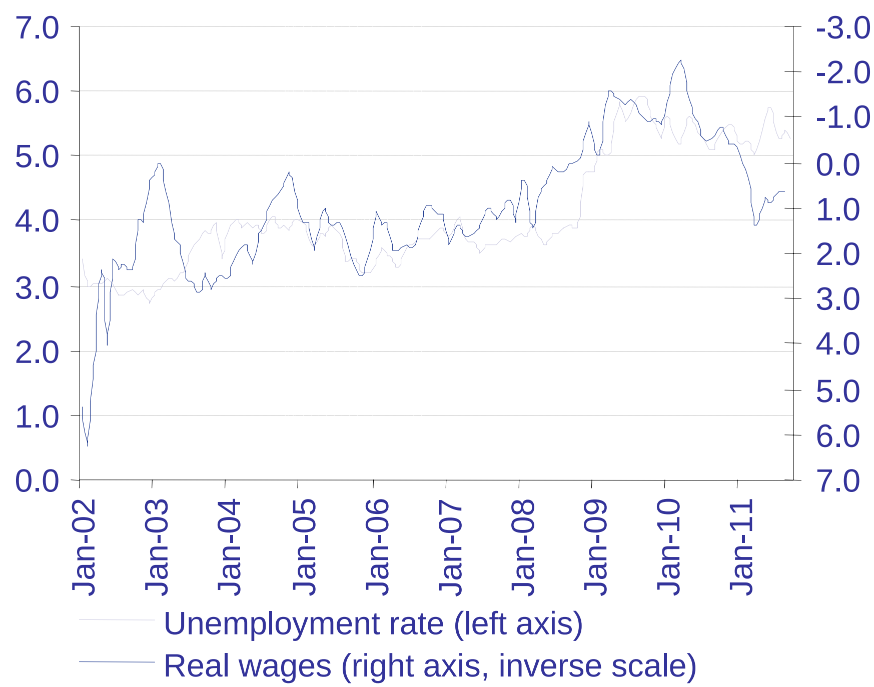
# No inflationary pressures and the balance of risks in equilibrium

**Core inflation**, the most indicative of the medium-term trend in prices, has remained well **in check** all year, thanks to the prevailing **slack** in the economy, which **prevents demand pressures** and costs from being passed on to consumers.

**Core inflation breakdown (y/y % change)**
Source: BBVA Research and INEGI




**Change in real wages and unemployment rate (real y/y % change and % of EAP)**
Source: BBVA Research, INEGI and Banxico

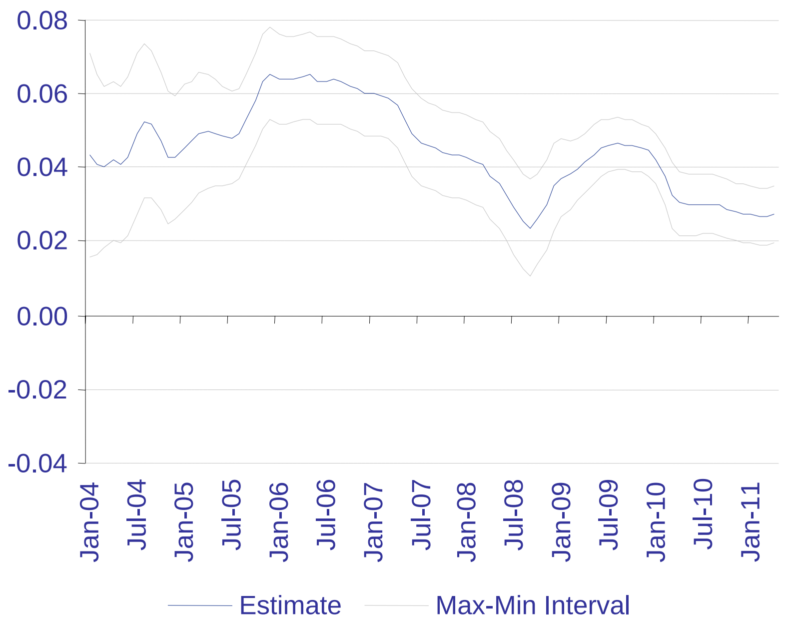


# No inflationary pressures and the balance of risks in equilibrium

In general, the **depreciation of the peso** has only affected inflation to a **limited extent**. Pressure in some specific markets such as **corn**, where at a global level it appears that prices have peaked, are more relevant than the exchange-rate effect

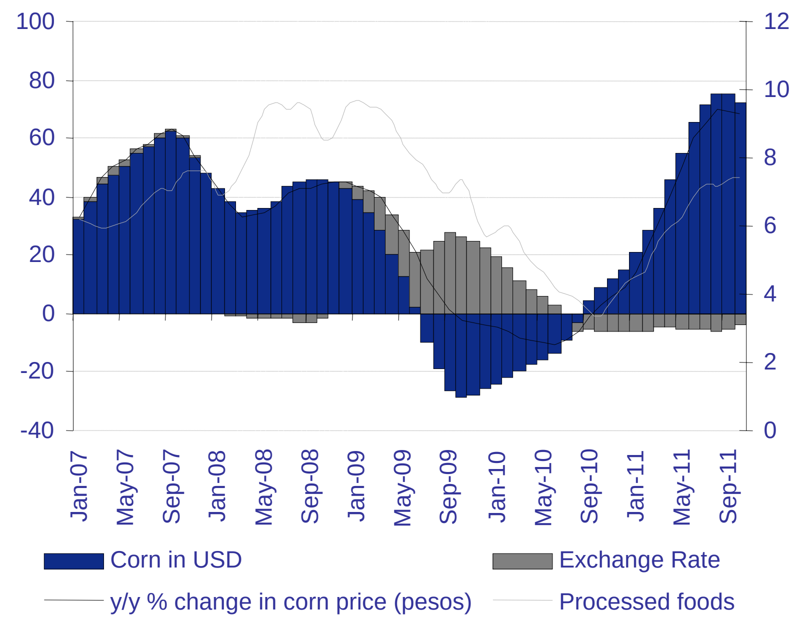
### Elasticity of exchange rates to annual inflation (%)

Source: BBVA Research and INEGI




### Inflation in processed food and corn on international markets in pesos (y/y % change and breakdown)

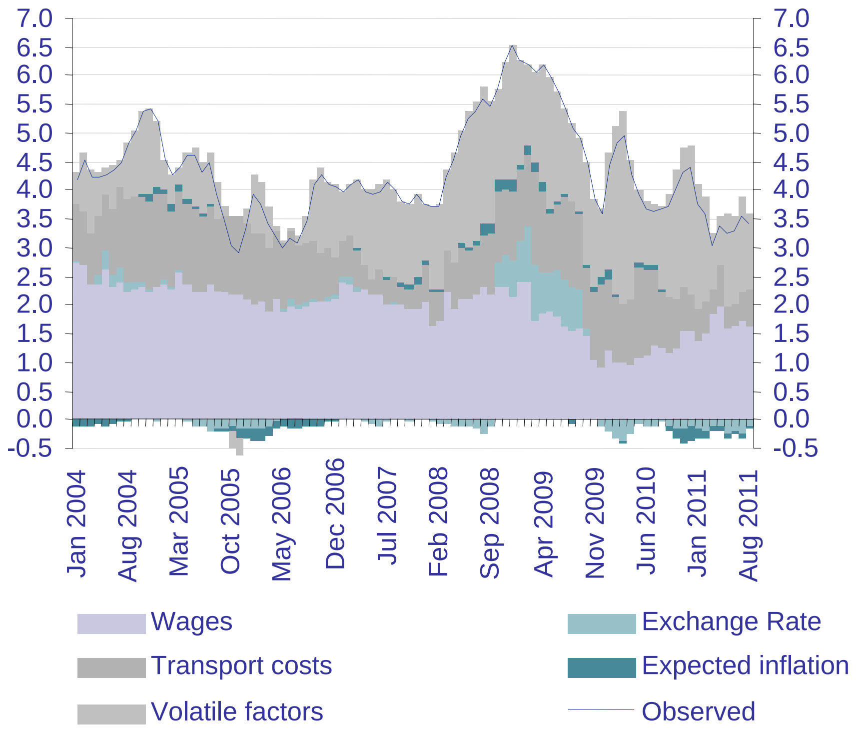
Source: BBVA Research, INEGI and Banxico



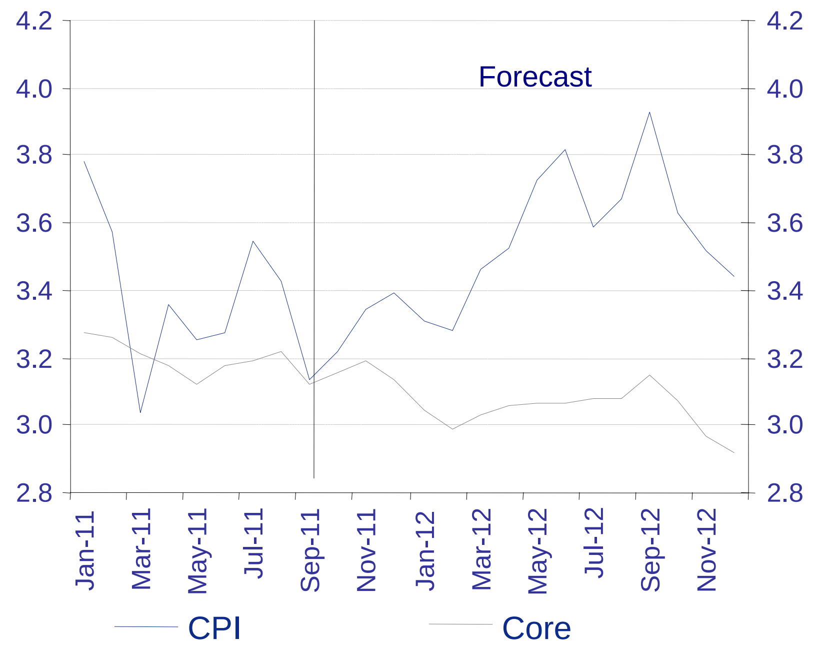
# No inflationary pressures and the balance of risks in equilibrium

**Volatile factors** always imply a greater **risk of deviation in the short term**, but they are **offset** by medium-term factors that are consistent with low and stable inflation.

### Breakdown by inflation factors (y/y % change and breakdown)
Source: BBVA Research and INEGI




### Inflation scenario 2011-2012 (real y/y % change)
Source: BBVA Research



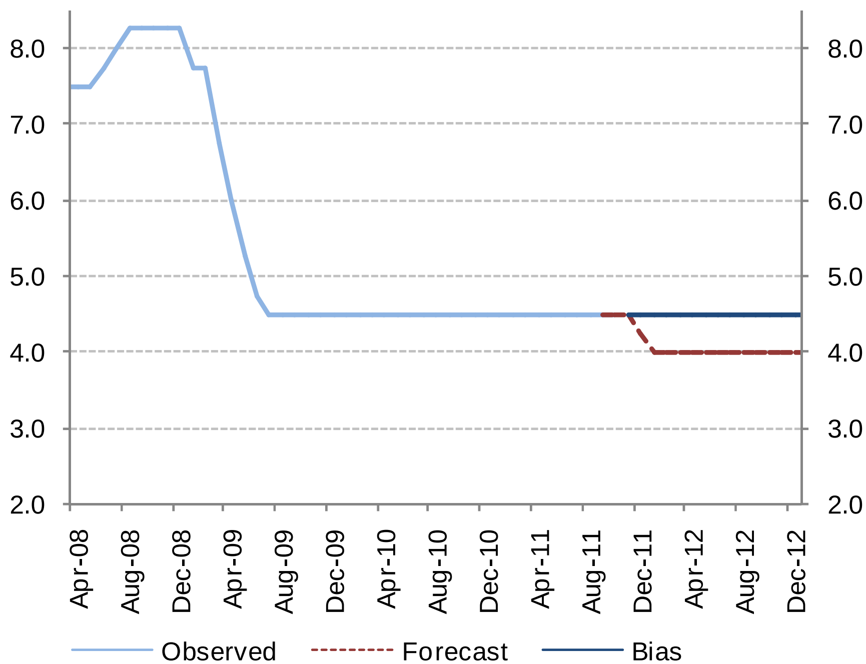
# Monetary policy: cut in December

Inflation close to the target, lack of demand pressures, economic slowdown and uncertainty with respect to the global economy, and accommodative statements, all suggest a rate cut in December.

The bias is for the rate to continue at 4.5% if the exchange rate shows a similar or higher level of volatility to those observed in the last weeks of September, or the environment of growth surprises upwards

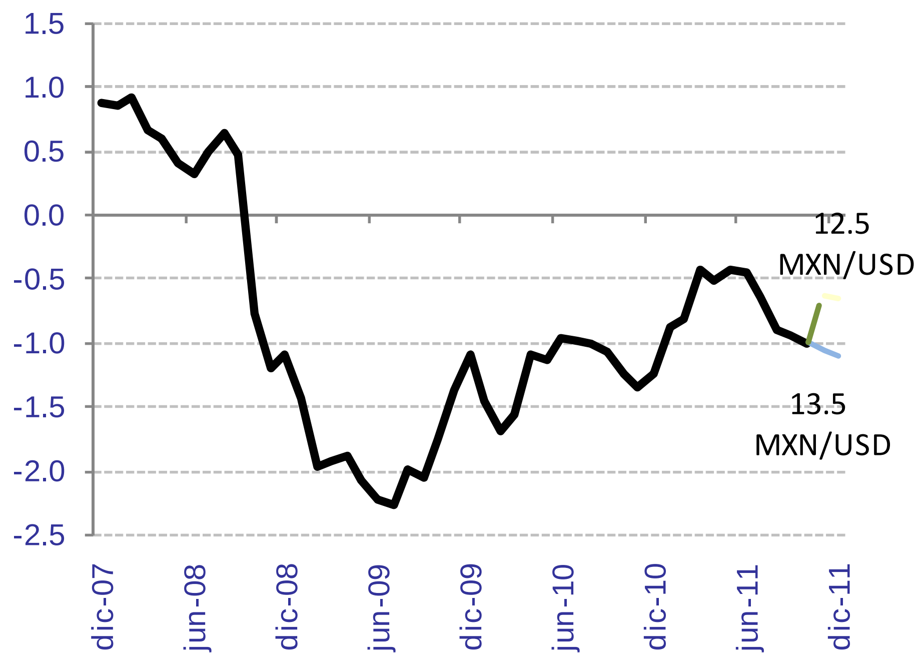
## Mexico, lending rate (%)

Source: BBVA Research




## Index of monetary conditions, alternative levels according to different exchange-rate levels

Source: BBVA Research



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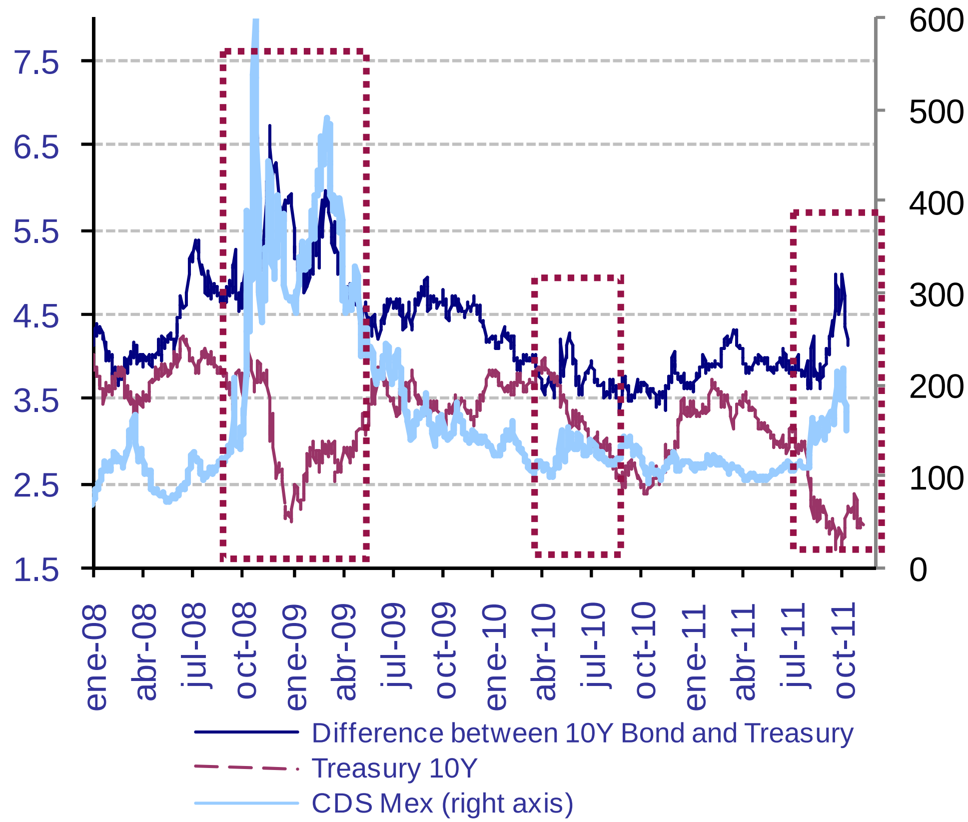
# Domestic anchors against global volatility

Starting in 2008, **three periods of risk aversion** can be identified for financial assets in Mexico. Investors are leaving Mexico and other emerging countries to escape risks derived from global uncertainty.

**Difference between 10-year Mexican and US Treasury bonds, and Mexican CDS**
**Source:** BBVA Research and Bloomberg




## Periods of global uncertainty:

i) Collapse of Lehman Brothers and global contraction;

ii) Debt crisis in the euro zone (Greece activates the IMF and EU support mechanism)

iii) Weakness of the global cycle and debt crisis in the euro zone

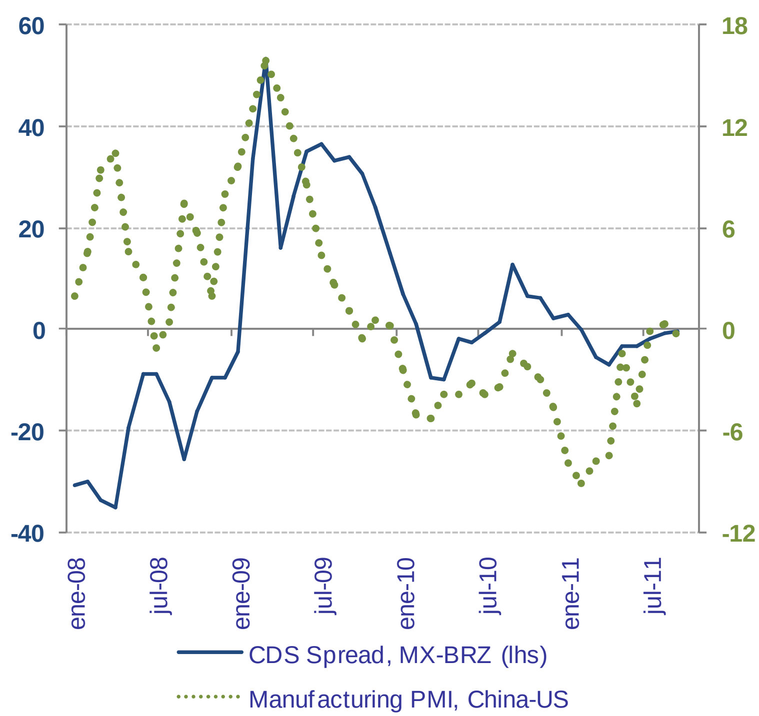
# Domestic anchors against global volatility

But **the markets differentiate** between the different economies' exposure to risks. The relative risk perception of Mexico and Brazil is consistent with the relative movement in cyclical risks that affect the two economies: the US in the case of Mexico, and the Asian for Brazil.

**Mexican CDS** are affected by events abroad, but the **domestic fundamentals** (growing reserves, low levels of public debt and the favorable economic cycle) **anchor their levels.**

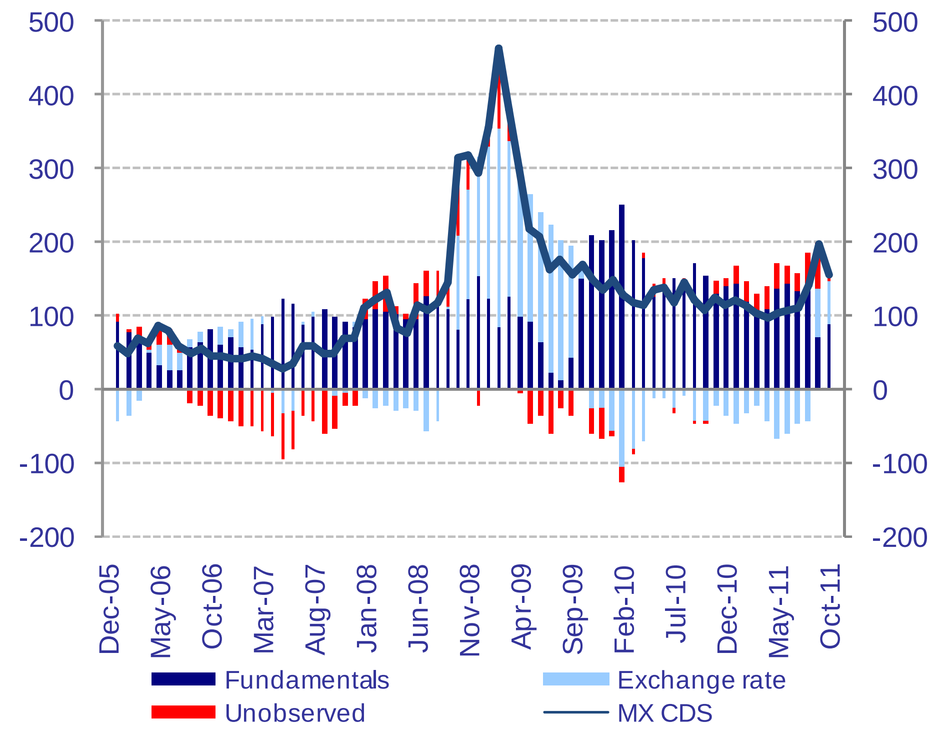
### Difference between Mexico and Brazil in CDS and manufacturing output

Source: BBVA Research and Bloomberg




### Breakdown of the Mexican CDS spread

Source: BBVA Research



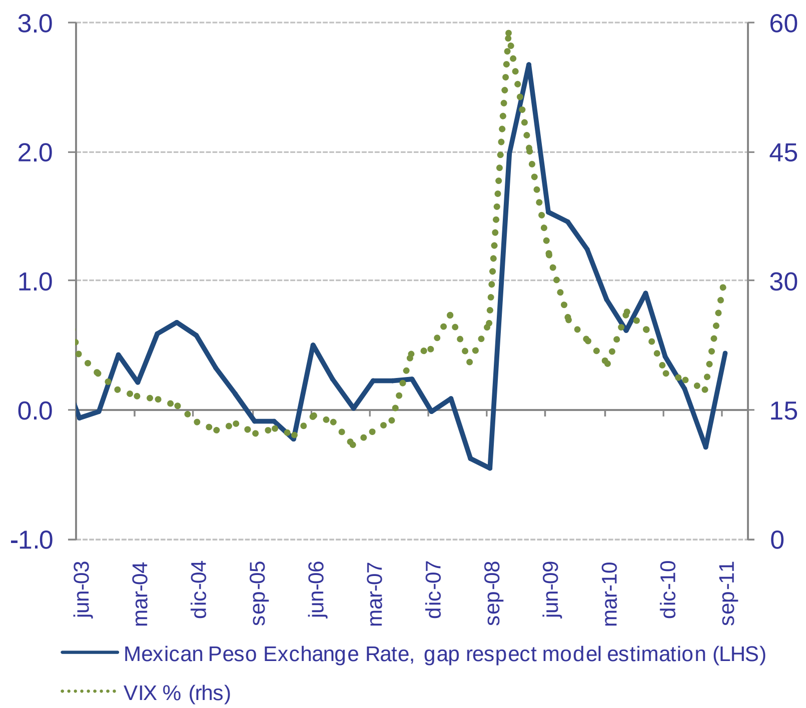
# Domestic anchors against global volatility

**Depreciation of the peso** in the short term in response to episodes of **global risk**.

As global uncertainty is reduced, **the fundamentals of the peso will anchor its level between 12.0 and 12.5** pesos/dollar in a scenario of **positive economic growth, inflation in line with the objective** of price stability and a **foreign government debt** that remains stable as a percentage of GDP

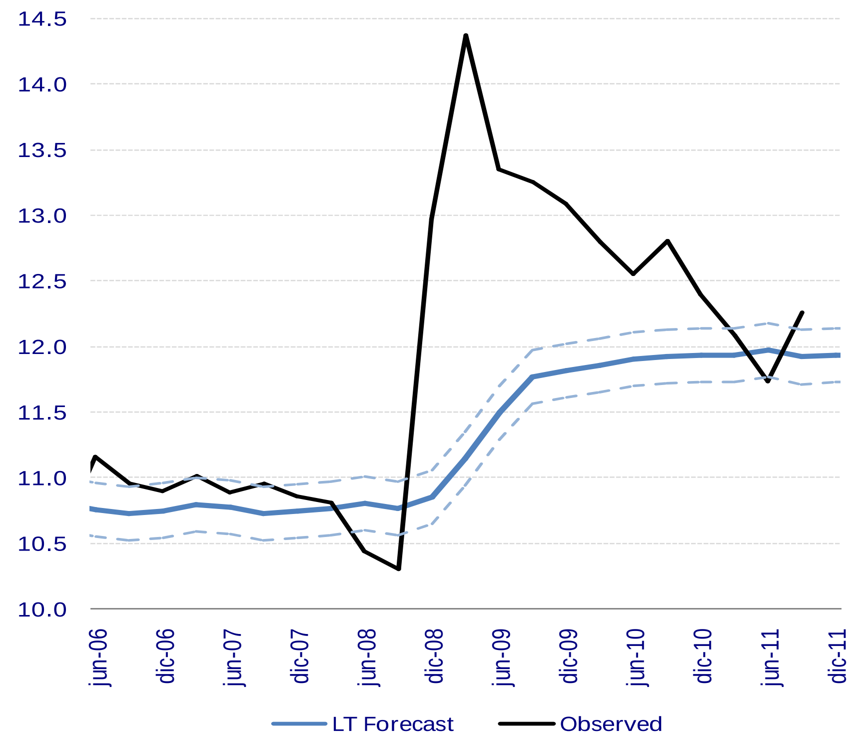
### Unexpected movements in the exchange rate and global risk

Source: BBVA Research and Bloomberg




### Level of long-term exchange-rate equilibrium (MXN/USD)

Source: BBVA Research



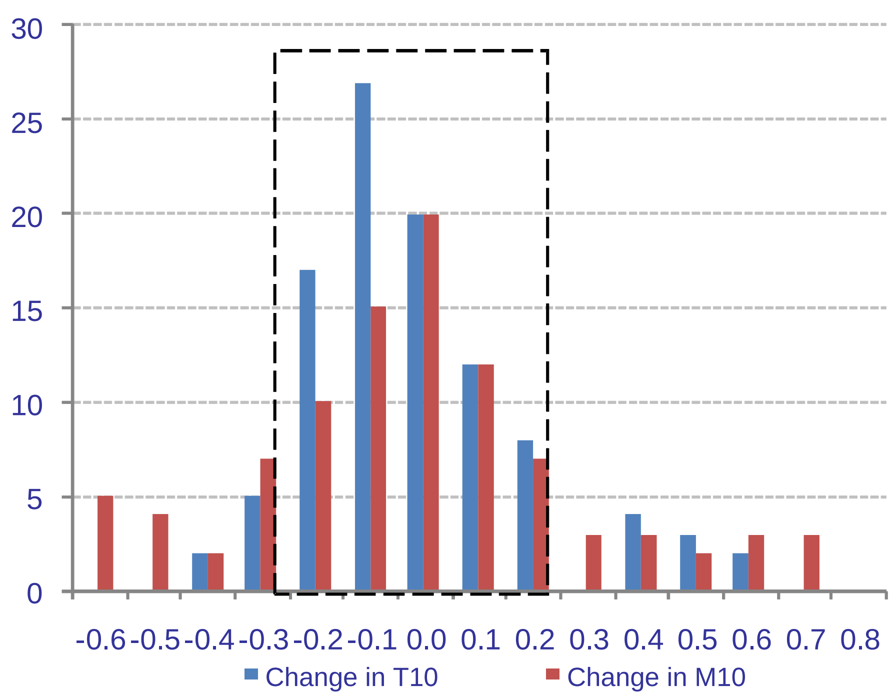
# Domestic anchors against global volatility

In general, the **yields on Mexican and US government debt** behave in similar fashion, given the close economic relationship between the two countries.

When **risk perception increases**, the change in the yield of US bonds moves more towards negative values (safe-haven assets), while the Mexican bonds concentrate on more positive and more extreme values

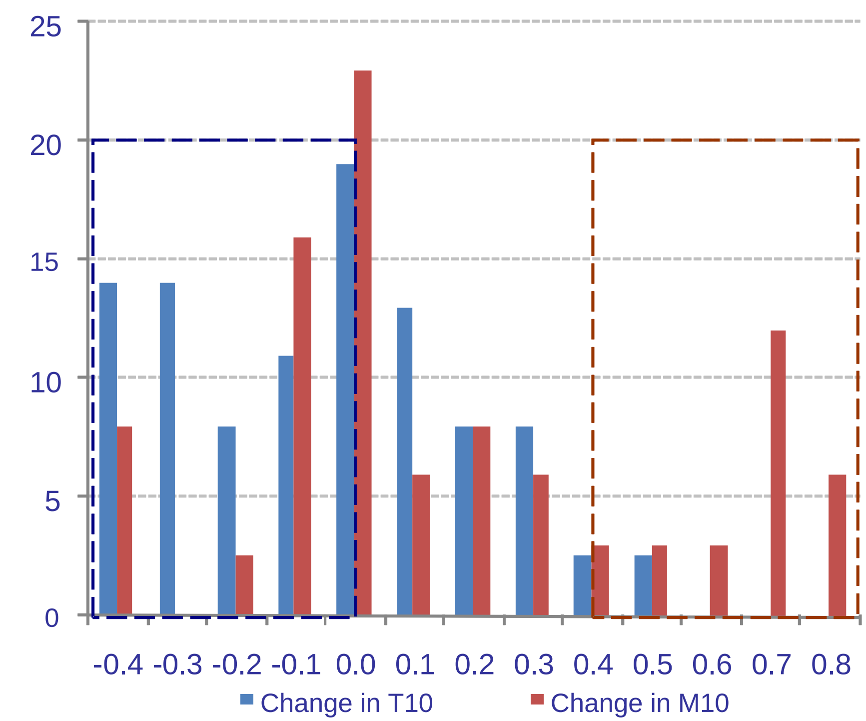
**Monthly change in the M10 and Treasury bond yields without an increase in sovereign risk (%)**

Source: BBVA Research and Bloomberg




**Monthly change in the M10 and Treasury bond yields with an increase in Mexican CDS (%)**

Source: BBVA Research and Bloomberg



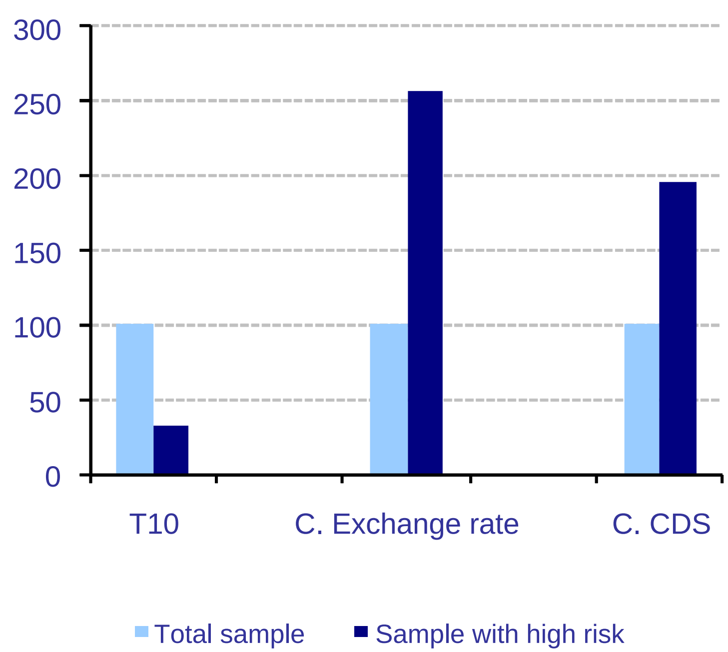
# Domestic anchors against global volatility

There are **differences in the ways that yields** on Mexican and US debt behave in reaction to changes in risk perception.

When risk increases, the yield on US bonds becomes less relevant for explaining movements in Mexican public debt, while the **exchange rate** and the **CDS** become more important.

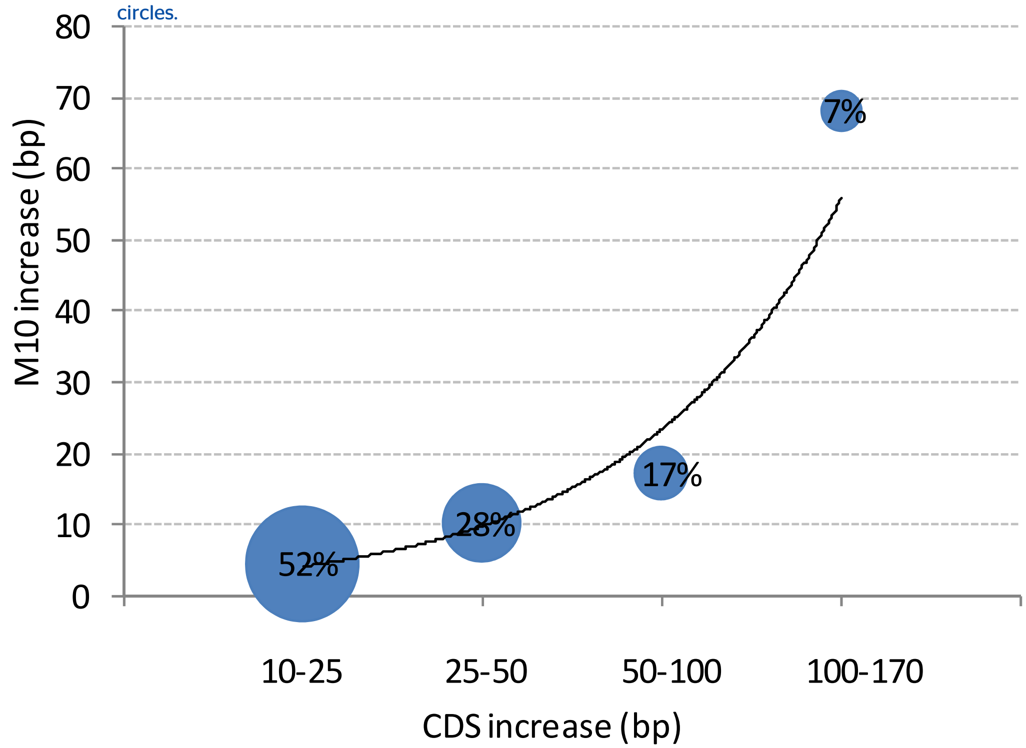
**Relative relevance of the determinants of M10 (estimated coefficients using the total of the sample = 100)**

Source: BBVA Research




**Average monthly increase of the M10 rate (bps), according to the different values of the Mexican CDS**

Source: BBVA Research and Bloomberg. The percentage of times it has occurred is indicated within the circles.



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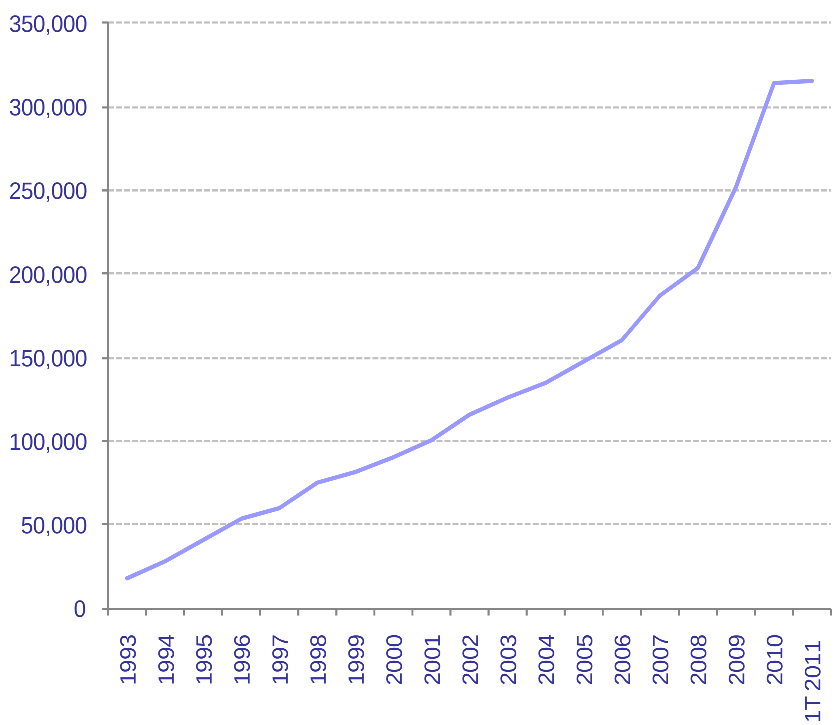
# States' public finances: no risk for the public accounts, but more transparency is needed

The **increasing debt** of the states is due to the significant **improvement** in **financing conditions** resulting from the strength of the Mexican economy

### Balance of states' debt (million pesos)

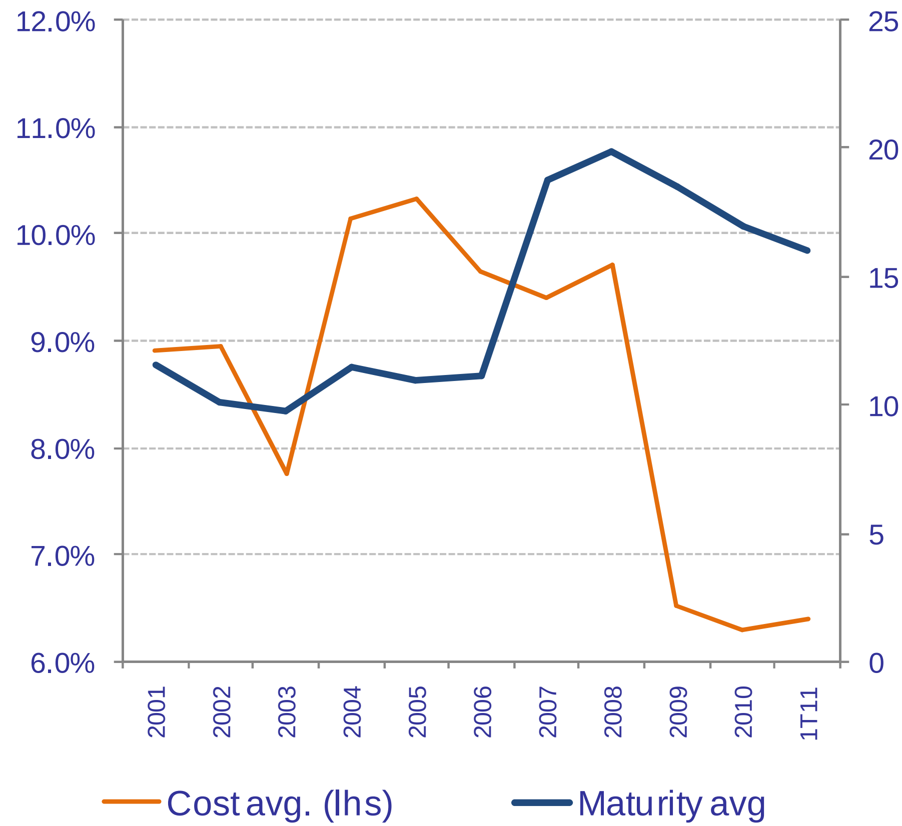
Source: BBVA Research and SHCP




### States' debt, term and cost

Average weighted term and average weighted cost

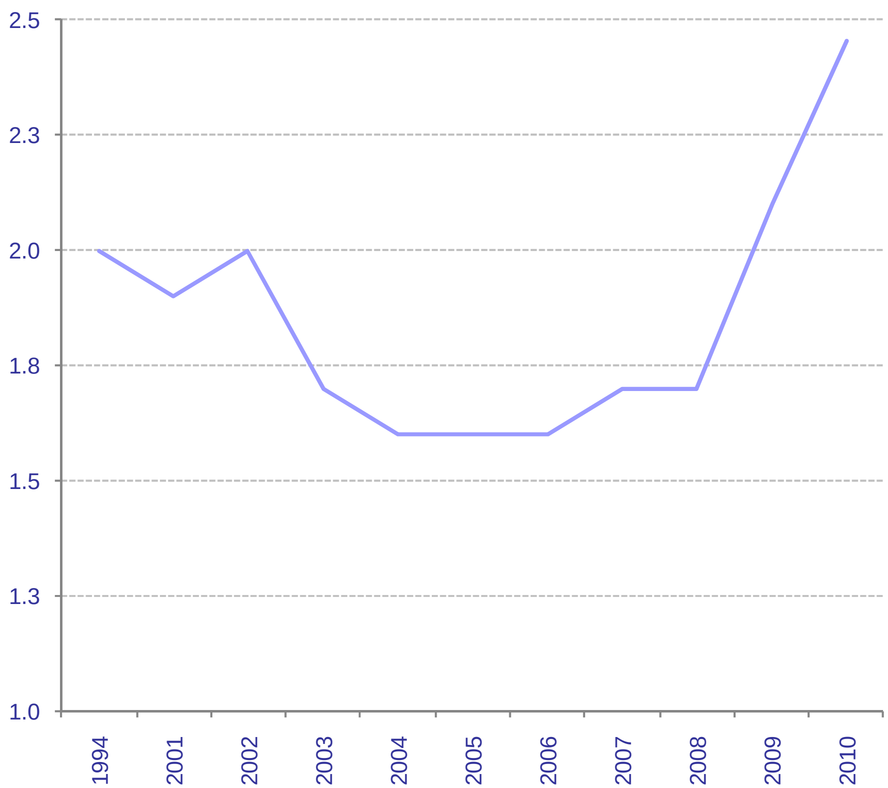
Source: BBVA Research and SHCP



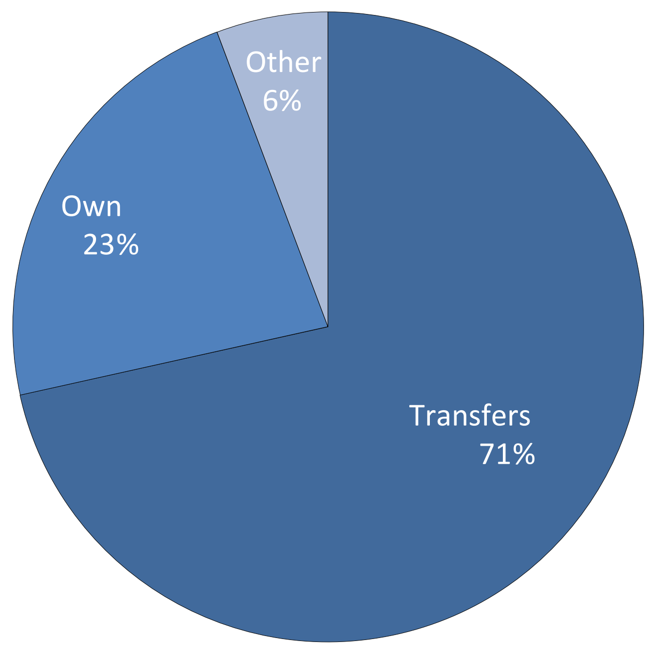
# States' public finances: no risk for the public accounts, but more transparency is needed

The **states' debt** amounts to **2.5% of GDP**, with a structure of guarantees that reflects the income of these authorities, closely **dependent on the transfers** received from the federal government.

**Balance of states' debt (% GDP)**
Source: BBVA Research and SHCP




**Balance of the states' debt by type of collateral (%)**
Source: BBVA Research and SHCP

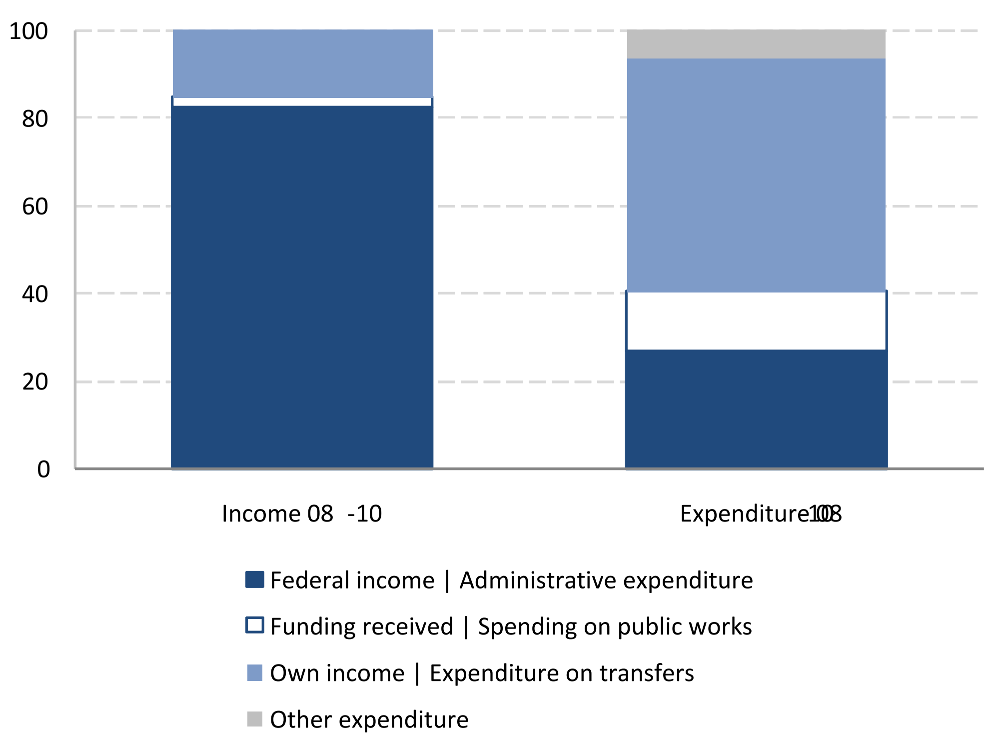


# States' public finances: no risk for the public accounts, but more transparency is needed

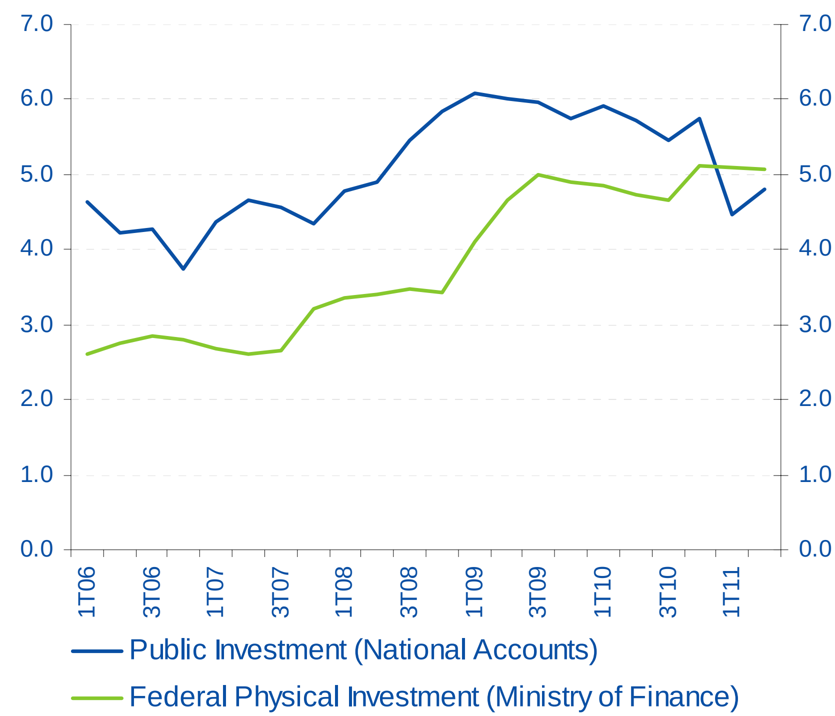
The institutional environment does not create incentives to **for the states to increase their own revenues** : 80% of all of the states' income is federal in origin.

The states' **expenditure** is mainly through their own **transfers**. There is no detailed information regarding their use for **current expenditure or investment**

**Income and expenditure of the states. (average %)**
Source: BBVA Research with the states' public accounts




**Public investment as % of GDP**
Source: BBVA Research with data from INEGI and SHCP



# Deterioration of public security: temporary impact on economic performance

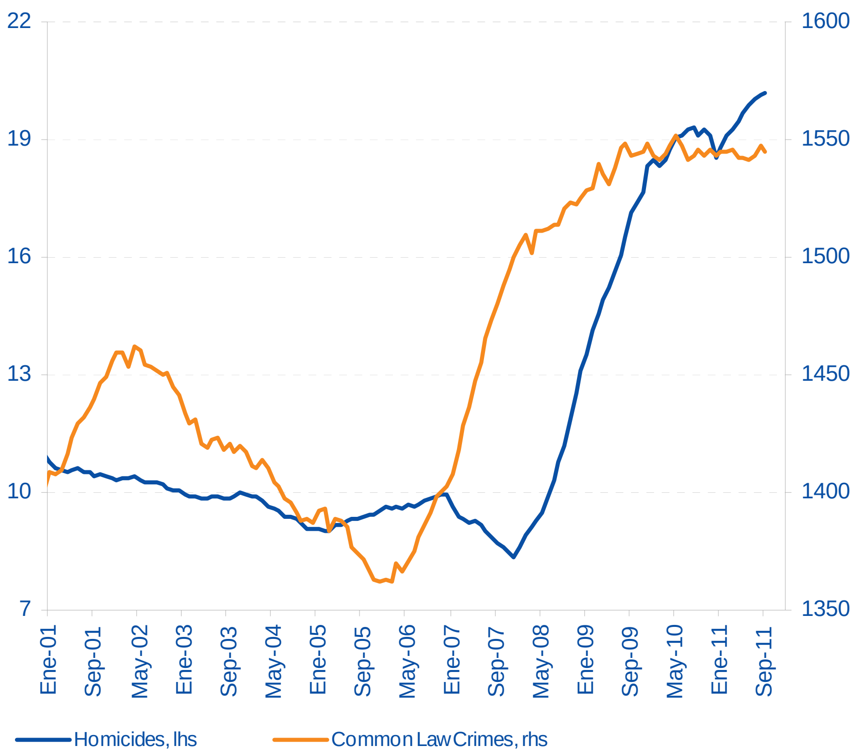
There is a **deterioration in public security** in Mexico, both objective and perceived:

- Objective indicators of security **such as the rate of crimes and homicides have increased** significantly over recent years
- The **perception of security among the general population is deteriorating** and there is a growing feeling that insecurity is limiting economic growth

## Mexico: Public security. Homicides and Crimes

**12-month accumulated rate per 100,000 inhabitants**

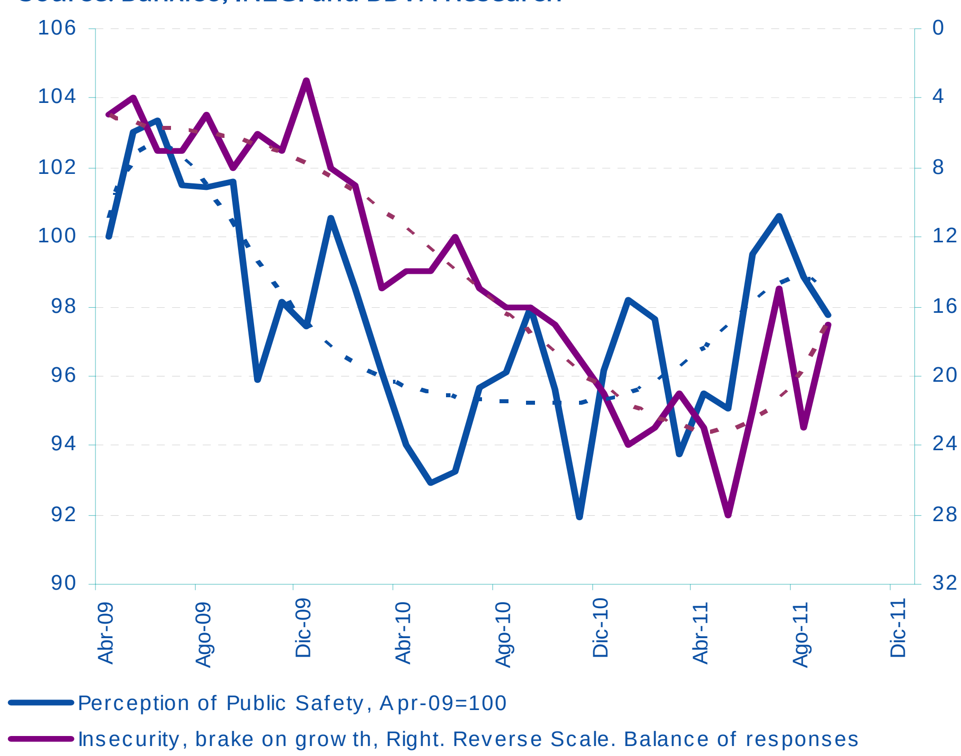
Source: Secretariat for Internal Affairs, INEGI and BBVA Research




## Mexico: Public security. Perceptions

**Perception of public security and of its restriction of growth**

Source: Banxico, INEGI and BBVA Research

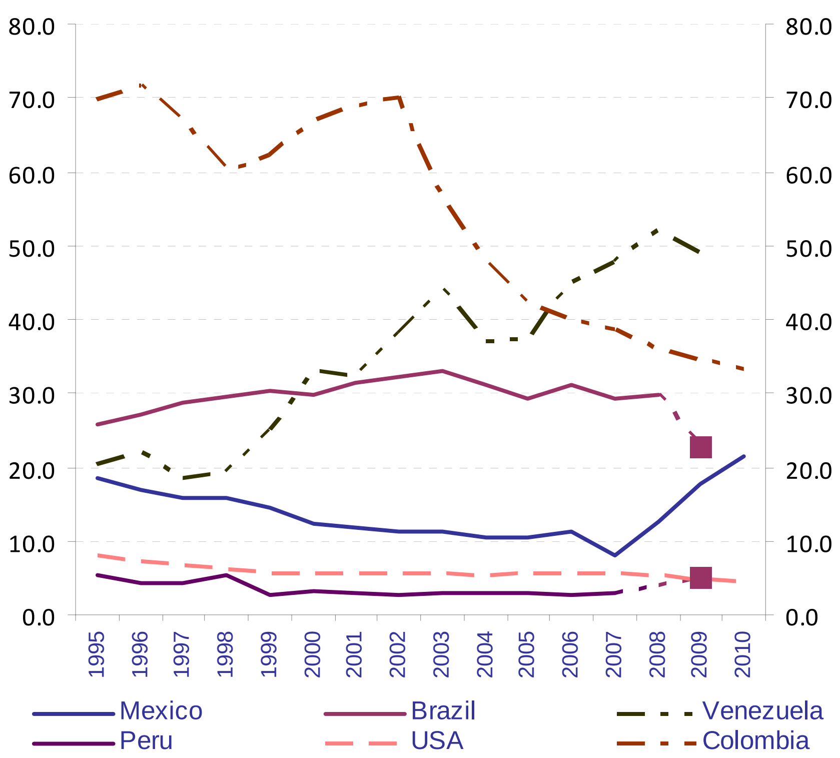


# Deterioration of public security: temporary impact on economic performance

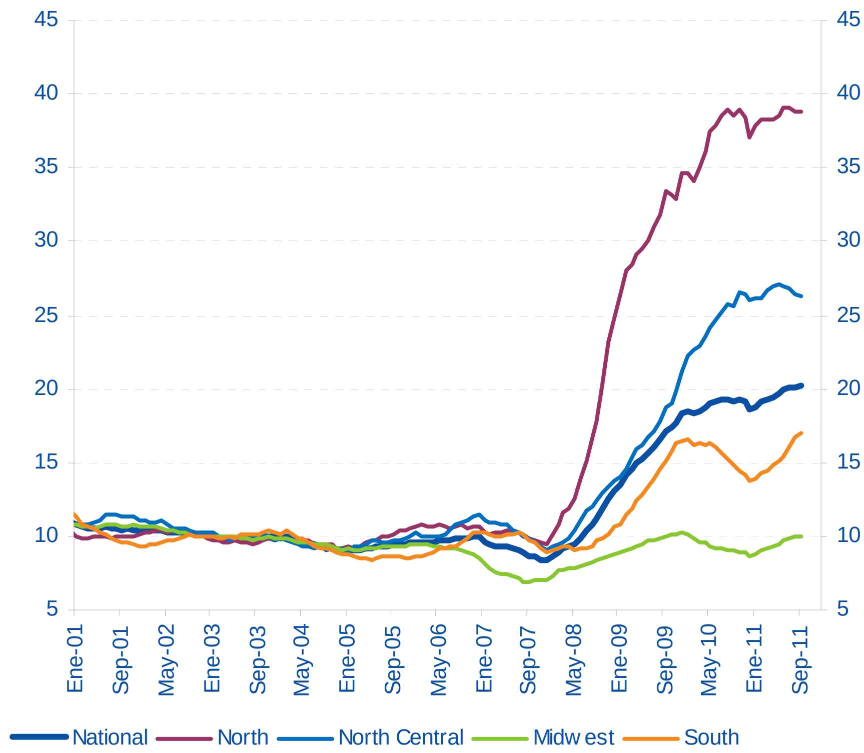
## The long-standing falling rate of homicides in Mexico **came to an end** in 2008

- Mexico has a **lower homicide rate than other countries in Latin America**, but it has been increasing swiftly since 2008
- The **increase** in the homicide rate in Mexico **is particularly notable in the northern and central-northern parts** of the country

### International comparison, homicides
**Homicide rate (per 100,000 inhabitants)**
Source: UNODC and BBVA Research




### Mexico, homicides by region
**12-month accumulated rate per 100,000 inhabitants**
Source: Secretariat for Internal Affairs, INEGI and BBVA Research



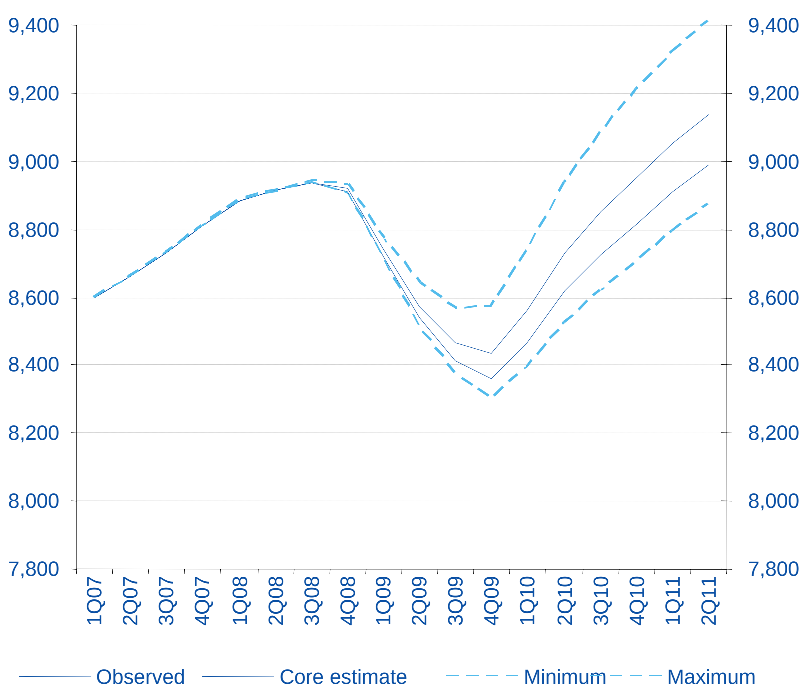
# Deterioration of public security: temporary impact on economic performance

- The deterioration in public security reflected by the increase in the homicide rate has **a temporary negative impact on GDP, but the extent of it is not clear**.
- The **different homicide rate** across the country suggests that the impact of insecurity on economic performance also varies across the country

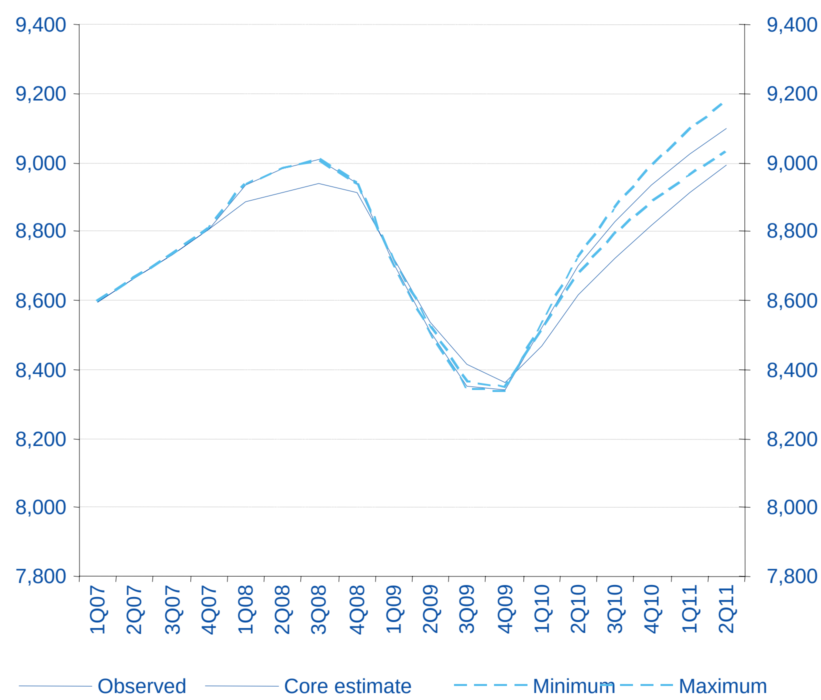
## Estimate of the impact on GDP of the increase in the homicide rate since the start of 2008

Source: BBVA Research

### Through a function of production




### Through a temporary shock on private demand



# Key messages

1. **Global environment:** The world economy is slowing and its prospects depend largely on a resolution to the European debt crisis. The risks are strongly tilted to downside.

2. **Growth:** Public demand, nominal stability and the strength of the financial sector will restrict the impact of lower demand and financial volatility abroad.

3. **Inflation:** Historically low in an environment of lack of pressure from domestic demand, given the slack in the factor markets

4. **Monetary policy:** Prospects of a cut in the lending rate in December, given the worsening balance of risks in the economy, better balance in prices and downward bias in the global environment.

5. **Financial variables:** Global risk aversion has an impact on the financing conditions of the Mexican economy, so the key is stronger anchoring from its fundamentals through fiscal, monetary and macroprudential policy.

6. **Domestic vulnerability:**
   1. The **finances of the states** do not endanger the strength of the public finances as a whole, but progress has to be made in transparency and co-responsibility.
   2. The sudden sharp **deterioration in public security** is having a negative impact on the country's economic performance, although the size of this is uncertain and its effect is temporary. There are notable regional differences.

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# Mexico Economic Outlook

## Fourth Quarter 2011

Mexico City. November 9, 2011

# Appendix: Forecasts

| | | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| **Activity** | | | | | | |
| Real GDP (y/y %) | | 1.2 | -6.2 | 5.4 | **3.8** | **3.3** |
| Consumption | | 1.6 | -5.8 | 4.7 | **3.9** | **3.5** |
| Private consumption | | 1.7 | -7.2 | 5.0 | **4.0** | **3.5** |
| Public consumption | | 1.1 | 3.8 | 2.8 | **3.4** | **3.6** |
| Gross Capital Formation | | 5.2 | -11.5 | 2.4 | **4.8** | **3.6** |
| Domestic demand (contribution to growth) | | 1.9 | -8.2 | 5.2 | **3.5** | **3.7** |
| Exports | | 0.5 | -13.9 | 25.7 | **9.2** | **8.6** |
| Imports | | 3.0 | -18.8 | 23.5 | **8.8** | **9.6** |
| Foreign demand (contribution to growth) | | -0.8 | 2.2 | 0.2 | **0.4** | **-0.5** |
| **Labor Market** | | | | | | |
| Employment* | % y/y | 2.0 | -3.1 | 3.7 | **4.0** | **2.9** |
| Unemployment rate (% of active population)* | | 4.0 | 5.4 | 5.4 | **5.4** | **4.9** |
| **Foreign sector** | | | | | | |
| Current account balance | % GDP | -1.6 | -0.7 | -0.5 | **-1.0** | **-1.1** |
| | | | | | | |
| Fiscal balance[1] | % GDP | -1.6 | -2.7 | -3.2 | **-2.9** | **-2.8** |
| **Prices** | | | | | | |
| CPI, % | average | 5.1 | 5.3 | 4.2 | **3.4** | **3.5** |
| CPI, % | EoP | 6.5 | 3.6 | 4.4 | **3.4** | **3.4** |
| **Exchange rate** | | | | | | |
| Exchange rate (against USD) | average | 11.2 | 13.5 | 12.6 | **12.3** | **12.4** |
| Exchange rate (against USD) | EoP | 13.4 | 12.9 | 12.4 | **12.7** | **12.4** |
| **Interest rates** | | | | | | |
| Official rate (lending rate) | average | 7.9 | 5.1 | 4.5 | **4.4** | **4.0** |
| Official rate (lending rate) | EoP[2] | 8.3 | 4.5 | 4.5 | **4.3** | **4.0** |
| 10-year rate (M10) | average | 8.3 | 8.1 | 6.6 | **6.5** | **6.4** |
| 10-year rate (M10) | EoP | 8.3 | 8.0 | 5.8 | **6.0** | **6.7** |

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1. PSBR

2. December