

# Mexico Economic Outlook

Fourth Quarter 2013  
Economic Analysis

- Growth picks up in the second half of the year
- The low growth of the first half of the year shows the need to tackle the major challenges facing the Mexican economy in order to achieve a sustained pace of economic growth
- Despite the supply shocks, inflation remains under control
- Mexican assets are resilient in an environment of volatility generated by the Federal Reserve statement and the fiscal negotiations in the U.S.

# Index

1. Summary .....	1
2. A slow global recovery with downward risks .....	3
3. Mexico: the worst of the slowdown has passed .....	9
3.1 Activity: recovery at the end of the year with expectations of improved growth in 2014.....	9
Box 1: Economic effects of the recent floods caused by the storms Ingrid and Manuel .....	14
Box 2: Analysis of the impact of government finance on private-sector credit.....	16
3.2 Favorable inflation in 2013; next year there will be an upturn due to the tax reform shock and the steady economic recovery.....	18
3.3 Monetary pause following a cut of 50 basis points that clearly shows economic weakness is prevailing over market volatility .....	21
3.4 Mexican assets are resilient in an environment of volatility generated by the Fed's statement and fiscal negotiations in the U.S. ....	23
Box 3: The Mexican peso becomes the currency with the highest trading volume among currencies of emerging countries .....	25
4. Indicators and forecasts .....	26

**Closing Date: November 8, 2013**

# 1. Summary

The first half of the year was notable for a slowdown that prompted a downward revision of the forecast for economic growth; however, growth has picked up in the second half of the year. Economic activity did not grow in the first quarter and fell by 0.7% in the second (in quarter-on-quarter terms). In the third quarter we expect growth, mainly due to an upturn in foreign demand, particularly the good performance of the manufacturing sector in the United States, which is importing more Mexican products. Investment and public expenditure, though contributing less to growth, are also expected to rise due to the effect of the reconstruction processes in the wake of the natural disasters and the increased approved budget deficit. The result will be a boost to economic growth at the end of 2013 and the start of 2014. Annual growth for 2013 and 2014 is therefore expected at 1.2% and 3.1% per year, respectively.

Hurricanes Ingrid and Manuel affected around two thirds of the country and led to damage that will reduce the real GDP estimated for 2013 by just under 0.1 percentage points. This is because the expenditure needed to deal with the emergency, more water in the reservoirs (for irrigation, water supply and electricity generation) and the reconstruction process will partially offset the initial losses.

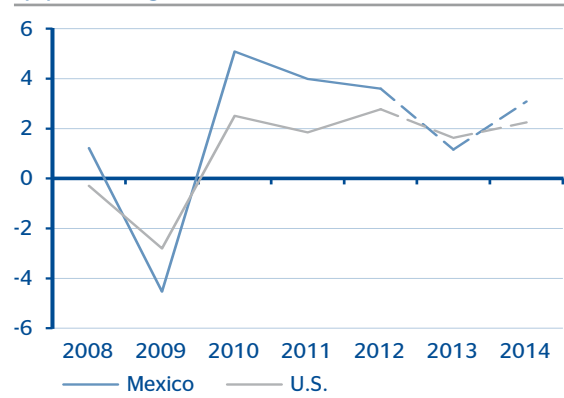
The low growth at the start of the year shows the need to tackle the major challenges facing the Mexican economy in order to achieve sustained economic growth. Among them are low economic productivity, the extensive informal sector, a growing perception of insecurity and the costs linked to this, and the lack of resources for innovation, science and technology. The series of reforms presented by the government in 2013 aim to resolve these limiting factors. However, the road ahead is still long, and steering Mexico along a route of growth and sustained development will depend largely on the agreements reached by the main political forces in the country represented in Congress, as well as the will of the government and a determined participation by the people at large.

Chart 1  
**Manufacturing output in Mexico and the U.S. (y/y % change)**



Source: BBVA Research with INEGI data

Chart 2  
**GDP of Mexico and the United States (y/y % change)**



Source: BBVA Research with INEGI data

**Despite the supply shocks, inflation remains under control.** We expect headline inflation to end 2013 at around 3.4%, the lowest level since the close of 2005. In January 2014, a new supply shock, this time derived from changes in taxation, will lead to an upturn in headline inflation to levels of close to 4.0%. Starting in February it will resume its decline to an average for 2014 of around 3.7%, similar to the average for 2013. Annual core inflation is expected to continue close to its all-time lows in the coming months and end the year at 2.6%. In 2014 we expect it to average 3.0%.

The performance of core inflation, which is a better indicator of prices in the medium term, has been very favorable in 2013, with a downward trend throughout the year. Average core inflation declined from 3.42% in 2012 to 2.46% in the third quarter of 2013. This reduction was the result of the weak economic cycle and the resulting slack, leading to lack of demand pressure on prices.

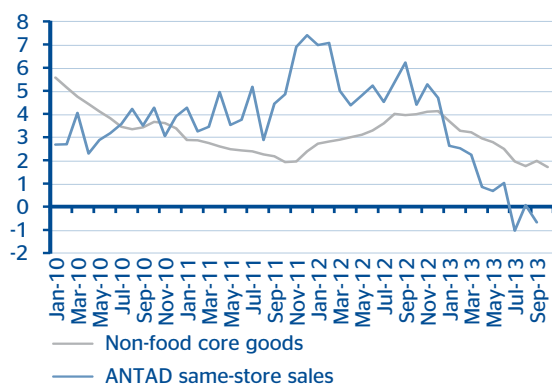
The changes finally approved in the tax reform will have a much smaller effect on inflation than they would have had if the original proposal been passed. The package of changes are expected to impact prices by between 0.4 and 0.6 pp. **It is also estimated that growth in government debt is leading to lower growth of finance for the private sector.** Similarly, an increase in public-sector borrowing requirements leads to weaker growth in bank credit.

In 2013 the monetary policy rate fell by 100 basis points to 3.5%. This is after remaining unchanged for nearly four years. In March, recognition of the gains in the fight against inflation led to a cut of 50 bps; while the weakness of the economic cycle in an environment where inflation is under control determined the two most recent cuts. Looking forward, we expect a prolonged pause, based on the slack in the markets, which will maintain demand pressure on prices under control.

**Mexican assets are resilient in an environment of volatility generated by the Fed's statement and fiscal negotiations in the U.S.** In recent months the possibility of another reduction in the pace of assets purchases by the Fed and the debate regarding the government debt ceiling in the U.S. have been the main factors behind the major price movements of financial assets. Specifically, U.S. government bond yields rose, as did those of emerging countries, which saw their currencies lose value. In contrast with other emerging countries, in Mexico these periods of volatility in the financial markets did not generate abrupt outflows of foreign investment in the sovereign fixed-income market. Although the flows did moderate, they remained positive. This favorable behavior with respect to Mexico is a sign of its comparative advantage in terms of economic and financial stability against other countries.

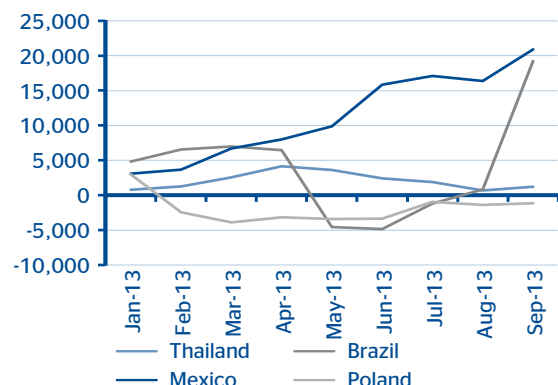
Toward the close of the year we expect the exchange rate to be at levels of 12.7 pesos per dollar, with a limited margin for appreciation derived from two factors: first, a scenario of possible reduction of the monetary stimuli by the Fed; and second, the fact that the favorable expectations for the reform process appear to be having a limited effect, and have already been incorporated into current prices. With respect to interest rates, the risk premium is expected to continue its steady return to normal. Combined with greater economic growth next year, this will generate an increase in rates in the medium and long term. In particular, we consider that the yield to maturity of the 10-year bond will close the year at around 6.0%.

Chart 3  
Core goods inflation, excluding food and ANTAD sales (y/y %)



Source: BBVA Research with INEGI data

Chart 4  
Cumulative flows to fixed-income instruments (million dollars)



Source: Central banks of countries included

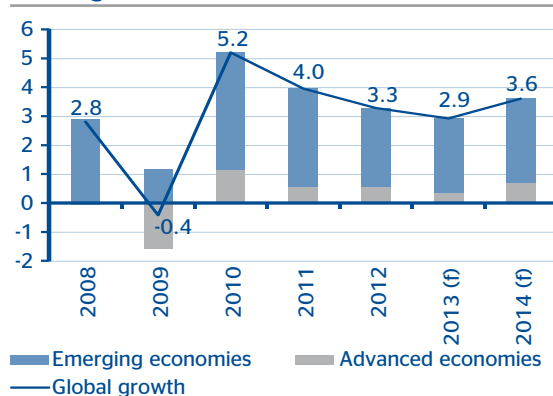
## 2. A slow global recovery with downward risks

### The economic cycle is improving, above all in advanced economies, although it is still far from a strong recovery

Two general features have characterized the last quarter for the global economic scenario. First, the confidence indicators of businesses and the volatility of the financial markets have continued to reflect the low probability of tail risk events, those that could be disruptive for the global situation. Thus economic recovery improves and there is less risk of it derailing. However, some events have contributed to a scenario of, at the end, a feeble global recovery within a one or two-year horizon. They are events with a current impact (the partial closure of the US government) but also a future one (the tightening of financial conditions due to expected end of the exceptional support of monetary policy).

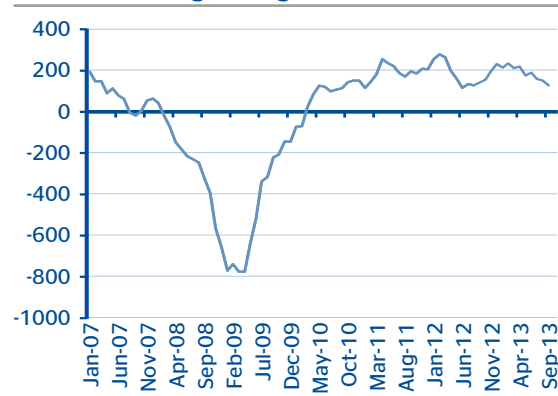
Overall, we have revised down by 0.2 pp the expected growth for the global economy in 2013 to 2.9% and in 2014 to 3.6%. The revision of 2013 growth is due to the worse figures recorded in the U.S. and the slowdown in some of the countries in developing Asia, which are also affected by financial turbulence in the wake of markets expectation of an imminent tapering of QE following FED's last May announcement. Growth in 2014 has also been revised down to 3.6%. The emerging markets are behind this downward revision, (except for China, where we stick to our forecasts), although they will continue to be the biggest contributors to global growth (Chart 5). The higher rate of global growth in 2014 is backed by an acceleration of the economy in all geographical areas, except for Asia, where growth is expected to remain at the same levels. Particularly worth noting is the improvement expected in the Eurozone after two years of recession, and the significant acceleration in Latin America after the blip in 2013 (see tables in the Appendix for more details).

Chart 5  
Global growth (%)



Source: BBVA Research with IMF data

Chart 6  
U.S.: Private non-agricultural employment growth (monthly changes in thousands, 3-month moving average)



Source: BBVA Research with BLS data

## The tension in the financial markets caused by the announcement of the Fed's tapering eases, providing a boost not only in the U.S.

The Fed caused surprise when in September it decided not to start the process of tapering in its quantitative easing (QE) program. By delaying the start, it underpinned the nature of the program as data-dependent. It appears that the data have not been as expected since the time in May 2013 when the Fed began to outline its exit plans. The growth acceleration is still expected in the second half of the year, but Household's consumption is weaker than expected, while the real-estate market, which had been gaining strength, has suffered from the initial reaction to tapering. At the same time, the labor market continues to be weak (Chart 6), and there is uncertainty inherent to the prolonged negotiations on the budget and the public debt ceiling, which have to be repeated in a few weeks. The lack of long-term solutions and the repetition of a brinkmanship strategy in fiscal negotiation increase the probability of a slowdown in decisions on expenditure and investment, as well as the direct impact of the partial closure of government activity.

The clarifications on the process of tapering, which the Fed's members are preparing in the light of the unexpected reaction of the market to their first announcement and its delay until (possibly) the start of 2014, have reduced the risks of a derailment in the recovery. The initial market response to the tapering announcement tightened financial conditions in advanced economies to over-restrictive level for their cyclical moment, as well as putting a sudden brake on finance in some emerging markets, particularly those with the weakest fundamentals and that are at the same time financially most integrated.

However, much of the rise in long-term interest rates recorded since May has been reversed (Chart 7). The markets do not now anticipate rises in Fed Funds rates until 2015, in line with what was discounted by the market immediately before Bernanke suggested that he would initiate the tapering process (Chart 8).

Chart 7

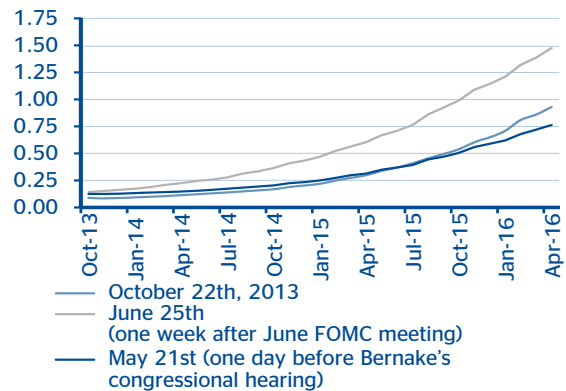
### U.S.: yield on 10-year government debt



Source: BBVA Research

Chart 8

### U.S.: implied Fed fund rates

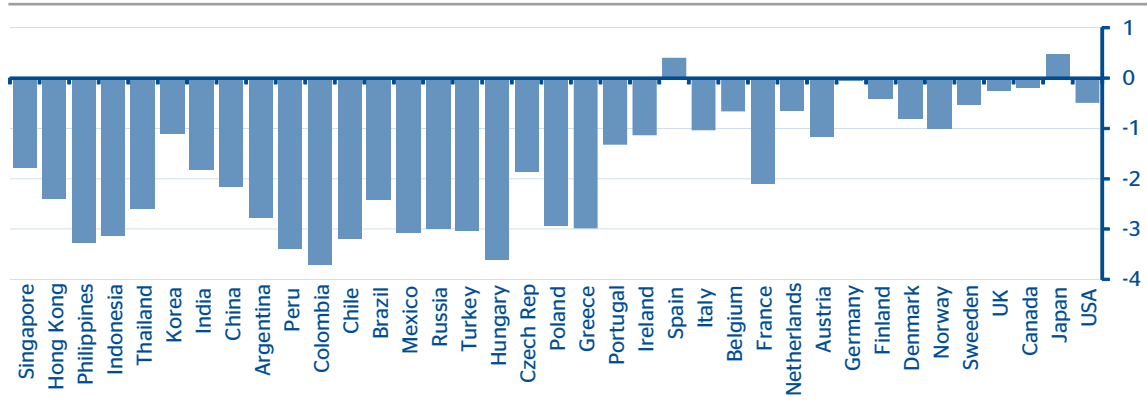


Source: BBVA Research

In addition, volatility and financial tensions have eased at a global level, particularly regarding emerging markets in Asia and Latin America, which are also affected by major capital flight. The first signs that the Fed could be considering putting an end to its monetary expansion program (with all the reservations and steadiness adopted) led to a major depreciation of the currencies of emerging markets, as well as major capital flight (Chart 9). These financial tensions coincided with doubts about the performance of these economies during a slowdown that was becoming more marked.

Chart 9

Flows to emerging economies (over total portfolio assets, June 2013, %)

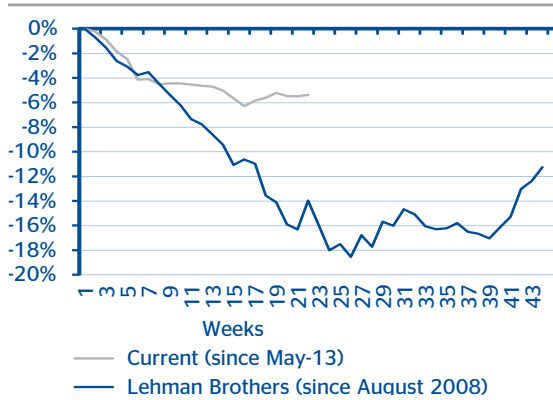


Source: BBVA Research with EPFR data

The severity of capital flight and the depreciation of currencies following expectations of an imminent tapering raised fears of a “sudden stop” of emerging markets funding and then a steep fall in economic activity. However, the sell-off process has gradually been losing intensity, and as can be seen in Chart 10, we are far from the level of severity of capital outflows observed after the collapse of Lehman Brothers. At the same time, emerging markets show some indications of a recovery in confidence, after the check in the middle of the year (Chart 11).

Chart 10

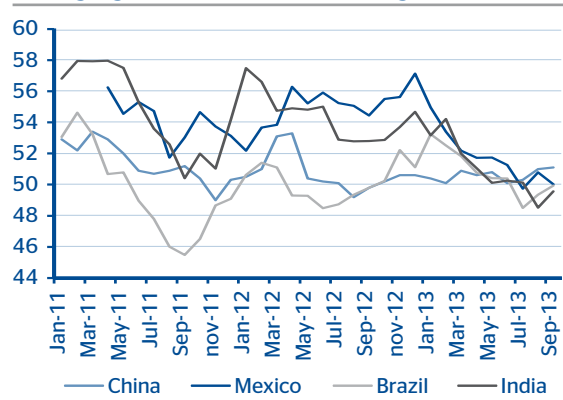
Portfolio flows to emerging markets (% assets under management, compared with pre-crisis levels)



Source: BBVA Research with EPFR data

Chart 11

Emerging markets: manufacturing PMI



Source: BBVA Research with Haver data

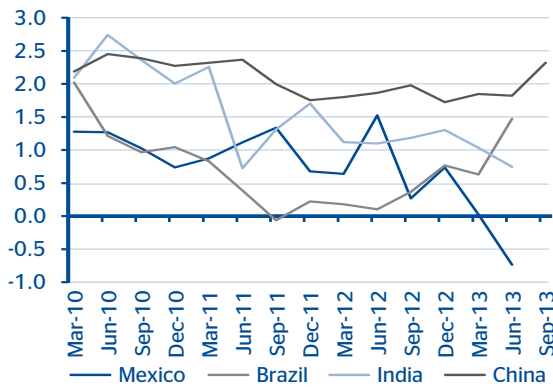
In any event, tapering will end up arriving, and change the global scenario of liquidity injections that favored indiscriminate flows to emerging markets. The impact of tapering, once it is effectively underway, will probably be a greater discrimination in flows toward emerging markets according to the fundamentals of each of them (current-account deficit, foreign-currency debt levels, greater or lesser maturity of short-term debt, etc.). In any event, the extra time allows a reduction in the risk of a sudden fall in economic activity, at least in the short term.

**China once more stimulates its growth, but in a more limited fashion; its increased demand drives other economies**

In China, the doubts at the start of the year on the possibility of a sharp adjustment in its economy have also dissipated, at least in the short term. Over the year, the economy has maintained a high rate of growth, and the most recent data (third quarter) suggest that the GDP is picking up (Charts 12 and 13). The better than expected figures in 2013 mean that the annual growth outlook has been revised upward slightly from 7.6% to 7.7%. Even so, doubts remain on the sustainability of growth in the medium and long term, as the recent upturn in growth has been the result of the improvement in foreign demand, but also of one-off measures of tax policy and public spending with a renewed use of credit. This means that financial vulnerabilities have been allowed to increase; they are still manageable, but they have to be addressed. Priorities include reducing excessive reliance of credit in some sectors of the economy; advancing domestic financial liberalization and reducing the role of shadow banking; and reforming fiscal relations to address high local government debt. The appropriate management of these aspects must ensure a steady transition, a re-balancing of growth toward more weight of domestic demand and household consumption.

Chart 12

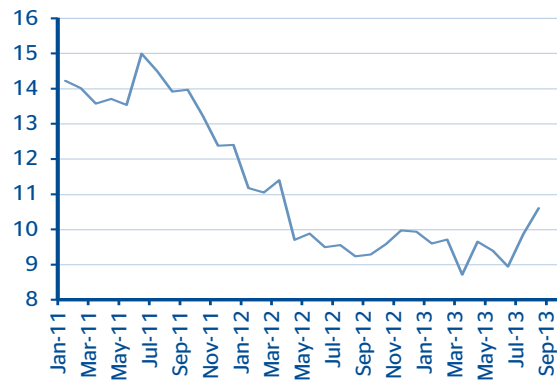
**GDP growth in emerging markets (q/q %, seasonally adjusted)**



Source: BBVA Research with Haver data

Chart 13

**China: index of industrial output (y/y %)**



Source: BBVA Research with Haver data

**The perception on Europe improves and the most extreme risks are dissipated. The reforms geared toward better governance continue and growth returns**

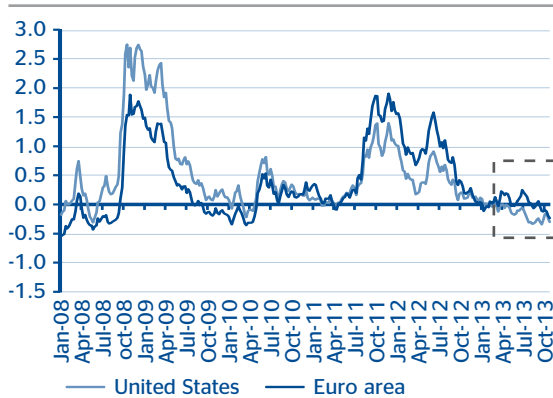
In Europe the forecasts have been confirmed and the economic situation has continued to improve, to the point that the Eurozone emerged from the recession with growth of 0.3% in the second quarter of 2013, after 6 quarters of recession. Recent economic data suggest that the trend will have been maintained in the third quarter, when the Eurozone would have once more recorded a few tenths of a percentage point of growth. The reading of the data is positive in two respects. First, as the recent upturn is based not only on foreign demand, but also on an improvement in domestic demand. Second, the improvement in activity is not only boosted by countries within the center of Europe (with Germany recording strong growth, but also France surprising recently), but the improvement also extends to the periphery (with Spain and Portugal emerging from recession, and Italy reducing its level of decline), contributing (together with the progress made to improve governance and the reforms) to eliminate the systemic risks characterizing previous quarters. The recovery of activity has been helped by a reduction in financial tensions in the area and by a relaxation (de facto) of the more short-term targets of fiscal consolidation, implicitly tolerated by the European authorities.



GDP growth in this part of the year formed part of our scenario, and there has been no additional element to make us change our expectations of a weak recovery. In 2013 Europe's GDP will fall by 0.4% and grow by 1.1% in 2014. The weak recovery is consistent with the deleveraging process underway in the private sector in some economies in the area and the financial fragmentation that is still in place, which affects the capacity of bank credit supply. Monetary policy will continue to be loose, offsetting in part the continued negative effect on growth of fiscal policy. Additionally, far from inflationary pressures, the ECB has shown itself prepared to act if necessary, either with a new round of long-term liquidity for the banks, or even with another cut in rates (which cannot be ruled out). At the same time, the next few months will be decisive in progress toward banking union, with the entry into operation of a single supervisor, the ECB, and the definition of the mechanisms for bank resolution, the model for implementing which is still under discussion.

Chart 14

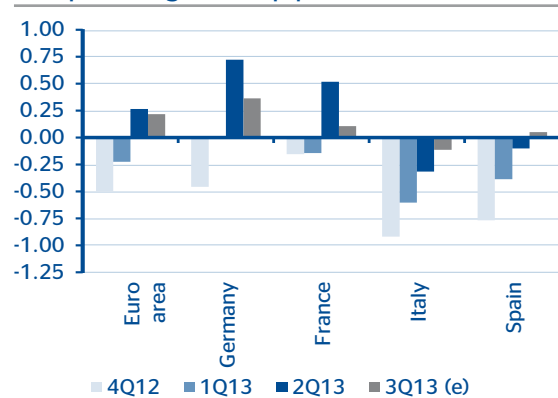
**BBVA Research Financial Stress Indicator**



Source: BBVA Research

Chart 15

**Europe: GDP growth (q/q %)**



Source: BBVA Research with Haver data

## The fiscal agreement in the U.S. has been another patch that does not address long-term fiscal sustainability and does not avoid a contractive short-term impact

On October 16 agreement was reached between the two parties in Congress and the Senate allowing the reopening of the Federal Government after two and a half weeks of closure, and elevating the debt ceiling. However, the agreement reached is a simple extension of the current situation, as it only includes that the Government will have finance until January 15, while the new debt ceiling will be reached on February 7 (though it could be extended until March, with "ingenious" measures by the Treasury). In addition, the agreement creates a committee of 29 members of Congress and the Senate who will have to propose a plan before December 13 on a 10-year budget horizon.

Intense negotiations are drawing near on cuts in discretionary expenditure and increases in taxation. The U.S. thus once more has to address an uncertain process that it has already passed through in these months on previous occasions, and this can only have negative consequences. First, there is the perception that the political confrontation has been too bitter, and that it could have an impact on the electoral outlook. This suggests that a more moderate stance that is more prone to making pacts when the February deadline approaches. Second, the closure of the Government will also have economic consequences, and not only direct ones. It is true that the markets have so far remained relatively immune to the imminent possibility of an event as disruptive as a default on the risk-free asset of the world economy. It seems self-convinced that, in one way or another, an event of this magnitude would be avoided, through a last-minute pact, as in fact happened. That is not to say that there has been no impact on the economy. Most likely is that the partial closure of government for 16 days has had a relatively marginal direct effect on the GDP for the quarter, perhaps a few tenths of a pp. However, the

threat of this process continuing may have an additional impact. This effect, more difficult to measure, would be through the drain on consumption and investment in the face of increased political uncertainty related to the government's capacity to meet its spending commitments. Overall, we consider that the decision that the Fed has to take on when to start the reduction in its asset purchase program (between December and the first quarter of 2014) will only depend on the state of the economy. In any event, the situation in which economic policies push in opposing directions will continue, with a loose monetary policy that will continue to be so for a long period, and an unnecessarily contractive fiscal policy in the short term. Thus the U.S. public deficit will have fallen without market pressure (unlike in Europe) from 6.8% in 2012 to 4% in 2013, which can be considered a drain of 1.3 percentage points of GDP growth in 2013. And the long-term challenges for the fiscal sustainability of the U.S. economy have not been tackled.

### **Risks in the forecast: downward bias but a priori with less probability and lower impact**

The risks to the moderate recovery scenario with a growing contribution from advanced economies and a sustained contribution from emerging markets have been reduced. This does not take away the fact that the balance of risks continues to be downward. It is worth pointing out first due to its character the possibility of a "disorderly exit" from the Fed's QE, which could generate an excessive increase in interest rates (in the U.S. and in other countries), not as a result of improved growth prospects or higher inflation, but due to uncertainty regarding the rate of exit planned by the Fed. Financial conditions that are too tight for the rest of the world could terminate a global recovery if it is not especially dynamic, as it is particularly in the Eurozone. In addition, it is also worth noting as a risk the resolution of the fiscal questions in the U.S., the budget and the debt ceiling, which have now been postponed until the first quarter of 2014. The negotiations that the parties have to carry out until then are a potential source of uncertainty and may lead to an additional drag if the fiscal drain increases.

Second, it is worth identifying as a risk factor the possible adjustment in growth in China and in other emerging markets. This could be the result of idiosyncratic factors, but also of dilemmas to which domestic policies have to address in a more acute global financial environment. Although as has been seen recently, the differences between economies are relevant, and an interruption in the recovery underway is not to be expected unless there are financial scenarios that are as adverse as those registered between the end of 2008 and 2009.

Lastly, the resurgence of the euro crisis is a globally relevant risk. The authorities have to support the positive perception of the markets with decisive progress to strengthen monetary union, in particular banking union. In all, there are a number of elements that could lead the better perception to change. Some peripheral countries are in a situation of lack of political consensus that could check the necessary reforms. Negotiations on the programs of Portugal and Greece may be the source of uncertainty. In addition, shortly work will begin on the review of the bank balance sheets and the test stress to risk scenarios, needed for the implementation of a single banking supervisor, the ECB. Finally, as has been shown by past experience, disagreements on the definition of policies that strengthen the euro area, in this case bank resolution mechanisms may produce tensions and volatility in the financial markets.

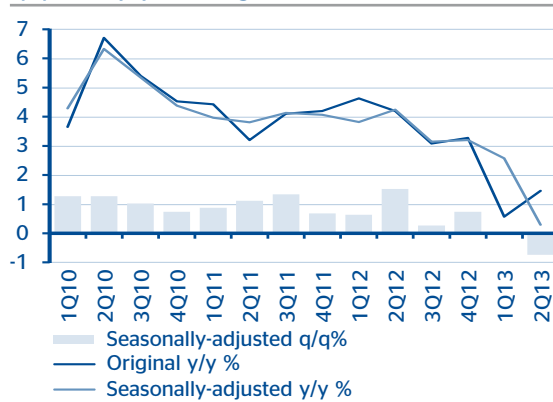
## 3 Mexico: the worst of the slowdown has passed

### 3.1 Activity: recovery at the end of the year with expectations of improved growth in 2014

The first half of the year was notable for a slowdown that prompted a downward revision of the forecast for economic growth; however, the path of growth has picked up in the second half of the year. Economic activity in the first quarter grew by 0.03% and declined by 0.74% in the second in quarter-on-quarter terms (see Chart 16). For the third quarter of 2013 we expect a rise slightly below the quarterly growth of 1.0% estimated at the start of the year (see Chart 17). The improvement in the second half of the year is mainly due to an upturn in foreign demand, particularly resulting from the good performance of the manufacturing sector in the United States, which will import more Mexican products. Investment and public expenditure, though contributing less to growth, are also expected to provide a stimulus due to the effect of the reconstruction processes in response to the natural disasters that hit Mexico. The result will be a boost to economic growth at the end of 2013 and the start of 2014. Annual growth for 2013 and 2014 is therefore expected at 1.2% and 3.1% per year, respectively.

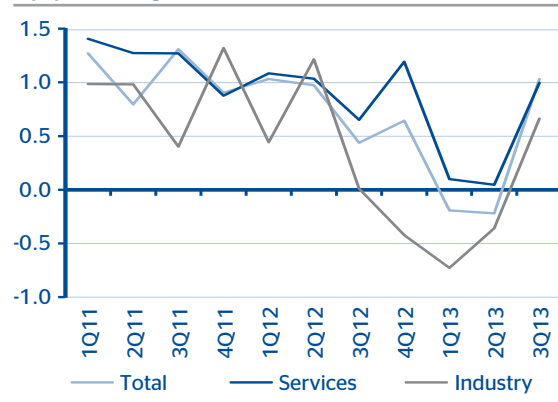
The low growth at the start of the year shows the need to tackle the major challenges facing the Mexican economy in order to achieve sustained economic growth. Among them are the following: the low level of economic productivity; the extensive informal sector (59% of the employed population); the growing perception of insecurity and the costs linked to it (according to INEGI, in 2012 the total cost of insecurity and crime for Mexican households accounted for 215 billion pesos, or 1.34% of GDP); and the limited resources available for innovation, science and technology (Mexico invests 0.45% of GDP on these items, compared with 2.3% of GDP on average in the OECD countries). The series of reforms presented by the government in 2013 aims to resolve these limiting factors. However, the road ahead is still long, and steering Mexico along a route of growth and sustained development will depend largely on the agreements reached by the main political forces in the country represented in Congress, the will of the government and a determined participation by the people at large.

Chart 16  
**Mexico GDP**  
(y/y and q/q % change)



Source: BBVA Research with INEGI data

Chart 17  
**Indicators of Global Economic Activity**  
(q/q % change)



Source: BBVA Research with INEGI data. The September data is an estimate.

The expansion in the first half of the year was weaker than originally expected due to significant moderation in economic activity in the manufacturing sector, linked to a fall in external demand, and a slowdown in domestic demand related to a weak labor market.

Based on the Global Indicator of Economic Activity (IGAE), with seasonally adjusted figures, the manufacturing sector declined by 0.7% y/y on average to August, agriculture only increased by 0.2% y/y and services grew by 2.5% y/y. Manufacturing slowed in the first half of the year and construction contracted; this had not happened since the 2009 crisis. The average growth of manufacturing industry through June was 0.7% y/y. The figure for July to September increased by an average of 2.3% y/y. This is related largely to improved foreign demand, as industrial output in the United States increased moderately; in particular, manufacturing output grew on average through September by 2.0% y/y, under the 3.9% y/y in 2012 (see Chart 18). There has been a significant fall in the construction sector. The decline in this sector this year through September by 4.1% is related to a greater weakness in public-sector expenditure and a fall in investment in private construction, mainly due to less residential construction (housing accounts for around half the gross value of production in building). The sector is expected to recover at a very slow pace for the rest of the year.

The IGAE figures for August 2013 suggest a more positive economic performance in the third and fourth quarters. After various months of slowdown and even falls, the monthly growth of the manufacturing sector recovered and in August posted a rise of 0.5% m/m, while services grew by 0.4% m/m, although agriculture continued to decline at 0.7% m/m. As a result, the IGAE recorded a growth of 1.4% y/y in August.

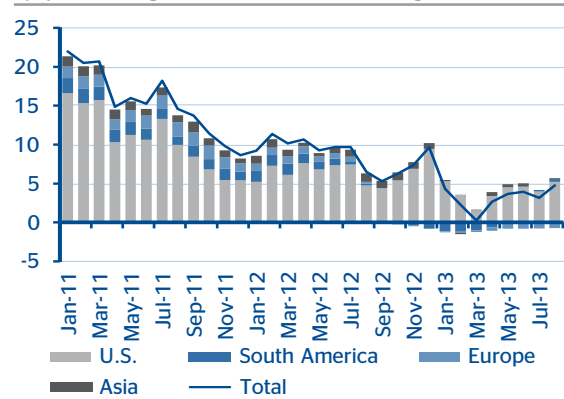
In addition, in September 2013 exports of goods (using seasonally adjusted figures) recorded a year-on-year growth of 4.3%, after declining in January, February and April. Non-oil exports in September increased significantly (annual 7.2%), although oil exports have lagged behind (down an annual 12%).

Chart 18  
**Manufacturing output in Mexico and the U.S. (y/y % change)**



Source: BBVA Research with INEGI data

Chart 19  
**Manufacturing exports by destination (y/y % change and contribution to growth)**



Source: BBVA Research with INEGI data

By destination, 79.1% of manufacturing exports through August went to the United States. Lower demand has meant a moderation in growth from 8.8% y/y in 2012 to 4.9% in the period January-August 2013. In South America, Europe, Asia and the rest of the world, which are the destination countries for the remaining 20.9% of manufactures produced in Mexico, the falls have been more notable. For example, exports to South America fell by 4.1% in January to August following the rise of 7.0% y/y in 2012; in Europe, after a rise of 6.9% in 2012 there was a fall of 8.2%; and in the rest of the world exports fell by 5.4% on average in 2012 and by 3.4% in January to August (see Chart 19). Unlike most of the manufacturing

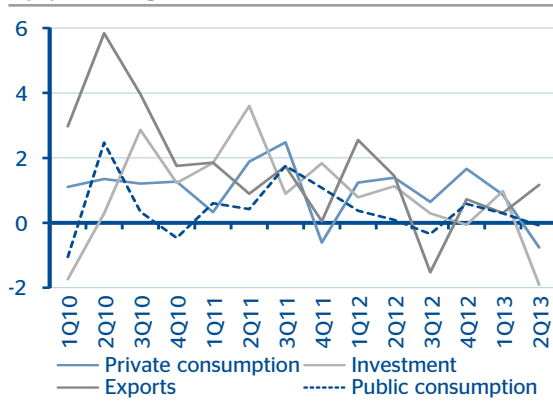
export branches, the automotive industry continued to increase exports, at an average of 2.6% in the period January-September, although notably below the 2012 average of 12.7%.

Imports, also seasonally adjusted, recorded a year-on-year increase of 2.7% in September, mainly due to increases in consumer goods imports (6.1%) and intermediate goods (3.2%), but there was a fall of 5.2% in imports of capital goods. As a result, there was a trade surplus in September of USD 604.4 million, so in cumulative terms from January through September the balance was a negative USD 4,416 million, equivalent to 0.4% of GDP.

Factors on the domestic demand side that contribute to the slowdown in private consumption have continued to perform weakly (see Chart 20). They include lower job creation, the limited increases in real wages, and the fall in foreign-currency inflows from remittances. The number of formal jobs created annually fell from 711,708 in December 2012 to 475,750 in September 2013. As a result, the number of workers registered in the IMSS system totaled 16,508,845 (see Chart 21). In addition, real wages remained unchanged with respect to the previous year and the "open" unemployment rate continues to grow, from 5.17% in August to 5.29% in September this year. Family remittances fell by 6.2% from January through September compared with the same period the previous year. However, the September figure reflects a certain recovery in jobs in the United States. According to the U.S. Department of Labor, the unemployment rate in the country came in at 7.2% in September, the lowest since the end of 2008. This could have been reflected in more jobs for Mexican migrants in the U.S., where most remittances to Mexico originate. In addition, the weaker peso in September in comparison to the previous two months could also prove an incentive to send more remittances to Mexico. Thus in September the figure amounted to USD 1,740.7 million.

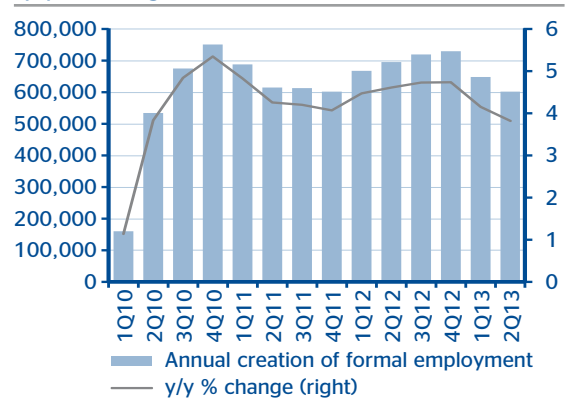
In January-June, foreign direct investment (FDI) amounted to USD 23,846.6 million, compared with USD 15,453.3 million in 2012 as a whole. However, the increase was mainly due to income from the sale of the Modelo group, so this year may be considered atypical. FDI flows were channeled to manufacturing industry (83.4%), retail trade (7.6%), construction (2.6%), professional, scientific and technical services (1.8%), transport (1.8%) and other sectors (2.9%).

Chart 20  
**Components of aggregate demand (q/q % change)**



Source: BBVA Research with INEGI data

Chart 21  
**Employment in the formal private sector (y/y % change and annual creation)**



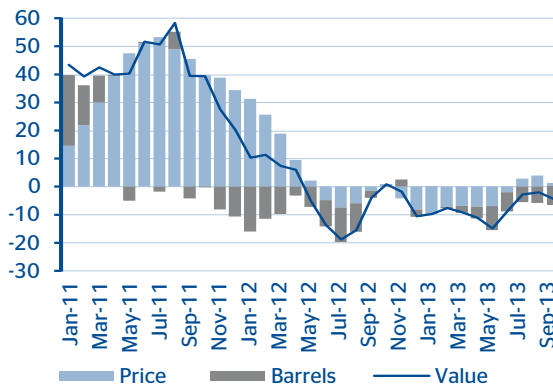
Source: BBVA Research with INEGI data

Cyclones Ingrid and Manuel, subsequently upgraded to hurricane status, affected nearly two thirds of the country and led to damage that will reduce the real GDP estimated for 2013 by just under 0.1 percentage points. This is because the expenditure needed for dealing with the emergency, more water in the reservoirs (for irrigation, water supply and electricity generation) and the reconstruction process will partially offset the initial losses. A positive effect may also be expected in 2014 when reconstruction activities pick up pace (see Box 1).

On the subject of public finances, according to data from the SHCP for July to September 2013, the government's budget revenue fell in real terms by 0.1% compared with the same period in 2012. For the close of this year, the authorities expect a tax deficit on budget plans of MXN 15,700 million and a reduction of oil revenues of MXN 49,700, mainly due to lower production (see Chart 22). Through September total net budget expenditure in the public sector increased by 0.4% in real terms with respect to the same period in 2012. As a result, the total cumulative public deficit through September amounted to MXN 188,400 million (not including PEMEX), which is consistent with a deficit of 0.4% of GDP, as proposed in the Economic Package of 2014. At the close of the third quarter of 2013, the net debt of the federal public sector was equivalent to 35.1% of GDP, or 1.8 percentage points above the figure recorded in December 2012, and the biggest percentage since 1990. This rise is due mainly to the increase in domestic debt from 23.4% to 24.7% of GDP in the same period. The historical balance of the public sector borrowing requirement was equivalent to 38.7% of GDP, 2.1 percentage points higher than at the close of 2012. These debt levels compare favorably internationally with countries with a similar or greater level of development. A fiscal deficit of 1.5% of GDP was approved for 2014 (not including PEMEX), and it is expected to decline steadily and thus ensure fiscal stability. It is important that the financing needs of the public sector should fall gradually, given that they could reduce the finance available to the private sector (see Box 2).

Chart 22

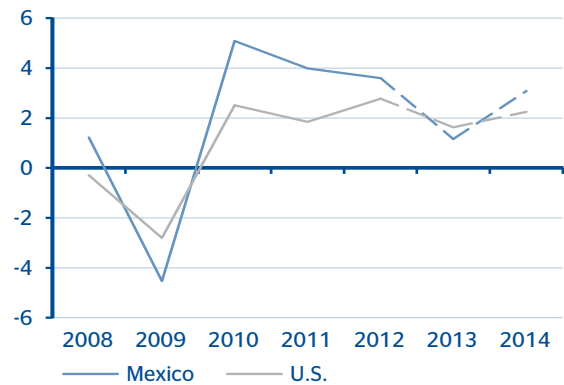
**Oil production  
(y/y % change)**



Source: BBVA Research with INEGI data

Chart 23

**GDP of Mexico and the United States  
(y/y % change)**



Source: BBVA Research with INEGI data

This has been a year in which progress has been made in the implementation of structural reforms. As an initial step in this process, on December 2, 2012 the political parties signed the Pact for Mexico, which focused on searching for agreements in five areas: a society of rights and freedoms; growth in the economy, jobs and competitiveness; security and justice; transparency, accountability and combating corruption; and democratic governance. Reforms in various areas within the framework of this pact were approved in 2013, and others are being debated and await regulatory implementation. However, it is important that the reforming effort should continue and that the implementation of the approved reforms should be consolidated. In parallel to these reforms, other areas may be boosted in which the country has made slow progress and which make the business environment difficult. For example, the

World Bank study Doing Business 2014 puts Mexico in 53rd place out of 189 countries looked at, i.e. two places under the figure for the previous year, due to declines in the indicators for starting a business (Mexico fell seven positions from 41 to 48) and for registering property (ranked at 150).

Next year the outlook is more favorable, though there are two challenges that have to be faced. First, we consider the Mexican economy will recover starting in the third quarter due to a number of factors: greater execution of expenditure and public investment, partly linked to the reconstruction work in response to the natural disasters; a slight recovery in formal employment that will boost private consumption; and a better performance by the U.S. economy, with the resulting increased demand for Mexican goods and services. It is also important to continue to deal with economic challenges: increase productivity; reduce informality; reduce insecurity; improve the labor market; boost quality education; and foster innovation, research and scientific and technological development. The current balance of all the economic factors analyzed will boost economic growth in Mexico in 2013 to 1.2% and accelerate it to over 3.0% in 2014 (see Chart 23).

**Box 1: Economic effects of the recent floods caused by the storms Ingrid and Manuel**

The cyclones Ingrid and Manuel, originating in the Atlantic and Pacific, respectively, which subsequently achieved the category of hurricanes, affected two thirds of the country at the same time. It was a phenomenon that had not been experienced for 50 years. This is extremely significant, as according to data from the National Institute of Statistics and Geography (INEGI), the states affected concentrate 74.4% of domestic GDP. There was tragic loss of life and a great deal of damage in Mexico.<sup>1</sup>

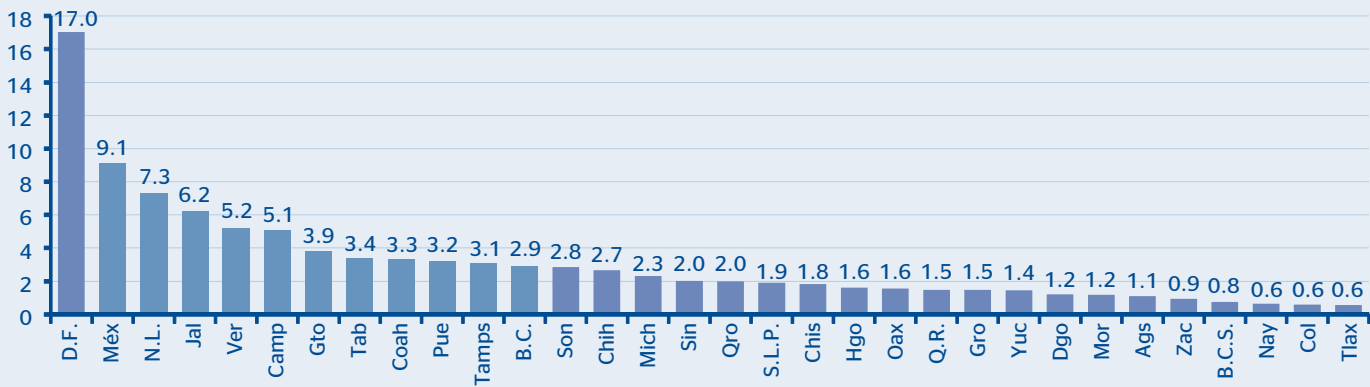
According to the World Bank, Mexico’s exposure to disasters is increasing. At the same time as Mexico’s economic development is improving the quality of life of its citizens, the growth of its assets and its population increasing its exposure to natural disasters. With the low-income population tending to live in the highest risk areas, these figures reveal the significant increase in exposure of a population that is of itself vulnerable.

generation) and the reconstruction process would partially offset the initial losses. In addition, a positive effect may be expected in 2014 as reconstruction activities pick up pace. Although the impact will be limited, it will slightly worsen the outlook for the Mexican economy given the economic slowdown of the first half of the year.<sup>2</sup>

The effect becomes more relevant if we take into account a cumulative effect from the weather phenomena that have affected the country in the last ten years. Evidence suggest that states that are best prepared against the possibility of these extreme natural phenomena occurring and that have insurance covering a proportion of the losses caused by these events recover quicker than states that do not.

Chart 24

**Gross domestic product by state in Mexico (percentage share)**



Source: BBVA Research with INEGI data

Overall, the damages losses (preliminary figures) caused by the disasters were equivalent to 0.1% of GDP at 2012 prices. Taking into account the additional resources needed for reconstruction and improvements, and the relocation of families, the costs of the disasters are estimated at a possible 0.2% of GDP in 2012. However, this would lead to a reduction of the real GDP estimated for 2013 of under 0.1 pp, as the expenditure on dealing with the emergency, more water in the reservoirs (for irrigation, water supply and electricity

Although the impact of the recent disasters is not capable in itself of altering the country’s rate of growth, its accumulated affect may do so: it could affect the long-term trend growth rate by destroying capital, diverting funds, and generating greater fiscal pressure. In terms of the public accounts, the disasters led to greater pressure on the limited funds allocated to deal with disasters, due to the costs of emergency assistance, restoration and reconstruction of the damaged public infrastructure. In addition, a small

<sup>1</sup> See Flash Mexico: “Efectos económicos de las recientes inundaciones”, September 26, 2013.

<sup>2</sup> The macroeconomic impact was estimated with the information available through September 26, 2013, and following as far as possible the international methodology of CEPAL for the socioeconomic evaluation of the disasters. The estimates presented are based on official information available, as well as data offered by sources in the private sector.



reduction in tax receipts has been estimated, as a result of lower economic activity in the regions that were isolated and the tax facilities granted to the victims. The Secretary for the Treasury has announced the implementation of various tax support measures for people affected in flood disaster areas. They include support to the tourism sector in Guerrero for MXN 15 million, the exemption from provisional payments of income tax and the flat-rate business tax (IETU) for August, September and October. These support measures include the following: the obligation on small taxpayers to make final payments of income tax, IETU and VAT for July to October has been waived; new fixed-asset investments made between September 15 and November 30 will receive an allowance of 100% immediately; and there will be tax incentives to the agriculture, livestock, fishing and forestry sectors, allowing payment of income tax withheld on workers' salaries in the affected areas to be delayed until November and December of this year.

A temporary increase in inflation was initially forecast due to the disasters, as a result of the temporary shortages in rural and urban areas affected, caused by the breakdown of some road networks and the partial loss of harvests towards the end of the year. However, neither inflation in the second half of September nor that for October recorded any impact in agricultural prices, so the effect of the hurricanes on prices was not significant. It is also estimated that the increased unemployment in areas affected will in part be offset by activities for restoration and reconstruction, so the negative effect on this item will be temporary. In general, this type of event tends to increase the poverty of families in affected areas; however, information is not available to make any estimate in this respect. Overall, the recovery of living

conditions and the overcoming of poverty in these cases depends on the effectiveness of the measures adopted to ensure economic recovery in the affected areas. The impact on the external sector will be seen more clearly when complete information is available on the tourist areas affected, such as Acapulco, and on the regions that are exporters of goods and services, as is the case of the regions producing legumes in the state of Sinaloa. On the import side, there may be an upturn due to the purchase of materials and drugs required for providing medical assistance to the hurricane victims, although it will not be significant in terms of the total value of imports.

The available funds in the National Disaster Fund (Fonden) amount to around MXN 12,507 million (MXN 2,800 million from previous years, MXN 3,500 from the 2013 budget and MXN 6,207 in new funds). These will be insufficient to deal with the emergency and the activity of reconstruction and recovery of the living conditions for the thousands of families affected. Additional funds will have to come from a redistribution of the budget or increased debt.

Given this scenario, it is essential to strengthen the state and federal civil defense systems and boost the culture of insurance (of household assets, crop areas, public infrastructure, farming goods and public facilities) in order to reduce the negative effect of the loss of assets, production and living conditions of the thousands of people affected by the disasters. Furthermore, it is important to bolster Mexico's programs for adapting to and mitigating climate change; use disaster funds efficiently and transparently; and improve the schemes for territorial reorganization and reduction of environmental degradation in order to reduce the risk of disasters.

## Box 2: Analysis of the impact of government finance on private-sector credit

Over the last decade the composition of government finance has changed a number of times, particularly toward a greater domestic debt rather than external debt. In the period 2001 to 2008, the debt issued in Mexico increased from 13.6% to 25.4% of GDP, while the foreign-currency debt fell from 9.2% to 4.4% of GDP. Subsequently, from 2008 to 2012 both sources of finance grew, though the growth in internal debt reached 35.67%<sup>1</sup> of GDP, while foreign-currency finance amounted to 7.52%<sup>2</sup> of GDP.

Previous economic research on developing countries has found that a high level of government finance is associated with a shift in the bank credit allocated to the private sector.<sup>3</sup> Given this evidence and the recent growth of domestic government debt in Mexico, it is important to know whether the increase in this debt has generated a shift from private-sector credit in Mexico. This is particularly important given that private-sector credit provides significant support for growth in an environment of global economic slowdown.

This analysis evaluates the behavior of credit based on a quantitative approach, where the volume of credit in the banking (and semi-banking) system to the private sector depends on the finance captured by the government.<sup>4</sup> Specifically, with the aim of analyzing and quantifying a possible shift of private-sector credit as a result of increased public finance, this study carries out an econometric analysis based on the proposal by Emran and Farazi (2009), which establishes a multiple regression equation as follows:

$$C_t = \alpha_0 + \beta_1 G_t + \beta_2 Y_t + \beta_3 F_{t-1} + \beta_4 I_t + \beta_5 R_t + \varepsilon_t$$

where  $C_t$  is bank credit to the private sector  $G_t$  is government finance,  $Y_t$  the GDP logarithm,  $F_{t-1}$  financial saving,  $I_t$  institutional quality,  $R_t$  the short and medium-term interest rate of private securities,  $t$  refers to the period of time, and  $\varepsilon$  to error. The series are quarterly and the sample covers from the period from the first quarter of 2001 to the fourth quarter

of 2012, due to the availability of data.

As the series used are not stationary, a cointegration methodology is used, which implies the existence of an equilibrium between bank credit to the private sector and government finance in the long term. The relevant parameter in the study is that which measures the effect on bank credit to the private sector of changes in government finance ( $\beta_1$ ). In particular, a shift in private credit would imply a coefficient with a negative sign ( $\beta_1 < 0$ ).

In accordance with the results of the estimates, the value of the coefficient for government financing is -0.12 and significantly different from zero. As a result, when the government borrows an additional 1.0% of GDP, the credit granted by banks to the private sector falls by around 0.12% of GDP. The rest of the coefficients of the variables for the calculation in general had the expected signs. In addition, if we use private finance as a dependent variable, the results in general are maintained and show a smaller shift toward one.<sup>5</sup>

These results indicate that growth in government debt has led to lower growth in private-sector credit. Given how dependent investment is on private credit, this could have a significant effect on it. However, we have to handle these results with care, given that during the period under analysis a number of regulatory and institutional changes took place that could influence the sense and size of the estimates by affecting the decisions taken by the different agents providing finance. Among these changes are: 1) the process of capitalization of the Mexican banks by international financial institutions; 2) the changes in banking regulation at national and international level; 3) the change in the investment rules for Afores, making them more flexible over time; and 4) the changes in the measurement of risk in the Mexican financial system.

<sup>1</sup> For 2013 the Annual Financing Plan sets out in its objectives an active search for external sources of finance on the capital markets and a modification of the composition of government debt to receive the benefits produced by the appropriate use of external credit.

<sup>2</sup> Growth of foreign-currency debt was influenced by the inclusion of Mexican debt within recognized global bond indices such as the World Global Bond Index, for which the sum of issues have to be at least USD 20 billion, and each issue must have a minimum of USD 1 billion in circulation.

<sup>3</sup> Among them are: Fayed (2012) and Bevan and Adam (2001).

<sup>4</sup> According to the literature the existence of a shift in private credit caused by public finance can be analyzed through two main approaches. The first is based on the effects of the increase in government finance on the equilibrium interest rate. However, this relationship is not significant in developed countries or developing countries, according to empirical studies. The second, called the quantitative approach, is based on the volume of credit in the banking system and is based on the premise that the presence of a shift in credit does not imply that if the government borrows one more peso, the banking system has one less peso for the private sector; rather, than the banks respond to a change in government indebtedness through optimizing their asset and liability portfolios in terms of risk-return. Thus when there is greater demand for finance on the part of the government sector, two possible scenarios may occur: 1) that access to risk-free assets issued by the government allow the bank to take more risk and thus increase the level of credit to the private sector (i.e. the risk diversification effect), or 2) that the credit to the private sector falls (i.e. the diversion effect), subject to regulatory, capital, liquidity and institutional conditions.

<sup>5</sup> Private finance includes banking and non-banking credit to companies, consumer finance and mortgages.

**References**

Blanchard O. (2007), "Entry in Crowding Out", The New Palgrave Dictionary of Economics, 2007.

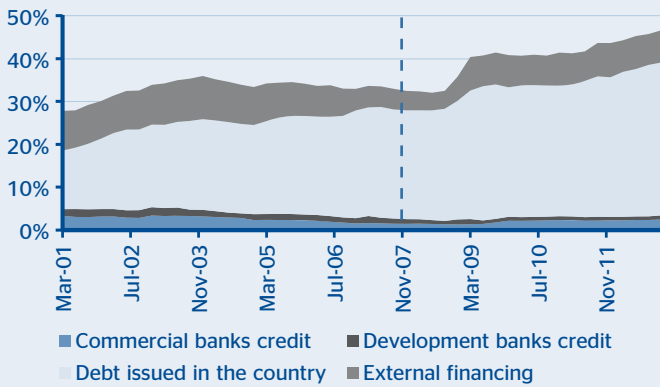
Bevan, D. L. y Adam C. S. (2001), "Fiscal Policy Design in low-income Countries", UNU-WIDER, 2001.

Emran M. S. y Farazi S. (2009), "Lazy Banks? Government Borrowing and Private Credit in Developing Countries", Institute for International Economic Policy Paper Series, 2009.

Fayed M. E. (2012), "Crowding Out Effect of Public Borrowing: The Case of Egypt", 2012.

Chart 25

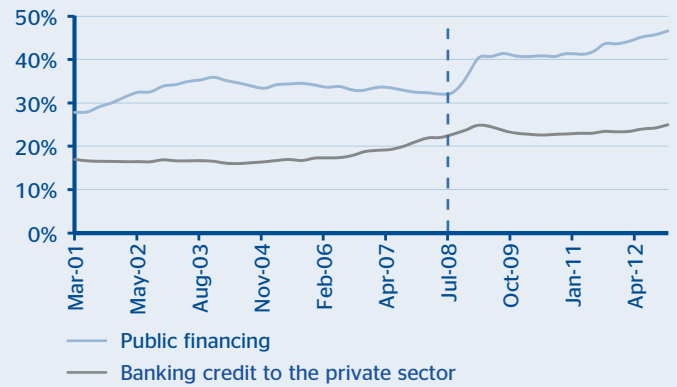
**Components of government finance (% of GDP)**



Source: BBVA Research with Bank of Mexico data

Chart 26

**Public-sector finance and bank credit to the private sector (% of GDP)**



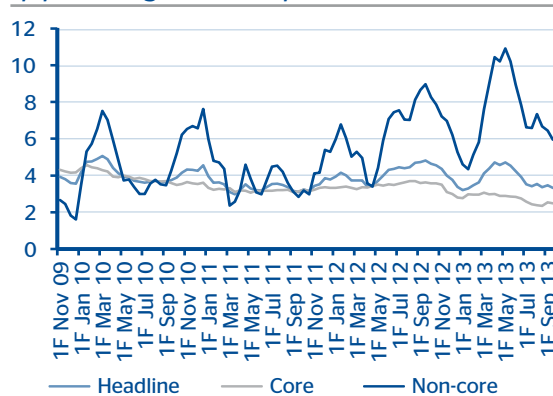
Note: Bank credit to the private sector includes commercial and public banking, Infonavit, Fovissste and regulated Sofomes.  
Source: BBVA Research, with data from the Bank of Mexico

### 3.2 Favorable inflation in 2013; next year there will be an upturn due to the tax reform shock and the steady economic recovery

We expect headline inflation to be at around 3.5% in December 2013, the lowest level since the close of 2005. In January 2014, a new supply shock, this time derived from tax changes, will lead to an upturn in headline inflation to levels of close to 4.0%. Starting in February it will resume its decline to an average for 2014 of around 3.6%, slightly below the average for 2013. Core inflation is forecast to continue close to its all-time lows for the rest of 2013 and end the year at 2.6%. In 2014 we consider it will remain under 3.0% in the first half of the year and slightly above this level in the second half. For the year as a whole we expect an average of 2.9%, slightly above the average for 2013 (2.7%).

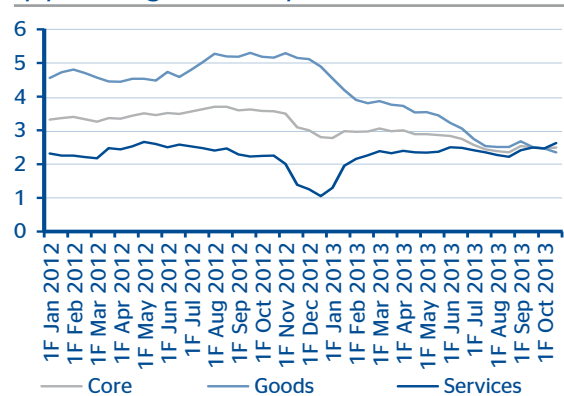
The performance of core inflation, which is a better indicator of price rises in the medium term, has been very favorable in 2013. Its trend has been for a decline throughout the year, favored by the weakness of the economic cycle and resulting slack, which has led to a lack of demand pressure on prices. Core inflation will average under 3.0% in all the quarters of the year: 2.95% in 1Q13, 2.87% in 2Q13; 2.46% in 3Q13; and an estimated 2.55% in 4Q13. This positive performance has been possible due to continuous moderation in goods inflation since November 2012 (Chart 28). Basically, the moderation has been due to the lower price increases in food, as well as other goods. Price moderation of the core inflation components was favored by lower international prices of grains in the first half of the year and the trend for a stronger peso in January-April, as well as economic weakness (Chart 29), which has limited prices increases by companies.

Chart 27  
**Inflation and components**  
(y/y % change, bi-weekly series)



Source: BBVA Research with INEGI data

Chart 28  
**Core inflation and components**  
(y/y % change, bi-weekly series)



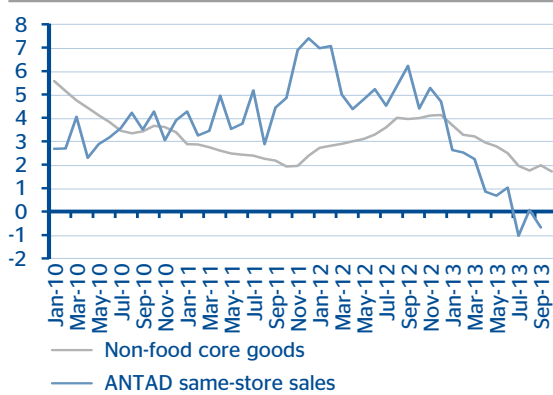
Source: BBVA Research with INEGI data

The economic slack has also favored the services component of core inflation (Chart 30), which has remained low and stable throughout the year (an average of 2.15%). The monthly prices of the sub-index of other services actually fell in August and September (by 0.65% and 0.19% respectively). Overall, core inflation has been helped this year by the behavior of its main determinants. With the prospects of a gradual economic recovery, we do not expect demand pressures, nor do we foresee financial tensions that could cause the peso to weaken substantially, or a sufficiently clear global recovery that could lead to an acceleration of commodity prices. As a result, we estimate that core inflation will remain moderate

for longer. We expect that for the rest of 2013 it will continue at close to its all-time lows and close the year at 2.6%. For 2014 we expect it to remain at under 3.0% in the first half of the year, although at higher levels than those of recent months due to the tax changes, and slightly above this level in the second half of the year, as the domestic and global economic cycle steadily improves. For the year as a whole we expect an average of 2.9%, slightly above the average for 2013 (2.7%).

Chart 29

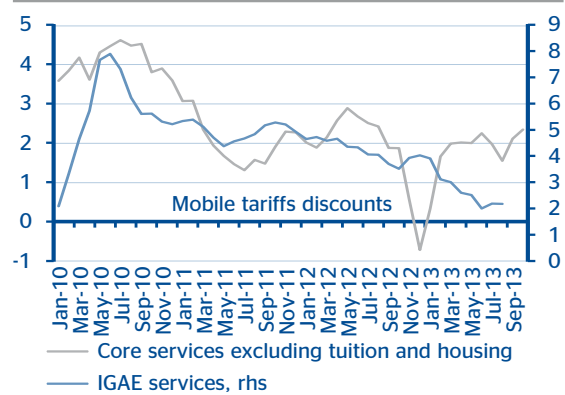
**Core goods inflation, excluding food and ANTAD sales (y/y %)**



Source: BBVA Research with INEGI data

Chart 30

**Core inflation in services excl. education, housing and IGAE services (y/y % change)**



Source: BBVA Research with INEGI data

Non-core inflation was exposed to a number of supply shocks in the second quarter of the year, resulting in a major rise to annual average of 9.8%. The agricultural price component rose from 9.0% in 1Q13 to 13.8% in 2Q13 due to higher prices for a number of components: green tomatoes, owing to the impact of frost on production; lemons, affected by the “yellow dragon” plague in the state of Colima; and chicken and eggs, again hit by a new outbreak of bird flu in several states. The higher level of non-core inflation was also a result of the component of energy and administered prices, which rose from 4.4% in 1Q13 to 7.4% in 2Q13, triggered by the significant hikes in gasoline and LP gas and public transport prices, and reduced subsidies or the reinstatement of car ownership tax in various states. However, by the second half of the second quarter, the supply shocks that affected the non-core component began to ease. Agricultural prices have fallen in three of the last five months and so far there has not been any effect from the recent floods in various states. This positive behavior reflecting the lack of new supply shocks, combined with the declining trend in core inflation, has improved the performance of headline inflation, which after accelerating in the second quarter of the year from an average of 3.7% in 1Q13 to 4.5% in 2Q13, has moderated steadily to 3.4% in 3Q13. We expect it average 3.4% in 4Q13, the same level as in December, and the best figure for the close of the year since 2005. In January 2014, a new supply shock, this time derived from tax changes, will lead to an upturn in headline inflation to levels of close to 4.0%. Starting in February it will resume its decline to an average for 2014 of around 3.6%, slightly below its average for 2013.

### Effect of the tax reform on inflation: the changes finally approved will have a much smaller effect than they would have had if the original proposal been passed

In comparative terms, the impact on inflation of the proposal for fiscal reform originally submitted by the executive would have been much greater than the reform now approved by both houses. With respect to the original proposal, the changes to VAT that were not approved (i.e. VAT on professional license fees, VAT on income from and purchase of homes and VAT on mortgage interest) were the elements that would potentially have had the biggest effect on inflation, and thus more than offset the introduction of new special taxes such as the 8% on food with a high calorie content. To put this into context, the application of VAT on professional licenses, depending on how this would be passed on, would have had an effect on annual inflation of between 0.3 pp and 0.6 pp. Although the VAT effect on the income from and purchase of housing was the most uncertain, its significant weight in the national consumer price index (INPC) anticipated that it would have been important (even assuming a low level of transfer, it could have amounted to 0.5 pp). With respect to inflation, the other relevant changes can be divided into: a) not-application of the special excise duty (IEPS) proposed on natural gas and VAT on public performances; and b) the new IEPS of 8% on food with a high calorie content. The low weight in the INPC of these items implies that their effect on headline inflation will be very limited.

To estimate the possible effect of the tax changes as a whole on prices, we have assumed a range of between 50% and 90% for the possible transfer by businesses of the cost of these taxes to end consumers; the final figure will depend on the point in the economic cycle (i.e. with greater/lesser strength, more/less transfer), the characteristics of the sector, and other factors. We calculate that the effect on inflation of the new IEPS that have been approved will be between 0.23 pp and 0.29 pp, while the effect of changes to VAT will be between 0.15 pp and 0.27 pp, so overall the changes will impact price levels by between 0.38 pp and 0.56 pp (see table below). To sum up, there are two main differences in the impact on inflation with respect to the original proposal: a) the increase will be much smaller; and b) it will be more uncertain. For our 2014 scenario, we consider that the effect on inflation of the tax changes will be around 0.44 pp. This will push headline inflation up to levels of around 4.0% and trigger an upturn in core inflation to levels of around 2.8% at the start of the year.

Table 1

#### Estimated ranges of the effect on inflation of the approved tax changes (pp)

IEPS <sup>1</sup>	0.23 - 0.29
Changes to VAT <sup>2</sup>	0.15 - 0.27
<b>Total (sum)</b>	<b>0.38 - 0.56</b>

<sup>1</sup> Possible effect due to new IEPS duties on soft drinks, food with high calorie content, fossil fuels (except for natural gas) and pesticides. We have taken into consideration the weightings in the INPC for canned soft drinks, concentrates for soft drinks, packaged fruit juices or nectars, chocolate, sweets, boxes and honey, cookies, ice-cream, cakes, pastries and sweet packaged bread, potato chips and similar, domestic LP gas, low and high-octane gasoline and pesticides. We have assumed a transfer rate of between 50% and 90%.

<sup>2</sup> Possible effect due to changes in VAT, i.e. the approval of a rise in the reduced border rate from 11% to 16% and the application of VAT at 16% on pet food, chewing gum and long-distance transport services. We have assumed a transfer rate of between 50% and 90%.

Source: BBVA Research, the tax reform approved by Congress

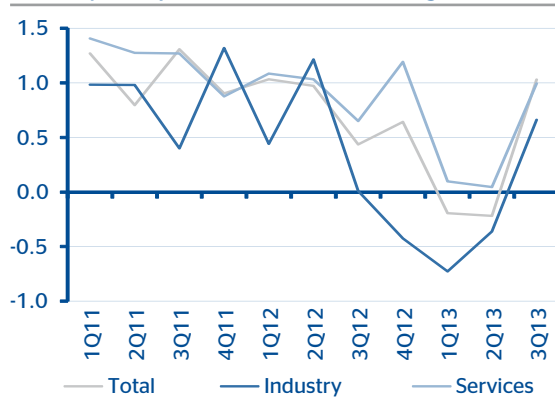
### 3.3 Monetary pause following a cut of 50 basis points that clearly shows economic weakness is prevailing over market volatility

In 2013 the monetary policy rate fell by 100 basis points (bps) to 3.5%. This is after remaining unchanged for nearly four years. In March, recognition of the gains in the fight against inflation led to a surprising cut of 50 bps; while the weakness of the economic cycle in an environment of inflation under control determined the two most recent cuts. Both changes to the monetary policy rate have given the market more information to analyze Banxico's decision-making; however, it may be said that it is from the last two cuts of 25 bps that the main lessons can be gleaned with respect to the Central Bank's steering of Mexico's monetary policy. These lessons may be summed up as follows:

1) The key factor of "efficient convergence" of inflation to the permanent target of 3%. In other words, continue the process of convergence of inflation to its target, minimizing costs in terms of economic activity. In fact, in the minutes of the monetary policy meeting of March 2012, most of the members of the Bank's governing board showed themselves in favor of this argument, which have gained weight in the Bank's statements. The argument actually gained so much in importance, that given a context of a slack economy anticipating the lack of demand pressure on prices for a prolonged period and the speed and depth of the economic slowdown, the last two statements have emphasized the compatibility of the monetary policy and "efficient convergence" of inflation to its target. Thus, even though the only objective of Banxico is price stability, this change in language may be associated with the greater importance given to economic activity in its monetary policy decisions.

Chart 31

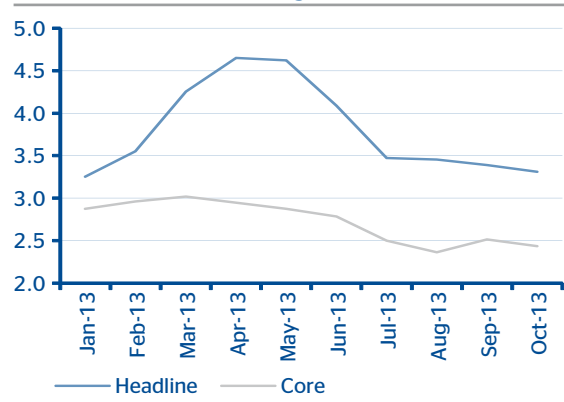
IGAE by component (annual % change)



Source: BBVA Research with INEGI data

Chart 32

Inflation (annual % change)



Source: BBVA Research with INEGI data

2) The relative monetary conditions are an important indicator, although with only a moderate weight in monetary policy decisions. Starting in August 2011 the argument of the relative monetary position of Mexico compared with other countries began to take on importance in Banxico's statements. It reached its high point in the statements of January and March this year, where it was pointed to as one of the factors to monitor carefully to determine Banxico's monetary policy. Given this language, both the markets and many analysts linked their predictions of the monetary rate largely to movements in relative monetary conditions. Thus given the stronger currency in the first four months of the year, which led to tightening monetary conditions, both the markets and nearly three quarters of the analysts discounted a cut as soon as last July.<sup>1</sup> However, in the wake of the foreign-exchange volatility caused by the possible reduction in the pace of asset purchases by the Fed in the U.S., monetary conditions were relaxed again. This, combined with the Fed's decision itself, led to a consensus by analysts and

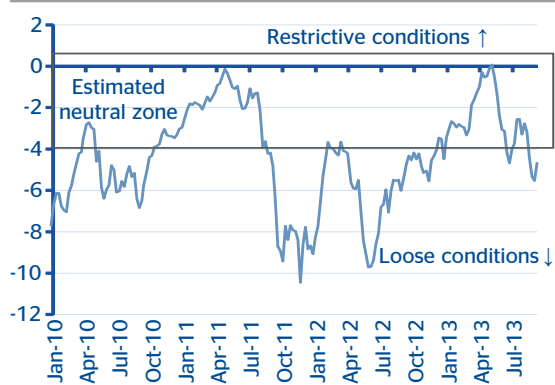
<sup>1</sup> According to the survey of Expectations of Financial Market Analysts of May 21, 2012.

markets to reverse their opinion and consider that the margin for a cut in the rate had been practically closed, even though economic activity showed a significant deterioration. In the end, the deterioration in activity in a context of declining headline inflation outweighed relative monetary conditions, and there were further cuts in rates. This suggests that although relative monetary conditions are relevant, they are not the major determinant in monetary policy decisions.

3) Orderly movements in financial markets may even be more relevant than the levels themselves for monetary policy decisions. The decision to cut the monetary policy rate in September took place in a context of foreign-exchange volatility that took the dollar to a level of MXN 13.39 in the context of an immediate reduction in the pace of asset purchases by the Fed. These circumstances were considered not propitious for a cut by analysts, both because it was not thought that Banxico would take a more relaxed stance when the Fed reduced its level of easing, and because of the level of the exchange rate itself. However, Banxico has stressed that it does not have an exchange rate target and that as long as movements in the financial markets are orderly, as they have been so far, there are no reasons for intervening. It is worth recalling that Banxico's last intervention in the foreign-exchange markets was in November 2011, when there was a lack of liquidity derived from the financial volatility that triggered the resurgence of the crisis in Europe.

Chart 33

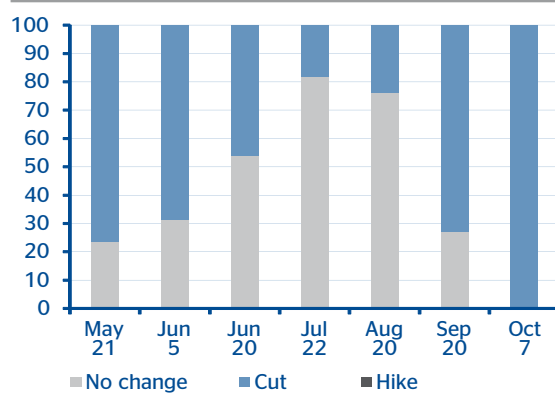
Monetary conditions index



Source: BBVA Research

Chart 34

Expectations of changes in the monetary policy rate in the coming 6 months (% analysts)



Source: BBVA Research with data from the Financial Market Analysts' Survey

4) A real interest rate of close to zero could signal the end of the cycle of easing. In its latest statement Banxico said it does not consider additional cuts to the monetary policy rate advisable in the foreseeable future. This is even though it has repeated that it expects the slack to be maintained for a prolonged period. One of the factors that could have been taken into consideration in the current context is undoubtedly the level of the real interest rate. As occurred in 2009, Banxico concluded its cycle of cuts when the real interest rate was around zero per cent. It is important to recall that a low real rate creates an incentive for present consumption over future consumption and could contribute to productive investment.

It should also be mentioned that it is not possible to dissociate these lessons from the very specific circumstances in which they have occurred, so it would be a mistake to think that rather than lessons these are guidelines on which Banxico will act. However, they are very useful for analyzing monetary policy decisions, above all given Banxico's move toward more open communication. Looking forward, we expect a prolonged pause, based on the slack in the markets, which will maintain demand pressure on prices under control.

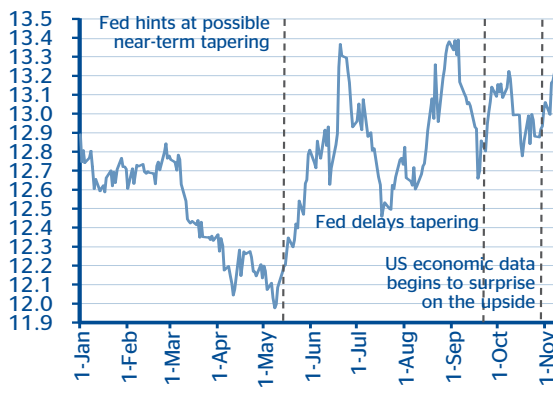


### 3.4 Mexican assets are resilient in an environment of volatility generated by the Fed’s statement and fiscal negotiations in the U.S.

In recent months the delay in the reduction in the pace of asset purchases by the Fed and the debate regarding the government debt limit in the U.S. have been the main factors behind the major price movements of financial assets. The publication of better than expected data for economic activity and jobs in the U.S. have led the consensus of analysts to expect the Fed to begin reducing the pace of asset purchases in September. Reflecting this, the long-term interest rates in the U.S. began to increase, hitting levels of 3.0% on September 5, 2013, their highest since 2011, in a reaction to the creation of 180,000 jobs in August. However, the Fed surprised the markets by not starting a reduction in the pace of purchases, arguing that it was necessary to wait for evidence that the growth in the economy and jobs are sustainable. As a result, the long-term interest rates fell to 2.6% at the start of October and demand for risk assets increased significantly. In Mexico, the Fed’s surprising announcement was reflected in a fall of 90 basis points in the 10-year government bond yield from its high of 6.5%. The exchange rate gained 5.8% from its high of 13.4 to stand once more at around 12.6 to the dollar. It is important to note that the Fed did not set aside its intention to reduce the pace of asset purchases, but markets anticipated at the time that liquidity would be maintained even into 2014.

Chart 35

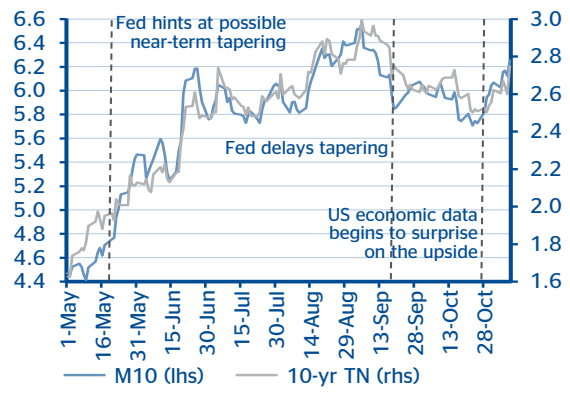
Exchange rate (MXN/USD)



Source: BBVA Research with Bloomberg data

Chart 36

Long-term interest rates (basis points)



Source: BBVA Research with Bloomberg data

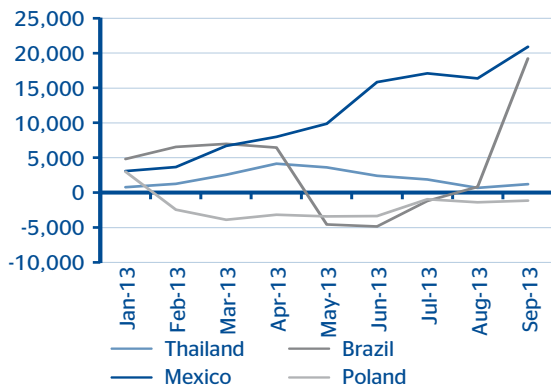
Toward the end of September, attention became focused on the U.S. government’s operational shutdown, and above all on the negotiation on the debt ceiling. October 17 marked the deadline for the Congress of the United States to increase the debt ceiling; if it did not do so, there could have been a moratorium on payments within a matter of days. As on previous occasions, and given the catastrophic consequences to the global financial system of a moratorium by the U.S., Congress agreed to approve the government’s finance to January 2014 and to increase the debt limit through February 2014. The movements in the financial markets during the height of the negotiations in Congress were considerably less marked than in previous episodes of fiscal paralysis, such as during the previous negotiations on the debt ceiling in August 2011 and the approval of new tax measures and expenditure cuts (the fiscal cliff) in December 2012. In fact, the peso fell to over 13 MXN/USD for a couple of weeks, before returning to levels of 12.8 after the agreement, while there were few significant changes in the interest-rate curve. Perhaps the most significant movement in the markets was the temporary increase in one and three-month interest rates in the U.S., reflecting the probability assigned to a lack of agreement in Washington. The 1-month rate rose to 0.33%, its highest level in the last 5 years, and 28 bps above its average for the 2009-2013 period.

During these periods of volatility in the financial markets foreign investment flows to the domestic fixed-income market continued to be positive. The entry of flows to M-bonds averaged USD 1,470 million in July and August, less than at the start of the year, but still more than the USD 1,500 million average for the period 2010-2013. In September, with the increased demand for risk assets, the flow once more increased to levels of USD 3,000 million. Foreign holdings of CETES did fall in July and August, by around USD 1,400 million, clearly reflecting the expectations of lower monetary stimuli by the Fed. In this respect, it is worth recalling that the demand for CETES by foreign investors may be largely associated with short-term investment strategies financed through short-term foreign-currency credits (the carry trade), which are more profitable in an environment of abundant liquidity as is the case now. These strategies aim to exploit the spreads between the interest rates in different countries and are sensitive to foreign-exchange movements. So it is no surprise that given the expected foreign-exchange depreciation following the changes in the Fed's statement these strategies were reduced and even reversed their returns, generating incentives for the sale of CETES. Looking abroad, unlike in Mexico the level of volatility associated with the Fed's announcements was high in countries such as Brazil.

One additional element to highlight is the lack of episodes of a liquidity squeeze in the foreign-exchange market. In previous episodes of global risk aversion spreads between the buy and sell price of the dollar widened, which even led to intervention by the Bank of Mexico on the foreign-exchange market. This phenomenon could be influenced by the fact that currently the Mexican peso is the most liquid among foreign currencies, with a daily trading volume of USD 135 billion. Although being the most liquid currency at global level appears to generate a greater correlation with movements of global risk aversion, it also contributes to these movements being more orderly.<sup>1</sup>

Chart 37

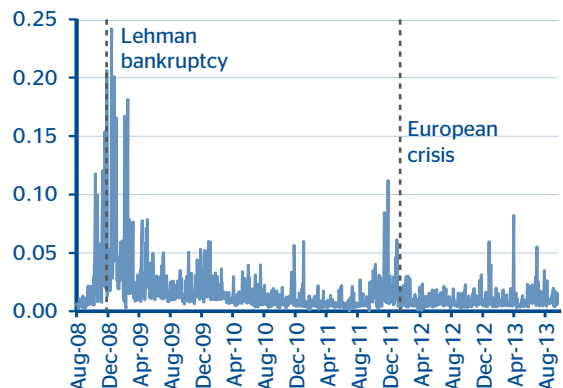
**Cumulative flows to fixed-income instruments (million dollars)**



Source: BBVA Research, with information from the central banks of the countries included

Chart 38

**Difference between the buy and sell price of the dollar (MXN/USD)**



Source: BBVA Research with Bloomberg data

Toward the close of the year we expect the exchange rate to be at levels of 12.7 pesos per dollar, with a limited margin for appreciation derived from two factors: first, a scenario of possible reduction of the monetary stimuli by the Fed; and second, the fact that the favorable expectations for the reform process appear to be having a limited effect, and have already been incorporated into current prices. With respect to interest rates, the risk premium is expected to continue its steady return to normal. Combined with greater economic growth next year, this will generate an increase in rates in the medium and long term. In particular, we consider that the yield to maturity of the 10-year bond will close the year at around 6.0%.

<sup>1</sup> See Box: "The Mexican peso becomes the currency with the highest trading volume among currencies of emerging countries"

**Box 3: The Mexican peso becomes the currency with the highest trading volume among currencies of emerging countries<sup>1</sup>**

According to the study carried out every three years by the Bank for International Settlements (BIS) among the world's central banks, the Mexican peso has become the currency with the largest trading volume among emerging-market currencies, while it was ranked third in 2010. With average trading volume increasing from USD 50 billion to USD 135 billion in just three years, the peso has overtaken the South Korean won and the Singapore dollar to top the ranking. This 170% increase, far exceeding the 35% overall rise in the total value of currency exchanges worldwide, places the Mexican currency as the eighth most traded currency worldwide, with an increase from 1.3% to 2.6% of the total volume traded.

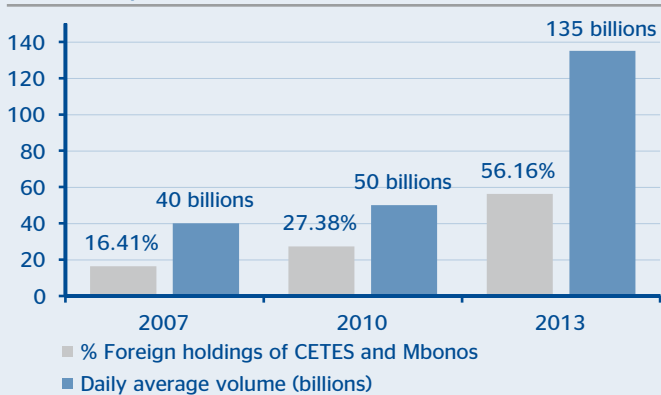
Overall, the survey points to an increase in participation by emerging-market currencies in global currency exchange at the cost of a reduced participation of the currencies of industrialized countries; for example, the euro reduced its share from 39.0% to 33.4%, the Swiss franc from 6.3% to 5.2% and the Canadian dollar fell from 5.3% to 4.6% of the

total volume traded at global level. It is worth pointing out that this phenomenon coincides with the implementation of unconventional monetary policy measures by central banks in developed countries, particularly the Federal Reserve.<sup>2</sup> In the particular case of Mexico, its entry in March 2010 into the World Government Bond Index (WGBI) should be added as a possible factor behind the increased peso trading.<sup>3</sup>

The results confirm the trend seen in previous studies with respect to the increase in the participation of institutional investors, hedge funds, and small and regional banks as counterparties in the global foreign exchange market. This group has increased its share from 48% to 53% of the total volume of transactions. Finally, there is the fact that the vast majority of transactions in foreign-exchange instruments is carried out on OTC (over the counter) markets, so in accordance with the BIS we should treat with care the figures on speculative positions in currencies that generally come from regulated markets.

Chart 39

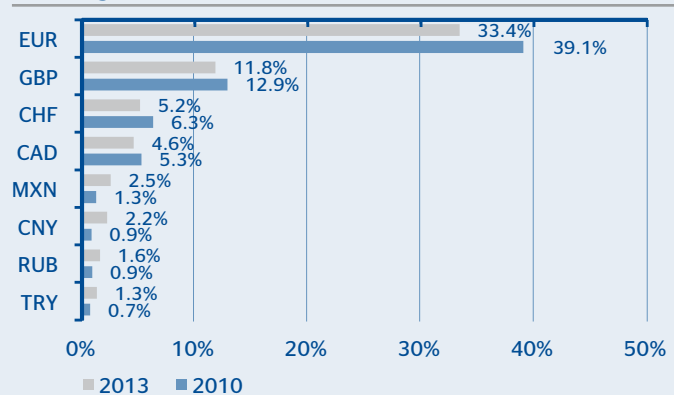
**Foreign holdings of CETES and M-bonds. Daily average volume of peso transactions (% , USD billion)**



Source: BBVA Research with BIS and Banxico data

Chart 40

**Share of the total volume of trading on the global foreign exchange market (%)**



Note: EUR: euro; GBP: pound sterling; CHF: Swiss franc; CAD: Canadian dollar; CNY: Chinese yuan; RUB: Russian ruble; TRY: Turkish lira.  
Source: BBVA Research with BIS data

<sup>1</sup> This article sums up the analysis and results obtained by BBVA Research in the document "El Peso Mexicano se coloca como la divisa con mayor volumen de operación entre las monedas de países emergentes" available at [http://www.bbvarresearch.com/KETD/fbin/mult/130926\\_ObsEcoMexico\\_38\\_eng\\_tcm348-403519.pdf](http://www.bbvarresearch.com/KETD/fbin/mult/130926_ObsEcoMexico_38_eng_tcm348-403519.pdf)

<sup>2</sup> In the 2010-2013 period, the balance sheet of the U.S. Federal Reserve has increased from USD 2.2 trillion to USD 3.6 trillion.

<sup>3</sup> Foreign holdings of CETES and M-bonds increased from 17% to 56% between 2010 and 2013.

## 4. Indicators and forecasts

Table 2

### Macroeconomic forecasts: Gross Domestic Product

(YoY growth rate)	2010	2011	2012	2013	2014
United States	2.5	1.8	2.8	1.6	2.3
EMU	1.9	1.6	-0.6	-0.4	1.1
Germany	3.9	3.4	0.9	0.6	1.8
France	1.6	2.0	0.0	0.2	1.2
Italy	1.7	0.6	-2.6	-1.9	0.7
Spain	-0.3	0.4	-1.6	-1.3	0.9
UK	1.7	1.1	0.1	1.4	2.3
Latin America *	6.0	4.0	2.5	2.4	3.1
Mexico	5.1	4.0	3.6	1.2	3.1
Brazil	7.5	2.7	0.9	2.6	2.8
EAGLES **	8.4	6.6	5.0	4.8	5.2
Turkey	9.2	8.5	2.2	3.7	3.6
Asia-Pacific	8.2	6.0	5.3	5.2	5.3
Japón	4.7	-0.6	2.0	1.9	1.5
China	10.4	9.3	7.7	7.7	7.6
Asia (exc. China)	6.8	3.6	3.7	3.4	3.6
World	5.1	4.0	3.3	2.9	3.6

\* Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela

\*\* Brazil, Corea, China, India, Indonesia, Mexico, Russia, Taiwan, Turkey

Closing date: November 4, 2013

Source: BBVA Research

Table 3

### Macroeconomic Forecasts: inflation (Average)

(YoY growth rate)	2010	2011	2012	2013	2014
United States	1.6	3.2	2.1	1.7	2.2
EMU	1.6	2.7	2.5	1.5	1.4
Germany	1.2	2.5	2.1	1.7	1.8
France	1.7	2.3	2.2	1.1	1.3
Italy	1.6	2.9	3.3	1.4	1.5
Spain	1.8	3.2	2.4	1.5	1.1
UK	3.3	4.5	2.8	2.7	2.2
Latin America *	7.6	8.0	7.5	8.8	9.4
Mexico	4.2	3.4	4.1	3.8	3.6
Brazil	5.0	6.6	5.4	6.2	5.9
EAGLES **	5.3	6.0	4.2	4.2	4.3
Turkey	8.6	6.2	8.9	7.5	6.4
Asia-Pacific	3.7	4.9	3.1	2.9	3.6
Japón	-0.7	-0.3	0.0	0.1	2.0
China	3.3	5.4	2.6	2.8	3.5
Asia (exc. China)	3.9	4.5	3.4	3.0	3.6
World	3.7	5.1	4.1	3.8	4.0

\* Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela

\*\* Brazil, Corea, China, India, Indonesia, Mexico, Russia, Taiwan, Turkey

Closing date: November 4, 2013

Source: BBVA Research

Table 4

**United States indicators and forecasts**

	2011	2012	2013	2014	1Q13	2Q13	3Q13	4Q13	1Q14	2Q14	3Q14	4Q14
<b>Indicadores Macroeconómicos</b>												
GDP (real % change)	1.8	2.8	<b>1.6</b>	<b>2.3</b>	1.1	2.5	2.3	2.3	2.5	2.0	2.0	<b>2.1</b>
Personal consumption (real % change)	2.5	2.2	<b>1.7</b>	<b>1.5</b>	2.3	1.8	1.1	1.0	1.8	1.6	1.6	<b>1.4</b>
Gov. consumption (real % change)	-3.2	-1.0	<b>-2.0</b>	<b>-0.2</b>	-4.2	-0.4	-0.2	-0.3	-0.1	-0.1	-0.1	<b>-0.1</b>
Gross fixed investment (real % change)	6.2	8.3	<b>4.9</b>	<b>6.4</b>	-1.5	6.5	6.9	7.1	7.8	4.5	5.0	<b>5.4</b>
Construction	4.4	3.4	<b>2.9</b>	<b>3.5</b>	3.8	-1.5	4.1	4.1	4.1	3.4	3.6	<b>3.6</b>
Industrial prod. (real annual % change)	3.4	3.6	<b>2.5</b>	<b>3.2</b>	2.4	2.0	2.5	3.2	3.0	3.4	3.6	<b>3.0</b>
Current account balance (% of GDP)	-3.0	-3.0	<b>-2.5</b>	<b>-2.8</b>	-2.5	-2.4	<b>-2.4</b>	-2.5	-2.7	-2.9	-2.7	<b>-3.1</b>
Final annual inflation	3.0	1.7	<b>2.2</b>	<b>2.1</b>	1.5	1.8	1.6	2.2	2.1	2.2	2.0	<b>2.1</b>
Average annual inflation	3.2	2.1	<b>1.7</b>	<b>2.2</b>	1.7	1.4	1.7	1.9	2.1	2.5	2.2	<b>2.1</b>
Primary fiscal balance (% of GDP)	-8.7	-6.8	<b>-4.0</b>	<b>-3.4</b>				-4.0				<b>-3.4</b>

Note: **Bold** figures are forecast  
 Source: BBVA Research

Table 5

**Mexico Indicators and Forecasts**

	2011	2012	2013	2014	1Q13	2Q13	3Q13	4Q13	1Q14	2Q14	3Q14	4Q14
<b>Economic Activity</b>												
<b>GDP (seasonally-adjusted series)</b>												
Real annual % change	4.0	3.6	1.2	<b>3.1</b>	2.6	0.3	1.1	1.0	<b>1.9</b>	<b>3.6</b>	<b>3.3</b>	<b>3.4</b>
Per inhabitant (US dollars)	11,853.7	12,608.1	13,502.5	<b>14,621.8</b>	13,398.4	13,213.5	13,236.0	14,162.1	<b>14,039.5</b>	<b>14,279.7</b>	<b>14,636.2</b>	<b>15,531.7</b>
US\$ billions	1,289.8	1,382.2	1,531.4	<b>1,669.7</b>	1,498.7	1,501.2	1,606.2	1,603.2	<b>1,630.6</b>	<b>1,671.3</b>	<b>1,773.6</b>	<b>1,774.6</b>
<b>Inflation (average, %)</b>												
Headline	3.4	4.1	3.8	<b>3.6</b>	3.7	4.5	3.4	3.4	<b>3.7</b>	<b>3.3</b>	<b>3.9</b>	<b>3.6</b>
Core	3.2	3.4	2.7	<b>2.9</b>	3.0	2.9	2.5	2.5	<b>2.7</b>	<b>2.8</b>	<b>3.1</b>	<b>3.1</b>
<b>Financial Markets (eop, %)</b>												
<b>Interest rates</b>												
Bank funding	4.5	<b>4.5</b>	3.5	<b>3.5</b>	4.0	4.0	3.8	3.5	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>
28-day Cetes	4.4	3.9	3.5	<b>3.5</b>	4.2	3.9	3.5	3.5	<b>3.5</b>	<b>3.6</b>	<b>3.5</b>	<b>3.5</b>
28-day TIE	4.8	4.8	3.8	<b>3.9</b>	4.4	4.3	4.0	3.8	<b>3.9</b>	<b>3.9</b>	<b>3.9</b>	<b>3.9</b>
10-year Bond (% average)	6.5	5.4	5.9	<b>6.5</b>	5.0	5.8	6.0	5.9	<b>6.0</b>	<b>6.3</b>	<b>6.4</b>	<b>6.5</b>
<b>Exchange rate (average)</b>												
Pesos per dollar	13.9	12.9	12.7	<b>12.8</b>	12.3	12.9	13.1	12.7	<b>12.8</b>	<b>12.7</b>	<b>12.8</b>	<b>12.8</b>
<b>Public Finances</b>												
*FRPS (% of GDP)	-2.6	-3.1	-2.9	<b>-4.1</b>				-2.9				<b>-4.1</b>
<b>External Sector<sup>3</sup></b>												
Trade balance (US\$ billions)	-1.5	0.0	-6.6	<b>-13.4</b>	-1.0	-0.8	-1.8	-2.9	<b>-0.9</b>	<b>-2.6</b>	<b>-2.8</b>	<b>-7.0</b>
Current account (US\$ billions)	-11.8	-14.2	-19.3	<b>-23.5</b>	-5.3	-6.0	-3.4	-4.6	<b>-5.5</b>	<b>-4.4</b>	<b>-4.8</b>	<b>-8.9</b>
Current account (% of GDP)	-0.9	<b>-1.0</b>	-1.3	<b>-1.4</b>	-1.4	-1.6	-0.9	-1.1	<b>-1.4</b>	<b>-1.1</b>	<b>-1.1</b>	<b>-2.0</b>
Oil (Mexican mix, dpb, eop)	101.1	101.8	99.7	<b>100.2</b>	104.3	98.5	97.9	98.1	<b>98.8</b>	<b>99.6</b>	<b>100.7</b>	<b>101.8</b>
<b>Employment</b>												
Formal Private (annual % change)	4.3	4.6	3.5	<b>3.6</b>	4.2	3.8	3.0	2.8	<b>3.0</b>	<b>3.5</b>	<b>3.9</b>	<b>3.9</b>
Open Unemployment Rate (% active pop.)	5.2	5.0	5.1	<b>5.0</b>	5.0	5.1	5.1	5.1	<b>5.1</b>	<b>5.1</b>	<b>5.0</b>	<b>5.0</b>

Continues on next page

**Mexico Indicators and Forecasts**

	2011	2012	2013	2014	1Q13	2Q13	3Q13	4Q13	1Q14	2Q14	3Q14	4Q14
<b>Aggregate Demand <sup>4</sup> (annual % change, seasonally-adjusted)</b>												
Total	4.9	3.9	1.7	<b>3.1</b>	2.9	0.9	1.9	1.2	<b>2.1</b>	<b>3.4</b>	<b>3.3</b>	<b>3.6</b>
Domestic Demand	4.7	3.9	1.7	<b>3.0</b>	3.2	1.2	1.5	0.9	<b>1.2</b>	<b>3.1</b>	<b>3.5</b>	<b>4.0</b>
Consumption	4.5	4.0	2.2	<b>2.5</b>	4.1	2.1	2.0	0.8	<b>0.9</b>	<b>2.5</b>	<b>3.0</b>	<b>3.4</b>
Private	4.8	4.3	2.4	<b>2.4</b>	4.6	2.4	2.1	0.7	<b>0.7</b>	<b>2.4</b>	<b>2.9</b>	<b>3.5</b>
Public	2.5	2.2	1.0	<b>2.9</b>	0.6	0.4	1.3	1.6	<b>2.2</b>	<b>3.1</b>	<b>3.2</b>	<b>2.8</b>
Investment	8.1	4.5	0.3	<b>4.3</b>	2.3	-0.7	-0.6	0.2	<b>0.8</b>	<b>4.3</b>	<b>5.6</b>	<b>6.5</b>
External Demand	8.3	4.2	2.1	<b>3.3</b>	0.9	0.6	3.3	3.4	<b>4.0</b>	<b>3.6</b>	<b>3.0</b>	<b>2.6</b>
Imports	8.1	4.8	3.3	<b>3.3</b>	4.0	2.6	4.6	1.9	<b>2.8</b>	<b>2.8</b>	<b>3.1</b>	<b>4.3</b>
<b>GDP by sectors (annual % change, seasonally-adjusted)</b>												
Primary	-1.9	6.1	0.7	<b>2.8</b>	-0.5	1.4	1.4	0.6	<b>2.4</b>	<b>3.9</b>	<b>3.9</b>	<b>1.0</b>
Secondary	3.9	3.3	0.9	<b>2.0</b>	2.9	1.2	-0.5	0.0	<b>1.4</b>	<b>2.6</b>	<b>2.2</b>	<b>1.9</b>
Mining	-0.4	1.7	-2.2	<b>0.0</b>	-1.4	-2.1	-2.8	-2.6	<b>-0.2</b>	<b>1.6</b>	<b>-0.6</b>	<b>-0.7</b>
Electricity	4.9	2.1	0.2	<b>1.8</b>	-0.7	0.2	1.2	0.2	<b>1.6</b>	<b>2.1</b>	<b>1.4</b>	<b>1.9</b>
Construction	4.0	1.9	-3.0	<b>1.6</b>	-2.5	-3.8	-4.0	-1.5	<b>-0.1</b>	<b>1.7</b>	<b>3.0</b>	<b>1.6</b>
Manufacturing	4.4	3.9	1.1	<b>3.2</b>	-1.3	1.5	2.1	2.0	<b>2.8</b>	<b>3.4</b>	<b>3.3</b>	<b>3.1</b>
Tertiary	4.8	4.0	2.2	<b>3.6</b>	3.6	1.8	1.9	1.5	<b>2.1</b>	<b>4.2</b>	<b>3.9</b>	<b>4.3</b>
Retail	9.6	4.5	1.7	<b>4.7</b>	0.8	3.8	1.6	0.7	<b>2.0</b>	<b>5.9</b>	<b>5.2</b>	<b>5.5</b>
Transportation, mail and warehouse	4.0	4.5	1.3	<b>2.9</b>	0.4	1.6	1.7	1.3	<b>2.1</b>	<b>3.8</b>	<b>2.3</b>	<b>3.3</b>
Massive media information	6.6	14.0	6.0	<b>6.5</b>	8.8	5.6	5.6	4.3	<b>4.5</b>	<b>5.6</b>	<b>7.9</b>	<b>8.0</b>
Financial and insurance	7.2	7.7	5.5	<b>9.6</b>	3.2	6.7	6.2	6.0	<b>7.2</b>	<b>9.3</b>	<b>10.8</b>	<b>11.0</b>
Real-estate and rent	2.8	2.4	1.6	<b>2.0</b>	2.2	2.2	1.5	0.7	<b>0.8</b>	<b>2.5</b>	<b>1.9</b>	<b>2.7</b>
Prof, scientific and technical servs.	4.5	3.8	2.1	<b>1.9</b>	2.4	2.6	2.0	1.6	<b>2.1</b>	<b>1.9</b>	<b>1.6</b>	<b>2.1</b>
Company and corporate management	3.6	3.7	-3.9	<b>0.3</b>	-4.2	-5.3	-4.5	-1.6	<b>-0.6</b>	<b>0.0</b>	<b>1.1</b>	<b>0.8</b>
Business support services	5.5	3.4	4.0	<b>4.5</b>	5.3	3.9	3.2	3.6	<b>3.6</b>	<b>4.1</b>	<b>5.2</b>	<b>5.0</b>
Education	1.5	1.3	0.5	<b>0.5</b>	-0.1	1.6	0.2	0.2	<b>0.1</b>	<b>0.3</b>	<b>0.8</b>	<b>0.9</b>
Health and social security	2.4	2.1	2.1	<b>1.9</b>	3.0	2.3	1.5	1.6	<b>1.5</b>	<b>1.4</b>	<b>2.3</b>	<b>2.2</b>
Cultural and sport	-0.4	5.1	1.3	<b>1.8</b>	3.4	0.4	0.6	0.7	<b>0.5</b>	<b>2.4</b>	<b>2.1</b>	<b>2.0</b>
Temporary stay	1.5	4.2	1.4	<b>3.0</b>	3.0	1.0	0.7	1.1	<b>1.1</b>	<b>3.5</b>	<b>3.6</b>	<b>3.6</b>
Other services, except government activities	1.8	4.0	1.9	<b>3.3</b>	2.8	2.3	0.6	1.9	<b>2.9</b>	<b>4.0</b>	<b>3.3</b>	<b>2.8</b>
Government activities	-1.3	1.8	-0.3	<b>1.9</b>	-0.7	-1.1	0.0	0.7	<b>0.9</b>	<b>3.3</b>	<b>1.3</b>	<b>2.2</b>

1: Residential investment

2: Fiscal balance (% GDP)

3: Accumulated, last 12 months

4: Base 1993=100; GDP by sector base 2003=100. The observed data of the primary sector, secondary and tertiary seasonally-adjusted by INEGI, the rest own seasonally-adjusted

bd: billions of dollars

dpb: dollars per barrel

\*FRPS: Financial Requirements of the Public Sector

na: not available

 Note: **Bold** figures are forecast

Source: BBVA Research with Federal Reserve, Bureau of Labor Statistics, Banco de Mexico, INEGI and SHCP data

**DISCLAIMER**

This document and the information, opinions, estimates and recommendations expressed herein, have been prepared by Banco Bilbao Vizcaya Argentaria, S.A. (hereinafter called "BBVA") to provide its customers with general information regarding the date of issue of the report and are subject to changes without prior notice. BBVA is not liable for giving notice of such changes or for updating the contents hereof.

This document and its contents do not constitute an offer, invitation or solicitation to purchase or subscribe to any securities or other instruments, or to undertake or divest investments. Neither shall this document nor its contents form the basis of any contract, commitment or decision of any kind.

**Investors who have access to this document should be aware that the securities, instruments or investments to which it refers may not be appropriate for them due to their specific investment goals, financial positions or risk profiles, as these have not been taken into account to prepare this report.** Therefore, investors should make their own investment decisions considering the said circumstances and obtaining such specialized advice as may be necessary. The contents of this document is based upon information available to the public that has been obtained from sources considered to be reliable. However, such information has not been independently verified by BBVA and therefore no warranty, either express or implicit, is given regarding its accuracy, integrity or correctness. BBVA accepts no liability of any type for any direct or indirect losses arising from the use of the document or its contents. Investors should note that the past performance of securities or instruments or the historical results of investments do not guarantee future performance.

**The market prices of securities or instruments or the results of investments could fluctuate against the interests of investors. Investors should be aware that they could even face a loss of their investment. Transactions in futures, options and securities or high-yield securities can involve high risks and are not appropriate for every investor. Indeed, in the case of some investments, the potential losses may exceed the amount of initial investment and, in such circumstances, investors may be required to pay more money to support those losses. Thus, before undertaking any transaction with these instruments, investors should be aware of their operation, as well as the rights, liabilities and risks implied by the same and the underlying stocks. Investors should also be aware that secondary markets for the said instruments may be limited or even not exist.**

BBVA or any of its affiliates, as well as their respective executives and employees, may have a position in any of the securities or instruments referred to, directly or indirectly, in this document, or in any other related thereto; they may trade for their own account or for third-party account in those securities, provide consulting or other services to the issuer of the aforementioned securities or instruments or to companies related thereto or to their shareholders, executives or employees, or may have interests or perform transactions in those securities or instruments or related investments before or after the publication of this report, to the extent permitted by the applicable law.

BBVA or any of its affiliates' salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to its clients that reflect opinions that are contrary to the opinions expressed herein. Furthermore, BBVA or any of its affiliates' proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. No part of this document may be (i) copied, photocopied or duplicated by any other form or means (ii) redistributed or (iii) quoted, without the prior written consent of BBVA. No part of this report may be copied, conveyed, distributed or furnished to any person or entity in any country (or persons or entities in the same) in which its distribution is prohibited by law. Failure to comply with these restrictions may breach the laws of the relevant jurisdiction.

This document is provided in the United Kingdom solely to those persons to whom it may be addressed according to the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 and it is not to be directly or indirectly delivered to or distributed among any other type of persons or entities. In particular, this document is only aimed at and can be delivered to the following persons or entities (i) those outside the United Kingdom (ii) those with expertise regarding investments as mentioned under Section 19(5) of Order 2001, (iii) high net worth entities and any other person or entity under Section 49(1) of Order 2001 to whom the contents hereof can be legally revealed.

The remuneration system concerning the analyst/s author/s of this report is based on multiple criteria, including the revenues obtained by BBVA and, indirectly, the results of BBVA Group in the fiscal year, which, in turn, include the results generated by the investment banking business; nevertheless, they do not receive any remuneration based on revenues from any specific transaction in investment banking.

BBVA Bancomer and the rest of BBVA Group who are not members of FINRA (Financial Industry Regulatory Authority), are not subject to the rules of disclosure for these members.

**"BBVA Bancomer, BBVA and its subsidiaries, among which is BBVA Global Markets Research, are subject to the Corporate Policy Group in the field of BBVA Securities Markets. In each jurisdiction in which BBVA is active in the Securities Markets, the policy is complemented by an Internal Code of Conduct which complements the policy and guidelines in conjunction with other established guidelines to prevent and avoid conflicts of interest with respect to recommendations issued by analysts among which is the separation of areas. Corporate Policy is available at: [www.bbva.com](http://www.bbva.com) / Corporate Governance / Conduct in Securities Markets".**

### Editorial Board

Carlos Serrano

Jorge Sicilia

### This report has been produced by

Editor

**Arnoldo López**

arnoldo.lopez@bbva.com

**Javier Amador**

javier.amador@grupobbva.com

**Iván Martínez**

ivan.martinez.2@bbva.com

**Juan Carlos Rivas**

juancarlos.rivasvaldivia@bbva.com

With collaboration of:  
Economic Scenarios

### BBVA Research

#### Group Chief Economist

Jorge Sicilia

#### Emerging Economies:

**Alicia García-Herrero**

alicia.garcia-herrero@bbva.com.hk

Cross-Country Emerging Markets Analysis

**Álvaro Ortiz Vidal-Abarca**

alvaro.ortiza@bbva.com

Asia

**Stephen Schwartz**

stephen.schwartz@bbva.com.hk

Mexico

**Carlos Serrano**

carlos.serrano@bbva.com

Latam Coordination

**Juan Ruiz**

juan.ruiz@bbva.com

Argentina

**Gloria Sorensen**

gsorensen@bbva.com

Chile

**Jorge Selaive**

jselaive@bbva.com

Colombia

**Juana Téllez**

juana.tellez@bbva.com

Peru

**Hugo Perea**

hperea@bbva.com

Venezuela

**Oswaldo López**

oswaldo\_lopez@bbva.com

#### Developed Economies:

**Rafael Doménech**

r.domenech@bbva.com

Spain

**Miguel Cardoso**

miguel.cardoso@bbva.com

Europe

**Miguel Jiménez**

mjimenezg@bbva.com

United States

**Nathaniel Karp**

nathaniel.karp@bbvacompass.com

#### Financial Systems & Regulation:

**Santiago Fernández de Lis**

sfernandezdelis@grupobbva.com

Financial Systems

**Ana Rubio**

arubiog@bbva.com

Financial Inclusion

**David Tuesta**

david.tuesta@bbva.com

Regulation and Public Policy

**María Abascal**

maria.abascal@bbva.com

#### Global Areas:

Financial Scenarios

**Julián Cubero**

juan.cubero@bbva.com

Economic Scenarios

**Sonsoles Castillo**

s.castillo@bbva.com

Innovation and Process

**Clara Barrabés**

clara.barrabes@bbva.com

BBVA Research Mexico  
Avda. Universidad 1200

Colonia Xoco

C.P. 03339 México D.F.

Publications:

E-mail: [researchmexico@bbva.bancomer.com](mailto:researchmexico@bbva.bancomer.com)

These and other BBVA Research publications

are available in English and in Spanish at: [www.bbvarsearch.com](http://www.bbvarsearch.com)

### Other publications:

