BBVA | RESEARCH

Mexico Economic Outlook

Third Quarter 2012
Economic Analysis

- Global growth will gain drive only if economic policy measures already approved and some pending approval are implemented in time. The generalized weakening of economic activity in 2012 makes the role of economic policy in achieving a slight improvement in growth in 2013 a determining factor
- Mexico is positively detached from the global environment thanks to its domestic strengths. Despite the downward review of the global scenario, its expected growth of 3-7% prevails, thanks to its domestic stability and external competitiveness
- Brazil and Mexico, a change of perspectives and challenges that remain. Brasil and Mexico are two large economies with a great potential for growth, a different global exposure and the challenge for adopting reforms that will increase its productivity

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Closing date: August 3, 2012

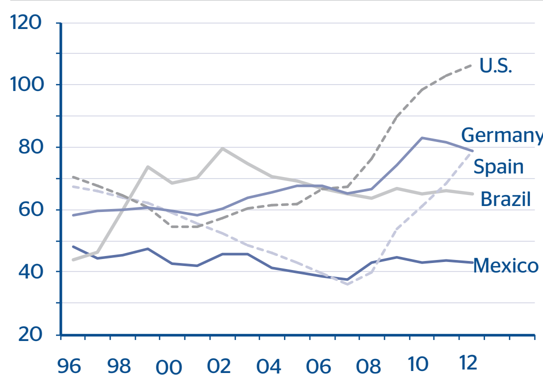
1. Summary

Although Mexico is positively detached from the slowdown in the global environment, there could be downward risks if economic policy measures are not implemented in time

Global growth will gain drive only if economic policy measures already taken are implemented in a timely manner and those pending approval are passed in time. With the weakening of global activity seen in the early part of 2012, the role of economic policy is perceived as a determining factor for there to be a slight improvement in growth in 2013 as foreseen in our scenario. We estimate world growth at around 3.5% for the 2012-2013 biennieum, but this will only occur if economic policy measures (approved and in the process of implementation, those announced but not implemented and, most uncertain, some decisive measures yet to be taken) arrive in time to avoid a financial accident in Europe[1], and there is an automatic fiscal adjustment in the U.S. in 2013, thereby helping the emerging economies to recover higher growth rates. In case the economic policies do not achieve their objectives, the slowdown underway since 2011 would intensify in 2012 and 2013, causing world economic growth next year to drop to its lowest level in the last 30 years, except for the 2009 recession.

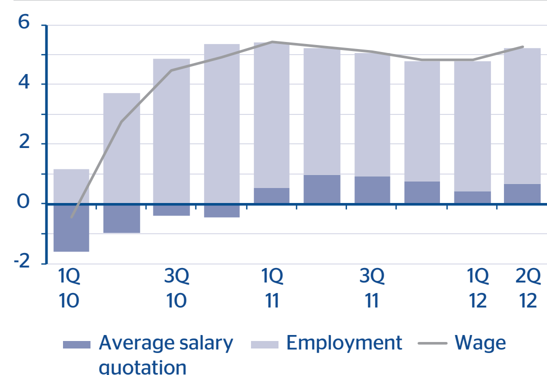
In the outlook for activity in Mexico, with growth at around 3.5% in 2012-2013, the domestic strengths carry more weight than the uncertainty in the external environment. The quarterly updating of the global economic scenario has assumed more or less intense reviews among the countries, although generalized downward, except in the case of the Mexican economy, for which we maintain last May's perspectives of GDP growth of 3.7% in 2012 and 3.0% in 2013. In the first place, the evolution of the current economic situation has been better than expected by BBVA Research in the first half of 2012, which presumes a positive statistical effect that contributes to offset the brake on the outlook for the U.S., Mexico's main trading partner. In the second place, and most importantly, domestic economic support factors remain in confronting a very uncertain external environment. This is a virtuous cycle of stability that favors the financing of homes and businesses in an environment, of low and stable inflation rates, and more so with a solid financial system capable of attending solvent credit demand. And this, first thanks to the drop and later stabilization of inflation and interest rates, with an independent central bank intent on obtaining price stability and a fiscal policy aimed at a balanced budget, which finances the deficit in an orthodox manner in the market.

Graph 1
Gross Public Debt as % of GDP



Source: BBVA Research with IMF data

Graph 2
Mexico, Total Wages, Formal Private Sector y/y % change and taxes



Source; BBVA Research

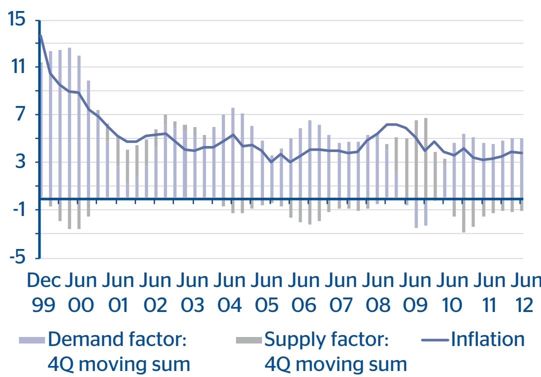
[1] The financial accident could take various forms, such as, for example, a lack of demand for sovereign debt issues of some of the peripheral economies.

Mexico's growth is not exempt of downward risks in case of a significant deterioration of growth in the U.S. With regard to the U.S. the downward revision of expectations for 2012 will be derived from now on, both on the disappointing growth registered in the second quarter of 2012, below expectations and not totally attributable to seasonal factors, and the impact of higher financial tensions in Europe. Additionally, in the U.S. agreements must be reached and applied in terms of fiscal consolidation that will prevent the implementation in 2013 of automatic expenditure cuts and the elijmination of tax exemptions that, such as they are defined, do not imply an improvement in the long-term sustainability of pubic finances and, foreseeably could lead the U.S. economy toward a recession in 2013. The elections currently underway in the U.S. would make it difficult to reach agreements during this electoral process, so it is foreseeable that the importance of fiscal uncertainty would increase in the following months.

The outlook for Mexican government rates is marked more than by domestic factors such as inflation or the perspectives of monetary policy, but rather by the abundance of global liquidity, which favors the entry of capital flows. The outlook for domestic inflation remains anchored at historically low levels despite the recent rebound of prices due to the supply of food products, without there being significant demand pressures. In this sense, a breakdown of inflation, due to the incidence of supply and demand, shows how the exchange rate or the prices of commodities, which are related to the supply factor,. Important oscillaltions of these also affect price changes. A very stable demand factor reflects the absence of tensions in the market of factors–labor, credit, installed capacity–to attend expenditures growth:and maintain economic well-being. As a result, it seems reasonable to believe that the central bank will continue to advance in its fourth year of monetary pause. Only a scenario of a rapid and intense deterioration of the risk balance of activity could lead us to expect rate cuts, which would also be coupled with a relative tensioning of Mexican monetary policy, given the foreseeable additional quantitative expansion in the U.S.

Graph 3

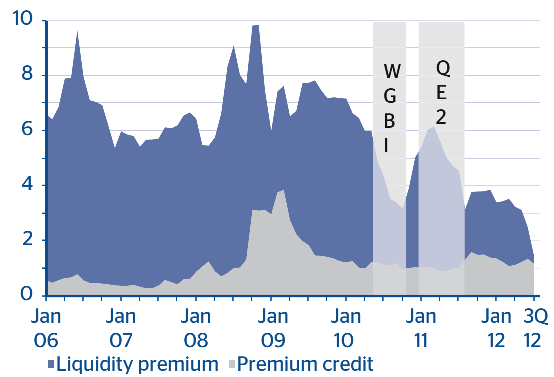
Mexico, Inflation. Supply and Demand
% and pp



Source: BBVA Research

Graph 4

Mexico, Total Wages, Formal Private Sector
y/y % change and taxes

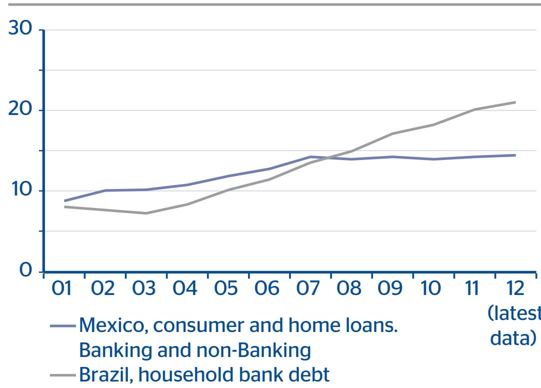


Source; BBVA Research

In this situation of domestic stability, the behavior of medium- and long-term rates–at historic lows–is being guided by the entry of flows from abroad in search of real yields in fiscally strong economies, a margin of cuts in monetary policy rates, without external imbalances and away from the focal point of the crisis in the area of the euro, as is the case of the Mexican economy. All in all, as shown in this publication, the low levels reached by long.term rates in Mexico are consistent with a practically non-existent liquidity premium, given the credit risk levels. Changes in the perspectives for monetary policy–upward–,an event of systemic risk or a quantitative expansion that would lead investors toward a preference for stocks rather than fixed-income investments would be factors that would lead to a rise in the local rates beyond those consistent with U.S. Treasury bonds and the outlook for growth and local inflation.

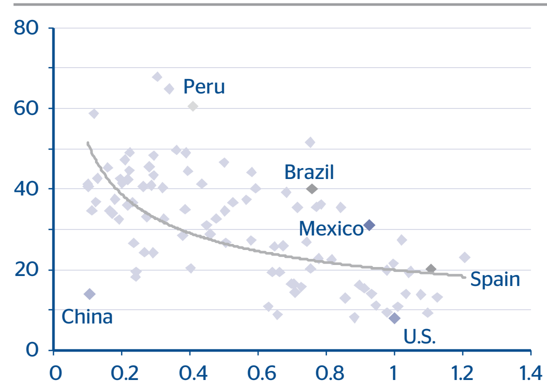
Brazil and México, changing perspectives and challenges that remain. The two largest Latin American economies are in a period of a change in outlook in favor of Mexico for the first time in the last four years, a period in which Brazil has grown significantly more than Mexico. This better relative position of Brazil, a recent phenomenon since up until the early part of the past decade, both economies were growing and converging in per capita income with the richest countries, with periods of an alternating relative advantage between the two countries. Important factors in Brazil's recent growth have been the strength of domestic demand, intensively supported by financing and the greater growth of its trading partners. However, both factors are not necessarily of a permanent nature. The growth of the emerging Asian economies could be interrupted and/or Brazil could be affected by the continued loss of price competitiveness, in contrast to Mexico, and in addition, the availability of credit could be less important for growth upon reaching a certain level of indebtedness. Recently, Mexico has shown growth based on more dynamic financing and improved competitiveness. On the side of supply, neither the demographic factor nor the investment rate justify an advantage in favor of Brazil; but rather quite the contrary. And in terms of productivity, it does not seem that there are significant differences that favor Brazil, and even less so considering its position in the World Bank ranking Doing Business. To summarize, Brazil and Mexico are two large economies, with good potential for growth over the next few years, which will depend on their different exposure in the global environment and on their capacity to adopt reforms that will reduce their vulnerabilities. These include implementing measures that will lead to the reduction of the informal market in order to improve the main source of long-term growth of an economy's productivity.

Graph 5
Household debt GDP %



Source: BBVA Research with CNBV Mexico, and Bank of Brazil

Graph 6
Informal market (% of GDP) and productivity (compared to the U.S.)



Sourde; BBVA Research with Schneider (2009) and World Bank data

2. Global scenario: a slowdown that may deepen unless decisive economic policy action is taken

Global growth will improve only if key economic policy measures are fully implemented in time. Some of them have already been approved but others are still under consideration

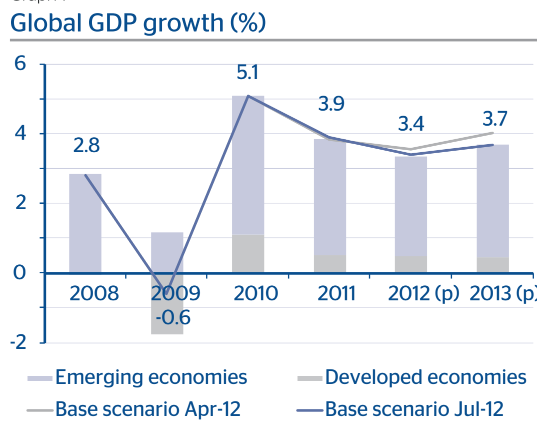
After the deterioration in global economic conditions in the first part of 2012, our current scenario that still envisages a slight economic rebound in 2013 is very dependent on economic-policy issues. Our global GDP growth forecast stands at around 3.5% in 2012-13, but relies on the assumption that several policy measures are implemented around the world. Some of them have already been brought into force but need appropriate implementation; others have been announced but not introduced yet; and, finally, some key measures still have yet to be passed. Policy measures must avoid a financial mess in Europe, an automatic fiscal adjustment in the US in 2013, and help reach higher growth rates in emerging economies. However, if economic policies fail to achieve their goals, the slowdown now in place since 2011 is likely to intensify in 2012 and 2013. That could leave 2013 global GDP growth at its slowest pace in 30 years (except for the 2009 recession).

At a summit in June, the eurozone leaders reached agreements in the right direction to reinforce the currency union: single bank supervision in the euro area, far-reaching plans covering banking and fiscal issues, and growth-supporting measures. However, financial-aid mechanisms that have been approved to ensure financial stability in the eurozone (i.e., EFSF&ESM) must be used in their full capabilities as soon as possible to avoid a financial "accident."[1] This is the only way to make sure that those economies currently struggling to access financial markets have the chance to implement fiscal-consolidation plans and structural reforms. This should include the involvement of the ECB.

In the US, there must be an agreement to prevent that automatic spending-cut measures and the expiration of tax cuts come into force at the beginning of 2013. This "fiscal cliff" would not solve long-term sustainability of the country's public finances and, if all measures materialized, they would push the US economy back into recession in 2013. As the presidential campaign makes any kind of agreement difficult until the election, the surrounding uncertainty over the outcome of this process is likely to play a key role in shaping the economic and financial outlook as we move towards the end of the year.

Graph 7

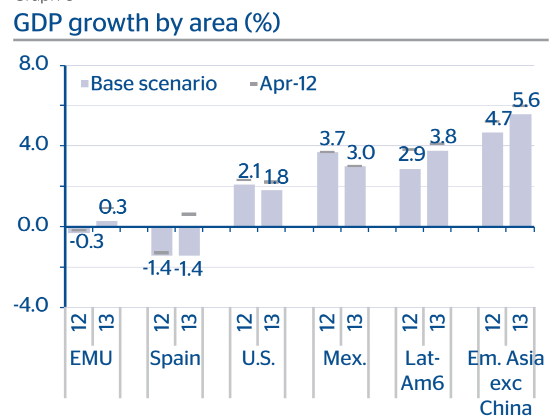
Global GDP growth (%)



Source: BBVA Research

Graph 8

GDP growth by area (%)



Source: BBVA Research

[1] The financial "accident" could take various forms, including for example the lack of demand for sovereign-bond issuances of peripheral economies.

Meanwhile, in emerging economies with room for policy stimulus, measures are needed to prop up domestic demand so that the effects of the external slowdown are mitigated. Additionally, volatility of capital inflows could increase due to the ebbs and flows of the eurozone crisis and, on the other hand, flows related to a new round of quantitative easing the US Fed is likely to embark on.

Failure to dovetail sovereignty transfer with debt mutualization at the rhythm that markets demand, drags the euro crisis out

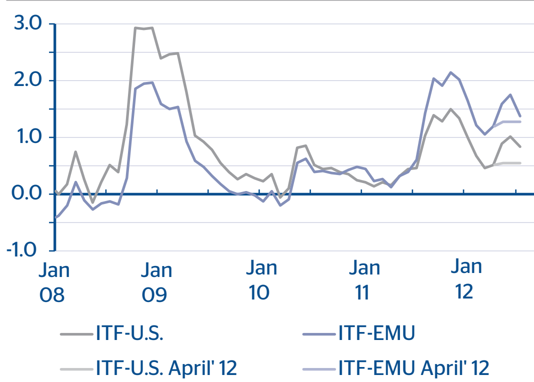
The main uncertainty over the current economic scenario is whether the efforts that the eurozone countries will have to make to reinforce its governance will be preceded by a further deterioration in its financial situation. If this were the case, we think that it will produce massive interventions from EU mechanisms to eventually assure the financial stability of the eurozone. The decisions already taken, if implemented forcefully could suffice but that requires that the measures approved at the end of June are implemented quickly. Those measures aimed to eliminate the risk emerging from the sovereign-banking feedback loop in Spain and to stabilize financial markets across the eurozone with the active use of the EFSF and, later on, of the ESM actively purchasing bonds in the primary and secondary market. Recent policy measures in Spain to reign in the deficit together with the strongly supportive stance by the President of the ECB are helping to ease tensions.

All in all, we have revised downwards our previous forecast (released three months ago) due to continued financial stress stemming from the euro area crisis and ongoing deterioration in global economic confidence. This scenario implies a period of stagnation in the eurozone in 2012-13. Despite this revision, in our view, the balance of risks continues to be tilted to the downside, given the likelihood that approved measures are introduced too slowly due to domestic-policy considerations in some countries. If that were to happen, then the risk of a recession in Europe in 2013 would be relevant, specially in countries such as Spain and Italy.

Eurozone countries have to solve the liquidity squeeze on some markets. Those constraints are a consequence of market participants assigning some chance that a euro break-up may occur. Euro countries are unable to dovetail the transfer of fiscal and banking sovereignty with effective mechanisms of reduction of imbalances at the rhythm that markets demand. As long as this situation continues, the risk of a euro break-up is fuelling the fragmentation of financial flows across the eurozone and impeding funding access for those economies with a net debt position with the rest of the zone. A fast implementation of financial-aid mechanisms and their reinforcement in terms of size and access to ECB's funding are key factors to eliminate the risk of a eurozone break up. However, in our opinion this extreme outcome is a tail risk; sooner or later, the measures needed to set up common institutions for banking supervision, deposit guarantee and banking resolution will be approved. Although there is political will to reinforce European currency-union institutions and governance, the implementation of appropriate measures are lagging behind. In the end, those measures will imply a transfer of national sovereignty to the European institutions and, at the end of the process, some form of liability sharing (debt mutualization). That will also happen as for the fiscal policy, for example in the form of national consolidation plans having to be submitted to European institutions. If the challenges ahead are met satisfactorily, global growth could gradually gain traction during 2H12.

In the case of the US, the downward revision to our outlook for 2012 and beyond has been driven by a combination of disappointing growth figures in 1H12 and the impact of a high financial stress coming from the euro area. As a result, emerging economies are likely to be the main drivers behind the slight acceleration in the global GDP we expect for 2013. In Latin America, despite a generalized downward revision in growth forecasts compared with three months ago, estimates for Mexico (3.7% and 3.0% for 2012 and 2013, respectively) remain unchanged thanks to upbeat activity data in 1H12, the continuation of favorable financing conditions in the domestic market, and gains in competitiveness. In Brazil, growth forecasts have been significantly revised downwards (to 2.2% from 3.3% in 2012) due to the impact of the external environment and to some domestic issues such as the slowdown in credit markets and increasing competitiveness problems. Even though activity is still expected to recover in the quarters ahead following the unprecedented softening of monetary conditions, the recent moderation warns against the current growth model and its excessive focus on private consumption and credit expansion.

Graph 9
Financial stress indicator, BBVA Research (*)



(*) Tracks the trend of a series of financial variables, including: stock market volatility; interest rates and exchange rates; sovereign, credit, and corporate risk; and liquidity tensions. Source: BBVA Research

Graph 10
Dollar-euro exchange rate and Spanish and Italian risk premiums
Simple average spread vs. 10Y Bond, bp; index 1 Jan 11=100

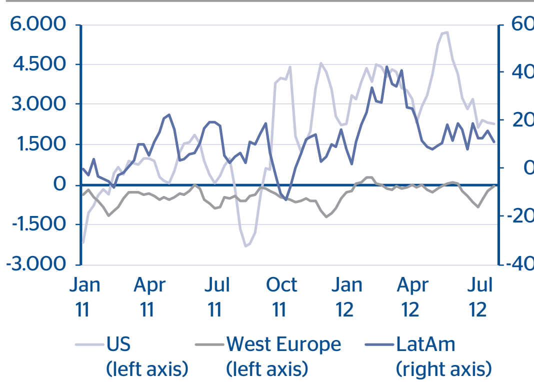
Source: BBVA Research and EPFR

As for Asia, growth in the first half of the year slowed in China more than expected. In line with the weaker global outlook, we have accordingly revised our projections for 2012-13 down. Nevertheless, monetary and fiscal measures to support growth should lead to a pickup, with growth in 2013 rising to 8.3%, a half percentage point higher than in 2012. Elsewhere in the Asia region, there is also room for policy stimulus to support growth. But there are downside risks, including a more severe worsening of external demand and a continued slowdown in China, exacerbated by ongoing domestic financial fragilities..

Abundant liquidity, accumulated imbalances and doubts about the ability of policy makers to resolve the euro crisis are changing the risk perception across assets in developed and emerging markets

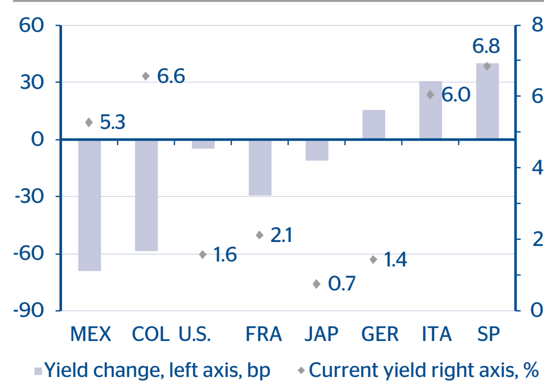
The outcome of the current economic problems is highly uncertain because there are political-economy considerations at stake that may not be consistent with the incentives to fix a supranational crisis. The risk scenario that dominates in the forecast horizon (2012-2013) appears to be more focused on the developed economies and in particular, on the eurozone. These emerging economies have more room to maneuver than developed economies when it comes to demand policies (fiscal and monetary), and also have, overall, lower accumulated imbalances. As a result, there have been increasing capital flows from Europe into the US and the emerging markets, including those in Latin America.

Graph 11
Sovereign debt flows (USD bln)



Fuente: BBVA Research y datos EPFR

Graph 12
Long-term (10Y) bond yields, changes since the beginning of June (bp)



Fuente: BBVA Research

These shifts in financial flows are a reflection of the level of uncertainty and the fact that risk is focused on developed economies. Both factors have led to a change in the risk character across assets in emerging and developed markets. Since the end of May (when markets started pricing in that the US economy was running out of steam), yields on bonds that are traditionally regarded as risk-free sovereign assets (US and Germany) have fallen to historically low levels. Since the end of June, doubts surrounding the ability to reach a rapid solution to the euro crisis have been pressing in the same direction. Peripheral sovereign bonds have been perceived as riskier, whereas yields on emerging-market bonds such as Mexico's[2] and Colombia's have fallen to all-time lows. Record foreign inflows are searching for returns in economies as isolated from the source of the crisis as possible, with good macroeconomic policies and growth prospects; in countries where any direct channel of contagion is relatively narrow, and where the room for maneuver in economic policies is ample.

But there are risks to the sustainability of this scenario. Apart from changes to local inflation or growth outlook that may cause rising yields, global factors, such as systemic shock in the eurozone could wipe out all the safe-haven value recently gained by certain emerging-market assets, e.g. those in Latin America. In the case of a systemic event, it remains to be seen whether domestic strengths (e.g., lack of fiscal imbalances) would be preserved in the event of a "Lehman-type" shock. In the event of a systemic risk, it is likely that only the assets of economies that have their own currency and a central bank that acts as the lender of last resort, and do not have any significant external imbalances, will be regarded as risk free.[3] On the other hand, additional expansion of the Fed's balance sheets could encourage investors to move out of fixed income and into equity markets, particularly if there are no clear signs of further easing in domestic monetary-policy expectations.

[2] In the case of Mexican bonds, the inflows may even have been intensified by investors betting on a change of composition of the benchmark indices used by global fixed income portfolios.

[3] Chapter 3 of the *IMF Global Financial Stability Report* (April 2012) is dedicated to the implications of low supply of risk-free assets for financial markets stability.

3 Mexico: sustained growth thanks to domestic strengths in a more uncertain global scenario

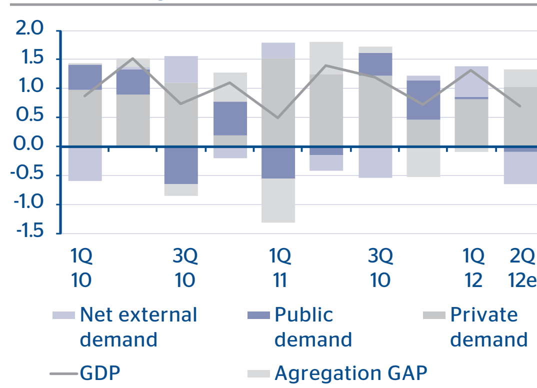
3.1 Outlook for activity in Mexico: domestic certainties in view of external uncertainties

Greater lack of coordination in Mexico in view of an environment of moderate growth

In a world where the outlook for growth is reviewed downward in practically all the regions, the positive differentiation of economic activity in Mexico during the early part of the year is noteworthy; Surprisingly, GDP growth surged upward in the 1Q12, with higher than expected expansion, based on available data on current conditions at that time. The estimator of quarterly GDP in real time, MICA BBVA Research Mexico, indicated growth of 0.7%, considerably below the 1.3%. datum eventually published by the INEGI. This growth was derived mainly from private demand, consumption by households and business investment, which contributed 0.8 points of the 1.3% of quarterly growth. In turn, the share of demand from the public sector in those first three months was null, while net exports and imports accounted for the rest (0.5 points).

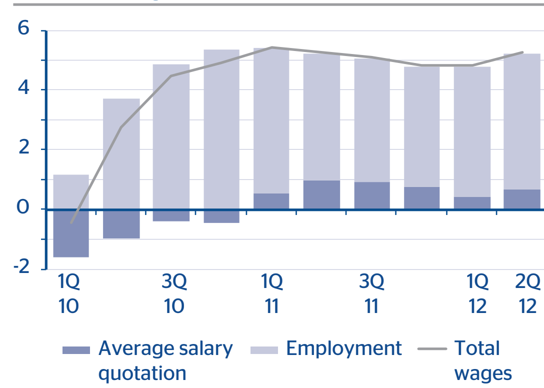
High growth of household consumption was particularly significant, providing the main boost to growth in recent quarters, supported by disposable income and access to financing. As has been the case for two years now, job creation in the formal private sector with average annual growth of 4.6% in the last eight quarters was an important factor, which added to growth in real wages of 0.4% in the same period contributed to growth close to 5% in real income derived from the formal labor market. It is important not to forget "however" that the approximation of households' disposable income, considering the total work market, formal and informal (with data from the National Jobs and Employment Survey) indicates that in real terms growth of household income has dropped, compared to the same period of the previous year in the last 16 quarters (on average (-) 1,9% in 2011, (-) 1.5% in 1Q12).

Graph 13
GDP Mexico: contribution to quarterly growth (Q/Q % Change and contributions)



Source: BBVA Research with INEGI data

Graph 14
Total Wages Formal Private Sector, (Y/Y % Change and contributions)



Source: BBVA Research

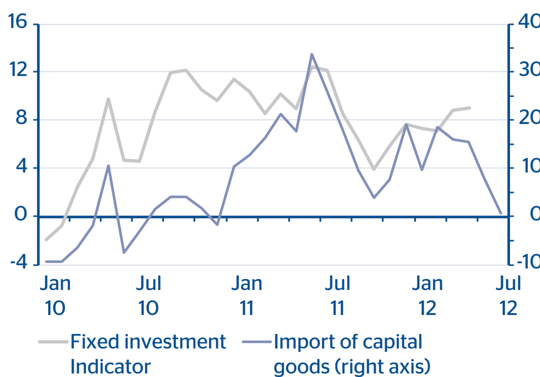
The second component of greater weight in domestic demand, companies' and government investment, was also of significant importance in the 1Q12, particularly in its private component. Public investment, however, was less dynamic than expected in the early months of the year and, as a whole, the formation of capital contributed 0.1 points to quarterly growth. Timely indicators of activity indicate that this component would have entered a stage of moderation in the second quarter. In both cases, consumption and investment, their positive performance in recent months reflect the availability of financing by the agents, which is a key factor for growth. It should be recalled that consumer credit continues to expand at high rates, along the order of 19.3% (average in the January-May period) in real terms. Even though this factor is showing a slight moderation, it is clear that it continues to be a key element that has contributed to the good performance of economic activity.

Signs of moderation in the 2Q12 derived from external demand. The series of timely indicators of activity indicate that in the 2Q12, Mexican GDP will have expanded at a quarterly 0.9%, around an annual 4%. There are some signs of moderation such as a lower contribution of real wages to disposable income in recent months due to the rise in inflation, the drop in indicators related to investment and, in particular, the moderation of Mexican exports that have registered drops in the last three months (-11.5%) on average, which compared negatively in view of 1.7% growth in the first quarter of the year. However, the confidence of both the manufacturing producer and the consumer also corroborates a somewhat less optimistic tone. In the first case, this could reflect the impact of lower expected growth in activity, given the drop in the ISM in the U.S., a reference indicator with consistent declines in trends, indicating greater moderation in the 3Q12 in Mexico.

Even with these signs of lower growth in activity, economic growth in Mexico is notable, especially in the current environment of high uncertainty and international moderation. In addition, it should be mentioned that the surprisingly positive growth in the 1Q12 even implies a slightly upward bias in view of our new growth estimate for the year of 3.7% which, however, we maintain, given the sharp uncertainty and the possibility of a slowdown in the global economy. In particular, we should not underestimate the risk of a strong moderation of growth in the U.S. economy, in which case, given the dependence of Mexico's foreign trade on that country, there might be an eventual adjustment in our economy.

Graph 15

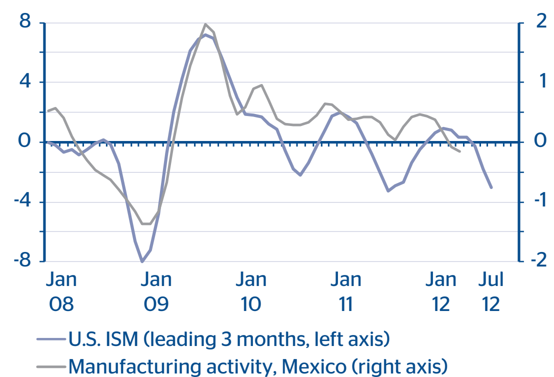
Investment and imports of capital goods (Y/Y % Change)



Source: BBVA Research with INEGI data

Graph 16

Mexican manufacturing and U.S. ISM (M/M % change of the trends)



Source: BBVA Research and Bloomberg

Domestic certainties, fiscal policiy without imbalances, margin for reaction in monetary policy and strength of the financial system

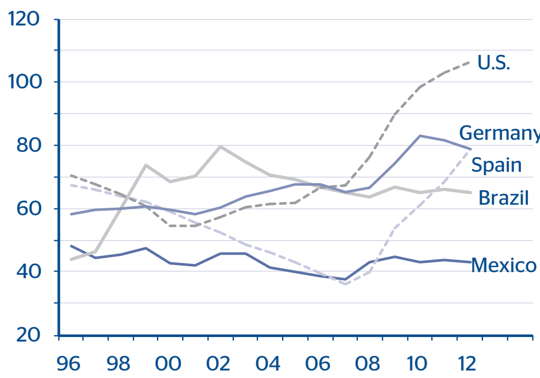
Perhaps the most important element in guiding economic policy in Mexico in recent years is the drop and stabilization of inflation and of interest rates, thanks to an independent central bank in obtaining price stability and a fiscal policy aimed at budgetary stability that finances the deficit in the market in an orthodox manner.

All of this has generated a virtuous circle of stability favoring households' and companies' demand for financing and more so when all that is said is accompanied by a solid financial system, capable of attending solvent demand for credit.

The certainty of fiscal policy with regard to the annual fulfillment of the deficit objective and limited debt is an element of solidity of the economy. Mexico's public debt as a percentage of GDP is considerably below the level of other economies, a situation that contributes to the government's continued financing at lower costs and longer terms, assuming a prudent risk level. Efforts have also been made to diversify the structure of liabilities in such a way that it is possible to reduce vulnerabilities in the event of external uncertainty. Through June 30, 79% of the federal government's net debt was in the hands of internal creditors and the remaining 21% was foreign debt.

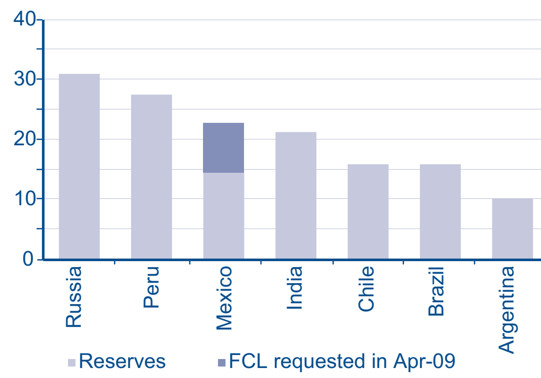
Also, the management of monetary and fiscal policies as well as regulation of the financial system has allowed for Mexico's positive differentiation compared to other economies (or all the countries in the European Union) in terms of the financial stress it is facing. The strength of the fundamentals in terms of its solid public finances, bank solvency and the country's comfortable reserve level, among other factors, are the elements that have allowed Mexico to ratify and have access to a Flexible Credit Line (FCL) by the IMF for an amount of DEG 47,292 (approximately US$72.98 billion, an agreement ratified in December 2011). By this, the country has an economic policy that does not depend on conditions with low-cost dollar funding, which alone implies 6.9% of its GDP.

Graph 17
Gross Public Debt (% of GDP)



Source: BBVA Research

Graph 18
Availability of Reserves (% of GDP)



Source: BBVA Research, Central Banks and IMF

The soundness of the banking system with a high capitalization level and limited and well covered credit risk is also strength, and even more so at this time, considering the events in the external environment. The Mexican financial system enjoys a capitalization level that surpasses the regulatory minimum (15.7% in the Mexican financial system; 8% is required by the Basel Supervisory Banking Commission and 10% is required by the National Banking and Securities Commission (CNBV for its Spanish initials). Thus, the system is well within the possibility of meeting the financial needs of companies and families. A sign of this is the perception that interest rates and the collateral demanded by the banks has been reduced systematically, which are the main factors limiting access to loans.

Thus, although there are important challenges pending in the horizon of the Mexican economy, there are some elements that endow Mexico with strength and constitute differentiating factors in the current environment of global uncertainty.

Among the pending challenges of note are some such as how to provide greater solidity to the institutional framework in force. A weak legal environment is related to the high levels of informal activity and/or against the law, in turn, related to low levels of investment and productivity (Inset 1).

Inset 1: Informal activity slows growth in productivity and investment

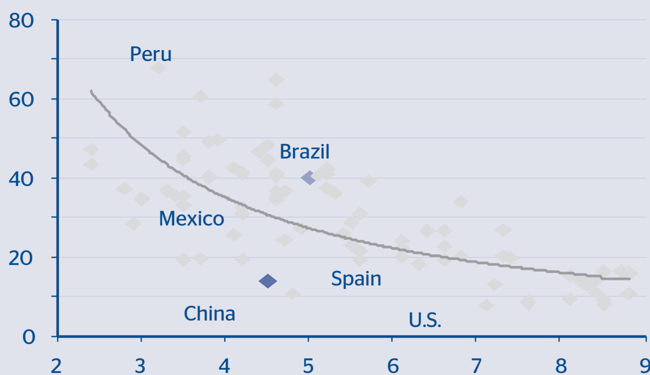
In some emerging economies, the weight of informality in economic activity and employment takes on important dimensions. For example, for the seven largest countries in Latin America [1] it is estimated that the informal economy represents, on average, 39% of GDP, while nearly 57% of total employment in these nations is informal. This includes both employment as such in companies belonging to the informal sector, as well as informal jobs in businesses outside the informal sector.

If the informal economy is defined as activity that is not subject to the regulations in effect, it seems clear that measuring it is marked by high uncertainty. This is the case both in terms of its importance in activity as measured by GDP as well as in relation to employment. As regards employment, it is also possible to differentiate between informal employment corresponding to informal activities as well as informal jobs in formal companies.

High levels of the informal economy are the result of factors related to the regulatory panorama in which economic activity unfolds, namely, the costs implied for complying on the part of companies and to what degree the regulatory agencies actively pursue non-compliance. Complex standards and regulations, compliance that is costly not only in terms of fees paid but also the paperwork procedures involved and at the same time a high probability of being sanctioned for breaching the rules, are elements that encourage informal activity. Since the costs of compliance with the rules and the possibility of being detected increase with the size of the business, this discourages economies of scale, which limits capital accumulation and investment. This is even more the case if this situation makes it difficult to access bank financing. All of these factors limit the productivity of the economy and capital accumulation, and therefore achieving a higher level of per capita GDP in the country will require changes to promote greater formality in the economy,

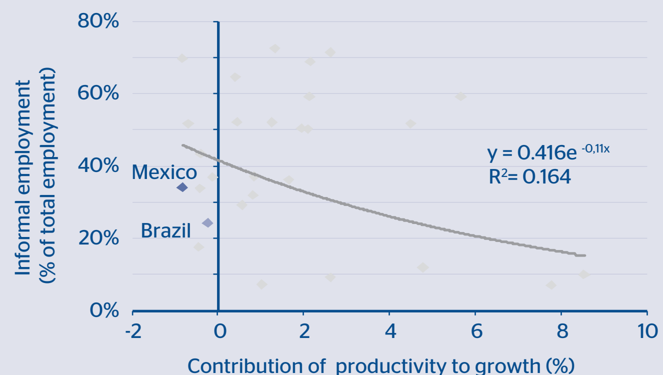
High levels of informal activity coincide with low levels of economic development, which can be observed in comparatively low levels of per capita GDP. This also correlates with low productivity.

Graph 19
Informal economy (% of official GDP) and legal environment index



Source: BBVA Research, ILO, and Conference Board data. The figure for informal workers as a percentage of total employment corresponds to the latest available data.

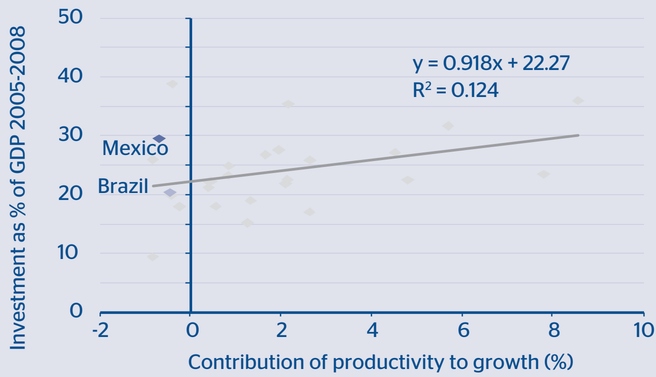
Graph 20
Informal workers as a percentage of total employment and the percentage contribution of their productivity to 2001-2008 growth



Source: BBVA Research. The figure for informal workers as a percentage of total employment corresponds to the latest available data.

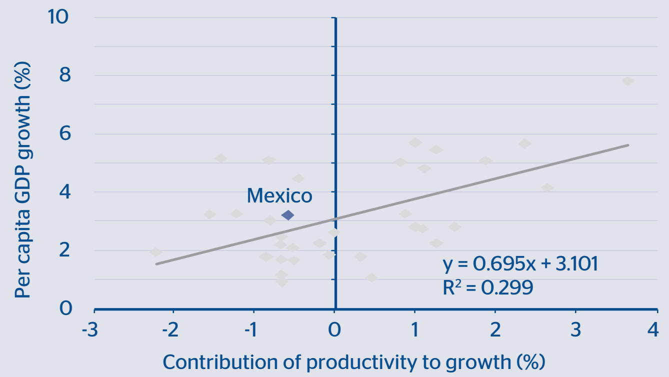
[1] The seven Latin American countries included are: Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, and Peru. The reference date is 2006. The GDP estimate is by Schneider (2009) and for employment, the International Labor Organization (ILO) estimates were used.

Graph 21
Informal workers as a percentage of total employment and investment



Source: BBVA Research and Conference Board data

Graph 22
Per capita GDP and productivity



Source: BBVA Research, International Property Rights Index 2011, Schneider (2010)

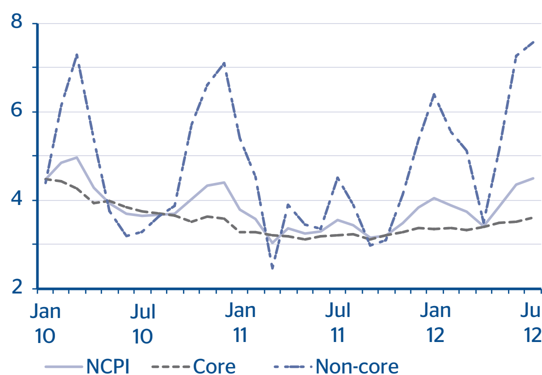
3.2 In an environment of upward supply shocks, inflation remains under control, thanks to the absence of demand as a significant pressure factor

During the second quarter of the year, inflation remained stable at 3.9%, compared to the previous quarter. However, after its lowest rate in the year, in April (3.4%), prices rose during the next two months, with inflation reaching 4.5% in the first two weeks of July. This sudden rebound in inflation is due to: i) the continuous upward shocks in commodities prices during the last two years, and to a lower extent to ii) the depreciation of the peso since 2011 and finally, to iii) a seasonal rebound of fruit and vegetable prices. Despite this, core inflation continues to reflect that aggregate demand is still not a relevant factor in price increases, although it has risen slightly as a result of the shocks mentioned.

Core inflation has increased slightly during the year, from 3.3% at the close of 2011, to 3.6% in the first two weeks of July. This increase is due to a slight rise in prices of services,-due to a slow but continuous recovery of consumption-and the persistence shown in merchandise prices, which have oscillated within a range between 4.5% and 4.8% throughout the year.

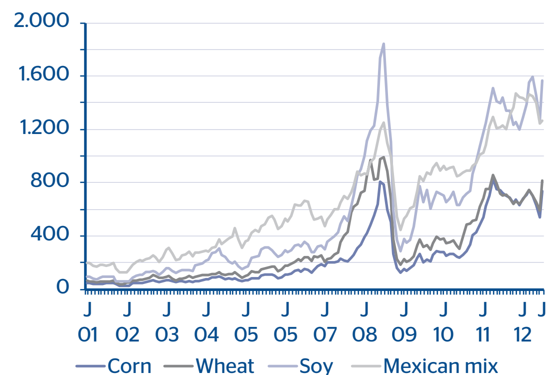
Inflation of merchandise prices has not fallen below 4.5% due to the continuous upward shocks in the grain markets and the depreciation of the peso due to the intense financial volatility. Internally, the prices of processed foods have slowed down gradually but consistently since the beginning of the year. However, after reaching their minimum in May for 2012 (6.3% y/y) they have rebounded slightly, mainly due to price increases of wheat, soy and, more recently, corn, derived from the strong drought affecting the U.S.

Graph 23
Inflation and components (y/y % change)



Source: BBVA Research with INEGI data

Graph 24
Prices of commodities in world markets (pesos per contract) and pesos per barrel



Source; BBVA Research with Bloomberg data

The reduction of inflation shown in food prices has been offset by the rise in prices of other merchandises, which rose from 1.9% in October 2011, to 3.5% in the first half of July. This increase is due to two factors: first, the depreciation of the peso of 106% on average since August 2011, and secondly, to the continued recovery of consumption..

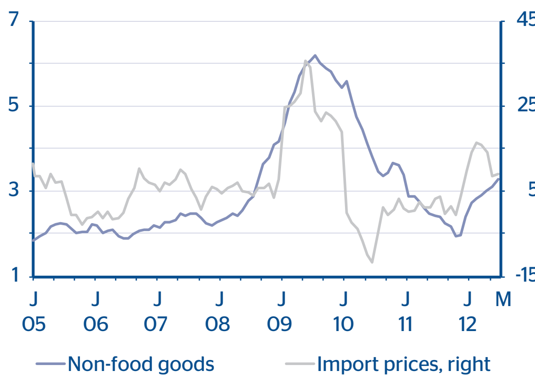
In turn, inflation in services has rebounded, from 2.2% in February, to 2.5% in the first two weeks of July, due mainly to a slight acceleration in the prices of basic and higher education since May, and to an upward adjustment in the prices of the rest of the services since March, with a significant increase in air travel and tourism packages, both affected by the rise in oil prices. The housing component continues at historic lows, posting annual inflation of 1.85% in June, an inflation rate that reflects the absence of demand pressures.

Core inflation will continue to show slight effects due to continued shocks in commodities prices, however, we believe that the transfer due to changes in these costs will be limited, because in a context in which demand growth is still moderate, most producers will avoid raising their prices due to a potential loss of market share which they could suffer against their competitors. Because of this, we believe that core inflation is already very close to its maximum annual rates and will even experience a slight slowdown at year end.

The non-core inflation component has been more volatile in the National Consumer Price Index (the NCPI) throughout the year, in terms of the consumer basket, due to price fluctuations in grains and oil, the peso depreciation and more recently to the outbreak of the avian flu in the western part of the country. The seasonal factor linked to the sowing and harvesting seasons of fruits and vegetables has had an important influence on the dynamic of this component.

Graph 25

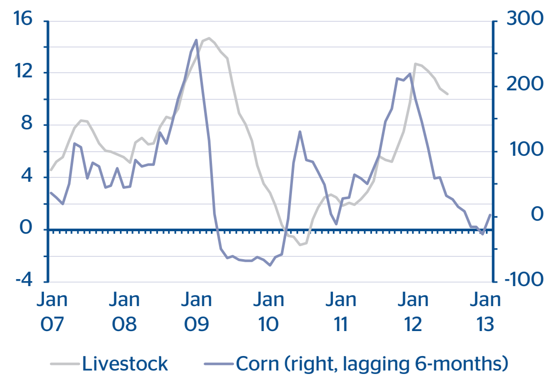
Prices of imports and inflation of non.food merchandises (y/y % change)



Source: BBVA Research with INEGI data

Graph 26

Inflation of livestock prices (y/y % change) and corn prices



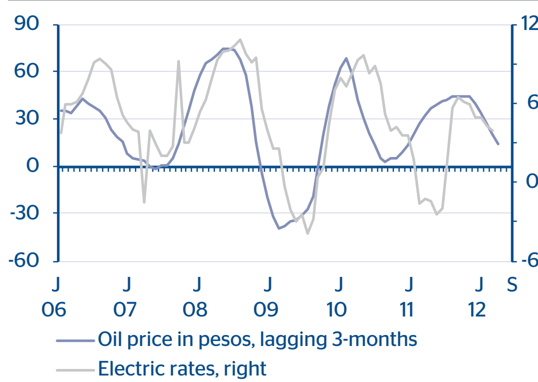
Source; BBVA Research with INEGI and Bloomberg data

Price increases of livestock products were significant from autumn of 2010 until January of this year, when annual inflation reached 12.7%. However, between February and June of this year, the inflation rate slowed down to 10.4%. Unfortunately, the outbreak of the avian flu at the beginning of July affected the production of eggs and chicken in the country, leading to an inflation rise up to 13.3% in the first two weeks of July. Allhough this demand shock of poultry products is transitory and short-lived, the outlook for producer costs has also worsened due to increases in soy and corn prices, so that, foreseeably, these prices still have an upward stretch to cover. .

Energy prices have also been affected by high oil and gas prices worldwide. Although in Mexico, the policy of programmed price increases, less intense in gasoline and diesel prices (which have an implicit subsidy, increasingly higher in 2012), prices of electricity and domestic gas have felt these increases more clearly, which are also more significant in periods of a strong depreciation of the peso.

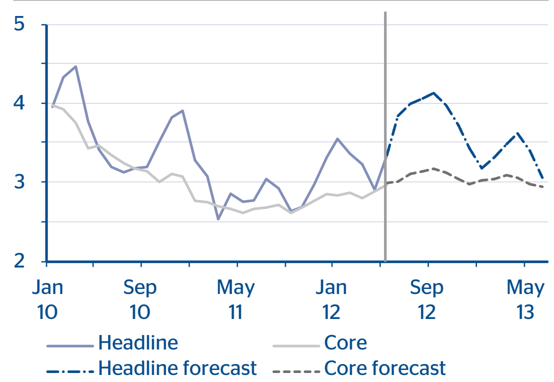
Finally, it must be mentioned that within non-core inflation there are components that help contain price increases, such as rates set by the local governments, by which annual inflation was barely 0.1%, thanks to the elimination of the car ownership tax in several states throughout the country. However, it must be noted that these prices are, by definition, subject to sudden changes linked to the status of revenues in the states and municipalities.

Graph 27
Inflation electricity rates (y/y % change) and Mexican oil mix prices
(y/y % change, 6 - month moving average)



Fuente: BBVA Research con datos de INEGI y Bloomberg

Graph 28
BBVA Research inflation scenario
(y/y % change)



Fuente; BBVA Research con datos de INEGI y Bloomberg

We believe that there is room for inflation to be lowered down to 3.9%, thanks to the favorable effect of comparison with the close of 2011. For 2013, we believe that, on average inflation will be well below 4%, with this being achieved surely in April, due again to the base effect. Finally, it is foreseeable that inflation will close 2013 at between 3% and 3.5%. Our scenario is subject to risks: i) upward if the recent increases in grain and oil prices continue, affected further by financial uncertainty in the world, in an environment of continued economic growth, ii) downward, due to the possibility of a weakening of global and domestic activity.

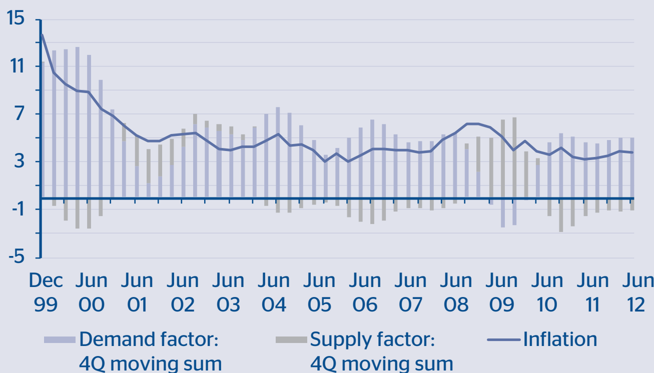
Inset 2: Supply factors affect Mexican inflation in the absence of significant demand pressures

This year, inflation in Mexico has reached levels above 4% in an environment marked by moderate growth, increases in the prices of some highly volatile products such as agricultural goods, and a depreciation of the peso. The recent movements in prices of agricultural goods can be considered to be the result of supply factors, since in most cases such changes can be attributed to climatic factors, the avian flu outbreak, and, in addition, to a depreciation of the peso, reflecting the global uncertainty. At the same time, movements in prices associated with economic growth considered to be above potential growth can be classified as a demand factor.[1] Thus, inflation can be broken down into two factors; demand factors, related to nominal economic growth with regard to the real potential of the economy, and residual or supply factors, which encompass the rest of the determining causes. [2]

This breakdown shows that the residual or supply factor in Mexico has a similar behavior to international prices of commodities such as grains and to a lesser extent oil (given energy policies based on subsidies), in addition to also being related to the exchange rate. It should also be noted that the demand factor is important. Nevertheless, this factor, being calculated as the difference between the nominal growth rate and the real growth trend, does not fully encompass the margin generated by unutilized production capacity. That is, demand pressures having a positive effect on inflation does not mean there is no leeway in terms of the factors present in the markets.

Graph 29

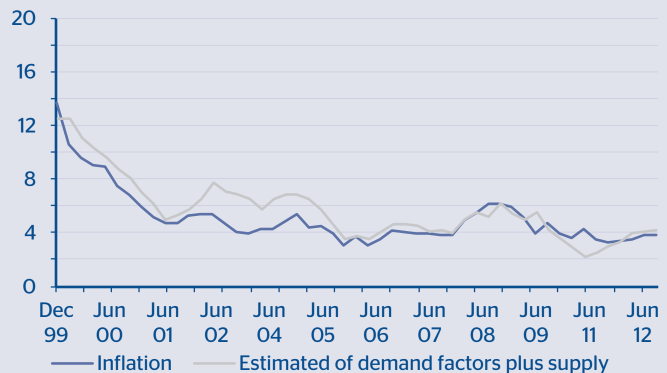
Annual inflation, Breakdown by demand and supply factors (y/y % change)



Source; BBVA Research

Graph 30

Observed and estimated annual inflation, based on demand and supply factors (y/y % change)



Source; BBVA Research

In times of crisis, the demand factor for construction will be negative given the decline in output, which leads the exogenous factor to encompass the elements that explain the level of inflation observed. Such elements could be the rigidity of prices in the economy, fiscal modifications, or movements in exchange rates and international prices, among others.

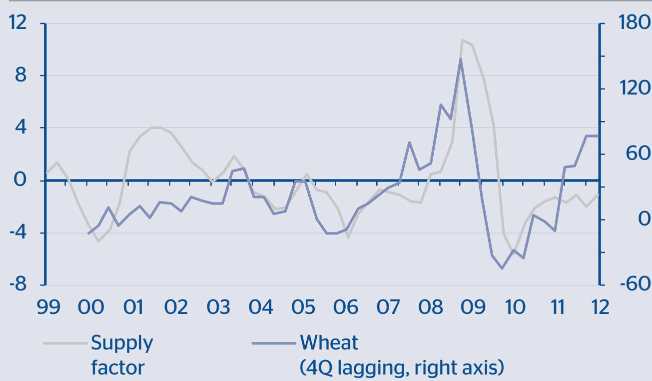
The fact that the factor related to supply factors has a correlation with grain and oil prices means that part of the prices in Mexico will be determined by the dynamics of the general level of prices in the world, especially for those goods or inputs that are of common use. This also helps to identify the time in which the effects of these shocks are transferred

[1] Growth potential implies a scenario in which the use of productive factors in the long run is consistent with price stability.

[2] The breakdown takes into account the work of Eagle and Domian (2011) in which the variation of prices in the economy is equal to the difference between the growth in nominal and real GDP (after a logarithmic transformation and in differences of four quarters in levels of the variables). It is assumed that is possible to approximate the prices in the economy as a whole with those of the consumer basket due to their high correlation, especially in annual rates, in addition to the GDP deflator series having its beginning in 2003. In addition, real GDP growth can be broken down through the use of the Hodrick-Prescott filter in its trend and cyclical factors, with this also being applicable for the period projected in the BBVA Research scenario. Thus, the demand factor involves the difference between nominal growth and the trend in real growth, while the exogenous or supply factor corresponds to the residual factor with inflation. This approximation can be compared to a Phillips Curve in which a differentiation is not made between supply factors. The sample covers the 1998:1-2012:2 period, with quarterly data. The results show that both determining factors are significant and maintain a correct signal, and with these two components alone, a more than 70% adjustment is achieved in the estimation period. This methodology is based on a simple model of the quantitative theory of money.

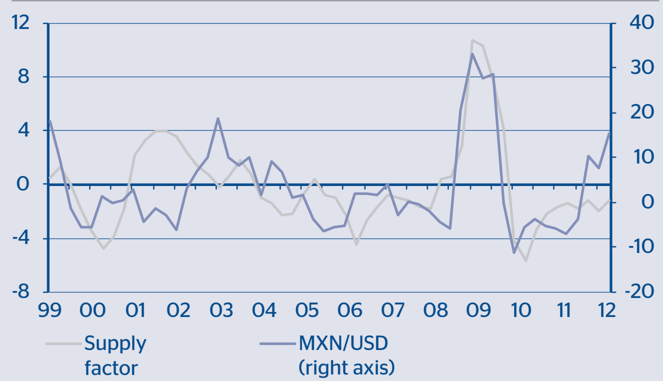
to price levels in the country. For example, in the case of the exchange rate, this effect is practically immediate, while for prices of commodities such as wheat, there is a several quarter lag. This delayed effect could be due to producers being able to obtain their supplies locally, having inventories or financial hedges. Isolating the factors of supply and demand in inflation allows for deducing the importance of the effect of the performance of economic activity on prices. At the same time, it enables a determination to be made on the economy's exposure to exogenous shocks.

Graph 31
Supply factors and wheat prices (y/y % change)



Source; BBVA Research

Graph 32
Supply factors and MXN/USD (peso/dollar) exchange rate (y/y % change)



Source; BBVA Research

Bibliographical references

Eagle, D. and Domian, D. (2011), "Immunizing our Economies against Recessions - A Microfoundations Investigation", Western Economic Association International Conference, San Diego, June 2011.

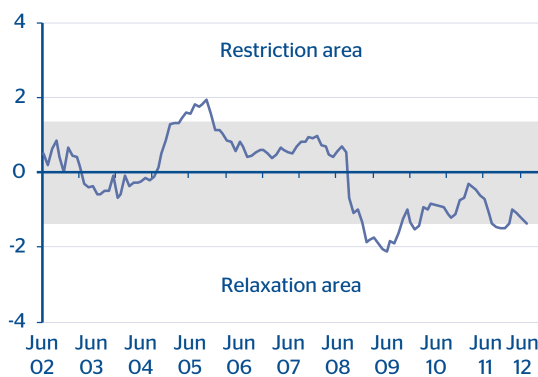
A neutral monetary position with the deterioration of the risk balance in activity and the rally in inflation

In the last two Announcements of Monetary Policy Decisions, the central bank has maintained its neutral position based on a deterioration of the risk balance and a rebound in inflation, to stand at 4.5% in the first two weeks of July. Growth in domestic activity has been maintained, although with some signs of a slowdown, at above 3.5%, and most analysts agree that this will continue through the rest of the year. However, the risks downward for world economic growth have intensified as a result of the uncertainty prevailing due to the crisis in the euro zone and the size of next year's fiscal adjustment could have in the U.S.. Moreover, the rebound in inflation in the last two months, to levels of over 4% as a result of the rise in the non-core sub-index, indicate that it will be maintained at around this figure for almost what is left of this year. Based on the outlook for economic activity and consumer prices, the central bank expanded its information regarding the balance of inflation risk, noting that it will be different in the short and medium terms. In the short term, the risks are biased upward as a result of the supply shocks affecting the prices of agricultural and livestock products, while in the medium term, the downward risks have increased, given the greater probability of a severe weakening of the world economy.

In addition to the risks considered by the central bank, the possibility that the U.S. Federal Reserve (FED) might launch a new round of monetary stimuli has been mentioned as an element that could have a bearing on a change in the position of monetary policy. Even though it is true that such a measure by the FED could bring with it a relative tensioning of the monetary policy in Mexico, the outlook of rallying inflation and a marginal appreciation of the peso compared to the current levels, does limit the toughening of monetary conditions. .

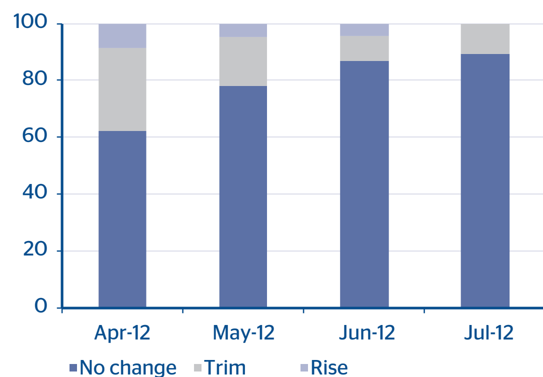
Currently, the BBVA Research scenario points to GDP growth of 3.7% for 2012 and average inflation of 4.4% for the rest of this year. This scenario, added to the current conditions, continues to be consistent with a monetary pause in 2012. Nevertheless, we reiterate the bias toward a cutback should the risks for activity materialize.

Graph 33
Index of Monetary Conditions



Source : BBVA Research

Graph 34
Movement expectations of the monetary policy rate in the next six months (analysts %)



Source; Survey of financial market analysts' expectations

Local financial markets in tune with global high risk and liquidity

Between May and July, the exchange rate continued to be linked to global risk, while interest rates on government debt responded to a greater degree to liquidity.

During the month of May, global aversion to risk rose as a result of doubts regarding the continuity of Greece in the euro area due to lack of a political agreement regarding the fiscal austerity measures agreed to with the Troika (the ECB, the IMF and the European Commission). This led the exchange rate to reach levels of 14.37 in the spot market. In June, the aversion to risk ceded after the commitment by the new Greek government was ratified with the austerity measures included in the European Summit as to the channeling of resources to the banking systems. To the extent that the global risk is reduced in response to said agreements, the Mexican peso appreciated with the exchange rate reaching 13.36 pesos per dollar at the end of June. The medium- and long-term rates of Mexican public debt in pesos maintained a downward trend throughout the entire period, not having without the global risk episodes of May interrupting this downward trend. The 10-year bond rate reached levels below 5%, which is significant, considering that the market and analysts expect monetary policy rates to remain at 4.5% in the coming months. In the last weeks of July, the peso has remained at around 13.30 pesos per dollar, influenced by news on the deterioration of the economic and financial situation of the peripheral countries of the euro area and, more recently, by the possibility of a new round of bond purchasing by the ECB.

In addition to the global aversion to risk, the foreign exchange market has also had a bearing on the possibility of a new round of monetary stimuli by the FED. The data below employment expectations in recent months in the U.S. have increased speculation surrounding further actions by the FED in support of economic activity. This is associated with the search for greater profitability, which tends to appreciate the emerging currencies for short periods. At this time, the FED has only extended its program to increase the duration of the assets of its balance (operation twist). The next data of non-agrarian employment, as well as the meeting of the central bankers that the FED organizes for the end of August will provide more elements regarding the course of U.S. monetary policy in the coming months, and, as a result, on possible exogenous events affecting the Mexican foreign exchange and interest rates.

Graph 35
Global risk and exchange rate (percentage and ppd)

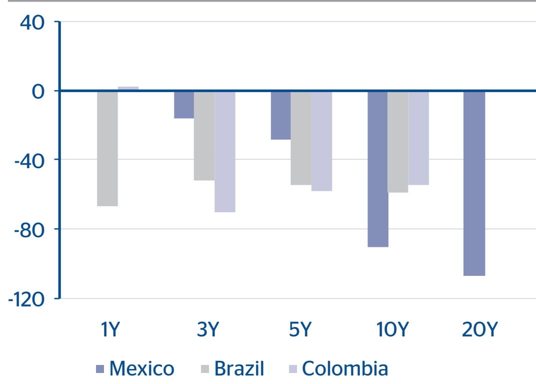
Source; BBVA Research and Bloomberg

Graph 36
Global risk and yield rate of the 10-year bond (percentage)

Source; BBVA Research and Bloomberg.

Long-term bond rates in Mexico dropped around 100 basis points on average between May and July. This decline is much greater than the reduction observed in other Latin American countries. The deterioration in credit quality of some European countries has underlined the fiscal discipline in Mexico, which has contributed to the continuation of strong entries of foreign flows to the government debt market in Mexico. Currently, the positions of foreign investors represent around 45% of this market..

Graph 37
Change in fixed income bonds between May 30 and July 31 (pb)



Source: BBVA Research y Bloomberg

Graph 38
Foreign flows to government debt bonds in Mexico (%)

Source; BBVA Research and Banxico

The intense drop in government rates with expectations of a monetary pause denotes an important decline in the term premium. This drop is much below the level due to the evolution of the loan risk, which is why it seems to be associated with an improvement in the liquidity conditions in the bond market in Mexico (See Box 3). For example, the spread between the buy and sell price of the 10-year government bond has declined to a level similar to that seen in the year 2010, when Mexico entered the World Government Bond Index (WGBI) which is a reference to a world level exposure to public debt by country.

Nevertheless, there are risk factors that could revert the premium per term: i) a rise in the aversion to global risk that could deteriorate domestic conditions; ii) an additional relaxing (QE3) on the part of the U.S. Federal Reserve that could produce replacing more secure bonds for greater risk and yield assets; and, iii) a rise in domestic inflation should the prices of more volatile products continue their growing trend..

Medium-and long-term rates of government bonds in Mexico should continue their rising course consistent with moderate economic growth and a normalization of global liquidity conditions. For example, it is expected that the 10-year bond rate will be at around 5.5% in December.

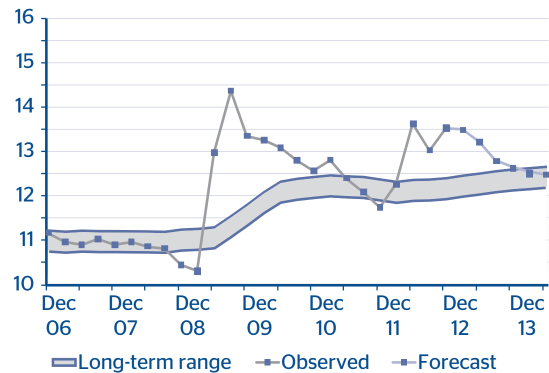
The temporary reduction of global risk generates space for the peso to appreciate with levels coherent with productivity and relative prices in Mexico and the U.S., fundamental factors that guide the performance of the exchange rate in the medium- and long-term In the medium term, the outlook for growth and inflation in Mexico and the U.S. continues to indicate an appreciation of the peso against the dollar. It is estimated that at the end of the year, the peso will be at around 13 pesos per dollar, a level close to the estimate of its long-term trend, which is between 12.30 and 12.60 pesos per dollar. Nevertheless, the uncertainty that is prevalent on the financial markets could alter the trend derived from the fundamentals.

Should there finally occur a financial "accident" in the euro area that would worsen its situation and should there be contagion toward the U.S. economy, both the domestic rates and the exchange rate would undergo a relevant increase of level and volatility. In any case, the intensity and duration of the risk event would be restrained by the European reaction to solve the unchained crisis.

Graph 39
10-year bond rate (%)

Source: BBVA Research

Graph 40
Exchange rate (pesos per dollar)



Source: BBVA Research

Inset 3: The improvement in liquidity conditions: support for the drop in interest rates

From the end of May until the end of July the interest rate curve for government bonds in Mexico has fallen 50bp on average, with a more pronounced decline in the longer term yields of about 100 bp. This decline occurs in a context of a monetary pause in the last three years with expectations that it will continue at least until well into 2013. This combination of factors suggests the presence of a low term premium, that is, a drop in the compensation that investors demand for holding medium and long term assets beyond the pure reinvestment in short-term securities. Indeed, in the presence of market risk (derived from variations in asset prices as a result of changes in interest rates), investors require a higher return than the average expectation for future short term yields, as compensation for maintaining assets with longer maturities. This additional compensation, which represents a shift away from the hypothesis of interest rate expectations, is known as a term premium. According to Cerecero et. al. (2008), the term premium can be interpreted as the sum of a liquidity premium and a risk premium. Therefore, identifying the component that the drop in interest rates can be attributed to, given the monetary policy scenario, is equivalent to finding the cause behind the decline in the term premium or the premium for permanence. This concept is approximated by the following formula:

$$\phi_{nt} = Y_{nt} - (1/n)\sum_{i} E_t(r_{t+i})$$

In which:

ϕ_{nt}: *Term Premium*. And $_{nt}$: Yield of a zero coupon bond maturing in n periods at time t; r_t. Short-term yield in time t. $E_t(X_{t+u})$: Expected value at time t of the variable X, or later periods.

In our particular case, ϕ_{nt} for each month in the January 2006 to July 2012 period is the spread between the average monthly yield on a zero coupon bond maturing in 10 years and the average monthly expectation for 365 day Cetes yields projected by BBVA Research for ten years into the future.

Once the term premium is calculated, it can be broken down into a liquidity premium and a risk premium by using the state space econometric methodology. The risk premium is linked to credit risk or asset default risk and is approximated through the credit default spread (CDS) on Mexican 5-year sovereign bonds. Using this variable, it is possible to calculate the default risk, which varies according to the expectations of indicators that represent the debt payment capacity such as its level, international reserves, the exchange rate, and foreign demand. The liquidity premium, which indicates the capacity to convert the assets in question into cash, is the unobserved component of the model. This approach is used due to the lack of variables that could accurately represent it, since no data are available of the volume traded in the secondary bond market for specific references. It should be noted, however, that an alternative variable to the liquidity premium such as the spread between the bond's buy and sell price, in this case, the 10-year M bond, has also declined considerably (see graph 42).

The results of the breakdown obtained are shown in Graph

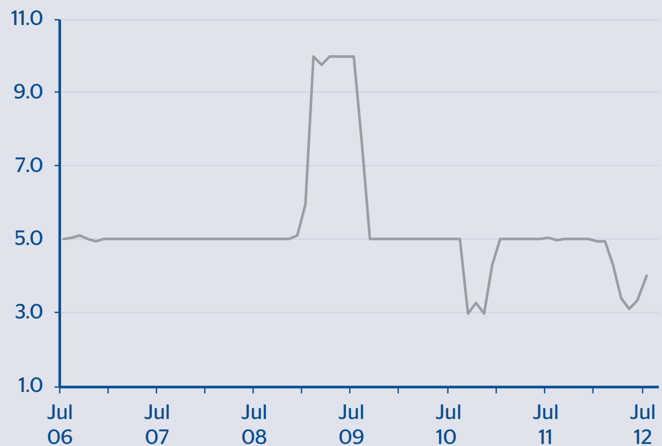
Graph 41

Term Premium. Breakdown in risk premium and liquidity premium (%)

Source; BBVA Research

Graph 42

Spread between the buy and sell price of the 10-year M Bond (bp)



Source; BBVA Research and Banxico

41. As can be seen, the liquidity premium has fallen in recent months to levels close to 0%, which leads the term premium to be at historically low levels. At the same time, there has been no significant decline in the risk premium linked to the CDS (credit default spread), since the factors that determine the probability of default have not changed significantly.

Both the previously described decline in the liquidity indicator as well as the fall in the term premium are comparable in scope to what occurred in 2010 when Mexico joined the World Government Bond Index (WGBI). Another point that should be mentioned is the fact that from this date on there appears to be a change in the data average. Specifically, after Mexico's entry into the WGBI, the risk premium has fluctuated at around a lower average (about 3%) than what had been observed before March 2010. It should be noted that the risk premium showed a significant variation and then returned to this average level during the period of asset purchases by the U.S. Federal Reserve (QE2).

The recent decline in the liquidity premium and consequently, the term premium, is influenced by foreign investment flows to Mexico. This demand for Mexican assets can be explained by two factors. First, the risk adjusted yield factor. Mexican long term bonds are still trading at positive real yields, while their credit risk is considerably less than in the case of other nations, for example, most countries in the Euro zone. Second, the sharp weakening of some European countries' credit worthiness has led to speculation of a possible withdrawal by these nations from the global fixed income indexes, which would favor demand for bonds from other countries. Nevertheless, the sharp drop in the liquidity premium has its origin in transitory factors, which coupled with the risk of a correction in domestic activity, makes an upward movement in domestic interest rates possible at the same rhythm as increases in U.S. benchmark yields.

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Cerecero, M., S. Salazar, and H. Salgado (2008),), "La curva de rendimiento y su relación con la actividad económica: Una aplicación para México" ("The yield curve and its relationship with economic activity: An application for Mexico"). Banco de México, research paper 2008-15.

Inset 4 Have the conditions that led to the reduction of Mexico's sovereign debt rating been reversed?

In November 2009, the Fitch Ratings and Standard & Poor's rating agencies downgraded the issuer default rating on Mexico's foreign currency denominated debt to BBB from BBB +, based on the country's fiscal weakness. More specifically, at that time Fitch Ratings argued that the high dependence on oil revenue and a narrow tax base reduced Mexico's fiscal flexibility to future shocks in oil revenues. In support of its argument, the rating agency presented a series of variables on fiscal questions in which Mexico's performance was below the average of countries with a similar rating.

In the past few years the fiscal rule of a balanced annual budget—budget balance without investment in Pemex—,the increase in oil prices, and growth in the 2010-2012 period that averaged around 4.4%, prevented Mexico's public finances from experiencing the crisis occurring in several European countries. However, various fiscal variables remain below the average for countries that currently have the same credit rating as Mexico. As shown in Table 1, public revenue as a percentage of GDP in Mexico is almost 10 percentage points below the average of countries with the same credit rating. In terms of total public debt, the downgrade experienced by some countries affected by the European debt crisis has meant that Mexico is almost at the same level as the average for comparable countries. Nevertheless, in combining these elements, the percentage of debt relative to revenue is still higher in the case of Mexico.

In 2009 the rating agency noted that a risk factor for Mexican fiscal revenue was the fall in oil production, a situation that continues to date. According to British Petroleum, oil production fell to 2.93 million barrels per day (mbd) in 2011 from 2.95 mbd in 2010, a drop similar to what has been registered in the last three years. This 0.8% decline is greater than the 0.2% decrease posted by the OECD countries and is totally at odds with the 3% growth in oil production registered by the OPEC countries. In addition, the decline in proven oil reserves between 2010 and 2011 was 300 mbd, a trend similar to that of the OECD countries, but contrary to the increase reported in OPEC countries' reserves. In terms of economic growth expectations, according to the IMF, Mexico's growth will be slightly below the average of the countries with a BBB rating.

Even though in recent years the above mentioned elements that underpin the current rating on Mexico's sovereign debt have persisted (i.e., a healthy banking sector, manageable amortization of its foreign debt payments) and there has even been progress in some areas such as the improvement in the international liquidity position of Mexican debt. The data cited above underscores the need for reforms to broaden the tax base and reduce fiscal dependence on oil revenue. If this does not occur, it will not be easy for the rating agencies to decide to upgrade the rating and/or outlook on Mexican debt.

Chart 1

Fiscal variables of countries with a BBB rating from Fitch Ratings

Country	Total public debt (%of GDP)	Public revenue (%of GDP)	Public debt/revenues	Average GDP growth, 2012-2016
Mexico	**42.9**	**22.2**	**1.9**	3.6
Brazil	65.1	36.3	1.8	3.9
Russia	8.4	38.7	0.2	3.9
Lithuania	40.9	35.7	1.1	3.2
Spain	79.0	36.0	2.2	0.5
Thailand	44.4	21.3	2.1	5.4
Peru	20.7	20.9	1.0	5.9
Kazakhstan	9.6	28.5	0.3	6.1
Average	41.9	32.1	1.5	3.9

Source: Fitch Ratings and IMF. Note: Due to the absence of the corresponding data, countries such as Aruba, Bahrain, and Panama were not included.

4. Brazil and Mexico: changing perspectives and the remaining challenges

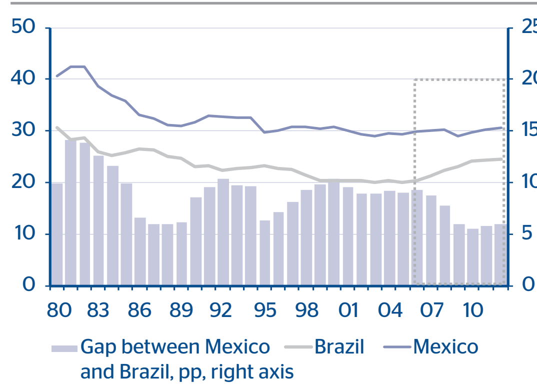
There has been an outlook change in recent quarters regarding the Brazilian and Mexican economies seen, for example, in consensus growth of 3.8% for Mexico in 2012, nearly two points above that for Brazil. If this turns out true, 2012 would be the second year in a run where Mexico grew more than Brazil, after four years where the average growth gap in Brazil's favor was 3.5pp.[1] In short, the question over what factors drove the relative performance of both economies arises; is there a type of pattern showing a preference for one or the other in terms of performance in the medium-term?.

Both Mexico and Brazil belong to the "*eagles*" group, comprising countries which, in the next decade, will contribute more to global GDP than the average of developed economies.[2] Mexico belongs to this group more for initial size than for growth which, in recent years, has been lower than other emerging economies and, specifically, than Brazil - the other Latin American "eagle". Brazil's GDP is almost 50% larger than Mexico's and has seen average growth of 3.8% in the last 10 years, around one and half points more than Mexico.

Brazil's relative better position in terms of income per capita growth is a recent phenomenon. As the attached chart shows, until the first half of the last decade, both economies saw a very similar real convergence process with the US. In general, their profile was relative poverty in the 80s, relative income level stability in the 90s in Mexico and a slight decoupling in Brazil, to major decoupling in the middle of the last decade in Brazil with US income levels while Mexico maintained earlier levels.

Graph 43

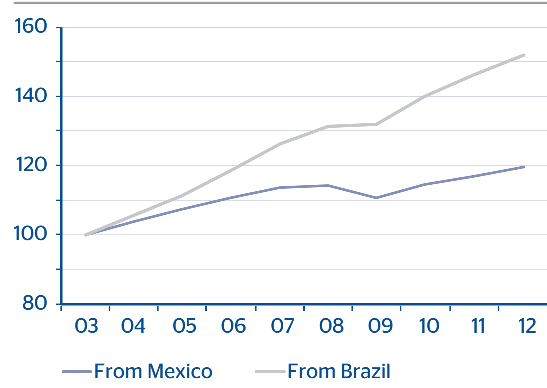
Brazil and Mexico: real convergence GDP per capita relative to the US, %



Source: BBVA Research, with IMF data

Graph 44

GDP of trading partners 2003=100, average weighted GDP level with weight of exports from the country



Source: BBVA Research

This performance coincided with a global shift in growth sources, with an increasing contribution from emerging Asian and Latin American economies and the standstill and decline of developed economies. This has had important effects on foreign demand from Brazil and Mexico, given their very different exposure to the aforementioned areas. In this sense, the main export destinations for Mexico are developed nations, with a total predominance by the US where around 83% of overseas sales of goods go. On the other hand, Brazil's exports to the US account for 12% of sales, while 68% go the high performance areas such as China, Asia and the rest of Latin America (in Mexico the figure is 12%). In this way, as the attached chart shows, the GDP of destination economies for Brazilian exports grew 50%

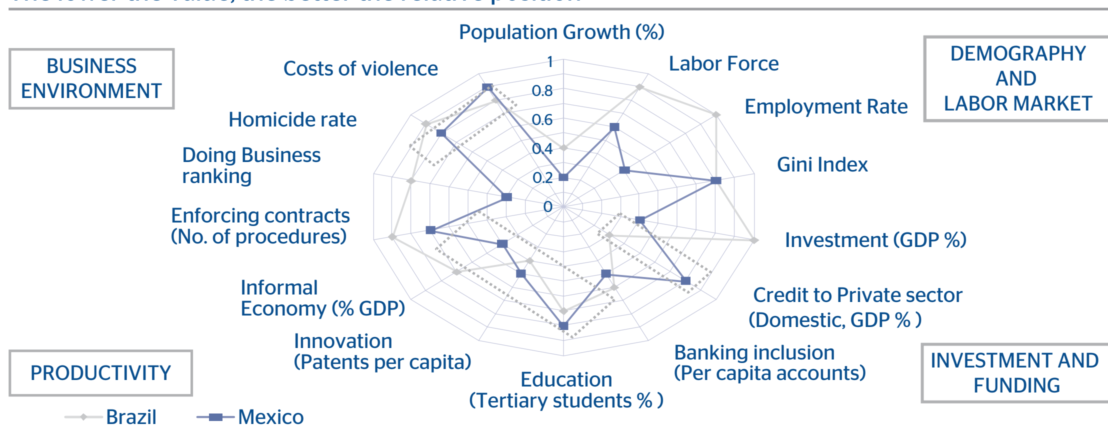
[1] A result magnified by the exceptional difference of six percentage points seen in 2009: -6.3% in Mexico vs. -0.3% in Brazil.
[2] For more details: www.bbvaeagles.com

from 2003 while for the destinations for Mexican products, growth was only 20%. Nonetheless, the trading openness of both economies is very different, three times larger for Mexico,[3] which makes direct comparisons problematic..

In the medium term, the balance between both economies does not show a clear dominance for either, with advantages for each country in some of the more important factors. If we take an economy from a supply perspective, the capacity to expand by the appropriate interaction of production and efficiency factors, there are four major elements to consider: demography and the job market, investment and savings, productivity and, finally, the business environment. As the attached chart shows, 14 representative variables have been chosen for these four axes. In addition, their level with regard to a reference group of emerging economies is shown.[4]

Graph 45

Brazil and Mexico: vulnerability radar for emerging economies
The lower the value, the better the relative position



Source: BBVA Research with IMF, World Bank and UN data.

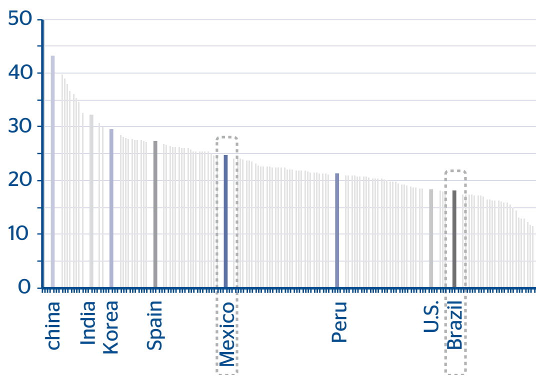
As for population and the job market, it would seem that the demographic boon is higher in Mexico than Brazil, with higher population growth and a higher share of the population in the job market. The low employment rate in Brazil stands out, measured as a percentage of those in work out of the working age population. According to available figures, this sits at 40%, around 20 points below the average for the group of countries looked at.

Both economies contrast in investment and bank financing with a better position for Mexico in the former and for Brazil in the latter. On average for the last decade, Mexico saw an investment ratio of GDP over five points higher than Brazil (24.6% vs. 18%), although without hitting levels in countries which, at times, are seen as reference points such as South Korea (29.4% over the same period). In short, the investment level in Mexico is rightly substantial for a country which does not have the domestic savings rate of an Asian emerging economy or that has not obtained savings from the overseas sector at an important level.[5] The domestic savings rate in Mexico is 23.6% of GDP versus 17.3% in Brazil on average between 2001 and 2011. This is a clear limitation without help from overseas for increased investment. Both public and private sector consumption has a greater weight in Brazil, further boosted by greater access to bank credit, both for that offered by the private and the public banking system. As the attached chart shows, domestic banking sector credit is over 50% of GDP in Brazil, almost 30pp higher than in Mexico, with a higher gap in loans granted by public banking than in private banking. The higher bank credit penetration rate in Brazil is due to the continual drive from public policies aimed at improving

[3] Goods exports accounted for 30% of Mexican GDP in 2011 and 9% in Brazil.
[4] Reference emerging economies are: Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela, China, India, Indonesia, South Korea, Malaysia, the Philippines, Thailand, Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Russia and Turkey. The lowest value, 0, would be the most favorable position in the variables for all countries reviewed; meanwhile, 1 would be the least favorable.
[5] The average annual current account deficit between 2001 and 2011 was 1% of GDP, around the same figure as in Brazil (0.7%).

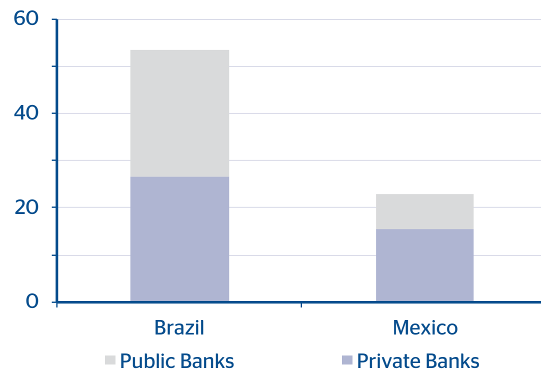
loan conditions and access to the banking system for population groups who normally have low access. Products such as payroll deductible loans and simple accounts are behind the aforementioned development.[6] In addition, the credit drive intensifies with the higher growth in the Brazilian economy over the last decade.

Graph 46
Investment as % of GDP, average 2001-11



Source: BBVA Research, with IMF data

Graph 47
Banking Credit as % of GDP, 2011



Source: BBVA Research with World Economic Forum data

Improving the business environment still requires work in both Brazil and Mexico. Although Mexico has a clear advantage over Brazil in terms of ease of doing business according to the World Bank's *Doing Business* chart, increased violence creates uncertainty for the Mexican economy. In any event, both countries would clearly benefit from reduced costs linked to lack of public safety and additional advances creating a more favorable business environment.

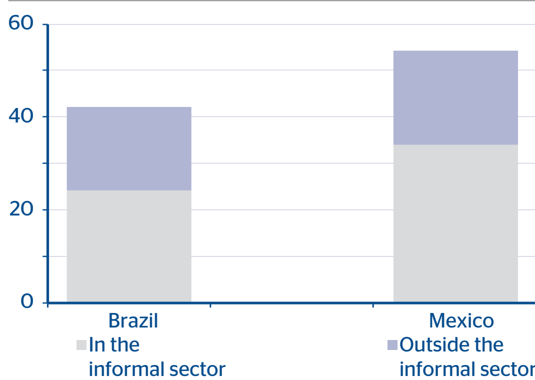
The key to growth lies in efficiency using available productive factors. Measuring productivity, the ability to produce more with less, is problematic since it is not a directly observable variable.[7] Productivity is usually calculated as the part of output not resulting from the amount of resources used and, therefore, it would be a result of how efficiently they combine. In the radar chart, as part of the selected variables as representative of productivity, figures do not favor Brazil. Quite the opposite, in fact: among other things, the weight of the black market as part of GDP is much higher in Brazil than in Mexico. Informality is a good sign of productivity since if the activity functions outside current regulations, mainly in fiscal matters, then economic agents cannot take advantage of economies of scale or adequately access the financial market to improve efficiency and increase its value in physical and human capital. In this sense, as shown in the following chart, according to ILO data Mexico has a higher level of informality in the job market.[8] In any event, it would seem that the challenge for both economies is to reduce the black market so that the main source of long-term economic growth (productivity) improves.

Brazil's strength of demand (not necessarily its supply capacity) and higher performance from its trading partners have created better perspectives in recent years. Nevertheless, the signs of exhaustion in the Brazilian model (too centered on higher demand) and the gains made in competitiveness in Mexico with regard to Brazil are contributing to a shifting relative vision of the two economies, in favor of the Mexican economy. In line with this analysis, it would appear that greater growth capacity in the medium term for Brazil cannot be justified by demography, labor participation or investment rates. In this way, the better GDP record must be linked from the supply side to efficiency or productivity where there seems to be no major differences in either economy in terms of the variables able to estimate it. On the demand side, the more favorable external environment and higher access

[6] This path is also being taken in Mexico with payroll loans and basic accounts.
[7] In reality, GDP is not "observed" either in the same way as employment can be tallied. Rather, it is a synthesis of different statistics on demand, output and income spread across economic agents.
[8] Measuring informality is, by definition, controversial since it attempts to reckon those activities free from obligations imposed by the state, especially in tax, and the jobs do not have social rights (healthcare, retirement)..

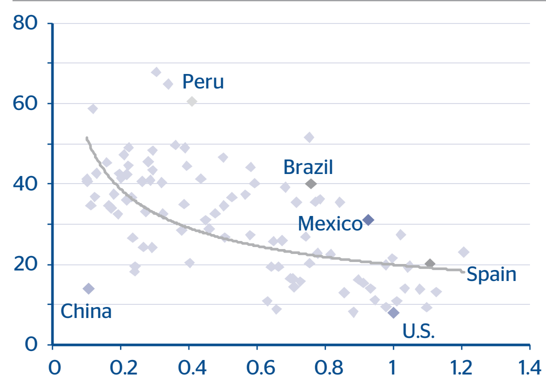
to bank finance support higher growth in Brazil with regard to Mexico. However, both factors are not necessarily permanent: the performance of emerging Asian economies could slow and/or Brazil could lose competitive advantages in terms of prices. Borrowing ability could be less important for growth from a certain debt level for economic agents.

Graph 48
Informality, % of total



Source: BBVA Research with ILO data

Graph 49
Informality (% of GDP) and productivity (relative to US)



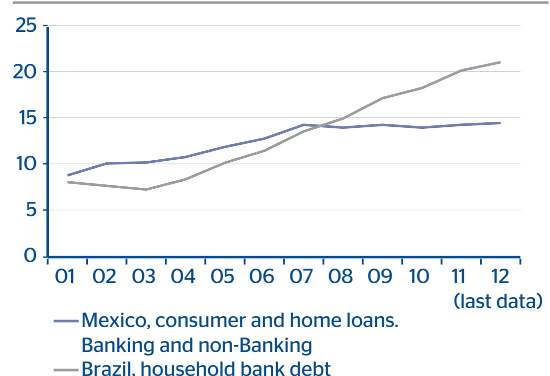
Source: BBVA Research with Schneider (2009) and World Bank data

Indeed, there has been a recent change in market perceptions of both countries, in Mexico's favor, in line with the slowdown in China, fatigue on Brazilian credit markets and the negative impact that labor costs and the higher exchange rate had on Brazilian industry. The last two factors contrast with the recent dynamism on credit markets and signs of increased competitiveness in Mexico. In any event, they are two large economies with good growth potential over coming years. In addition, respective outlooks will continue to be determined by their different exposure to the global environment and by their ability to adopt reforms reducing their weaknesses.

Graph 50
Price competitiveness, real effective exchange rate (2005=100)
Increases in the index point to strengthening

Source: BBVA Research with Haver data.

Graph 51
Household debt (% of GDP)



Source: BBVA Research with CNBV data for Mexico and BCB data for Brazil

5. Indicators and forecasts

Chart 2

Macroeconomic forecasts: Gross Domestic Product

(YoY growth rate)	2009	2010	2011	2012	2013
United States	-3.1	2.4	1.8	**2.1**	**1.8**
EMU	-4.4	1.9	1.5	**-0.3**	**0.3**
Germany	-5.1	3.6	3.1	**0.9**	**1.4**
France	-3.1	1.6	1.7	**0.2**	**0.7**
Italy	-5.5	1.8	0.5	**-1.8**	**-0.1**
Spain	-3.7	-0.1	0.7	**-1.4**	**-1.4**
UK	-4.0	1.8	0.8	**-0.4**	**1.3**
Latin America *	-0.6	6.6	4.5	**2.9**	**3.8**
Mexico	-6.1	5.4	4.0	**3.7**	**3.0**
EAGLES **	4.0	8.4	6.6	**5.4**	**6.1**
Turkey	-4.9	9.2	8.5	**3.2**	**4.1**
Asia Pacific	4.2	8.1	5.7	**5.4**	**5.8**
China	9.2	10.4	9.2	**7.8**	**8.3**
Asia (exc. China)	1.0	6.5	3.4	**3.8**	**4.1**
World	-0.6	5.1	3.9	**3.4**	**3.7**

* Argentina, Brazil, Chile, Colombia, Peru, Venezuela
** Brazil, China, India, Indonesia, Korea, Mexico, Russia, Taiwan, Turkey
Forecast closing date: August 3, 2012
Source: BBVA Research

Chart 3

Macroeconomic forecasts: inflation (Avg.)

(YoY growth rate)	2009	2010	2011	2012	2013
United States	-0.4	1.6	3.1	**2.0**	**1.9**
EMU	0.3	1.6	2.7	**2.3**	**1.4**
Germany	0.2	1.2	2.5	**2.0**	**1.4**
France	0.1	1.7	2.3	**2.3**	**1.5**
Italy	0.8	1.6	2.9	**3.3**	**1.9**
Spain	-0.3	1.8	3.2	**2.1**	**1.5**
UK	2.2	3.3	4.5	**2.5**	**2.0**
Latin America *	10.6	8.5	9.1	**10.1**	**8.9**
Mexico	5.3	4.2	3.4	**4.1**	**3.5**
EAGLES **	2.8	5.3	6.0	**4.3**	**4.4**
Turkey	6.3	8.6	6.5	**8.8**	**5.3**
Asia Pacific	0.3	3.6	4.8	**3.3**	**3.4**
China	-0.8	3.3	5.4	**3.0**	**3.6**
Asia (exc. China)	1.1	3.8	4.3	**3.4**	**3.2**
World	2.2	3.8	5.1	**4.2**	**3.9**

* Argentina, Brazil, Chile, Colombia, Peru, Venezuela
** Brazil, China, India, Indonesia, Korea, Mexico, Russia, Taiwan, Turkey
Forecast closing date: August 3, 2012
Source: BBVA Research

Chart 4

United States indicators and forecasts

	2010	2011	2012	2013	1T11	2T11	3T11	4T11	1T12	2T12	3T12	4T12
Macroeconomic Indicators												
GDP (real % change)	2.4	1.8	2.1	1.8	1.8	1.9	1.6	2.0	2.4	2.2	2.3	1.6
Personal consumption (real % change)	1.8	2.5	2.0	1.9	3.1	2.7	2.5	1.9	1.8	1.9	2.1	2.0
Gov. consumption (real % change)	0.6	-3.1	-2.1	-0.2	-2.3	-3.2	-3.8	-3.3	-2.2	-2.4	-2.0	-1.7
Gross fixed investment (real % change)	-0.2	6.6	9.6	6.2	4.8	4.3	8.4	9.0	11.9	10.3	8.9	7.6
Construction[1]	-3.7	-1.4	11.5	8.5	-3.2	-7.1	1.4	3.9	9.3	10.7	13.4	12.7
Industrial prod. (real annual % change)	5.4	4.1	4.4	2.1	5.4	3.6	3.3	4.1	4.4	4.7	4.6	3.9
Current account balance (% of GDP)	-3.1	-3.1	-3.0	-3.1	-3.2	-3.2	-2.9	-3.1	-3.6	-2.8	-2.7	-2.8
Final annual inflation	1.5	3.0	1.8	2.1	2.7	3.6	3.9	3.0	2.7	1.7	1.4	1.8
Average annual inflation	1.6	3.2	2.0	1.9	2.1	3.4	3.8	3.3	2.8	1.9	1.5	1.7
Primary fiscal balance[2] (% of GDP)	-8.9	-8.7	-7.7	-5.0				-8.7				-7.7

Actualización 13 de mayo de 2012
Fuente: BBVA Research

Chart 5

Mexico indicators and forecasts

	2010	2011	2012	2013	1T11	2T11	3T11	4T11	1T12	2T12	3T12	4T12
Economic Activity												
GDP (seasonally-adjusted series)												
Real annual % change	5.6	3.9	3.7	3.0	3.9	3.8	4.2	3.9	4.7	4.0	3.2	3.1
Per inhabitant (US dollars)	9,595	10,391	10,540	11,576	10,692.7	11,037.2	9,966.2	9,866.9	10,600.0	10,367.1	10,417.6	10,774.4
US$ billions	1,037.6	1,138.9	1,162.4	1,288.2	1,141.7	1,195.9	1,093.7	1,124.3	1,160.4	1,136.1	1,149.1	1,204.1
Inflation (average, %)												
Headline	4.2	3.4	4.1	3.5	3.5	3.3	3.4	3.5	3.9	3.9	4.6	4.2
Core	3.9	3.2	3.5	3.4	3.2	3.2	3.2	3.3	3.3	3.5	3.6	3.5
Financial Markets (eop, %)												
Interest rates												
Bank funding	4.50	4.50	4.50	5.50	4.50	4.50	4.50	4.50	4.5	4.5	4.5	4.5
28-day Cetes	3.9	3.2	3.5	3.4	4.2	4.3	4.1	4.4	4.3	4.4	4.2	4.4
28-day TIIE	4.9	4.8	4.9	5.9	4.8	4.9	4.8	4.8	4.8	4.8	4.8	4.8
10-year Bond (%, average)	6.9	6.8	6.4	7.0	7.5	7.1	6.3	6.6	6.2	5.9	5.1	5.5
Exchange rate (average)												
Pesos per dollar	12.7	12.7	13.3	12.6	11.9	11.8	13.3	13.7	13.0	13.6	13.5	13.2
Public Finances												
*FRPS (% of GDP)	-3.5	-2.7	-2.6	-2.3	-	-	-	-2.7	-	-	-	-2.6
External Sector[3]												
Trade balance (US$ billions)	-0.7	-0.3	-1.9	-3.8	2.0	1.3	-3.8	-0.7	1.9	-0.5	-4.3	-4.6
Current account (US$ billions)	-0.7	-2.3	-3.5	-4.8	-1.9	-0.7	-4.5	-1.9	0.0	-3.7	-4.1	-6.2
Current account (% of GDP)	-0.3	-0.8	-1.1	-1.4	-0.7	-0.2	-1.6	-0.6	0.0	-1.2	-1.3	-1.9
Oil (Mexican mix, dpb, eop)	79.6	111.0	103.4	101.9	104.5	117.1	113.1	109.2	118.3	109.3	93.2	92.7
Employment												
Formal Private (annual % change)	3.7	4.3	4.1	3.1	4.9	4.3	4.1	4.1	4.4	4.6	3.7	3.6
Open Unemployment Rate (% active pop.)	5.4	5.2	5.1	4.8	5.2	5.4	5.3	5.0	5.1	5.1	5.1	5.2

Continues on next page

Mexico indicators and forecasts

	2010	2011	2012	2013	1T11	2T11	3T11	4T11	1T12	2T12	3T12	4T12
Aggregate Demand [4] (ann. % chge., seasonally-adjusted)												
Total	9.0	4.7	5.0	5.1	5.1	4.6	4.8	4.1	5.1	4.9	4.8	5.2
Domestic Demand	5.5	4.1	3.6	3.7	3.5	3.6	5.0	4.2	4.8	4.4	2.6	2.5
Consumption	4.6	4.0	3.1	2.7	4.5	3.5	3.9	3.9	4.1	3.9	2.4	2.1
Private	5.0	4.5	3.4	2.8	5.0	4.4	4.4	4.3	4.3	4.1	2.7	2.4
Public	2.4	0.6	1.5	2.0	1.3	-1.4	0.7	1.8	2.8	2.6	0.8	-0.1
Investment	6.3	8.4	6.0	6.5	8.8	9.8	8.8	6.4	8.7	5.5	4.9	4.9
Private	6.3	12.3	5.1	5.8	14.4	17.5	10.4	7.4	7.5	2.9	3.5	6.7
Public	6.3	12.3	5.1	5.8	14.4	17.5	10.4	7.4	7.5	2.9	3.5	6.7
External Demand	21.7	6.8	9.4	9.0	11.4	8.4	4.4	3.4	5.8	6.6	11.6	13.6
Imports	20.7	6.8	8.8	11.0	8.9	7.2	6.5	4.6	6.2	7.7	9.5	11.5
GDP by sectors (ann. % chge., seasonally-adjusted)												
Primary	2.9	-3.0	3.5	2.1	-2.9	-9.0	-0.2	0.5	6.7	2.8	2.5	1.9
Secondary	6.2	4.0	3.6	2.4	4.8	4.2	3.6	3.4	4.5	3.9	3.3	2.8
Mining	1.2	-1.9	0.0	-0.1	-2.6	-1.9	-3.5	0.6	0.6	0.0	-0.3	-0.2
Electricity	10.1	5.6	3.0	2.7	9.9	7.6	3.0	2.2	2.6	2.5	3.5	3.4
Construction	-0.1	4.8	4.2	2.9	5.7	3.8	5.3	4.7	4.8	5.0	3.9	3.0
Manufacturing	10.0	5.2	4.1	2.8	6.2	5.4	5.3	3.7	4.2	4.7	3.9	3.5
Tertiary	5.5	4.2	3.6	3.0	4.2	3.7	4.8	4.2	4.1	4.1	3.3	2.9
Retail	13.1	7.7	5.0	4.2	8.1	8.4	8.2	6.1	6.6	5.4	4.6	3.4
Transportation, mail and warehouse	7.6	3.4	3.9	3.7	3.4	3.1	3.8	3.4	5.3	3.7	3.0	3.4
Massive media information	1.6	6.6	4.3	3.7	5.2	6.0	8.0	7.1	4.7	4.6	3.3	4.7
Financial and insurance	13.1	5.4	7.9	6.0	4.9	1.3	8.1	7.3	12.9	9.1	5.7	4.4
Real-estate and rent	1.9	2.1	1.8	1.1	1.8	1.9	2.1	2.4	1.3	2.0	2.0	1.9
Prof., scientific and technical servs.	-1.1	5.8	3.9	2.8	3.8	7.0	5.4	6.9	5.1	3.9	3.4	3.3
Company and corporate management	4.9	5.8	7.2	5.0	4.4	7.3	4.3	7.1	6.9	7.2	7.4	7.4
Business support services	1.5	4.2	3.9	3.5	3.6	4.6	4.6	4.2	2.3	4.8	4.5	4.1
Education	0.2	1.5	2.1	1.9	-0.1	0.9	2.8	2.5	1.5	2.0	2.3	2.3
Health and social security	0.7	1.7	2.1	1.4	1.1	2.8	2.8	0.0	2.3	2.7	1.8	1.5
Cultural and sport	5.9	6.6	3.4	3.2	8.1	7.4	6.0	5.1	1.9	5.9	3.0	2.8
Temporary stay	3.2	2.6	3.3	2.0	0.6	2.5	3.1	4.3	4.5	4.0	3.0	1.8
Other services, except government activities	1.0	4.0	3.8	1.8	3.0	4.5	4.2	4.3	5.0	3.4	3.4	3.3
Government activities	3.1	-0.8	0.9	0.7	0.2	-5.0	-0.8	2.6	4.0	0.5	-0.3	-0.5

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 by INEGI, the rest own seasonal adjustment
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

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