

# Situación

Economic Research Department

Fourth Quarter 2005



U.S.: despite high oil prices, inflation remains contained  
Mexico: lower potential growth?  
Inflation: convergence and sustainability of targets?  
Cycle of declines in interest rates begins  
The nuances in capital flows to Mexico  
Will the vote of Mexicans abroad be important?

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The Mexican economy entered a slump in growth in the first half of 2005 and, thus far, the evidence indicates that 2006 will bring moderate expansion. Less than two years after the start of an economic recovery that promised to be solid due to the international expansion, high oil prices, and the reactivation of credit in a context of macroeconomic stability, Mexico has been unable to fully capitalize this favorable environment. Explanations for such a development abound, ranging from those that consider the lower than expected economic growth to be the result of the real appreciation of the peso and/or high interest rates, to those that blame U.S. industrial developments, as well as arguments that underscore the need of implementing structural reforms.

In this debate, some elements have been raised that are worthy of consideration. In the past 10 years, the Mexican economy has experienced a strong boost as a result of positive factors that have allowed the country to expand its productive capacities, the most noteworthy being the trade opening process that culminated with the North American Free Trade Agreement in 1994. In addition, following the reforms undertaken in the financial sector, an environment was generated in which in the past few years credit experienced a major reactivation, a phenomenon that not only heralds less volatile economic cycles in the medium term, but also provides an important support for domestic demand in the short term. But all the above mentioned factors have been insufficient to trigger higher growth rates. There should be little doubt that a depreciation of the peso could alleviate the situation of some export companies, and that lower interest rates could further stimulate investment and perhaps credit; but in analyzing the data, it is difficult to conclude that this latter factor is the underlying problem.

What can simultaneously explain that the external sector is losing strength and that credit has been unable to become a driving force for higher internal expansion? Few economists can argue that the explanation is not to be found in the lack of structural reforms that could reverse the process of the loss in productivity, free the economy of internal obstacles that hinder domestic growth, attract more foreign direct investment and definitively allow the Mexican economy to flexibly adjust its activities to the realities of a world that is advancing at dizzying speed. Mexico's problem is not the slowdown or change in the structure of U.S. industry, but the country's reduced capacity to adapt to major changes that have been taking place at the international level. If Mexico would have had the same capacity to adapt economically, as was the case with the United States, in an environment in which the industrial sector has been decreasing in importance for some time, we would still speak today of the slowdown in some sectors, but we would be talking about how growth was taking place in others.

To point the finger of blame on monetary policy or on the exchange rate only diverts attention from the need to advance in the debate that Mexico needs in order to grow as it should and not what it can modestly get by with. The studies that analyze Mexico's potential growth have been indicating an increasing reduction in estimates that point to GDP growth much closer to 3% rather than 4%. And it is difficult to think that a more depreciated peso or lower nominal interest rates would free up resources to upwardly modify such estimates, beyond their possible (but small) cyclical impact.

## U.S. Economy

### We maintain expectations of higher economic growth than the potential in 2005 (3.6%) and close to it in 2006 (3.2%)

The performance of the economy in the 1H05 confirms our base scenario of economic growth converging toward its potential, supported by solid fundamentals. The strength of private consumption and the strong boost from investment will continue to be the main support for expansion. As a result of the Katrina and Rita hurricanes, some uncertainty was generated regarding their effects. Even though the impact will be negative on economic growth in the 3Q05, it will be offset in the 4Q05 and the 1Q06 due to the reconstruction efforts in the affected areas. The greatest risk is not its transitory effect on economic activity in the affected area, but the probable negative impact on consumer confidence and spending that the permanence of fuel prices at such high levels would have. Nevertheless, the advance made in the reconstruction of oil and natural gas production seems to be going faster than initially estimated. We therefore maintain our forecast for economic growth of 3.6% for 2005 and 3.2% for 2006.

The factors that have supported the expansion in family spending will continue to boost it in the following quarters, although to a lesser extent. In this sense, we continue to foresee that growth in productivity will continue to converge with its long-term trend (2%-2.5%) and that the creation of jobs will decrease its rate (1.7% in 2005 and 1.4% in 2006). Likewise, we expect a significant moderation in growth of families' wealth, derived from the lower expansion in housing prices, mainly due to the effect of higher real interest rates. In face of the moderation of wealth and the greater cost of credit, we expect a moderation in the consumption of durable goods. Although housing investment will continue to be strong in 2005, it will moderate in 2006 in view of higher interest rates.

Non-housing investment will continue a moderation trend, in view of the rise in the cost of capital, lower growth in demand and, mainly, an adjustment in business profits due to higher production costs and limited price power, the latter a consequence of globalization and technological change. Nevertheless, the solid financial situation of companies and the need to replace obsolete equipment will help investment to continue to grow more than the rest of the economy.

With the slowdown of consumption and private investment, imports will also decelerate, while the greater economic expansion of the rest of the world will boost exports. However, the contribution of net exports will continue to be negative in 2006 (-0.2 pp) and, due to lower economic growth, the current account deficit as a percentage of GDP will increase slightly.

On the other hand, in 2005 we expect a correction in the public balance as a percentage of GDP of 0.8 pp compared to 2004, mainly due to the marked increase in fiscal revenue. However, in 2006 this will increase 0.3 pp due to the moderation in revenue growth in view of the lower economic expansion and higher public spending from the reconstruction of the areas affected by the Katrina hurricane.

### Real Disposable Personal Income and Productivity

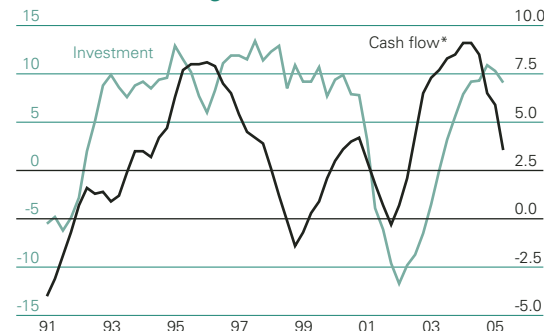
Real ann. % chge., 4Q moving ave., non-agric. sector



Source: BBVA U.S. with BEA and BLS data

### Non-Residential Investment and Cash Flow

Real annual % change



\* 8 quarters moving average

Source: BBVA U.S. with BEA data

## Base Scenario GDP

	Real ann.% chge.		Share*	
	2005	2006	2005	2006
<b>Gross Domestic Product</b>	<b>3.6</b>	<b>3.2</b>	<b>3.6</b>	<b>3.2</b>
Pers. spend. consump.	3.5	3.0	2.5	2.1
Gross fixed investment	6.4	5.5	1.1	1.0
Total exports	7.3	5.2	0.8	0.6
Total imports	6.6	4.5	-1.0	-0.7
Gvment. consumption	1.7	2.0	0.3	0.4

\* Share of growth, percentage points  
Source: BBVA U.S.

## Base Scenario

	Annual average	
	2005	2006
<b>Inflation</b>		
<b>CPI</b>		
Headline	3.3	2.8
Core	2.3	2.5
<b>PCE</b>		
Headline	2.8	2.3
Core	2.0	2.1
<b>End of period</b>		
<b>Monetary policy</b>		
Federal funds (%)	4.25	4.75
<b>Other indicators</b>		
Current account (% GDP)	-6.2	-6.4
Fiscal balance (% GDP)	-2.8	-3.1
Employment. (monthly ave., thds.)	173	134
Industrial prod. (% change)	3.3	3.0

Source: BBVA U.S.

## Risk Scenario

	Real annual % chge.	
	2005	2006
GDP (annual % change)	3.5	1.3
CPI (annual %)		
Headline	3.4	3.9
Core	2.4	2.7
Federal funds (% fdp)	4.25	4.00
Current account (% GDP)	-6.3	-6.1
Fiscal balance (% GDP)	-2.8	-3.5

Source: BBVA U.S.

## Risk of transmission to core inflation increases

Our models indicate that core inflation will continue its rallying trend, although it will remain contained. For 2005, the strength of the dollar in recent months and the lower industrial growth delimit the core prices of imports and prices to the producer, and will continue to allow stable core inflation which could even be 0.1 pp below our estimate of 2.3%.

However, higher production costs (fuels and labor), the position of the economy in the current expansion cycle—with the labor market strengthening, growth in productivity converging with its long-term trend (2-2.5%), unit labor costs increasing and the remaining idle capacity in the economy decreasing—clearly imposes upward risks on core inflation and inflation expectations in the coming quarters. Moreover, with the economy growing above its potential, the competitive pressure on producers could diminish slightly, thereby increasing its price power. However, the flexibility of the markets, high competition, external prices, the absorption of higher costs in view of high margins and, mainly, the expectations of inflation anchored, will delimit these rises. Therefore, we foresee a rallying trend for core inflation in 2006, which could average 2.5%.

In contrast, taking into account the oil scenario of the Group, which presumes continued drops in oil prices of more than 4% per quarter, general inflation will tend to moderate from 3.3% in 2005 to 2.8% in 2006. A fundamental element in our estimates is based on inflation expectations. The greatest short-term risk is that fuel prices will remain high and will have an impact on the prices of other goods and services and that this, in turn, will contaminate inflation expectations.

## Risk scenario 2005-2006

This scenario assumes that the imbalances of the economy provoke an abrupt shock as of 2006. In this sense, the risk scenario not only hastens the greater economic slowdown of the base scenario, it makes it more pronounced and lasting. This scenario considers a significant drop in housing prices, an abrupt slowdown in business profits, low productivity growth and higher oil prices. This environment would imply a prolonged loss of confidence with significant consequences in consumption and investment, which, in turn, would imply an important correction in the current account deficit.

The higher oil prices, together with the rallying impact on core inflation derived from a greater transmission of costs to final prices in view of the significant slowdown in business profits would more than offset the downward effect on prices due to a greater negative output gap in 2006. The deterioration of inflation and the contamination of inflation expectations would lead the Fed to raise its reference rate up to 5% at the end of June 2006. However, in view of the economic slowdown and the change in the inflationary trend, the Fed would revert the rises quickly, considering that they have raised it too much, thereby closing the year at 4%.

## Interest rates and exchange rate

The recent performance of the financial markets has been dominated by two interrelated factors. On the one hand, doubts regarding the macroeconomic scenario linked to the rise in oil prices. On the other, the maintenance of high capital flows within a context of high world savings. Both elements are giving rise to an environment of long-term yields below what was expected. In the U.S. it is significant that the 10-year rates are currently standing below those observed at the start of the rising cycle of the federal funds rate in June 2004, despite the fact that it has increased from 1% to 3.75%.

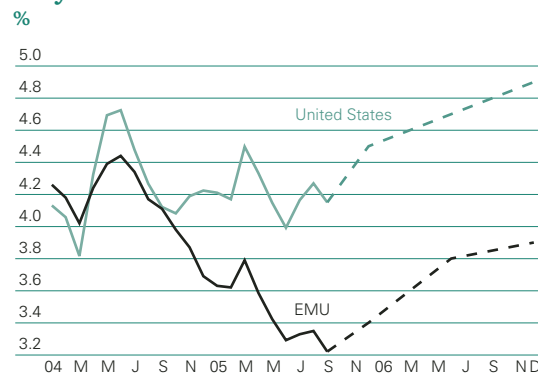
Two key questions thus arise for the coming months. The first deals with the possibility of a recession of the economy in which oil would serve to unleash a correction of expectations, particularly of the confidence of families, who have increased their indebtedness in recent years. In this case, long-term interest rates would discount a recession and their rallying run would be limited. The second is whether, even in a macroeconomic environment characterized by a notable vigor of the U.S. economy, long-term yields continue at low levels as a consequence of the performance of international capital flows.

Oil prices, which in 1999 stood at US\$11 per barrel, are now at about US\$60. Despite these price levels, the world economy is maintaining notable strength, with a moderate slowdown from the maximum growth levels of 2004. The gradual nature of price rises, which has allowed an adjustment in the expectations of agents, the greater energy efficiency or the lower effect of the mechanisms of wage indexing have caused the impact on the economy to be moderate. In reality, together with the oil shock, a globalization process is being produced that is acting by offsetting this shock at least partially. World trade is more dynamic and there is a greater supply of labor, which contributes to making labor costs cheaper. The corporate sector, which had realized a notable process of reorganization, is showing significant growth in the benefits, which increases its share in the national product, to the detriment of wages.

Everything points to the probability that a scenario of recession linked to the performance of oil prices is limited, but not all the uncertainties have been dispelled. In the first place, it is feasible to expect a moderation of these prices to levels more in accordance with the equilibrium, which could stand at between US\$40 and US\$50. Price levels such as the current ones increase the oil supply and reduce demand, making the exploitation of alternate energy sources more profitable. Now, given that the market has a narrow differential between supply and demand, it appears quite vulnerable to any shock and, within the context of an increase in the geopolitical risk, a scenario of higher oil prices (a risk scenario) is possible.

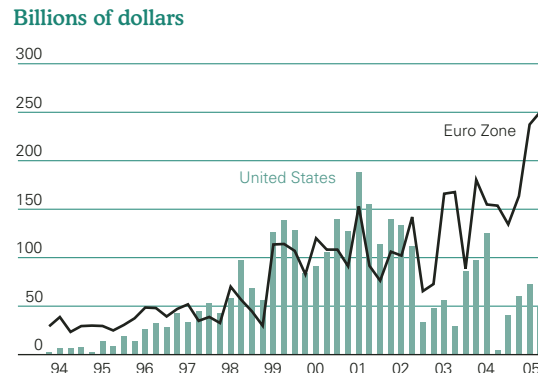
In the second place, the manner in which monetary policy is handled is important. In economies with a high degree of the use of productive resources such as the U.S., the upward trend in inflation, which the rise in oil prices presupposes, should lead to the continuation of the trend in rises of the official rates, trying to place them at levels closer to the neutral rates in the early months of 2006. In this

### 10-year Interest Rates



Note: Estimated as of October 2005  
Source: BBVA with Federal Reserve and BCE data

### Net Debt Issue



Source: BBVA with Bloomberg data

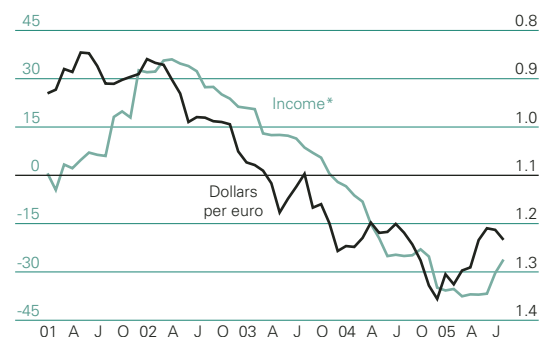
### Exchange Rate



Note: Estimated as of October 2005  
Source: BBVA with Federal Reserve data

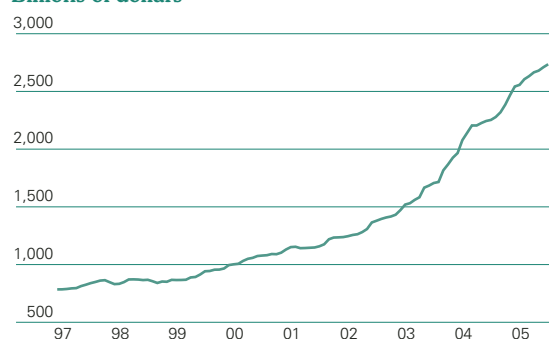


## M&A Announcements



## World International Reserves

Billions of dollars



## Financial Base Scenario

Averages

	Current	2005	2006
<b>Official rates</b>			
United States	3.50	3.20	4.70
EMU	2.00	2.00	2.15
<b>10-Year rates</b>			
United States	4.17	4.30	4.85
EMU	3.12	3.40	3.65
<b>Exchange rate</b>			
Dollars per euro	1.23	1.20-1.25	1.17-1.25

Source: BBVA

sense, the Federal Reserve will maintain a principle of gradual rises until it has reached 4.75%. This scenario would support the dollar, which in its exchange with the euro would quote within the range of 1.17-1.25.

In the third place, as has been commented, the channel of expectations that turn into a key element should be watched, particularly in economies in which families are highly indebted. A drop in confidence could lead to a reduction in the demand for assets such as housing and, because of this, a reduction in real estate wealth and consumption. In this case, in the U.S., interest rates that initially would have increased to put a brake on inflation expectations could begin to drop before the end of 2006. In this scenario we cannot rule out a tendency of the dollar to depreciate within the 1.25-1.33 range.

As a result, in the base scenario, the economies will continue to grow at notable rates, although lower than in the previous year, while the monetary policy is adjusted upward, particularly in the U.S., and the dollar consolidates levels with the euro or appreciates slightly. However, long-term interest rates do not have an important upward run due to the significant demand for bonds that is linked to the financial globalization process.

The real interest rate is the result of the interaction of savings and world investment, especially when the domestic trend of investors is reduced. Within the current context, savings could be increasing, with a clear differentiation of performance by groups of countries. The industrialized countries are reducing their savings; however, savings are increasing in Asia, given the growth model, or in the Middle East as a result of the revenues of the oil-exporting countries. This could be behind a drop in the real yields. Also, world inflation expectations are now at low levels, in part anchored by the rise in credibility that the central banks have had in recent years, which contributes to reducing the long-term nominal yields. For its part, the lower volatility of inflation is an element that has reduced the risk premiums per term in the longer-issue bonds, although they perhaps have dropped excessively.

Low interest rates generate capital flows in search of yield toward emerging countries, appreciating their currencies. To resist this appreciation, these countries intervene in the currency market. The accumulation of reserves continues to be important, although it has slowed down compared to the previous year. By this, on the one side, they increase their domestic liquidity; on the other, they implement these interventions by purchasing bonds and contributing to maintaining interest rates low, thus closing a circle that constitutes an accelerator of world liquidity. With all of this, the expected increases for long-term interest rates will be limited. In the U.S., the 10-year yields could end the year 2006 at 4.9%.

## Unexpected Developments Boost Oil Prices

### Four important developments

The fragile balance between supply and demand that is reflected in an additional short-term production capacity equivalent to barely 2% of demand makes the oil market extremely sensitive to any combination of unfortunate developments. The third quarter was particularly notable in this regard with four major developments occurring that had important repercussions on the oil market.

The first such development was the **death of King Fahd**. Even though the royal succession took place as was expected, the new King Abdullah is a member of an octogenarian generation that represents the line of succession of the Saudi throne, which points to strong volatility in relation to the establishment of a government that has demonstrated being a key factor in the stabilization and unification of the world's main oil producer. In addition, in this line of succession counterposed visions coexist toward the West that lead to greater uncertainty in terms of the country's future behavior.

The second development was the **Iran crisis**. The election of the ultra conservative Ahmadinejad as the country's new president reverses the reformist line. One of the new government's first actions was to renew its nuclear energy program, which had been suspended, in a clear challenging tone to the United States and Europe. A diplomatic solution will be difficult, and this results in a greater probability of a scenario marked by geopolitical conflict.

The third element is the **current hurricane season in the North Atlantic**. A total of 21 tropical storms and 11 hurricanes are expected, of which more than half can become major hurricanes. So far 17 storms have occurred, of which nine have reached the category of hurricanes and there are still two months left to go in the season. The most affected area has been the Gulf of Mexico, where 28% of the oil consumed in the United States is produced, 60% of imported crude enters the country, and where 47% of refinement capacity and 20% of the natural gas output is located. Therefore, it was a particularly sensitive season for the oil market.

The fourth element involves **heightened problems in oil refinery activity in the United States**. Prior to the impact of the hurricanes, different developments occurred that in various degrees paralyzed around 11 refineries, a situation that was reflected in a decrease in

gasoline inventories beyond what had been anticipated and a lower buildup in distillation inventories than was expected in the summer.

The combination of these four elements, which separately have a low probability of occurring, can explain the 30% rise in Brent prices since May.

### Iran: has the most impact on the market

Beyond the short-term impact from the hurricane season, which will depend on the amount of damages and the recovery time to repair the oil production facilities, the factor with the greatest potential effect on the market is unquestionably the evolution of the conflict over Iran's nuclear energy program. It should not be forgotten that Iran produces 4 million barrels of crude oil daily. The factor that detonated the current crisis was the renewal of what the Iranians term a peaceful nuclear energy program, ignoring the veto imposed in the past by the United Nations. For the West, such a program represents a step toward the production of atomic weapons.

The United States and the countries of the European Union have rejected the Iranian arguments and are attempting to bring the issue before the United Nations Security Council, which would imply placing an ultimatum on Iran that if not met, would result in economic and military sanctions and which could possibly include an embargo on the country's exports. However, China and Russia, two permanent members of the Security Council, and therefore with the power to veto its decisions, oppose any immediate action against Iran.

Meanwhile, Iran reacted angrily to the resolution of the European countries and has threatened to proceed further and renew its uranium enrichment program in case the motion is approved. Teheran has also threatened to suspend its commitment to comply with the Additional Protocol to the Treaty on the Non-Proliferation of Nuclear Weapons, which allows inspections in the country without prior notification.

A diplomatic solution to the situation will be difficult, which will introduce tension into market given the possibility that Iranian oil production may be removed from the world market. Even if this does not occur, the likelihood (which cannot be ruled out) that it could take place is undeniably the factor with the greatest impact at the present time.



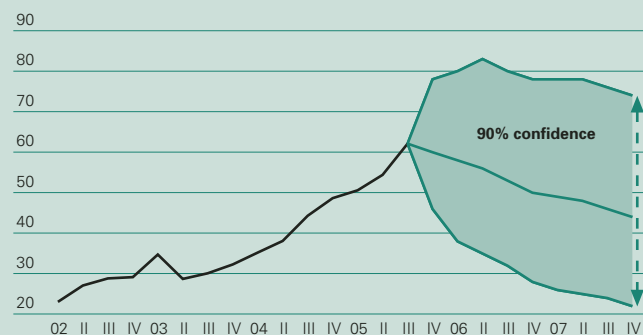
### Review of the price scenario

One of the main features of the market is the considerable persistence of the effect on prices from the news and the market's fears concerning the future balance between crude oil supply and demand. The four previously described developments, some of which will continue to be elements of concern, make it necessary to review the scenario for oil prices.

The new base scenario presupposes that the losses from the hurricane season will be short term and that the factor that will persist is the uncertainty surrounding the possibility that Iranian crude could be withdrawn from the world market. For 2006, a 20% rise in prices is expected in relation to the previous period, which would translate into an average price of 54.6 dollars per barrel for the Brent crude and 42 dollars per barrel for the Mexican mix.

### Estimate of the Brent Oil Price 2005-2007

Dollars per barrel



Source: Estimates by the BBVA Banco Provincial of Economic Research

However, the Iranian situation opens a risk scenario, with a probability of between 10%-15%, which would imply a real withdrawal of that country's oil production for a period of more than one year. This would bring the 2005 price to 61.2 dollars per barrel for the Brent and 47.1 dollars per barrel for the Mexican mix (9% higher than in the base scenario) and to 89.9 dollars for the Brent and 69.2 dollars for the Mexican mix for 2006 (64% above the base scenario).

For 2007, the base scenario would mean an average projected price of 46.2 dollars per barrel, while the risk scenario would raise this to 84 dollars. **For the Mexican mix, the price would be 35.6 dollars for 2007 and 64.6 dollars in the risk scenario.**

### Are we moving toward a new price balance?

The key question is whether we are witnessing a prolonged upside movement toward a new balance or if it is an over-reaction that will undergo a correction at a lower level.

In analyzing the historical behavior of oil prices, we can see that we are in an atypical cycle of continuous increases that has already extended for nine quarters, the longest such cycle since 1957. The permanent changes in price levels have been characterized by being rapid upside movements that contrast with processes involving more gradual rises in which price levels do not consolidate and converge at a lower level. This classic behavior of the market, coupled with a better performance of supply in the medium term, makes it possible to anticipate that we are in a phase marked by an over-reaction, in which prices will be adjusted, with the Brent oil quoting at levels that are closer to 40 dollars than the current 63 dollars per barrel, and as a reference for the Mexican mix, with the latter's prices declining from 50 to 30 dollars. But to reach these levels, even in the main scenario, it will be necessary to wait a few more quarters.

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# Will the Industrial Slowdown Affect Domestic Demand Permanently?

## In the first half of 2005, growth was moderate.

In the second quarter of 2005, economic activity in Mexico reflected the slowdown that was present from the beginning of the year. Not only was the upward trend interrupted, but the change was profound and with an atypical profile for the moment of the cycle in which Mexico seemed to be. In seasonally adjusted series (as), the annual GDP growth rate lost almost three percentage points (pp), dropping from 4.8% at the end of 2004 to 1.9% in the 2Q05. With this, growth in the economy accumulated an annual 2.8% in the first half of the year.

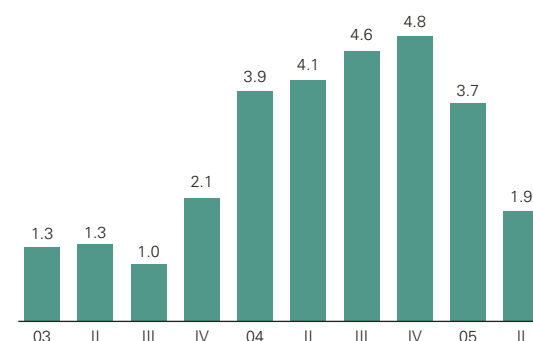
Even though the slowdown has been generalized, there are temporary differences and particular characteristics among the components of aggregate demand that should be reviewed in order to understand what is happening and to analyze the outlook. As for the sequence, the slowdown first appeared in exports, although it should be pointed out that the contraction has been more in proportion with the moderation of external growth. Growth in exports of goods and services (in real terms) fell from 13.6% in the 2Q04 to 3.9% in the 2Q05, that is, their growth lost two thirds in one year.

Imports, reflecting the strength of domestic demand, began their downward trend two quarters later and more gradually (1Q05). This implied greater growth in imports than in exports since the 4Q04, and, with a difference that has been growing, in contrast to the situation in 2003 and the greater part of 2004. This is significant, because it changes the net share of the external sector to GDP growth. In fact, in the last three quarters, said share was negative and it is probable that it will continue to expand. Consumption and investment also reflected more moderate activity in the first two quarters of 2005. However, their performance can be qualified as atypical. On one hand, growth in investment rallied in the second quarter and was higher than that of consumption, a performance that is normal in periods of expansion or high growth, but it would not be what was expected in the current situation.

On the other hand, the slowdown in consumption does not seem to be much in line with the performance of the monthly indicators that habitually improve the performance of this aggregate, such as sales in retail stores, consumer credit, employment, real wages, domestic auto sales, etc. In a simple report of consumption to sales of retail establishments in the last ten years (and that presents a good adjustment,  $R^2 = 0.90$ ), the estimated value for growth in consumption is of 4.7% vs. the observed 3.4%<sup>1</sup>. The conclusion is similar to other indicators such as imports of consumer goods or consumer credit. In any case, more than just how much of the slowdown is atypical and could be reviewed upward, this should not invalidate the message that it is showing: that of a slowdown.

## GDP Mexico

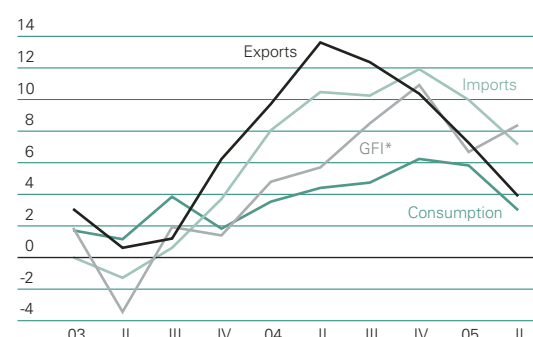
Annual % change, seasonally adjusted



Source: BBVA Bancomer with INEGI data

## Aggregate Demand

Annual % change, seasonally adjusted



\* Gross Fixed Investment

Source: BBVA Bancomer with INEGI data

1 The difference between both values is high (1.3 pp), but statistically it is not significant at a level of 95% confidence, that is, it can be explained due to the volatility of the series with regard to its trend value.

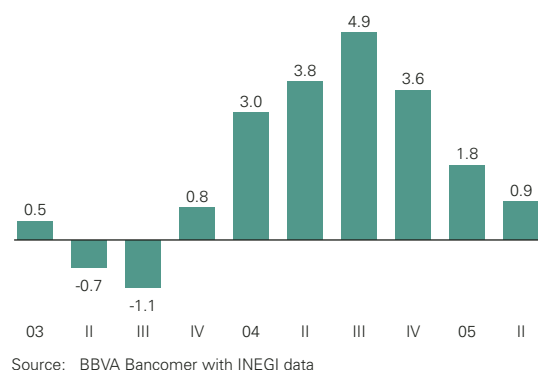
## Consumption Indicators

Annual % change, seasonally adjusted



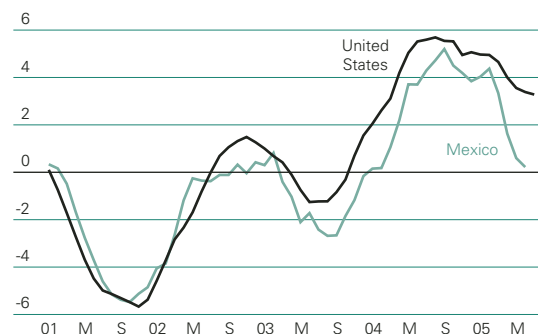
## Industry GDP

Annual % change, seasonally adjusted



## Manufacturing Production: Mexico and the U.S.

Annual % change, seasonally adjusted, 3-month moving average



## On the supply side, a greater adjustment in the industrial sector

Although with a one-quarter lag, the industrial sector reacted strongly to the negative trends in exports. Any change in foreign sales necessarily translates into an impact on domestic manufacturing production, which is not surprising, given the structure and weight of exports in the total of the sector (44% of the production value), and this impact has been produced both due to the moderation of U.S. industrial production and to a certain lag in the Mexican variables, which could be reflecting problems of international competitiveness. But these were not the only factors that affected growth in industry, since the circumstantial and situational (temporary) problems that could be reverted in the coming months such as the performance in the auto and construction sectors, together with an increase in the imported component in consumption and investment, had significant weight.

Since the North American Free Trade Agreement (NAFTA) came into force, industrial production in Mexico and the U.S. took on great coordination; however, in recent months, this relationship has deteriorated noticeably. Undoubtedly, it is this potential change in the margin of coordination between Mexico and the U.S. that could generate great caution in the valuations of the economic outlook toward the future. The correlation between the manufacturing activity of both countries has decreased. For example, for machinery and equipment (the main manufacturing sector in both countries) the correlation dropped from 0.94 to 0.55, between 2002 and 2005 (samples of 36 observations). This situation can be explained by the industrial restructuring in the U.S., which is being directed to sectors of high technology, in face of the sectors in which Mexico is better positioned, such as the automotive industry (see box: Mexican exports, competition and challenges) or due to the existence of a certain lag.

Domestically, there are several elements that must be underscored. In the first place, construction felt the effects of the high prices of some inputs in 2004, in particular steel. Also, production of motor vehicles was strongly affected by problems of the sector in the U.S. In this sector there is also a problem of a structural type with the loss of market share in the U.S. in the automobiles for persons segment. Lastly, part of the growth in domestic demand was channeled abroad with a renewed appetite for goods produced abroad. In the first quarter of this year, consumption of imported goods grew 23% and that of machinery and equipment 16%, compared to domestic consumption of 3% in both cases.

Necessarily, the trends of the external sector and of industry have repercussions on services. However, their growth rate is less volatile than that of industry and has low income-elasticity. In fact, it was the sector that sustained growth in terms of supply, since the performance in agriculture was bad (-3.4%) due to climatic factors that delayed sowing.

There is a close relationship of services with industrial activity of the period and with that of the immediately previous period, ( $R^2 = 0.96$ , regression of 1Q00 to 2Q05) and obviously, with domestic demand

( $R^2 = 0.94$ , regression of 1Q00 to 2Q05). Therefore, it is relevant to ask up to what point the industrial slowdown will affect services? Given its lower volatility and the existence of internal support factors, this should, in principle, point to the fact that, despite slow industrial growth, services can continue to expand, although at a lower rate than in the immediate past.

### Is the potential GDP of the Mexican economy decreasing?

The evaluation of the performance of the Mexican economy during the 1H05 seems simple due to its results, but it is complex in explanations. The drop in the growth rate surprised both the authorities and analysts, for different reasons: growing external demand; strong dynamism at the end of 2004; acceptable results in leading indicators such as retail sales, employment, consumer credit, and high oil prices, and, therefore, potential growth in public spending should have generated higher growth than 2.8%. Despite this, consumption slowed down, particularly in the second quarter of this year. Some possible initial explanations to this respect that must be evaluated in the coming quarters are:

Growth lower than its trend value. The historic performance of growth in consumption presents deviations on the trend values (or against the expected values, as per the leading indicators) that tend to be offset. In the second quarter of 2005, the growth observed in consumption is lower than that expected by more than one point, and, in the immediately previous quarters, it had been higher in the same magnitude. These results could anticipate performance in the third quarter closer to its trend.

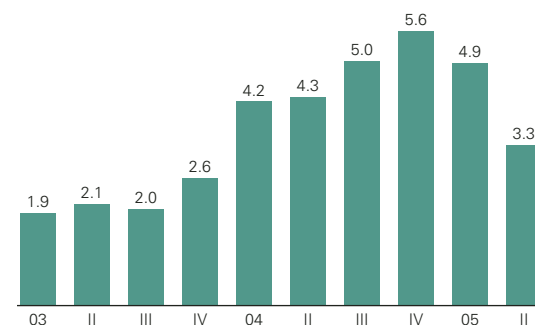
Loss of U.S. market share and a lower integration with that economy. More important than the possible statistical discrepancies is, undoubtedly, the decline in U.S. market share, where the growing presence of China and of other competitors is a fact more than a potential risk. Also, lower coordination between the Mexican and U.S. economies is present, particularly in manufacturing, which although it could be partially temporary, also has structural components and could be transferred with a certain intensity to domestic demand.

A decrease in the growth potential of the Mexican economy. A recent study<sup>2</sup> of the International Monetary Fund estimates that growth in the Mexican economy will be 3.2% for the period between 2005 and 2009. Within this context, the 2005 results could be perceived as a correction toward long-term trends, although without forgetting that there were also situational or temporary negative factors.

There could be disparities between indicators and results, a revision of series that would change specific values, or a temporary deviation, but there is no doubt regarding the lower growth of activity in Mexico, especially in industry. This adds a question to the growth outlook, despite the financial stability and the positive performance of many of its indicators.

### Services GDP

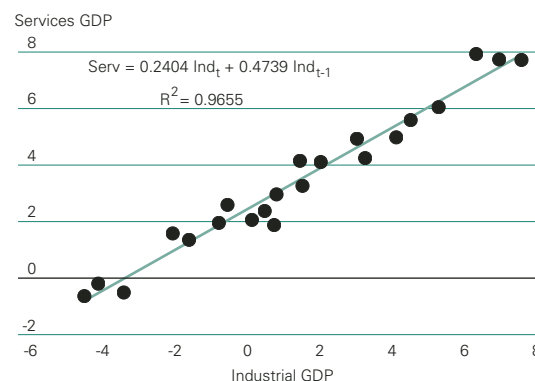
Annual % change, seasonally adjusted



Source: BBVA Bancomer with INEGI data

### GDP: Industrial vs. Services

Annual % change, 1Q00 - 2Q05

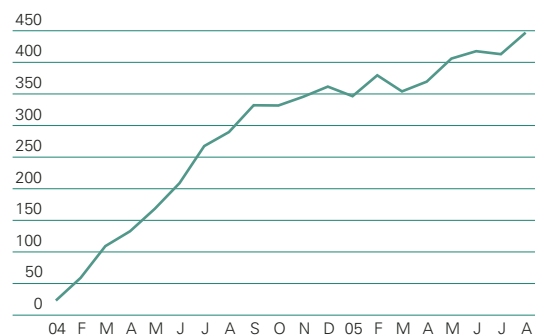


Source: BBVA Bancomer

2 GDP Growth, Potential Output, and Output Gaps in Mexico, IMF Working paper, EP/05/93, May 2005.

## Employment

Growth in the number of IMSS-registered workers, thousands, seasonally adjusted



Source: BBVA Bancomer with INEGI and IMSS data

## Outlook

Within the uncertainty associated with a precise diagnosis of the current situation, the outlook is for a continuation of moderate growth rates. The external environment will be of economic growth, although it might be slightly lower. Thus, the strength of our main trading partner, the U.S., will go from 3.6% to 3.2% from 2005 to 2006 (see international environment section).

The performance of the Mexican economy in the coming quarters will depend on overcoming the afore-mentioned temporary problems, and on the permanence of the strength of domestic demand. We expect that it will continue to expand, boosted by macroeconomic stability, employment, credit, oil revenues, higher spending related to the political campaign and the need to replace capital in companies. In agriculture, the problem is that of an imbalance in the agricultural cycle, not of loss in production, while construction is recovering, boosted by housing loans and public works, and, in the automotive sector, the new models open a window of opportunity for greater growth in the coming quarters.

Within this context, for 2005, we estimate GDP growth of 3%, a figure similar to that in which the economy could grow in 2006. Jointly, our projection implies an improvement in the second quarter of 2005, compared to the first: 3.2% vs. 2.8% respectively. The main short-term risks of this scenario are the permanence of high oil prices for a prolonged period, which could have negative repercussions on U.S. industrial production, and on the decrease in Mexico's complementary industrial relationship with the U.S., an element that is derived from the loss of competitiveness and the delay in structural reforms. Also, it will be necessary to watch how the political environment develops, in case the uncertainty could generate an increase in savings and lower investment due to precaution. As a whole, these elements open a scenario of lower growth in the economy in 2005, more toward 2%.

## Macroeconomic Chart of Mexico

Annual % change, seasonally-adjusted

	Observed					Forecasts						Contrib. to growth (pp)		
	2000	2001	2002	2003	2004	2005	2006	1Q05*	2Q05	3Q05	4Q05	2004	2005	2006
<b>GDP</b>	<b>6.6</b>	<b>-0.2</b>	<b>0.8</b>	<b>1.4</b>	<b>4.4</b>	<b>3.0</b>	<b>3.0</b>	<b>3.7</b>	<b>1.9</b>	<b>2.8</b>	<b>3.5</b>	<b>4.4</b>	<b>3.0</b>	<b>3.0</b>
Total demand	10.3	-0.5	1.0	1.2	5.9	4.2	3.8	5.4	3.3	3.9	4.2	8.0	5.9	5.3
Domestic	8.3	0.3	0.9	1.8	5.3	4.6	3.7	6.0	4.0	4.3	4.1	4.0	4.0	3.4
Consumption	7.5	1.9	1.3	2.1	4.7	4.1	3.3	5.8	3.0	3.9	3.9	3.8	3.4	2.8
Private	8.2	2.5	1.5	2.3	5.5	4.6	3.5	6.6	3.4	4.3	4.2	4.0	3.3	2.6
Public	2.6	-2.4	-0.1	1.0	-1.2	0.4	2.0	-0.2	-0.5	0.7	1.7	-0.1	0.0	0.2
Investment	11.4	-5.6	-0.7	0.4	7.5	6.5	5.2	6.7	8.4	6.2	4.8	1.3	1.3	1.1
Private	6.3	-4.7	-4.0	-1.2	7.6	5.5	4.1	7.8	7.6	2.0	5.0	1.2	0.9	0.7
Public	24.7	-2.0	13.7	9.4	3.5	11.9	9.4	15.3	13.6	10.0	9.0	0.1	0.5	0.4
Inventory chge.**												-1.1	-0.7	-0.4
Net external**												0.2	-1.0	-0.4
External	16.5	-3.7	1.5	2.8	11.5	5.0	5.2	7.2	3.9	5.5	3.7	4.0	1.9	2.0
Imports (g. & serv.)	21.6	-1.5	1.4	0.7	10.2	7.3	5.8	10.0	7.1	6.5	5.9	3.8	2.9	2.4

\* Observed

\*\* Annual rates are not presented because are non-representative

Source: BBVA Bancomer with INEGI data



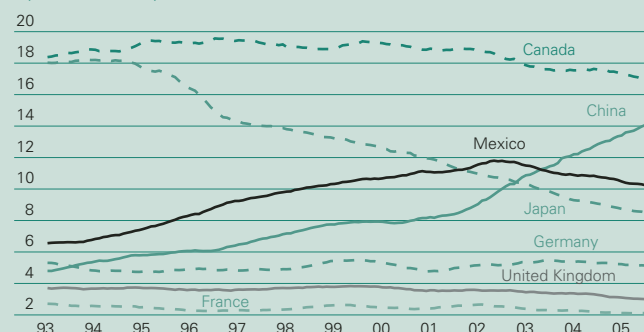
## Mexican Exports, Competition and Challenges

In 2004, the commercial exchange of goods and services of Mexico with the rest of the world represented 76% of the Gross National Product (GDP), a share that has doubled in ten years. In particular, the U.S. market represents the most important destination for Mexican export products with 98% of the total. Consequently, the development, characteristics and competition in said market are significant for the national economy.

Mexico was the second most important trading partner of the United States in 2001 and 2002, displacing Japan from this position, although it lost its place to China in 2003 (see graph below). However, when the statistics are analyzed excluding oil, the indicator that could be more appropriate for measuring the penetration of manufactured goods, Mexico has occupied third place as supplier of the U.S. economy, with a decreasing share as of 2002 and at a growing distance from second place.

### Share in U.S. imports

%, includes oil, Jan 1993 - Jul 2005



Source: BBVA Bancomer with data from the U.S. Department of Commerce

The most marked changes in the share of the various countries in the U.S. market were observed following the inclusion of China in the World Trade Organization (in December 2001). In fact, imports from China into the U.S. market, which had been gaining share prior to that date, are now doing it on a greater basis, within a formal framework, which has granted them an extraordinary boost. In the last four years, China has gained almost five points in market share, and its exports grew at an annual average rate of 22%. This implies more than doubling its sales volume in that period. Among the main trading partners of the U.S., the losers in market share have been Japan, Canada and Mexico.

### Main Countries Participating in the U.S. Market % in U.S. imports, including oil

	2000	2001	1S05	Var.*
Canada	18.8	19.0	17.4	-1.6
China	8.2	9.0	13.8	4.8
<b>Mexico</b>	<b>11.2</b>	<b>11.5</b>	<b>10.4</b>	<b>-1.1</b>
Japan	12.0	11.1	8.6	-2.5
Germany	4.8	5.2	5.2	0.0

\* Change, percentage points 2001 - 1<sup>st</sup> half 2005

Source: BBVA Bancomer with data from U.S. Department of Commerce

Mexican exports are concentrated in a few product lines, the most important being those of the automobile industry (terminal and auto parts) with 22% of exports, and oil with 13%, which, together with another seven, concentrate two-thirds of the total (see table below), while in recent years, a slight trend toward a greater diversification of products has been observed. The performance of each one of them is important in analyzing what is happening to exports.

### Mexico: Main Products Exported to the U.S. % share of exports

	2001	Jun'05	Diff..	Acumm'01	Acumm'05
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>	<b>100.0</b>	<b>100.0</b>
Oil	7.3	13.0	5.7	7.3	13.0
Auto parts	10.1	11.7	1.6	17.4	24.7
Motor vehicles	16.2	10.4	-5.8	33.6	35.1
Electric household equipment	7.4	7.8	0.4	41.0	42.9
Audio and video equipment	5.9	5.0	-0.9	46.9	47.9
Communication equipment	4.8	4.6	-0.2	51.7	52.4
Computer equipment	6.4	4.1	-2.3	58.1	56.6
Clothing and accessories	5.7	3.9	-1.8	63.8	60.4
Electronic components	5.6	3.4	-2.2	69.4	63.8
Agricultural products	1.9	3.0	1.1	71.3	66.8

Source: BBVA Bancomer with data from U.S. Department of Commerce

In general terms, the main products exported by Mexico coincide with the structure of U.S. imports. However, in Mexico they are more concentrated, 67% in ten products (in face of 63% of the ten products most imported by the U.S.) What is significant is that some of Mexico's main export items are not among the most dynamic imports of the USA, such as is the case of automobiles. Also, in others, the share is relatively low, for example in pharmaceutical and medicinal products. In any case, it should be considered that conditions change and, therefore, Mexico's share in the U.S. market must be seen in a dynamic way.



Between 2001 and 2005, of the first ten products of Mexican origin imported into the U.S., only two have improved their share in the U.S. market: oil and agricultural products. While among the other eight, manufactured goods decreased their share. The most marked changes were observed in communication equipment, computer equipment, motor vehicles and audio and video equipment. That is, those with the greatest added value are the ones losing weight. Of course, the market share gains by China are not exclusively reducing market from Mexico; it is a global phenomenon. For example, in computer equipment, China's share rose from 14% to 43% in this period while that of Mexico dropped from 14.3% to 9.2%. Evidently, China's advance (29 pp) did not only affect Mexico (-5.1 pp). In addition, there are differences by products, for example, in automobiles, Germany and Korea have increased their share while Malaysia has gained in computer equipment, to mention some cases.

### Mexico's Share in the U.S. Imports

Main products and main country that improved in U.S. market

	Mex.in US impor., %			Winning country	
	2001	Jun'05	Diff.	Country	Diff.pp
<b>Total</b>	<b>11.5</b>	<b>10.4</b>	<b>-1.1</b>		
Oil	10.1	11.0	0.9	Venezuela	1.9
Auto parts	27.4	26.9	-0.5	China	2.4
Motor vehicles	17.1	12.4	-4.7	Korea	2.1
Electric household equipment	25.2	24.5	-0.7	China	6.4
Audio and video equipment	28.1	23.7	-4.4	China	9.7
Communication equipment	23.1	17.3	-5.8	China	15.1
Computer equipment	14.3	9.2	-5.1	China	29.5
Clothing and accessories	13.0	9.1	-3.9	China	12.6
Electronic components	10.9	8.6	-2.3	China	7.8
Agricultural products	22.4	24.2	1.8	Brazil	2.5

Source: BBVA Bancomer with data from U.S. Department of Commerce

When a more general exercise is considered, total exports grouped in a little more than 100 categories, half of them increased their share and half decreased it. However, in terms of value, among the negative ones, those with the greater weight predominate and the total decreases. Therefore, what is significant is Mexico's loss of the total share, a phenomenon that undoubtedly is explained by lower competitiveness, which might have important implications for growth.

Competitiveness and the capacity for response of articles made in China could be reached by analyzing its share in the rise of the main products imported by the U.S. In the table below, for the main manufactures exported by

Mexico, the increases of China and Mexico with respect to the total increase of U.S. imports is presented. For example, in computer equipment, U.S. imports rose by almost US\$15 billion between 2001 and 2004. Imports from China rose US\$21.3 billion taking advantage of a market in expansion and displacing competitors such as Mexico, which lost US\$3 billion. Although in other products, Mexico did not lose sales in dollars and in fact, even increased them, it did lose share and was unable to take advantage of the market growth.

### Increase in U.S. imports

Selected products, 2001-2004, millions of dollars

	Total	From China	From Mexico
Auto parts	16,585	1,429	4,630
Motor vehicles	16,522	—	-2,529
Computer equipment	14,831	21,313	-1,091
Communication equipment	11,618	5,887	1,168
Household equipment	10,101	5,724	2,333
Audio and video equipment	9,554	6,116	481
Clothing and accessories	8,151	4,535	-1,180
Scientific equip. and apparatuses	7,217	745	413
Electronic equipment	-1,063	4,886	-1,373

Source: BBVA Bancomer with data from U.S. Department of Commerce

Of the main manufactures exported by Mexico, China took advantage, in seven products, of the better growth opportunities of the U.S. market. In counterpart, only two of those seven do not have a significant presence: motor vehicles where Mexico could not preserve its market share and in auto parts where the presence of China is new but is growing rapidly and will represent a challenge in a not-too-distant future.

Foreign demand was very important in the development of the Mexican economy as of the coming into force of the North American Free Trade Agreement (NAFTA). However, external conditions have changed and the initial advantages have been diluted. Therefore, in order to take advantage of the potential of the U.S. market, and the advantages of the trade agreement, it is indispensable to improve domestic productivity by advancing in the structural reforms of a second generation that would spur greater competitiveness and would allow taking advantage of the opportunities existing in the U.S. market. Should this not be done, the Mexican economy's capacity for growth would lose strength.

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## 2005, a Good Year for Inflation: Will We Reach and Remain on Target?

### The best inflation result in 34 years

In 2005, inflation in Mexico has reached historically low levels not seen since the early 1970s (the minimum was reached in 1971 with 2.5% inflation) and very close to the Banco de México's inflation target of 3%. In September, inflation in Mexico was even lower than in the United States, given the different impact of oil prices. It has been a long road toward price stabilization, since 1995 when the central bank began to gradually establish a monetary policy based on inflation targeting, first qualitatively and then quantitatively, with explicit goals set as of 2000<sup>1</sup>. The convergence toward the inflation target is also the result of the process of stabilizing the Mexican economy, in which fiscal discipline, the autonomy of the central bank, market liberalization and deregulation, as well as the commitment of the public sector to meeting inflation targets have all had an impact.

Headline inflation went from a recent record high in November 2004 of 5.4% to 3.5% in September. More specifically, core inflation in September fell to 3.2%, below the minimum level at which it had remained since 2002 (3.4%, with a range of up to 3.8%) and at present could be heading toward the 3% goal. This article will analyze the reasons that explain the decline in inflation, present estimates for the close of 2005 and 2006, as well as discuss factors that could force inflation to be diverted from meeting these projections.

### Why did inflation decline? Supply pressures decreased...

A key element in 2005 inflation results was that supply pressures decreased due to the reduction in agricultural prices, the government's commitment to bring public prices in line with the central bank's target, as well as the reduction in international prices of raw materials, mainly steel.

Agricultural prices reversed their upward trend seen in the second half of 2004, that led the fruits and vegetables sub-index to experience fluctuations in its annual growth rate, from -1% in August to 15% in November of that year. The average of the monthly variations in this sub-index in the second half of 2004 was 2.1%, compared to a 0.1% drop in the first six months of 2005. At the same time, the increases in oil prices did not have an impact on inflation in Mexico during 2005 due to the aligning of public prices with the inflation target. This policy was especially important in the case of government-managed prices (electricity, gas, and gasoline), since it was the first time since 1998 that their growth was below that of the NCPI. Thus, the non-core component of inflation, specifically the sub-indexes for government-managed and regulated prices and agricultural prices, represented three-fourths of the decline in inflation between December 2004 and September 2005.

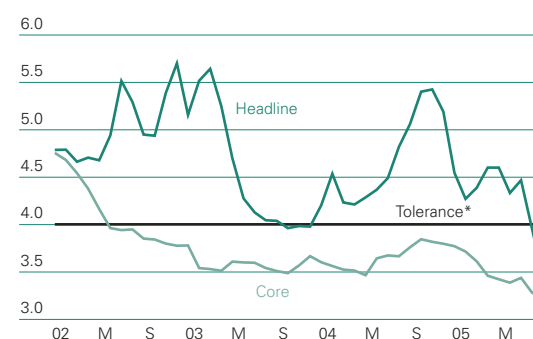
The decline in core inflation was the result, on the one hand, of the reduced transmission of agricultural prices to processed foods, in which the food sub-index, which represents close to 25% of core inflation, saw its growth rate reduced from 7% to 4.5% between

### Inflation: Registered and Target Annual % change, end of period

	Registered inflation		Targets
	Headline	Core	
1995	52.0	52.8	19.0
1996	27.7	25.6	20.5
1997	15.7	15.9	15.0
1998	18.6	17.7	12.0
1999	12.3	14.2	13.0
2000	9.0	7.5	10.0
2001	4.4	5.1	6.5
2002	5.7	3.8	4.5
2003	4.0	3.7	3.0 +/-1pp
2004	5.4	3.8	3.0 +/-1pp
2005*	3.8	3.2	3.0 +/-1pp

\* Estimated  
Source: BBVA Bancomer with Banco de México data

### Inflation Annual % change



\* Central bank tolerance range  
Source: BBVA Bancomer with Banco de México data

1 Between 1995 and 1999, inflation targets were qualitative, in order "to help price stabilization." It was not until 2000 that the Banco de México announced specific inflation targets in its monetary program.

## National Consumer Price Index

	Weight (%)	Annual % chge.		Share*
		Dec'04	Sept'05	
<b>NCPI</b>	<b>100.00</b>	<b>5.19</b>	<b>3.51</b>	<b>-1.68</b>
<b>Core</b>	<b>69.56</b>	<b>3.80</b>	<b>3.20</b>	<b>-0.41</b>
Food	37.03	3.87	3.05	-0.30
Housing	17.86	3.70	2.37	-0.24
<b>Non-core</b>	<b>30.44</b>	<b>8.20</b>	<b>4.17</b>	<b>-1.23</b>
Agricultural	8.07	10.11	4.53	-0.45
Managed	7.77	10.02	3.65	-0.50
Gasoline	3.66	5.84	3.82	-0.07
Gas	1.84	18.27	12.31	-0.11
Electricity	2.27	9.16	-4.48	-0.31

\* Share, percentage points  
Source: BBVA Bancomer with Banco de México data

December 2004 and September 2005. On the other hand, core inflation was influenced by the reduction in steel prices in the first half of 2005, which were 15% lower than at the close of 2004, since decreasing the costs of housing construction, coupled with the support policies to this sector aimed at generating greater supply, reduced the pressures on rental fees. Together, the share of food and housing services in the drop in the inflation rate through September (vs. December 2004) was 0.61 percentage points.

### ... the economy slowed down and the peso remained strong and stable

The decline in inflation was also influenced by the downturn in domestic demand. The lower growth in private consumer spending, which even registered a quarterly loss in the April-June period, contributed to moderating the pressures on the non-housing services sub-index, the component that exercised the greatest upward pressure on core inflation. Without the boost from demand, there is less room for second round effects, or the transmission of inflationary pressures toward wages, expectations, and price formation. Since employment is a variable that lags behind economic activity, further restrictions on wage increases could even begin to be seen in the second half of the year<sup>2</sup>.

Finally, the strength of the peso also played a role in the reduction of inflation (see box). Although in the past few years, the transmission of the exchange rate to prices has decreased significantly (partly due to less volatility in peso-dollar parity), the strength of the peso (appreciation of 3.8% in September vs. December 2004) could be the reason for the low growth rate in non-food products, which posted the lowest growth rate among all the components of inflation in 2004 and 2005.

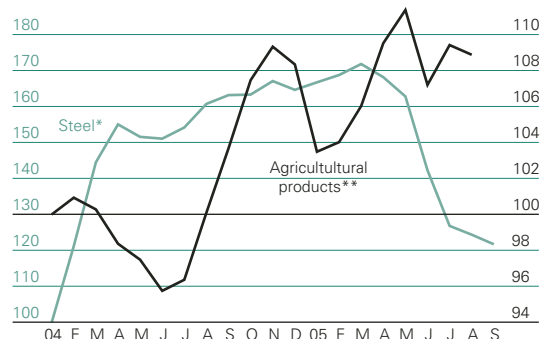
Toward the close of 2005, inflation could continue its recent performance. Headline inflation could register around 3.8% depending on the volatility of agricultural prices, while core inflation will close the year within a range of 3.0% to 3.2%. Although both are within the Banco de México's tolerance range, it is still not possible to speak of full convergence. For this to occur, core inflation would have to stabilize at levels of around 3%, allowing headline inflation to remain within the 3% +/-1 percentage-point tolerance range, even in periods with seasonal pressures or supply pressures. Due to its structure, the NCPI has an inherent volatility of up to 33%, and as a result, the inflation target can only be consistently achieved when core inflation has stabilized for a prolonged period around the target (3%).

### 2006: optimistic outlook, with reservations

The inflation scenario in 2006 will be marked by GDP growth that is once again below its potential (3% vs. 3.5%<sup>3</sup>) with a certain moderation in the world economy that will favor the drop in oil prices; stability in the peso-dollar exchange rate; the likelihood of greater volatility with a rising trend in agricultural prices (given the cyclical nature of such prices, with high and low levels alternating from one

## Raw Materials

January 2004 Index = 100



\* Spot price for exports from Latin America of cold rolled steel sheets  
\*\* Of NCPI

Source: BBVA Bancomer with Metal Bulletin and Banco de México data

- In the first half of 2005, the results of wage negotiations remained practically at the same level as in the same period of 2004, at a 4.5% yearly increase.
- According to IMF estimates for the 1996-2003 period. Working paper 05/093 May 2005.

year to the next); and, finally, a policy of public prices that could once again be aligned with the inflation target<sup>4</sup>.

For core inflation, the moderate rate of economic growth will limit demand pressures. Together with the projected stability of the peso and without pressures from energy prices (due to financial armor plating through fiscal measures that will limit the transmission of international prices), this will allow core inflation to remain within a range of 3% to 3.5%. In this forecast, expectations (with their impact on wages) will play a key role. Indeed, they still have not reflected the good inflation results of 2005, with 12-month inflation figures still close to 4% levels, while the medium-term projections (2006-2009) are still leaning toward the upper limit of the target (3.7% in September, according to the central bank survey of expectations). The rigidity of the economy, the difficulty in lowering inflation expectations, and wage negotiations could hinder the convergence of core inflation with the target.

At the same time, headline inflation will be subject to seasonal factors that will once again place it at over 4% during the first half of 2006. The volatility in agricultural prices could also temporarily divert it from its trend toward a convergence with the inflation target. At the close of 2006, headline inflation could end up at around 3.7%, a similar level to that of 2005 (estimated at 3.8%.<sup>5</sup> To summarize, the panorama for 2006 allows for some optimism with regard to inflation; however, the difficulty in achieving a full convergence with the Banco de México target should be noted, in which the rigidity in expectations and vulnerability in response to supply pressures weigh in.

### The risks

Despite the government's financial armor plating in response to the rise in international energy costs, oil will continue being the upside risk for inflation in 2006. In the base scenario, to which we assign 65% probability, the contribution of energy prices (gasoline, electricity, gas) to headline inflation for the year could be 0.3 percentage points. However, if oil prices continue to rise, even up to levels of 90 dollars per barrel (Brent, annual average; see chart), the effect on headline inflation could be up to 1.4 percentage points. The transmission to core inflation would be inevitable, due to the increase in producer prices and imported inflation. In this risk scenario, with a 15% probability, headline inflation could move toward levels perhaps higher than 5%.

At the other end, and with a probability that we currently estimate at 20%, inflation would decline even further in a scenario in which the downturn would intensify (GDP growth toward 2%), inflation (and wage) expectations would decrease, there would be no pressure from agricultural prices, and the authorities would manage to maintain the sub-index of government-managed and regulated prices within the central bank target. In such a context, core inflation could even be below 3% and headline inflation could approach 3%.

4 In the 2006 Economic Program, the following increases in government managed prices are anticipated: gasoline 3%, electricity 4%, and LP gas with a monthly variation in the range of 0.8% to 1.8% and natural gas for household use with a 28% subsidy.

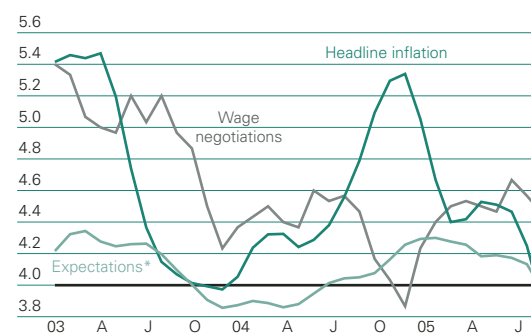
5 The monthly development of headline inflation contemplates the seasonal effects of the different components, the announced public prices policy, and the risk of an agricultural year marked by high prices (average monthly increase of 0.5%, vs. 0.35% estimated in 2005).

### Impact on Inflation of 2006 Energy Program

	Share*	Annual % change			Impact , pp		
		2004	2005	2006	2004	2005	2006
<b>Total</b>	<b>7.77</b>	<b>7.6</b>	<b>6.4</b>	<b>3.5</b>	<b>0.59</b>	<b>0.50</b>	<b>0.27</b>
Gasoline	3.66	5.2	4.3	3.0	0.19	0.16	0.11
Electricity	2.27	8.8	1.9	4.0	0.20	0.04	0.09
Househ. gas	1.84	10.9	16.0	3.8	0.20	0.30	0.07
LP	1.75	9.3	16.4	4.0	0.16	0.29	0.07
Natural	0.09	42.4	9.5	0.0	0.04	0.01	0.00

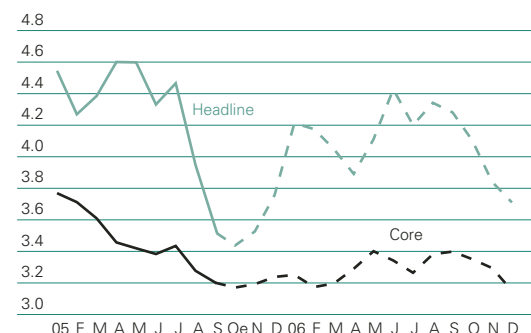
\* % share of NCPI  
Source: BBVA Bancomer with Banco de México data

### Nominal Wages and Inflation Annual % change, 3-month moving average



\* 12-month inflation expectations  
Source: BBVA Bancomer with Banco de México data

### 2005 - 2006 Inflation Annual % change



Note: Estimated as of October 2005  
Source: BBVA Bancomer with Banco de México data

## Determining Factors Behind Inflation: 1996-2005

Since inflation has remained at single-digit levels, as of 2000, important changes have occurred in the Mexican economy, such as a monetary policy with explicit inflation targets and less volatility in the peso/dollar exchange rate. This has led to equally important changes in the determining factors behind price formation. This article will analyze, as an initial approximation to this important issue, the changes in these determining factors and their implications on inflation trends in the medium term.

Through the use of a self-regressive vector model for correcting errors<sup>1</sup>, we analyzed the sensitivity of core inflation to external developments during the 1996-2005 period in order to identify its main determining factors. The sample was divided into two periods, 1996-2000 and 2001-2005, due to the disparity in the economic conditions between them. The 1996-2000 period was characterized by high GDP growth rates, two-digit inflation, high volatility in the exchange rate, and a monetary policy without explicit inflation targets, while the 2001-2005 period was marked by lower demand pressures, declining single-digit inflation, lower volatility in foreign-exchange, and explicit inflation targets set by the Banco de México. In both periods, high volatility was seen in the prices of raw materials, energy, and food.

The variables of the model, in monthly series and placed in order of their degree of independence as regards core inflation, were raw material prices (non-processed foods and energy), economic activity (General Index of Economic Activity, GIAE), the peso-dollar exchange rate, wages, inflationary lag (one period) and real interest rates (28-day Cetes). To incorporate their full effect, the response to the growth in each variable was measured after one year.

The results of the analysis confirm the effects of the change in economic conditions on the determining factors of inflation. Raw material prices (energy and agricultural products), which could reflect supply pressures, accounted for only 3% of the variability in core inflation in the first period, while from 2001-2005 they represented close to 50%. At the same time, the GIAE, which incorporates the shocks associated with demand pressures rose from 9% to 21%, the result of a more "normal" economic cycle in Mexico (see Situation Mexico, first

quarter 2005) and most certainly of the convergence of inflation with the central bank target.

In contrast, the exchange rate went from accounting to close to 30% in the first period, to 20% in the second. Other factors that lost weight were wages, interest rates, and the inflationary lag, all three of which tended to decline. The strong fall in wages (from 17% to 7%) and the inflationary lag (from 33% to a surprising 2%) reflected greater maturity in the price formation process, while the drop in wages responded to inflation expectations converging with Banco de México's target. At the same time, the declining percentage share corresponding to the momentum component suggests an advance in the process of economic stabilization, with a reduction in companies' margins that forces them to react more quickly to and in some cases to absorb part of the external pressures.

### Core Inflation Variance Decomposition Analysis % share of variability\*

	1996-2000	2001-2005
Energy	1.3	27.1
GIAE	8.9	21.3
Exchange rate	28.5	19.8
Agricultural	1.7	19.6
Wages	17.1	7.2
Interest rates	10.0	2.7
Core inflation lag	32.6	2.3
* Impact over 12 months Source: BBVA Bancomer		

The results of the analysis of variance decomposition for the 2001-2005 period are important in projecting inflation scenarios in the medium term. In 2006, with a rate of economic expansion that will perhaps once again be below its potential, the possibility of oil prices remaining high, and an unfavorable agricultural cycle, the main inflation risks could be associated mainly with supply pressures.

Thus, we estimated the possible performance of core inflation in response to different scenarios involving oil prices, given the forecasts of economic growth and wage increases. With this in mind, a lineal regression model

<sup>1</sup> The self-regressive vector models for correcting errors identify the effect of long-term relations on the variables of short-term fluctuations.



was made that included wage negotiations, oil prices, and economic activity that could reflect external pressures and inflation expectations<sup>2</sup>.

In the base scenario, which for 2006 projects a downward trend in oil prices, moderate demand pressures, and negotiated wage increases contained by a convergence with inflation expectations, core inflation would continue to decline toward levels of 3% on average during the year. In a risk scenario with oil prices still on the rise (an average of US\$88 per barrel for the Brent blend<sup>3</sup> vs. an estimated average of US\$55 for 2005), the impact on core inflation would be around 10% (from 3% to 3.3% annual average). In this panorama, it would be neces-

sary to include the effects on the non-core component, specifically the sub-index of government-managed and regulated prices, which could add up to 1.4 percentage points to headline inflation. It would also be necessary to add second-round effects such as higher expectations, transmission to wages, etc., that this model does not incorporate.

However, it is nonetheless reassuring that the risk for core inflation in 2006 is, according to this simulation, the transmission of a potential increase in volatility in the prices of raw materials (energy and agricultural products) that could boost inflation above the levels registered during this current year. This is nothing different from what we are currently seeing in the more developed countries.

2 The model, estimated on the basis of monthly series in annual variation rates for the January 2001 - August 2005 period, is specified as follows:  

$$\text{Core}_t = 0.01 * \text{Brent}_t + 0.14 * \text{GIEA}_{t-3} + 0.61 * \text{Wages}_{t-4}$$

(0.01)
(0.00)
(0.00)

in which the numbers in parenthesis indicate the value of the "t" statistic for each variable, which shows that they are significant with 95% confidence. Also included were the variations in producer prices of fruits and vegetables, although it was not a significant variable in the period considered in the sample.

3 See oil box, in the first section.

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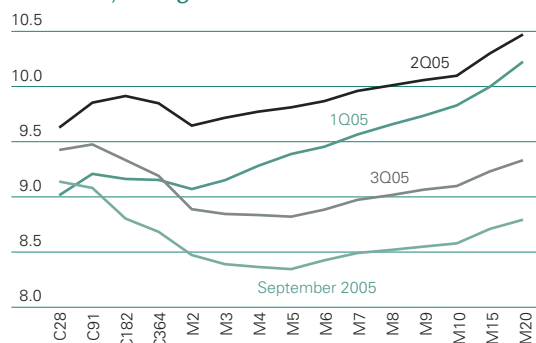
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## Downward Cycle in Funding Rates Begins, but with a Possible Pause Beginning 2006

### Yield curve

Generic %, averages



Source: BBVA Bancomer with Valmer data

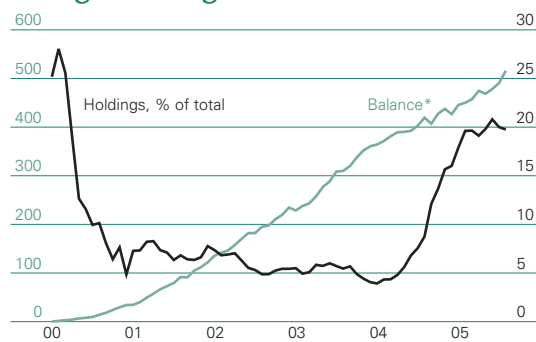
After 16 increases in bank funding rates from April 2003 to May 3, 2005, the Banco de México allowed the rate to decline on two occasions (August 26 and September 23) to close the third quarter at 9.25%. These decreases took place after data showed that headline and core inflation were converging toward the Banco de México's target of 3% (see section 2) and with the evidence of the surprising economic downturn in the first half of the year (which contributed to limiting demand pressures). This, coupled with the decline in inflation expectations in all their terms (although especially short term)—and the low risk of second round effects of supply pressures and wage negotiations—was sufficient for authorities to allow the change in the monetary cycle.

In terms of the structure of interest rates, since April there have been continuous decreases in medium- and long-term rates to the extent that the yield curve has had a negative slope as of June 2005. Among the most important factors behind this behavior are: (1) the high international liquidity that has been reflected in relatively low rates on 10-year bonds in the United States and in greater demand for long-term bonds in Mexico; (2) the expectation of lower inflation (mainly reflected in the middle segments of the curve) and, as a result, the market's anticipation of lower bank funding rates; and, to a lesser extent, (3) the outlook of lower economic growth. As a result, the spread between yields on the 10-year bond (M10) and bank funding rates in Mexico went from +45 bp on average in the second quarter of the year to -0.50 bp in the third.

### Money market “short” and minimum rate: tools to interpret

The implementation of the country's monetary policy has been based both on changes in the level of the market “short” as well as on the explicit establishment of a range of variation in internal monetary conditions, which has functioned *de facto* as a minimum interest rate. Within the restrictive monetary cycle (April 2004 to August 2005), the Banco de México increased the “short” on 10 occasions, from -33 million to -79 million pesos daily. By the same token, the central bank announced increases in funding rates similar to those registered in the United States until it declared on June 24 that movements in Mexican interest rates would no longer be tied to Federal Reserve decisions in this regard.

### Government Bonds and Foreign Holdings



\* Billions of pesos  
Source: BBVA Bancomer with Banco de México data

In the downward cycle that has just begun, the central bank has chosen to maintain the money market short at -79 million pesos daily and to determine the scale of the decline in bank funding rates on two occasions. The use that has been given to both instruments has generated uncertainty in the market regarding the intentions of conserving two instruments and, more specifically, on the functionality of the “short” in relation to the minimum bank funding rates established by the central bank. To this regard, three interpretations can be advanced concerning the coexistence of the two instruments. First, that the “short” could be exhausted as a signal to the market and it would be, in this case, a question of time before formally adopting a benchmark rate. Second, the “short” is being recovered as a signal

of the rate of declines and increases in interest rates so that by allowing a lower rate and maintaining the “short”, a signal would be sent in relation to the Banco de México’s “cautious” behavior. Third, the central bank could manage “*ad hoc*” instruments that would allow it, on the one hand, to have the flexibility of limiting the decline rate in interest rates and, on the other, to permit the market to accommodate—with higher interest rates—potential negative pressures on the economy that are reflected in the foreign exchange market (that is, a contraction in liquidity and the increase of political risk).

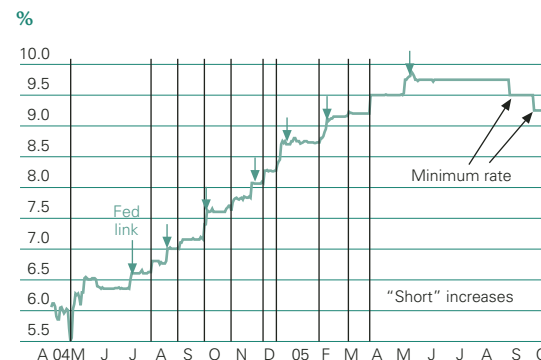
### We anticipate a gradual decline in funding rates in 4Q05 and 2006, but with a possible pause before the elections

Although the beginning of the cycle of lower funding rates is clear, the question regarding their decline rate remains open. In this regard, we feel that the Banco de México will choose gradual decreases in bank funding rates in response to the presence of domestic and international risks. Two domestic factors suggest to us that there will be a moderate adjustment in the funding rates. First, the probable renewed rise in inflation at the close of the year (3.8%) although the trend continues to be toward a convergence with the 3% target. More specifically, considerable uncertainty will prevail in relation to agricultural prices and a potential adjustment in public prices in view of high oil prices. Second, the political debate will tend to intensify as the elections approach, which could lead to greater volatility of the peso and of interest rates in the yield curve.

At the same time, there are several risk factors on an international level that would weigh in favor of a more cautious monetary policy. First of all, the persistence of energy supply pressures that will tend to be reflected in higher inflation worldwide; second, the decision process of the Federal Reserve to boost its rates; and third, linked to the previous factor, the latent growth in international investors’ “risk aversion” that could depreciate peso-dollar parity to levels that would imply a greater inflationary risk. Although we consider this development to still be distant, we must not lose sight of the fact that in 2006 several Latin American countries will hold elections, which could increase the region’s perceived risk. Finally, we feel that in the process of lowering its rates, the central bank will try not to induce erratic changes in the direction of the monetary cycle in order to not be a factor for volatility in the market.

In this panorama and in our base scenario we feel that two additional reductions in funding rates will occur in 2005 (at the close of the year at 8.75% vs. the current level of 9.25%) and, subsequently, in the early part of 2006, there will be a pause in the downtrend, given the rise in domestic risks and the need to monitor the process of inflation converging toward the central bank target. Following the federal elections, and coinciding with additional reductions in inflation, there is a greater likelihood that the interest rate reductions will be resumed, with bank funding rates closing the year at 8.0% based on the assumption of an orderly political process.

### Funding Rate and Banco de México Instruments



Source: BBVA Bancomer with Banco de México data

### Spread between Mexican and U.S. Rates Bank funding rate minus the Fed rate, basis points



Source: BBVA Bancomer with Banco de México and Federal Reserve data

## 10-year Interest Rates



## 2005-2006 Scenario: Interest rates %, end of period

	Base		Downtrend	
	BF	M10	BF	M10
4th. qrtr. 2005	8.75	8.7	8.5	8.5
1st. qrtr. 2006	8.75	8.8	8.0	8.1
2nd. qrtr. 2006	8.75	9.4	8.0	8.7
3rd. qrtr. 2006	8.25	9.1	7.5	8.4
4th. qrtr. 2006	8.00	8.7	7.0	8.0
2005 (average)	9.30	9.4	9.3	9.4
2006 (average)	8.40	9.0	7.8	8.2

BF Bank funding rate and 10-year M10 Bond yield  
Source: BBVA Bancomer estimates

In the long segment of the curve, the M10 rate will mainly be determined by international liquidity conditions (especially in relation to the 10-year bond in the United States) and the performance of projected inflation. In our central scenario, M10 rates will end the year at close to their current levels (near 9%) and will remain in a narrow range of between 9.4% and 8.7% throughout 2006. As a result, the yield curve would be flat, similar to what might occur in the United States.

## The most probable trend is toward lower interest rates

To date, we cannot rule out the possibility that international liquidity will remain high for a longer period of time—either due to moderate increases in U.S. rates or spurred by the resources generated by oil prices—which, in turn, sustains a strengthened peso and allows “accommodating” greater declines in bank funding rates without significant foreign exchange repercussions (see article on the exchange rate on page 24). Simultaneously, lower bank funding levels will be seen in the event of a greater convergence of inflation in the context of an orderly pre/post-electoral process and a solid “macroeconomic armor plating”, or, perhaps, due to a greater economic downturn (GDP growth toward 2%).

With this scenario, to which we assign a lower probability, bank funding rates could diminish to 8.5% and 7.0% at the close of 2005 and 2006, respectively (a range in which we estimate that neutral interest rates in Mexico could be found). At the same time, if this were accompanied by a continuation of the current high international liquidity, this would translate into lower long-term rates (with M10 yields closing 2005 and 2006 at 8.5% and 8%, respectively).

We feel that at the present time, the risk of higher short-term rates is more limited and could only be sparked by an important reversal in inflationary trends, a strong increase in political risk, and an abrupt adjustment in international liquidity, or the perception of a sharp loss in Mexico’s competitiveness. These latter factors could unleash a strong depreciation of the peso.

## Recent Determinants of the Yield Curve in Mexico

### Performance and Determinants

The slope of the yield curve in Mexico has shown continuous decreases in 2005, to the point where the spread between the rates of 10-year Bonds and 28-day Cetes stood at -0.52 bp at the end of the 3Q05. This trend has generated various interpretations with respect to the factors behind the structure of interest rates, the information that it contains and the possible reaction due to a change in the domestic and/or international economic environment.

In this respect, the performance of the curve can be attributed to: (1) the central bank's restrictive policy (prolonged for 13 months through August 2005) which had a greater response to a rise in the short segments of the curve; (2) the expected drop in inflation that was incorporated first of all in medium-term interest rates; (3) high international liquidity, which implied the entry of foreign investors to long segments of the curve and, therefore, to decreases in the 10-year bond rates (2Q05), supported by the purchasing demand of the Afores; (4) the economic slowdown in the first part of the year; and, (5) the drop in the risk measurements (EMBI+), which favors the displacement of the curve.

### What is the importance of each factor?

In order to explore this response it is useful to develop multi-varied models as a reference of the recent performance of the curve<sup>1</sup>. The results suggest the great importance of the international liquidity, measured through the slope of the curve in the U.S., to explain the deviations of the Mexican curve to its estimated levels. In addition to its **high contribution to explaining the curve in Mexico (between 33.6% and 39.2%)**, the effects of the international liquidity are the ones lasting the longest among the identified factors. Similarly, **inflation increasingly contributes** to the variations in the curve, explaining up to 39.2% at the end of three months (see table). However, the variations in the sovereign risk (EMBI+) tend not only to displace the whole yield curve but also to adjust its slope gradually: it explains up to 16% six months after the thrust. For their part, the monetary shocks (measured as the change in the bank funding rate) are the most important in explaining the slope of the curve in Mexico (it explains 40.6% the first month); however, its importance is diluted quickly over time.

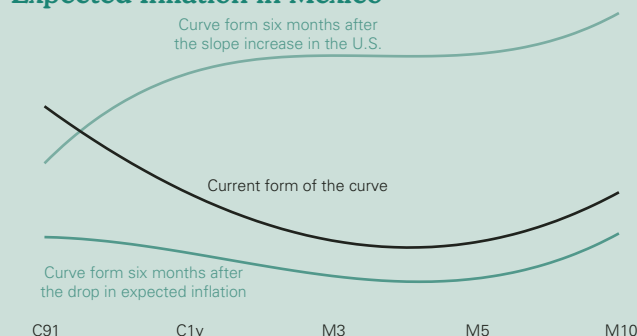
### Contribution to the Changes in the Slope of the Mexican Curve % of share

Months	Slope U.S.*	EMBI	Industrial production	NCPI	Exch. rate	BF	Slope Mexico*
1	35.5	0.9	1.8	1.4	7.5	40.6	12.3
2	39.2	1.9	0.8	30.6	3.1	19.1	5.3
3	33.6	1.6	1.9	39.2	2.7	15.8	5.1
6	38.7	16.1	5.3	23.1	4.1	8.7	4.1
12	34.7	16.0	12.8	20.3	5.2	7.4	3.5

\* Slope of the curve similar to the 10-year Bond rate minus one month  
Model of error correction VAR (2001-2005), variables by order of exogeneity

While this stimulus turns out to be short-lived individually, it should be recalled that since June 2004, 12 increases have been registered (and two recent decreases), which implies its importance in the explanation of the current rate structure. The other variables that could have an influence on the curve (activity and exchange rate) have made less of a contribution to the slope of the curve.

### Trend in the Rate Structure after Slope Increase Stimuli in the U.S. and Lower Expected Inflation in Mexico



Note: Stimuli of +0.24 pp in the U.S. slope and -0.05 pp in Mexico inflation  
Source: Own estimates with data from Bloomberg

### Stimulus-Response of the Mexican Curve

Based on this model, we simulate the stimulus that a decrease could generate on international liquidity and on the expected inflation on the yield curve. Independently of the magnitudes, both events would cause the curve to gradually recover its positive slope, even if it continues to be relatively flat. In particular, should the slope increase in the U.S. in 2006, we would be witnessing more important adjustments in the long segment of the curve in Mexico than in the short segments, while the drops in the expected inflation would favor greater descents in terms of up to one year. That is, a trend toward a positive yield curve.

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<sup>1</sup> Error Correction Models developed in Edelberg, W. and D. Marshall, "Monetary policy shocks and long-term interest rates", Economic Perspectives, Federal Reserve Bank of Chicago (1996).

### Annual Volatility of the Daily Variations of the Exchange Rate

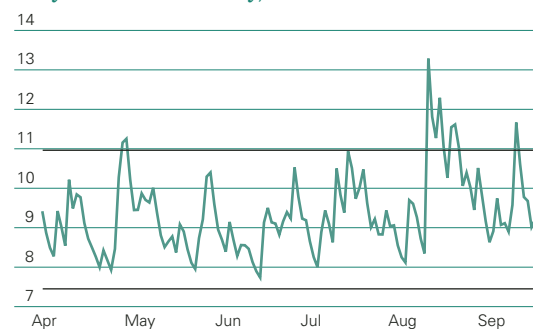
Annualized rate



Source: BBVA Bancomer with Banco de México data

### Daily Uncertainty of the Exchange Rate

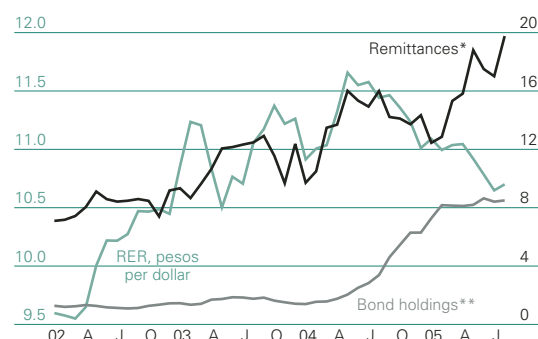
Daily estimated volatility, annualized rate\*



\* GARCH Models

Source: BBVA Bancomer with Banco de México data

### Real Exchange Rate (RER), Remittances and Bond Holdings



\* Remittances flow, billions of dollars / 100

\*\* Bond holdings by foreigners, % of total

Source: BBVA Bancomer with Banco de México data

### The exchange rate within a different monetary context

The peso has been distinguished as being one of the most stable currencies, not only among the emerging markets but also with respect to other "strong" currencies such as the euro and the yen. In fact, so far this year, the annual volatility<sup>1</sup> of the peso/dollar exchange rate is the lowest since the end of 1994, when the current free-float foreign-exchange regime was adopted. However, since the beginning of August, the foreign exchange market began to feel a possible change toward laxity in the monetary cycle in Mexico, at the same time that a rising process in U.S. federal funds continued, generating expectations (met, for the time being) of a reduction of the short-term interest rate differential with the U.S. That is, a narrowing of the premium to the investor. The rise in volatility observed in August and September has been significant, although it is still at very moderate levels.

### The performance of the exchange rate continues to reflect the intense entry of flows

On the one hand, the excess liquidity at an international level has impeded a greater adjustment in U.S. long-term interest rates, which according to a historic pattern, would have been produced in that country in face of a rallying period of the federal funds rate. This has led to the generation of surplus resources that have been directed to the emerging markets. The combination of a greater profitability of bonds in Mexico and a country-risk perception at historic lows continues to be an attraction for investment in the domestic market. The financial and macroeconomic armor plating has boosted the development and issue of greater instruments denominated in pesos, has reduced the potential demand for dollars and has contributed to investor trust. Another factor of an international nature relates to the high prices of Mexican crude oil. The inflow from oil revenues now comes to US\$20 billion through August, 35.3% more than in the same period the previous year. These surpluses are converted into an accumulation of international reserves, which, together with sales transactions in dollars by the central bank (in order to avoid excessive accumulation) are pressuring toward the strengthening of the peso. To this must be added that, so far this year the flow of dollars, once again at historic records from remittances, is equivalent to US\$13 billion, an amount 18.1% higher than that of the first eight months of 2004 and a relatively high flow associated with Foreign Direct Investment.

In brief, it is clear that the momentum lived by the peso mainly corresponds to circumstantial factors that do not consider the perspective of a moderation in growth, nor the expectation of lower yields in the bond market (Ms), nor even the loss of competitiveness of Mexican products in the U.S. (even though the latter is not a problem, it is not of a foreign exchange nature (see box). The drops in the inflation differential with the U.S. are more than noted, and it will be difficult to see pronounced adjustments that would support an appreciation as a result of the price dynamics. In fact, although at low levels, the exchange rate has already reverted the trend of recent months as of the change of direction in monetary policy. To the extent that this will continue (and the interest rates rise in the U.S.) we expect a

1 Volatility measured by the daily variations of the peso in one year at an annualized rate.



moderate depreciation of the peso, which will depend on investors' appetite and on the performance of those capital flows.

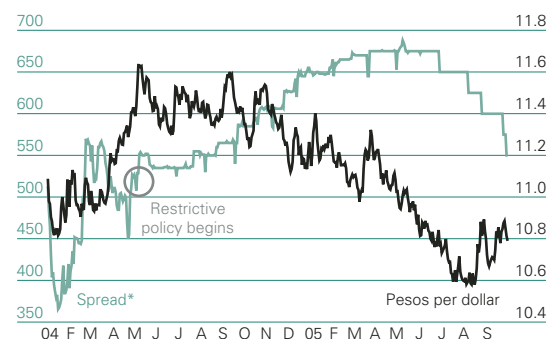
### Where is the peso heading? The outlook for 2005-2006

As per the base scenario, to which we assign a 65% probability, the exchange rate will trade at 11.0 and 11.6 pesos per dollar at the end of 2005 and 2006, respectively. We believe that, while the gradual decrease of the interest rate spread between Mexico and the U.S. continues and is accompanied by a progressive adjustment of the capital flows (as we expected) without this being a dramatic contraction of liquidity, the exchange rate will be moderately pressured. Expected economic growth for 2006 in this scenario is 3%. The strength of the depreciation is delimited due to the fact that, on the one hand, inflation represents a lower risk and will decrease moderately toward the end of 2005 and 2006 (below 4%). Also, we do not foresee abrupt changes in the volatility of the peso as a result of the electoral process (similar to that seen in the year 2000).

On the other hand, if the enormous international liquidity is not reverted, and within this context, the appetite for risk that characterizes the current financial cycle continues, the peso could continue to show strength. In particular, this scenario considers that the interest rate differential continues to be attractive, be it as the result of a slow rise in the Federal Funds interest rates (in its case, an insufficient effect throughout the curve) and of a lower than expected downward adjustment in short-term interest rates in Mexico, or a combination of both. Under these circumstances, a greater appetite for risk is maintained (the search for profitability remains). In addition, the macroeconomic armor plating protection acquires greater relevance in risk weighting and the political risk and perception is minimized (an orderly and stable transition exists). High oil prices are an additional source of liquidity, and there is an accelerated downward adjustment of core inflation, clearly toward 3%. The peso level considered in this scenario for the end of 2005 and 2006 is of 10.8 and 11.0 ppd respectively, with a probability of 20%.

Now, this scenario is not the only alternative. There are factors of uncertainty that could detonate and have a bearing on a greater-than-expected adjustment of the peso. Although for the moment there is lower probability for these factors (15%), we do not rule out that they will increase in 2006, particularly because the current risk perceived by investors is influenced, to a large extent, by low profitability in other parts of the world. In this bias, (11.30 and 12.60 ppd for 2005 and 2006, respectively), we believe there is a possibility that there will be a liquidity shock and a potential flight to quality. There are various elements that could motivate a possible reduction of liquidity such as, for example, doubts about maintaining the deficits in the U.S., the risk of a potential recession and an inflation rise in the U.S. Moreover, we cannot rule out that the loss of competitiveness might worsen and there might be a greater economic slowdown in Mexico led by the foreign sector, which would include a moderation in domestic demand. Insofar as the lower strength in the export sector continues and domestic demand continues to be the driving force behind low economic growth, pressure on the trade deficit could intensify. Finally, all of these elements could worsen the political scenario, which by itself presents a greater risk in this scenario.

### Exchange and Interest Rates



\* Short-term interest rate spread with the U.S., basis points  
Source: BBVA Bancomer with Banco de México and Federal Reserve data

### Exchange Rate Scenario

Pesos per dollar

	Base (65%)	Super peso (20%)	Risk (15%)
3rd. quarter 2005	10.75	10.60	10.90
4th. quarter 2005	11.00	10.80	11.30
1st. quarter 2006	11.10	10.80	11.50
2nd. quarter 2006	11.50	11.00	11.90
3rd. quarter 2006	11.30	10.88	12.40
4th. quarter 2006	11.60	11.00	12.60

\* Variation 2005 - 2004  
Source: BBVA Bancomer with Banco de México data



## Exchange Rate Determinants and Macroeconomic Adjustment

In a free-float regime, the exchange rate, as any financial variable, should reflect market conditions. In Mexico's case, the question is whether the fluctuations in the exchange rate are a factor of macroeconomic instability or whether they have been an element of adjustment to the changes in the economic fundamentals of recent years. In this box, an exercise is made that allows discerning a response to these questionings, in particular, the foreign exchange determinants.

### What role has the exchange rate played in the economy?

While it is complicated to link foreign exchange movements to the fluctuations in macroeconomic variables in a model (GDP, inflation, rates), the methodology of self-regressive vectors (VAR, its Spanish initials) (reduced and structural) has allowed grasping the implicit dynamics among all these variables.<sup>1</sup> In this case, we estimate a VAR error correction model that allows understanding the interaction throughout time between the peso and its possible determinants, as well as the long-term ratio that best adjusts the estimate. The VAR incorporated, in order, the monthly series of industrial activity, the inflation differential between Mexico and the U.S., the exchange rate, short-term interest rates, the stock exchange price index and security listings and one-year Cetes.<sup>2</sup> The estimated long-term component takes into account the relationship between the peso, and interest rate and inflation rate spreads. The analysis period includes monthly information from January 2001 to August 2005. As per the results (see table), the peso has been a variable that has served to absorb the adjustments of the economy, as well as the differences in monetary policy decisions between Mexico and the U.S.

### What explains the Performance of the Peso?

% change, VAR error correction model, 2001-2005\*

	Economic activity	Inflation differential	Interest rate spread	Exchange rate
6 months	15.0	15.6	24.0	35.0
1 year	17.5	17.3	22.0	33.0

\* The percentages do not add up to 100, since the model includes other non-explicit variables

We estimate that the short-term interest rate differential is the main determinant of the peso and helps to explain its variations between 22% and 24% throughout a one-year

period. The effect on the exchange rate level depends on the origin of the shock that either reflects the incidence of the spread in bonds profitability, which, in turn, alters capital flows, or the rate differential incorporated expectations of the future performance of the exchange rate, which affects the exchange rate observed. Economic activity and the inflation differential jointly contribute 34.8% of the forecasting errors (in similar magnitudes: 17.5% and 17.3%, respectively). Economic growth generates greater demand due to real balances, which tends to appreciate the currency and, on the other hand, in accordance with purchasing power parity, higher domestic prices have to be offset with a higher exchange rate, and, thereby, maintain equilibrium in the international market—the law of one sole price. The situational variables omitted in the model (oil, remittances, etc.) should be emphasized, and/or speculative factors explain a large part of the exchange rate variations (33%), measured through error in the model.

On the other hand, there is no evidence that the arbitrary shocks in the exchange rate are the source of the imbalances in the economy. In the following table, we can see that its contribution to the forecasting errors (of inflation and growth) is quite low.<sup>3</sup> This implies that the peso is an element that on average has offset the various economic shocks and does not seem to be causing them.

### Contribution of the Exchange Rate to the Forecasting Error in Inflation, Growth and Interest Rate Spread

% change, VAR error correction model, 2001-2005\*

	Economic activity	Inflation differential	Interest rate spread
6 meses	0.44	2.5	14.0
1 año	0.85	2.9	16.0

\* The percentages do not add up to 100, since the model includes other non-explicit variables

In brief, we can conclude that the current exchange rate regime has contributed to the macroeconomic adjustment process, and its fluctuations correspond to changes in the fundamentals. Monetary policy decisions are an important factor in the variability of the peso. However, this variability has not generated any additional movements in the exchange rate that would add economic imbalances.

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1 Clarida, R. and Gali, J. (1994), Eichenbaum, M. and C. Evans (1995), Cobham (2002).

2 The number of lags for the whole sample is five. Akaike and Schwarz's criterion was used, as well as the LR, adjusted.

3 Due to the marked simultaneity existing between interest rate and exchange rate differentials, the exchange rate order was changed (at the end of the VAR). The percentages to the forecasting error were not substantially modified.

## International Capital Flows to Mexico

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In accordance with a classical vision of economic development, private financial resources flow from developed and capital intensive countries where investment opportunities are more limited and therefore greater savings are available, to developing economies with growth potential and high expected returns. Indeed, developing countries can absorb considerable resources as a result of the strengthening of the domestic demand necessary to finance investment. These flows can be channeled either as foreign direct investment (FDI), with the resources earmarked for purchasing or creating companies or obtaining an equity share in them or as portfolio investment in the financial markets. Given their importance for the country's development, this article will provide a detailed analysis of the origin, development, and use made of these flows since the 1990s.

### Foreign direct investment (FDI) flows to Mexico

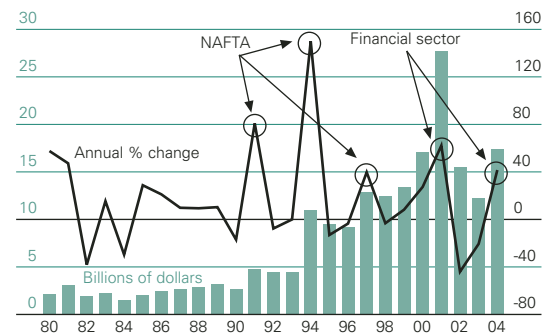
In the 1980s and 1990s, flows of foreign direct investment to Mexico were directly associated with the country's opening up to and integration with international trade and world economic activity. However, as of 2000, this trend began to show signs of exhaustion, which led to an important change in the origin and composition of the investment flows. From being focused predominantly in the manufacturing industry, investments began to be earmarked to a part of the services sector. In this process, even though the United States remained the main source of such investment, other countries significantly increased their percentage share.

### Trade as a factor boosting FDI in the manufacturing sector

During the first half of the 1980s, investment flows to the country remained relatively stable, averaging around 2 billion dollars annually. Mexico's entry into the General Agreement on Tariffs and Trade (GATT) (today known as the World Trade Organization, WTO) in 1986, marked the first strong boost to investment. During the second half of the decade, investment flows increased to 2.7 billion dollars, a 35% rise. However, the main factor spurring foreign investment to Mexico was the North American Free Trade Agreement (NAFTA). Even before the agreement entered into force (1994), investment flows began to rapidly increase in response to the structural reforms, and between 1990 and 1994 the amount of FDI doubled compared to levels registered between 1985 and 1989, and again doubled in the 1995-1999 period (see chart).

Once NAFTA came into force, although investments flowed to all sectors of the economy, they were especially concentrated in manufacturing, which received up to 62% of the total between 1995 and 1999. Within manufacturing, the machinery and equipment division was the main recipient, with 50% of the total; other branches with the highest growth in investment flows were the automotive and electric and electronic appliances industries. The food and beverages division was second in importance in terms of overall investment and enjoyed a strong growth rate, with average annual rates of 73% in the same period. A good part of the investment in manufacturing was channeled through maquiladoras (in-bond manufacturing companies for export purposes), which became the main source of employment in the country's northern border with the United States, in industries such as textiles, electric and electronic appliances, and auto parts. Mexico's industrial integration with the United States was unquestionably the main stimulus for foreign direct investment flows.

### Foreign Direct Investment in Mexico



Source: BBVA Bancomer with Banco de México data

### Foreign Direct Investment in Mexico Flows accumulated in the period

	Billions of dollars	% change
1980-1984	10.8	
1985-1989	13.1	21.1
1990-1994	27.1	107.6
1995-1999	57.4	111.3
2000-2004	89.9	56.7

Source: BBVA Bancomer with Banco de México data

### Origin of FDI in Mexico

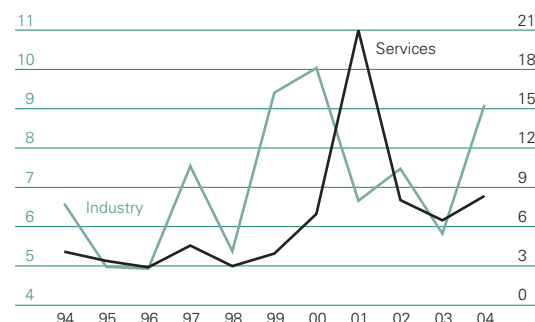
	Millions of dollars		% share	
	1995-1999	2000-2004	1995-1999	2000-2004
<b>Total</b>	<b>50,047</b>	<b>92,432</b>	<b>100.0</b>	<b>100.0</b>
U.S.	30,785	57,532	61.5	62.2
Spain	1,839	12,011	3.7	13.0
Netherlands	3,743	7,214	7.5	7.8
Canada	1,791	2,448	3.6	2.6
Switzerland	484	2,162	1.0	2.3
Germany	2,125	1,733	4.2	1.9
France	606	1,237	1.2	1.3
Japan	1,986	1,047	4.0	1.1
Denmark	303	932	0.6	1.0
Italy	111	254	0.2	0.3
Other	6,274	5,862	12.5	6.3

\* Accumulated flows

Source: BBVA Bancomer with Banco de México data

## Foreign Direct Investment

Billions of dollars



Source: BBVA Bancomer with Banco de México data

In 2000, foreign direct investment flows to Mexico earmarked for manufacturing activities reached a record level, and from that point on, began to decline. The average annual growth in FDI flows to this sector in the 2000-2004 period was only 4% (vs. an average of 15% between 1995 and 1999).

Three factors contributed to this process. First of all, there was the entry of new players in the trade environment. With China's entry into the WTO in 2001, the advantages of NAFTA for Mexican exports began to rapidly decline. An agreement between the United States and Central America in relation to the textile trade further reduced Mexico's attractiveness. In addition, the number of maquiladoras reached their maximum level in 2001 and began to decline from that point on. Furthermore, the economic downturn in the United States between 2000 and 2001 significantly affected imports of fixed assets by the maquiladoras, which might have represented as much as 15% of total annual investment flows<sup>1</sup>.

Finally, this process picked up steam due to Mexico's loss of competitiveness. Following the strong growth in the country's competitiveness after NAFTA was signed due to the tariff agreements and Mexico's geographical proximity to the United States, further progress has not been made in the pending second generation reforms in labor, fiscal and energy legislation, to mention the most important. The absence of such reforms, among other factors, has translated into a loss of competitiveness for Mexico, which between 2000 and 2004 went from 70<sup>th</sup> to 93<sup>rd</sup> place in the scale of competitiveness of the World Economic Forum<sup>2</sup>.

### The rise in services replaced trade

This reduced attractiveness of the manufacturing industry for foreign direct investment was offset by a growing channeling of such

- 1 Estimates of the Ministry of the Economy. See Quarterly Report on Foreign Investment at [www.economia.gob.mx](http://www.economia.gob.mx).
- 2 Scale extended to 100 countries. Source: World Economic Forum.

## Channeling of Foreign Direct Investment in Mexico

	Millions of dollars*		Average annual % change		% share	
	1995-1999	2000-2004	1995-1999	2000-2004	1995-1999	2000-2004
<b>Total</b>	<b>50,047</b>	<b>89,898</b>	<b>11.2</b>	<b>13.2</b>	<b>100.0</b>	<b>100.0</b>
<b>Manufacturing</b>	<b>31,136</b>	<b>36,402</b>	<b>14.9</b>	<b>4.0</b>	<b>62.2</b>	<b>40.5</b>
Metal prods., machinery, and equip.	15,605	17,642	33.9	-2.6	31.2	19.6
Chemicals, oil deriv., rubber & plastic	4,715	5,952	18.4	45.4	9.4	6.6
Food, beverages and tobacco	5,880	5,569	73.6	4.8	11.7	6.2
Other manufactured products	3,652	5,561	19.3	1.3	7.3	6.2
Non-metallic minerals	388	1,042	244.7	102.8	0.8	1.2
Basic metals	897	636	63.6	-30.5	1.8	0.7
<b>Services</b>	<b>9,023</b>	<b>37,813</b>	<b>6.4</b>	<b>58.6</b>	<b>18.0</b>	<b>42.1</b>
Financial, insurance, and bonds	4,036	29,429	-7.6	262.9	8.1	32.7
Professional, technical, and specialized	1,556	3,297	45.5	-9.2	3.1	3.7
Other services	1,634	2,101	41.7	-9.3	3.3	2.3
Restaurants and hotels	1,372	2,058	42.1	13.2	2.7	2.3
Real estate	426	928	24.6	16.5	0.9	1.0
<b>Others not specified</b>	<b>9,888</b>	<b>15,683</b>	<b>9.2</b>	<b>95.7</b>	<b>19.8</b>	<b>17.4</b>

\* Accumulated flows  
Source: BBVA Bancomer with Banco de México data

flows to the services sector, especially to activities in the financial field. Between 2000 and 2004, investment flows channeled to the services sector quadrupled, from 9 billion to 38 billion dollars. Key in this regard were purchase operations by the country's main financial institutions, with close to 76% of the investments to the sector being earmarked for such purposes.

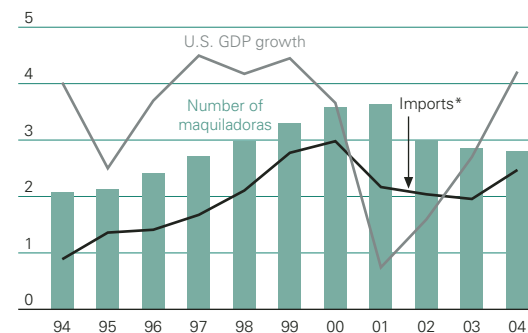
Although the United States continued to be the main source of FDI, with a percentage share higher than 60% in both periods (1995-1999 and 2000-2004), significant changes occurred with other countries. Specifically, Spain increased its share of the total, from 4% to 13%, while Germany and Japan saw their percentage reduced, from levels of 4% to 2% and 1.1% respectively.

### The performance of investment flows in the financial markets

Since the 1990s, three general major stages can be identified in the performance of financial flows to Latin America and specifically to Mexico. The 1990-1994 period was characterized by the presence of substantial investment flows supported by expectations of high profitability based on the reforms undertaken at the time, particularly with NAFTA entering into force. The period between 1995 and 2002 was characterized by a substantial reduction in such flows to the emerging markets. And the most recent period, between 2003 and 2005, experienced very favorable trends, with flows to both the industrialized nations as well as to emerging markets, although not reaching the levels registered between 1995 and 2002. In the 2003 to 2005 period, contrary to what occurred in the past, investment has flowed from emerging markets (in Asia) and from Japan, to developed economies (United States). Latin America is, once again, a recipient of surplus international flows sparked by macroeconomic imbalances, although this time they do not originate in the domestic economies.

The greatest volume of capital flows to the financial markets was registered before the 1990s, when such resources came to represent more than 50% of the money market, equivalent to 7% of GDP. Foreign portfolio investment represented 12.5% of the economy as a whole. These flows were based on expectations of high profitability. In the money market such resources were invested in federal government instruments

### Maquiladora Industry

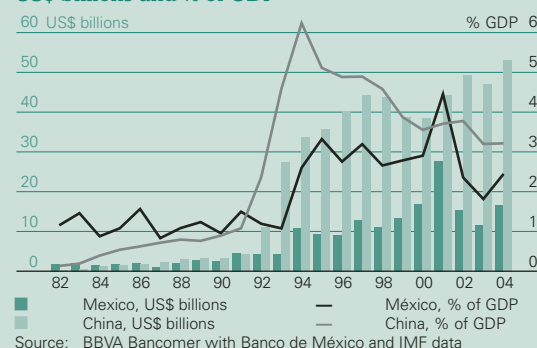


\* Imports of fixed assets, billions of dollars  
Source: BBVA Bancomer with Banco de México data

## In Context: Comparison with China

In the 1980s and in the early 1990s, investment flows to Mexico were similar to those of China. However, as a result of the reforms undertaken by that country as of 1992, aimed at expanding investment possibilities for the private sector in the economy, investment flows rose by more than 40 billion dollars in the course of the 1990s. For Mexico, the maximum amount of investment in this same period was 13 billion dollars. In both economies, FDI flows as a percentage of the size of the economy have decreased gradually, although in the case of China, it is the result of the rapid expansion rate of the economy, while for Mexico it reflects the lower amounts of investment. As of 2001, if operations of the financial sector are excluded, investment flows to Mexico were on the decline, in contrast to the situation in China, where they were constantly on the rise.

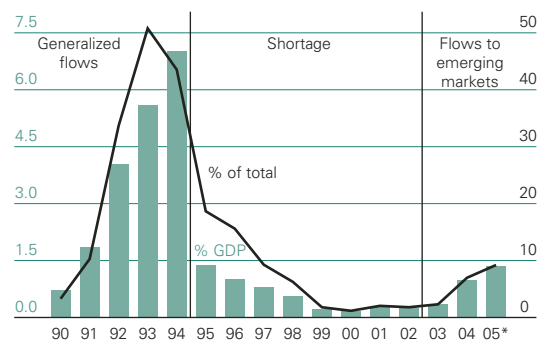
### Foreign Direct Investment US\$ billions and % of GDP



Source: BBVA Bancomer with Banco de México and IMF data

### Balance of Foreign Investment in Public Debt

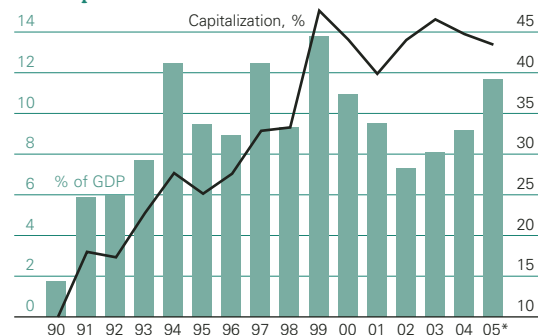
End of period



\* Figures through July  
Source: BBVA Bancomer with Banco de México data

### Balance of Foreign Investment in the Stock Exchange

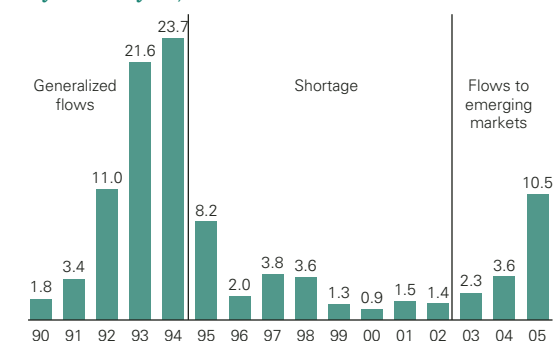
End of period



\* Figures through July  
Source: BBVA Bancomer with Mexican Stock Exchange (BMV) data

### Balance of Foreign Investment in Public Debt

July of each year, billions of dollars



Source: BBVA Bancomer with Banco de México data

offering a semi-fixed exchange rate, and a yield that was higher than similar securities abroad (given low interest rates in the United States and assuming the foreign-exchange risk). When doubts began to arise regarding the sustainability of the foreign exchange régime, these securities were replaced with dollar-denominated instruments, known as Tesobonos. In the case of stock market investment, the rationality behind the flows was based on NAFTA entering into effect, which offered the potential of profitability given the increase in the trade flows.

Following the 1994 crisis and during the next seven years, financial flows into the country were marked by rather erratic behavior, although on the whole, their performance could be characterized as moderate. The risk aversion derived from the crises in emerging markets, first in Russia and later in a generalized fashion in Asia, and the increase in international interest rates were elements that reduced the attractiveness of investing in emerging markets. It was not until 2003 when an important amount of foreign resources returned to the country, mainly to the money market, and this trend has not been reversed in the intervening years. Foreign investment flows in the money market totaled 900 million dollars in that year, considerably higher than 2002 levels. By 2004, such resources topped 5 billion dollars. In July 2005, the accumulated investment flows totaled 3 billion dollars while the balances through that month reached 10.5 billion, almost three times as much as one year before.

At present, the spread between Mexican and U.S. interest rates is a decisive factor in the performance of FDI flows. However, it is not the only element. Such flows are also tied to the need to build up a securities portfolio in emerging markets that includes Mexican instruments, given the low country risk perception<sup>3</sup>. Furthermore, temporary factors have come together on an international level that have led to excess liquidity in search of profitability, which has found its place in the emerging markets. Whatever the motivation might be, it is possible to obtain yields higher than those offered on similar instruments in the United States and at a risk that, in a situation characterized by very reduced risk premiums, is tempting to international investors. Some can decide to accept the exchange risk and others to cover it with derivatives.

### Benefits and risks of the financial flows

The internationalization of the Mexican money and foreign-exchange markets is positive, both from the point of view of the financial markets as well as on a macroeconomic level. The entry of a greater number of participants into any market allows it a more orderly price formation and leads to greater liquidity. Evidence of this growth is the scope of the federal government bond market (M's) where both Mexican as well as foreign investors (who hold around 20% of the paper issued in this market) contribute to the strength of the debt market. Furthermore, this internationalization allows both public and private sector financial policies to be strengthened and be more flexible. An example of this is the expansion of the yield curve on government instruments, today available in maturities of up to 20 years and whose liquidity will continue to increase, given the Finance Ministry's recently announced debt placement plans.

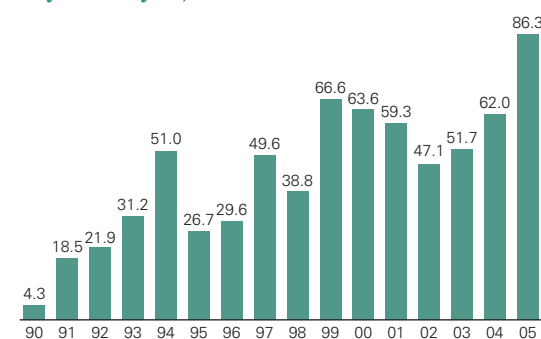
3 This was with the intention of duplicating a certain benchmark rate. The Lehman Brothers' Global Aggregate index modified the weight structure, and as of January 2005 has included long-term bonds, the M's. Their importance lies in that the bonds are denominated in local currency.



These benefits do not eliminate the elements of concern that could arise in the next few months in response to the projected upward trend in U.S. rates (that we expect will continue gradually and in contained fashion) and the election period in a large number of Latin American countries in 2006, and their possible impact on the vulnerability of these investment flows given changes in the environment. There is undoubtedly no point in exaggerating the concern and transferring historical experiences of the past to the current panorama without appreciating the changes that have reduced such vulnerability. The macroeconomic risks that the country faces today are much lower when compared to those of the past, and specially before the 1994 crisis. To begin with, the foreign exchange regime is flexible, which allows any demand for dollars to be channeled immediately, thus preventing pressures from accumulating. Also, not only the public deficit and the external accounts are on a healthy footing, but inflation is low and controlled within a reduced range. The amount of the investment flows is also different in relation to the size of the markets. Currently they represent 9.2% of total investment in the money market (5.5 times less than in 1994 and 1.3% of GDP) and 17% of the country's international reserves (from 32% to 300% from 1991 to 1994). Thus, the dependence on these resources is on a much more reduced scale than was the case in 1993 and 1994.

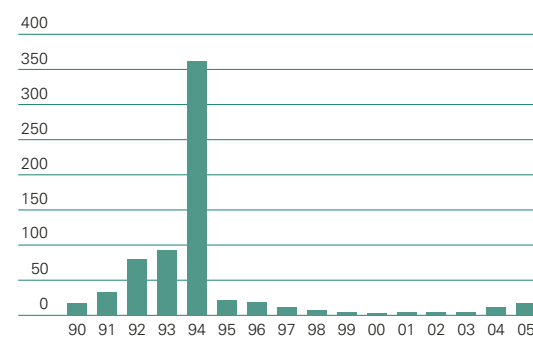
At the same time, we should not be complacent. The main domestic risk is the country's lack of attractiveness for foreign direct investment given its loss of competitiveness. The risk in this situation would be wanting to resolve it with a depreciation of the real exchange rate, which would not only generate higher inflation, but also (at least if this is were the only measure) would not allow gains in production in a context in which the problem is productivity and the loss of the country's attractiveness in relation to other more dynamic economies. This could pressure the balance of payments and raise the risk premium on financial assets, which would, in turn, lead to a migration of capital involving those investments most adverse to risk. Mexico should advance in its pending agenda of structural reforms in order to recover the investment levels of the 1990s. It is important to point out that the current cycle of capital flows has its mixed aspects. On the one hand, the financial sector is further developing and becoming modernized while the real economy is losing its comparative advantages (which inhibits FDI). Resolving this dilemma is the main challenge facing the Mexican economy.

**Balance of Foreign Investment  
in the Stock Exchange**  
July of each year, billions of dollars



Source: BBVA Bancomer with Banco de México data

**Balances of Foreign Investment  
in Public Debt**  
% of international reserves



Source: BBVA Bancomer with Banco de México data

## The Peso Becomes a Global Currency

The peso is a currency whose fortunes are on the rise, and is currently ranked number 12 in the world and accounts for 0.6% of global volume. It is the most liquid currency in Latin America with a volume 5 times greater than the Brazilian real and 10 times more than the Chilean peso. The reasons behind the greater trading volume in the Mexican peso can be attributed to the higher trade and financial flows. Specifically, the attractiveness of the peso is derived from the country's economic convergence with the United States and the growing importance of the currency's liquidity in both the Chicago Mercantile Exchange (CME) as well as the Mex-Der derivatives markets. This flexibility in trading, stability in peso-dollar parity, lower inflationary risks, minimum levels of country risk, and attractive investment grade, has boosted the Europeso market since April of this year. Different international institutions with high credit rating such as the Inter-American Development Bank (IDB) have placed peso-denominated debt with maturities of up to 10 years in overseas markets. This confirms both the attractiveness and interest in investing in pesos, as well as the new global scope of the currency, the latter factor thanks to its liquidity and stability. This new market will surely generate greater coverage instruments that further strengthen the peso's stability and that that could be used in other emerging markets that have a high correlation with the Mexican peso.

**Historical Europeso Volume Placed  
Accumulated, billions of pesos**



Source: BBVA Bancomer with Banco de México data



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005*
<b>Foreign Direct Investment by Sector of Activity</b>												
<b>Millions of dollars</b>												
Total	10,661.7	8,348.4	7,837.2	12,081.4	8,366.2	13,414.0	17,077.5	27,687.2	15,476.8	12,279.0	17,377.4	5,963.8
Agriculture	10.8	11.1	33.4	10.0	29.1	82.5	91.6	49.6	-0.8	-3.7	-45.8	2.0
Industry	6,580.2	4,971.3	4,925.3	7,533.6	5,369.8	9,405.4	10,034.7	6,652.9	7,468.2	5,818.4	9,097.8	3,611.0
Mining	97.8	79.1	83.8	130.3	49.2	128.1	164.0	22.3	226.5	78.6	130.9	34.6
Manufacturing	6,207.6	4,858.3	4,814.9	7,287.7	5,159.3	9,015.7	9,564.7	6,210.0	6,623.2	5,351.2	8,652.9	3,365.3
Electricity	15.2	2.1	1.1	5.2	25.1	150.3	134.0	324.3	386.8	322.1	197.7	186.4
Construction	259.6	31.8	25.5	110.4	136.2	111.3	172.0	96.3	231.7	66.5	116.3	24.7
Services	4,070.7	3,366.0	2,878.5	4,537.8	2,967.3	3,926.1	6,951.2	20,984.7	8,009.4	6,464.3	8,325.4	2,350.8
Retail trade	1,251.3	1,011.6	746.5	1,838.8	1,018.3	1,383.7	2,387.2	2,218.9	1,617.5	1,201.3	1,164.2	1,345.1
Transportation	719.3	876.3	428.0	681.5	436.6	231.0	-2,159.8	2,771.4	809.2	1,669.8	1,242.3	881.7
Financial services	941.5	1,066.1	1,215.5	1,103.8	728.5	760.5	4,769.8	14,405.9	4,495.2	2,043.2	5,257.1	-221.4
Other services	1,158.6	412.0	488.5	913.7	783.9	1,550.9	1,954.0	1,588.5	1,087.5	1,550.0	661.8	345.4
<b>% share</b>												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	0.1	0.1	0.4	0.1	0.3	0.6	0.5	0.2	0.0	0.0	-0.3	0.0
Mining	0.9	0.9	1.1	1.1	0.6	1.0	1.0	0.1	1.5	0.6	0.8	0.6
Manufacturing	58.2	58.2	61.4	60.3	61.7	67.2	56.0	22.4	42.8	43.6	49.8	56.4
Electricity	0.1	0.0	0.0	0.0	0.3	1.1	0.8	1.2	2.5	2.6	1.1	3.1
Construction	2.4	0.4	0.3	0.9	1.6	0.8	1.0	0.3	1.5	0.5	0.7	0.4
Retail trade	11.7	12.1	9.5	15.2	12.2	10.3	14.0	8.0	10.5	9.8	6.7	22.6
Transportation	6.7	10.5	5.5	5.6	5.2	1.7	-12.6	10.0	5.2	13.6	7.1	14.8
Financial services	8.8	12.8	15.5	9.1	8.7	5.7	27.9	52.0	29.0	16.6	30.3	-3.7
Other services	10.9	4.9	6.2	7.6	9.4	11.6	11.4	5.7	7.0	12.6	3.8	5.8

### Foreign Direct Investment by Country of Origin

<b>Millions of dollars</b>												
Total	10,661.7	8,348.4	7,837.2	12,081.4	8,366.2	13,414.0	19,569.3	27,687.2	15,476.8	12,321.1	17,377.4	5,963.8
United States	4,981.3	5,493.2	5,274.8	7,384.9	5,466.4	7,166.0	12,154.7	21,406.7	9,838.4	6,758.2	7,373.8	4,519.0
Spain	145.7	49.8	74.0	328.5	344.6	1,042.1	2,094.1	689.1	670.7	1,712.7	6,844.6	644.6
Switzerland	53.8	200.2	83.0	26.7	48.5	125.2	151.3	130.2	428.1	309.8	1,142.3	32.7
Canada	740.7	170.2	542.2	240.1	215.2	623.3	668.5	988.4	188.8	223.1	379.2	156.9
Germany	307.5	548.6	201.4	483.8	137.3	754.3	345.8	0.0	586.7	444.4	356.5	82.4
Netherlands	757.6	744.7	493.3	349.7	1,071.2	1,084.3	2,586.7	2,589.5	1,168.7	592.0	276.6	168.1
Japan	631.3	155.8	143.9	353.1	100.0	1,232.7	416.9	184.9	157.2	122.0	165.7	6.5
Italy	2.7	10.5	18.5	29.4	17.4	35.2	35.5	17.5	35.8	0.0	165.5	5.7
France	90.5	125.9	124.0	59.8	127.8	168.1	0.0	397.9	263.9	434.0	141.3	73.4
Denmark	14.5	19.0	17.7	18.9	68.1	179.6	203.2	247.6	163.8	178.5	138.8	25.6
Other countries	2,936.1	830.5	864.4	2,806.5	769.7	1,003.2	912.6	1,035.4	1,974.7	1,546.4	393.1	248.9
<b>% share</b>												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
United States	46.7	65.8	67.3	61.1	65.3	53.4	62.1	77.3	63.6	54.9	42.4	75.8
Spain	1.4	0.6	0.9	2.7	4.1	7.8	10.7	2.5	4.3	13.9	39.4	10.8
Switzerland	0.5	2.4	1.1	0.2	0.6	0.9	0.8	0.5	2.8	2.5	6.6	0.5
Canada	6.9	2.0	6.9	2.0	2.6	4.6	3.4	3.6	1.2	1.8	2.2	2.6
Germany	2.9	6.6	2.6	4.0	1.6	5.6	1.8	0.0	3.8	3.6	2.1	1.4
Netherlands	7.1	8.9	6.3	2.9	12.8	8.1	13.2	9.4	7.6	4.8	1.6	2.8
Japan	5.9	1.9	1.8	2.9	1.2	9.2	2.1	0.7	1.0	1.0	1.0	0.1
Italy	0.0	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.0	1.0	0.1
France	0.8	1.5	1.6	0.5	1.5	1.3	0.0	1.4	1.7	3.5	0.8	1.2
Denmark	0.1	0.2	0.2	0.2	0.8	1.3	1.0	0.9	1.1	1.4	0.8	0.4
Other countries	27.5	9.9	11.0	23.2	9.2	7.5	4.7	3.7	12.8	12.6	2.3	4.2

### Foreign Direct Investment by Sector of Activity

<b>Millions of dollars</b>												
Total	10,661.7	8,348.4	7,837.2	12,081.4	8,366.2	13,414.0	17,077.5	27,687.2	15,476.8	12,279.0	17,377.4	5,963.8
Manufacturing	6,207.6	4,858.3	4,814.9	7,287.7	5,159.3	9,015.7	9,564.7	6,210.0	6,623.2	5,351.2	8,652.9	3,365.3
Food, beverages, and tobacco	1,809.4	651.2	502.2	2,952.9	731.9	1,041.6	1,201.0	993.3	1,345.3	909.3	1,120.1	567.5
Metal prod, machinery, and equip.	1,888.9	2,892.8	2,212.5	2,757.1	2,344.0	5,398.1	4,475.3	3,395.2	2,940.9	2,756.6	4,074.1	1,993.8
Chemical, oil derivs, rubber & plastic	645.5	573.1	1,196.9	812.8	1,165.5	966.8	1,475.0	536.7	1,226.6	785.3	1,928.2	350.0
Non-metallic minerals	53.9	89.6	36.5	6.0	20.3	235.8	143.5	102.3	-81.2	76.0	801.7	-9.2
Basic metals	1,344.0	142.5	324.8	106.1	54.3	269.1	282.1	242.8	59.9	27.5	23.7	45.8
Other manufacturing ind.	465.9	509.1	542.0	652.8	843.3	1,104.3	1,987.8	939.7	1,131.7	796.5	705.1	417.4
Services	2,100.1	1,478.1	1,704.0	2,017.5	1,512.4	2,311.4	6,723.8	15,994.4	5,582.7	3,593.2	5,918.9	124.0
Real Estate	221.8	64.8	64.2	58.7	59.1	178.9	329.3	153.4	218.4	83.6	143.2	60.4
Professional, technical, & specialized	266.4	141.5	211.1	144.8	307.7	751.0	1,153.3	987.1	418.1	695.4	43.0	98.0
Financial, insurance, and bonds	715.5	951.8	1,110.9	969.5	625.7	378.5	4,343.8	14,010.6	4,237.9	1,843.8	4,992.8	-294.3
Restaurants and hotels	723.0	102.5	167.2	571.1	207.9	322.8	439.8	370.7	358.1	356.8	532.7	224.2
Other services	173.4	217.5	150.6	273.4	312.0	680.2	457.6	472.6	350.2	613.6	207.2	35.7
Others not specified	2,354.0	2,012.0	1,318.3	2,776.2	1,694.5	2,086.9	789.0	5,482.8	3,270.9	3,334.6	2,805.6	2,474.5

\* Accumulated flows through June  
Source: BBVA Bancomer with Banco de México data

## The Vote of Mexicans Living Abroad

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With 455 votes in favor, six against and six abstentions, on June 28, 2005, the Chamber of Deputies reformed the Federal Code of Electoral Institutions and Procedures (Cofipe for its initials in Spanish) so that Mexicans living abroad can vote in the coming presidential elections (the Senate had already approved this legislation). The 1996 electoral reform certainly recognized this right; however, its regulation had been the subject of prolonged parliamentary discussion. Undoubtedly, the consensus over this question achieved by the political parties, as well as the lobbying undertaken in Mexico by Mexicans residing in the USA, help to explain the passing of this long-delayed reform. On the other hand, the notable growth in remittances—which will amount to approximately US\$20 billion in 2005 and are Mexico's second source of foreign exchange—gives this group of citizens an influence that is impossible to ignore today.

Those benefiting from this law and who have a voter's card will be able to send, between October 1, 2005, and January 15, 2006, an application to the Federal Electoral Institute (IFE for its initials in Spanish) to be included in the Nominal List of Electors Residing Abroad. The IFE will then send them by mail, between April 20 and May 20, 2006, the corresponding ballots with which to vote, which must be posted back to that institution at the latest on June 30 of that year in order to be valid. Forty-eight hours after that date, the envelopes from abroad will be opened and the votes counted in order to be added to the final results of the July 2<sup>nd</sup> election. The responsibility for ensuring the success of this pioneering endeavor will depend not only on the IFE but also on the Mexican Postal Service.

About 70 countries worldwide recognize the right of their citizens to vote even when they are living abroad. In the American Continent, the USA, Canada, Brazil, Argentina, Colombia, Peru and Honduras are countries that have approved, regulated and held elections outside their national territory. In contrast to Mexico, none of the countries that allow a voting process outside their native land concentrates more than 95% of its residents abroad in a single nation with which it furthermore shares one of the longest borders. Currently and taking into account migration flows, more than ten million persons born in Mexico live in the USA and may, in theory, vote. However, the total number of potential voters is reduced to four million, since only those older than 18 may vote. They will also be required to have a voter's card issued by the IFE and to have an address in the USA, which could reduce the estimate of potential voters even more in the coming elections.

### What implications does this legislation have for the 2006 contest?

In spite of the understandable enthusiasm that the above-mentioned reform arouses, it is unlikely that the voting process by mail will involve four million people (equivalent to 5.6% of the national electoral census, although this figure will be affected by the effective level of participation in Mexico, which was 64% in the 2000 presidential contest). While interest in the elections could rise due to the coverage of the presidential campaign by the Spanish-speaking media in the USA, the approved legislation prohibits candidates from campaigning

### Mexican Population of Voting Age Resident Abroad in the Year 2000

	Number of inhabitants
<b>Abroad</b>	<b>9,904,000</b>
<b>In the United States (U.S.)</b>	<b>9,800,000</b>
Foreign service	420
Immigrants in the U.S. born in Mexico	7,126,000
Nationalized in the U.S.	1,000,000
Not naturalized	6,126,000
Born in the U.S. but of Mexican parents	2,674,000
Of both parents	1,472,000
Of mother	531,000
Of father	671,000
<b>In other countries</b>	<b>104,000</b>
Foreign service	740
Born in Mexico	76,000
Born abroad but of Mexican parents	27,000

Source: Calderón Chelius, Leticia, coordinator, *Votar en la Distancia: La Extensión de los Derechos Políticos a Migrantes, Experiencias Comparadas*, Instituto Mora, Mexico City, second edition, 2004

## Margins of Victory in Presidential Elections

	1st. place	2nd. place	Difference
1988	PRI	FDN	
%	50.4	31.1	19.3
Votes	9,687,926	5,843,679	3,844,247
1994	PRI	PAN	
%	50.1	26.8	23.3
Votes	17,181,651	9,146,841	8,034,810
2000	PAN	PRI	
%	42.5	36.1	6.4
Votes	15,989,636	13,579,718	2,409,918

Source: IFE and CIDAC

abroad. According to Alejandro Moreno, who carries out polls and is the author of a study on Mexican's values, 59% of immigrants living in the USA expressed an interest in voting (June 2003). Of this percentage, 25% were very interested and 34% somewhat interested. He pointed out that most of this sample refers to those people who have been living in the USA for less than 20 years, that is to say recent immigrants. In the case of Mexicans who have been there longer, not all of them are interested in voting.

### How will Mexicans living vote abroad?

There is very little information on the party preferences of this new segment of the electorate, and it is hard for those political parties who approved the legislation to know precisely what could occur outside Mexico. In the past, it was argued without concrete evidence that parties opposed to the PRI could benefit from the regulation of the vote of Mexicans living abroad. This assumption led in consequence to the PRD championing the extraterritorial vote, while the PRI adopted a cautious stance in this regard. It came to be believed —erroneously— that Mexicans who moved to the USA did so for political and not economic and social reasons. Specialists affirm that migration to the USA is motivated, to a large extent, by the more attractive salaries in that country, the capacity of its economy to absorb labor and the close links that Mexicans have with their countrymen on the other side of the border.

Moreno's study includes the results of a poll on the preferences of Mexican living in the USA with respect to political parties in Mexico. Of those consulted, 31% said they would vote for the PAN, 17% for the PRI and 8% for the PRD. On the other hand, 27% expressed no preference and 12% indicated they would not vote. This poll was taken two years prior to the approval of the postal vote for Mexicans living abroad. Other polls taken among Mexicans who have immigrated to the USA placed the PRI in first place. Neither can one ignore the fact that the PRD has been working for over a decade with Mexican organizations in the USA, which could give it far from negligible advantages. In contrast, organizational efforts by the PRI and the PAN have taken longer to develop.

### Valuation

The available information is not sufficient to reach definitive conclusions regarding the probable electoral behavior of Mexicans residing abroad, although it is reasonable to assume that the opinions they hold about parties and candidates do not essentially differ from those their countrymen express in Mexico. In a hard-fought contest, in which the winning candidate might defeat his main opponent by a narrow margin, the extraterritorial vote could take on some relevance. The legislation approved by Congress is a first step toward the extension of the vote to millions of Mexicans living abroad. It would have been unfair to expect the IFE to undertake a massive campaign to deliver a voting card to every Mexican living abroad barely 12 months before the election. In any case, the experience that the IFE will acquire with regard to the external vote will enable it to advance not only in extending this right (which in addition reinforces the ties of Mexicans living abroad with their homeland) but also to have a clearer picture of the preferences, requirements and concerns of those citizens who decided to move to another country.

## The Vote of Mexicans Abroad

Potential vote	% external participation	% national electoral census
4,000,000	100	5.6
3,000,000	75	4.2
2,000,000	50	2.8
1,000,000	25	1.4

Source: BBVA Bancomer based on information in national press

## United States Indicators and Forecasts

	III'04	IV'04	I'05	II'05	III'05	IV'05	I'06	II'06	2004	2005	2006
<b>Economic Activity</b>											
GDP (real annual % change)	3.8	3.8	3.6	3.6	<b>3.5</b>	<b>3.5</b>	<b>3.3</b>	<b>3.3</b>	4.2	<b>3.6</b>	<b>3.2</b>
Personal consumption expenditures	3.5	3.8	3.5	3.9	<b>3.6</b>	<b>3.2</b>	<b>3.3</b>	<b>2.7</b>	3.9	<b>3.6</b>	<b>3.0</b>
Gross fixed investment	9.3	9.4	9.4	8.0	<b>7.0</b>	<b>6.9</b>	<b>6.2</b>	<b>5.1</b>	9.7	<b>7.8</b>	<b>5.3</b>
Non-residential	9.3	10.9	10.3	9.2	<b>8.8</b>	<b>7.8</b>	<b>7.0</b>	<b>6.1</b>	9.4	<b>9.0</b>	<b>6.1</b>
Structures	1.9	2.8	3.1	1.7	<b>0.8</b>	<b>2.6</b>	<b>5.0</b>	<b>0.4</b>	2.2	<b>2.0</b>	<b>1.6</b>
Equipment and software	12.0	13.8	12.8	11.8	<b>9.7</b>	<b>7.9</b>	<b>6.1</b>	<b>6.0</b>	11.9	<b>10.5</b>	<b>6.5</b>
Residential	9.1	6.6	7.7	6.1	<b>4.4</b>	<b>5.9</b>	<b>5.5</b>	<b>4.1</b>	10.3	<b>6.0</b>	<b>4.0</b>
Total exports	9.0	6.1	6.7	7.7	<b>7.3</b>	<b>6.8</b>	<b>5.8</b>	<b>5.2</b>	8.4	<b>7.1</b>	<b>5.2</b>
Total imports	11.8	10.6	9.4	5.7	<b>6.0</b>	<b>5.0</b>	<b>4.8</b>	<b>4.3</b>	10.7	<b>6.5</b>	<b>4.5</b>
Government consumption	2.0	2.1	1.7	1.8	<b>1.6</b>	<b>1.6</b>	<b>2.0</b>	<b>2.0</b>	2.2	<b>1.7</b>	<b>2.0</b>
<b>Contribution to Growth (pp)</b>											
Personal consumption expenditures	2.5	2.7	2.5	2.7	<b>2.6</b>	<b>2.3</b>	<b>2.4</b>	<b>1.9</b>	2.7	<b>2.5</b>	<b>2.1</b>
Private investment	1.9	1.7	1.6	0.7	<b>0.9</b>	<b>1.0</b>	<b>0.8</b>	<b>1.2</b>	1.9	<b>1.1</b>	<b>0.9</b>
Net exports	-0.9	-1.0	-0.8	-0.1	<b>-0.2</b>	<b>-0.1</b>	<b>-0.2</b>	<b>-0.2</b>	-0.8	<b>-0.3</b>	<b>-0.2</b>
Government consumption	0.4	0.4	0.3	0.3	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	0.4	<b>0.3</b>	<b>0.4</b>
<b>Prices and Costs (annual % change, average)</b>											
CPI	2.7	3.3	3.0	2.9	<b>3.6</b>	<b>3.4</b>	<b>3.5</b>	<b>3.0</b>	2.7	<b>3.3</b>	<b>2.8</b>
Core	1.8	2.1	2.3	2.2	<b>2.1</b>	<b>2.3</b>	<b>2.3</b>	<b>2.4</b>	1.8	<b>2.3</b>	<b>2.5</b>
PCE	2.6	3.1	2.7	2.5	<b>3.0</b>	<b>2.9</b>	<b>2.8</b>	<b>2.4</b>	2.6	<b>2.8</b>	<b>2.3</b>
Core	2.0	2.2	2.2	2.0	<b>2.0</b>	<b>2.0</b>	<b>1.9</b>	<b>2.0</b>	2.0	<b>2.0</b>	<b>2.1</b>
GDP deflator	2.7	2.9	2.8	2.5	<b>3.0</b>	<b>2.8</b>	<b>2.6</b>	<b>2.3</b>	2.6	<b>2.8</b>	<b>2.2</b>
Productivity	2.1	2.8	2.7	2.0	<b>2.4</b>	<b>2.3</b>	<b>2.4</b>	<b>2.3</b>	3.4	<b>2.4</b>	<b>2.2</b>
Real compensation per hour	1.4	2.9	3.4	3.4	<b>2.9</b>	<b>3.0</b>	<b>2.7</b>	<b>2.6</b>	1.9	<b>3.1</b>	<b>2.5</b>
Unit labor cost	2.0	3.4	3.6	4.4	<b>2.7</b>	<b>2.9</b>	<b>2.6</b>	<b>2.7</b>	1.2	<b>3.4</b>	<b>2.6</b>
<b>Other Indicators</b>											
Industrial production (real annual % change)	4.6	4.3	3.8	3.0	<b>3.4</b>	<b>3.0</b>	<b>2.8</b>	<b>3.3</b>	4.1	<b>3.3</b>	<b>3.0</b>
Capacity utilization (%)	78.2	78.8	79.3	79.3	<b>79.8</b>	<b>80.4</b>	<b>80.1</b>	<b>79.4</b>	78.1	<b>79.7</b>	<b>78.7</b>
Light weight vehicle sales (millions, annualized)	17.9	18.9	17.3	18.3	<b>17.3</b>	<b>17.5</b>	<b>17.5</b>	<b>17.5</b>	16.8	<b>17.2</b>	<b>17.1</b>
Housing starts (thousands, annualized)	1,974	1,973	2,083	2,044	<b>2,008</b>	<b>2,001</b>	<b>1,968</b>	<b>1,886</b>	1,950	<b>2,034</b>	<b>1,861</b>
Nonfarm payrolls (thousands of new jobs, average)	161	183	182	194	<b>165</b>	<b>155</b>	<b>152</b>	<b>149</b>	183	<b>174</b>	<b>150</b>
Unemployment rate (average, %)	5.4	5.4	5.3	5.0	5.1	<b>5.1</b>	<b>5.0</b>	<b>5.0</b>	5.5	<b>5.1</b>	<b>5.0</b>
Personal savings rate	0.7	2.2	0.9	-0.2	0.3	<b>0.3</b>	<b>-0.1</b>	<b>0.8</b>	1.3	<b>0.3</b>	<b>0.5</b>
Trade balance (US\$ billions)	-157	-169	-172	-173	<b>-180</b>	<b>-193</b>	<b>-192</b>	<b>-189</b>	-617	<b>-718</b>	<b>-781</b>
Current account balance (US\$ billions)	-668	-753	-780	-766	<b>-761</b>	<b>-812</b>	<b>-847</b>	<b>-829</b>	-666	<b>-780</b>	<b>-843</b>
% of GDP	-5.7	-6.3	-6.4	-6.2	<b>-6.0</b>	<b>-6.4</b>	<b>-6.6</b>	<b>-6.3</b>	-5.7	<b>-6.2</b>	<b>-6.4</b>
Fiscal balance (US\$ billions, fiscal year)	—	—	—	—	—	—	—	—	-412	<b>-344</b>	<b>-402</b>
% of GDP	—	—	—	—	—	—	—	—	-3.6	<b>-2.8</b>	<b>-3.1</b>
Brent (dollars per barrel, average)	41.6	44.2	47.7	51.6	61.5	<b>60.5</b>	<b>57.7</b>	<b>55.0</b>	41.2	<b>54.7</b>	<b>53.8</b>
<b>Financial Markets (eop)</b>											
Fed Funds (%)	1.75	2.25	2.75	3.25	3.75	<b>4.25</b>	<b>4.50</b>	<b>4.75</b>	2.25	<b>4.25</b>	<b>4.75</b>
3-month Libor (%)	2.02	2.56	3.12	3.52	4.06	<b>4.50</b>	<b>4.75</b>	<b>5.00</b>	2.56	<b>4.50</b>	<b>5.00</b>
10-year Treasury Note (%)	4.19	4.24	4.56	3.94	4.34	<b>4.50</b>	<b>4.73</b>	<b>4.83</b>	4.24	<b>4.50</b>	<b>4.90</b>
Dollar/euro	1.24	1.35	1.32	1.22	1.21	<b>1.22</b>	<b>1.22</b>	<b>1.22</b>	1.35	<b>1.22</b>	<b>1.21</b>

eop      end of period  
CPI      Consumer price index  
PCE      Personal consumption expenditures index

## Mexico Indicators and Forecasts

	2002	2003	2004	2005	2006	I'05	II'05	III'05	IV'05	I'06	II'06	III'06	IV'06
<b>Economic Activity</b>													
GDP (seasonally-adjusted series)													
Real annual % change	0.8	1.4	4.4	<b>3.0</b>	<b>3.0</b>	3.7	1.9	<b>2.8</b>	<b>3.5</b>	<b>3.4</b>	<b>4.1</b>	<b>2.9</b>	<b>1.5</b>
Per inhabitant (US dollars)*	6,431	6,235	6,453	<b>7,031</b>	<b>7,178</b>	6,838	6,847	<b>7,160</b>	<b>7,280</b>	<b>7,278</b>	<b>7,046</b>	<b>7,105</b>	<b>7,282</b>
US\$ billions	649	639	676	<b>747</b>	<b>774</b>	707	740	<b>745</b>	<b>794</b>	<b>765</b>	<b>776</b>	<b>750</b>	<b>805</b>
<b>Inflation (eop, %)</b>													
Headline	5.7	4.0	5.2	<b>3.8</b>	<b>3.7</b>	4.4	4.3	3.5	<b>3.8</b>	<b>4.0</b>	<b>4.4</b>	<b>4.3</b>	<b>3.7</b>
Core	3.8	3.7	3.8	<b>3.2</b>	<b>3.2</b>	3.6	3.4	3.2	<b>3.2</b>	<b>3.2</b>	<b>3.3</b>	<b>3.4</b>	<b>3.2</b>
<b>Financial Markets</b>													
Interest rates (eop, %)													
Bank funding	—	6.1	8.8	<b>8.8</b>	<b>8.0</b>	9.5	9.8	9.3	<b>8.8</b>	<b>8.8</b>	<b>8.8</b>	<b>8.3</b>	<b>8.0</b>
28-day Cetes	7.0	6.0	8.6	<b>8.7</b>	<b>8.0</b>	9.6	9.6	9.0	<b>8.7</b>	<b>8.8</b>	<b>8.7</b>	<b>8.3</b>	<b>8.0</b>
28-day TIE	8.5	6.3	9.0	<b>9.1</b>	<b>8.3</b>	9.9	10.0	9.5	<b>9.1</b>	<b>9.0</b>	<b>9.0</b>	<b>8.5</b>	<b>8.3</b>
10-year Bond	10.1	8.3	9.7	<b>8.7</b>	<b>8.7</b>	10.5	9.6	8.5	<b>8.7</b>	<b>8.8</b>	<b>9.4</b>	<b>9.1</b>	<b>8.7</b>
Exchange rate													
Pesos per dollar, eop	10.3	11.2	11.3	<b>11.0</b>	<b>11.6</b>	11.3	10.8	10.8	<b>11.0</b>	<b>11.1</b>	<b>11.5</b>	<b>11.3</b>	<b>11.6</b>
<b>Public Finances</b>													
Fiscal balance (% of GDP)	-1.2	-0.6	-0.3	<b>-0.1</b>	<b>0.0</b>	nd	nd	<b>nd</b>	<b>-0.1</b>	<b>nd</b>	<b>nd</b>	<b>nd</b>	<b>0.0</b>
FRPS (% GDP)	3.3	3.1	2.7	<b>2.1</b>	<b>1.5</b>	nd	nd	<b>nd</b>	<b>2.1</b>	<b>nd</b>	<b>nd</b>	<b>nd</b>	<b>1.5</b>
<b>External Sector**</b>													
Trade balance (US\$ billions)	-7.6	-5.8	-8.8	<b>-7.5</b>	<b>-8.2</b>	-10.2	-9.8	<b>-9.7</b>	<b>-7.5</b>	<b>-8.1</b>	<b>-7.8</b>	<b>-8.7</b>	<b>-8.2</b>
Current account (US\$ billions)	-13.5	-8.6	-7.4	<b>-7.9</b>	<b>-10.1</b>	-8.5	-8.3	<b>-9.3</b>	<b>-7.9</b>	<b>-7.7</b>	<b>-9.5</b>	<b>-9.6</b>	<b>-10.1</b>
Current account (% of GDP)	-2.1	-1.3	-1.1	<b>-1.1</b>	<b>-1.3</b>	-1.2	-1.2	<b>-1.3</b>	<b>-1.1</b>	<b>-1.0</b>	<b>-1.2</b>	<b>-1.3</b>	<b>-1.3</b>
Oil (Mexican mix, dpb, eop)	24.7	25.0	32.4	<b>48.5</b>	<b>38.8</b>	33.7	40.1	<b>50.7</b>	<b>48.5</b>	<b>43.7</b>	<b>42.6</b>	<b>40.7</b>	<b>38.4</b>
<b>Monetary Aggregates &amp; Banking Activity (ann. % chge.)</b>													
Core bank deposits	-5.5	7.5	6.3	<b>6.9</b>	<b>4.8</b>	3.1	2.3	<b>6.4</b>	<b>6.9</b>	<b>6.8</b>	<b>3.7</b>	<b>4.1</b>	<b>4.8</b>
Commer. banks performing loans***	8.5	8.6	26.1	<b>25.6</b>	<b>21.4</b>	29.6	30.0	<b>30.4</b>	<b>25.6</b>	<b>25.9</b>	<b>25.4</b>	<b>23.4</b>	<b>21.4</b>
<b>Aggregate Demand (ann. % chge., seasonally-adjusted)</b>													
Total	1.0	1.2	5.9	<b>4.2</b>	<b>3.8</b>	5.4	3.3	<b>3.9</b>	<b>4.2</b>	<b>3.8</b>	<b>5.0</b>	<b>3.7</b>	<b>2.7</b>
Domestic demand	0.9	1.8	5.3	<b>4.6</b>	<b>3.7</b>	6.0	4.0	<b>4.3</b>	<b>4.1</b>	<b>3.6</b>	<b>3.8</b>	<b>3.5</b>	<b>3.9</b>
Consumption	1.3	2.1	4.7	<b>4.1</b>	<b>3.3</b>	5.8	3.0	<b>3.9</b>	<b>3.9</b>	<b>3.4</b>	<b>3.5</b>	<b>3.2</b>	<b>3.3</b>
Private	1.5	2.3	5.5	<b>4.6</b>	<b>3.5</b>	6.6	3.4	<b>4.3</b>	<b>4.2</b>	<b>3.6</b>	<b>3.5</b>	<b>3.5</b>	<b>3.4</b>
Public	-0.1	1.0	-1.2	<b>0.4</b>	<b>2.0</b>	-0.2	-0.5	<b>0.7</b>	<b>1.7</b>	<b>2.2</b>	<b>2.8</b>	<b>1.3</b>	<b>1.7</b>
Investment	-0.7	0.4	7.5	<b>6.5</b>	<b>5.2</b>	6.7	8.4	<b>6.2</b>	<b>4.8</b>	<b>4.5</b>	<b>5.2</b>	<b>4.6</b>	<b>6.6</b>
Private	-4.0	-1.2	7.6	<b>5.5</b>	<b>4.1</b>	7.8	7.6	<b>2.0</b>	<b>5.0</b>	<b>3.0</b>	<b>3.5</b>	<b>3.7</b>	<b>6.1</b>
Public	13.7	9.4	3.5	<b>11.9</b>	<b>9.4</b>	15.3	13.6	<b>10.0</b>	<b>9.0</b>	<b>11.5</b>	<b>9.5</b>	<b>8.0</b>	<b>8.5</b>
External demand	1.5	2.8	11.5	<b>5.0</b>	<b>5.2</b>	7.2	3.9	<b>5.5</b>	<b>3.7</b>	<b>4.5</b>	<b>5.2</b>	<b>6.0</b>	<b>5.1</b>
Imports	1.4	0.7	10.2	<b>7.3</b>	<b>5.8</b>	10.0	7.1	<b>6.5</b>	<b>5.9</b>	<b>4.7</b>	<b>7.3</b>	<b>5.6</b>	<b>5.5</b>
<b>GDP by sectors (annual % change)</b>													
Agriculture	0.1	3.5	4.0	<b>-0.4</b>	<b>1.1</b>	-1.5	-3.3	<b>1.0</b>	<b>2.0</b>	<b>2.0</b>	<b>4.0</b>	<b>1.0</b>	<b>-2.0</b>
Industrial	-0.1	-0.2	3.8	<b>1.6</b>	<b>2.8</b>	-0.2	2.9	<b>1.5</b>	<b>2.2</b>	<b>3.8</b>	<b>2.3</b>	<b>2.9</b>	<b>2.1</b>
Mining	0.4	3.7	2.5	<b>1.2</b>	<b>2.3</b>	-1.1	2.8	<b>0.7</b>	<b>2.7</b>	<b>2.5</b>	<b>1.2</b>	<b>3.3</b>	<b>2.4</b>
Manufactures	-0.7	-1.3	3.8	<b>1.4</b>	<b>2.9</b>	-0.2	2.6	<b>1.3</b>	<b>1.7</b>	<b>4.0</b>	<b>2.4</b>	<b>2.8</b>	<b>2.2</b>
Construction	2.1	3.3	5.3	<b>3.3</b>	<b>2.8</b>	1.0	5.0	<b>2.6</b>	<b>4.4</b>	<b>3.9</b>	<b>2.3</b>	<b>3.3</b>	<b>1.7</b>
Electricity, gas and water	1.0	1.6	2.3	<b>0.9</b>	<b>2.0</b>	-1.2	1.4	<b>1.1</b>	<b>2.1</b>	<b>2.8</b>	<b>1.9</b>	<b>1.9</b>	<b>1.5</b>
Services	1.6	2.1	4.8	<b>4.0</b>	<b>3.4</b>	4.1	4.1	<b>3.7</b>	<b>4.0</b>	<b>3.4</b>	<b>4.6</b>	<b>3.4</b>	<b>2.2</b>
Retail, restaurants and hotels	0.0	1.6	4.9	<b>6.5</b>	<b>6.0</b>	3.3	3.5	<b>3.2</b>	<b>3.7</b>	<b>3.4</b>	<b>5.4</b>	<b>2.6</b>	<b>1.1</b>
Transportation and communications	1.8	5.0	9.7	<b>3.4</b>	<b>3.1</b>	7.8	7.1	<b>5.9</b>	<b>5.5</b>	<b>5.4</b>	<b>7.7</b>	<b>6.2</b>	<b>4.6</b>
Financial, insurance and real-estate	4.2	3.9	4.6	<b>5.5</b>	<b>4.1</b>	5.1	5.5	<b>5.5</b>	<b>6.1</b>	<b>4.2</b>	<b>4.7</b>	<b>4.0</b>	<b>3.6</b>
Community and personal	0.9	-0.6	1.7	<b>1.4</b>	<b>1.2</b>	1.6	1.5	<b>0.8</b>	<b>1.6</b>	<b>1.4</b>	<b>1.7</b>	<b>1.6</b>	<b>0.4</b>

eop end of period  
dpb dollars per barrel  
\* Seasonally-adjusted series for quarterly data  
\*\* Accumulated, last 12 months  
\*\*\* To the private sector  
FRPS Financial Requirements of the Public Sector, % of GDP  
na not available  
Note: **Bold** figures are forecast



# Economic Research Department Presentations

Title	Institution - Client	Place and date
<b>Bogotá</b> <a href="http://www.bbva.com.co">www.bbva.com.co</a>		
Macroeconomic and financial overview	SAP-Miller	Bogota, July '05
Entorno macroeconómico	BID	Bogota, August '05
Coyuntura y perspectivas macro	Coca Cola	Bogota, August '05
Perspectivas económicas 2005 - 2006	Treasury Clients	Bogota, August '05
Sobre la noción de justicia	Universidad Externado de Colombia	Bogota, September '05
<b>Buenos Aires</b> <a href="http://www.bancofrances.com.ar">www.bancofrances.com.ar</a>		
Desempeño económico y dinámica de deuda post-reestructuración	Seminar "Reestruc. de la Deuda Argentina"	Buenos Aires, July '05
Panorama macroeconómico y perspectivas	ATC Asoc. Tucumana de Citrus	San Miguel de Tucumán, Jul'05
Argentina 2005 - 2006: política cambiaria, inflación y crecimiento	Universidad de Ciencias Económicas	Mar del Plata, August '05
Panorama macroeconómico 2006	Peugeot Citroën Argentina	Buenos Aires, September '05
Perspectivas macroeconómicas 2005-2006 y construcción	Real State Hall and Personal Loans	Buenos Aires, September '05
<b>Caracas</b> <a href="http://www.provincial.com">www.provincial.com</a>		
Perspectivas macroeconómicas 2005-2006	Polar Companies	Caracas, June '05
Escenario macroeconómico y su impacto en el sector industrial	Clients Reunion	Valencia, June '05
Perspectivas de corto, mediano y largo plazo	Global Banking	Caracas, July '05
Perspectivas macroeconómicas y mercado petrolero	Repsol YPF	Caracas, September '05
Venezuela: economic outlook 2005-2007	Global Banking	Caracas, September '05
<b>Lima</b> <a href="http://www.bbvbancointinental.com">www.bbvbancointinental.com</a>		
Necesidades fiscales y reforma: una visión agregada	PHR Plus Perú/National Democracy Institute	Lima, July '05
Situación económica	Global Banking	Lima, July '05
El futuro del dólar	Peru's American Chamber of Commerce	Lima, August '05
Situación económica	Essalud; Retail Banking	Lima, Aug-Sept '05
<b>Madrid</b> <a href="http://www.bbva.com">www.bbva.com</a>		
Vivienda y endeudamiento de las familias	UIMP Santander	Madrid, July '05
Previsiones macroeconómicas y financieras	Corporate Banking	Barcelona, July '05
Situación y perspectivas del sistema bancario español	IMF	Madrid, July '05
Strategic options for a European bank at home and abroad	BAFT Institute	New York, July '05
Lecciones de internacionalización	Company Institute	Madrid, July '05
La emergencia de China: retos y oportunidades para América Latina	BBVA-China Seminar	Lima, September '05
China en el mediano plazo: riesgos de un modelo de expan. sosten.	BBVA-China Seminar	Lima, September '05
La integración de la economía española en Europa	Chamber of Commerce of Spain	Lima, September '05
<b>México</b> <a href="http://www.bancomer.com">www.bancomer.com</a>		
Hacia las elecciones presidenciales de 2006	Latin American Company Observatory	Mexico City, July '05
Escenario económico y financiero en México 2005-2007	Corporate Clients	Mexico City, July '05
Escenario económico y financiero en México 2005-2007	Hipotecaria Nacional	S.L.P., August '05
Perspectivas de mercados	Global Markets Journals	Cuernavaca, September '05
El potencial de la vivienda en México	Risks Madrid	Mexico City, September '05
<b>BBVA USA</b> <a href="http://www.bancomer.com">www.bancomer.com</a>		
Entorno macroeconómico de Estados Unidos	Strategy and Funds Committee	Mexico City, August '05
Entorno macroeconómico de Estados Unidos	Treasury Journals	Mexico City, September '05
Impacto del huracán Katrina	Various committees	Mexico City, September '05
Escenario macroeconómico de Estados Unidos 2005-2007	Economic Research Department	Mexico City, September '05
<b>Santiago de Chile</b> <a href="http://www.bhif.cl">www.bhif.cl</a>		
Chile: de la recuperación al crecimiento	Insurance Companies Executives	Santiago, July '05
Chile: de la recuperación al crecimiento	BBVA Clients	La Serena, July '05
Perspectivas económicas de Chile	Economic Research Department Madrid	Madrid, August '05
Panorama de la competitividad de América Latina	CIEPLAN; Exporters, BBVA clients	Santiago, August '05

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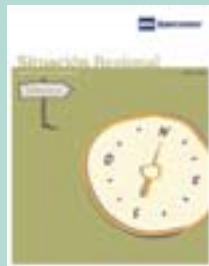
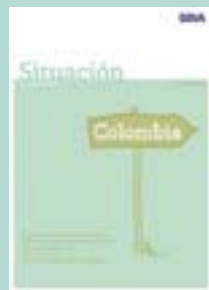
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## Other publications



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