

Situación

Economic Research Department

First Quarter 2005



U.S. and China: drivers for growth in 2005
A different economic cycle in Mexico
Inflation: will it drop significantly?
Is China a threat to Mexico?

Foreword

A new phase

With this quarterly issue of the English-language edition of ***Situación México*** we are entering a new phase involving new publications, new formats, and new contents.

This new phase will be characterized by offering our readers a series of quarterly and weekly publications, as well as occasional reports on specific questions prepared by the BBVA Bancomer Economic Research Department in coordination with the different banks.

With this in mind, simultaneously with the appearance of the English language edition of *Situación México*, for the first time we will be circulating quarterly publications entitled “Situaciones” in Spain and other Latin American countries such as Argentina, Chile, Colombia, Peru, and Venezuela. Their structure and format will be the same and they will supplement the new quarterly *LatinWatch* by providing highly detailed information on the respective countries, with a more structurally oriented and long-term perspective. Occasionally, Grupo BBVA economists in each country will produce reports, known as “*EconomicWatch*” that will contain accurate and comprehensive analysis on issues that have an impact on the economy and the financial markets.

A second series of publications has also been designed. The weekly bulletin “Situaciones” will be issued, offering a global and Latin American focus, and for Mexico, “*Situación Semanal México*” will be published. On an occasional basis, as opportunity requires, “*Notas Rápidas*” will be prepared, publications that will be designed to provide follow up on short-term, timely information, with a view toward the future regarding the economic environment and the financial markets.

In addition, other publications with a great tradition in BBVA Bancomer will be maintained and strengthened, such as the *Serie Propuestas*, which analyze and provide details on the regulatory and structural changes that the country requires to increase its growth. The specialized real estate publication, *Informe Inmobiliario*, which has had been very well received by clients, investors and authorities, will change its name to *Situación Inmobiliaria México*. The same will occur with *Informe Regional*, which will now be called *Situación Regional México*. The publications *Temas Bancarios* and *Perspectivas Sectoriales* will be maintained and published on a semi-annual basis.

We are confident that this new array of publications will contribute high quality information, analysis, and expertise on the economy and the country’s financial markets. These publications will be available and regularly updated for consultation at www.bancomer.com and www.bbva.es

Contents

Closing date: December 17, 2004

Editorial	2
1. International Environment	
Moderate Slowdown	3
Box: Emerging Market Spreads and Liquidity	6
Box: Oil Market	7
2. Macroeconomic Environment Mexico	
2005: Recovery for Domestic Demand	8
Box: Synchrony between Mexico and the U.S.	11
Box: What will Growth be in the Sectors in 2005?	12
Inflation 2005: Will the Target be Met?	13
Box: How are Inflation Expectations Determined in Mexico?	16
3. Financial Markets Mexico	
Pressures in Interest Rates	18
Box: The Taylor Rule: Is it Applicable to Mexico?	21
Box: Foreign Investment in the Money Market	23
The Mexican Peso in 2005	24
Box: With the Greatest Trading Volume in Emerging Markets	27
Box: Politics in Mexico: The Run-up to 2006	28
Box: The Elections and the Financial Markets	29
4. Articles	
Is China a Threat to México?	30
5. Indicators and Forecasts	35

Economic Research Department:

Chief Economist:

José Luis Escrivá

Deputy Chief Economist:

David Taguas

Unit Heads:

LatAm and Emerging Markets: Javier Santiso

Argentina: Ernesto Gaba

Chile: Joaquín Vial

Colombia: Daniel Castellanos

Peru: David Tuesta

Venezuela: Giovanni di Placido

North America: Jorge Sicilia

United States: Nathaniel Karp

Mexico: Adolfo Albo

Europe: Manuel Balmaseda

Sector Analysis: Carmen Hernansanz

Financial Scenarios: Mayte Ledo

This publication was prepared by:

Jorge Sicilia

Adolfo Albo

Javier Amador

David Aylett

Fernando González

Octavio Gutiérrez

Carlos Herrera

Nathaniel Karp

Alma Martínez

Eduardo Millán

Fco. Javier Morales

Marcial Nava

Fernando Tamayo

Eduardo Torres

Following a hesitant recovery at the beginning of the year, Mexico was marked by high economic growth in 2004, fostered by exports and a strong performance in consumption and investment. The strength of domestic demand—even during the recent slowdown—gave rise to a rather atypical economic cycle, in which no crisis occurred. The close link to the United States, the application of prudent economic policies focused on achieving stability, and the strengthening the banking sector (three important sources of support in the Mexican economy) are the main reasons explaining why Mexico has experienced a normal business cycle, in accordance with the standards of developed countries.

Nevertheless, the good year in economic activity was tarnished by a strong rise in inflation, forcing the Banco de México to restrict monetary conditions, which has translated into higher interest rates. These measures have not been exempt from criticism, from those who feel that the Banco de México has gone too far in the degree of restriction to those that argue that the monetary authority acted belatedly.

It is true that the increases have been mainly due to the most volatile components of inflation, which paves the way to think that these rises have been temporary. However, it is also true that inflation is very far from the target set by the Banco de México; that core inflation is closer to the upper limit of 4% rather than the central target of 3%; and that the expectations of economic agents reflect doubts regarding how long inflation will be above the target, which could end up generating second round effects through wage increases. In this debate, it should be recalled that the main asset of the monetary authorities is credibility in their commitment to maintain price stability. This asset should not be lost or placed in question. This is the challenge facing the Banco de México.

But other challenges for Mexico have to be borne in mind. The most important is to undertake the pending structural reforms, which requires a debate and if possible a broad political agreement. Mexican society should decide the long-term economic growth rate the country should aspire to achieve. Mexico has the potential to achieve sustained growth of more than 4% without generating inflationary pressures. The discussion is not trivial: higher growth rates would allow advancing more rapidly in the fight against poverty. Furthermore, there is no guarantee that without structural reforms the country can maintain its current growth rates.

China's entry in the international markets has placed a formidable competitor in Mexico's way in terms of the fight for international capital flows, because of the Asian country's high degree of specialization in exports of manufactured goods. For the time being, Mexico is coping relatively well with the challenge of resisting the Chinese trade competition, especially in sectors where shipping costs are decisive and there is a strong vertical integration with U.S. production, which more than compensates the Chinese advantage in labor costs. But it would not be advisable to further delay progress in dealing with the pending tasks. The Chinese experience has underlined how the major transformations in the world economy simultaneously create challenges and opportunities. If Mexico takes advantage of the Chinese competition as a catalyst for its own structural reforms, it can make it easier for the country to achieve the appropriate conditions to reach its enormous economic growth potential.

International Environment

Moderate slowdown in the two drivers for world economic growth

In 2005, the world economy will experience its third consecutive year of expansion although at a lower growth rate than during 2004. This is the result of less expansive monetary conditions and the impact of higher energy prices. Given this environment, it can be expected that the United States and China will continue to gradually adjust their interest rates at less accommodating levels as they have been doing since mid 2004. This process could begin in 2005 in the European Monetary Union countries. This outlook is based on the continuation of solid growth in the United States and China, which are functioning as drivers of world economic activity. In this context of bipolar growth, however, the risk is that one of these two drivers (if not both) could fail.

For China, the uncertainty is whether, as anticipated, growth will be gradually moderated, preventing an abrupt adjustment in activity from occurring. In this context, there is good news: the beginning of the rising interest rate cycle has revived some expectations that progress is being made toward market mechanisms and that an appreciation of the Chinese currency against the dollar could take place in the next few months.

In terms of the United States, the risk involves a possible adjustment of the current account deficit that is perceived to be increasingly untenable, especially given that the disparities in the current account balances between countries grows year by year. In a scenario in which no announcements are being made concerning measures to control the fiscal deficit, the possibility cannot be ruled out that the necessary adjustments will continue to occur via the financial variables. In this sense, the depreciation of the dollar and the increase in the spread between U.S. and European Monetary Union interest rates could be reflecting less commitment to continuing to finance the growing U.S. trade deficit. If this continues, it could result in inflationary pressures that would force the Fed to adjust its benchmark interest rates more rapidly than initially anticipated and therefore, would lead to lower economic growth.

In 2005, the U.S. economy will grow at a lower rate

During the first three quarters of 2004, the U.S. economy grew at an annual rate of 4.6%, between 1 pp and 1.5 pp above its potential growth. This growth can be attributed to the continued dynamism of private consumer spending and the strong boost in investment, especially in equipment and software. Nevertheless, signs of moderation are beginning to accumulate, confirmed by the trend toward more modest growth in quarterly GDP during 2004.

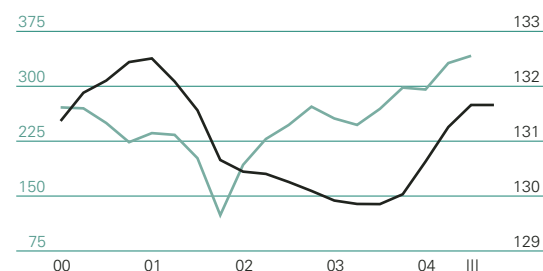
Our outlook for 2005 is of lower domestic demand, both in investment as well as consumption. Investment is growing at rates higher than its long term trend in a context in which the output gap is already positive, which implies that economic growth could already have reached its maximum level in the current expansive cycle, and that in the future these rates will register more moderate levels. However, companies' financial strength and the improvement in business confidence will help maintain high investment rates in 2005, although lower than those in 2004.

U.S.: Base Scenario

	Real ann.% chge.		Contribution, pp	
	2004	2005	2004	2005
GDP	4.4	3.5	4.4	3.5
Private consumption	3.7	3.5	2.6	2.5
Gross fixed investment	12.5	5.8	2.0	1.0
Net total exports	10.9	3.9	-0.5	-0.2
Government spending	2.0	1.9	0.4	0.3
Inflation (%)				
Headline, average	2.7	2.2		
Core, average	1.8	1.9		

Source: BBVA Bancomer

U.S.: Corporate Earnings and Non-farm Payroll



■ Non-financial corporate earnings after taxes (US\$ billions)
 ■ Non-farm payroll, millions of persons
 Source: BBVA Bancomer with BEA and BLS data

U.S.: Producer and Import Prices

Annual % change



The lower economic growth in the upcoming quarters will also be sustained by less expansion of private consumer spending. The exhaustion of the monetary stimulus and the moderation in increased fiscal efforts, both implemented in the past three years, support this prognosis. The rise in real interest rates will lead to a decrease in wealth and motivate families to increase their savings, currently at historic low levels. Growth rates will continue, supported by the continued recovery in employment, particularly in the services sector and the positive increase in real payment for hours worked. The lower growth in private consumer spending, together with our expectation of a reduction in prices for energy and raw materials, will allow for more moderate trade and current account deficits. For the economy as a whole, we expect growth of 3.5% in 2005.

Inflation will continue to be low, although there are risks of a rise in prices

After a year of strong increases in energy prices, the moderation in economic activity could limit inflationary pressures. This seems to be, at least, analysts' estimate. According to the Consensus Forecasts survey, average inflation projected in November 2004 for 2005 was 2.4%, 0.3% higher than the January 2004 estimate.

The balance for inflation indicates more upward than downward risks. To begin with, there is the depreciation of the dollar and the increase in prices of raw materials. In this sense, it is worthwhile to pay attention to one of the channels that helped diminish price increases in the United States in the past, namely, the low inflation in Asian countries. In the past few months and in a context of exchange interventions, the greater liquidity in these countries, due to resistance to the appreciation of their currencies, is generating greater inflation. Secondly, the cyclical position of the economy (with a positive output gap) could, contrary to what occurred in 2004, end up leading to a growing number of companies transferring the cost increases to final prices.

We can already begin to see these pressures. Of particular importance in the past few months was the inflection in price trends for non-energy industrial goods, which are posting positive annual growth rates, something that has not occurred since November 2001 and that could continue in the future. Some of these pressures, however, could be compensated by the favorable evolution of inflation in the service sector, if it continues to be supported by less pressure from communications prices.

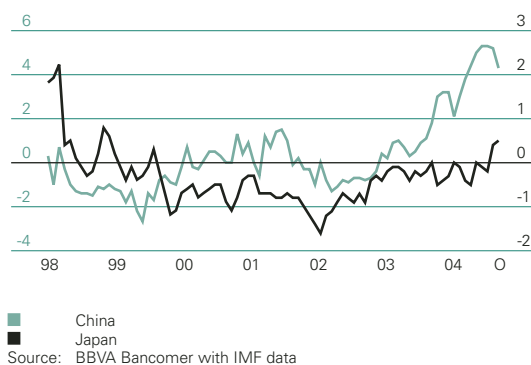
The Fed will continue eliminating its accommodating monetary policy

In this scenario, in 2005, the Fed will continue the monetary restriction. The pace at which the monetary authorities will raise interest rates and the impact that these increases will have on the rest of the financial assets are two key issues for 2005.

Since June 2004, two and a half years after the beginning of the expansive phase of economic activity, the Fed has continually increased federal funds rates. They have done so even though on many occasions the monetary authorities speculated with the possibility that once the level of official rates was reached that would nullify real interest rates, they would stop increasing yields.

Annual Inflation

%



There are reasons to believe that far from halting this adjustment, what we will see in 2005 are continued increases in interest rates. In the first place, due to the relative strength in economic activity. In the second place, because the downside risks on inflation have given way to upside risks, as a result of the cyclical position of the economy and the development of import prices. Furthermore, it seems probable that the monetary authorities will change the current neutral thrust in inflation to a policy favoring a rise in prices in their initial meetings of 2005.

Finally, the very depreciation of the dollar is causing a monetary relaxation that for the moment is compensating the rises in real interest rates in the United States. The tone in monetary policy continues, therefore, to be accommodating as it reflects the low interest rates and the exchange weakness.

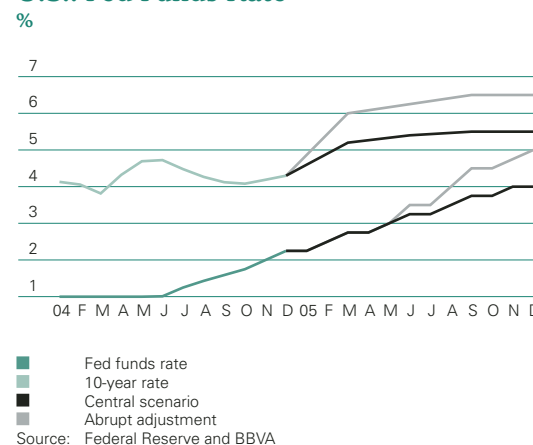
Everything indicates that the official interest rates will reach levels of 4% at the end of 2005, much closer to the real rate levels that are considered "neutral." The pace of increases will be relatively even in the year, with gradual hikes of a quarter of a point and with the possibility of a pause only in the second half of 2005. In this scenario, it is assumed that the dollar-euro exchange rate will depreciate 7% compared to the 2004 average (1.33 in 2005 vs. 1.24 in 2004).

The other key question is the impact of the monetary adjustment on other assets, especially long-term bonds whose interest rates have remained low in the past year. These long-term yields have strongly correlated with monetary policy expectations. Since the outlook for interest rates increases that are discounted for next year are moderate, a readjustment of such yields could boost returns on the long end of the yield curve to levels of 5.5% at the end of 2005.

A somewhat more abrupt adjustment of the financial variables cannot be ruled out

It should be pointed out that there are elements of uncertainty especially linked to a greater depreciation of the dollar associated with a sudden adjustment in the U.S. current account deficit. Given the important role played by the central banks in financing this deficit (compared to that of direct investment in the 1990s), less active intervention by Asian central banks or a change in the composition of their assets in terms of foreign currencies, with less preference for assets in dollars, would lead to a scenario of an abrupt adjustment of the greenback, in which dollar-euro parity could reach levels of 1.4. Exceeding this range would imply a greater risk of inflation and would push the Fed to more aggressively up their interest rates until reaching 5% at the end of the year. In this scenario, the demand for a higher risk premium could also lead to increasing long-term interest rates to levels of 6.5% at the end of 2005.

U.S.: Fed Funds Rate



U.S.: Interest Rates



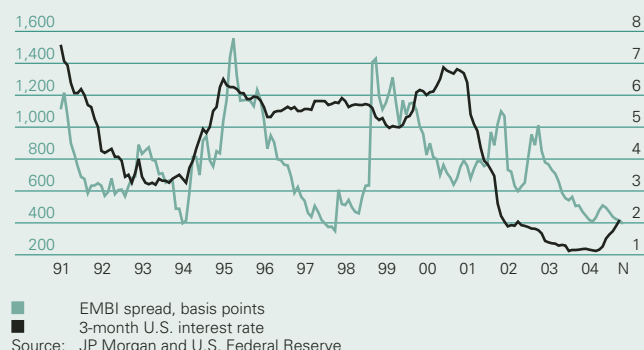
Emerging Market Spreads and Liquidity

Is there an overreaction of emerging market spreads to international liquidity?

In the second half of 2003 sovereign debt spreads in emerging markets fell rapidly. In 2004 they stabilized at levels comparable to those prior to the Southeast Asian crisis.

Many analysts feel that the current scenario has been caused by the expansive monetary policy of the U.S. Federal Reserve. This diagnosis is based on the high correlation observed between interest rates in the U.S. and the spread in emerging market bonds. From July 2002 to May 2004, the correlation between the three-month rate in the United States and the EMBI was 0.91.

Spreads and U.S. Interest Rates



2004 vs. 1994: A return to the past?

This correlation has sparked apprehension among many analysts who recall the developments that occurred in 1994, when high liquidity led to restrictive monetary policies on the part of the Fed, with interest rates increasing from 3% to 6% in 12 months. This increase boosted the price tag of the rollover of the Mexican debt and sparked what was known as the "Tequila effect."

But what is the trend in this correlation when viewed over a longer period of time? If we consider the correlation starting from 1994 it can be noted that it is not significant and in some periods is in fact negative (-0.26), such as in the three years between 1999 and 2001 in which it was -0.41. In the past six months, that is, between May and November 2004, we see a negative correlation in which U.S. rates have been increasing while emerging bond spreads have decreased.

What can we expect in the next few months?

Considering the results of a vector autoregressive analysis, a possible end to such shocks will lead to the spread once again increasing from -3.28 to -2.83 (equivalent to a 250 basis-point rise) at the end of 2005.

There are many other factors that are necessary to control econometrically in order to be able to predict future spreads. The projections are difficult to make over time, especially if they are medium- and long-term forecasts. In any event, the current situation in relation to reserves and the debt structure in emerging markets ratifies this result, in the sense that the projected increase in the spread would not assume catastrophic levels, as was the case in 1994.

Macroeconomic fundamentals are better than in 1994 and the transmission channels are not as sensitive. The first channel in which an increase in U.S. rates affects the spread in emerging markets involves a substitution effect, inasmuch as it is more attractive to acquire U.S. bonds as opposed to those offered by the emerging markets. This shift in demand translates into a lower price for emerging market bonds and therefore, in a possible increase in their spread.

The second effect is in relation to the supply of emerging market bonds. With an increase in U.S. rates, and with the resulting demand for dollars, the U.S. currency appreciates. The dollar appreciation leads to an increased likelihood of default on the emerging market debt (especially in Latin America, since the sovereign debt is mainly denominated in dollars) and, as a result, a rise in the risk premium for such paper.

But the elasticity currently displayed by these spreads is different from the 1994 experience. This is because one of the lessons learned in the 1990s was the need to maintain higher reserves, deepen the trade opening, and improve the foreign debt structure, mainly by extending its maturity. Therefore it can be expected that, if the upward cycle of U.S. interest rates continues, the emerging bond spread in Latin American countries will increase, albeit not traumatically, as was the case in 1994, but rather moderately, which would not generate adverse effects.

Alejandro Neut

alejandro.neut@grupobbva.com

Oil Market

Oil prices to be adjusted 26% in the next two years

At the close of November 2004, oil prices accumulated a 54% increase with 16.5% volatility. Since the close of 2001, they have increased 155%, with an average price of US\$30 per barrel and 22% volatility. In light of this behavior, three questions should be posed: What has changed in the oil market? Why has the impact of this rise in oil prices been less than in the past? How will prices evolve in the next two years?

Structural changes have taken place in the oil market in the past five years that explain the current behavior of oil prices. About 75% of the average increase in daily demand in this period is associated with emerging economies headed by China and the rest of the Asian nations, which are characterized as being 2.5 times more inefficient in the use of oil per percentage point of GDP than the OECD member countries. In terms of supply, 60% of the average daily increase in crude oil production corresponds to the countries that had been part of the former Soviet Union, led by Russia, while the OPEC member states have contributed only 20% of the growth in output. In addition, the OPEC's additional production capacity, which represented 15% of the world demand for crude oil in 1989, currently accounts for 2%. Behind this reduced elasticity in supply is the decrease in real terms in investment in exploration and production, which fell 16% on average for the 1983-2003 period compared to levels posted in 1973-1982, while production increased in the same period by 13%. With these structural changes, the "fair value" for Brent crude oil is US\$30-US\$32 per barrel in real 2004 dollar terms.

The impact of the increase has been limited

In evaluating the average Brent price for 2004, which was US\$38 per barrel, it should be noted that in real terms it represents only half the average for the 1974-1984 period. If it is compared with the previously sustained price increases registered in 2000, which lasted 20 months, the current rise measured in real terms represents only 60% growth in average prices for the United States and 44% for Europe.

In the short term, the productivity shocks have meant that the impact of the rise in oil prices, lessened in real terms, has not been devastating to growth. The sustained impact of higher oil prices has a greater repercussion on inflation than on growth. In the United States, a sustained increase of US\$10 in oil prices for more than

one year leads to a 0.2% decline in economic activity and a 40 basis-point rise in inflation, while for Europe the corresponding impact is 0.4% and 50 basis points, and for Japan, 0.3% and 50 basis points.

Oil prices projected to fall US\$11 between 2004-2006

In the short term, there is a disalignment of market prices with regard to "structural" prices, expressed in a risk premium of about US\$14 due to temporary circumstances. This is the result of both demand and supply considerations that will not be operative in the next two years.

On the supply side, there is a nine-dollar premium that will be reduced as Saudi Arabia boosts its production, Iraq stabilizes its output at between 2.0 million to 2.4 million barrels daily, and the Yukos' fiscal difficulties are resolved. In terms of demand, to the extent that there are no new surprises, prices will be reduced by about 5 dollars, which are currently having an impact on the market in the short term. In fact, it is expected that facing the coming year, world demand, after experiencing 3.5% growth in 2004, will expand 2% in 2005. The increase in demand in the developed countries is estimated to be around 1.4%. Supply will post a similar increase to demand, so that stability in the current inventory stock is expected.

Oil Scenario 2004-2006 US dollars per barrel, average

	WTI	Brent		WTI	Brent
I 2003	33.9	31.3	I 2005	44.7	40.3
II	30.0	27.0	II	40.6	37.8
III	31.0	28.6	III	39.0	36.3
IV	29.9	28.5	IV	37.4	34.8
I 2004	35.2	31.8	I 2006	35.9	31.4
II	38.4	35.5	II	35.5	32.0
III	44.1	41.7	III	34.9	32.4
IV	48.8	42.7	IV	34.1	31.7

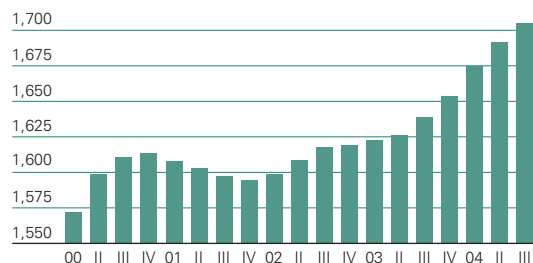
Source: BBVA Banco Provincial

For 2005, the estimated average price per barrel for the Brent is US\$37.3, while for 2006 the projected average will be US\$32, representing an 8.7% adjustment between the close of 2005 and the end of 2006. For the next two years, an accumulated adjustment of US\$11 dollars is expected, equivalent to 26% of the price level at the close of 2004.

Giovanni di Placido giovanni.diplacido@grupobbva.com

GDP

Billions of 1993 pesos*

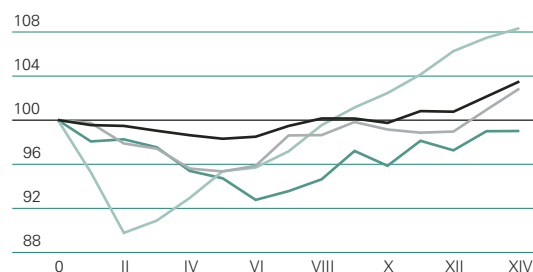


* Seasonally-adjusted, 3-quarter moving average
Source: BBVA Bancomer with INEGI data

Recent Cycles in the Mexican Economy

	1981- 1985	1985- 1994	1994- 2000	As of 2000
Contraction				
Number of quarters	6	5	2	5
Quarterly % change*	1.2	0.9	5.0	0.3
Cumulative % change	7.3	4.7	10.3	1.7
Expansion				
Number of quarters	9	32	21	na
Quarterly % change*	0.8	0.9	1.4	na
Cumulative % change	7.4	33.5	35.2	na
* Average				
na does not apply				
Source: BBVA Bancomer with INEGI data				

GDP: Quarterly Performance in Different Cycles • Immediately previous quarter = 100*



* Seasonally-adjusted

1981 - 1985

1985 - 1994

1994 - 2000

Current

Source: BBVA Bancomer with INEGI data

In 2004, the Mexican economy consolidated its recovery from the recessive period that had started at the end of 2000, with GDP registering its highest growth in four years. The fact that this growth was strongly boosted by domestic demand marks a great difference compared with previous periods of recovery. This is why it is useful to contrast the characteristics of the current cycle¹ with those observed in the past 25 years.

How does the current cycle compare?

Between 1980 and 2000, economic activity was characterized by periods of braking-accelerating; habitually, the adjustment programs marked the start and the end of growth. Furthermore, in most of the cases, the crisis started with the change in government, although with different peculiarities in each one of the cycles. In the cycle that began in 1981, the consolidation of recovery had not been achieved when, at the close of 1985, a new recessive period began. The year 1995 was characterized by the strongest contraction (an accumulated drop of 10.3% in GDP), the shortest contraction period (only two quarters) and the highest growth rate in the recovery that followed. In the current cycle, the recession was the most benign (1.7%) and the one that reached the level the fastest prior to the beginning of the fall (eight quarters).

In the current cycle, both the recessive cycle and that of the expansion present notable differences compared to those observed in the recent cycles. Although more prolonged, the drop was less pronounced than in the past. Also, the demand components of recovery have changed compared to other cycles. Two factors allow explaining this change in the response of activity: the origin of the recession and the change in structural conditions, particularly the integration process between Mexico and the United States.

The recession of 2001 originated in the exporting sector, not as in previous years when it was associated with internal imbalances. All the crisis periods of 1976 through 1995 were the product of adjustments in the foreign-account and public sector deficits that led to marked “financial crises” in which the exchange rate, subject to a controlled regime², was the adjustment variable. In contrast, in 2001 the fall was related to the end of the expansive cycle in the U.S.

Moreover, the structural conditions of the Mexican economy were more solid in this cycle, with no debt financing pressure and with foreign accounts covered by long-term funds.

Another characteristic that distinguishes the current cycle from the previous ones and reflects the structural change in the economy is the solidity shown by private consumption. The control of inflation was key in moderating the impact of the contraction of economic activity on this demand component. On the one hand, the drop in the employment level was offset by the recovery of real wages, so that total wages continued to expand. On the other, the decline in interest rates, due to a great extent to the downtrend followed by inflation,

avored the reactivation of credit³, limiting the drop in consumption and in activity. To summarize, in the current cycle, consumption has not shown the adjustments that had characterized it in the past.

The peso quotation reflected this structural situation: in contrast to other occasions, during the contraction period of the current cycle, the exchange rate maintained an appreciation trend (from 2000 through April 2002).

The integration of Mexico and the U.S. is an additional component that distinguishes the current cycle. The performance of Mexican industrial production has followed that of the U.S. as of the signing of the NAFTA, particularly in the manufacturing sector, specifically in machinery and equipment and textiles (see synchronization box), which represent around 36% of the manufacturing and employment production value in the sector.

In conclusion, the financial or balance of payment crises of the past have been absent from the current cycle, which is following a trend more similar to that of developed countries, associated with a greater synchrony with the U.S. economy, with the flexibility of the exchange rate—which prevents accumulating imbalances with other countries—and with the improvement of the fundamentals of the economy. The reflection of this change on the economic conditions can be seen in the characteristics of the cycle: a milder recession period, stability in the financial variables and growth with more solid bases.

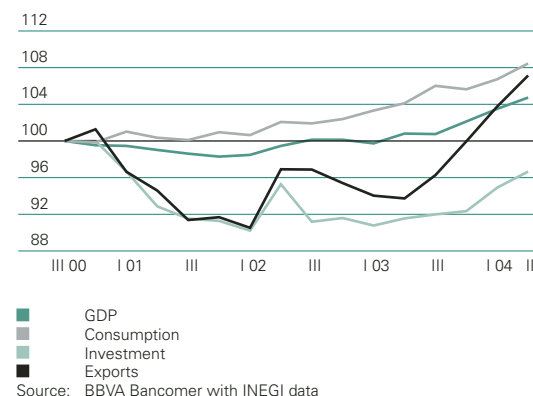
Domestic market, basis for growth in 2005

Once the recovery in 2004 is consolidated, the scenario for 2005 will offer more moderate GDP growth (3.8% vs. 4.1% expected in 2004), in which the main characteristic will be a greater contribution of the domestic components to the expansion of economic activity.

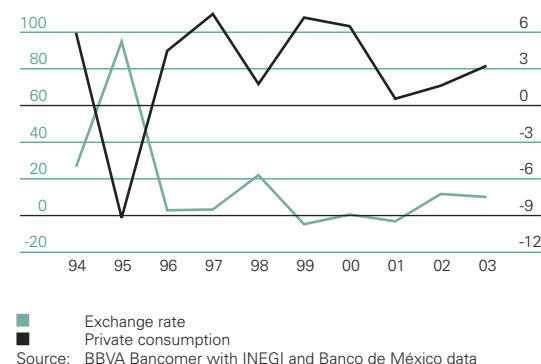
As regards consumption, the growth rate will be supported by the recovery in employment and financial stability, which will continue to boost credit, mainly in the acquisition of durable goods. To a lesser extent, public spending will also contribute to the expansion of this demand component, for which growth could reach 4.3%, a level practically the same as that of 2004.

Inasmuch as investment is concerned, it is anticipated that most of the elements that permitted its reactivation in 2004 will continue to be present. On the one hand, the support programs for housing construction by the federal government, the development of which has become a priority for the present administration, and, on the other, the infrastructure, highway, and energy (electricity, natural gas and oil) development projects, which, due to their nature, have a multi-annual budget and guarantee high investment flows in these environments. The increase in automobile marketing should also be noted, which, with credit characteristics with fixed interest rates and longer payment terms, could continue to boost investment—although lower than in the previous year—specifically in the transportation equipment line item.

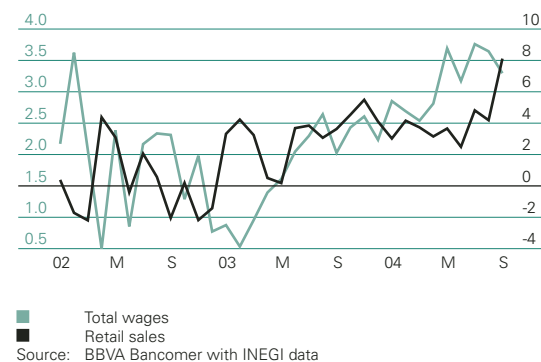
Performance of the GDP Components Third quarter 2000 = 100



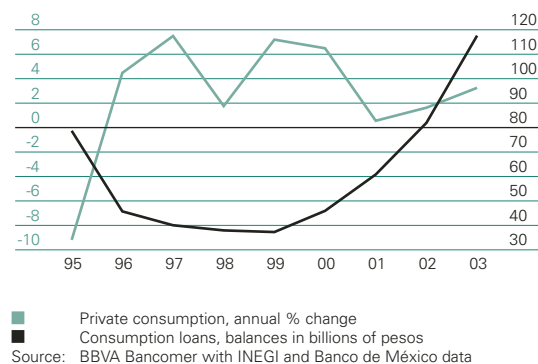
Exchange Rate and Private Consumption Annual % change, end of period



Total Wages and Consumption Annual % change



Private Consumption and Consumption Loans



In the external context, the moderate growth expected in the U.S. (3.5% vs. 4.4% estimated for 2004), could have a modest impact on Mexico, particularly if industrial production maintains its solidity (forecast of 4% vs. 4.5%, respectively). Despite this, the main factors for uncertainty in Mexico for 2005 are linked to the performance of that economy (See international environment section).

Finally, it is well to warn that the panorama is not free of internal risks. The primacy of the political agenda in the topics of substance in the economy could put a brake on growth, due to the gradual, though persistent, lag in competitiveness. The experience in 2004 is revealing in this sense: even when the highest growth in four years was reached, the generation of formal employment did not surpass 500,000 jobs, barely half of what is required in the country annually in order to meet the demand for growth of the economically-active population. In this sense, the structural reforms, in terms of energy, fiscal, labor and rule of law issues, continue to be a necessary condition to reach higher growth rates and improved levels of living standards.

- 1 The definition of cycle is important: for purposes of this analysis, the maximum and minimum points of the quarterly performance of GDP in seasonally-adjusted series are determined. These points are used as a reference for all the components of aggregate demand. An index base of 100 is assigned to each maximum point and subsequent trends of the period are compared with periods and components. Recession is defined as the occurrence of two consecutive quarters with GDP contraction. For cycle, it is the period between two maximum points of GDP. In order to respect the chronological sequence and avoid overlapping, each lapse has been limited to 14 quarterly observations, or three and one half years.
- 2 The exchange-rate floating system in México was announced on December 20, 1994. Prior to this, the exchange rate moved within a controlled flotation band (crawling peg) set by the government.
- 3 Credit was also boosted by a greater solidity of the banking system: an improvement in the regulatory framework, better capitalized institutions, as well as greater competition and diversity in the supply of credit.

Mexico Macroeconomic Chart

Annual % change

	Observed				Forecasts					Contribution to growth (pp)	
	2001	2002	2003	2004*	2005	1Q05	2Q05	3Q05	4Q05	2004	2005
GDP	-0.1	0.7	1.3	4.1	3.8	4.1	3.7	3.7	3.6	4.1	3.8
Total demand	-0.5	0.9	0.7	5.8	5.8	5.7	5.8	6.0	5.5	8.0	8.0
Domestic	0.6	1.6	0.5	3.8	4.3	4.4	4.3	4.4	4.2	3.9	4.4
Consumption	1.9	1.2	2.9	4.4	4.3	4.3	4.2	4.4	4.2	3.6	3.5
Private	2.5	1.3	3.0	4.9	4.5	4.5	4.4	4.7	4.6	3.5	3.3
Public	-2.0	0.1	2.5	1.2	2.1	2.6	2.5	1.7	1.9	0.1	0.2
Investment	-5.6	-1.0	-0.4	5.4	4.1	4.8	3.9	4.2	3.5	1.0	0.8
Private	-5.9	-4.0	-5.7	6.2	4.5	5.4	4.2	4.2	4.0	0.9	0.7
Public	-4.2	14.2	22.4	3.0	2.8	1.5	2.5	4.3	2.6	0.1	0.1
Change in stock										-0.6	0.1
External	-3.8	1.5	1.1	12.1	9.7	9.5	10.0	10.2	9.3	4.1	3.6

* Estimated
 ** Annual rates are not stated because they are non-representative

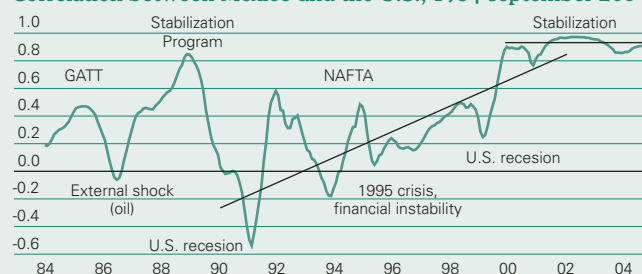
Synchrony Between the Mexican and the U.S. Economies

The Mexican and U.S. economies are closely related, although the degree of synchronization of the productive activity of both countries has been inconsistent throughout time and differs among the productive sectors.

To define this, an analysis was undertaken of the correlation of annual growth rates on monthly data of seasonally adjusted series with moving periods of 36 observations between January 1981 and September 2004. The most significant results noted are: a) the association between both economies is increasing over time, although different by sector of activity; b) the opening intensified this relationship; and, c) temporary situation factors, such as the 1995 crisis, affected the general trend.

Industrial Production

Correlation between Mexico and the U.S., 1984-september 2004*



* Seasonally-adjusted series, monthly data, annual % change, 3-year consecutive periods, graphed by last data
Source: BBVA Bancomer with INEGI and Federal Reserve data

As per the relation between the industrial production of both economies, three periods can be identified: prior to the NAFTA (North American Free Trade Agreement), the first years of this agreement and the recent period (2000-2004). In the decade of the 80's, external shocks and domestic instability were reflected in unstable relations and they minimized the effect that the 1985 opening could have generated. Following the trade agreements with North America, the correlation shows a growing trend that stabilized starting in 2000, as of which time the average coefficient correlation reached 91 %, with fluctuations between 0.77% and 0.99% in the period.

In terms of specific activities,¹ the closest relationship is in sectors with a strong presence in foreign trade (shaded in the table), and the weakest in those sectors focused on the domestic market. Metal Products and Food are the two main productive sectors; the former is highly exporting and the latter serves the domestic market, which is reflected in the respective correlation coefficients.

1 Without construction due to its domestic market orientation

Industrial Production

Annual % change



Source: BBVA Bancomer with INEGI and Federal Reserve data

Relation Between Mexico and U.S. Industrial Production • Correlation coefficients

	% brkdn. Before NAFTA 2003	1981-1993	After NAFTA	
			Instability 1994-1999	Stability 2000-2004
Total	100.0	0.23	0.41	0.93
Manufactures	73.4	0.11	0.46	0.90
Metal products (1)	21.6	0.24	0.44	0.79
Text., apparel & leather	5.1	-0.39	-0.03	0.79
Chemicals & plastics	11.1	-0.04	0.31	0.75
Basic metals (2)	3.7	0.59	0.19	0.75
Paper, printing & publ.	3.2	-0.19	0.20	0.65
Non-metallic min. (3)	5.3	0.03	0.53	0.59
Food, bev. & tobacco	19.6	0.09	0.12	0.38
Other manufactures	2.0	-0.07	0.26	0.30
Wood & its products	1.8	-0.05	0.32	-0.05
Mining	5.0	0.22	0.40	0.42
Electricity, gas & water	6.3	-0.03	-0.28	-0.13

Notes:

- (1) Mainly the automobile final and spare parts industry; electric and electronic machinery and equipment; and, scientific and professional equipment
- (2) Steel, copper, zinc and other metals foundry
- (3) Cement, glass, ceramics, etc.

Source: BBVA Bancomer with INEGI and Federal Reserve data

In brief, the greatest synchrony between both economies reached in the last ten years is due to their geographical proximity, the globalization and liberalization of the Mexican economy, and, particularly, to the NAFTA, and it is reflected in those sectors most open to the exterior.

Fernando González f.gonzalez8@bbva.bancomer.com
Eduardo Torres e.torres@bbva.bancomer.com

References:

Cuevas C.A., Messmacher M., Werner A.M. (2003), "Sincronización Macroeconómica entre México y sus Socios Comerciales del TLCAN", Banco de México
Torres G.A., Vela T.O. (2002), "Integración Comercial y Sincronización entre los Ciclos Económicos de México y los de Estados Unidos", Banco de México

What will Growth be in the Sectors in 2005?

The dynamics of economic growth in 2005 will continue the consolidation trend that began in 2004, with less volatile annual growth rates within the nine large divisions that comprise the productive apparatus. A greater strength in domestic demand will join the growth environment of external demand that will be more moderate than that of 2004. As a whole, it is expected that the driving force for growth in 2005 will be the domestic market (it will contribute 4.4 percentage points) while the external sector will have a net negative contribution of 0.6 percentage points, due to the greater strength of imports compared to exports.

Gross Domestic Product Performance and Forecast Annual % change

	2001	2002	2003	2004e	2005f
Total	-0.1	0.7	1.3	4.1	3.8
1. Agriculture, forestry and fishing	3.5	0.3	3.9	3.0	1.5
Industrial sector	-3.4	-0.3	-0.8	4.0	3.9
2. Mining	1.5	0.4	3.7	3.2	3.8
3. Manufacturing	-3.8	-0.7	-2.0	3.9	3.7
I. Food, beverages and tobacco	2.3	1.8	1.2	2.7	2.7
II. Textiles, apparel and leather	-8.6	-5.8	-8.9	1.5	0.1
III. Wood and its products	-6.7	-4.9	0.2	1.8	1.3
IV. Paper, printing and publishing	-4.3	-1.8	-1.7	2.3	2.5
V. Chemicals and oil by-products	-3.8	-0.2	1.8	4.5	3.2
VI. Non-metallic minerals	-1.8	3.8	0.7	4.4	4.8
VII. Basic metals	-7.1	1.3	3.4	6.6	5.6
VIII. Machinery and equipment	-6.8	-2.2	-5.9	5.1	5.2
IX. Other manufactures	-2.1	-3.2	-8.3	5.3	6.9
4. Construction	-5.7	1.3	3.4	5.6	5.4
5. Electricity, gas and water	4.7	0.4	1.1	2.0	2.8
Services sector	1.2	1.5	2.1	4.4	4.1
6. Retail, restaurants and hotels	-1.2	0.0	1.3	4.3	3.9
7. Transportation, wareh. & commun.	3.8	1.9	3.3	8.9	7.6
8. Financial, insurance and real-estate	4.5	4.3	4.3	4.6	4.4
9. Community, social and personal	-0.3	0.5	0.5	1.6	1.7

e Estimated
f BBVA Bancomer forecast
Source: BBVA Bancomer with INEGI data

In the domestic environment, the increase in physical investment, mainly in private construction, will support construction of housing, commercial and entertainment establishments, thereby enabling the construction industry to surpass general growth (5.4% vs. 3.8%) and will benefit mining growth (3.8%) and the manufacture of non-metallic minerals such as cement, glass and ceramics, among others (4.8%) as well as basic metals (5.6%).

In turn, the boost from private consumption will directly benefit four manufacturing divisions: chemicals and oil by-products; food, beverages and tobacco; paper, printing and publishing; and wood and its products with advances in their production output of 3.2%, 2.7%, 2.5% and 1.3%, respectively. Services, particularly financial, insurance and real estate (4.4%) as well as retailing, restaurants and hotels (3.9%) will also benefit.

The annual 4% rise projected for U.S. industrial production—lower than that of 2004—will continue to support the growth course of Mexican manufacturing exports. This will mainly be reflected in GDP growth in the manufacturing sector, the transportation sector and, to a lesser extent that of retailing, due to greater wholesale transactions.

Even though all the manufacturing divisions are sensitive to changes in external demand, some react with greater intensity. Those activities that will receive a greater positive impact from purchases abroad will be other manufactures, basic metals (steel), machinery and equipment (auto parts and electric and electronic equipment) and textiles and apparel, with annual growth rates of 6.9%, 5.6%, 5.2% and 0.1% respectively. The modest advance in textiles and apparel is due to problems of competitiveness and market loss.

Characteristics of the Dynamics of Productive Growth

	2001	2002	2003	2004e	2005f
Standard deviation					
Large divisions (1-9)	3.8	1.5	2.1	2.2	1.9
Industry (2-5)	4.8	0.8	2.6	1.5	1.1
Manufacturing (I - IX)	3.4	3.2	4.6	1.8	2.2
Services (6-9)	2.9	1.9	1.8	3.0	2.4

e Estimated
f BBVA Bancomer forecast
Source: BBVA Bancomer

The consolidation of growth in the sectors expected for 2005 will mean a lower dispersion compared to the average posted in the 2001-2003 period, which in accordance with the previous chart, will be observed both in the nine large activity divisions and in the industrial and services sectors.

Alma Martínez ag.martinez2@bbva.bancomer.com

Inflation 2005: Will the Target be Met?

The year 2004 was characterized by supply problems that pressured prices upward throughout most of the year and led to inflation surpassing the target set by Banco de México. In 2005, conditions could be more favorable, although the question is whether they will be sufficient or not to converge with the upper limit of the target: 4%.

What was the determining factor for inflation in 2004?

Price growth in 2004 (according to the INPC or National Consumer Price Index), estimated at 5.4% for the end of December, turned out to be particularly high. It posted an Increase of 1.4 percentage points (pp) compared to the close of 2003 and 2.4 pp above the target¹ set by the Banco de México (3% with a maximum limit of 4%). Moreover, the core component, with an annual estimated rise of 3.8%, interrupted the downward trend of the five previous years.

The inflationary rally in 2004 was related mainly to temporary situations, both internal and external, that affected the most volatile components of the INPC. In fact, the increase in the non-core component—almost 9%—accounts for approximately 50% of annual inflation. The external context was the main reason for this result. On the one hand, accelerated growth in the Asia region, particularly China, pressured prices of raw materials upward, including fuels. In the case of oil, the rise in demand combined with negative supply shocks (political instability in exporting countries) bringing oil prices to record levels in nominal terms. The effect of the volatility of fuel prices was reflected in the “government-managed and regulated” prices sub-index, especially in natural gas, gasoline, electricity and public transportation, with rises in some cases of up to 17%. The contribution of this sub-index to annual inflation was 23%. In the domestic environment, the agricultural and livestock sector was the component with the greatest volatility in the INPC: its growth (13.4%) accounted for 20% of inflation in 2004.

Not all the inflation performance in 2004 is due to the volatile components. Pressure also accumulated on core inflation prices during the year, although with a more stable development. The merchandise component reflects part of the increases in agriculture and livestock in processed foods (7% growth) and imported inflation as well. Also, this component should have absorbed the effect of the peso depreciation: the statistical analysis shows that total inflation incorporates close to two thirds of the exchange-rate movements, with a lag of up to one quarter.

Perhaps the most favorable news in terms of prices in 2004 came from the services component, which contributed 22.5% to general inflation. Excluding education and transportation, considered as volatile, their Increase turned out to be lower than that of the INPC for the first time in four years. This datum is relevant due to two factors: first, because it suggests that the price increases are not the result of pressure from demand; in other words, it could be indicating that the current growth rates—which imply a slightly positive output gap—do not bring higher inflation with them. Second, because the drop in this component is encouraging, given the rigidity of general inflation that

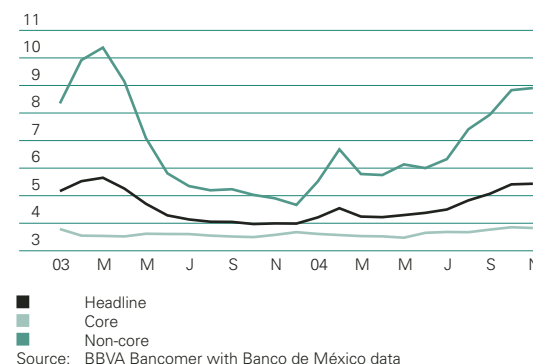
Inflation: Observed vs. Target Annual % change

	Headline	Core	Official target
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
2004*	5.4	3.8	3.0

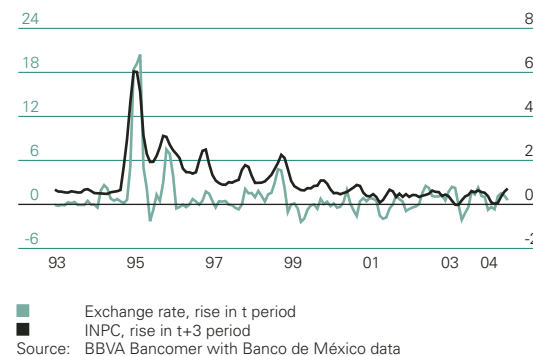
* November

Source: BBVA Bancomer with Banco de México data

Inflation Performance in 2004 Annual % change



Exchange Rate to Price Pass-through Monthly % change, 3-month moving average



Contribution to Inflation of the Main Sub-Indices in 2004

	Inflation*	Contribution	
		pp	%
INPC	5.4	5.4	100.0
Non-core	8.9	2.7	50.5
Gov't. managed & regulated	7.2	1.2	23.2
Agricultural & livestock	13.4	1.1	20.2
Education	7.5	0.4	7.3
Core	3.8	2.7	49.5
Merchandise	3.9	1.4	27.0
Services	3.7	1.2	22.5

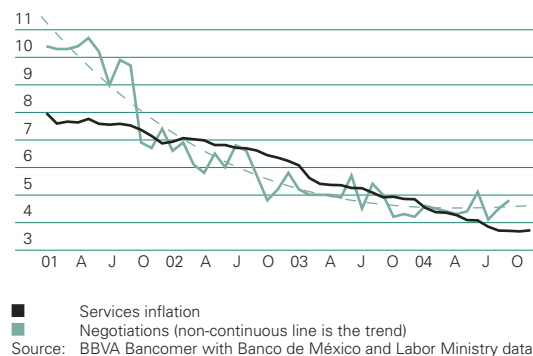
* Annual % change, November
Source: BBVA Bancomer with Banco de México data

Contribution to Inflation by Spending Object in 2004

	Inflation*	Contribution	
		pp	%
INPC	5.4	5.4	100.0
Food, beverages and tobacco	9.4	2.1	39.4
Transportation	5.4	0.7	13.4
Housing	4.9	1.3	23.9
Education and entertainment	4.8	0.6	10.3
Other services**	4.7	0.3	6.0
Health and personal care	2.8	0.2	4.5
Apparel and footwear	1.4	0.1	1.5
Furniture and home appliances	1.2	0.1	1.1

* Annual % change, November
** Includes restaurants, bars and professional servs., among others
Source: BBVA Bancomer with Banco de México data

Services Inflation & Contract Negotiations Annual % change



has characterized it in recent years, particularly within a context of a generalized rise in the rest of the sub-indices of the INPC.

A more favorable outlook for 2005

Given that in 2004, the main pressures on prices were due to temporary situation factors, the probability that these will moderate or even that the process will revert, is the most probable scenario for 2005. The factors that contributed the most to the rise in inflation in 2004 could favor its descent this coming year.

For one, lower prices are anticipated for raw materials. As for oil, at the close of 2004, prices were already showing a significant descent compared to the maximum levels reached during the year. Even though the pressures from demand will keep prices relatively high in 2005, compared to 2004, the trend will be downward. As for the agricultural sector, the evidence of recent years reveals a cyclical pattern in which the changes (highs or lows) in a year will revert in the next year. Following this trend, 2005 could be characterized as a year of low agricultural prices.

Finally, another element that could have a bearing on lowering Inflation is the government's commitment to the Banco de México target, based on a policy consistent with government-managed prices. This would be a great advance, since between 1990 and 2004, only on two occasions was the rise in this sub-index lower than that of the INPC.

This improved scenario does not mean that it will be easy to meet the inflation target set by Banco de México for 2005 even when in some of those months, as in previous years, a price drop is registered. In our base scenario, which assumes a "good agricultural year", it is probable that inflation will begin to drop toward the end of the first quarter, with a gradual convergence in line with the seasonal pattern. Our forecast is that inflation will close at 4.2% at the end of 2005, while core Inflation could reach 3.7%.

This scenario, however, is not exempt from risks. At the very least, the convergence of inflation will be delayed perhaps longer than foreseen. Among the factors that could derail the course of inflation compared to our original projection, are notably first, the possibility of wage increases of over 4%. In 2004, negotiated wages for the next 12 months showed an ascending trend. The negotiation of collective bargaining contracts at the beginning of 2005 could set the pace for wage increases throughout the rest of the year. At the beginning of 2005, numerous wage negotiation processes with private sector unions should be defined, that will first have as reference 4.5% growth in the minimum wage and second, inflation levels higher than 5%.

In fact, this concern is palpable in the monetary authorities that strongly restricted the monetary conditions throughout the second half of 2004. Despite this restrictive policy, inflation expectations in Mexico for the coming 12 months surpass 4%, the maximum tolerance limit set by Banco de México. The market expectation for the next two years is that inflation will stand at a slightly lower

level (see box: How are inflation expectations formed in Mexico?). If these expectations are transferred to wage negotiations and join with potential demands for the recovery of lost purchasing power in 2005, the outlook for inflation at the medium terms could worsen significantly.

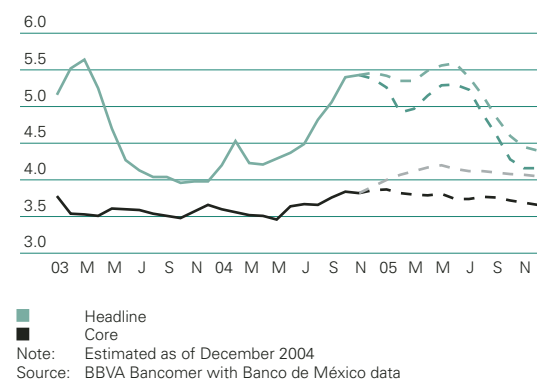
The second risk is a supply shock longer than anticipated due to higher prices in raw materials and imported merchandise. Finally, the possibility exists that agricultural prices will not drop or that they will do so at a slower rate than foreseen. We estimate that, as a minimum, the combination of these elements could prolong the period of high Inflation until summer. The concern of this scenario is that it would bring with it a slower convergence with the Banco de México Inflation target, and that it would be compatible with a higher than 4% increase in the core sub-index.

- 1 Between 1995 and 1999, the Banco de México inflation targets were set in coordination with the Finance Ministry through the programs of economic adjustment (1995-1997) and the General Criteria of Economic Policy (1998-1999); the objective in those years was qualitative, to help reduce inflation levels. As of 2000, it established short- and medium-term quantitative objectives to reach the 3% annual inflation target at the close of 2003. In 2003, a variability range of plus or minus one percentage point was added to the 3% target. As of 2004, the inflation target (including the variability range) was established for all the months of the year and not just for the close.

Monthly Inflation due to Seasonality



2005 Inflation Annual % change



How Are Inflation Expectations Determined in Mexico?

One of the reasons why inflation expectations are important is because, under certain circumstances, they can generate inflation. For example, if workers are expecting higher price levels for this year, due to the expectation of deterioration in their purchasing power, they could demand high wages, which would contribute, in turn, to generating pressure on the general level of prices in the economy. Similar examples can be found in price setting when firms expect high input prices. Obviously, this transference capacity depends on the moment of the cycle that the economy is experiencing and on the competition and flexibility of markets.

Inflation Expectations in the EU

Annual % change



It is precisely because of this need to delimit inflation expectations that the developed countries have opted to endow central banks with autonomy in defining a monetary policy aimed at maintaining price stability.

In economic theory, there are two ways for modeling the formation of inflation expectations: that of *adaptive expectations* and of *rational expectations*. In the former, the economic agents develop inflation projections based on errors of calculation committed in the past. In colloquial terms, this means that the best inflation forecast is the most recent inflation, which is why if agents were to determine their expectations in this manner, transitory surprises in inflation could become permanent.

More recently, the formation of inflation expectations is usually modeled through a different approach, that of *rational expectations*, which suggests that although individuals commit errors in projections, these are not persistent. The model can be written in the following manner:

$$\pi_t = \alpha + \beta E_{t-1}(\pi_t) + \varepsilon \quad (1)$$

Where π_t is current inflation and $E_{t-1}(\pi_t)$ is expected inflation in $t-1$ for the t period. Under rational expectations, the agents use all the information at their reach, both from the past and the present, in order to form their inflation expectations. In this approach, there are two modalities. The first, known as *strong rationality*, refers to the optimum utilization and full disposition of all the necessary information to make the most exact forecast possible. However, in most of the cases, the agents only have a sub-group of the necessary information or they do not have the tools for making the best use of it, in which case we speak of *weak rationality*.

Inflation Expectations in Mexico

Annual % change



The rational approach is the tip of the spear in the analysis of how agents' inflation expectations are formed. If individuals had strong rational expectations, they would not modify their forecast due to inflation surprises of a transitory nature.

The rationality of inflation expectations has been tested for other countries. In the case of the United States, Dutt and Gosh (1998), using data from the NBER-ASA¹ poll, found that between 1981 and 1997, the expectations show signs of weak, not strong, rationality. Nielsen (2003), in turn, evaluates the rationality of expectations for the European Union (EU) in the 1986-2001 period, obtaining similar results.

1 National Bureau of Economic Research-American Statistical Association

This exercise can be applied to Mexico (from 1998 to date)² using information from the "Polls on expectations of economics specialists of the private sector" undertaken by Banco de México, as well as the polls conducted by Infosel. Our results (see table) point to the fact that, in Mexico, the inflation expectations of specialists and observed inflation are formed with weak rationality criteria. That is, the best information available is used, although not in an optimal way.

Inflation Expectations in the U.S. Annual % change



However, there are differences. The rationality of the agents in the U.S. and in the EU is also reflected in the stability of long-term inflation expectations, independently of the presence of transitory shocks, which allows the monetary authorities to exercise their policies more gradually than in the case where inflation expectations are not anchored. In Mexico, said inflation expectations are not so stable.

In view of the rise in inflation, the central bank had to harden its monetary policy in 2004 more frequently so as to avoid inflation expectations from growing in an accelerated manner and contaminating price setting in the economy. In Mexico, it is possible for agents to believe that the effect of current inflation is more permanent than what it really is, or for them to rely less on

the capacity of Banco de México to achieve its inflation target, or to weigh the recent past upward in forming their expectations.

Nevertheless, if the rise in inflation in the last part of 2004 was, as we had considered, to a certain extent, transitory, it is quite probable that this year expectations will be corrected downward, once observed inflation begins to descend.

Inflation Expectations in Mexico

Expectations one year forward, 1998 - November 2004 period

Long-term relation

Cointegration (Engel-Granger focus)	ρ	t	D-F	Ho: $\rho=0$, no cointegration*
$\Delta \hat{u}_t = \rho \hat{u}_{t-1} + \sum_{i=1}^{p-1} \delta_i \Delta \hat{u}_{t-i} + \omega_t$	-1.153	-2.84	2.6	
$\hat{u}_t = \text{equation residuals (1)}$				

Short-term relation

Error correction model	β	t	χ^2	Ho: $\beta=1$ **
$\Delta \pi_t = \beta \Delta E_{t-1} [\pi_t] + \phi \hat{u}_{t-1} + \varepsilon_t$	-0.2443	2.1924	141	

D-F	Dicky-Fuller
*	Rejected. Conclusion: Long-term relation exists
**	Rejected. Conclusion: There is no evidence of strong rationality

If our observations are correct and the expectations are formed under the hypothesis of rationality, albeit weak, the agents sooner or later will incorporate the commitment of the Central Bank with the inflation target, which is why it is not too probable for inflation expectations to grow indefinitely and significantly contaminate the determination of prices in the economy. Therefore, there is no doubt that the longer they remain high, there will be greater risk that transitory inflation risks will be transferred to setting prices and wages.

Marcial Nava

jm.nava@bbva.bancomer.com

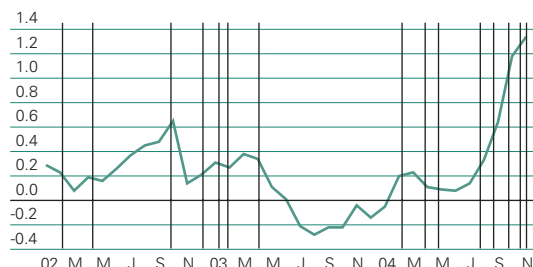
References:

- Dutt, Swarna and Ghosh, Dipak (1998), "Inflation expectations: are they rational? An empirical examination", *Applied Economic Letters*, 7, pp. 103-106.
- Nielsen, Hannah (2003), "Inflation Expectations in the EU - rational or not?", Freie Universität Berlin, Departament of Economy, Institute of Statistics and Econometry.
- Sargent, Thomas (1986), "Rational Expectations and Inflation", Harper & Row Publishers, Nueva York, pp. 1-18.

2 These consisted in estimating the equation (1). The strong rationality hypothesis is equivalent to proving the null hypothesis $H_0 = \alpha = 0$, $\beta = 1$ by means of a model of correction of errors due to the non-seasonality of the series. Because both observed and expected inflation are integrated in order 1 it was necessary to conduct a co-integration test in the Engel-Granger style to rescue the long-term relation between both variables, which is equivalent to proving the hypothesis of weak rationality.

Interest Rates will Continue to Rise in 2005, but at a Slower Pace

Inflation Expectations and the “Short” pp deviation from target (4.5% in 2002 and 4% in 2003-04)



Note: “Short” dates are: 8-Feb-02, 12-Apr-02, 23-Sep-02, 6-Dec-02, 10-Jan-03, 7-Feb-03, 28-Mar-03, 20-Feb-04, 12-Mar-04, 27-Apr-04, 23-Jul-04, 27-Aug-04, 24-Sep-04, 22-Oct-04, 26-Nov-04, 10-Dec-04
Source: BBVA Bancomer with Banco de México data

In 2005, interest rates will post higher average levels than in 2004 and their development will be different. Increases in interest rates will be tied to the performance of inflation and the way in which monetary policy is handled in the country. Thus, we estimate that interest rates during this first half of the year will continue their upward trend—but at a slower pace than in the last months of 2004—to stabilize at high levels in the second half of 2005.

High inflation in the first half of the year, with more moderate growth in the second half

Last year was marked by strong pressure on prices in the economy, which gradually transferred into higher inflation expectations, to the extent that price increases veered significantly from the Banco de México’s inflation target. In response, monetary authorities increased the “short” on nine occasions between July and December, which translated into rapid increases in short-term interest rates. The bank overnight rate alone increased more than 200 basis points (bp) in the second half of 2004.

Although inflationary pressures will begin to subside in 2005, it is probable that price increases will end the year lower than 4%. Furthermore, it is highly probable that inflation will continue to veer from the target during the early months of the year. For this reason, the central bank will maintain a tight monetary policy and will impose greater increases in short-term interest rates during the first half of the year. In this environment, yields on 28-day Cetes could average 8.9% from January to June 2005 (vs. an average of 7.63% in the second half of 2004).

Important Events in Monetary Policy in 2005

Month	Monetary policy program	Monetary policy report	Quarterly inflation report	Monetary policy decision*		Inflation report**	
				Just announc.	With bulletin	Month 1st. half	Prev. month
January	31	31	31	14	28	24	7
February				11	25	24	9
March				11	23	22	9
April			27	8	22	22	7
May				13	27	24	9
June				10	24	23	9
July			27	8	22	22	7
August				12	26	24	9
September				9	23	22	8
October		31	26	14	28	24	7
November				11	25	24	9
December				9		22	8

Events in the U.S.

Federal Open Market Committee	Monetary policy report to Congress
1, 2	X
22	
3	
29 - 30	
9	X
20	
1	
13	

* Distributed to the market at 9:00 A.M. Mexico City
** Distributed to the market at 2:30 P.M. Mexico City
Source: Banco de México and Federal Reserve

As of July 2005, annual inflation could begin to diminish once the transitory increases in volatile prices registered at the end of 2004 dissipate, in the process reducing pressures for a greater monetary restriction by the central bank. In this sense, we feel that the 28-day Cetes interest rate could begin to stabilize at relatively high levels, specifically, at an average of 9.14% and 9.06% for the third and fourth quarters, respectively.

How will international monetary conditions affect inflation in Mexico?

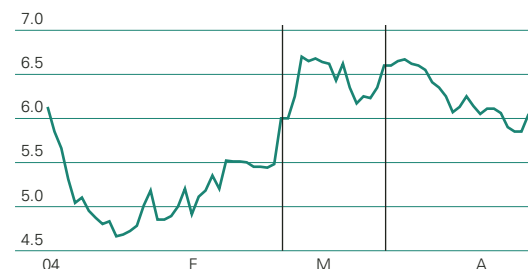
In 2005, the Fed will increase its benchmark rate with the aim of taking it to 4.0% levels by the end of 2005 and in the process eliminating the expansive trend of its monetary policy. In this context, it is important to ponder to what extent the increase in the Fed's benchmark rates will transfer to the bank overnight rate in Mexico. It should be noted that since June 2004, the central bank has not stopped announcing that "as long as it considers it convenient" it wants the increases in U.S. interest rates to be transferred to Mexican rates. Although it can be argued that this discourse responds to the existence of inflationary pressures common to both economies (for example, price increases for raw materials), we should not belittle the importance that this announcement has had in the central bank's communication strategy. Since the central bank began to use this argument, Mexican monetary authorities have managed to reinforce the restrictive character of their monetary policy and have prevented—contrary to the past—the "short" from having transitory effects on the country's short-term interest rates.

How long will this strategy be sustained? Our opinion is that it will remain in effect until the Banco de México might decide to eliminate its policies in favor of rate increases, which could occur in the second half of the year when inflation resumes its descending path. Until now, inflationary pressures have been stronger in Mexico—partly because inflation expectations are less "embedded" than in the case of the country's northern neighbor—which has required greater interest rate increases in Mexico than in the United States. Nevertheless, this could change in 2005, depending on the development of volatile prices (for example, for agricultural products). To summarize, we feel that the debate should not be centered on how much the Fed's rates will increase, but rather to what extent the central bank considers it necessary to maintain its current discourse to guarantee that inflation will be close to 3%.

On the whole, short-term interest rates in Mexico will continue to partially follow rate increases in the United States in the first months of the year but they could cease doing so in the second half of 2005. This would allow the Banco de México to abandon its discourse on "following the Fed" in the second half of the year, and therefore, we could observe a slight time lag in monetary policy between Mexico and the United States. For this to occur, inflation must move toward the official target and the wage negotiations that take place would have to indicate that this trend would not be reversed.

In this regard, it should come as no surprise that the way in which the central bank is conducting the country's monetary policy "nominally

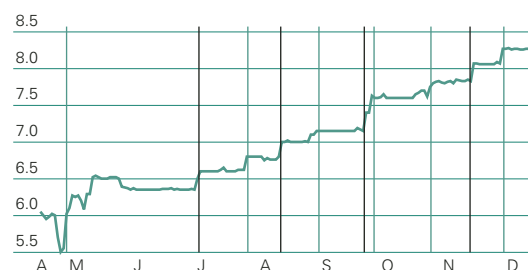
Bank Funding Rates: Transitory Effects 2004, %



Note: "Short" dates are: 20-Feb, 12-Mar

Source: BBVA Bancomer with Banco de México data

Bank Funding Rates: Lasting Effects 2004, %



"Short" dates are: 27-Apr, 23-Jul, 27-Aug, 24-Sep, 22-Oct, 26-Nov, 10-Dec

Fed dates are: 30-Jun, 10-Aug, 21-Sep, 10-Nov

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

Monetary Conditions 2005* 28-day Cetes, monthly average, %



* See Taylor Rule box on page 21

Base
High inflation risk

Source: BBVA Bancomer with Banco de México data

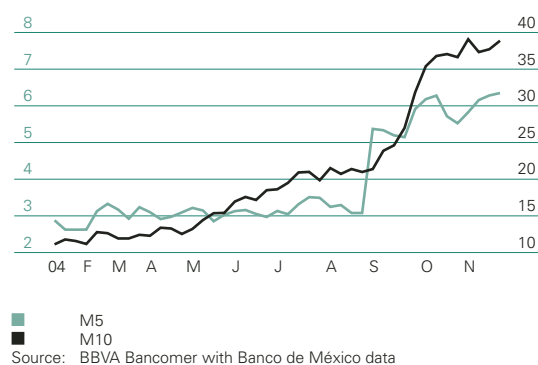
EMBI+ Basis points, 2004



Spread in 10-year Rates: Mexico and U.S. • Basis points



Holdings by Foreigners % of total in circulation, 2004



takes its distance" from the restrictive cycle in the United States. It should be kept in mind that the Fed has just begun its normalization policy with a view toward neutral interest rates while Mexico's central bank has already been doing so for some months now. This is taking real domestic interest rates to extremely high levels (4.4% in real terms in 2005 vs. 3.0% on average from 2001-2005). Furthermore, the expectation of lower inflation in Mexico in the second half of the year, together with stable nominal interest rate levels, implies that the real rates could increase gradually, with which the central bank could continue restricting monetary conditions in the second half of 2005.

The risk of greater inflation

If a scenario of higher inflation were to emerge in Mexico, the central bank could implement a greater number of "shorts" or could continue "following the Fed" in the second half of the year, which would maintain the upward trend in nominal interest rates and, along with it, the restrictive trend in its monetary policy. For illustrative effects, the performance of estimated monetary conditions for Mexico based on the Taylor Rule (calculated in the attached box), considering our assumptions on the development of domestic inflation (current and risk), on U.S. federal funds rates and the described risks, would be compatible with upward pressures on interest rates in the first half of 2005 and their stabilization in the second half of the year.

At the same time, we should not rule out the possibility that the restrictive monetary policy coupled with a better performance of volatile prices will lead to a greater moderation of inflation rates and, following such trends, to a pronounced return of interest rates to previous levels in the second half of the year. However, this scenario currently is highly unlikely and is closely tied to the wage negotiations of the next few months.

Long-term rates

The development of longer-term rates during 2005 will continue to be tied to the performance of long-term interest rates in the United States. Given the upward trend in U.S. rates, Mexican 10-year bonds could close the first half of the year paying a 10.9% yield and in 2005 at levels above 11%. However, the 10-year interest rate could be greater in the event that an abrupt adjustment occurs in U.S. interest rates in response to the weakening of confidence in the United States in relation to its high current-account deficit.

Although these considerations imply higher real rates in Mexico, these would not be different from levels registered in other historic periods. Furthermore, an increase in U.S. interest rates could lead to foreign investors abandoning the country, which would justify domestic rates higher than the current levels. However, so long as interest rates in 10-year bills in U.S. remain at low levels, Mexico could continue benefiting—as would also be the case with other emerging economies—from a quest for profitability and investment flows, with which the country's long-term interest rates might not be very far from the 10% mark.

The Taylor Rule: Is it Applicable to Mexico?

In 1978, John Taylor developed a model to evaluate the performance of the U.S. Federal Reserve Board in relation to its inflationary and economic growth targets, known as the “Taylor Rule.” This rule says that the Fed sets its nominal interest rates in accordance with the level of inflation registered and the real equilibrium rate (which it assumes to be constant) and in proportion to the inflation gap (projected inflation minus the target) and the output gap (registered GDP minus potential GDP).

The reasoning behind the rule is simple. Taylor proposes that the central bank should maintain a real interest rate (nominal rate minus registered inflation) similar to the real equilibrium rate, whenever inflation is equal to its target and GDP is the same as its potential. On the other side of the ledger, the central bank will choose a real rate that is higher (or lower) than the equilibrium rate—modifying the nominal interest rate—as a reaction to a positive (or negative) inflation gap and/or to a positive (or negative) output gap.

“Basic” Taylor Rule

$R = \alpha + \beta(\text{inflation gap}) + \gamma(\text{output gap})$
when,

R is the short-term nominal interest rate

α the constant equal to actual inflation plus the real equilibrium interest rate; β and γ are the coefficients of change in R in response to a variation in the inflation or output gap ($\beta = \gamma = 0.5$ in the original model)

This rule is difficult to estimate since neither the real equilibrium interest rate nor potential GDP are observable variables. Nevertheless, it is useful for predicting the evolution of interest rates in countries with no major fluctuations in the real equilibrium rate and with a monetary policy with defined instruments (for example, benchmark rates) as well as for evaluating the degree of monetary restriction at a specific point in time. However, there are limitations to its application in cases in which: (1) the central bank does not have defined instruments or clear monetary policy objectives; (2) the financial markets are not mature, contain restrictions on capital mobility, and present structural changes in the real rates; and (3) the central bank establishes other control variables such as the monetary base or functioning as a creditor in relation to the financial system. Nevertheless, modified versions of the Taylor Rule can function in emerging economies.

Evidence in Mexico

The explicit instrument of monetary policy in Mexico is the “short” and not a benchmark rate. Despite this and given that the first transmission channel of monetary pol-

icy to the economy is through the interbank interest rates and that the intentions of the central bank’s monetary policy—with verbal interventions and/or modifications in the “short”—directly translate to interest rates, it can be assumed that the bank funding rate acts as an implicit benchmark for monetary policy.

A “direct” estimate of the Taylor Rule in Mexico tends to overestimate rates in the past few years. Although this could be interpreted as the acceptance of relatively lax monetary policies, it is due to the decrease in real interest rates as a result of progress in financial stability (from an average of 8.37% between 1995-99 to 3.30% of 2001) and to the adoption of a fixed inflation target being recent (2001), since the target previously varied year by year.

“Basic” Taylor Rule: Results for Mexico

$$R = 012 + 1.68(\text{inflation gap}) + 1.52(\text{output gap})$$

(20.2) (5.82) (2.5)

R is the rate for the 28-day Cete. It reflects data from 1996-2004. The parameters are 95% accurate (value of statistic t between parenthesis) and $R^2 = 0.23$

“Basic” Taylor Rule: Results for Mexico 28-day Cetes, %



To apply the Taylor Rule in Mexico, other variables should be used to explain the performance of interest rates. Monetary conditions in the United States and variations in the exchange rate have determined movements in the interest rates thanks to the fact that Mexico has become an open economy. The central bank should also respond more to expected inflation than to inflation at each given point in time. Finally, to better gauge a rule it can be argued that adjustments in nominal interest rates are implemented gradually in relation to inflation and output gaps in order to reduce volatility in the economic cycle. Based on these considerations, the following equation can be used:

Taylor Rule “Modified” for Mexico*

Equation 1:

$$R_t = \alpha + \beta' \pi_t^e + \gamma'(Y_t^{obs} - Y_t^{pot}) + \rho R_{t-1} + \eta_1' TC_t + e_t$$

Equation 2:

$$R_t = \alpha' + \beta' \pi_t^e + \gamma'(Y_t^{obs} - Y_t^{pot}) + \rho R_{t-1} + \eta_2' \Delta(FF_{t-1}) + e_t$$

In which,

R_t is the 28 day Cete rate in the t period; π_t^e is the expected inflation rate in t of $t+1$; $Y_t^{obs} - Y_t^{pot}$ is the actual GDP over potential GDP calculated through the use of the Hodrick-Prescott filter; TC_t is the nominal exchange rate (in natural logarithm); $\Delta(FF_{t-1})$ is the change in the U.S. federal fund rate; and $\beta = \beta' / (1-\rho)$; $\gamma = \gamma' / (1-\rho)$; $\eta = \eta' / (1-\rho)$

Interpretation of parameters: if $\beta > 1$ the central bank adjusts the nominal short-term rate in order to reduce expected inflation. If $\beta < 1$, the change in the rate “accommodates” the expected variations in inflation. If $\gamma > 0$ the nominal rate is adjusted in order to maintain the real rates in the economy and to stabilize GDP. ρ is the graduality in the adjustment of the nominal rates (value between zero and one). η_1 and η_2 are the monetary response to the exchange rate or the level of the federal funds rate, respectively.

* Details of the conceptual framework in Svensson (1999).

Taylor Rule Results Modified for Mexico

Dependent: R_t (28-day Cetes); monthly data Jan'01 to Sept'04*

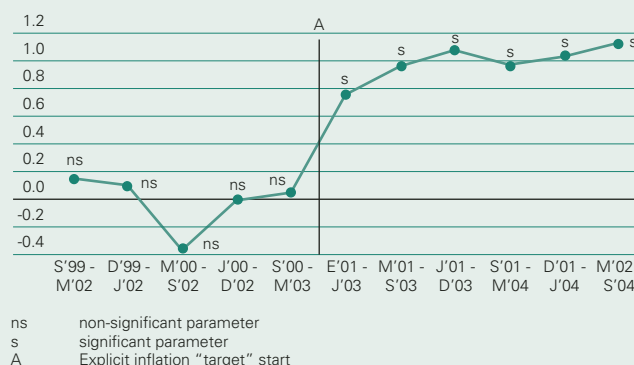
	α	π_t^e	$(Y_t^{obs} - Y_t^{pot})_t$	R_{t-1}	TC_t	ΔFF_{t-1}
Equation 1	-0.138 (-3.37)	1.047 (+3.50)	-0.001 (-1.84)	0.682 (+8.62)	0.047 (+2.95)	—
Equation 2	-0.021 (-2.02)	0.833 (+2.63)	-0.001 (-1.51) ns	0.728 (+8.15)	—	1.512 (+2.01)
	R2	DW	F			
Equation 1	0.937	1.867	0.000			
Equation 2	0.936	1.784	0.000			

* All variables are I(0)

Source: BBVA Bancomer with INEGI and Banco de México data

With the caution that any exercise of this type requires, the following conclusions can be drawn from the estimation of this rule. There is evidence that the expected deviations from its inflation target will lead the central bank to induce an adjustment to nominal interest rates in order to counteract the increase in prices (parameter b being significant and greater than 1). It is important to emphasize that this reaction takes on greater importance since the “fixed” inflationary targets were announced in 2001 (see graph), since it was at that point when the parameter of the central bank’s reaction to the inflation gap (b) was higher than one.

Beta Coefficient over Expected Inflation



Based on this model, domestic interest rates also respond to the U.S. federal funds rate, to the peso/dollar exchange rate and, to a lesser extent, to the output gap. In particular, it should be noted that for each 25 bp increase in the Federal funds rate, yields on the 28-day Cete rise approximately 30 bp after a couple of days. By the same token, as can be observed in other countries, monetary authorities prefer not to respond abruptly to changes in the economy but to gradually modify interest rates.

To summarize, advances in the development of the country’s financial markets and the decrease in real interest rates have made estimating Taylor Rules in Mexico important as a way of understanding the performance of the central bank. An initial econometric exercise leads us to conclude that in response to a deviation in the inflation target, the central bank will react more than proportionally to adjust nominal interest rates in order to correct such variations, which illustrates its commitment to combating inflation and to guaranteeing price stability. By the same token, there is evidence indicating that the central bank is also reacting to changes in the monetary restriction in the United States. As advances take place in the consolidation of and transparency in the markets, applications of the Taylor Rule will be increasingly useful tools to analyze the behavior of monetary policy in Mexico.

Octavio Gutiérrez o.gutierrez3@bbva.bancomer.com

References:

Taylor, J (2002). “Uso de Reglas de Política Monetaria en Economías de Mercados Emergentes”. Banco de México.
Torres, A. (2002). “Un Análisis de las Tasas de Interés en México a través de la Metodología de Reglas Monetarias”. Banco de México
Svensson, L. (1999). “Price Stability as a Target for Monetary Policy: Defining and Maintaining Price Stability”. NBER 1999.

Foreign Investment in the Domestic Money Market

During 2004, important capital inflows were registered in the domestic money market, estimated at above US\$4 billion. Similar levels had not been registered since the period prior to the 1994 crisis. At that time, to avoid massive capital flight, investors were offered international instruments known as “*Tesobonos*”¹, denominated in U.S. dollars, which eliminated the exchange risk, at attractive interest rates, higher than similar instruments in the United States.

Given these circumstances, it is worthwhile to raise several questions. What are the incentives for international investors to buy bonds in the domestic market? What is their evaluation? Does it represent a new risk for the country’s economy and financial markets?

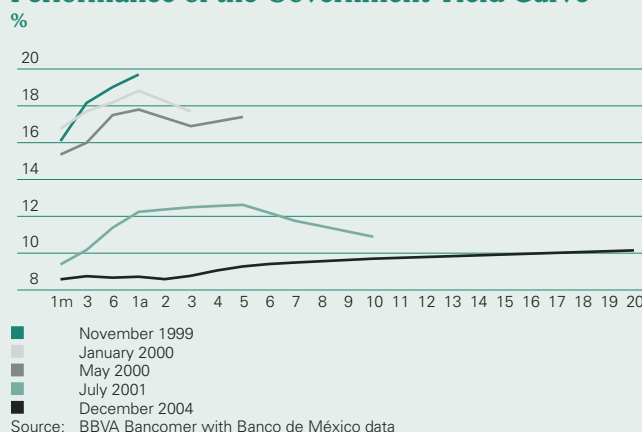
It is possible to identify two main incentives: first, the profitability of the investment and second, the need to bring together a portfolio of securities from emerging markets that includes Mexican instruments, so as to allow for the use of a certain reference or benchmark rate². The greater profitability is derived from the spread in interest rates between Mexico and mainly the United States. Some investors can choose to assume the exchange risk and others to cover it through derivatives. Whatever the motivation, it is possible to obtain higher yields than from similar instruments offered in the United States. In this context, two elements generate confidence for investors, namely, the gradual process of convergence between Mexico and its northern neighbor that makes interest rates tend—in general and in the long term—to move in the same direction, and the country’s investment grade, which assigns less volatility to its markets compared to high-risk nations.

The valuation of this process of transformation of the domestic money market toward a greater internationalization is positive, both from the standpoint of the markets as well as on a macroeconomic level. The entry of more participants in any market provides it with greater liquidity and a more orderly price formation. This point was particularly valid in 2004. Since the beginning of January, domestic institutional investors have sold off federal government bonds, known as M’s; their place was gradually taken by foreign and other Mexican inves-

tors. It is possible that if the former had not participated, the increase in long-term interest rates would have been higher.

From the macroeconomic standpoint, there are also benefits resulting from a larger number of market participants. It has been possible to gradually expand the yield curve on government securities. Not very long ago—in 2000—the longest term, particularly for Cetes, was one year. Currently, three, five, seven, 10, and 20-year maturities are offered, and in fact, foreign investors have centered their interest precisely on the longer-term issues. This expansion and deepening of the yield curve on government securities has been one of the factors that have allowed a yield curve to begin to be established for private debt placements. These new benchmark rates are favorable for long-term loans.

Performance of the Government Yield Curve



The risks for new foreign investors are significantly lower than in 1994, because the conditions are diametrically different. What is most important in this regard is the exchange rate regime, previously predetermined and now flexible, which prevents pressures from permanently accumulating. At the same time, the volume handled by the foreign exchange market is greater while the share of total debt held by foreigners is smaller. In the past few years the highest level has been 15%, while in 1994 it exceeded 70%. To summarize, a greater participation by foreign investors in the country’s money market is favorable because it contributes to its strengthening and development, independently of changes in the strategy of these investors that could result in movements in the markets, generating certain volatility.

Adolfo Albo

a.albo@bbva.bancomer.com

1 Tesobonos were Mexican Federal Treasury Certificates denominated in U.S. dollars.
 2 The Lehman Brothers index, known as the Global Aggregate Bond index modified its weight structure, including long-term Mexican bonds, the M’s, as of January 2005.

Performance of the Exchange Rate

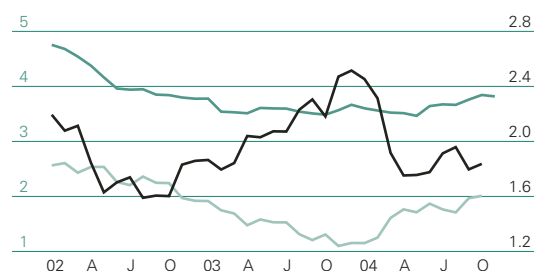
Spot closing, pesos per dollar



Source: BBVA Bancomer with Banco de México data

Core Inflation in Mexico and the U.S.

%



■ Mexico
■ United States
■ Spread, percentage points

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

Exchange Rate and Interest Rate Spread



■ Exchange rate, pesos per dollar
■ 91-day Cetes minus 3-month Notes, basis points

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

The Mexican peso will open strongly in 2005, although with lower impetus as the year advances

As of 2002, the Mexican peso has shown a continuous depreciation against the dollar, which moderated in mid-2004, supported by transitory factors (i.e. international liquidity and oil prices). During this period, the peso has stabilized gradually, so that its cumulative depreciation against the dollar in 2002, 2003 and 2004 was 11.9%, 7.5% and 0.4%, respectively. Although in the first half of 2005, it is probable that the peso will be strong, mainly at the beginning of the year, it is feasible that in the second half it will converge gradually with its pattern of moderate depreciation.

From January 2002 to June of last year, the weakness of the peso was due to a lower expansion rate in the Mexican economy rather than in the United States and to an adverse core inflation spread for Mexico from July 2002 through December 2003. The average course of the peso in this period reflected the loss of competitiveness in the economy: a wider inflation gap and deterioration in the growth spread. With this, the relative strength of the peso was corrected between 1999 and the beginning of 2002.

The factors benefiting the peso in the second half of 2004 could continue in the early months of 2005

In mid-2004, the peso depreciation trend reverted due to the following factors: 1) the widening of the spread in interest rates between Mexico and the U.S.; 2) the increase in the international flows to emerging economies; 3) higher growth in the Mexican economy than in the U.S.; and 4) the combination of solid fundamentals of the Mexican economy with favorable external conditions (i.e. the effect of oil prices on public finances and the current account).

It should be noted that in this environment, the prudent management of monetary and fiscal policies in 2004, the reduced current account deficit and the nature of the shocks observed last year—which affected Mexico and the U.S. asymmetrically—implied that the course followed by our exchange rate parity was out of step with the U.S. currency, particularly as of September 2004: while the peso appreciated 2% against the dollar in December, the dollar regressed against the euro by more than 10%.

High interest rate spread and the search for profitability

The higher spread in interest rates—induced by the greater monetary restriction in Mexico compared with the U.S.—has encouraged foreign investment flows into the market (see box “Foreign Investment in the Money Market”) and increased the demand for pesos. In particular, at the end of November 2004, holdings of government securities in the hands of foreigners stood at 15% of the total current amount in fixed-interest bonds at 3-, 5-, 10- and 20- year terms (vs. 4% at the beginning of 2004).

Reductions in long-term interest rates in the U.S. at the beginning of the fourth quarter of 2004 spurred the search for greater financial profitability in economies with attractive interest rate spreads in

relation to U.S. Treasury bonds. The process favored the reduction of the spreads in emerging economies and led to a generalized appreciation of the emerging countries' currencies. In this respect, it is notable that the Mexican peso was not one of the most favored currencies.

Nevertheless, throughout 2005, a gradual withdrawal of the U.S. expansive monetary policy can be anticipated, which will bring conditions of lower liquidity on the international market than those prevailing in the second half of 2004 and will pressure the spread of emerging countries and, therefore, their currencies. However—contrasting with previous years—the reduction in the fiscal deficit in Mexico as well as the availability of long-term funds to finance the deficit in the current account will favor Mexico's sovereign risk perception and will lessen the impact of higher interest rates in the U.S. on the EMBI+ of the country and, therefore, on the peso/dollar parity (see box on spreads).

The growth spread with the U.S. will be favorable for Mexico with solid fundamentals

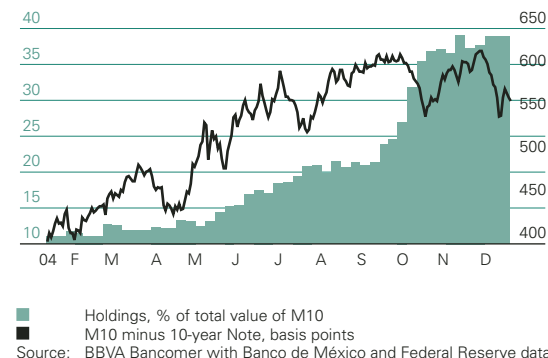
In addition, there were narrower spreads in the growth gap between the U.S. and Mexico in 2004, which tends to have repercussions on the expected resumption of productive projects in both economies and to have a bearing on the allocation of funds in Mexico. For 2005, we estimate that this spread will continue to favor Mexico; the economy could grow slightly more than that of the U.S. (an annual 3.8% vs. 3.5%).

This determining factor could take second place since we anticipate that there will be few structural reforms in 2005 (and even in 2006) within a political context centered on the presidential elections in 2006 (see charts). While political events could bring volatility to the foreign exchange market, the solid macro-economic fundamentals will help mitigate this risk. In the first place, the fiscal deficit will stand at 0.3% of GDP¹ (vs. 0.4% projected for the end of 2004) with which its descending course in this administration is maintained. Also, the uncertainty that the volatility in oil prices could cause in 2005 on fiscal revenue is reduced to the extent that the existence of the coverage instrument and the stabilizers of public spending—included in the expenditures budget—will allow maintaining the commitment of the fiscal deficit.

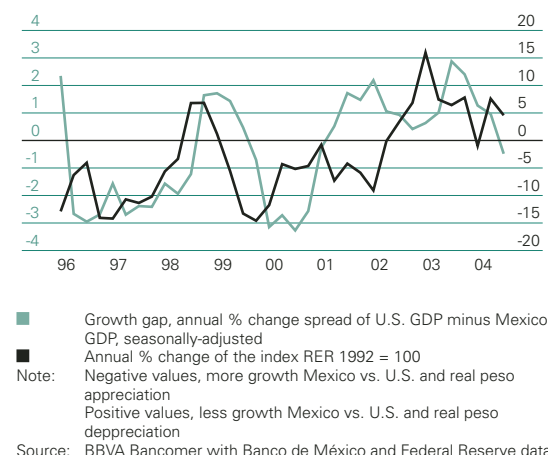
With this fiscal policy, the public sector will absorb fewer domestic and foreign private savings for financing itself, which will favor the perception of sovereign risk. Moreover, the debt policy approved for 2005 includes a foreign debt reduction of US\$500 million. With this, the foreign debt ratio with respect to the total continues to be reduced and the foreign exchange risk is delimited in public finances since it is pre-financed for this year.

As for the current account, while we anticipate a higher deficit for 2005 (2.0% of GDP vs. 1.2% estimated for the end of 2004) this will be covered—almost totally—by long-term revenue from foreign

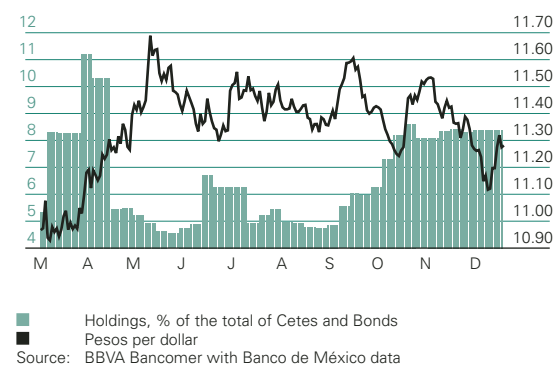
Interest Rate Spread and Foreign Holdings of Mexican Securities



U.S.-Mexico Growth Gap and Performance of the Real Exchange Rate



Exchange Rate and Foreign Holdings of Government Securities



1 Public deficit authorized by the Chamber of Deputies for the 2005 budget. However, the fiscal authority has insisted that it will seek to place it at 0.1% of GDP.

Course of the Exchange Rate and Interest Rate Spread



■ Exchange rate, pesos per dollar
 ■ 91-day Cetes minus 3-month Libor dollars, basis points
 Note: Estimated as of December 2004
 Source: BBVA Bancomer with Banco de México and Federal Reserve data

direct investment (between 2002 and 2004 it averaged US\$13.7 billion annually) that would be generated in an environment of gradual economic recovery.

To summarize, with the global recovery, with a gradual adjustment in U.S. monetary policy, and by maintaining the monetary restriction in Mexico in the first half of 2005, the exchange rate could quote at average levels of 11.69 ppd. However, it cannot be ruled out that it could be lower should the flows to emerging markets intensify. For the second half, there is greater probability of further pressure on the exchange rate to the extent that U.S. interest rates continue to rise and therefore, the spread can be narrowed in the nominal Interest rate. For 2005, we estimate that the peso could close the year at levels of 11.85 per dollar.

Risk factors cannot be ruled out

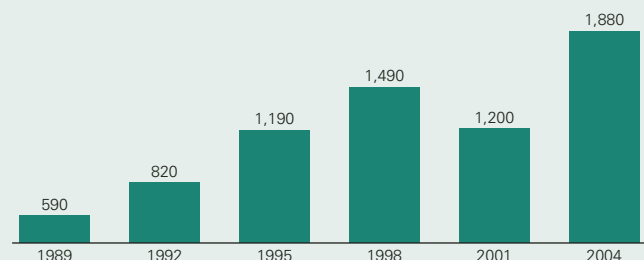
In recent months, the negative feeling derived from the expansion of the U.S. current account deficit has prevailed in the international market, which, within a context of low rates in public and private savings, has weakened the dollar against the major world currencies. If the loss of confidence in the U.S. dollar intensifies, a sharp adjustment in U.S. interest rates could be generated and, with this, the return to investments in pesos would be reduced. Should this scenario materialize, a sharp peso depreciation in the year could not be ruled out, which would be higher if inflation in Mexico does not converge quickly with the projected target.

The Mexican Peso, One of the Emerging Market Currencies with the Greatest Trading Volume

In recent decades, the currency exchange markets in the world have shown strong growth; since the beginning of the 1990s, their volumes have multiplied by three. The Bank of International Settlements (BIS)¹ estimates that on an average day of April 2004, foreign exchange trading in the world totaled US\$1.8 billion, an amount equivalent to 2.8 times the value of Mexico's GDP.

In the last three years, the process has renewed its drive, associated with the consolidation of the banking system—with an increasingly global presence—with the concentration of large corporations, and with the improvement of electronic transactions systems (brokers) in cost and quality. Macroeconomic conditions have also helped, with greater trade and investment flows.

Global Trading Volume on the Currency Exchange Markets • April daily averages, US\$ billions



Source: BBVA Bancomer with BIS data

In the last few years, the currencies of emerging markets and even some developed countries have become attractive for investors such as pension funds, insurance companies, corporate treasuries and leverage or "hedge funds".² The greater importance of these investments stems from the high profitability that they obtain from exchange rate movements, their own volatility and wide interest rate spreads, which allow transactions known as "carry trades".³ These are transactions in which investors finance themselves in currencies at low interest rates and invest in currencies at higher interest rates, thereby obtaining a spread or "premium". The main currencies in which financing is obtained are: U.S. dollars, yens and Swiss francs; in contrast, investment is made in pounds sterling, Australian dollars, Canadian dollars,

etc. Given these conditions, it is natural that the main trading centers are concentrated in the United Kingdom (31%), the U.S. (19%) and Japan (8%). In recent years, other places such as Singapore (5%), Germany (5%), Hong Kong (4%), Australia (3%), Switzerland (3%) and France (3%) are also becoming important.

How does the Mexican peso rank in these leagues?

The peso is a currency on the rise; it ranks as number 12 in the world and concentrates 0.6% of global volume, behind the major "strong" currencies. The foreign exchange global market is very concentrated, with four currencies participating with more than 80% of total trading: the U.S. dollar (44.4%), the euro (18.6%), the yen (10.2%) and the pound sterling (8.5%).

The Mexican peso is well positioned in Latin America; it is the most liquid currency, with a volume five times higher than the Brazilian real and 10 times higher than the Chilean peso. With reference to other emerging market currencies, it has a volume similar to the Korean won and the Singapore dollar. Nevertheless, it is important to mention the strong growth of other currencies. In Asia, of note are the Taiwanese dollar, in Eastern Europe, the Polish zloty, and the Russian ruble.

The reasons explaining the strong volume of the Mexican peso emanate from greater trade and financial flows (such as investment, remittances, tourism, etc.) that have intensified as of the NAFTA. More recently, the attractiveness of the Mexican currency is derived from the convergence process with the U.S. and from the growing importance of derivatives with which it is possible to cover foreign exchange risks, such as the Chicago futures (CME) and the Mexican Derivatives Market (MexDer). This operating flexibility and the attractiveness of interest rate spreads are factors that have contributed to greater activity in the foreign exchange market in Mexico, conditions that will probably prevail in the near future.

Adolfo Albo

a.albo@bbva.bancomer.com

¹ The BIS publishes the survey on the Exchange Markets and Derivatives. In April 2004, 52 central banks participated. Information was obtained on the traditional currency exchange markets, including spot transactions, forwards, exchange swaps and derivatives. BIS (2004). "Triennial central bank survey of foreign exchange and derivatives market activity in April 2004".

² Hedge funds invest large amounts of money, which in turn borrow, with a series of heterogeneous strategies. In recent years, the importance of this type of funds is growing. In accordance with the TASS database, at the beginning of 2004, they managed funds for US\$850 billion.

³ The simplest strategy will be profitable when currencies where it has been invested moderately depreciates or even appreciates vs. the indebted currency, so that the interest rate spread can be obtained plus a capital gain. There are more complex strategies that include derivative operations.

Politics in Mexico: The Run-up to 2006

The year 2005 is a pre-electoral one in which the process of selecting the PAN, PRI and PRD presidential candidates will dominate the political calendar. For the first time in seven decades, the nomination processes of each party will take place under circumstances in which the PRI no longer heads the Executive Power; furthermore, they will be hotly contested.

On this occasion, in contrast to 1999, when no one competed with Vicente Fox for the candidacy, there are four front-line contenders in the PAN: the Interior Minister, Santiago Creel; the ex-Energy Minister, Felipe Calderón Hinojosa; Senator Carlos Medina Plascencia; and the PAN leader in the Chamber of Deputies, Francisco Barrio. Other possible candidates are: the Foreign Relations Minister, Luis Ernesto Derbez; and the Environmental Minister, Alberto Cárdenas.

For the PRI, the process of selecting its candidate no longer depends on the outgoing President, who traditionally chose his successor. However, that party's national leader, Roberto Madrazo, is well placed to secure the nomination. Several past and present governors hope to compete with Madrazo: Natividad González Parás, of Nuevo León; Arturo Montiel, of the State of Mexico; Miguel Alemán, of Veracruz; Tomás Yarrington, of Tamaulipas; and Miguel Ángel Núñez Soto, of Hidalgo. The PRI leader in the Senate, Enrique Jackson, cannot be ignored either.

For the PRD, the 2006 contest provides it with its best opportunity to win the Presidency since Cuauhtémoc Cárdenas obtained 31 % of the votes in the 1988 elections.

The left's hopes are centered on the Mayor of Mexico City, Andrés Manuel López Obrador. Even though he could be subject to impeachment by Congress in 2005 after having been accused of ignoring a Supreme Court order, López Obrador remains the most popular politician in the country. In spite of all this, it would be unwise to discount Cárdenas.

Just as in 2004, certain political noise is anticipated in 2005, in particular between May and November, a period that spans the probable start and culmination of the campaigns of those aspiring to be their party's presidential candidates. At the same time, the governorships of the states of Guerrero, Baja California Sur, Hidalgo, Quintana Roo, Mexico, Nayarit and Coahuila will be renewed. With the exception of Baja California Sur and Nayarit, all those states are governed by the PRI. The elections in the State of Mexico will be a useful electoral barometer, due to that state's proximity to Mexico City and to the fact that it has the largest number of voters in the country: 7.7 million.

The campaigns that the presidential hopefuls will mount in 2005 will be hard fought, but this is no reason to be alarmed. In the entire world, competition is the distinctive mark of democratic processes and something that financial markets incorporate as an intrinsic variable. At the end of 2005, the parties will have concluded their nominating processes and picked their candidates. If all goes well, it won't be until the early months of 2006 before the contenders, along with their economic programs, arouse investor interest.

David Aylett

dp.aylett@bbva.bancomer.com

Relevant Political Events 2005-2006

Events	Pre-election year 2005	Election year 2006
Presidency	May-June: Registration of presidential hopefuls Sept.-Nov.: Internal party processes to nominate candidates Dec. 31: Cut-off date resignation of public officials planning to run for Presidency	January 1-15: Registration presidential candidates start of campaigns June 29: End of campaign July 2: Election of President July 5: Official vote count September 1: President Fox's VI State of Nation address December 1: New President takes office
Congress	Feb. 1-April 30: Regular session of Congress: possible impeachment of López Obrador	March 15-30: Start of campaign for Senate April 1-15: Start of campaign for Chamber of Deputies June 29: End of campaigns July 2: Election of full Congress September 1: Start of regular sessions of new Congress
D.F.		July 2: Election Mexico City's Mayor, 16 delegates & Legis. Assembly
States	February 6: Election Governor Guerrero and Baja California Sur and Quintana Roo February 20: Election Governor Hidalgo July 3: Election Governor State of Mexico and Nayarit September 25: Election Governor Coahuila	July 2: Election Governor Guanajuato, Jalisco, Morelos, Colima and San Luis Potosí August 20: Election Governor Chiapas
Others	March: Election new leader PAN and PRD	

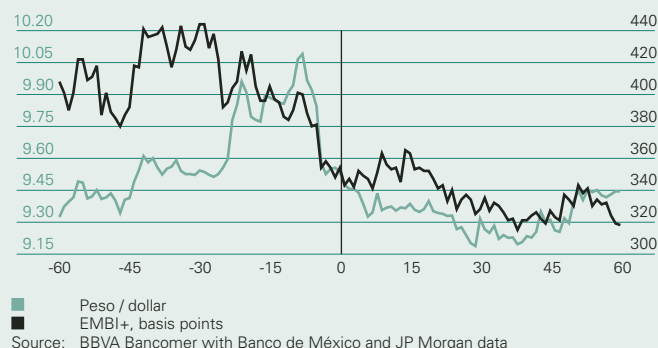
Source: IFE and National Congress

The Elections: Effects on the Financial Markets

Since 1976, presidential elections in Mexico have almost always been accompanied by foreign exchange crises and an abrupt drop in economic activity. Fortunately, the year 2000 was different. For the first time in history, the country experienced a peaceful transfer of power from one party to another. This event took place without great financial turmoil, thereby demonstrating that adoption of a free-floating exchange rate system, development of autonomous and credible institutions (IFE, Banco de México) and maintenance of a stable macro-economic environment had facilitated a democratic change with certainty.

Elections in 2000

+ / - 60 days



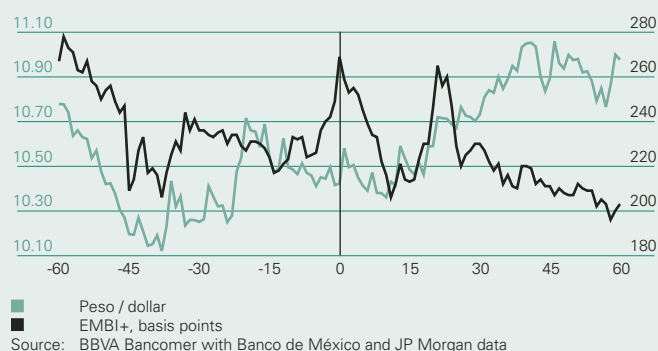
Mexico's recent experience with competitive elections that do not contaminate the economic environment in any significant way, allows financial markets to have a greater degree of confidence in the ability of the multi-party system and the main political actors to process the 2006 presidential succession without any setbacks. As a result, it can be anticipated, with a reasonable degree of certainty, that the coming elections will generate only moderate nervousness among investors and that this sentiment will be diluted shortly after the results are made known.

It is useful to examine to what extent the performance of financial variables in the past bears out this assertion. In this regard, the 2000 presidential elections and the 2003 legislative elections are the only ones that are relevant: in contrast to the previous ones, these took place in the context of a free-floating peso, electoral transparency and political alternation. On both occasions, uncertainty in the weeks prior to the elections gave rise to a precau-

tionary demand for dollars, which provoked temporary pressure on the exchange rate. For their part, interest rates rose slightly and the sovereign spread posted a moderate increase due to the risk perception. Once the voting was over, everything returned to normal. The effect of the above-mentioned electoral processes on financial variables was temporary.

Elections in 2003

+ / - 60 days



However, each election has its own peculiarities. The 2002 Brazilian presidential elections are not that far off: they were preceded by notable financial volatility, depreciation of the local currency and persistent doubts about the management of the bulky public debt. The radical background of "Lula", the candidate of the left who was leading in the polls, together with some of his past statements regarding debt restructuring, provoked nervousness among investors, who abhor uncertainty. Once the winning candidate's commitment to a responsible monetary and fiscal policy was made clear, the financial markets notably calmed down.

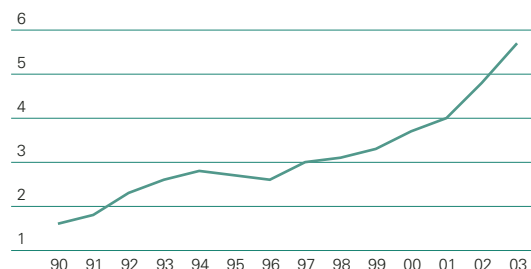
In Mexico, it is reasonable to assume that the presidential hopefuls recognize the risks of sending a mistaken or confused message to the economic and financial agents in the midst of the electoral campaign. Knowing that in a country such as Mexico, fiscal and monetary discipline is not the only thing that ensures confidence, they will have to take into account the fears, susceptibilities and prejudices of the financial markets. Those who aspire to win the Presidency of the Republic should be aware that current economic stability and institutional solidity are assets prized by voters and investors alike.

David Aylett

dp.aylett@bbva.bancomer.com

Is China a Threat to Mexico?

Chinese Foreign Trade % of world trade*



* Trade = exports + imports
Source: BBVA Bancomer with WTO data

According to the World Trade Organization (WTO), one out of every five dollars in China's exports is sold to the United States, which is Mexico's main trading partner. Furthermore, despite the reduced U.S. economic activity in recent years, Chinese penetration in its manufacturing markets has been strong. This has generated a growing concern in Mexico over the country's exports possibly being displaced.

In this article we will attempt to answer some questions, such as: what are the forces that can explain China's export dynamism? Are Mexican manufactured goods in fact being displaced? And, if this is indeed the case, can this be attributed to China?

China: the world's new factory

In the past 25 years, one of the most important economic developments on a global level has been China's growing incorporation into international trade and investment flows. Between 1979 and 2003, the country's share of world trade rose from 1 to 5.7%, after its exports and imports jointly posted average annual growth of 15 vs. 7% for the world as a whole.

The dynamic expansion of China's foreign trade has been the result of a constant process of deregulation and the opening up of its economy, although also due to a corresponding specialization within international production. In addition, private companies have bet in favor of the Chinese growth model. Thus, China is today one of the largest receivers of foreign direct investment flows, which mainly come from Asian, European, and U.S. transnational companies that seek to penetrate its markets, and use the comparative advantages that the country offers in terms of labor costs for assembling products for their subsequent export to other nations.

As a result of a vertical integration in international production, 57% of the growth in Chinese exports comes from transnational companies and is centered in the manufacturing sector. China is the world's fourth largest exporter and the third greatest importer of merchandises. It is the main producer of light manufactured goods, such as toys and clothing, but its electronic and machinery and equipment sectors are beginning to have a growing share of the world market.

Although in the long term, China's commercial dynamism will encourage productive efficiency and the expansion of world economic activity, in the short term, its entry into the fray has generated very important, although differentiated, effects among countries. In general terms, economies specialized in capital intensive products and in exports of raw materials are more benefited by Chinese trade and investments than others with manufactured goods that are labor intensive, which because they are similar to those of the Asian giant face greater competition.

Trade Balance: China vs. Selected Economies • US\$ billions

	China	
	1997	2003
United States	16	59
European Monetary Union	5	19
Japan	3	-15
Rest of Asia	18	-15
Others	-1	-23
Total	41	25

Source: BBVA Bancomer with IMF data

China and Mexico in the U.S. market

During the 1990s, U.S. purchases of manufactured goods from China and Mexico were highly dynamic. While total U.S. imports of such products posted average annual growth of 9.4% between 1990 and 2000, in the same period those coming from China and Mexico registered average yearly increases of 22.4% and 17.7%, respectively.

As a result, both countries significantly increased their share of total U.S. imports of manufactured goods. Purchases from China increased 6.1 percentage points (pp), rising from 3.5 to 9.6%, while imports from Mexico grew 6 pp, from 5.5 to 11.5% of the total. However, between 2001 and 2003, sales of Mexican manufactured goods to the United States weakened, while those sold by China maintained their strength. In this period, Mexican exports fell an annual 0.5% on average, while the sale of Chinese products rose 15.5%. Thus, China's share of total U.S. imports of manufactured goods grew 4 pp, while Mexico's percentage participation diminished by 0.9 pp.

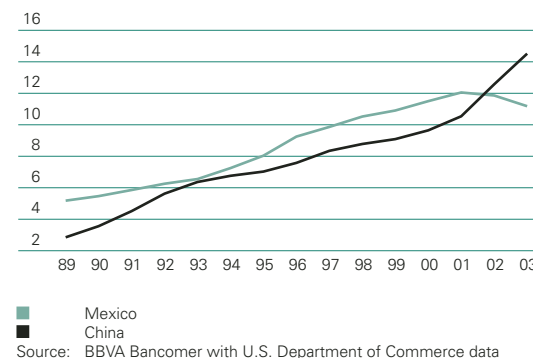
Although, on the whole, Mexico's exports of manufactured goods have lost less market share than those of other countries such as Japan, Taiwan, and Canada (see graph), it is clear that Chinese manufactured goods represent strong competition. To evaluate this panorama, two indicators were used in commercial terms, the specialization ratio and the conformity ratio. These variables measure the matching in the exports of the two countries. If they totally coincide, the ratios have a value equal to 1, indicating that their potential for commercial competition is high. When they do not coincide, the ratios are equal to 0.¹

Based on the previously mentioned indicators, Mexican manufactured goods in the U.S. market increasingly coincide with those of Chinese origin. Between 1990 and 2003, the average of both ratios for total Mexican manufactured goods rose from 0.37 to 0.56. Among the main Mexican exports to the United States, the highest average in the ratios in 2003 corresponded to equipment and telecommunications apparatuses (0.91) and the lowest to automotive vehicles and auto parts (0.26).

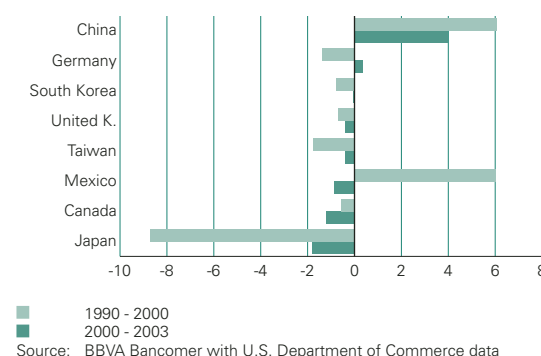
It should be noted that from 2000 to 2003, a period in which Mexico lost market share in the United States, the average of the potential trade competition ratios remained at 0.56 for total manufactured goods and the same was the case for machinery and electrical appliances (0.66). At the same time, for clothing, the average declined from 0.71 to 0.66 and for automotive vehicles and auto parts it increased from 0.16 to 0.26.

A sectoral analysis reveals that there is potential trade competition between Chinese and Mexican manufactured goods and that this has increased, although unevenly (see chart). The greater competition present in almost all manufacturing sectors is not completely revealed by the aggregate figures because in the case of motor vehicles and auto parts, in which there is lower trade competition, the sector is also characterized by having the greatest percentage share within total exports of Mexican manufactured goods and this tends to pull the ratios used downward.

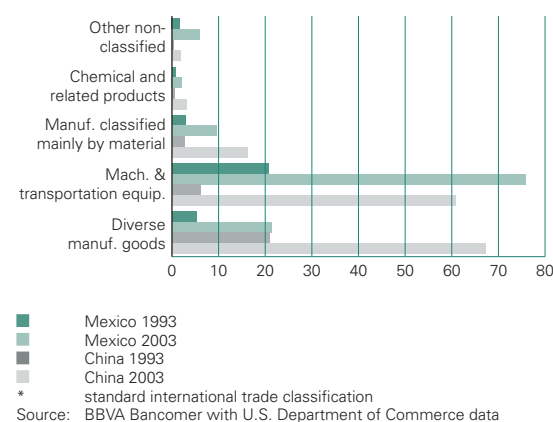
U.S.: Imports of Manufactured Goods % of total manufactured goods imports



U.S.: Imports from Main Trading Partners Absolute change in market share within total, pp



U.S.: Manufactured Goods Imports* US\$ billions



1 See Jorge Blázquez Lidoy, Javier Rodríguez, and Javier Santiso (2004) for more information on the use of these indexes measuring trade competition.

The gain in market share of Chinese products within U.S. imports in part is due to fewer direct exports from countries such as Japan and Taiwan, which send their intermediate goods to China for final assembly and they are then re-exported to the United States as final products. But China's increased U.S. market share can also be attributed to changes in U.S. regulations that have eliminated entry barriers to Chinese products.

A story of two sectors: apparel and motor vehicles

Reduced trade barriers have allowed Chinese exports to fully reflect the country's comparative advantages in terms of the production of manufactured goods. There is no sector in which these advantages are best reflected than in the apparel industry, in which advances in the industry's trade liberalization in the United States have negatively affected Mexico.

At the beginning, the North America Free Trade Agreement (NAFTA) provided Mexico with preferential access to the U.S. clothing market. With the trade agreement, Mexican exports doubled between 1994 and 1999. However, in 2000, Washington broadened preferential access to Central American countries and in the framework of its agreements with the WTO, it has also progressively reduced its import quotas for other nations. Thus, the number of suppliers from different countries in the U.S. market is increasingly greater and México's relative share is progressively smaller.

With the trade opening, relative costs of production have been decisive. Since hourly wages before benefits and taxes in the Mexican manufacturing industry are three times higher than those of China (calculated through 2003), this gives the Asian country a relative comparative advantage in sectors characterized by an intensive use of labor. Thus, while between 1999 and 2003, unitary labor costs in the textile, apparel, and leather products sector in Mexico increased 16%, the share of the country's exports to the U.S. clothing market fell from its maximum level of 14% to 9.9%.

Potential Commercial Competition Indexes (Specialization and Conformity)*

Scale from 0 (low competition) to 1 (high competition)

	1990				2000				2003			
	SR	CR	Avge. % bkdn.		SR	CR	Avge. % bkdn.		SR	CR	Avge. % bkdn.	
Total manufactured goods	0.38	0.35	0.37	100.0	0.57	0.55	0.56	100.0	0.56	0.56	0.56	100.0
Automotive vehicles and auto parts	0.30	0.21	0.26	17.2	0.20	0.12	0.16	22.3	0.26	0.26	0.26	22.1
Machinery, electrical parts and equipment	0.53	0.61	0.57	21.1	0.61	0.72	0.66	15.5	0.60	0.71	0.66	14.7
Electrical appliances weighing less than 20kg.	0.41	0.35	0.38	11.4	0.41	0.51	0.46	10.7	0.56	0.63	0.60	9.2
Telecommunications equipment and apparatuses	0.77	0.94	0.85	3.9	0.89	0.98	0.94	4.5	0.86	0.97	0.91	4.8
Clothing and accessories	0.52	0.66	0.59	2.6	0.63	0.78	0.71	4.4	0.61	0.71	0.66	3.6
Measurement instruments and equipment	0.35	0.40	0.37	1.3	0.38	0.51	0.45	2.2	0.44	0.58	0.51	2.8
Medical and surgical instruments and equipment	0.53	0.65	0.59	1.3	0.55	0.65	0.60	1.1	0.53	0.61	0.57	2.0
Manuf. goods with natural and synthetic fabric	0.47	0.47	0.47	0.5	0.58	0.80	0.69	0.5	0.50	0.68	0.59	0.6
Optical, photographic & movie equip. & instrum.	0.50	0.67	0.58	0.5	0.77	0.95	0.86	0.5	0.55	0.85	0.70	0.4
Manufactured goods with leather and fur	0.71	0.93	0.82	0.4	0.72	0.90	0.81	0.2	0.70	0.93	0.82	0.1
Subtotal (% of total value of exports of manuf. goods)				60.4				62.0				60.3

SR Specialization Ratio
CR Competition Ratio
% bkdn. % share in total U.S. imports of manufactured goods
Source: BBVA Bancomer with U.S. Department of Commerce data

However, the smaller market share for Mexican exports in other sectors cannot be attributed only to China, but also to the recession in U.S. industrial production, whose correlation with Mexican export sales of manufactured goods was 0.94 between 1996 and 2003. The strong fall in Mexico's main trading partner's industrial activity between 2001 and 2003 also caused an important contraction in the intra-industrial trade of both economies, negatively affecting the strength of Mexican exports.

An example of this is the automotive sector. In Mexico, the largest auto manufacturers are of U.S. origin and a large share of their production is exported to the United States, while domestic demand is mainly satisfied with imports.

The above leads to the key factors in determining national auto production and the sector's exports being dictated by demand in the United States. Thus, in recent years, the reduced dynamism of Mexican exports from this sector reflected lower demand and certain changes in consumer preferences. For example, the autos most in demand in the United States have been SUV type vehicles and not compact and subcompact cars, in which Mexican production specializes.

Chinese competition would not have to affect Mexico in this sector since the latter's geographical proximity with the United States offers it an important relative comparative advantage in auto assembly. This allows for lower shipping and distribution costs for heavy and voluminous products, "just-in-time" delivery to maintain low inventories, and a rapid response to apply innovations in product lines.

The integration between the U.S. and Mexican productive cycles leads to the idea of a better performance for Mexican exports as the growth in U.S. production is consolidated.

Faced with competition from China, what can Mexico do?

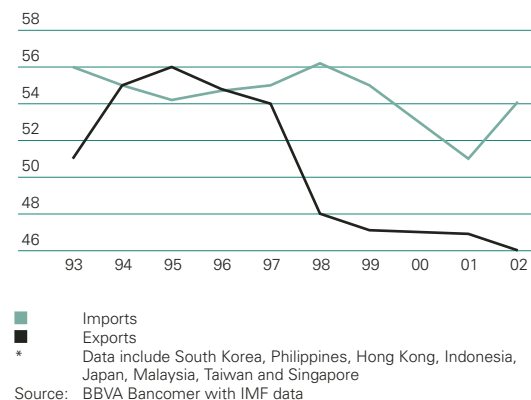
The market share enjoyed by Mexican products in the United States ultimately depends on their competitiveness. In the case of intermediate goods, this is closely tied with an efficient integration with the U.S. productive cycle, and for final consumer goods, with strategies that allow making the most of the comparative advantages offered by Mexico.

On a company level, some measures that can improve competitiveness are those aimed at developing products with greater added value that are still not marketed by Chinese companies. In a broader sense, the recommendation would be to diversify exports toward goods for which Mexico's geographical proximity offers comparative advantages in terms of lower shipping and distribution costs, short inventory cycles, and greater operating efficiency based on the practice of "just-in-time" delivery.

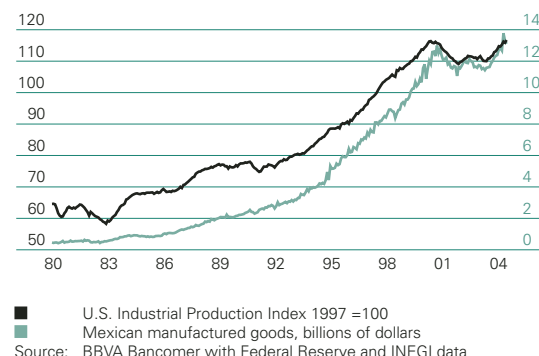
On an industry level, vertical integration with the U.S. industry should be strengthened, but efforts should also be made to advance toward a more important participation in the final stages of productive processes that are not labor intensive. In this regard, NAFTA and other trade agreements such as those signed with the European Union

China Trade with Asia*

% of the region in total China trade



U.S. Industrial Production and Exports of Mexican Manufactured Goods

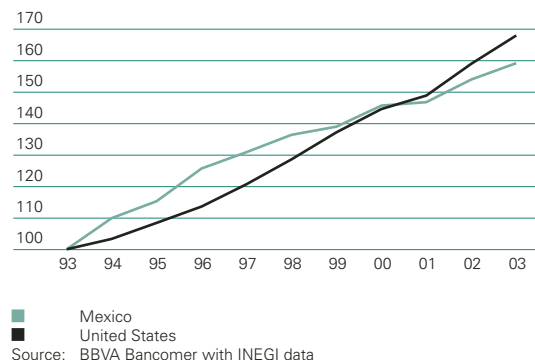


Factors that Have an Influence on the Location of Plants • Relative advantages

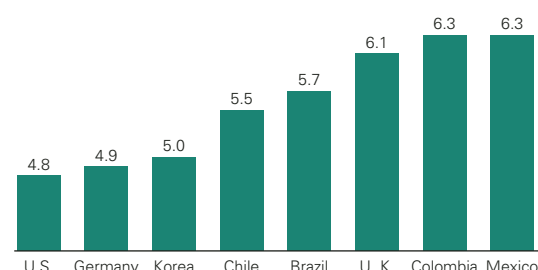
	Mexico	China
Labor costs		X
Energy costs		X
Supplier base		X
Transportation costs	X	
Qualified labor	X	
Telecommunications costs	X	
Technology transference	X	
Production flexibility	X	
Intellectual property protection	X	
Trade agreements	X	

Source: US International Trade Commission, 2002

Labor Productivity in the Manufacturing Industry • Index 1993 = 100



Electric Energy Prices for Industry US cents per KWh



Environment for Investment 2004

	China	Mexico	OECD (avge.)
Business transactions			
Time to open a business (days)	41	58	25
Cost (% income per inhab.)	14.5	16.7	8
Labor relations*			
Difficulty index for hiring	11	67	26.2
Difficulty index for layoffs	40	90	26.8
Contract compliance			
Compliance (% of debt)	25.5	20.0	10.8
Time (days)	241	421	229
Legal security index**			
	2	2	6.3

* 0 better to 100 worse
 ** 0 worse to 10 better

Source: Doing Business 2005, World Bank

and more recently with Japan, represent an asset for making Mexico a more extensive platform from which to penetrate North America and other regions. Nevertheless, it is imperative to supplement such measures with economic conditions and incentives that reinforce productivity and reduce the operating costs of doing business in Mexico.

Since 1997, labor productivity in the manufacturing industry has become less dynamic. This negatively affects the competitiveness of Mexican exports, because it raises production costs. Thus, Mexican manufactured goods that compete in price in external markets lose their advantages, and the same phenomenon occurs with U.S. products that are labor intensive and that use Mexican intermediate goods.

The high relative cost of energy in the country is another key variable that reduces the competitiveness of Mexican products. Furthermore, various deficiencies in the Mexican energy sector, which could be resolved with greater public infrastructure and fewer restrictions on private participation, have generated uncertainty concerning the medium- and long-term supply of fuel at competitive prices and rates for industry.

Finally, recent data from the World Bank reveal that the costs of doing business in Mexico are higher than those of the average cost for OECD member countries and other emerging economies. For example, to establish a business in Mexico takes 58 days on average, while in China and in the OECD countries, the corresponding periods are 41 and 25 days respectively. At the same time, legal provisions concerning the functioning of the labor market, such as minimum wages, collective bargaining agreements, etc., lead to Mexico having one of the most rigid labor markets worldwide and for the same reason, make it very expensive to hire and lay off workers.

In conclusion, the losses in labor productivity and the high costs of doing business in Mexico represent greater threats to the country's exports than those revealed by the analysis of the potential trade competition with China, since these are the factors that ultimately sustain their competitiveness. Therefore, more than posing a threat for Mexico, the competition from China represents an opportunity to identify comparative advantages and a motive for advancing in structural changes that will allow for an increase in domestic productivity and competitiveness abroad. When a country moves as quickly as China, it is very expensive to lag behind.

References:

Jorge Blázquez Lidoy, Javier Rodríguez and Javier Santiso (2004). "Angel or Devil? Chinese Trade Impact on Latin American Emerging Markets", Economic Research Department, BBVA, Madrid, October 4. Document presented at Georgetown University, Center for Latin America Studies.

United States Indicators and Forecasts

	2000	2001	2002	2003	2004*	2005**
Economic Activity						
GDP (real annual % change)						
Gross Domestic Product	3.7	0.8	1.9	3.0	4.4	3.5
Personal consumption spending	4.7	2.5	3.1	3.3	3.7	3.5
Private investment	5.7	-7.9	-2.4	4.4	12.5	5.8
Total exports	8.7	-5.4	-2.4	1.9	8.9	8.6
Total imports	13.1	-2.7	3.4	4.4	9.6	7.0
Government consumption	2.1	3.4	4.4	2.8	2.0	1.9
Industrial production (real annual % change)	4.4	-3.4	-0.6	0.3	4.5	4.0
Inflation (annual average, %)						
Headline	3.4	2.8	1.6	2.3	2.7	2.2
Core	2.4	2.7	2.3	1.5	1.8	1.9
Public Finances						
Fiscal balance (% of GDP)	2.4	1.3	-1.5	-3.5	-3.6	-3.4
External Sector						
Current account (% of GDP)	-4.2	-3.8	-4.5	-4.8	-5.5	-5.4
Financial Markets						
Interest rates						
Fed Funds (average, %)	6.2	3.9	1.7	1.1	1.4	3.2
Fed Funds (eop, %)	6.4	1.8	1.2	1.0	2.3	4.0
3-month Libor (average, %)	6.5	3.8	1.8	1.2	1.6	3.5
3-month Libor (eop, %)	6.4	1.9	1.4	1.2	2.5	4.3
10-year Treasury Note (average, %)	5.7	5.0	4.6	4.0	4.3	5.3
10-year Treasury Note (eop, %)	5.1	5.0	3.8	4.3	4.3	5.5
Exchange rate						
Dollar/euro (average)	0.92	0.89	0.95	1.13	1.24	1.33
Dollar/euro (eop)	0.94	0.89	1.04	1.25	1.33	1.35
Yen/dollar (average)	107.77	121.48	125.14	115.83	108.28	105.00
Yen/dollar (eop)	114.27	131.63	118.74	107.33	104.61	100.00

* Estimated
** Forecast

Mexico Indicators and Forecasts

	2000	2001	2002	2003	2004*	2005**	I'05	II'05	III'05	IV'05
Economic Activity										
Gross Domestic Product										
Real annual % change	6.6	-0.1	0.7	1.3	4.1	3.8	4.1	3.7	3.7	3.6
Per inhabitant (US dollars)	5,920	6,279	6,425	6,109	6,275	6,464	6,347	6,587	6,331	6,589
US\$ billions	581	623	649	626	658	685	670	697	672	701
Financial Markets										
Inflation (eop, %)										
Headline	9.0	4.4	5.7	4.0	5.4	4.2	5.0	5.3	4.6	4.2
Core	7.5	5.1	3.8	3.7	3.9	3.7	3.8	3.7	3.8	3.7
Interest rates (eop, %)										
28-day Cetes	17.6	6.8	7.0	6.0	8.5	9.1	8.9	9.2	9.1	9.1
28-day TIE	18.4	7.9	8.5	6.3	8.9	9.4	9.2	9.6	9.5	9.4
10-year Bond (eop, %)	—	10.3	10.1	8.3	9.7	11.4	10.4	10.9	11.1	11.4
Exchange rate										
Pesos per dollar, eop	9.6	9.1	10.3	11.2	11.4	11.9	11.4	11.7	12.0	11.9
Other Indicators										
Public Finances										
Fiscal balance (% of GDP)	-1.1	-0.7	-0.6	-0.6	-0.4	-0.1				
Financial Requirements of the Public Sector (% GDP)	-3.3	-3.0	-2.6	-2.5	-2.7	-2.1				
External Sector***										
Trade balance (US\$ billions)	-8.0	-10.0	-7.9	-5.6	-6.1	-10.7	-6.8	-7.9	-9.2	-10.7
Current account (US\$ billions)	-23.7	-23.9	-13.8	-8.9	-8.0	-13.4	-9.4	-10.7	-12.1	-13.4
Current account (% of GDP)	-4.1	-3.8	-2.1	-1.4	-1.2	-2.0	-1.4	-1.6	-1.8	-2.0
Oil (Mexican mix, dollars per barrel, eop)	18.8	14.38	24.7	25.7	33.4	26.8	28.2	27.7	27.3	26.8
Banking Activity (real annual % change)										
Core bank deposits	-13.9	2.2	-5.5	7.4	7.2	5.0	3.0	1.1	4.3	5.0
Commercial banks performing loans****	2.6	0.8	7.9	8.1	14.3	10.1	15.3	12.0	11.0	10.1
Aggregate Demand (real annual % change)										
Total	10.3	-0.5	0.9	0.7	5.8	5.8	5.7	5.8	6.0	5.5
Domestic demand	8.3	0.6	0.7	0.5	3.8	4.3	4.4	4.3	4.4	4.2
Consumption	7.4	1.9	1.2	2.9	4.4	4.3	4.3	4.2	4.4	4.2
Private	8.2	2.5	1.3	3.0	4.9	4.5	4.5	4.4	4.7	4.6
Public	2.4	-2.0	0.1	2.5	1.2	2.1	2.6	2.5	1.7	1.9
Investment	11.4	-5.6	-1.0	-0.4	5.4	4.1	4.8	3.9	4.2	3.5
Private	9.0	-5.9	-4.0	-5.7	6.2	4.5	5.4	4.2	4.2	4.0
Public	25.2	-4.2	14.2	22.4	3.0	2.8	1.5	2.5	4.3	2.6
External Demand	16.4	-3.8	1.5	1.1	12.1	9.7	9.5	10.0	10.2	9.3
GDP by sectors (real annual % change)										
Agriculture	0.6	3.5	0.3	3.9	3.0	1.5	3.8	-2.0	1.0	3.0
Industrial	6.0	-3.4	-0.3	-0.8	4.0	3.9	4.4	4.7	3.8	2.9
Mining	3.8	1.5	0.4	3.7	3.2	3.8	2.8	5.2	5.7	1.6
Manufactures	6.9	-3.8	-0.7	-2.0	3.9	3.7	4.3	4.3	3.6	2.7
Construction	4.2	-5.7	1.3	3.4	5.6	5.4	6.2	6.6	4.7	4.3
Electricity, gas and water	4.2	-5.7	1.3	3.4	2.0	2.8	2.3	3.8	2.3	2.8
Services	7.3	1.2	1.5	2.1	4.4	4.1	4.4	4.1	4.1	3.9
Retail, restaurants and hotels	12.2	-1.2	0.0	1.3	4.3	3.9	4.7	4.4	3.4	3.3
Transportation and communications	9.1	3.8	1.9	3.3	8.9	7.6	7.8	7.2	7.5	7.8
Financial, insurance and real-estate	5.5	4.5	4.3	4.3	4.6	4.4	4.5	4.3	4.8	4.1
Community and personal	2.9	-0.3	0.5	0.5	1.6	1.7	1.7	1.7	1.8	1.7

eop end of period
 * Estimated
 ** Forecast
 *** Accumulated, last 12 months
 **** To the private sector

Economic Research Department Presentations

Title	Institution - Client	Place and date
Bogota www.bbva.com.co		
Coyuntura y perspectivas cambiarias	Banca de Empresas BBVA	Medellín, 5 nov. 04
Coyuntura y perspectivas cambiarias	Banca de Empresas BBVA	Cali, 4 nov. 04
Coyuntura y perspectivas cambiarias	Banca de Empresas BBVA	Bogotá, 2 nov. 04
Algunas causas y remedios del déficit presupuestal	Universidad de los Andes	Bogotá, 26 oct 04
Coyuntura macroeconómica	Tesorería BBVA	Bogotá, 15 oct. 04
Buenos Aires www.bancofrances.com.ar		
VI Congreso de Economía	Consejo Prof.de Ciencias Económicas de la Ciudad de Bs.As.	Buenos Aires, Abr. 04
Perspectivas Económicas 2004	FORUM business information.	Buenos Aires, Mar. 04
Caracas www.provincial.com		
Escenario 2004-2005	Instituto Venezolano de Ejecutivos de Finanzas	Maracaibo Nov 04
Mercado Petrolero, Perspectivas de corto y largo plazo	Venezuela Corporte Leaders' Forum	Caracas Nov 04
Mercado Petrolero y Prespectivas 2005	Cámara de la Construcción	Caracas Nov 04
Escenario 2004-2005	Cámara Inmobiliaria	Valencia Oct 04
Escenario 2004-2005	Cámara de Transportistas	Valencia Oct 04
Escenario 2004-2005	Fundes	Barquisimeto Oct 04
Lima www.bbvaibancocontinental.com		
Escenarios Financieros	BBVA Continental Bolsa	Lima, Nov. 04
Perspectivas Económicas 2005	Cientes principales de Banca Mayorista	Lima, Nov. 04
Situación Económica	BBVA Banca Empresa Institucional	Lima, Oct. 04
Perú: Contexto Económico	Equilibrium Clasificadora Riesgo	Lima, Oct. 04
Perú: Contexto Económico	Cámara de Comercio Oficial de España	Lima, Sep.04
¿En Dónde Estamos?	Universidad San Ignacio de Loyola	Lima, Ago.04
Madrid www.bbva.com		
China ¿angel o demonio para América Latina?	Corporación Andina de Fomento	Caracas, Dic. 04
Inversión Socialmente Responsable	VII Congreso Nacional de Medio Ambiente	Madrid, Nov. 04
Las Claves del Escenario Financiero	Universidad Navarra	Madrid, Nov. 04
Europa, Situación y Perspectivas	Grupo Expertos Coyuntura	Madrid, Nov. 04
Las claves del Escenario Financiero	Círculo de Economía	Madrid, Nov. 04
Spanish Real Estate	FMI	Madrid, Nov. 04
Angel or Devil? Chinese Impact on Latin America	World Bank	Nueva York, Oct.04
A journey towards Latin American Emerging Markets	Fundación CIDOB	Barcelona, Oct.04
Foreign Direct Investment in Latin America	Inter- American Develop. Bank	Paris, Oct. 04
In search of a better world: BBVA in Latin America	Columbia Business School	Nueva York, Oct.04
Chinese Impact on Latin America	Georgetown University	Washington, Oct. 04
Latin America: Oh, les beaux jours!	BBVA Corporate Banking	Paris, Oct. 04
Las Claves del Escenario Macroeconómico y Financiero	Jornadas de Empresa Familiar	Oviedo, Sept.04
Mexico www.bancomer.com		
México: Transformación y Perspectivas	CESCE	Madrid, Oct. 04
Ambiente de Inversión en el Sector Turismo	Bolsa Mexicana de Inversión Turística	México, Sept. 04
Santiago de Chile www.bhif.cl		
Recuperación en medio de turbulencias	BBVA clientes por región	Puerto Varas, Nov 04
Panorama Económico Mensual	Banca Corporativa BBVA	Santiago, Nov. 04
Panorama Económico 2004-2005	Banca Minorista BBVA	Santa Cruz, Nov. 04
Perspectivas Económicas 2004-2005	Constructora Gardilcic	Santiago, Oct. 04
Panorama Económico Mensual	Banca Corporativa BBVA	Santiago, Oct. 04
Instituciones y Crecimiento Económico	Seminario BBVA	Madrid, Oct. 04