

# Inflation Report

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January – March 2002



BANCO DE MEXICO

APRIL 2002

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*BOARD OF GOVERNORS*

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***FOREWARNING***

*Unless otherwise stated, this document has been prepared using data available as of April 24<sup>th</sup>, 2002. The figures are preliminary and subject to change.*



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## I. Introduction

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During the first quarter of 2002, the United States economy grew at a much faster rate than expected. As a result, growth forecasts for 2002 have been revised upwards. Although evidence pointing to a recovery in Mexico has not been as conclusive as in the United States, there are some signals that suggest a rebound in economic activity. Furthermore, capital inflows were sufficient to finance the current account deficit easily, a development that led to an improvement in country risk perceptions as well as to the appreciation of the exchange rate.

The weakness of the economy and the appreciation of the exchange rate were two factors that helped to maintain inflation on a trend consistent with the medium-term objective. This is evident as core inflation continued to descend, reaching a level close to targeted inflation for 2002.

Nevertheless, during the January-March period the annual growth rate of the Consumer Price Index (CPI) increased. As Banco de México had warned at the onset of the year, this responded to two factors. First, the fact that annual inflation of agricultural and livestock goods rose partly as a result of a statistical effect. Despite the marked accumulated disinflation of these goods during the quarter, it was lower than that observed during the same period of 2001. Second, inflation of goods and services administered or regulated by the public sector escalated sharply from December 2001 to March 2002. By means of a preventive widening of the “short” applied by the Central Bank, increases in the latter prices were restrained from having an upward effect on inflation expectations as well as on pricing of other products. As a result, the impact of these increases is expected to dissipate at the beginning of 2003 as they reflect once-and-for-all changes in the prices rather than permanent changes in the rate of growth of such prices. Once the effect of the adjustment in prices of goods or services administered or regulated by the public sector has been absorbed, and volatility of agricultural and livestock prices has been offset, it is reasonable to foresee that CPI inflation will converge rapidly towards the trend marked by core inflation.

During the remainder of the year, the vigorous growth of the United States economy is expected to progressively lead to a rebound in economic activity in Mexico. Therefore, Banco de México has revised upwards its forecast for real GDP growth from

1.5 percent in January to 1.8 percent at the time of publishing this Report. In this regard, prospects of the economy and the current monetary policy stance are deemed consistent with the objective of attaining at year-end 2002 a CPI inflation that does not exceed 4.5 percent.

The main risk factors for Mexico's economy are related to the following issues: i) a weaker than expected economic upturn in the United States; ii) a lower than anticipated impact of the United States recovery on the Mexican economy; and iii) a substantial rise in international interest rates that might reduce capital flows to Mexico.

## II. Recent Developments in Inflation

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The path of annual inflation during the January-March quarter proved to be broadly in line with what was foreseen in the previous Inflation Report. Thus, CPI yearly inflation increased while core inflation continued to decrease. Nonetheless, the performance of both indices was compatible with the target of attaining an inflation rate of less than 4.5 percent by year-end. In this respect, the following results are noteworthy:

- (a) Annual CPI inflation was 0.26 percentage points higher than the level registered at the close of the previous quarter. In contrast, core inflation diminished 0.54 percentage points;
- (b) Annual core inflation of goods' prices fell. That pertaining to services posted an increase during the first two months of the quarter, which was partially reverted in March;
- (c) The luxury tax had a limited effect on inflation;
- (d) Inflation of agricultural and livestock goods' prices exhibited great volatility. In addition, its contribution to annual CPI inflation was higher, and
- (e) Annual inflation of the sub-index of the prices administered or regulated by the public sector rose substantially. This can be explained by the sharp upward movement in Mexico City's subway, urban transportation and electricity prices as well as in fees for licenses and other official documents.

The upturn in annual inflation as measured by the CPI during the present quarter reflects the volatility of the prices of goods and services excluded from core inflation. This confirms the relevance that the latter has acquired as a reliable indicator of inflation trends. It should also be mentioned that the fall in annual core inflation responded to a large extent to the appreciation of the exchange rate, which contributed to limit the upward movement of goods' prices.

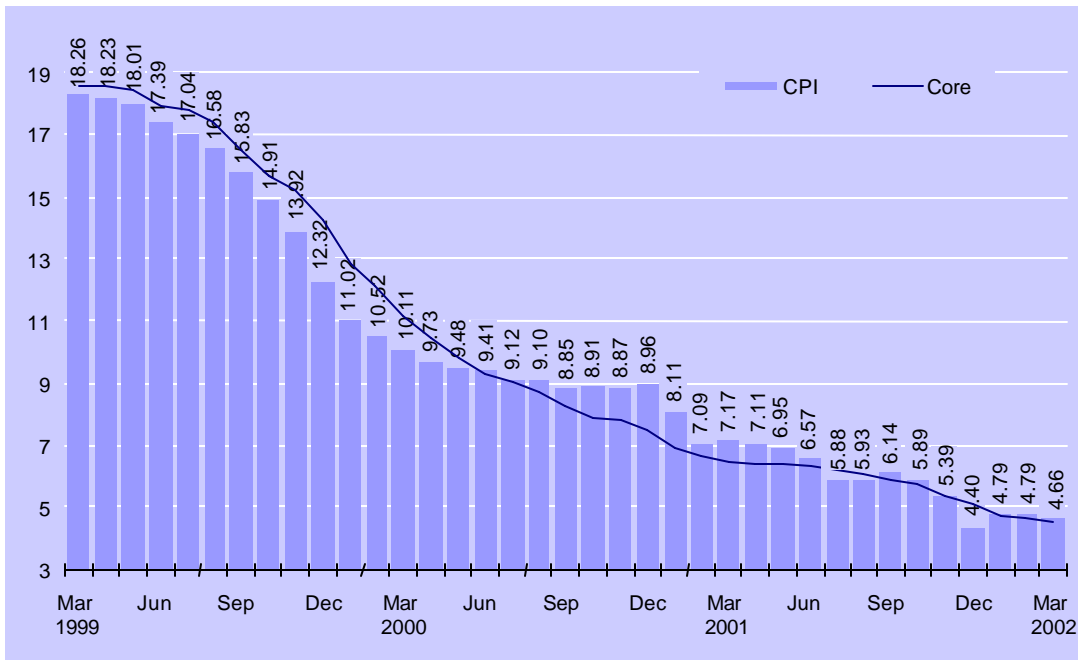
## II.1. Behavior of Several Inflation Indicators

This section will examine the performance of the main price indexes calculated by Banco de México during the first quarter of 2002.

### II.1.1. Annual Inflation of the Consumer Price Index and of the Core Price Index

The CPI registered a 4.66 percent annual growth at the end of the first quarter of 2002, an outcome that implies an increase of 0.26 percentage points in regards to the previous quarter (Graph 1). Since CPI inflation posted a sharp fall in December 2001, in order to identify the trend of this indicator it is more convenient to compare the average inflation observed during the first quarter of 2002 (4.75 percent) with that of the past quarter (5.23 percent).

**Graph 1** National Consumer Price Index and Core Price Index  
Annual percentage change



In contrast with the evolution of CPI inflation, core inflation remained on a downward trend, reaching 4.54 percent in March, a reduction of 0.54 percentage points compared to December 2001 (Graph 1).

The annual growth rate of the sub-index of agricultural and livestock prices and of that of prices of goods administered or

regulated by the public sector was higher in March of this year than at the end of the previous quarter (Table 1). The substantial rise in inflation of agricultural and livestock prices obeyed, to a certain degree, to a statistical effect. This originated from the fact that even though the accumulated disinflation of the prices of the mentioned goods was noticeable during January-March, it was still less pronounced than last year's. Inflation of prices of goods and services regulated by the public sector increased substantially from December 2001 to March 2002 due to the significant rise in subway fares in Mexico City, in urban transportation prices as well as in fees for licenses and other official documents. In regards to the inflation of prices of goods administered by the public sector, this grew as a result of an increase in electricity prices, albeit being partially offset by the decrease in domestic gas prices.

**Table 1** Price Indexes: CPI, Core, Agricultural and Livestock Products, Education and Goods and Services Administered or Regulated by the Public Sector

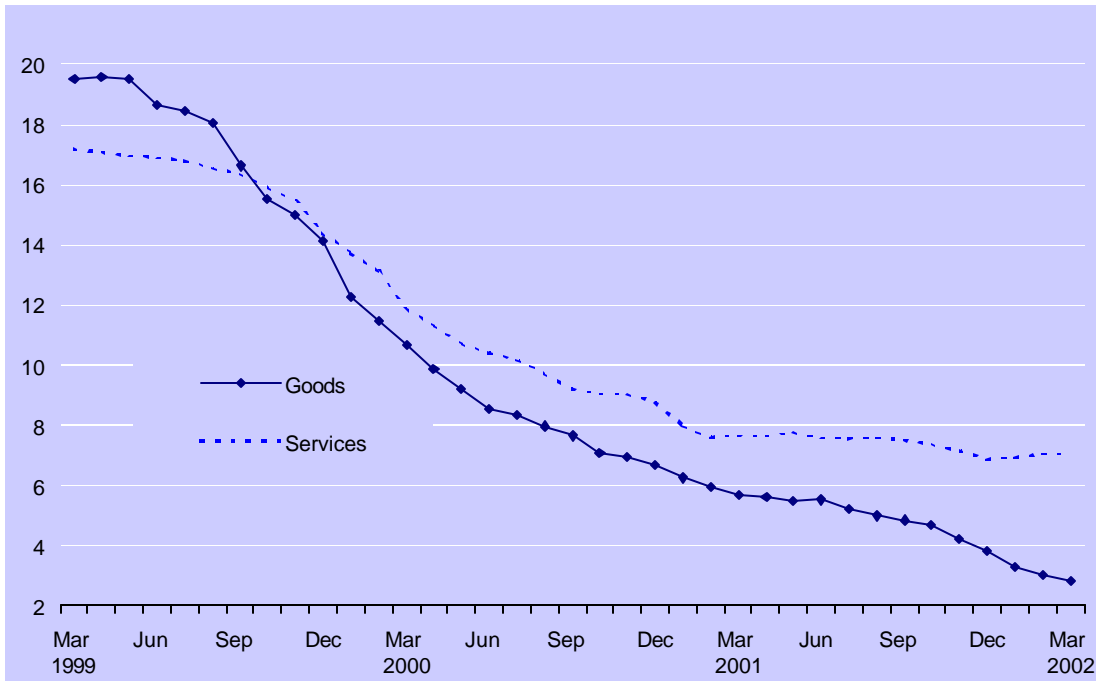
Annual percentage changes

	Annual changes			Quarterly changes		
	Mar 2002/ Mar 2001	Dec 2001/ Dec 2000	Mar 2001/ Mar 2000	Mar 2002/ Dec 2001	Dec 2001/ Sep 2001	Mar 2001/ Dec 2000
	CPI	4.66	4.40	7.17	1.37	0.97
Core	4.54	5.08	6.46	1.67	0.78	2.20
Goods	2.84	3.85	5.66	1.01	0.46	2.01
Services	7.02	6.87	7.66	2.61	1.26	2.46
Agricultural and Livestock	2.85	1.35	3.98	-4.95	0.10	-6.33
Education	13.61	14.02	14.63	0.98	0.05	1.35
Goods and Services Administered or Regulated by the Public Sector	4.58	2.21	10.62	4.51	2.45	2.15
Administered	1.35	-1.26	16.69	4.73	4.83	2.03
Regulated	7.28	5.13	6.01	4.34	0.66	2.24

Annual core inflation of goods declined significantly due, above all, to the appreciation of the exchange rate. In contrast, core inflation of services slightly rebounded and remains above that of goods (Graph 2). Such behavior derived from the upward effect of the new luxury tax on the prices of restaurants, bars and similar services, nightclubs and pubs, which have a considerable weight in the core services prices' sub-index. Likewise, despite the fact that there has been a moderation in the rate of growth of nominal wage settlements, this adjustment has not been reflected in the inflation of this sub-index to the same extent. It should also be mentioned that the upward movement registered by the core

inflation of services during January and February of 2002 was partially reverted in March.

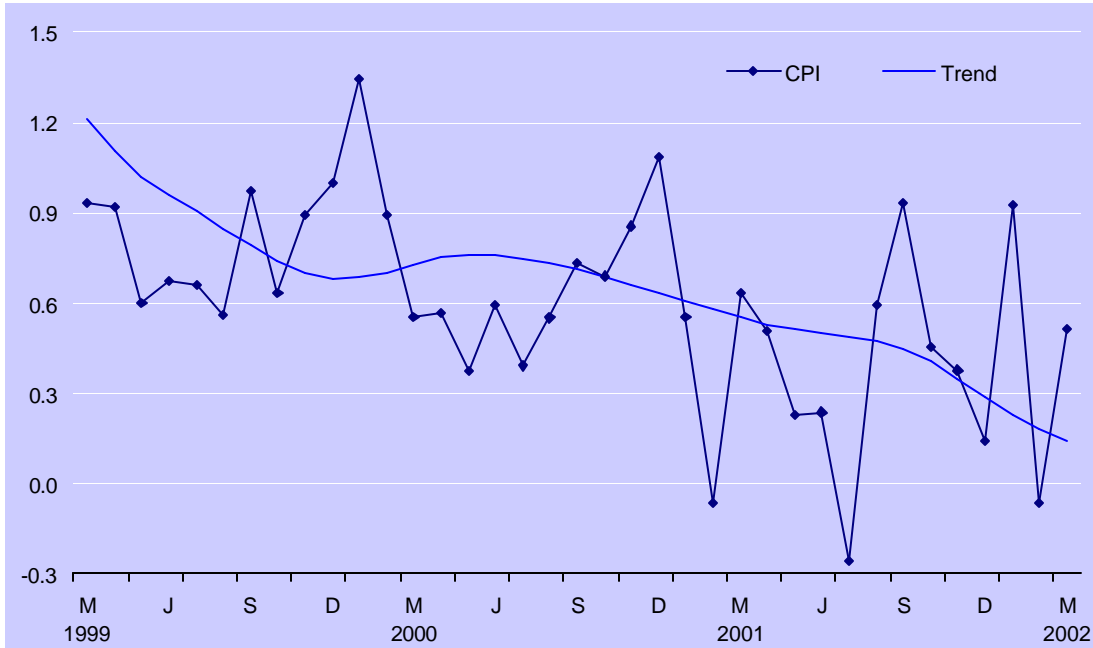
**Graph 2** **Core Price Index for Goods and Services**  
Annual percentage change



**II.1.2. Monthly Inflation of the Consumer Price Index and of the Core Price Index**

Inflation turned out to be 0.92, -0.06 and 0.51 percent in January, February and March, respectively. Although CPI inflation experienced a substantial increase in January 2002 compared to the same month in 2001, its statistical trend registered a noticeable fall. This can be explained by the significant reduction in monthly inflation during the fourth quarter of 2001 and in February of 2002 (Graph 3).

**Graph 3 Consumer Price Index**  
Annual percentage change



The difference between private sector analysts' expectations at the beginning of the quarter and observed inflation did not exhibit a distinctive pattern (Table 2). The diversity of the results obtained reflects the volatility that is characteristic of some of the CPI's components. This underlines the importance that core inflation has acquired in the assessment of the price stabilization process that is taking place in the Mexican economy.

**Table 2 Expected and Observed Monthly Inflation**  
Percentage

	2002		2001	
	Observed	Expected <sup>1/</sup>	Observed	Expected <sup>1/</sup>
January	0.92	0.92	0.55	1.13
February	-0.06	0.48	-0.07	0.73
March	0.51	0.39	0.63	0.53

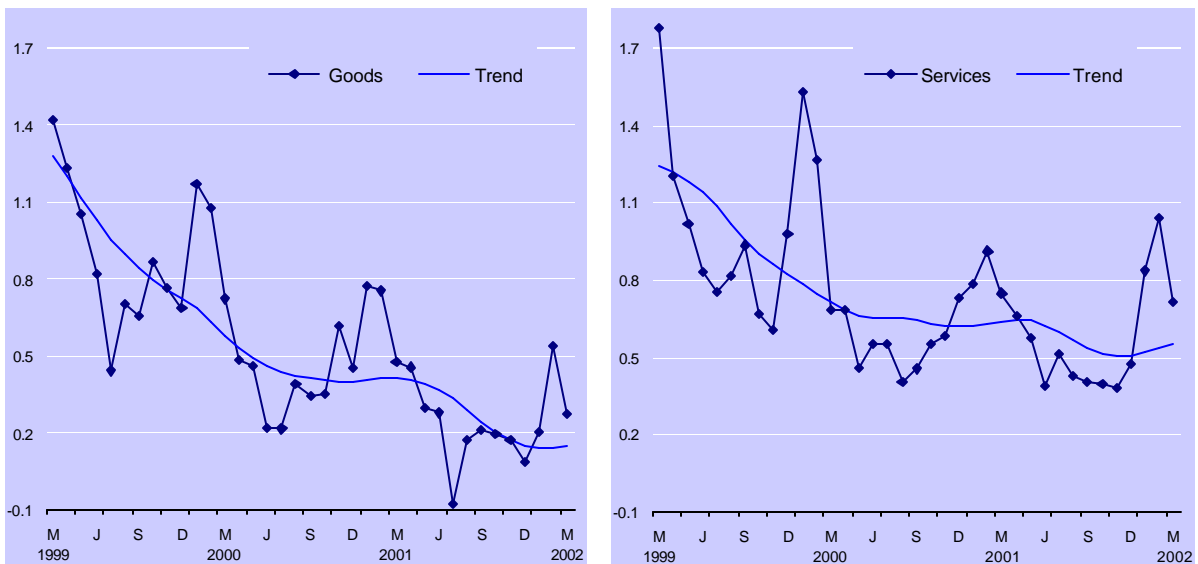
<sup>1/</sup> Source: Expected inflation at the end of the previous quarter according to the Survey of Private Sector Economic Analysts' Expectations undertaken by Banco de México.

As previously stated, the inflationary impact of the new luxury tax was limited due to limited coverage and the delay in putting it into effect. If goods affected by the new tax are excluded from the calculations of core inflation, growth rates of this sub-index in January, February and March of 2002 are 0.41, 0.69 and 0.41 percent, respectively. In contrast, core inflation (without any

adjustments) was 0.46, 0.75 and 0.46 percent. The analysis of the inflationary impact of this new tax shows that it had an upward effect on the prices of both goods and services. Nonetheless, the appreciation of the exchange rate more than compensated the adverse incidence of the tax on the prices of goods.

During the present quarter, the trend series for core inflation of goods remained stable while that for core inflation of services increased slightly (Graph 4).

**Graph 4** **Core Price Indexes for Goods and Services**  
Monthly percentage change



### II.1.3. Producer Price Index

Annual inflation of the Producer Price Index (PPI) excluding oil and services was 1.66 percent in March 2002, while in December 2001 it had been 2.61 percent. The slower growth of this index during the January-March quarter can be attributable, most of all, to the appreciation of the exchange rate. This behavior suggests that tradable goods inflation could weaken even further in the medium term.

### II.1.4. Transitory Factors that Affected Inflation

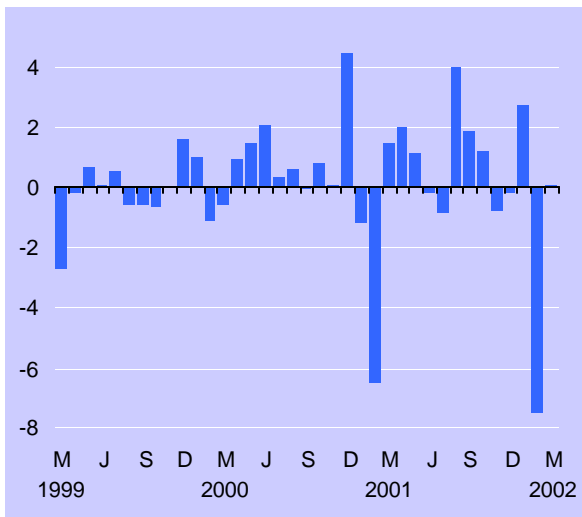
During the first quarter of 2002, the agricultural and livestock price sub-index accumulated a -4.95 percent variation. However, the behavior of this sub-index at a monthly rate was



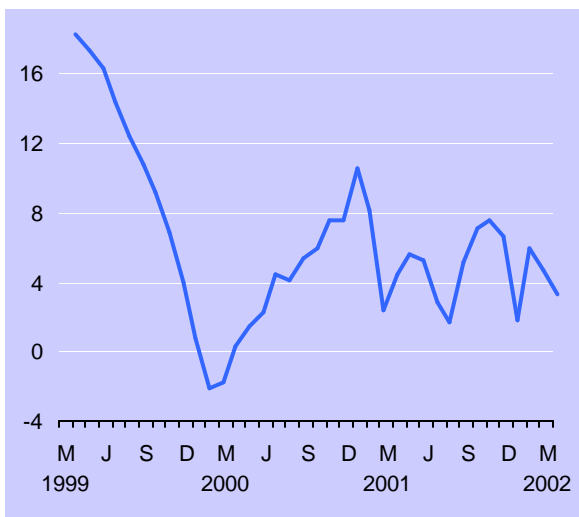
characterized by severe fluctuations (Graph 5). Monthly variation turned out to be 2.74 percent in January, -7.55 percent in February and 0.08 percent in March. One product which has a high incidence on this indicator (due to a weight on the CPI close to 1 percent), and whose price experienced high volatility, was tomato. The price of this product posted a variation of 11.49 percent in January, -44.52 percent in February, and 10.76 percent in March. Other agricultural goods that registered substantial quarterly price variations were green tomato (-21.91 percent), onion (-27.49 percent) and carrot (-20.47 percent).

**Graph 5** Agricultural and Livestock Price Index

Monthly percentage change



Annual percentage change



## II.2. Main Determinants of Inflation

The main factors that affected inflation will be analyzed in this section. First, the evolution of the international environment will be reviewed in order to have a better understanding of its effects on Mexico's external accounts and their corresponding influence on the determination of exchange rate, output, aggregate demand and prices. Second, the behavior of wages and productivity will be examined due to their direct incidence on unit labor costs, which have become a factor of significant influence on the inflation process. Third, the evolution of aggregate supply and demand will be described as their assessment allows inflationary pressures derived from excess aggregate demand to be identified. The latter also affect the current account, which will be studied together with the components of the capital account. Finally, the behavior of prices administered or regulated by the public sector will be

reviewed. As explained in this Report, these prices have a very important direct incidence on CPI inflation.

## **II.2.1. International Environment**

The external variables that influence the Mexican economy had a more favorable behavior during the first quarter of 2002. The price per barrel of the Mexican crude-oil export mix went up from 15.85 dollars at the onset of the year to 22.23 dollars at the end of March<sup>1</sup>. Likewise, indicators of economic activity in the United States continued strengthening, a development which will probably lead to a recovery of Mexican exports. Finally, country risk perceptions for Mexico continued to improve, a fact that may translate into lower costs of external financing.

### **II.2.1.1. Oil prices**

During the first quarter of 2002, the average price of WTI oil was 21.46 dollars per barrel, 0.92 dollars higher than in the last quarter of 2001 and 1.98 dollars higher than the average future prices for delivery in January, February and March, contracted on the last day of 2001.<sup>2</sup> Still, this average conceals the marked increase experienced by those prices throughout January-March of 2002. At the end of this period, the price of the WTI barrel reached 25.82 dollars (way above the 20 dollars at which it was contracted at the end of December 2001, for delivery in March of 2002). The following factors apparently contributed to rising oil prices during the period under analysis:

- (a) The most important, perhaps, has been the greater demand for energy goods, associated with the beginning of a rebound of economic activity in the United States and Europe;
- (b) As to the supply side, the reduction in oil exports decided by the OPEC and agreed by other countries (resulting from the negotiations held at the end of 2001, which were confirmed during the first days of 2002) helped to revert the downward trend of oil prices.<sup>3</sup> Indeed, the cut back announcement was followed by an increase of nearly one dollar in oil future prices for February-December 2002, which was observed during the first days of the year; and

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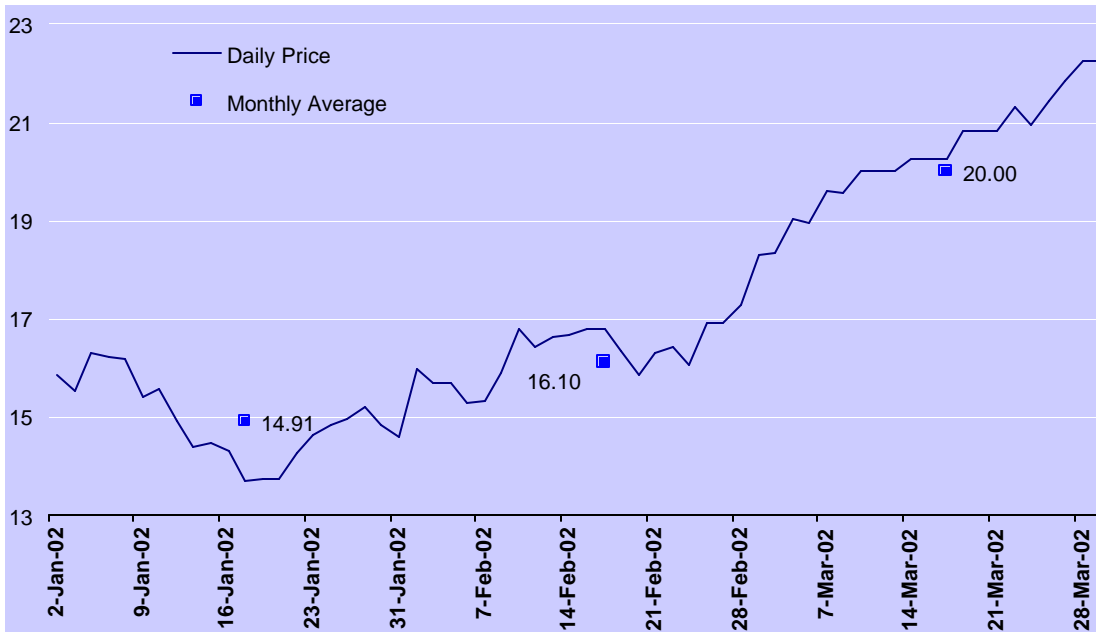
<sup>1</sup> The average price of oil during the quarter was 17 dollars.

<sup>2</sup> Calculations based on the WTI oil price reported by Bloomberg (daily average).

<sup>3</sup> In particular, Mexico announced its commitment to reduce its export volume by 100 thousand barrels per day during the first half of 2002.

- (c) The worsening of the Israeli-Palestinian conflict exacerbated (especially in March) the uncertainty regarding the political situation in the Middle East. This situation had become more strained since the end of January due to the United States' government statements that mentioned that Iraq and Iran could be subject to retaliation because of their support of terrorism.

**Graph 6** Price of Mexico's Crude Oil Export Mix  
Dollars per barrel



Source: REUTERS

During January-March of 2002, the average price of the Mexican crude-oil export mix was 17 dollars per barrel, 2 dollars more than in the past quarter (Graph 6). At the end of the period, this price closed at 22.23 dollars, way above its level of December. The spread between the Mexican mix and the WTI fluctuated between 4 and 5.30 dollars per barrel. This spread narrowed as the WTI price rose (mostly in March), thus suggesting that the international demand for heavy crude oil experienced a relative increase throughout the period. In that respect, it should be mentioned that the Mexican mix is heavier than the WTI.

### II.2.1.2. Developments in the United States' Economy

The United States' GDP growth rate was 1.7 percent<sup>4</sup>, a result that confirms that recession in 2001 was the shortest-lived in recent history. During the first quarter of 2002, evidence of the recovery of economic activity strengthened, in light of the general improvement in industrial sector indicators and the persistent strength of private consumption. The economic policy measures applied have been crucial in rapidly overcoming the recession. In fact, some analysts have begun to advance the idea that part of the stimulus, which has driven the economy, needs to be reverted.

The rebound during the last quarter of 2001 responded basically to the increase in household consumption, which reached an annualized rate of 6.1 percent in real terms. This performance was due to higher consumption of durable goods, which was fueled by low financing costs, income tax rebates approved by the United States Congress, and auto sales promotions. Higher public spending (including the sharp increase in military expenditures in response to the terrorist attacks of September 11<sup>th</sup>) also supported economic activity. During the referred period, the strength of private consumption and public expenditure more than compensated the fall in investment.

During the last quarter of 2001, the decline in investment paradoxically included an encouraging element for 2002, as it mainly reflected the reduction in the level of inventories. During the last months of 2001, firms' inventories posted negative annual variations of 5 percent or more, reducing the sales/inventories ratio to very low levels. This led to anticipate that the fall in inventories would be less pronounced at the onset of 2002.

During the first quarter of 2002, the main indicators of aggregate supply and demand in the United States evolved positively. Among these, the following are noteworthy:

- (a) Personal consumption spending expanded at a monthly rate of 0.5 and 0.6 percent during January and February, respectively. On the other hand, indicators for retail sales posted annual growth rates of between 3.7 and 5.9 percent;
- (b) Consumer confidence indexes improved. The University of Michigan Index went up from an average of 85 units during the fourth quarter of 2001 to an average of 93 units

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<sup>4</sup> This figure refers to the seasonally adjusted output growth from the third to the fourth quarter at annual rates.

during January-March of 2002. Meanwhile, the Conference Board Index rose from 88.3 to 101 units;

- (c) The Survey of the Institute for Supply Management (previously known as NAPM), a leading indicator of industrial activity, reached 54.7 percent and 55.6 percent in February and March of this year, respectively. This index had remained at levels below 50 percent (its critical level) during 2001 and January 2002.
- (d) The industrial output index increased 0.2, 0.4 and 0.7 percent in January, February and March, respectively, hence reverting the almost uninterrupted fall it had been showing since October of 2000.

The behavior of these and other indicators of economic activity during the first months of the year led market analysts to revise their forecasts upwards. In this regard, current estimates for the first quarter of 2002 point to a growth of between 4.2 and 5 percent (at annual rates), and between 2 and 3 percent for the entire year (Table 3).

**Table 3**

**Growth Forecasts for the United States Economy**

Annual percentage change

	Start of January 2002		Start of April 2002	
	I/2002	2002	I/2002	2002
Consensus Forecasts <sup>1/</sup>	0.1	0.9	n.a.	2.6
Deutsche Bank	0.5	0.7	5.3	3.1
Goldman Sachs	2.0	1.0	5.0	2.4
JP Morgan	1.0	0.6	5.0	3.1

<sup>1/</sup> The *Consensus Forecasts* of April 8, 2002 reports the forecast for annual growth rate at that date, while the quarterly forecasts refer to the survey carried out on March 11, 2002. Thus, no reference is made to the quarterly forecast in this document.  
n.a. Not available.

As for the remainder of 2002, the contributions of the components of demand are expected to change in the following manner:

- (a) Private consumption contribution to GDP growth may decline. The fact that this aggregate did not fall in 2001 (like it did in other recessions) implies that it will probably not increase dramatically during the recovery period. Furthermore, some analysts believe consumption may be posed for a downward adjustment in line with the

decline in household's financial wealth that resulted from the adjustment of equity markets.

- (b) A rebound in private investment is foreseen based on the indicators of firms' earnings and cash flow, which recovered during the last quarter of 2001. Moreover, according to data of the Department of Commerce, these indicators likely improved even further during the first quarter of 2002. In the same way, private investment will be fueled by the tax incentives included in the economic stimuli package applied by the government on March of 2002.
- (c) Inventories are expected to have negative variations in January-March of 2002. Nonetheless, its contraction will be substantially smaller than that of the previous quarter, therefore having a positive influence on growth. Over the following months, inventories are expected to increase in response to the desired levels of warehouse stocks. This type of expenditure will be one of the main factors that will affect the quarterly pattern of growth forecasted for 2002.
- (d) The stance of the fiscal policy will probably become even more expansionary. The economic stimuli package launched in March of 2002 includes a longer duration of benefits for the unemployed and new fiscal incentives for firms. Likewise, the government has delivered to Congress a supplementary budget proposal with additional expenses equivalent to 0.25 percent of GDP. The purpose of these items will be to reinforce domestic security, to support the reconstruction of New York's afflicted zone and to heed other requirements resulting from the events of September 11<sup>th</sup>.

Although the economic recovery in the United States has been more vigorous and has occurred earlier than expected, employment has remained sluggish. Hence, between February and March, statistics on the non-agricultural payroll barely showed signs of improvement while several other indicators only recovered slightly. During most of the first quarter of 2002, unemployment claims remained stagnant at nearly 370 thousand per week (a figure similar to the one registered last year), although they seemed to have increased towards the end of the quarter.<sup>5</sup> Likewise,

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<sup>5</sup> At the end of March, these claims totaled 460,000. Nevertheless, it is likely that this sharp increase responds to a technical factor related to an extension of the duration of payment of unemployment claims to the corresponding beneficiaries.

unemployment rose to 5.7 percent in March, significantly above the estimated level for the non-inflationary rate of unemployment. It should be pointed out that even if conditions tend to improve, it is possible that during the coming months this rate will not be lower and may increase slightly in response to the return to the labor market of workers that had previously left the labor force. Some analysts saw the slow recovery of labor market indicators halfway into the quarter as a sign of a relapse in growth. Notwithstanding, such likelihood seems to fade as evidence pointing towards a recovery accumulates.

As previously mentioned, economic policy in the United States has played a very important role in shortening the duration of the recessive episode. In response to the persistence of a slowdown in economic activity and to the uncertainty stemming from the terrorist attacks, the Federal Reserve made several additional cuts to the federal funds rate objective during the last quarter of 2001. These actions added to previous cuts in that rate, thus leading it to a historic minimum of 1.75 percent.

In contrast, the Federal Reserve did not modify the federal funds rate during the first quarter of 2002. This decision is understandable in light of evidence that the negative economic effects caused by the events of September 11th have been curbed. Throughout January-March, indicators clearly pointed to a recovery of economic activity. Towards the end of March, information confirmed that a recovery was already underway. The evolution of those indicators (which fluctuated from negative to mixed and then positive signals) led the Federal Reserve to maintain the reference interest rates unchanged, although indicating, via its assessment of the balance of risks, its disposition to lower them again if signs of a relapse in growth arisen. Finally, by the middle of March the Federal Reserve adopted a neutral stance in its balance of risks. Analysts had already anticipated this statement, which has been interpreted as preparing a gradual reversion in the interest rate cuts that were implemented in 2001.

The largest contribution of fiscal policy to the economic upturn can be expected to take place during the current year. The evidence that the September 11th events might have had a relatively moderate economic effect prevented the attainment of agreements on fiscal stimuli measures by Congress, beyond the tax benefits that had already been promised during the electoral campaign. Nevertheless, as previously stated, an additional package of fiscal measures to support economic recovery was approved in March of 2002, when the government sent to Congress a supplementary expenditure budget. Should these measures be

approved, total fiscal stimuli for 2002 is estimated to be a little more than one percentage point of GDP.

Given the signals of an upturn in economic activity, analysts expect a change in the economic policy stance. Some of them are of the opinion that, with the benefit of hindsight, fiscal and monetary policies were probably too expansionary and given the speed of the transmission to the economy, it would be wise to begin promptly a cycle of interest rates increases. Nevertheless, inflation figures for 2001 (1.5 percent for the overall index and 2.7 percent for the core index) as well as for the elapsed months of 2002 (0.2 percent for the overall and core index in January, and 0.2 percent and 0.3 percent for the overall index and core index in February), and the absence of pressures in the labor market, seem to provide margin for an adjustment of the monetary policy stance to be done gradually. Likewise, the rise in oil prices during March and April is a risk factor and will undoubtedly influence the authorities' deliberations.

#### II.2.1.3. Developments in the Economies of the Rest of the World

The economic slowdown experienced by the European Union countries apparently ended during the first quarter of 2002. Since December 2001, some leading indicators of economic activity such as the survey of purchasing managers have suggested that an upturn is imminent. Those signals were confirmed by the contemporary indicators of activity, such as those of industrial output indexes for the European Union's most important economies. The shift in trend of these indexes is particularly relevant as the weakness in economic activity was characterized mainly by the contraction of the industrial sector. However, recovery during the first quarter has been fragile, as unemployment has remained high in France as well as in several other European countries. As was to be expected, this situation has had an adverse effect on consumers' confidence. The IMF estimates real GDP in the European Union will grow nearly 1.5 percent in 2002.

During January and February of 2002, the inflation rate in the euro zone remained above the maximum level of tolerance established by the European Central Bank (ECB). This rise in inflation is mostly attributable to the increase in some indirect taxes and in certain prices administered by the public sector. It is worth mentioning that there is no evidence that the euro's entry into circulation had an adverse impact on inflation. At the same time, throughout January-March, the euro continued weakening against the US dollar, reaching almost 0.85 euros per dollar (the level at



which the ECB, the Federal Reserve and other central banks intervened coordinately in the exchange market during autumn of 2000). Given the policy dilemma created by a still weak economic recovery and relatively depreciated currency, and convinced that the brief rise in inflation from January to February was generated by transitory factors, the ECB (in its monetary policy meeting at the end of February) decided to maintain unaltered the reference interest rate. Analysts still expect inflation in 2002 to be slightly below the 2 percent target.

As for Japan, real GDP is expected to have grown 1.1 percent during the first quarter of 2002, compared to the 4.5 percent reduction it recorded during the last quarter of 2001.<sup>6</sup> Estimates are for an initially moderate upturn due to the unfavorable behavior of consumption and employment, and the relatively austere fiscal policy stemming from the difficulties experienced by local governments. The more optimistic expectations for the second half of 2002 are based on leading economic indicators such as the surveys on firms' economic conditions and the levels of inventory and orders whose recent behavior suggest that the slowdown might be coming to an end. At least during its first phase, the expected recovery could be supported by growth of net exports, derived from the combination of the following three factors: a still weak domestic demand, the positive performance of Japan's main trading partners, and a yen depreciation over the coming months. Nevertheless, recession's inertia in addition to the sluggishness of the rebound in economic activity have led the IMF to forecast a one percent contraction in real GDP during 2002.

Economic recovery in the United States has yet to impact Latin American exports. Although the crisis in Argentina deepened at the beginning of 2002, it has not severely affected the rest of the countries of the region. Since mid-February, Venezuela became a new source of instability for Latin America, a fact that might have contributed to increase the volatility of international oil prices.

The most important event in Argentina was the abandonment of the currency board decreed by Congress on January 6<sup>th</sup>, which was initially replaced by a dual exchange rate regime. Under this system, exports and certain imports were handled at an official exchange rate of 1.40 Argentinean pesos per US dollar, while the rest of the transactions were carried out in the free market where the dollar soon reached two Argentinean pesos.

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<sup>6</sup> Seasonally adjusted and annualized quarterly rates.

By mid-February the official exchange rate was abolished and a floating exchange rate regime was adopted.

Given the extensive dollarization of liabilities in that country, the peso depreciation had substantial effects on the balance sheets of economic agents. In order to ease these effects, the government decreed the “pesification” of bank credit at an exchange rate of one Argentinean peso per one US dollar. Bank deposits were also “pesified” at an exchange rate of 1.4 Argentinean pesos per one US dollar. The federal government assumed the net cost that resulted from these operations, which has been estimated by some analysts in approximately 20 billion Argentinean pesos (5 percent of GDP).

Restrictions on the withdrawal of deposits from banks were partially removed during the first quarter of 2002 as deposits used for payment of wages were excluded from the so-called “corralito”, and authorization was granted to use fixed-term deposits to purchase certain goods (mainly automobile and real estate). In this regard, some bank customers have obtained judicial orders protecting them from these restrictions. As a result, the stock of bank deposits subject to restriction was falling at a pace of 150 million Argentinean pesos per day in February, reaching a stock of nearly 80 billion pesos by the end of that month. As these deposits have been unrestrained, they have fed the demand for foreign currency, thus adding downward pressure on the exchange rate. The most worrisome episode happened close to the Easter holiday when a run against the Argentinean peso took place, during which the exchange rate plunged to four pesos per dollar. Given this situation, the Central Bank decided to intervene directly in the retail market, lowering the dollar to three pesos in the last working days of March. As a result of the peso depreciation and despite the lack of liquidity due to the “corralito”, consumer prices in the urban area of Buenos Aires rose 9.7 percent in the first quarter of 2002.

During February and March, the Argentinean government announced several measures regarding taxation, presented the budget to Congress and negotiated a new fiscal agreement with the provincial governments. These actions were cautiously received by market analysts, who fear revenue forecasts used in the preparation of the budget are too optimistic, and agreements reached with the provincial governments are not sufficient. The lack of advance in the negotiations with the IMF –in which the government of that country holds great expectations- and the delay in the start of the negotiations between the federal government and its creditors, increased the uncertainty during the first quarter. This was reflected

in the dispersion of analysts' inflation forecasts for year-end 2002 (which fluctuated from 25 to 90 percent at the end of March) and in the general perception of a decline in real GDP that will exceed 10 percent.

As a consequence of the global recession and of the Argentinean crisis, Brazil's economy also experienced a slowdown. Given a contraction of 0.7 percent in the fourth quarter of 2001 (compared to the same period in 2000), real GDP in 2001 grew at a rate of 1.6 percent. At the onset of 2002, employment and economic activity indicators still showed signs of deterioration compared to last year. Nonetheless, Brazil met its fiscal targets in 2001 and apparently will be able to comply with those for the first quarter of 2002 (in March, it concluded satisfactorily the second revision of its agreement with the IMF). Despite the economic contraction in Argentina, Brazil's trade deficit has showed signs of improvement, with a positive balance of 1.03 billion dollars during the first quarter of 2002. Furthermore, foreign direct investment flows to Brazil remained at high levels in 2001 and during the first months of 2002. With the support provided by this environment, the Central Bank decided to cut its reference interest rate by 50 basis points in February and in March, down to 18.5 percent. This decision was taken with the aim of setting the monetary conditions that would be ideal to attain the inflation target for 2003. Moreover, the Central Bank clarified that this monetary policy stance implied that inflation for 2002 would be above target as it turned out to be relatively high in January and February (0.62 and 0.44 percent, respectively), and prices administered by the public sector are expected to increase more than at the beginning of 2002.<sup>7</sup> By mid-March, market analysts anticipated that Brazil's inflation would reach 5 percent by year-end 2002 and the IMF estimated a 2.5 percent growth in real GDP.

Chile has not escaped from the effects of world economic slowdown, which in spite of being moderate, have been exacerbated by the weakness of domestic demand. Chile has clearly decoupled from the Argentinean crisis, allowing monetary policy to be geared towards attaining domestic equilibrium. Thus, in response to the negative results of economic activity during the first quarter, and having already undergone two consecutive months of deflation, in February, the Central Bank of Chile decided to lower its reference interest rate on two occasions, from 6.5 to 5.5

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<sup>7</sup> From December 2001 to March of this year, the Central Bank of Brazil modified its inflation forecast for 2002 from 3.7 to 4.4 percent. The change in the forecast for 2003 was from 2.5 to 2.8 percent. The smaller magnitude of the revision of the estimates for 2003 reflects the assessment of the Central Bank of Brazil in the sense that increases in prices administered by the public sector are only one-time adjustments that will have a limited effect on the variation of other prices.

percent. For 2002, the main analysts estimate inflation will be 2.8 percent, while the IMF expects real GDP will grow by 3 percent.

Since the end of 2001, political instability in Venezuela contributed to capital flight. In December of that year, the government increased the pace of exchange rate depreciation. Nonetheless, since pressure on the bolivar continued, the referred measure was not sufficient to prevent the country from incurring in a considerable loss of international reserves. Finally, on February 12<sup>th</sup>, the government announced it would let the exchange rate float, and that it would adopt measures oriented towards fiscal consolidation and monetary policy restriction. This package was well received by market analysts, although some doubts persisted as to the government's capacity to cut down public spending. The new exchange rate regime has allowed the Central Bank to reduce its dollar sales to levels consistent with the use of oil revenues, mainly to cover the needs of the current account. This has halted the loss of international reserves. Nevertheless, nominal interest rates have risen considerably, thus affecting adversely some small and medium-size banks that have required the support of the Central Bank. The difficulties associated with the depreciation of the bolivar led the IMF to foresee a real GDP contraction of 0.8 percent for 2002. On the other hand, analysts expect that inflation will be close to 32 percent.

Table 4

**IMF Forecasts for Gross Domestic Product Growth**

Percentage change

	2000	2001	2002 <sup>e/</sup>	2003 <sup>e/</sup>
World	4.7	2.5	2.8	4.0
Advanced Economies	3.9	1.2	1.7	3.0
United States	4.1	1.2	2.3	3.4
Japan	2.2	-0.4	-1.0	0.8
Germany	3.0	0.6	0.9	2.7
France	3.6	2.0	1.4	3.0
Italy	2.9	1.8	1.4	2.9
United Kingdom	3.0	2.2	2.0	2.8
Canada	4.4	1.5	2.5	3.6
Rest of the world	5.2	1.6	2.5	3.7
European Union	3.4	1.7	1.5	2.9
Asian RIE <sup>1/</sup>	8.5	0.8	3.6	5.1
Latin America	4.0	0.7	0.7	3.7

1/ Recently Industrialized Economies.

e/ estimated.

Source: World Economic Outlook, April 2002, IMF.

## II.2.2. Compensations, Wages and Employment

Compensations, wages and employment are factors that have a substantial influence in the future path of inflation. During January-March 2002, increases in compensations and real wages eased, although they are still far from being totally aligned with the decline in expected inflation and with productivity gains not associated with cyclical factors.

This, together with the recent strengthening of United States' demand for Mexican products, helped to bring about the improvement observed (albeit marginal) in labor market conditions.

### II.2.2.1. Compensations

In January 2002, in those sectors for which information is available, nominal compensations per worker showed annual variations of 7.7 to 14.7 percent. During the previous year, nominal compensations posted average increases between 5.7 and 14.9 percent, which implied real increases of between -0.5 and 8 percent (Table 5).

**Table 5**                      **Compensations per worker**  
Annual percentage change

	Nominal								Real							
	2001						2002	Average	2001						2002	Average
	Jul	Aug	Sep	Oct	Nov	Dec	Jan <sup>1/</sup>	2001*	Jul	Aug	Sep	Oct	Nov	Dec	Jan <sup>1/</sup>	2001*
Manufacturing Industry	13.7	10.4	12.7	13.4	12.9	14.7	11.6	13.0	7.4	4.2	6.2	7.1	7.2	9.8	6.5	6.3
In-bond Industry	13.1	15.1	13.7	14.8	12.9	13.3	14.7	14.0	6.8	8.7	7.1	8.4	7.2	8.5	9.4	7.2
Construction Industry	17.6	9.0	6.4	11.1	9.2	n.a.	n.a.	14.9	11.1	2.9	0.2	4.9	3.6	n.a.	n.a.	8.0
Commerce	6.5	7.1	5.0	5.1	4.3	6.3	7.7	5.7	0.5	1.1	-1.1	-0.7	-1.0	1.8	2.8	-0.5

Source: Calculations based on data from INEGI.

1/ Manufacturing information for January 2002 is obtained from the Index of Manufacturing Wages calculated by Banco de México with data from INEGI's Monthly Industrial Survey.

n.a. Not available.

\* The construction industry is the only sector where the average is calculated for January -November 2001.

It should be mentioned that severance payments are included in the compensation figures. Therefore, given the notorious fall in employment registered over the past year, it is possible that data showing a rise in compensations may be overestimated. According to developments in the manufacturing

sector during 2001, it is feasible that severance payments might have induced an upward bias of more than 1 percentage point.<sup>8</sup>

Labor productivity experienced variations between -4.2 and 5 percent in January while rises in unit labor costs fluctuated between 3.2 and 7.3 percent. That is, at that time, increases in productivity were not enough to compensate the upward movement of real wages (Table 6).

**Table 6** **Unit Labor Costs and Output per Worker**  
Annual percentage change

	Output per Worker								Unit Labor Costs							
	2001						2002	Average	2001						2002	Average
	Jul	Aug	Sep	Oct	Nov	Dec	Jan <sup>1/</sup>	2001*	Jul	Aug	Sep	Oct	Nov	Dec	Jan <sup>1/</sup>	2001*
Manufacturing Industry	1.2	0.7	0.1	1.9	3.0	2.3	3.2	1.0	6.1	3.5	6.2	5.1	4.0	7.4	3.2	5.2
In-bond Industry	-6.5	-1.5	-4.5	-3.3	-2.2	2.9	5.0	-2.8	14.3	10.4	12.2	12.0	9.5	5.4	4.3	10.2
Construction Industry	-4.1	-5.5	-6.9	2.7	0.7	n.a.	n.a.	-3.2	15.8	8.9	7.6	2.2	2.9	n.a.	n.a.	11.6
Commerce	-10.7	-10.6	-11.8	-10.1	-9.7	-4.8	-4.2	-7.7	12.6	13.1	12.1	10.5	9.6	6.9	7.3	7.7

1/ Manufacturing information for January 2002 is obtained from the Index of Manufacturing Wages elaborated by Banco de México with data from INEGI'S Monthly Industrial Survey.

n.a. Not available.

\* The construction industry is the only sector where the average is calculated for January -November 2001.

Source: elaborated with data from INEGI.

The only sector that recorded a positive variation in average productivity during 2001 was manufacturing. Nevertheless, as it will be discussed later, this can be attributable to the substantial fall in employment in this sector. On the other hand, in those productive sectors for which complete information is available, unit labor costs during the mentioned year posted average increases of between 5.2 and 10.2 percent.

The increase in unit labor costs had a harmful effect on employment during the period covered by this Report. In January 2002 alone, employment and the total wage bill registered negative annual variation rates in three out of four of the mentioned sectors. Likewise, employment in the in-bond industry fell 18.2 percent and the total wage bill decreased by 10.5 percent.

<sup>8</sup> Series for wages and salaries in the manufacturing industry were adjusted in the reported calculations. Specifically, it is assumed that every unemployed person receives (at the time of settlement) 3 months of salary during the month of dismissal, and this figure is multiplied by the number of unemployed per month. Total severance payments to dismissed workers and employees is subtracted from the total payment on salaries and wages. The total adjusted payment is divided by the number of active workers and employees. This procedure yields an adjusted figure for salaries and wages. The rise in compensations is calculated using these adjusted series. In general, the adjusted growth rate for both wages and salaries is lower (by more than 1 percentage point) relative to the growth rate obtained from the original series.

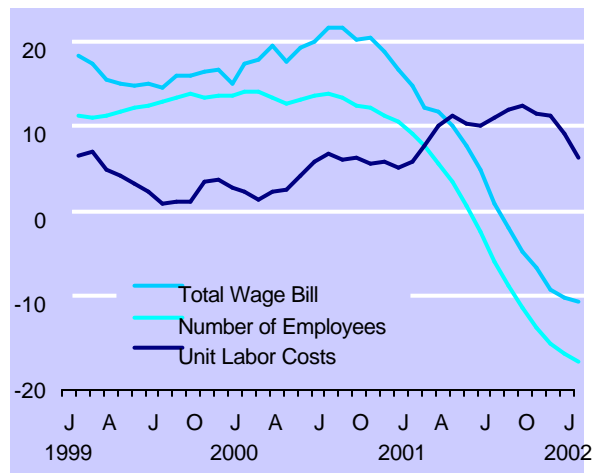
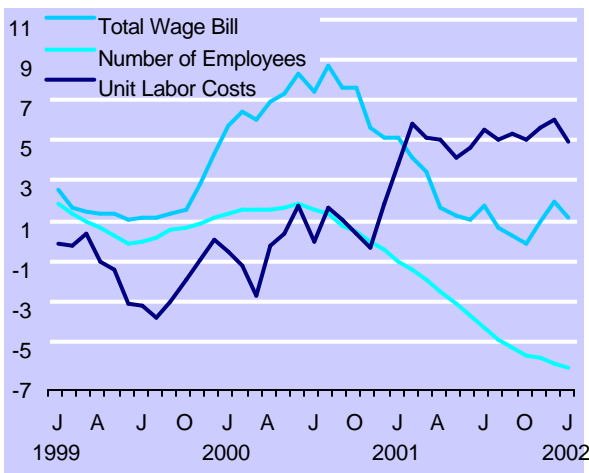
Up to November 2001, the total wage bill and employment in the construction industry experienced annual variations of -17.1 and -20 percent, respectively. Moreover, the annual variations of those aggregates in the in-bond export sector were -10.3 and -17.3 percent (Graph 7). For that reason, although real remunerations have posted significant increases, total labor payments to labor have decreased sharply in several productive sectors.

**Graph 7 Total Wage Bill, Number of Employees and Unit Labor Costs**

Annual percentage change

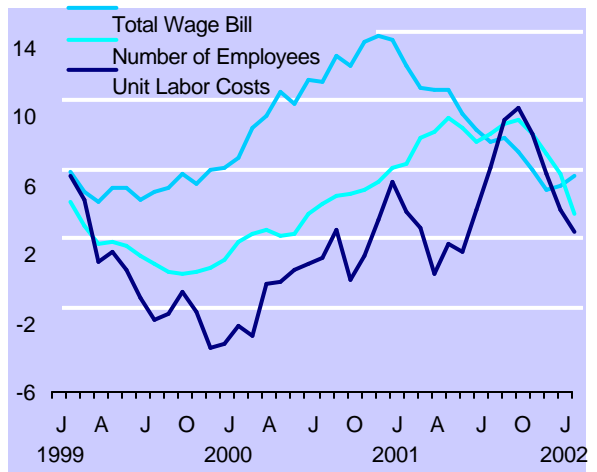
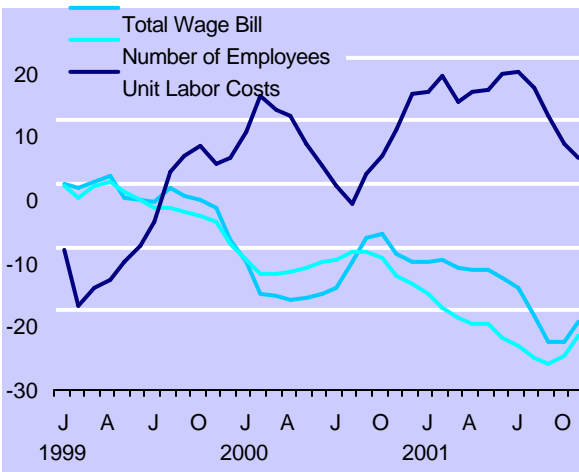
Manufacturing Industry (excluding in-bond industry)

In-bond Export Industry



Construction

Retail Trade



Source: Banco de México and INEGI.

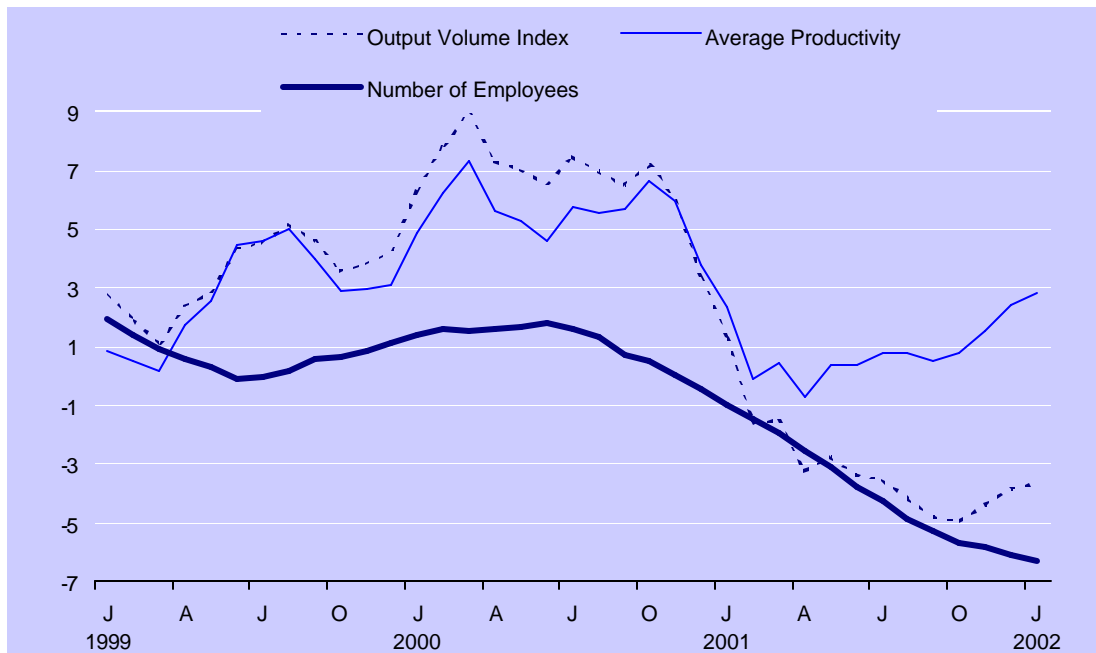
Throughout 2001 and in January of 2002, employment experienced a rapid contraction in some sectors. Such a

contraction, by a simple arithmetic effect, will tend to stabilize -and even raise- productivity figures. The same result has been observed in the non in-bond manufacturing sector where employment has fallen tandem with output. As a result, growth in productivity stabilized from March to September 2001. From this last month onwards, employment continued falling while output registered an incipient recovery, a situation that contributed to a substantial increase in productivity.

Productivity growth in the non in-bond manufacturing sector has derived mainly from the fall in employment. Therefore, these gains do not strictly represent an improvement of Mexican firms' productive conditions inasmuch as if this had been the case, both employment and productivity would have grown (Graph 8).

**Graph 8 Output and Average Productivity in the Non In-bond Manufacturing Industry**

Annual percentage change of the 3-month moving average



Source: INEGI.

Labor market conditions have deteriorated significantly in recent times. This fact is evident for although there has been a marked increase in real remunerations, total labor income has diminished in a number of sectors. Consequently, in the current conjuncture it is of utmost importance that conditions prevailing in the labor market be more flexible in order to recover jobs lost in



2001 and begin to generate those required by the growing Economically Active Population (EAP).<sup>9</sup>

#### II.2.2.2. Wage Settlements

The average increase in nominal wage settlements during the first quarter of 2002 was 6.5 percent. It should be mentioned that during this period, the slower pace of wage increases that had long been expected due to the slack in the labor market, materialized. Thus, the average rise in wage settlements stabilized during the quarter at between 6.1 and 6.9 percent.

Nominal wages also experienced moderation in light of the average increases granted by the main private firms under federal jurisdiction and with 250 or more workers. During January, February and March these increases were 7, 5.8 and 5.7 percent, respectively. This situation contrasts with the rise of 8.9 percent registered by this indicator during the last quarter of 2001.

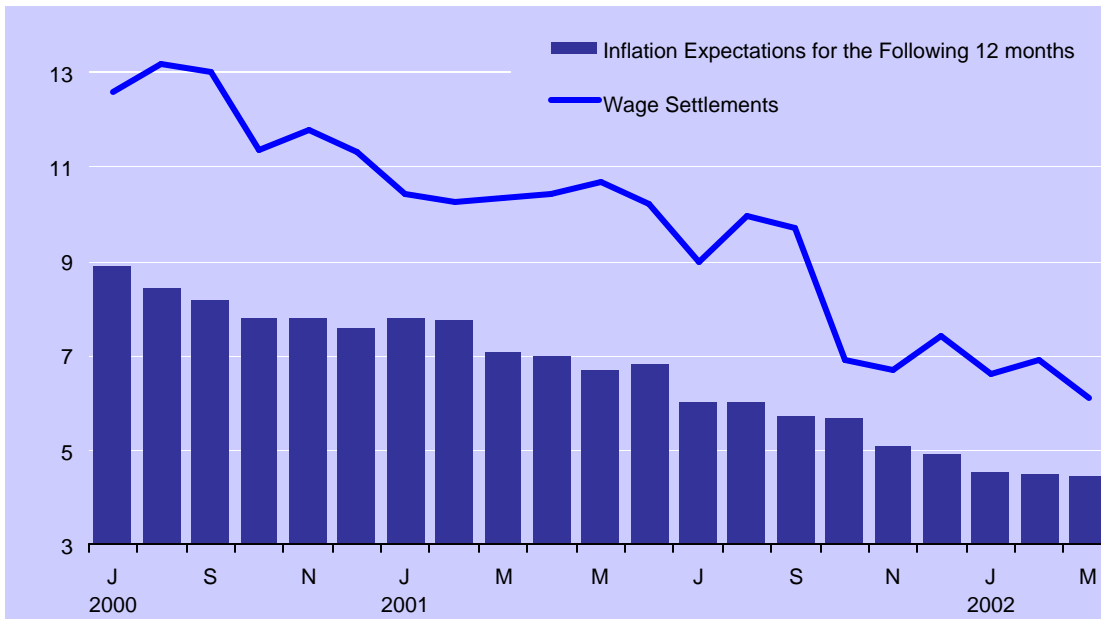
The spread between wage settlements and expected inflation for the next twelve months averaged 2 percent during the first quarter of 2002 and turned out to be narrower than the 2.8 percent observed last year (Graph 9).

Considering exclusively the rises granted by the private firms under federal jurisdiction and with 250 or more workers, the difference between the percentage increase in wage settlements and expected inflation averaged 1.9 percentage points.

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<sup>9</sup> The EAP is the population of 12 or more years of age that has been employed, or was actively seeking a job, over the past three weeks.

**Graph 9 Wage Settlements and Inflation Expectations for the Following 12 Months**  
Annual percentage change



Source: Survey of Private Sector Economic Analysts' Expectations. Banco de México and Ministry of Labor.

During the first quarter of 2002, nominal wage settlements rose at similar rates in the manufacturing industry and in the other sectors (Table 7).

**Table 7 Wage Settlements by Sectors**  
Annual percentage change

	2001						2002		
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*
Manufacturing	9.0	10.1	10.1	9.1	6.3	6.8	7.0	6.9	6.2
Other Sectors	9.0	9.9	9.1	6.7	7.3	9.3	6.4	6.8	6.0

Source: Banco de México's calculations based on data from the Ministry of Labor.

\* Preliminary data.

Although the pace at which nominal wage settlements had been growing eased during the first quarter, it is appropriate to insist in the convenience of attaining wage settlements closer to inflation expectations. Particularly, given the uncertainty regarding future developments in productivity. Therefore, although the process to bring wage increases into line with prevailing labor market conditions has initiated it is still insufficient. This conclusion is founded on the need to generate employment for the new entrants to the labor force and regain jobs lost in 2001.

### II.2.2.3. Employment

Employment continued falling during the first quarter of 2002. At the end of March, the number of workers (permanent and temporary urban employees) affiliated to the Mexican Social Security Institute (IMSS) was 12,129,368 persons, 34,269 less than the total registered at year-end 2001 (Graph 10a). This reduction was 64.5 percent lower than that observed last year. It should also be mentioned that in February and March nearly 95 thousand jobs were created. On the other hand, the seasonally adjusted series for permanent and temporary urban employees affiliated to the IMSS recorded an increase of 3,642 jobs during the first quarter of 2002, hence implying a significant moderation of the fall in employment.

The affiliation of permanent workers in the services sector went down by nearly 73 thousand workers during the first two months of the year. From this total, more than 52 thousand were employed in commerce. Employment in the agricultural and livestock sector rose by more than 48 thousand jobs. Finally, employment in the industrial sector remained practically unchanged, gaining only 342 jobs.

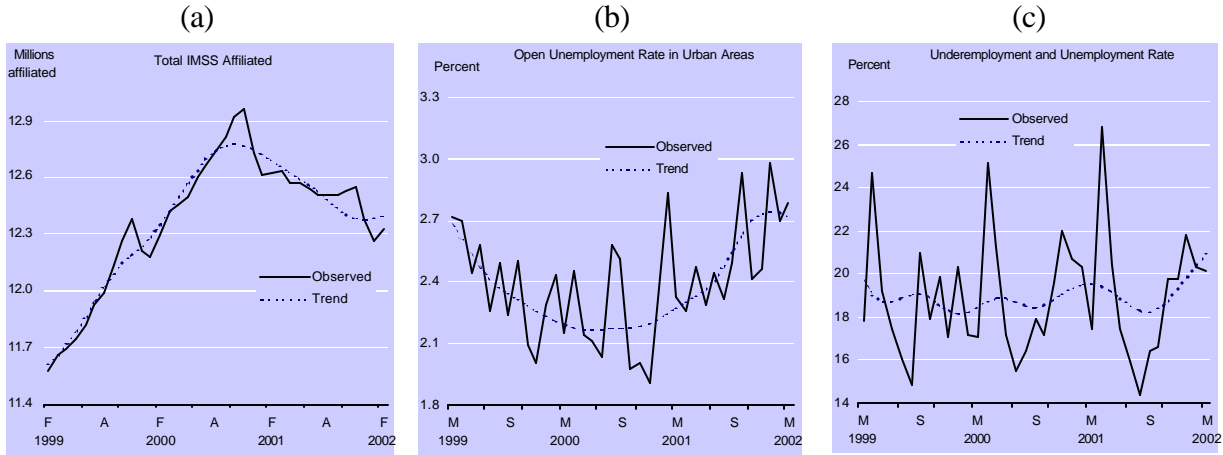
Considering the aforementioned, it is evident that the downward trend experienced by employment has weakened in recent months. The recent behavior of employment in the industrial sector is an optimistic sign of future developments in the labor market, given that during the last year employment in this sector was the most severely affected by the economic downturn.

From January to March of 2002, the main indicators of unemployment deteriorated slightly compared to year-end 2001. Open unemployment averaged 2.8 percent, whereas in the last three months of 2001 it registered an average of 2.6 percent (Graph 10b).

Nonetheless, the deterioration in the unemployment rate has undergone an incipient moderation. In its seasonally adjusted series, the indicator's average for the first quarter of 2002 was 2.7 percent (the same figure as in October-December of 2001).

The underemployment and unemployment rate was higher on average during the first quarter of 2002 than in the last quarter of 2001, when it reached values of nearly 21 percent. Since October 2001, the trend series for this indicator has risen continually (Graph 10c).

**Graph 10**                      **Employment and Unemployment Indicators**  
Trend Series



Source: IMSS and INEGI.

The open unemployment rate was similar for men and women during the first quarter of this year. On average, this indicator was 2.8 percent for men and 2.9 percent for women. However, the average duration of unemployment decreased. Hence, the percentage of persons unemployed for more than five weeks diminished from an average of 43.5 percent during the last quarter of 2001, to 38.7 percent in the first three months of 2002.

Employment in the informal sector remained stable. An indirect way of measuring employment in this sector is by calculating the EAP that does not receive any benefits. During the last quarter of 2001, this indicator averaged 47.7 percent, while during January-March it fell to 47.6 percent.

In short, although the labor market continued showing weaknesses, it has already begun to display some signs of recovery. In regards to labor income, increases in wage settlements have tapered off to between 6.5 and 7 percent. On the other hand, although employment has started to present some signs of a slight improvement, accumulated job losses are still substantial. Therefore, Banco de México reiterates the need to ease the downward rigidity of wage increases.

**II.2.3. Aggregate Supply and Demand**

During the last quarter of 2001, aggregate supply and demand experienced a contraction of 3.3 percent compared to 2000. The decline in aggregate supply reflects the fall in its two components: GDP (1.6 percent) and imports of goods and services

(7.7 percent). The reduction in aggregate demand resulted from the decline in private investment (12.8 percent) and in exports (10.9 percent), which outweighed the increase in consumption [public sector (3.3. percent) and private sector (1.5 percent)] and in public investment (6.6 percent). The annual growth rate of the main components of aggregate supply and demand remained stable from the third to the fourth quarter of 2001. Nevertheless, the annual rate of change of the public and private components of total investment differed sharply (Table 8).

Considering these results, aggregate supply and demand during 2001 diminished 1 percent, thus experiencing their first contraction since 1995. On the one side, the decline in supply derived from both the fall in GDP (0.3 percent) as well as in imports of goods and services (2.9 percent). The decline in aggregate demand resulted from the combination of a 3.4 percent growth in private consumption and the decrease of 5.9, 5.1 and 1.4 percent in investment, exports of goods and services, and public consumption, respectively.

The assessment of the quarterly variation of the seasonally adjusted series proves useful to analyze the most recent changes in the components of aggregate supply and demand. During the fourth quarter of 2001, consumption posted an increase of 0.5 percent from the previous quarter. In regards to its components, private and public consumption rose 0.3 and 1.2 percent, respectively. Moreover, capital formation fell from the previous quarter (1.1 percent), in response to a 3.9 percent increase in public sector investment and a 1.9 percent contraction in private sector investment. Compared to the third quarter of 2001, aggregate supply and demand decreased 0.1 percent during the fourth quarter.

The analysis of the seasonally adjusted growth rates of the main components of demand renders two significant results:

- (a) Although total consumption increased slightly on average during the last two quarters of 2001, private consumption remained practically unchanged; and
- (b) Non-oil exports were already showing signs of a recovery by the end of last year.

**Table 8** **Aggregate Supply and Demand in 2001**  
Percentage change

	Real Annual Percentage Change					Real Quarterly Percentage Change (seasonally adjusted series)			
	2001					2001			
	1st Q	2nd Q	3rd Q	4th Q	Annual	1st Q	2nd Q	3rd Q	4th Q
Aggregate Supply	2.8	0.2	-3.4	-3.3	-1.0	-0.8	-0.5	-1.4	-0.1
GDP	2.0	0.1	-1.5	-1.6	-0.3	-0.5	-0.1	-0.3	-0.4
Imports	5.2	0.6	-8.0	-7.7	-2.9	-1.7	-1.5	-4.3	1.0
Aggregate Demand	2.8	0.2	-3.4	-3.3	-1.0	-0.8	-0.5	-1.4	-0.1
Total Consumption	5.3	3.1	1.1	1.8	2.8	1.2	0.3	-0.1	0.5
Private	6.6	4.1	1.6	1.5	3.4	1.1	0.3	-0.2	0.3
Public	-3.5	-3.2	-3.5	3.3	-1.4	1.6	-0.1	0.4	1.2
Total Investment	0.5	-5.5	-8.9	-9.1	-5.9	-2.4	-2.4	-3.4	-1.1
Private	-1.2	-5.2	-1.3	-12.8	-5.1	-6.3	-2.2	-0.8	-1.9
Public	12.8	-7.6	-38.0	6.6	-9.6	24.2	-3.2	-17.2	3.9
Exports	2.6	-1.7	-9.5	-10.9	-5.1	-4.4	-0.9	-3.5	-1.7

Source: INEGI and seasonal adjustments by Banco de México.

During the first months of 2002, data on economic activity in Mexico provided ambiguous signals. On the one hand, the number of positive indicators grew. On the other hand, some variables continued to show weaknesses, while others displayed fluctuations without showing a sustained improvement.

Among the favorable aspects, the following are worth mentioning:

- (a) Using seasonally adjusted series, the Global Indicator of Economic Activity (IGAE) as well as industrial output displayed positive monthly growth rates of 0.6 and 1.3 percent in February;
- (b) Seasonally adjusted data of manufacturing output and of the construction sector increased in January and February compared to December of 2001. In fact, by the end of February, the construction sector had accumulated four consecutive months of positive monthly variations;
- (c) Sales of the National Association of Self-service and Department Stores (*Asociación Nacional de Tiendas de Autoservicio y Departamentales, ANTAD*) had a significant annual increase of 9.8 percent, which was favored by the Easter holiday (which benefits retail trade but exerts an adverse effect on industrial output and on

foreign trade). Using seasonally adjusted data, ANTAD sales grew 0.9 percent in relation to the previous month;

- (d) Domestic sales of the auto industry recovered;
- (e) Annual variation of investment spending moved from -7.2 percent in December to -4.2 percent in January. Using seasonally adjusted data, the monthly rate of this aggregate was positive in January (1.4 percent);
- (f) Recent data on the leading cyclical indicators for Mexico point to a recovery of economic activity;
- (g) Business confidence indicators of the manufacturing entrepreneurs as well as of the private sector economic analysts continued on an upward trend in March;
- (h) During February, the open unemployment rate in urban areas decreased compared to January (using original as well as seasonally adjusted series). This rate remained practically unchanged in March from the previous month; and
- (i) Seasonally adjusted figures for in-bond and non in-bond manufacturing exports as well as for imports of intermediate goods rebounded in February and March.

Among the unfavorable features of economic activity that were identified at the time of publishing this Report the following are noteworthy:

- (a) For the thirteenth consecutive month, the seasonally adjusted series for wholesale sales in February decreased at annual as well as at monthly rates;
- (b) In January, output and employment in the in-bond sector fell sharply at annual rates. Furthermore, the accumulated reduction in the number of in-bond establishments up-to-that month was also considerable. However, this information should be compared to that pertaining to the incipient rebound in in-bond exports during February and March;
- (c) An indicator that has revealed a mixed behavior has been the number of affiliated workers to the IMSS. While this number contracted during the last two weeks of March, after showing signs of improvement for eight consecutive weeks, it recorded an increase during the first two weeks

of April. Considering seasonally adjusted data, at the end of March, the number of workers recorded an accumulated increase of only 3,642 persons compared to the figures registered at the end of December of 2001.

It should be pointed out that data on economic activity for the first quarter and, particularly, for March, will be affected by the Easter holiday<sup>10</sup> as it will have a negative and significant incidence on the annual growth rates for that period. This will create difficulties for the analysts' assessment of the Mexican economy.

Given the above outlook, Banco de México estimates that real GDP contracted 1.6 percent (at annual rates) during the first quarter of 2002. After adjusting for the effect of the Easter holiday and other seasonal phenomena, the estimate for GDP's annual decrease would have been closer to 0.7 percent, while the quarterly variation of seasonally adjusted data would have registered a positive figure. The annual rate of change in private consumption during the referred period is expected to be 1 percent whereas total investment is anticipated to have suffered a 6 percent reduction.

#### **II.2.4. Balance of Payments, Capital Flows and Exchange Rate**

Since the upturn of economic activity in the United States is being transmitted to Mexico with certain lags, the annual contraction in non-oil exports during the first quarter was less pronounced than that of total imports. That is to say, the recovery of exports linked to the international environment has preceded the rise in imports, which also responds to domestic demand's prevailing conditions.

The accumulated total and non-oil commercial deficits decreased 16 and 19 percent, respectively, during the quarter (Graph 11). Based on this information, the current account deficit is expected to have been close to 4.2 billion dollars.

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<sup>10</sup> Last year this holiday took place in April.

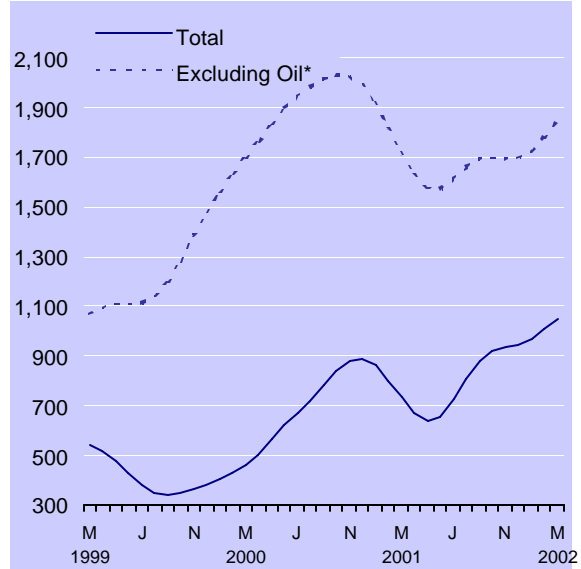
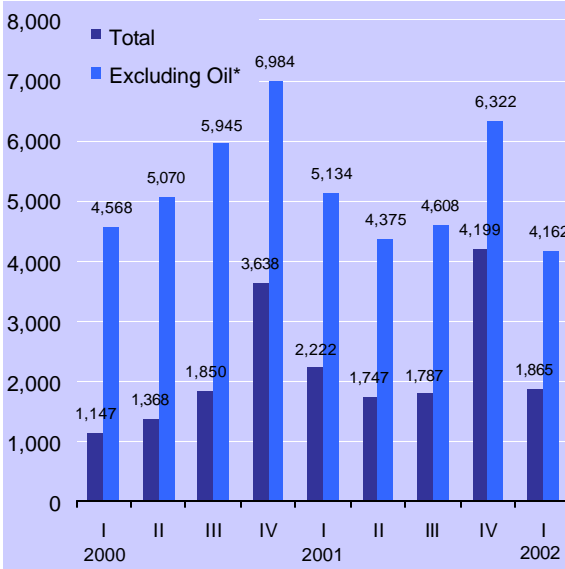


**Graph 11 Trade Deficit: Total and Excluding Oil**

Millions of dollars

Quarterly

Monthly: Trend Series



\* Excluding oil exports and gasoline, butane and propane gas imports.

Developments in the external sector have contributed to reduce Mexico’s demand of external resources, thereby strengthening the exchange rate and the stability of the interest rates.

The availability of external savings provided support for the stability of the main financial variables. On the basis of preliminary information, the capital account surplus is estimated to have amounted to 5.5 billion dollars. As in previous quarters, foreign direct investment (FDI) most likely accounted for a substantial proportion of this surplus.

From the aforementioned it can be inferred that the supply of external savings has been sufficient to finance the economy’s needs without difficulties. Thus, the net yield on UMS26 sovereign bonds continued to decline during the period. On March 29<sup>th</sup>, this yield registered 249 basis points, 50 points lower than that prevailing at the end of 2001 (Graph 12).

Although there was some uncertainty at the beginning of the year caused by the debate on the fiscal reform, the confirmation that the public deficit in 2001 had been consistent with the year-target, the approval of a prudent budget for 2002, and of several tax laws by Congress, influenced the opinion of two of the main rating firms, which decided to upgrade Mexico’s sovereign debt. In

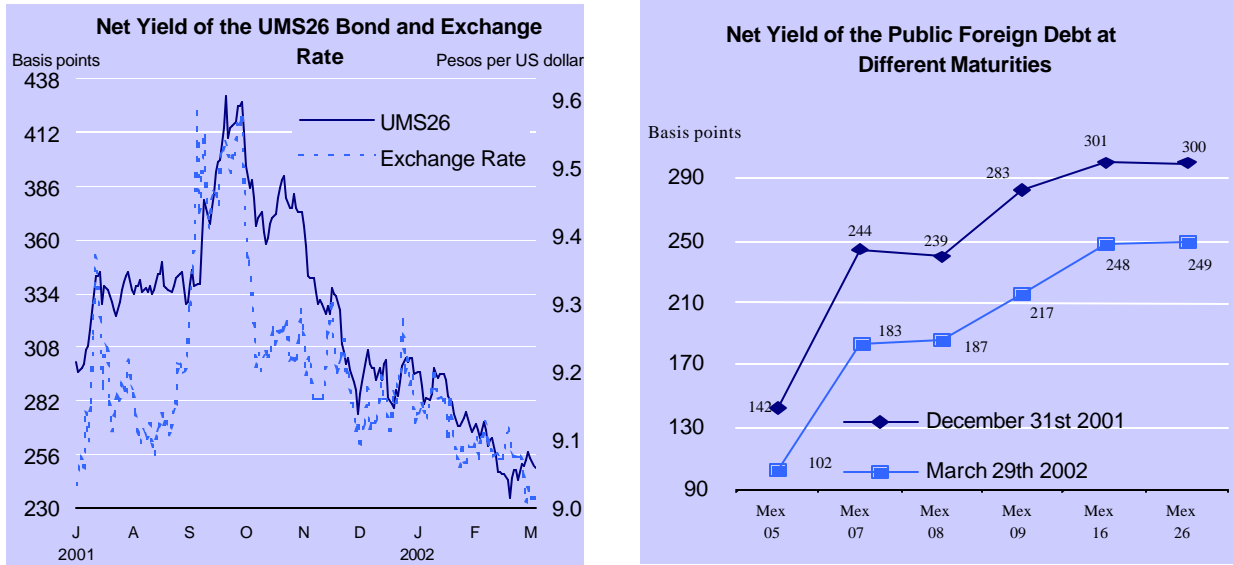
particular, Standard and Poor's granted "investment grade" status to the Mexican debt in February. Nevertheless, since this decision had already been anticipated by the financial markets participants, its announcement did not generate immediate changes in the pricing of the government's external debt. On March 19<sup>th</sup>, the Ministry of Finance and Public Credit (SHCP) announced the anticipated repurchase of floating rate sovereign bonds (which had been issued in 1999). This measure is compatible with the strategy of substituting lesser-cost liabilities with longer maturity for relatively costly debt. A strategy of this sort has become feasible to the extent that country-risk perception has improved.

Finally, in response to the favorable behavior of country risk indicators during the quarter, the exchange rate appreciated 1.4 percent, closing at 9.02 pesos in March (Graph 12). During recent months, confidence in Mexico's economy has materialized in a sufficient and sustained supply of external financial resources. This, along with a moderate trade deficit has contributed to the peso's appreciation.

The appreciation of the peso has not had a discernible link to monetary policy. It is important to mention that during the recent period of exchange rate appreciation, interest rates fell to historic minimum levels. In the hypothetical case that the monetary authority would have tried to appreciate the exchange rate in order to support the disinflation process, such strategy would have required an increase in interest rates. Recent financial stability has resulted from capital market's expectations of a substantial real GDP growth and increases in productivity levels in the Mexican economy. This has led to high capital inflows to the country, which had a counterpart in the revaluation of Mexican assets and in the appreciation of the exchange rate.

The process outlined has similarities with the one experienced by other countries (Spain and Portugal, for example) that underwent a period of macroeconomic convergence with their more developed trading partners.

**Graph 12 Country Risk Indicators and Exchange Rate**



Source: Bloomberg and Banco de México.  
 Note: The net yield on the UMS26 bond is the difference between its gross yield and that of a United States government bond with similar maturity.

**II.2.5. Prices Regulated or Administered by the Public Sector**

During the quarter, monthly inflation rates for goods and services prices administered or regulated by the public sector<sup>11</sup> were 1.53, 1.86, and 1.05 percent, respectively. In those same months, CPI variations were 0.92, -0.06 and 0.51 percent (Graph 13). The increases in prices regulated or administered by the public sector compare unfavorably with those registered during the same months of the previous year.<sup>12</sup>

As for products whose prices are regulated by the public sector, Mexico City’s subway and urban transportation fares rose during January. These increases had an upward effect of 0.26 percentage points on CPI inflation.

Regarding products whose prices are administered by the public sector, in January the federal government announced a substantial additional increase in residential electricity. The

<sup>11</sup> The basket considered in the sub-index of goods and services whose prices are administered by the public sector includes the following products: gasoline, domestic gas and electricity. Products whose prices are regulated by the public sector are: international long distance telephone calls, local telephone services, domestic long distance telephone calls, telephone line installation and service fees, taxi fares, city bus fares, subway or electric transportation fares, inter-state transportation, inter-city public transportation, parking lots, automobile ownership taxes, highway tolls, oil and lubricants and duties and licenses.

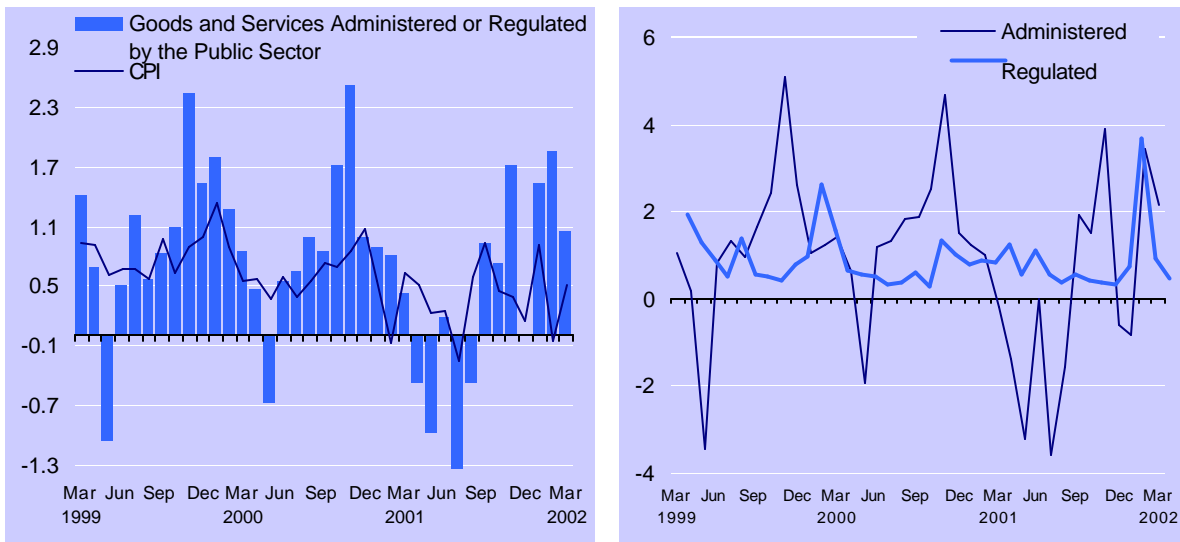
<sup>12</sup> Increases were 0.90, 0.80 and 0.43 percent in January, February and March of 2001, respectively.

modifications were implemented by reducing the subsidy granted to electricity in homes that consume from 280 to 500 kilowatts per hour on a two-month basis. Likewise, the subsidy for those that consume more than 500 kilowatts per hour every two months was completely eliminated. This measure affected approximately 25 percent of electricity users.

The rise in electricity tariffs for residential use had a substantial effect on overall inflation. Thus, such measure had a direct upward impact on the CPI of 0.27 percentage points in February and 0.10 in March. Banco de México anticipates that the direct effect of this policy change on inflation will be of 0.37 percentage points for the year as a whole.

**Graph 13 Price Index for Goods and Services Administered or Regulated by the Public Sector and CPI**

Annual percentage change



It is important to stress that these increases in public prices had once-and-for-all repercussions of a limited magnitude. In particular, it has been possible to determine (based on several studies carried out by Banco de México) that the effect of this type of price increases on inflation is, usually, transitory and tends to disappear in the following 12 months.<sup>13</sup>

Finally, during March, domestic gas prices went up 3.17 percent compared to the previous month. This fact will be relevant

<sup>13</sup> "Efecto de los Precios Administrados sobre la Inflación", *Documento de Investigación* No. 9709, Banco de México, December 1997.

for the outlook of inflation for the rest of the year, as a sharp increase in international oil prices (which is a reference for domestic gas) would negatively affect the behavior of the sub-index of prices administered or regulated by the public sector.

## II.2.6. Summary

Annual CPI inflation experienced a rebound during the first quarter of 2002. This behavior was mainly due to increases in the prices of agricultural and livestock products, as well as in those administered or regulated by the public sector. The incidence of these sub-indexes on overall inflation grew from 0.16 and 0.51 percentage points in December 2001, to 0.32 and 0.73 percentage points in March of this year (Table 9). In contrast, core inflation remained on a downward path, driven by the fall in core inflation of goods. As previously stated, the exchange rate appreciation had a favorable influence on the core inflation of goods. Thus, core inflation contributed 3.04 percentage points to annual overall inflation up to March.

**Table 9** **Contribution of CPI Components to Annual inflation**  
Percentage points

	March-2002	December-2001	March-2001
CPI	4.66	4.40	7.17
Core	3.04	3.36	4.35
Goods	1.13	1.52	2.28
Services	1.91	1.84	2.07
Agricultural and Livestock	0.32	0.16	0.46
Education	0.46	0.47	0.46
Goods and Services Administered or Regulated by the Public Sector	0.84	0.41	1.90
Administered	0.11	-0.10	1.29
Regulated	0.73	0.51	0.61

Annual core inflation of services displayed a mixed behavior during the period, as it grew during the first two months of the year but then weakened in March. Even though the nominal growth rate of wage settlements has undergone certain moderation, this decrease has not translated yet into a lower inflation of this sub-index. As a result, the incidence of core inflation of services was 0.07 percentage points above that of the previous quarter. A factor that probably had an unfavorable impact on the prices of this sector was the new luxury tax, as the affected components have a significant weight in the core price services sub-index. Nevertheless, the new tax had a mild overall effect due to its limited coverage and the delay in putting it into effect.

On balance, the path followed by prices during the period under review was compatible with the announced target of a year-end inflation that does not exceed 4.5 percent.

### III. Monetary Policy During the First Quarter of 2002

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This section reviews monetary policy actions from January to March of 2002. Particular emphasis is given to the reasons behind Banco de México's Board of Governors decision to modify the stance of the monetary policy in February. To complement this review, the behavior of expectations regarding inflation and nominal and real interest rates is also assessed. This analysis is of relevance as both variables influence the monetary conditions prevailing in the economy as well as the general public's perception of the inflationary process. Last, the path of the monetary base and of other monetary and credit aggregates is also evaluated.

#### III.1. Monetary Policy Actions

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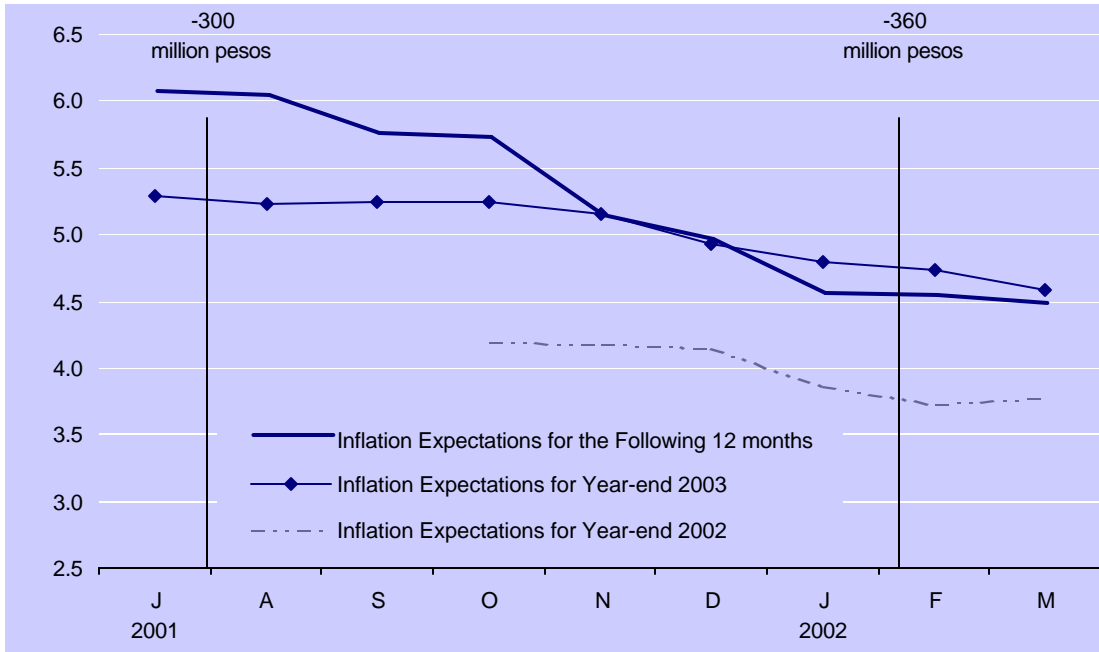
On February 8th, the Board of Governors of Banco de México decided to raise the "short" from 300 to 360 million pesos, maintaining it at that level throughout the rest of the quarter.

This measure was adopted to prevent a deterioration of inflation expectations and the consequent contagion of the overall process of price formation that could have resulted from the partial elimination of the subsidy on electricity announced by the Federal Government on January 29th and which went into effect on February 8th. Unlike other elements which were anticipated in the Monetary Program for 2002, and which might have caused an increase in inflation during the first quarter of the year, the referred measure had not been foreseen in the Monetary Program. Certainly, its implementation could have contaminated inflation expectations and therefore, wage negotiations and the setting of all other prices of the economy.

In consequence, the monetary policy actions that were implemented had a clearly preventive nature. Its general purpose was to help secure the appropriate monetary conditions that will allow the attainment of the inflation objectives set forth for 2002 and the following year.

The increase of the “short” was effective in containing the adverse effects of the reduction in the electricity subsidy on inflation expectations (Graph 14).

**Graph 14 Inflation Expectations and Accumulated Balances Objective ("Short")**



Source: Survey of Private Sector Economic Analysts' Expectations undertaken by Banco de México.

Consistent with the increase of the “short” and with the favorable behavior of core inflation, overall expected inflation for 2002 for the following twelve months and for year-end 2003 was adjusted downwards (Graph 14) during the quarter. These results suggest that said change contributed to prevent a worsening of inflation expectations. During the reported quarter, expected inflation for 2002 decreased 0.34 percentage points. In line with these developments, inflation forecasts for the next twelve months and for year-end 2003 also fell 0.48 and 0.37 percentage points, respectively. It should be mentioned that this revision implied that expected inflation for 2002 at the end of the quarter was 4.58 percent, close to the year’s target.<sup>14</sup>

During the first quarter of 2002, nominal and real domestic interest rates evolved quite differently from external interest rates, a fact that is indicative that the main determinants of the changes in the former were domestic events (Graph 15). During the last week of January, nominal and real interest rates increased substantially in

<sup>14</sup> At the closing of the first quarter, the core inflation forecast for December 2002 was 4.87 percent, a level consistent with the target.

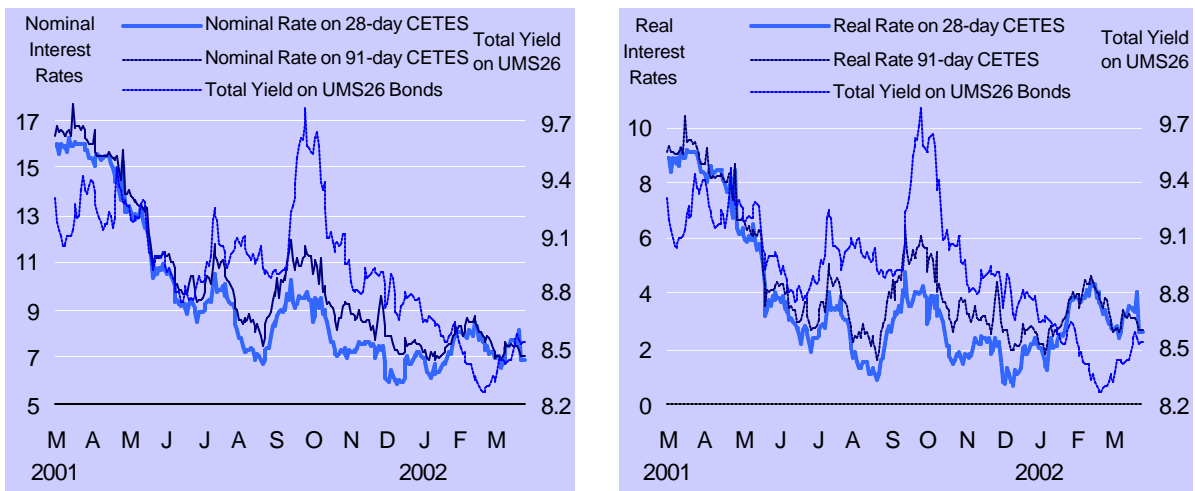


anticipation of a foreseeable inflationary effect due to the partial elimination of the electricity subsidy. Yields increased again in the second week of February, coincidental with the widening of the “short” (February 8<sup>th</sup>). The nominal yield on 28-day Cetes increased 7 basis points on average in the five trading days before and after the increase in the “short”. The upward movement of the nominal interest rate on 91-day Cetes was 38 basis points. In contrast, the yield on the UMS26 bond decreased by 11 basis points.

Starting in mid-February, and anticipating the favorable evolution of inflation for the remainder of the month, real domestic interest rates (nominal and real) decreased significantly, reaching levels similar to those prevailing in mid-January. However, interest rates subsequently experienced a temporary increase, although the maximum levels recorded were lower than those observed during February. This transitory reversion is attributed to two factors. First, the perception that the evolution of the price index during March would not be as favorable as that attained in February, particularly because of the influence of certain agricultural and livestock prices. Second, the fact that some financial institutions expected liquidity pressures associated with the Easter holiday (in response to seasonal factors), leading them to modify provisionally their strategies on placement of liabilities and investment in financial assets. Notwithstanding, as inflation forecasts evolved favorably and the seasonal effects associated with the Easter vacation began to fade, interest rates decreased once again towards the end of the quarter.

**Graph 15** **Nominal Interest Rates, Real Interest Rates<sup>1/</sup> and Total Yield on UMS26 Bonds**

Percent



1/ Nominal interest rates deflated by inflation expectations for the following 12 months.

In the end, the response of private sector analysts' forecasts of inflation and interest rates to news regarding agricultural and livestock prices, proved unfounded. Although in several past episodes some of the most extreme fluctuations in the prices of these goods have affected inflation negatively, such movements have typically proven to be temporary as they have reverted in the subsequent months. In general, increases in the prices of agricultural goods have not altered the downward path of CPI inflation significantly, and have only done so in certain months. Nonetheless, markets have responded perhaps excessively to these brief and transitory movements. As a result, financial markets' volatility has increased.

In sum, a non-anticipated revision of prices of goods administered or regulated by the public sector was experienced in the first quarter of 2002. This led to additional inflationary pressures that, however, appear to be temporary. This statement can be attested by the fact that such influence did not contaminate inflation expectations or the behavior of all other prices in the economy. Interest rates moved upward in response to the preventive increase to the "short". As mentioned, the latter obeyed to the need to prevent any upward contaminating effect - resulting from the referred adjustment in electricity prices - from spreading to other prices. Apparently, this reaction (along with the favorable evolution of other price sub-indexes that offset the inflationary effect of the government's measure) fulfilled its purpose. The widening of the "short" did not prevent ulterior decreases in interest rates from taking place.

## **III.2. Monetary and Credit Aggregates**

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### **III.2.1. Monetary Base, Net International Assets and Net Domestic Credit**

At the end of the first quarter of 2002, the stock of the monetary base amounted to 216.31 billion pesos, 8.91 billion pesos higher than expected. The deviation from the forecasted stock was 4.3 percent, above the upper limit of the confidence interval of the estimation model (3 percent). This can partly be explained by the high seasonal demand for cash due to the proximity of the March 21<sup>st</sup> and Easter holidays. In regards to this matter, it is important to point out that although the atypical effect of the holidays was taken into account in the forecast for the monetary base, the volatility experienced every year by this additional demand led to an

underestimation of the desired cash balances. Thus, the deviation of the monetary base from its estimated value decreased from 6 percent on March 20<sup>th</sup> to levels within the confidence interval of the estimation model once the holiday period ended.

The macroeconomic stability attained and compliance with the inflation targets have led to a more orderly process for the formation of expectations by economic agents. This has translated into lower nominal and real interest rates, compared with those observed in recent past. These developments have lowered the opportunity cost of holding cash balances and have become an additional factor that has spurred growth of this monetary aggregate. Finally, as opposed to what has occurred in past periods of economic contraction in Mexico, the recent downturn in production has taken place in a context in which workers' real compensations rose substantially. This has also fostered the expansion of the demand for bills and coins.

The increase in international assets during the quarter amounted to 1.45 billion dollars. In order to maintain the supply of base money in line with the demand from the public, Banco de México sterilized the monetary impact of this accumulation via increases in the Central Bank's non-monetary liabilities. The latter, along with a seasonal reduction in the demand for base money, led to a reduction of net domestic credit of 22.77 billion pesos (Table 10).

**Table 10** **Monetary Base, International Assets and Net Domestic Credit**  
Millions

	Stock		Accrued Annual Cash Flows
	To Dec. 31st 2001	To March 31st 2002	To March 31st 2002
<b>(A)</b> Monetary Base (Pesos)	225,580	216,309	-9,272
<b>(B)</b> Net International Assets (Pesos) <sup>2/</sup>	411,315	417,532	13,497
Net International Assets (US Dollars) <sup>2/</sup>	44,857	46,310	1,453
<b>Change in Net International Assets</b>			<b>1,453</b>
<i>Pemex</i>			3,382
<i>Federal Government</i>			-2,004
<i>Others</i>			75
<b>(C)</b> Net Domestic Credit (Pesos) [(A)-(B)] <sup>1/</sup>	-185,735	-201,223	-22,769
<b>Memorandum:</b>			
<b>(D)</b> International Reserves (US Dollars) <sup>3/</sup>	40,880	42,229	1,349

1/ In the estimation of effective flows in pesos of net international assets, the exchange rate applied in the operation of each flow is considered. The differential between net international asset stocks in pesos does not correspond to the concept of effective flows, due to the fact that stocks of the former definition are valued at the daily exchange rate. This also explains why the differential between the net domestic credit stocks is not the same as the effective flows.

2/ Net international assets are defined as gross reserves plus credit agreements with central banks with more than six months to maturity, minus total liabilities payable to the IMF, and minus credit agreements with central banks with less than six months to maturity.

3/ As defined by Banco de México's Law.

### III.2.2. Monetary Aggregates

Preliminary figures point to a marginal decrease in the annual variation rate of the broad monetary aggregates during the first quarter of 2002. On the other hand, the narrow money aggregate (M1) has persistently expanded at higher rates than the broad aggregates. This suggests an important change in the structure of financial assets, which most likely was influenced by the unusual demand for means of payment during the Easter holiday (Table 11).

**Table 11** **Monetary Aggregates**  
Real annual percentage change of the average stock

	2001				2002
	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
<b>M1</b>	<b>6.8</b>	<b>3.5</b>	<b>7.6</b>	<b>13.0</b>	<b>16.2</b>
Bills and Coins Held by the Public	7.3	3.1	6.3	4.9	10.5
Checking Accounts in Pesos	4.1	3.1	4.2	8.1	10.0
Checking Accounts in Foreign Currency	6.5	-1.3	22.0	60.7	59.6
Current Account Deposits	17.6	10.2	13.5	16.7	22.3
<b>M4</b>	<b>6.4</b>	<b>6.7</b>	<b>8.9</b>	<b>10.3</b>	<b>9.4</b>
Bank Deposits	-10.3	-7.2	-3.0	1.0	-3.9
Public Securities <sup>1/2/</sup>	37.1	31.1	28.8	25.0	25.2
Private Securities <sup>2/</sup>	20.0	10.6	6.1	10.6	26.3
Retirement Savings Funds (excluding Siefores) <sup>3/</sup>	18.3	17.3	14.8	13.7	12.6

1/ Including Federal Government securities, BPAS and BREMS.

2/ Including securities held by the Siefores (Specialized Retirement Funds).

3/ Including housing funds and retirement funds held by Banco de México.

The Citigroup purchase of Banamex continues to influence monetary aggregates.<sup>15</sup> In particular, after adjusting for the effect of this transaction, during the first quarter M4 and M1 grew at average real annual rates of 8.4 and 11.6 percent, respectively.

The expansion in domestic financial savings contrasts with the weakness of economic activity at the onset of 2002. This is basically explained by the resources that are channeled through the Retirement Savings System (SAR), which amounted to 36.7 billion pesos during the first quarter.

A relevant aspect of the behavior of financial savings is the presence of a clear trend towards an increased share of public securities and a substantial reduction in that of traditional bank deposits (Graph 16a). The stronger demand for securities has

<sup>15</sup> Refer to the Inflation Report of October- December 2001, page 50.

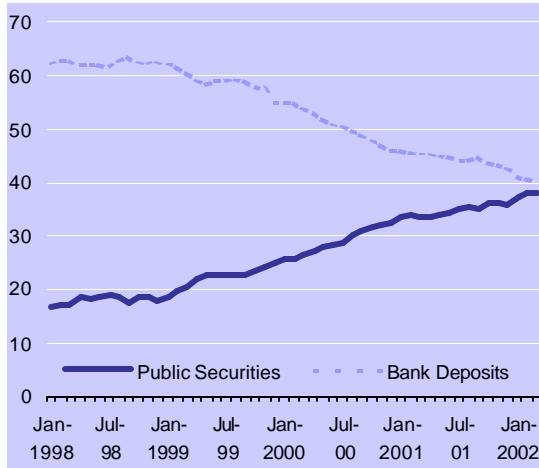
derived mainly from the investment societies, which have become the most dynamic intermediary for financial savings (Graph 16b).

**Graph 16**

**Main Components of M2**

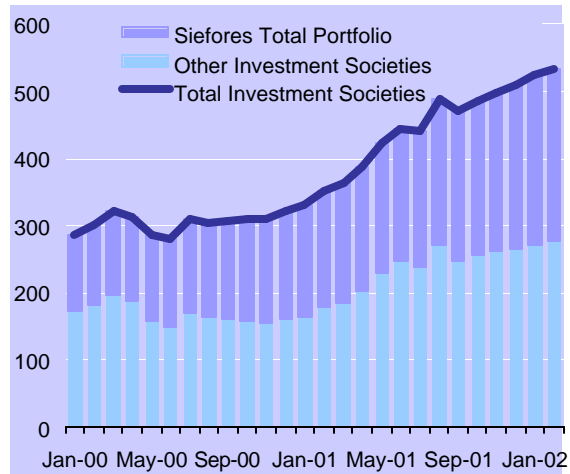
**a) Bank Deposits and Public Securities \*/**

Percentage of M2



**b) Investment Societies Securities Portfolio**

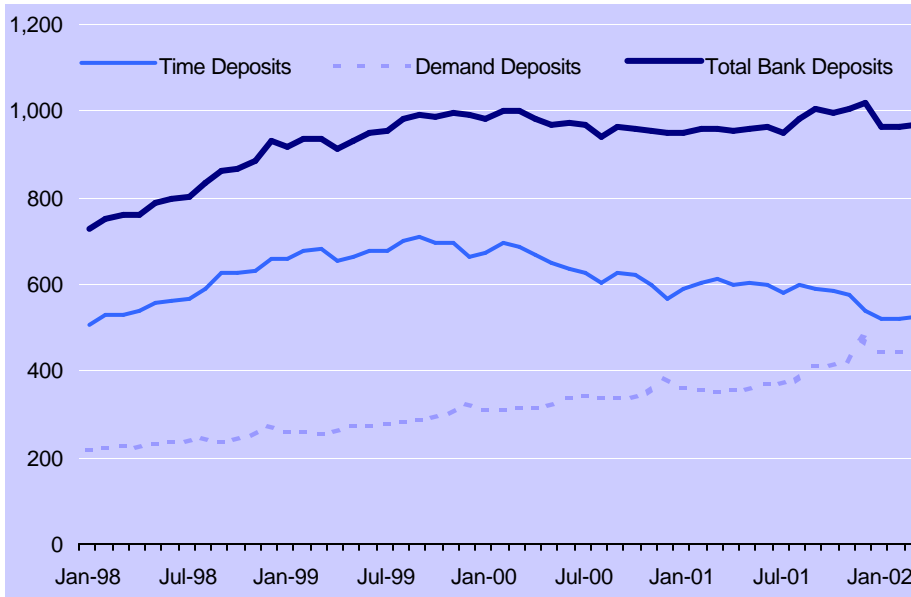
Stock in billion pesos



\*/ Public securities include those issued by the Federal Government, the IPAB and Banco de México.

The structure of bank deposits has also undergone substantial changes. While time deposits have decreased, more liquid bank liabilities are becoming more important within the total monetary stock.

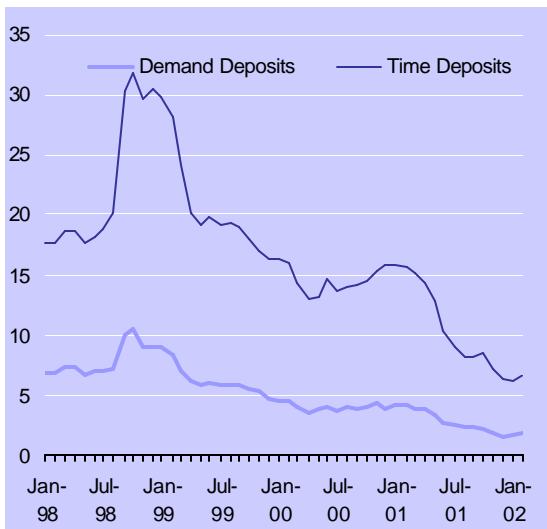
**Graph 17** **Bank Deposits at Commercial Banks**  
Stock in billion pesos



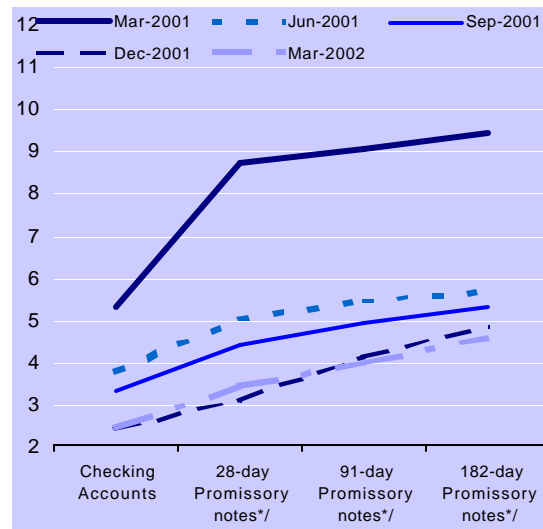
The shift in the structure of bank deposits towards more liquid liabilities has become more evident in the last six months, in response to the general decrease in interest rates and the narrower spreads between the yield on time deposits and that on checking accounts (Graph 18).

**Graph 18** **Interest Rates on Bank Deposits**  
**Cost of Bank Deposits in Domestic Currency Nominal Rates**

Annual percentage



Annual percentage



\*/ Over-the-counter opening rates.

### III.2.3. Financing to the Private Sector

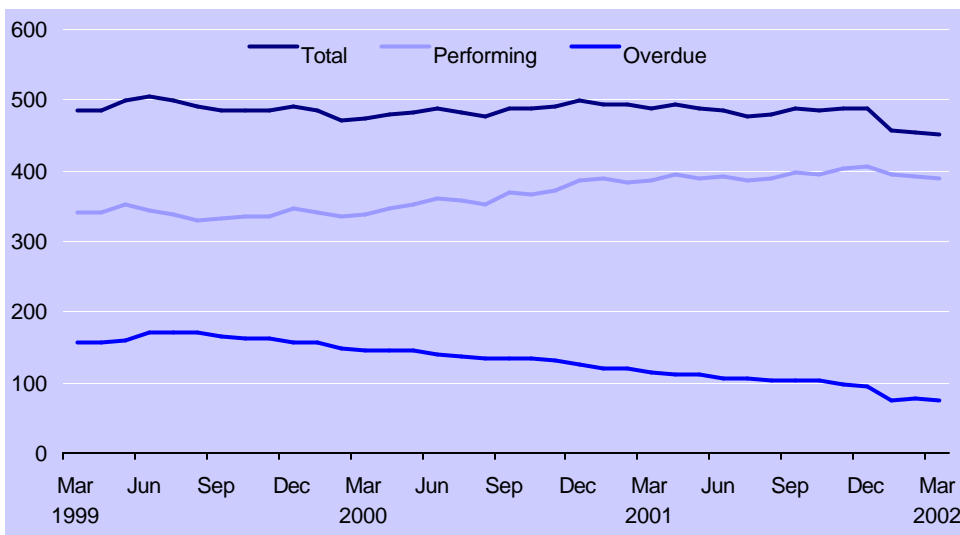
During the same period, bank financing was mainly influenced by two factors: the continuing process of canceling commercial banks' overdue portfolio and the contraction in financing to the private sector.

In regards to the first factor, in January of 2002 there was a decrease of 17.4 billion pesos in overdue credit, as a result of the latter being cancelled out against provisions (Graph 19).

**Graph 19**

#### Credit Granted by Commercial Banks to the Private Sector

Stock in billion pesos



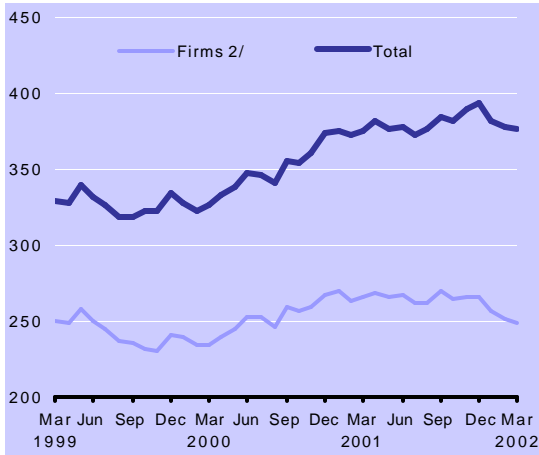
Total financing has been determined by the behavior of performing credit and especially by the decline in credit granted to firms. Up to March 2002, the latter experienced a reduction of 17.1 billion pesos (Graph 20). Nonetheless, the stock of consumer credit has continually risen, while credit for housing has remained practically unchanged.

**Graph 20**

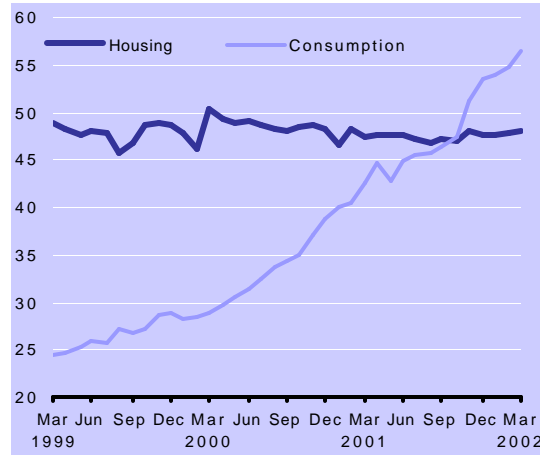
**Credit Granted by Commercial Banks to the Private Sector <sup>1/</sup>**

Performing loan portfolio

Stock in billion pesos



Stock in billion pesos



1/ Refers to commercial banks' own portfolio, a concept that excludes credit related to debtor support programs and bank rescue programs (IPAB-FOBAPROA promissory notes and Cetes-UDIs).

2/ Firms and individuals with a business activity. Does not include credit granted to non-bank financial intermediaries.

Considering a wider set of sources of financing, the following developments can be noted:

- (a) The stock of credit granted by mortgage Sofoles (non-bank institutions) continues to expand. On February 2002, it grew 35.7 percent in real terms compared to that of 2001. This contrasts with the stagnation of similar credits granted by commercial banks; and
- (b) At the end of February 2002, the stock of credit granted by non-mortgage Sofoles increased at an annual rate of 19.6 percent in real terms. Automotive Sofoles, which are noteworthy given their substantial share in the total, registered an annual real increase of 21.3 percent in their stock of credit.

Finally, macroeconomic stabilization has translated into lower interest rates, thus reducing financing costs for firms and individuals. Likewise, the greater stability in the markets has translated into lengthened credit terms for both the private and public sectors (Graph 21).

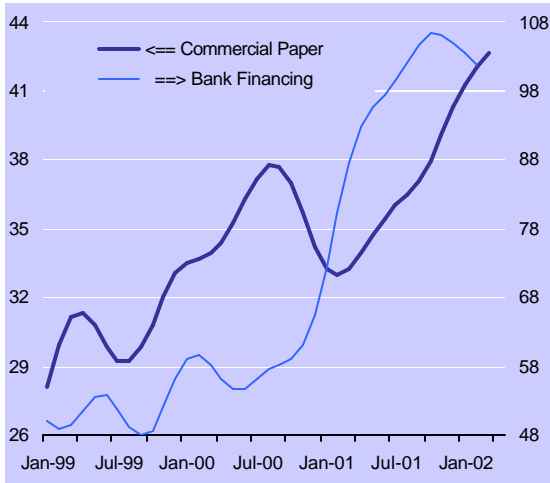


**Graph 21**

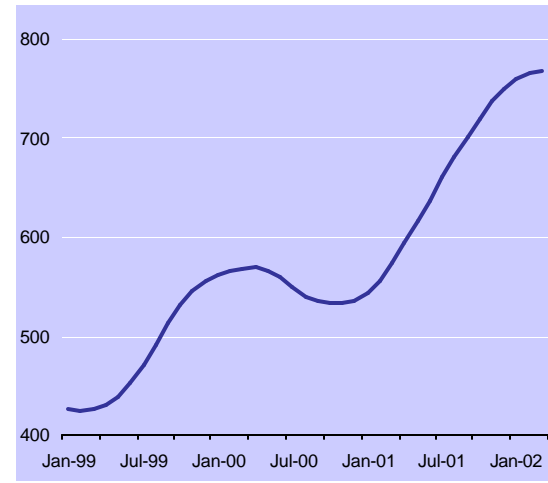
**Average Maturity of Private and Public Sector Debt**

Number of days

**Trend of Average Maturity of Bank Financing and Commercial Paper**



**Average Term to Maturity of Government Securities**



## IV. Private Sector Outlook for 2002<sup>16</sup>

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During the January-March 2002 period, economic analysts modified their forecasts on the performance of the main macroeconomic variables for the present year, with the following outcomes: higher GDP growth, an increase in oil prices and a moderately lower inflation.

### IV.1. Forecasts on the Main Determinants of Inflation

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Private sector financial analysts expect the international environment to be more favorable than that considered in the previous Report. In this regard, the following are noteworthy:

- (a) Expectations of domestic analysts related to economic growth in the United States for 2002 increased considerably, from an annual rate of 1.1 percent in December 2001 to a 2 percent annual rate in March of 2002. On the other hand, the average forecast of U.S. analysts for economic growth in that country in 2002 turned out to be 2.6 percent.<sup>17</sup> Several international investment banks anticipate an even higher growth scenario for 2002. The average GDP growth forecast of three brokerage firms<sup>18</sup> at the time of publishing this Report was 2.9 percent (Table 12). Likewise, these institutions estimate economic expansion to be between 5 and 5.3 percent during the first quarter of 2002.

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<sup>16</sup> Unless otherwise stated, the forecasts reported in this section are taken from the Survey of Private Sector Economic Analysts' Expectations conducted each month by Banco de México.

<sup>17</sup> Source: Consensus Forecasts, April 8th, 2002.

<sup>18</sup> Goldman Sachs, JP Morgan and Deutsche Bank.

**Comparison of Growth Measurements in Mexico and the United States**

Gross Domestic Product (GDP) growth rates, as well as other indicators of economic activity in Mexico and the United States cannot be compared directly due to the different methodologies used to calculate them in each country. In Mexico, the National Institute of Statistics, Geography and Informatics (*Instituto Nacional de Estadística, Geografía e Informática, INEGI*) has traditionally presented economic data without seasonal adjustments. Growth rates of these series are measured as percentage changes (monthly, quarterly, etc.) in relation to the previous year. This way of calculating growth rates provides a simple procedure to eliminate the seasonality of the original series. In the United States, on the contrary, series are generally published with seasonal adjustments. Thus, growth rates are calculated as percentage variations in relation to the previous period (month, quarter, etc.) and then are annualized. The use of either methodology may affect growth rates that are obtained from the same data by making them differ substantially in magnitude and even in sign.

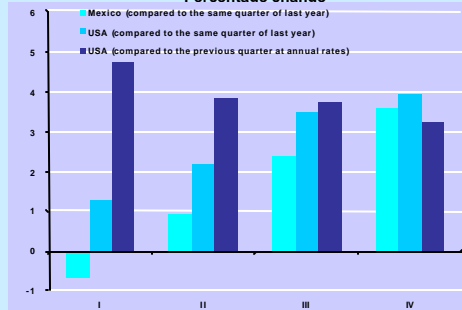
The reason behind the conventional use of the first methodology in Mexico is that the excessive volatility that had characterized Mexico's economy over the past decades made "filtering" an unpractical procedure to seasonally adjust the series. As Mexico's economy has become more stable there is no reason for not applying the most commonly used methodology that calculates rates as annual percentage changes in relation to the previous period. As a result, INEGI has recently begun publishing seasonally adjusted and unadjusted series.

For instance, let us consider the annual GDP growth rates in 2002 for Mexico and the United States that have been forecasted by several private sector analysts. Graph 1 and Table 1 present rates for each quarter of 2002. The first bar in Graph 1 and the first column of Table 1 correspond to Mexico's GDP growth rate, estimated by private sector analysts according to the traditional methodology; that is, using the unadjusted series for quarterly GDP, the expected growth rate is the percentage change in relation to the same quarter of 2001. The second bar in Graph 1 and the second column in Table 1 show quarterly GDP growth rates in the United States, calculated using the same methodology as for Mexico. The third bar in Graph 1 and the third column in Table 1 show quarterly GDP growth rates for the United States based on the methodology that has traditionally been put into practice in that country. That is, using seasonally adjusted quarterly GDP series, the expected growth rate is the annual percentage change in relation to the previous quarter. It is evident (as shown in Graph 1 and Table 1) that the path of GDP growth rates for both countries is very similar when the same methodology is applied.

Once the methodology used to calculate growth rates is standardized, the expected path of economic recovery in Mexico seems to be much more synchronized with that of the United States. That is, the effective differences in expected GDP growth rates between Mexico and the United States are narrower. The fact that "the rate" of growth in Mexico has been slower than in the United States (particularly during the first quarter of 2002) has derived both from the natural lag in output recovery between both countries as well as from the statistical effect that stems from the comparison of growth rates calculated with different methodologies. When the statistical effect is eliminated, expected

economic growth in Mexico appears to follow very closely that of the United States.

**Graph 1**  
**Expectations for Real GDP Growth for Mexico and the United States in 2002**  
**Percentage change**



Sources: Survey of Private Sector Economic Analysts' Expectations carried out by Banco de México; Goldman Sachs, Deutsche Bank and JP Morgan

**Table 1**  
**Expectations for Real GDP Growth for Mexico and the United States in 2002**  
**Percentage change**

	Mexico		United States	
	compared to the previous quarter of last year (1)	compared To the previous quarter of last year	compared to the previous quarter of last year	compared to the previous quarter of last year at annual rates
I	-0.70	1.27	4.73	
II	0.90	2.16	3.83	
III	2.40	3.46	3.73	
IV	3.60	3.94	3.23	

1 Survey of Private Sector Economic Analysts' Forecasts carried out by Banco de México.  
2/Average of forecasts by Deutsche Bank, Goldman and Sachs and JP Morgan.

Table 12

**Expectations for GDP Growth in the United States in 2002**

Annualized quarterly percentage change

	2002				
	I	II	III	IV	Annual
Consensus Forecasts <sup>1/</sup>	n.a.	n.a.	n.a.	n.a.	2.6
Deutsche Bank	5.3	4.4	4.5	4.3	3.1
Goldman Sachs	5.0	3.0	2.5	2.5	2.4
JP Morgan	5.0	5.0	4.5	3.5	3.1
<b>Average<sup>2/</sup></b>	<b>5.1</b>	<b>4.1</b>	<b>3.8</b>	<b>3.4</b>	<b>2.9</b>

1/ The April 8, 2002 issue of the *Consensus Forecasts* reports annual growth rates expected according to the survey conducted on that same date; however, it does not include the survey done on March 11, 2002. For this reason, no reference is made here to the quarterly forecast.

2/ Average forecasts of Deutsche Bank, Goldman Sachs and JP Morgan.  
n.a. Not available.

- (b) According to both national and foreign analysts of Mexico's economy, the average price of the Mexican crude-oil export mix in 2002 is expected to be 16.9 dollars per barrel.<sup>19</sup>

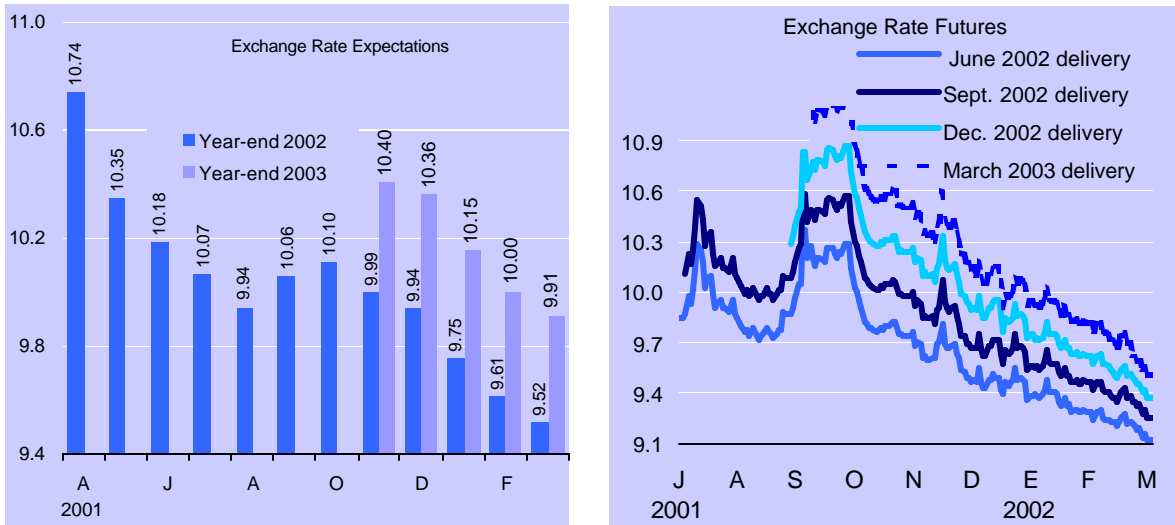
Exchange rate forecasts for year-end 2002 went from 9.94 pesos per dollar in December 2001 to 9.52 pesos per dollar in March of 2002. Peso futures for year-end 2002 declined from 9.96 pesos per dollar in December to 9.37 pesos per dollar in March. Finally, the surveyed specialists estimate the exchange rate will close at 9.91 pesos per dollar by December 2003 (Graph 22).

<sup>19</sup> Considering the international WTI future oil price (April 2) and the spread of the Mexican crude-oil mix of that same date, the resulting estimated average price for the latter is 21.03 dollars per barrel in 2002.

**Graph 22**

**Exchange Rate Forecasts and Exchange Rate Futures for Year-end 2002 and 2003**

Pesos per dollar



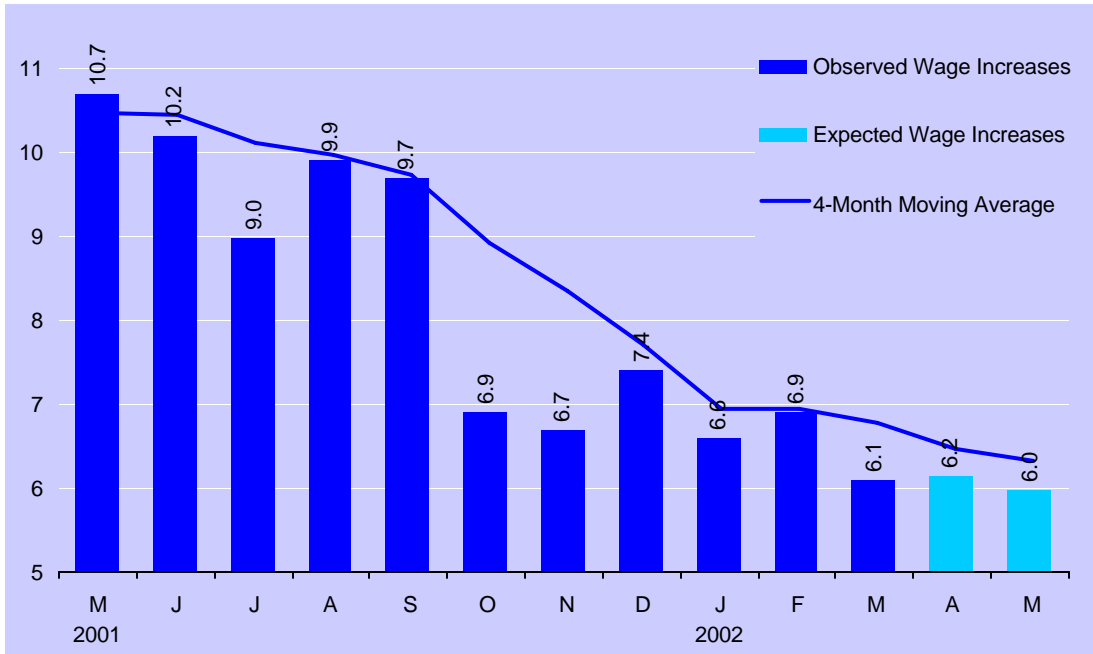
Source: Bloomberg and Survey of Private Sector Economic Analysts' Expectations, Banco de México.

Analysts estimate that nominal increases in wage settlements during April and May will be 6.2 and 6 percent, respectively.

Graph 23

## Wage Settlements

Percentage



Source: Ministry of Labor. For April and May of 2002, the data on private sector's forecasts was taken from the Survey of Private Sector Economic Analysts' Expectations conducted by Banco de México on March of 2002.

Private sector analysts' forecasts for real GDP growth for 2002 were adjusted slightly upwards, from 1.42 percent in December 2001 to 1.57 in March 2002, while those for annual GDP growth for 2003 are set to 4 percent. At the same time, trade and current account deficits for year-end 2002 are anticipated to close at 11.4 and 20.3 billion dollars, respectively. Expectations on annual FDI inflows were revised downwards, from 14.52 billion dollars in December to 14.15 billion dollars in March.

Indicators on the business climate, and private sector confidence display a significant improvement compared to December 2001. Sixty nine percent of the analysts surveyed were of the opinion that the business climate for the next half of the year will be favorable, while 31 percent mentioned that it would remain unchanged.

According to the analysts surveyed, the main elements that could hinder economic activity within a six month horizon are the following: the weakness of external markets and of the world economy (23 percent of the responses), real exchange rate appreciation (14 percent of the responses), the level of oil prices (19 percent of the responses), the weakness of the domestic market

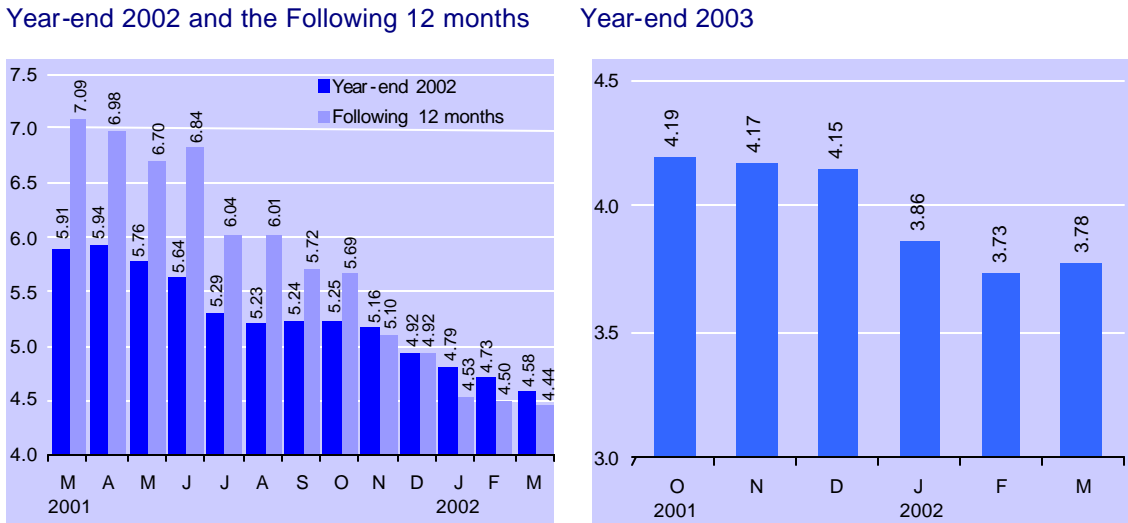
(10 percent of the responses), the current fiscal policy and higher wage costs (8 percent of responses, each).

## IV.2. Inflation Expectations

According to the survey conducted in March, analyst's monthly inflation expectations for April, May and June were 0.37, 0.22 and 0.24 percent, respectively. These forecasts imply that annual inflation will drop from 4.66 percent in March to 4.52 by June.

Annual inflation estimates for the following twelve months posted a reduction, from 4.92 percent in December 2001 to 4.44 percent in March of this year. Year-end inflation for 2002 was modified downwards, from 4.92 percent in December 2001 to 4.58 in March 2002. Finally, inflation expectations for 2003 were revised slightly downwards, from 4.15 percent in December to 3.78 in March (Graph 24).

**Graph 24 Behavior of Inflation Expectations**  
Annual percentage change



Source: Survey of Private Sector Economic Analysts' Expectations, Banco de México.

## V. Balance of Risks and Final Remarks

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During the first quarter of 2002, the performance of Mexico's economy was markedly conditioned by the following factors:

- (a) The upturn in economic growth in the United States;
- (b) The weakness of domestic demand; and
- (c) The availability of external financing offered on favorable terms.

As previously mentioned, economic growth in the United States is expected to have been significantly higher than that anticipated at the onset of the year. This outcome would result from a considerable rise in consumption along with a substantial recovery in the growth rate of inventories. Furthermore, during the first three months of the year, the monthly rate of change in that country's industrial output turned out to be positive after registering negative figures in 14 out of the 15 months that end in December 2001.

Since the main link between the Mexican economy and that of the United States is the industrial sector –specifically, the manufacturing sector, the rebound in growth in that sector was synchronized in both countries. Thus, the industrial activity index in Mexico also posted monthly increases during the first two months of the year (based on seasonally adjusted series). The increases accumulated by this index in Mexico and in the United States were 1.6 and 0.6 percent, respectively. Thus, although available information is relatively scarce, it is reasonable to assume that the synchronization in the industrial output indexes of both countries during the contractionary phase of the cycle will also be observed during its expansionary phase (Graph 25).

Another economic indicator which has exhibited close synchronization with its U.S. counterpart is gross-fixed investment. Therefore, it is of significance that in Mexico this variable has registered an expansion (with seasonally adjusted data) in three out of the four last months. The data also suggests that investment has moved in anticipation of economic recovery, just like it did during the slowdown episode.

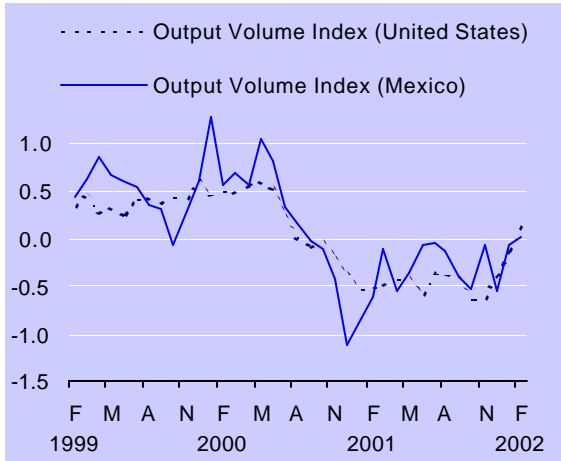


Graph 25

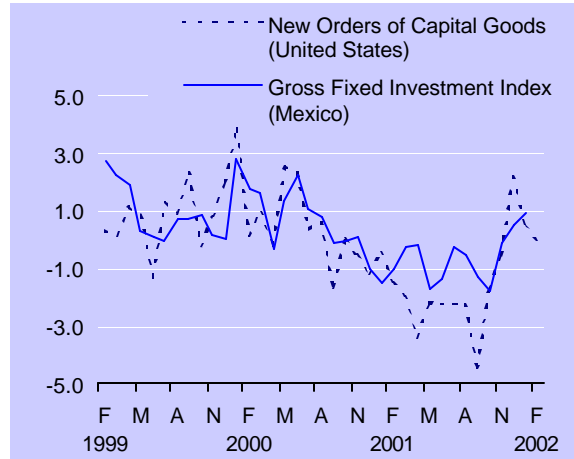
**Output and Investment Indicators in the United States and Mexico**

Monthly percent change (3-month moving average of the seasonally adjusted series)

Industrial Output Volume Index



Gross Fixed Investment Index



Source: U.S. Department of Commerce, Census Bureau, Federal Reserve Board, Washington D.C., Mexico's National Accounts System (*Sistema de Cuentas Nacionales*), National Institute of Statistics, Geography and Informatics (*Instituto Nacional de Estadística, Geografía e Informática, INEGI*) and Banco de México.

Available information on the behavior of the main components of aggregate supply and demand in Mexico suggests that the level of economic activity has stabilized. Nonetheless, unlike in the United States, this information does not conclusively confirm that recovery is imminent. Therefore, although the industrial sector is experiencing a strengthening in line with that observed in the United States, this has not yet become widespread. This may be attributable to the fact that consumption during the first quarter in Mexico did not expand as quickly as in the United States.

The sum of these influences might have yielded a slightly positive percentage change in domestic demand (based on seasonally adjusted data). This would also have strengthened the effect of the increase in external demand.

The supply of external savings has been sufficient to cover the needs of the economy at a low and even declining cost. This has been consistent with a greater availability of resources to the emerging markets, which was reflected in the fall of the net yield rate of the EMBI+ index (without Argentina) and the appreciation of the exchange rate. The latter resulted from the following two factors: the granting of investment grade by Standard and Poor's and the upturn of economic activity in the United States.

The economic slowdown, the stability of the current account and the sufficient supply of foreign capital have aided in generating a favorable environment for inflation abatement in Mexico insofar as moderation in aggregate demand growth and an ample supply of external savings have limited producers' capacity to pass on to non-tradable goods prices the rise in unit labor costs that has taken place. In addition, the weakness of domestic demand has supported the slowing of the rate of increase of wage settlements. Likewise, by fostering exchange rate stability, inflows of foreign capitals have induced a considerable weakening of upward pressures on tradable goods' prices. Nonetheless, it is relevant to point out that during the first quarter of the year there were as well factors that had an unfavorable impact on price behavior. In particular:

- (a) The rise in prices of goods and services administered or regulated by the public sector;
- (b) The fiscal reform which slightly boosted prices; and
- (c) Although there has been some easing of wage settlements, it has not yet been fully reflected in the core inflation of services.

Up to now, given that the first two elements have not contaminated either the expectations formation process or the settling of wage negotiations, it is likely that they will only have a transitory effect on inflation. As for the third factor, it is to be expected that throughout the year the moderation in wage settlements will likely lead to a downward movement in the annual inflation of the core services sub-index.

For the remainder of 2002, it is reasonable to assume that the way the country's economy evolves will continue to be conditioned by the course followed of the above mentioned external and domestic factors. In particular, expectations for economic growth in the United States as well as leading indicators for the Mexican economy suggest that real GDP growth will rebound by the second quarter of 2002. Likewise, annual core inflation is expected to remain on its recent downward trend and overall inflation is expected to converge to the target. Nevertheless, given the volatility of the subindices excluded from the core inflation calculations, overall inflation may experience in some months transitory deviations from its downward medium-term trend. Such is the case of inflation of agricultural prices, which was high during the second half of March, thus leaving a substantial carryover into April for both this sub-index and for the CPI.

Expectations are for a decline in annual core inflation during the second quarter, down to a level below 4.5 percent, while CPI inflation is expected to remain relatively unchanged. The latter result could be altered in the event of significant increases in the prices of goods and services administered or regulated by the public sector or in those of agricultural and livestock products.

The base scenario of Banco de México includes the following assumptions regarding the international environment during the remainder of 2002:

- (a) Forecasts for growth in the United States in 2002 have been adjusted upwards, from 0.7 percent assumed in the Monetary Program for 2002 to 2.2 percent at present. This figure has been revised on the grounds of a substantial gap between the likely outcome of vigorous growth in the first quarter and prospects in January. Furthermore, in light of the favorable performance of the economy during the first quarter, there has been an upward revision in expectations for real GDP growth in the second quarter, which simultaneously led to a downward adjustment in the rebound foreseen for the last two quarters of the year. This growth forecast is similar to the one published recently by the IMF<sup>20</sup> and to that of the analysts' consensus (2.1 percent). It should be mentioned that although the expected change in industrial output was revised from -0.7 percent in January to 0.2 percent at present, this revision is smaller than that for the GDP growth forecast;
- (b) Based on futures prices for WTI oil, and considering a spread between the Mexican oil mix similar to that registered in recent months, the average price of the Mexican oil export mix for 2002 is forecasted to be approximately 19 dollars per barrel; and
- (c) Recent developments in financial markets allow foreseeing that the terms and availability of external financing during the second quarter will be comparable to those prevailing in the first quarter. The outlook for the second half of the year is that rising international interest rates will only slightly limit the flow of resources to emerging markets. Nonetheless, in a context of soaring international interest rates, emerging economies that have

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<sup>20</sup> *World Economic Outlook*, April 2002.

already attained investment grade status (such as Mexico) will be less affected by the contraction of capital flows.

As the reading of preliminary evidence of the first quarter of 2002 suggests, the recovery in the United States is initially being transmitted to Mexico via an upturn in industrial activity. Consumption indicators for this period as well as expectations of a moderate growth in employment indicate that consumption's contribution to Mexico's economic expansion will be subdued during the first half of the year. Nevertheless, consumption spending is foreseen to increase during the second half of the year as job creation gains strength. The external accounts contribution to economic growth in Mexico will tend to increase in line with the probable weakness that domestic demand is anticipated to reveal during the first half of 2002 and with the rapid recovery of economic activity in the United States.

Considering the aforementioned assumptions and on the basis of available information regarding developments in the Mexican economy during the first quarter of 2002, Banco de México revised its projections for the course of the main macroeconomic variables in 2002. The most relevant results are the following:

**Economic Growth:** estimates for real GDP growth were modified upwards from 1.5 percent in January to 1.8 percent at the time of publishing this Report. This revision reflects the improvement of the forecasts for industrial output in the United States as well as the expected rise in oil prices. On a separate note, the anticipated increase in public expenditure was revised downwards due to the cut in spending announced by the Ministry of Finance on April 2. This led to a small decrease in expected GDP growth, which partially compensated the positive contribution of the two latter elements.

**Current Account:** The expected current account deficit for 2002 (as a percentage of GDP) fell from 3.2 percent in January to 3 percent at present, due to the following factors:

- (a) Expectations of higher revenues from oil exports; and
- (b) A smaller trade deficit in line with higher growth in the United States and a subdued expansion of domestic demand.

**Inflation:** Recent developments in CPI and core inflation and the current stance of monetary policy are compatible with attaining the target for the year. Nonetheless, the observed

volatility of the annual inflation of the agricultural and livestock products' sub-index could cause unforeseen fluctuations in annual CPI inflation.

The main external risks that could affect the base scenario are the following:

- (a) A much weaker than expected recovery of economic activity in the United States; and
- (b) A substantial reduction of capital flows to emerging markets as a result of international interest rates rising significantly above the level implicit in futures prices and in long-term interest rates.

Although the former risk has diminished with the improvement shown by the main indicators for the United States economy, a perception still endures that the United States may experience a downturn during the second half of the year and return to an environment of low growth. These concerns are fed on the persistence of serious macroeconomic imbalances. As a result, the prospect of a fall in private consumption is still present, a development which would most probably lead to a substantial weakening in GDP growth.

Another element that might induce a sharp slowdown in the United States is increases in oil prices. If these were to remain at high levels for a considerable period, the impact on households' disposable income would be negative, hence affecting consumption adversely.

The second external risk factor would emerge in a scenario whereby inflationary pressures in the United States would tend to be higher than expected and the rise in interest rates would exceed market expectations by a considerable margin. If this were the case, the cost and supply of external financing to emerging economies would likely be negatively affected. However, the effects would be milder for those emerging market economies that have received investment grade status and have solid macroeconomic fundamentals. Nevertheless, an eventual impact on external flows to Mexico cannot be discarded.

The materialization of either scenario would undermine economic growth in Mexico. In the first case, the effect would be transmitted via the current account in the form of a drop in exports and weaker economic activity. As to the second, the shock would derive from the capital account, limiting the amount of foreign

financing available, raising domestic interest rates, and consequently leading to a contraction of domestic demand.

The two scenarios would have an ambiguous effect on inflation. On the one hand, slower growth would probably entail an easing of inflationary pressures. However, in the first scenario, the unfavorable influence on exports and on overall economic activity in Mexico would widen the external deficit. Moreover, in both scenarios a weaker demand for the country's assets may be observed. These factors could lead to an exchange rate depreciation, which in turn would give rise to additional inflationary pressures.

The main domestic risk factor that could modify the base scenario is a worsening of the medium-term growth expectations for the Mexican economy. This could occur if economic activity recovers strongly in the United States, while the growth of the Mexican economy picks up at a slower pace.

Under such circumstances, the exchange rate would probably depreciate. This, as the recent strength of the peso has been supported by favorable expectations regarding economic growth and the deepening of the convergence process with the developed economies in North America. Should these perspectives be altered unfavorably, the price of domestic assets would probably experience a correction, mainly through an exchange rate depreciation.

Should the exchange rate depreciation adversely affect the formation of inflation expectations, monetary policy would have to become restrictive in order to attain the targets. Nevertheless, it is likely that the degree of passthrough of a depreciation of the exchange rate to domestic inflation has eased in recent years.

It may be emphasized, as it has been done in previous Reports, that even though world economic activity seems to be recovering, in the short-term, the economies of Mexico's main trading partners are expected to expand at slower rates than those registered in 1995-2000. Therefore, for Mexico to attain the growth rates needed to create sufficient jobs for its increasing population and simultaneously raise the standard of living, it is essential to advance the agenda of pending structural reforms. These reforms will lead to higher productivity, vigorous job creation, sustainable gains in real wages and higher GDP growth. Among them, the following are crucial: macroeconomic stability consolidation; energy sector reform, labor market reform, furthering of the deregulation process of the economy; promotion of capital market

development as well as attainment of higher rates of domestic saving; incentives for investment in infrastructure, education, health and technology; and a significant improvement of physical safety, protection of assets, and legal certainty.

Although the United States economy is currently undergoing a recovery, it is still uncertain whether this will immediately translate into a robust activity in Mexico that would allow the creation of the jobs needed to attend the demands of new entrants to the labor force and replace jobs lost.

These considerations bring to the fore the urgent need to attain visible results in at least in two areas. First, in the pending structural reforms that would lead to a more favorable investment environment and would open new opportunities for investment. Second, employees and firms must seek wage settlements consistent with expected inflation and sustainable gains in labor productivity. The sustainable creation of more numerous and better-paid jobs necessarily depends on productivity gains which transcend strictly cyclical considerations.

To further contribute to macroeconomic stability, the Board of Governors of Banco de México reiterates its intention to ensure the monetary conditions consistent with attaining an annual inflation not higher than 4.5 percent for December of this year and converging with an annual inflation of approximately 3 percent by year-end 2003. This, together with the expected upturn in economic activity will help to significantly improve the well being of the Mexican population.

\* \* \*

Statistics produced by Banco de México are subject to a continuous process of quality improvement and updating. Therefore, as the latest results from the National Survey on Households Income and Expenses have become available, a decision was taken to start the preliminary work needed to change the base year of the CPI. From 1995 on, this index has been calculated with reference to the year 1994. This project will conclude with the adoption of the second half of June 2002 as the new base of comparison for the prices of goods and services that comprise the CPI's basket. Shortly, Banco de México will issue a press release containing a detailed explanation of the methodology employed for this base year change.