# Inflation Report October – December 2003

and

# Monetary Program for 2004



BANCODEMEXICO

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# **BOARD OF GOVERNORS**

#### Governor

GUILLERMO ORTIZ MARTÍNEZ

# **Deputy Governors**

EVERARDO ELIZONDO ALMAGUER

GUILLERMO GÜÉMEZ GARCÍA

JESÚS MARCOS YACAMÁN

JOSÉ JULIÁN SIDAOUI DIB

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Unless otherwise stated, this document has been prepared using data available as of January 26, 2004. Figures are preliminary and subject to change.

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# I. Introduction

During the fourth quarter of 2003 international conditions remained as favorable as in previous months. The U.S. economy kept growing steadily, albeit at a more moderate pace. The pattern of growth in this country was more balanced, either by the components of expenditure or by its sectorial structure. In particular, non-residential investment, which lagged behind that of consumption and residential investment, has shown signs of a recovery. As for the sectorial side, manufacturing production finally began to expand and, particularly important for the Mexican economy, it has spread across more sectors of the economy. As economic expansion has been consolidating in the U.S., some incipient signs of recovery have appeared in the labor market. Moreover, most of the world economies have grown at higher rates and oil prices have remained relatively high.

Available information suggests that the Mexican economy also exhibited a recovery during the fourth quarter of 2003. The behavior of non-oil exports and total imports point to an increase in economic activity by the end of 2003. This outlook seems to be confirmed by the significant growth in manufacturing production in October and November (monthly rate), which reflects the cyclical improvement of U.S. manufacturing production. During the quarter, the number of workers insured by the IMSS (seasonally adjusted figures) increased. Nonetheless, using original data, figures fell from December 2002 to December 2003. Regarding aggregate demand, the components that expanded the most were consumption, investment in construction, and exports. In contrast, investment in machinery and equipment remained weak.

Despite the abovementioned improvement of the Mexican economy during the fourth quarter of 2003, overall, in 2003, it had an unfavorable performance. In this regard, GDP is expected to have grown at a rate around 1.2 percent.

Inflation was 3.98 percent in December 2003, a level just two basis points below the upper limit of the plus/minus one percentage point variability interval around the 3 percent target. Although core inflation remained within said interval, its contribution to CPI disinflation declined throughout the year and it rose in the last quarter of 2003. The merchandise component of core inflation followed an upward trend during the fourth quarter of 2003, which resulted, to a great extent, from the rise in both

international prices of foods' raw materials and the exchange rate. Core inflation of services kept falling throughout 2003; nonetheless, such decline came mainly from housing prices, since the annual variation of prices for the rest of the services remained practically constant (showing a slight increase in the last quarter) influenced by wage inertia. Thus, the lower inflation in 2003 was mainly the result of the reduction of the non-core component. In this regard, the variation in agricultural prices fell significantly in general terms throughout the year; the rise in prices of goods administered by and concerted with the public sector followed a sharp downward path; and education prices showed a moderate reduction in its annual growth rate.

Under such environment and given the gradual trend of inflation towards its target, Banco de México kept the "short" (corto) unchanged during the quarter. This decision was also supported by the behavior of inflation expectations, which remained relatively stable both for the short and long terms, despite being above the target. Notwithstanding the slight increase in shortterm interest rates by the end of 2003, the yield curve remains at historically low levels. The behavior of interest rates, particularly longer-term ones, responds to both current economic conditions and structural factors. As for the first ones, the level of interest rates is related to the lower phase of the business cycle, where the lower profitability of capital usually reduces the demand for loans. Regarding structural factors, the progress made to attain an environment of low and stable inflation should be highlighted, since it tends to reduce nominal interest rates permanently as a result of lower implicit inflationary risk.

The Mexican economy is expected to consolidate its recovery in 2004 and grow at a significantly higher rate than 2003, although still below its potential. Thus, given the slack in both labor market and installed capacity, aggregate supply should be able to satisfy the higher aggregate demand without any difficulties, at least in the short term. Thus, estimates for GDP growth in 2004 from the previous Inflation Report are kept unchanged (between 3.0 and 3.5 percent) and no significant inflationary pressures are expected from the expansion of aggregate expenditure.

The above scenario must be assessed in terms of its effects on the economy and the corresponding external and domestic risks. Mexico's economic recovery in 2004 is expected to be cyclical and linked to an external environment that could change easily. Therefore, the secular problems the economy has not been able to overcome should not be underestimated. In this regard,

Banco de México's analysis on this matter from some time ago should be emphasized. Mexican exports have been losing competitiveness in global markets, as evidenced by their lower share in U.S. imports, and despite the preferential treatment to which they are entitled by the North American Free Trade Agreement. Furthermore, despite the expected recovery of the economy, GDP growth forecasts for 2004 are below potential and insufficient to address poverty and set the foundations for sustainable growth. In particular, the weakness exhibited by gross fixed investment in the last three years is a cause for concern. Such weakness is attributed, in part, to the lack of progress in structural reforms and other measures to promote stability and economic efficiency that would trigger a higher profitability of investment projects.

Annual CPI inflation in 2004 is expected to decrease towards December, in line with the convergence to the inflation target. Nonetheless, year-end 2003 inflation gives way to the possibility of CPI inflation rising above 4 percent during certain months of the year, especially in winter and summer. This could occur as a result of temporary supply shocks, which are expected to affect the non-core CPI component. Under such circumstances, Banco de México will keep a strict surveillance of these conditions and, should it be the case, will take the necessary actions to prevent any contagion on inflation expectations so that inflation remains on its downward trend towards the 3 percent target.

# II.1. Recent Developments in Inflation

At the end of the fourth quarter of 2003, annual inflation was 3.98 percent, below the figures of the previous quarter (4.04 percent) and the same period of 2002 (5.70 percent). Thus, inflation was two basis points below the upper limit of the plus/minus one percentage point variability interval around the 3 percent target.

This resulted mainly from the reduction of non-core inflation, since core inflation rose 0.15 percentage points. In this regard, the following deserve mention:

- (a) Annual core inflation increased as a result of higher merchandise inflation, which could not be offset by the reduction of services inflation.
- (b) Core inflation of merchandises started an upward trend since the last quarter of 2002, which increased during the last quarter of 2003 due to the rise in foods' prices.
- (c) Core inflation of services diminished slightly due to lower prices for housing, which were able to offset price increases in the rest of the items of the subindex.
- (d) Non-core inflation remained on the downward trend followed since the second quarter of 2003, prompted by the decline in prices in the subindexes for agriculture products and for goods and services administered by and concerted with the public sector.
- (e) Agriculture prices fell due to the annual decline in prices of fruits and vegetables (2.36 percent). In contrast, prices of meat and eggs rose due to their significant increase in international markets.
- (f) The Producer Price Index excluding oil and services rose more than at the end of the third quarter of 2003 (6.24 vs. 5.62 percent). Products whose prices had a greater incidence on this index were electricity, gas, foods, and beverages and tobacco.

## II.2. Inflation Indicators

#### II.2.1. Annual Inflation

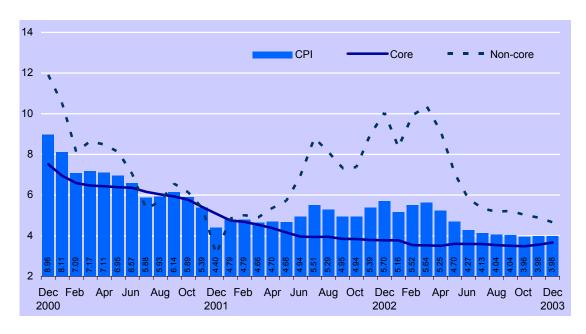
Annual CPI inflation was 3.98 percent in December 2003. During the last quarter, annual core inflation rose 0.15 percentage points (its weight in the CPI is 69.6 percent), while non-core inflation dropped 0.57 percentage points (its weight in the CPI is 30.4 percent) [Graph 1]. Regarding core inflation, the increase in the price subindex of merchandises (fifth consecutive rise), although from a relatively low level, should be noted. As for non-core inflation, the price subindex for goods and vegetables slowed its rate of growth. The difference between CPI and core inflation was 1.93 percentage points at the end of 2002 and 0.32 percentage points at December 2003.

Table 1 Price Indexes: CPI, Core and Non-core
Percent

	Α	nnual Variatio	ns	Qu	arterly Variation	ons
	Dec-2002/	Sep-2003/	Dec-2003/	Dec-2002/	Sep-2003/	Dec-2003/
	Dec-2001	Sep-2002	Dec-2002	Sep-2002	Jun-2003	Sep-2003
CPI	5.70	4.04	3.98	1.69	1.04	1.63
Core	3.77	3.51	3.66	0.71	0.54	0.87
Merchandise	1.95	2.27	2.62	0.55	0.27	0.90
Services	6.23	4.91	4.84	0.89	0.84	0.83
Non-core	10.05	5.23	4.66	3.90	2.17	3.34
Agricultural	8.65	5.47	3.65	6.22	1.63	4.39
Fruits and Vegetables	22.23	6.36	-2.36	14.22	3.67	4.85
Other	-0.10	4.86	8.34	0.72	0.25	4.06
Education	10.04	8.57	8.59	0.00	7.03	0.03
Administered by/Concerted with	10.96	4.02	3.91	4.07	0.88	3.96
Administered	16.84	6.47	6.11	8.46	1.48	8.09
Concerted	6.12	1.96	1.90	0.39	0.35	0.33

Graph 1 Consumer Price Index, Core and Non-core Price Indexes

Annual percentage change



The annual rate of growth of the core subindex for merchandises increased throughout 2003, ending the year at 2.62 percent. In particular, during the fourth quarter of 2003, such subindex exhibited an accumulated inflation of 0.90 percent, due to price increases in foods (1.75 percent) and other merchandises (0.33 percent). In general, merchandise prices can be affected by both international prices of the raw materials used in its production and the exchange rate. Regarding the subindex for foods, it is important to point out that prices of six food products regularly used accounted for 70.3 percent of this subindex's accumulated inflation during the quarter. This was mainly due to the rise in prices of some foods' raw materials.<sup>2</sup> The exchange rate depreciation (which reached 4.09 and 3.11 percent in the third and fourth quarters, respectively) also added to this effect. The latter has also affected the prices of other merchandises. The behavior of the price of automobiles alone, which includes a high volume of imported inputs, explains 41 percent of the inflation of merchandises different from food during the quarter. In the last years, the pass-through coefficient that measures the impact of the exchange rate to prices has diminished significantly. Nonetheless, the sharp depreciation of the exchange rate during the last two

According to their incidence on inflation in 2003-IV such products are milk, corn tortillas, sweet rolls and pastries, sugar, oil and fats for food preparation, and white bread.

<sup>&</sup>lt;sup>2</sup> In 2003, producer prices (in pesos) for all commodities in the United States rose at an annual average rate of 17.85 percent.

quarters of the year has affected, albeit moderately, the core subindex of merchandises.

The annual growth rate of the core price subindex for services dropped slightly compared to the end of the third quarter of 2003. This was due to the favorable behavior of the subindex for housing and to the rise in prices for the rest of the services. Products comprising the housing subindex (home rentals and home-usage cost) have fallen due to the combination of several factors such as i) a greater availability of mortgage financing; ii) lower interest rates; and, iii) more public spending in housing. This has fostered a higher supply of housing and improved the terms and conditions that families have to obtain them. As for prices for the rest of the services, despite the reduction in their rate of growth during the year, in the last quarter they increased slightly (from 5.49 to 5.72 percent). This result might have been affected by the wage revisions, which, throughout the year, did not reflect the slack prevailing in the labor market.

As for non-core inflation, the variations in the subindexes of fruits and vegetables, and of goods and services with prices administered by the public sector, were relatively moderate during the quarter. Regarding the former, during the last quarter of 2002 its rate of growth was extraordinarily high (14.22 percent), which led to an annual rate of 22.23 percent in December. In contrast, farming conditions in 2003 improved. This brought about a reduction in these prices, which ended the year at an annual rate of -2.36 percent.

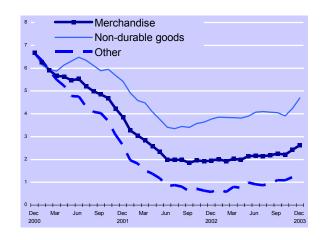
Prices of electricity and LP gas, which belong to the subindex of goods and services administered by the public sector, exhibited a similar behavior. In the last quarter of 2002, prices of LP gas rose 10.48 percent, and electricity tariffs were affected by the seasonal increase coming from the end of the subsidies announced at the beginning of 2002. In contrast, during 2003, the path of the abovementioned energy items was more in line with Banco de México's inflation target.<sup>3</sup>

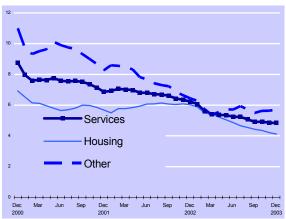
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Gasoline was the only item of the price subindex of goods administered by the public sector that exhibited higher price increases in 2003 than in 2002. During the last quarter of 2002, prices of gasoline in the country's border cities remained flexible, thus inducing a significant downward adjustment that did not repeat in 2003.

Graph 2 Core Price Indexes (Merchandise and Services)

Annual percentage change





# II.2.2. Monthly Inflation

Excluding November, monthly inflation rates during the quarter were similar to those forecasted by private sector economic analysts. Inflation was higher in that month probably because estimates failed to include the upward effect of the end of the summer electricity tariffs in some northwestern cities.

Table 2 Observed and Expected Monthly Inflation

Percent

		2002		2003					
	Obse	erved	Expected 1/	Obse	Expected 1/				
Month	Core	CPI	СРІ	Core	CPI	CPI			
October	0.27	0.44	0.29	0.24	0.37	0.37			
November	0.22	0.81	0.34	0.30	0.83	0.56			
December	0.23	0.44	0.42	0.32	0.43	0.50			

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

During 2003-IV, monthly CPI inflation fell slightly compared to the same period of 2002. The core price subindex exhibited an average monthly variation of 0.29 percent, compared with 0.24 percent during the same period of 2002. This result was due to price increases in the different merchandises included in the core price subindex. Regarding the core subindex for services, prices of non-housing services were the ones that increased the most.

# II.2.3. Producer Price Index (PPI)

During the last quarter of the year, the PPI rose at an annual rate of 6.24 percent in December, compared with 5.62 percent at the end of September. The main factors behind this variation were the increases in prices of electricity and gas, and of products in the food, beverages and tobacco industries (all sorts of meat, bottled milk, cold cuts, wheat flour, bread and pasta, vegetable oils and fats, and sweets and candies). Such increases reflect the behavior of some prices of foods' raw materials and the exchange rate.

#### II.3. Main Determinants of Inflation

#### II.3.1. International Environment

During the fourth quarter of 2003, the recovery of the world economy continued to consolidate under favorable financial conditions. This brought about more confidence, which was reflected in the positive performance of stock markets. The rebound of the world economy prevailed despite the higher oil prices. Under such conditions, Mexico faced a favorable external environment. The consolidation of the U.S. recovery reached its industrial sector, which supported the recovery of Mexican exports. Furthermore, higher oil export mix prices and the reduction in sovereign debt's interest-rate differentials had a positive effect on the Mexican economy.

#### II.3.2. Oil prices

Oil prices rose during the last quarter of 2003. The average price of the West Texas Intermediate (WTI) was 31.2 US dollars per barrel, 91 cents above that of the previous quarter. These results were mainly due to both the low level of oil inventories in the United States and the severe weather conditions. The Mexican oil export mix price averaged 25.05 US dollars in the fourth quarter of 2003, 51 cents higher than the average price observed from July to September.<sup>4</sup>

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<sup>&</sup>lt;sup>4</sup> In 2003, the Mexican oil export mix price averaged 24,76 US dollars.

Graph 3 Mexican Oil Export Mix Price

US dollars per barrel



Source: PMI.

# II.3.3. Developments in the United States Economy

During the fourth quarter of 2003, the U.S. economy kept growing, albeit at a more moderate pace than in the third. GDP growth figures for July-September 2003 (8.2 percent, at quarterly annualized rates), the highest since the fourth quarter of 1983, were above most economic analysts' forecasts by more than 2.5 percentage points. GDP growth was fueled mainly by private consumption, which in turn responded to both the fiscal stimuli during the period and a loose monetary policy. It is important to point out that for a second consecutive quarter, the strength of economic recovery was supported by non-residential investment, particularly in equipment and software. This signaled that investment is starting to be an engine of growth and that the economy's recovery will be more long-lasting. Both government expenditure and net exports also contributed, although to a lesser extent, to GDP growth during the quarter.

The expansion of the U.S. economy in 2003-IV was bolstered by the favorable financial conditions observed in previous quarters. The Federal Open Market Committee (FOMC) kept the federal funds rate unchanged at historically low levels (1 percent). Long-term interest rates remained around the levels of the previous quarter. Additionally, the better outlook for growth in the

U.S. economy was reflected in the significant rally in stock markets.

The US dollar followed, although more sharply, its depreciation trend since the beginning of 2002, 8.0 percent against the euro and 3.8 percent against the yen (end-quarter figures). This was mainly driven by the high current account deficit. Moreover, at the end of September, the G7 announced its support for a greater flexibility in exchange rates, which led to changes in markets' expectations regarding some central bank's intervention in exchange rate markets.

During the fourth quarter of 2003, the components of expenditure posted different results than in the previous quarter. The reduction in the effect of the fiscal stimulus slowed down consumption growth, while persistent favorable financial conditions fueled investment. Given the recent behavior of orders for capital goods, among other indicators, private investment is expected to have expanded significantly during the fourth quarter of 2003. This, together with the beginning of the process of inventory accumulation, gives support to estimates that during the fourth quarter the U.S. economy kept growing above potential despite expanding less than in the third.

Table 3 Forecasts for GDP Growth in the United States in 2003
Annual percentage change

		At end 2	003-III		Most Recent Data						
	200	)3-IV <sup>1/</sup>	2	:003	200	)3-IV <sup>1/</sup>	2003				
	GDP	Ind. Prod.	GDP	Ind.Prod.	GDP	Ind. Prod.	GDP	Ind.Prod.			
Consensus Forecasts <sup>2/</sup>	4.1	4.4	2.6	0.1	3.6	6.2	3.1	0.3			
Blue Chip Economic Indicators <sup>3/</sup>	3.9	4.5	2.6	0.2	4.3	6.2	3.1	0.3			

<sup>1/</sup> Quarterly annualized percentage change of seasonally adjusted series.

4/ Figures for industrial production are observed.

Industrial production, whose recovery had fallen behind that of GDP, strengthened throughout October-December, growing at an annualized quarterly rate of 6.2 percent. Despite being at nearly historically low levels, industry's installed capacity increased to 75.8 percent in December compared with 74.9 percent

<sup>2/</sup> September 8<sup>th</sup> and December 8<sup>th</sup> 2003, and January 12<sup>th</sup> 2004 issues of the *Consensus Forecasts*. The quarterly annualized variation is calculated based on annual variation figures reported on these issues.

<sup>3/</sup> Blue Chip Economic Indicators (September 10<sup>th</sup> and December 10<sup>th</sup> 2003, and January 10<sup>th</sup> 2004).

<sup>5</sup> At the end of 2003, the US dollar exchange rate was 107.44 yens per US dollar and 1.26 US dollars per euro compared with 118.83 and 1.05, respectively, at the end of 2002.

<sup>&</sup>lt;sup>6</sup> Announcement made at the 2003 Annual IMF/World Bank Board of Governors Meeting at Dubai.

In October-November, consumer spending increased in real terms 1.9 percent (annualized rate) with respect to the third quarter, while the expansion in said quarter was 6.9 percent.

in September. Manufacturing production also exhibited a similar pattern.

Due to its importance for the Mexican economy, the observed recovery among the different divisions of industrial production in the U.S. should be highlighted. Compared with previous cyclical periods, when different divisions of industrial production exhibited simultaneous growth, during the current cycle, growth has concentrated in a few of them, data-processing equipment among others. Nonetheless, such pattern has started to improve. As the Industrial Diffusion Index shows, during the fourth quarter of 2003, industrial expansion included more divisions than in the previous quarter (Graph 4).

Graph 4 United States: Industrial Production Diffusion Index



Source: Calculated based on data from the Federal Reserve Board. A value of 1 was given to those industrial groups that exhibited monthly growth, and zero otherwise. Each result was weighted according to the share of each group in the Industrial Production Index. Twenty three market groups according to the North American Industrial Classification System (NAICS) were considered (with figures rounded to 3 digits).

The labor market remained weak despite its modest improvement since August 2003. During the fourth quarter of 2003, non-farm payroll increased by only 144 thousand jobs. The unemployment rate was 5.7 percent at the end of the quarter, 0.4 percentage points lower than in the previous quarter. Nonetheless, manufacturing employment remained weak. From July 2000 (the last month in which jobs were created in this sector) to December 2003, manufacturing payroll fell by 2.81 million positions. The expansion of production together with the weakness in employment

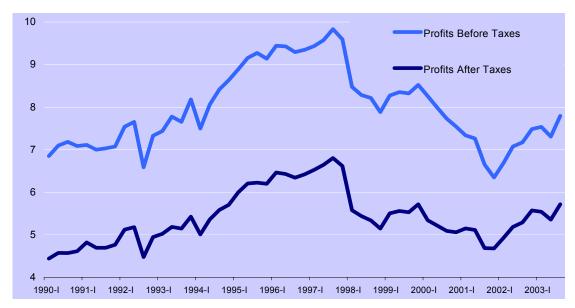
has led to productivity increases, which are inherent to the current phase of the business cycle.<sup>8</sup>

Despite the recovery of economic activity, CPI inflation dropped throughout 2003 and ended the year at an annual rate of 1.9 percent, while that of core inflation was 1.1 percent (rate not seen since 1963). Low inflation has resulted from a combination of different factors, among which the negative output gap has been the most important.

Private sector analysts' outlook for economic activity in the United States in the next quarters remains positive. On the one hand, a fiscal stimulus is expected during the first half of the year due to tax rebates. On the other, given the low inflation and the slack in resource use in the economy, the Federal Reserve Board announced that the accommodative monetary policy could prevail for a considerable period. Some economic analysts expect the monetary authorities will begin to tighten monetary policy gradually during the second half of 2004, while others believe they will do so until 2005. Nowadays, future markets are discounting an increase in the target level for the federal funds rate in September. Under such environment, the economy is expected to grow more vigorously during the first half of 2004 and remain above its potential throughout the year. Analysts estimate that nonresidential investment will continue to be the engine of growth. In this regard, it is important to point out that the positive change in productivity has translated into lower unit labor costs for eight consecutive quarters (annual variation). This has led to a continuous recovery of firms' profits (Graph 5) and also raised expectations that such improvement will prevail in the immediate future.

It is estimated that the significant investment in high technology sectors in the United States during the nineties created favorable conditions that led to continuous gains in productivity.

Graph 5 United States: Corporate Profits
Percentage of GDP



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

#### Box 1

#### **United States' Current Account Adjustment**

During the last years the United States' current account deficit has widened, from nearly 2 percent in the mid-nineties to more than 5 percent of that country's GDP in 2003. This situation has raised discussions on the need to adjust the U.S. external accounts.

A deficit in the United States' current account implies an excess of aggregate expenditures over revenues. It also means that other world economies have more revenues than expenditures. Given such relationship, an adjustment in the U.S. current account also leads to an adjustment in excess revenues over expenditures in the rest of the world economies.

The last episode of correction in the U.S. external accounts took place in the eighties. From 1982 to 1987 the U.S. current account went from practically being in equilibrium to a deficit that accounted for more than 3 percent of that country's GDP. Such deterioration coincided with two events: a) an increase in the U.S. fiscal deficit (of more than three percentage points of that country's GDP from 1981 to 1983) [Graph 1]; and b) an appreciation of the U.S. dollar in real terms (from 1980 to 1985 the effective real exchange rate appreciated, on average, more than 35 percent) [Graph 2].

Graph 1
U.S. Current Account and Public and Private Savings
(GDP Percentage)



The current account deficit began to narrow in 1988 and closed almost completely by 1991. As for the fiscal balance, despite exhibiting a cyclical deterioration at the beginning of the nineties, it began to show signs of improvement after 1993. Since 1998, the U.S. Federal Government began to have fiscal surpluses.

In 1985, the real exchange rate began to fall by somewhat more than 25 percent in effective terms. From 1985 to 1988, the exchange rate depreciated

markedly. However, from that year (and until 1996) it followed the same trend but at a slower pace.

Graph 2
U.S. Current Account and Real Exchange Rate



Source: U.S. Department of Commerce and Federal Reserve Board.

The worsening of the current account since the midnineties has coincided with two significant trends in public finances. On the one hand, the sustained improvement in public finances from 1992 to 2000 and, on the other, its significant deterioration from 2000 to date. This path suggests that the evolution of public deficits is not the only determinant of higher current account deficits. Private savings seems to partially offset the behavior of public savings movements. Thus, any increases in the fiscal deficit affect the current account only partially.

The current account balance seems to be influenced by the real exchange rate and by GDP growth differentials between the United States and the rest of the world. The widening of the U.S. external deficit over the last decade took place in an environment in which the US dollar appreciated significantly in real terms. In this context, the higher current account deficit of the United States in the second half of the nineties has resulted from the expansion of private investment in this country, mostly in high technology. Capital accumulation has apparently led to long-lived raises in productivity and to higher growth in the U.S. compared with other economies (Graph 3).

Graph 3
U.S. Current Account and Differential in GDP Growth
Between U.S. and its Main Trading Partners
(GDP Percentage)



Source: U.S. Department of Commerce, Statistics Canada, ESRI, and Banco de México

The outlook for the United States beyond 2004 is, in general, favorable. Although analysts expect economic activity to slow down in 2005, GDP growth is anticipated to remain robust (above 3.5 percent). Under such forecasts, the output gap should close. Nonetheless, inflation is expected to remain within moderate intervals, around 2 percent. This scenario includes several risks. On the one hand, the U.S. fiscal deficit as a percentage of GDP is high and, although available forecasts point to its reduction in 2005, it is still expected to remain at high levels. On the other, analysts also estimate that the current account deficit, which is currently at historically high levels, will widen in absolute terms in 2005. The presence of significant imbalances in both U.S. public finances and the current account, together with households' savings being at historically low levels, have been mentioned as significant risks for the U.S. economy.

## II.3.4. Developments in the Rest of the World Economies

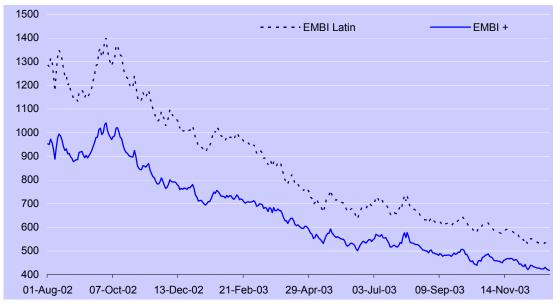
During the third quarter of 2003, industrial production in the Euro zone began to show an incipient recovery, although it did not include an expansion of domestic demand. GDP grew at a quarterly rate of 0.4 percent after three consecutive periods of nil or negative growth variations. The main engine of growth was net exports, which were favored by the expansion of external demand, particularly that from the United States. In contrast, domestic demand contracted due to both the fall in investment and the negative variation in inventories. As for the fourth quarter of 2003, available indicators such as the Purchasing Managers Index suggest that production kept growing. The European Commission estimates that GDP in that region grew at a quarterly rate between 0.3 and 0.7 percent in October-December. For 2004, a gradual recovery fostered by domestic and external demand is expected, in which GDP will grow below its potential until the beginning of the second semester of 2004. According to the European Central Bank (December press release), the euro economy is expected to grow between 1.1 and 2.1 percent in 2004.

The Japanese economy expanded at an annualized quarterly rate of 1.4 percent during the third quarter of 2003. This performance was supported by the dynamism of investment and increased exports, which picked up despite the yens' appreciation. Different timely indicators, such as the Tankan business survey, suggest that growth continued in the last quarter of 2003. In October-November, merchandise exports were 6.8 percent above the previous quarter's average, and industrial production is expected to have grown at an annualized quarterly rate of 15.6

percent during October-December. GDP is expected to have grown 2.7 percent, while forecasts for 2004 point to 2.1 percent. Greater confidence and favorable expectations regarding private investment have diminished concerns over a new fall in economic activity.

During the fourth quarter of 2003, international financial conditions for developing countries continued to improve due to many of these countries' stronger economic fundamentals, lower interest rates in industrialized countries and, therefore, investor's search for more profitable, and even riskier, assets. In this regard, there has been a significant reduction in reference rates and interest-rate differentials, as well as an extension of maturities. This led to a fall in sovereign spreads: during the last quarter of 2003, J.P. Morgan's Emerging Market Bond Index (EMBI+) fell 88 basis points compared with the previous quarter (end of period figures), while the index for Latin America (EMBI+ Latin) dropped 119 basis points (Graph 6). It should be noted that some emerging market economies took advantage of the greater appetite for risk in the markets to pre-finance part of their external borrowing requirements for 2004. Nonetheless, it is likely expected that once the upper phase of the global business cycle consolidates, both yields and interest-rate differentials will increase, thus constituting a potential risk for highly indebted countries.

Graph 6 Sovereign Risk (Emerging Countries and Latin America)
Basis points



Source: J.P. Morgan.

The Latin American economy slightly improved during the last quarter of 2003. Argentina, whose GDP grew at an annual rate of 9.8 percent in the third quarter, is expected to have grown at the end of the year at the highest rate of the region (7.9 percent). Nonetheless, such expansion stems from a very low base. Furthermore, the uncertainty regarding its external debt renegotiation could affect its growth prospects. In Brazil, economic activity remained weak, and GDP fell at an annual rate of 1.5 percent during July-September. Thus, unemployment remained high in November (12.2 percent). The fall in inflation allowed for a significant reduction in the Selic reference rate (from 20 percent at the end of September to 16.5 percent at December). Estimates indicate that Latin America grew at an annual rate of 1.4 percent in 2003, and that it will grow 4.0 percent in 2004.

## II.3.5. Earnings and Employment

# II.3.5.1. Earnings

During January-October 2003, variations in real average earnings (including wages, salaries and fringe benefits) in manufacturing, commerce and in the non in-bond industry were 1.4 percent, 3.8 percent, and -0.7 percent, respectively, compared with average figures for 2002. During the same period, labor productivity increased at an annual rate in the three mentioned sectors, although in the in-bond sector this was modest. Due to changes in both productivity and earnings, unit labor costs dropped in the in-bond industry, slightly increased in the commerce sector, and remained practically unchanged in the manufacturing industry (Table 4 and Table 5).

Table 4 Earnings per Worker
Annual percentage change

		Nominal										Real										
	•						Average	2003								Average						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Jan-Oct 2003	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Jan-Oct 2003
Manufacturing Industry	6.5	6.2	6.9	5.7	5.0	6.4	7.7	5.0	6.5	5.4	6.1	1.3	0.7	1.2	0.4	0.3	2.0	3.4	0.9	2.4	1.3	1.4
In-bond Industry	6.8	5.5	4.4	3.7	2.3	3.4	3.9	1.7	3.1	5.0	4.0	1.6	-0.1	-1.2	-1.4	-2.3	-0.9	-0.2	-2.2	-0.9	1.0	-0.7
Commerce	12.8	10.1	9.5	7.2	9.3	8.8	10.1	5.3	6.7	6.7	8.6	7.3	4.4	3.6	1.8	4.4	4.3	5.8	1.2	2.5	2.6	3.8

Source: Prepared by Banco de México with data from INEGI.

It should be noted that in the last three years, gains in productivity in the manufacturing and commerce sectors as well as in the in-bond industry have been the result of more than proportional falls in employment with respect to production. Nonetheless, the in-bond industry showed a different pattern in 2003, as production and employment practically stabilized. From 2001 to 2003, unit labor costs followed a downward trend in the

three sectors, mainly due to a reduction in real earnings' annual variation.

Table 5 Output per Worker and Unit Labor Costs
Annual percentage change

		Output per Worker										Unit Labor Costs										
							Average	2003							Average							
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Jan-Oct 2003	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Jan-Oct 2003
Manufacturing Industry	2.2	3.5	6.0	-3.6	0.2	0.5	0.4	-0.7	2.7	2.0	1.3	-0.9	-2.8	-4.5	4.2	0.1	1.5	3.1	1.6	-0.3	-0.6	0.1
In-bond Industry	1.6	1.4	3.5	0.3	-0.9	0.4	1.2	-3.0	0.7	-2.1	0.3	-0.1	-1.4	-4.5	-1.7	-1.4	-1.2	-1.3	0.8	-1.6	3.2	-0.9
Commerce	-0.3	0.1	3.2	-2.0	-0.6	3.8	6.3	5.9	6.4	8.1	3.1	7.5	4.2	0.4	3.9	5.1	0.5	-0.5	-4.4	-3.6	-5.1	0.8

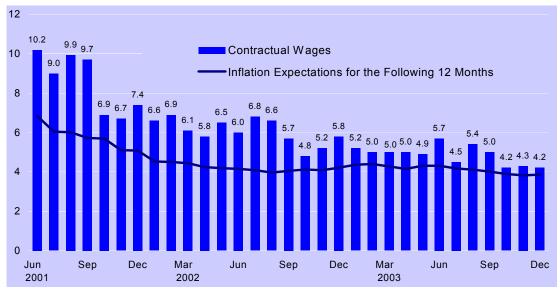
Source: Prepared by Banco de México with data from INEGI.

## II.3.5.2. Contractual Wages

During the fourth quarter of 2003, the average increase in contractual wages (weighted by number of workers) in enterprises under federal jurisdiction was 4.2 percent, the lowest in the year. This result was influenced by the wage agreement in the IMSS, which led to an increase of 4.0 percent for more than 353,000 workers. The number of workers that benefited from the wage agreement in the IMSS represents 62 percent of the total number of workers in enterprises under federal jurisdiction.

Graph 7 Contractual Wages and Expected Inflation for the Following 12 Months

Annual percentage change



Source: Ministry of Labor and Banco de México.

Table 6 Contractual Wages by Sector and Type of Business

Annual percentage change weighted by number of workers

		2003											Average	Average	
	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Oct-Dec 2003 <sup>1/</sup>	Jan-Dec 2003 <sup>1/</sup>	
Total	5.2	5.0	5.0	5.0	4.9	5.7	4.5	5.4	5.0	4.2	4.3	4.2	4.2	4.7	
Public Enterprises	4.3	4.3	4.3	4.3	5.0	5.7	4.3	4.3	3.7	4.0	3.8	4.6	4.0	4.1	
Private Enterprises	5.4	5.0	5.3	5.4	4.9	5.7	5.1	5.5	5.0	5.1	4.3	4.2	4.6	5.2	
Manufacturing Sector	5.4	5.0	5.5	5.7	5.3	5.6	4.5	5.3	5.4	4.9	4.1	4.6	4.4	5.0	
Other	5.1	4.9	4.6	4.8	4.7	5.8	4.6	5.5	4.2	4.1	4.8	3.8	4.2	4.6	

Source: Prepared by Banco de México with data from the Ministry of Labor. 1/ Weighted average by number of workers benefited during the period.

Wage increases granted by private enterprises were higher than those granted by public enterprises. Moreover, wage settlements in the manufacturing industry were above those in the rest of the sectors of the economy (Table 6).

It is important to note that the number of workers that benefited from wage increases in the intervals from 0.0 to 3.9 percent and from 4.0 to 5.9 percent has risen significantly in the last years (Table 7). Nevertheless, such increases are not fully reflecting the position of the Mexican economy in the current business cycle and the prevailing slack in the labor market.

Table 7 Wage Revisions by Interval
Percentage distribution

Interval Increase (9/)	Revis	ions by Ente	erprise	Number of Workers						
Interval Increase (%) =	2001	2002	2003	2001	2002	2003				
0.0 to 3.9	0.14	2.82	14.68	0.69	1.00	9.59				
4.0 to 5.9	1.87	30.11	55.87	3.39	67.12	79.22				
6.0 and above	97.99	67.07	29.45	95.92	31.88	11.19				

Source: Prepared by Banco de México with data from the Ministry of Labor.

#### II.3.5.3. Employment

The cyclical recovery of economic activity in the fourth quarter of 2003 has started to marginally affect the demand for labor. The labor market was characterized by the improvement of some indicators such as formal employment (with seasonally adjusted data), while others still showed a deterioration. This behavior was consistent with the lagged response of labor demand at the beginning of an economic recovery.

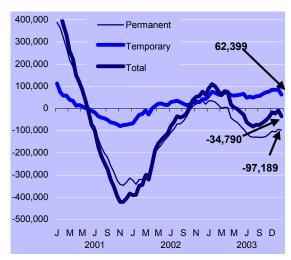
At the end of December, the number of wage earners insured by the IMSS (permanent and temporary urban workers) was 12,190,792 individuals, 49,137 less than at the end of

September. Such results can be attributed to seasonal factors, as the referred numbers of workers using seasonally adjusted data rose by 57,627 individuals. The comparison between the number of workers insured by the IMSS at the end of December 2003 and those insured the same month of 2002 results in a reduction of 34,790 individuals (the net balance of an annual increase of 62,399 urban temporary workers and a reduction of 97,189 permanent workers).

Graph 8 Urban Workers Insured by the IMSS: Permanent and Temporary and Open Unemployment Rate

Number of workers' annual variation

#### a) Total, Permanent and Temporary



b) Unemployment Rate (Seasonally Adjusted)
Percent



Source: IMSS.

Source: INEGI; seasonally adjusted figures by Banco de México.

Job creation in the manufacturing sector remained weak. At the end of December 2003, the number of workers of such sector insured by the IMSS fell by 173,266 individuals when compared to 2002. The main divisions that suffered a contraction were Textiles and Apparel and Metallic Goods, Machinery and Equipment. In contrast, the number of workers in the services sector increased by 128,284 individuals from December 2002 to the end of 2003.

According to seasonally adjusted data, the open unemployment rate in urban areas increased, although it fell in the original figures. During the fourth quarter of 2003, this rate averaged 3.46 percent compared with 3.78 percent in the previous quarter. In contrast, considering seasonally adjusted data, the average unemployment rate rose slightly from 3.56 to 3.62 percent during the last quarter. Since the beginning of 2003, the rate of

unemployment measured with seasonally adjusted figures has followed an upward trend.

#### II.3.6. Aggregate Supply and Demand

According to available information, during the fourth quarter of 2003, economic activity in Mexico exhibited a cyclical recovery. This was reflected in indicators for both aggregate demand and production. Given the slack in production capacity, aggregate demand behavior was not a source of inflationary pressures. In fact, during the first three quarters of the year, GDP grew, on average, above aggregate demand (0.9 percent vs. 0.1 percent). The lesser dynamism of domestic expenditure in relation to production was also reflected in the current account of the balance of payments, which exhibited a moderate deficit. In this regard, the following are noteworthy:

- (a) On the domestic demand side, consumption expenditures increased significantly while investment remained weak. The former was reflected in the behavior of different sales indicators. Retail sales increased at an annual rate of 5.0 percent in October-November, thus accumulating an annual increase of 3.2 percent in the first eleven months of 2003. This figure contrasts with the stagnation observed in 2002. As for total sales from the National Retailers Association (Asociación Nacional de Tiendas de Autoservicio y Departamentales, ANTAD), in 2003-IV they increased at an annual rate of 7.0 percent, higher than that of the first three quarters of the year and 2002. Likewise, domestic retail car sales rose by the end of the year.
- (b) Compared with consumption's relative strength, investment expenditure, particularly its component of machinery and equipment, remained weak during the fourth quarter of 2003. In October, investment rose at an annual rate of 0.8 percent, which is very close to the 0.7 percent average figure observed in the third quarter of the year. However, in November-December the annual growth of investment is expected to have remained low. Construction was the only component of investment that exhibited significant annual growth (3.4 percent in October-November), fueled by the expansion of housing construction.

- (c) External demand increased during the fourth quarter of 2003. Data on U.S. foreign trade shows that non-oil Mexican exports recovered in September-November.
- (d) On the production side, the Global Indicator of Economic Activity (*Indicador Global de la Actividad Económica*, *IGAE*) exhibited an annual variation of 1.4 percent in October-November. This was mainly due to the rise in the services sector, while the industrial one still contracted at an annual rate.
- (e) Both manufacturing and industrial production grew at a monthly rate (seasonally adjusted figures) in October-November 2003. In that period both components posted positive variations that accumulated to 2.45 and 2.25 percent, respectively. Nonetheless, industrial production dropped at an annual rate of 0.6 percent during the mentioned period due to the fall in manufacturing activity.
- (f) Confidence and Business Climate Indicators did not improve significantly in 2003-IV. In December, Private Sector Analysts Confidence Index decreased 1 percent compared to its level in September, while that of Manufacturing Firms increased slightly. As for the Consumer Confidence Index, it fell from August to September 2003, but slightly improved in December.
- (g) Leading indicators of economic activity in Mexico, prepared by Banco de México, INEGI, and the Conference Board, have slightly improved since the second quarter of 2003. In general, these indicators anticipated an upturn in economic activity during the fourth quarter of 2003.

The abovementioned conditions allow to foresee that both GDP and aggregate demand grew moderately at an annual rate in 2003-IV. As for domestic demand, private consumption expanded significantly at an annual rate, fostered by the greater availability of credit from commercial banks as well as non-bank financial intermediaries and chain stores; lower interest rates; and the persistence of real wage increases in different sectors. An additional factor was the significant volume of remittances from Mexican workers abroad received during the fourth quarter of 2003.

During such period, neither increased domestic sales in different sectors nor the improvement of domestic demand were a sufficient incentive for the recovery of investment. In fact, capital formation seems to be discouraged by the medium-term outlook, which has been affected by the lack of progress in structural reforms that would enhance the competitiveness of the economy and, therefore, a higher profitability of investment projects. Nonetheless, the private sector has upgraded its financial position by gradually modifying the structure of its liabilities; first, by increasing its debt denominated in pesos and, second, by extending its maturities. The improvement of private sector's balance sheets has strengthened its capacity to invest once the demand for its goods and services recovers and a better outlook for the medium term is perceived.

# Box 2 Macroeconomic Stability and Business Cycles in Mexico

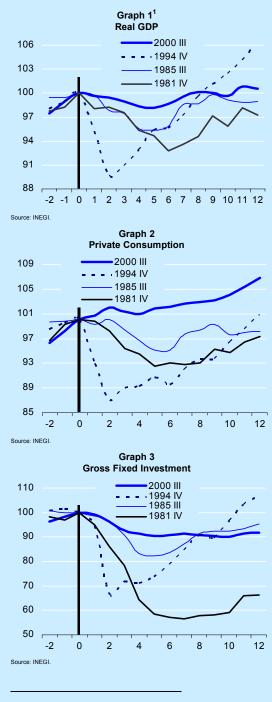
The performance of the Mexican economy during the current business cycle has differed significantly from the previous ones. In general, Mexico has followed the same path of an ordinary business cycle, similar to that observed in most industrialized countries. In contrast, its previous recessions have been associated with financial and balance of payments' crises, which led to different dynamics in the economy.

Graphs 1, 2 and 3 show a comparison between the quarterly performance of GDP, private consumption and gross fixed investment during four different recessive periods. Variables have been normalized to a value of 100 for the quarter in which GDP reached a peak before the recession (period zero). During the most recent episode, GDP reached a peak in the third quarter of 2000, and then began a phase of contraction. Five quarters afterwards (in 2001-IV) GDP reached a minimum (valley), and then followed an upward trend, although with some variations.

After comparing the trajectory of the last recession with the previous ones, GDP and investment fell at a significantly lower accumulated rate than in previous episodes. Moreover, in contrast with previous business cycles, private consumption has expanded almost uninterruptedly during the current one.

The difference in business cycles can be attributed, to a large extent, to the greater macroeconomic stability achieved by the discipline exhibited in the conduction of both monetary and fiscal policies. The different reforms geared towards strengthening the financial system have also created more solid fundamentals and improved the performance of the economy during the lower phases of the business cycle.

Macroeconomic discipline, together with the mentioned reforms, have allowed interest rates to reach historically low levels during the current cycle, increased the availability of credit, prevented inflationary surprises, and also expanded financial savings. These conditions have supported consumption expansion. Furthermore, they have allowed Mexican enterprises to upgrade their financial positions (in terms of denomination and maturity), thus creating suitable conditions for them to increase their investments.



<sup>&</sup>lt;sup>1</sup> Variables in Graphs 1, 2 and 3 have been normalized to a value of 100 for the quarter in which each business cycle peaked (1981-IV, 1985-III, 1994-IV, and 2000-III). The horizontal axis represents the number of months before and after the peak (period "0").

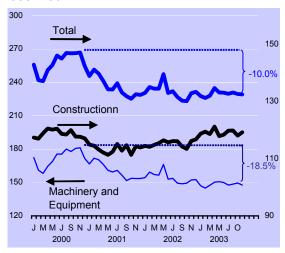
# **Graph 9**

# **Investment and Consumer Spending Indicators**

Seasonally adjusted figures

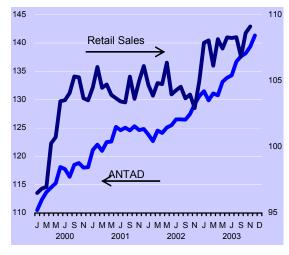
# **Gross Fixed Investment**

1993=100



# **Retail Sales**

1994=100



Source INEGI and ANTAD. Seasonally adjusted figures by Banco de México.

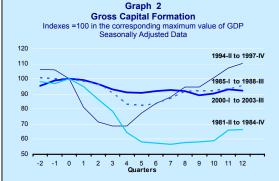
# Box 3 The Fall in Investment in Recent Years\*

One aspect that has characterized the performance of the Mexican economy in recent years has been the fall in investment. For three consecutive years investment has exhibited negative annual variations, affecting significantly GDP growth (actual and potential) and the country's competitiveness. In general, investment has been characterized by the following:

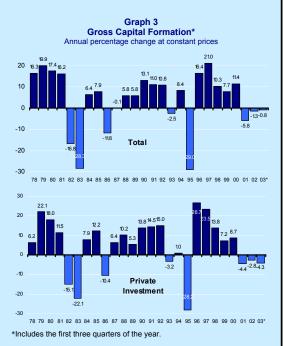
 i) Investment spending has been the weakest component of aggregate demand (Graph 1).

Graph 1 GDP, Consumption, Investment and External Demand Seasonally Adjusted Data; 2000-III=100 106 Total 104 Consumption 102 100 GDP 98 External 96 92 92.4 90 Investment 2002

ii) The accumulated fall in investment has not been very significant compared with that registered in previous cyclical episodes (Graph 2), some of which have been accompanied by economic crises. Nonetheless, investment has remained weak for a very long period. Available statistics on gross capital formation show that in the last thirty-four years, investment had not exhibited annual negative growth for three consecutive years until 2003 (Graph 3).

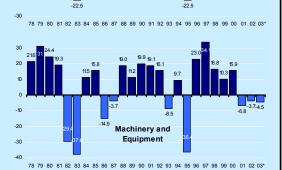


iii) During the initial period of the current cycle, both components of investment (machinery and equipment, and construction) fell. Nevertheless, since mid-2001, construction, despite exhibiting sharp variations, began to recover.



iv) The recovery of construction since mid-2001 has depended mainly on the growth of housing (Graph 4). This resulted from the greater availability of mortgage credit, lower interest rates, and from increased public spending in housing.





Construction

\*Includes the three quarters of the year.

<sup>\*</sup> Graphs included in this box were prepared with data from INEGI. Seasonally adjusted figures by Banco de México.

v) Investment spending in Mexico has been discouraged by the lack of progress in implementing structural reforms. Structural change fosters investment returns and opens new opportunities for capital outlays in different sectors of the economy. Furthermore, it raises factor productivity and the country's competitiveness in order to face trade competition, both in the domestic and external markets. Foreign direct investment in Mexico has been significantly affected by the lack of structural reforms (see balance of payments section). In contrast, other emerging economies from Asia, and even Latin America, have made significant progress on these topics, therefore raising both domestic and external investment to their countries.

Table 1
Measures to Foster Higher Private Investment (Domestic and Foreign) in Mexico:
Private Sector Economic Analysts

•	IIVate	Occio	LCOM	mile And	ıyata
	(Parcar	ntana Di	etribution	of Pacnon	eae)

(Percentage Distribution of Responses)

	2002			2003	
	Feb	Dec	Feb	Sep	Dec
Energy Sector Reform (Electricity and Gas)	19	22	19	23	22
2. Fiscal Reform*	9	18	21	23	19
3. Labor Reform	17	18	7	13	10
Rule of Law Strengthening	5	8	3	5	6
<ol> <li>Maintaining Macroeconomic Stability, Fiscal and Monetary Discipline, and Improving both Coordination and</li> </ol>					
Accountability of Fiscal and Monetary Policies	4	2	6	1	6
More Deregulation and Domestic Competition	9	2	3	5	6
7. Improve Both Dialogue and Political Negotiations				1	6
Implementation and Continuity of Structural Reforms	4	8	13	6	4
Education Reform and Better Technical Training Programs		0	0	1	4
10. Upgrade Infrastructure	0	0	0	1	4
<ol> <li>Strengthen both Legal Framework and Legal Certainty **</li> </ol>	5	8	14	5	3
12. Reactivate Credit and Lower Interest Rates	1	2	3	1	3
13. Industry Modernization Policies	0	2	3	3	3
<ol> <li>Better Political Handling, Agreements and a Legislative Power Committed with Mexico's Development</li> </ol>	0	0	1	0	1
15. Less Strong Exchange Rate	3	2	1	1	1
16. Effective Fight Against Corruption		2	3	3	1
17. Improve Public Security System		2	1	3	0
18. Other	10	2	2	2	1
S U M:	100%	100%	100%	100%	100

<sup>\*</sup> Includes concepts such as complete and effective fiscal and tax

- vi) In the surveys of manufacturing enterprises, private sector analysts, and foreign direct investment, periodically undertaken by Banco de México, most responses agree on the need to implement structural reform measures to foster more investment in Mexico (Table 1). It is important to point out that in 2003 investment was limited by both the weak results of business climate and business confidence indicators in certain periods of the year, and by some political uncertainty.
- vii) The lack of progress in implementing structural reforms, including the fiscal reform, has significantly limited the availability of public resources for infrastructure and human capital. This has negatively affected private investment returns and, therefore, the level of investment. Furthermore, it has also affected adversely the country's competitiveness and its capacity to create more and better paid jobs.
- viii) Investment stability fosters both current and potential growth in a country. Capital goods incorporate technological advances, thus raising productivity and improving workers' skills and capacities.
- ix) In the past, the availability of credit was a factor that limited the recovery and sustainability of investment, particularly in small and medium enterprises. Financial stability and an environment of low inflation have expanded the supply of credit through different means (bank financing, SOFOLES, investment funds, etc.). Nonetheless, at present, not much has been done to take full advantage of these conditions, as confirmed by the different factors above mentioned, which have negatively affected investment returns in Mexico.

<sup>\*\*</sup> Includes concepts such as more legal transparency. Source: Banco de México.

During most of 2003 there was a lack of dynamism in exports of goods and services. This was due to both the weak external demand and the loss of market share of Mexican exports as a result of the country's lack of modernization. Despite this situation, exports of goods and services are expected to have increased at an annual rate during 2003-IV, after two consecutive quarters of negative growth. This result is attributed to the significant expansion of external demand, particularly from the United States.

Based on the above considerations, annual GDP growth is expected to have been close to 1.9 percent in 2003-IV and nearly 1.2 percent for the year as a whole. As a result, in the last three years the Mexican economy has grown below its potential.

## II.3.7. Balance of Payments and Capital Flows

During 2003-IV, the behavior of the external sector and, in particular, of the foreign trade and the current accounts of the balance of payments, was influenced by the following factors: the recovery of external demand, which resulted in more exports of manufactured goods; the rebound of domestic production, which fostered higher imports of intermediate goods; and the seasonal increase in domestic spending, especially in consumption. These explain the higher trade and current account deficits in the fourth quarter of 2003, when compared to those registered in the previous quarter. Nonetheless, both deficits were significantly lower than in the fourth quarter of 2002.

The main aspects that characterized the external sector in 2003-IV were the following:

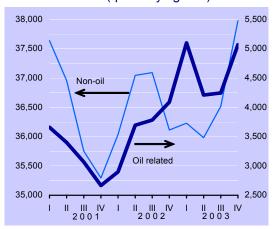
- (a) Merchandise exports and imports rose at an annual rate. Regarding exports, such expansion included both oil and non-oil exports. The rise in oil exports was fueled by the favorable behavior of international crude oil prices. Non-oil exports, including agriculture, extractive, and manufacturing exports, exhibited positive annual rates. Manufacturing exports increased after having had two quarters of negative annual variations.
- (b) Mexican exports to the United States recovered during the fourth quarter of 2003. Nonetheless, they still grew at an annual rate below that of total U.S. imports. As a result, Mexican exports continued losing share in U.S. imports.

- (c) The flow of resources coming from remittances from Mexican workers abroad continued exhibiting positive results.
- (d) Moderate trade and current account deficits.
- (e) A significant surplus in the capital account and a high volume of accumulated international reserves.

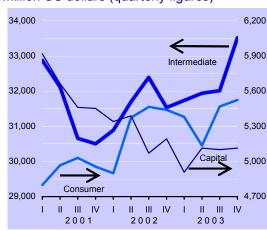
During the fourth quarter of 2003, merchandise exports rose at an annual rate of 6.3 percent. This led to increases in oil and non-oil exports of 24.0 and 4.5 percent, respectively. Merchandise imports grew at an annual rate of 4.1 percent. Imports of intermediate and consumer goods rose 5.7 and 0.9 percent, respectively, while those of capital goods fell at an annual rate of 1.3 percent.

Graph 10 Exports and Imports: Seasonally Adjusted Series

Million US dollars (quarterly figures)



Million US dollars (quarterly figures)



Foreign trade seasonally adjusted figures show an improvement in non-oil exports during the last months of 2003. Such recovery was supported first by the rise in agriculture exports, afterward by manufacturing in-bond exports, and, later, in the fourth quarter of 2003, by non in-bond manufacturing exports. Automotive exports did not exhibit a favorable behavior.

Regarding imports, seasonally adjusted figures show an increase in imports of intermediate goods in the fourth quarter, while those of consumer goods exhibited variations without following an upward trend. Imports of capital goods remained weak.

In September-November 2003, Mexican exports to the United States rose. Nonetheless, such increase was below that of other U.S. trading partners. As a result, Mexico's export share in the U.S. market continued falling. From January to November 2003, the share of Mexican exports in U.S. imports was 11.01 percent, compared to 11.72 percent in the same months of 2002. These results reflect the gradual loss of competitiveness of the Mexican economy (due to the lack of progress in implementing structural reforms) as compared with other emerging economies, which are Mexico's competitors.

Table 8 U.S. Imports
Percent

		Annual Variations					Share in Imports					
	Country of Origin:		2003					2003				
		2002	I	II	III	Jan- Nov	2002	ı	II	III	Jan- Nov	
	Total	1.78	14.32	6.59	5.52	8.28	100.00	100.00	100.00	100.00	100.00	
	Total excluding Mexico	1.69	15.18	7.72	6.32	9.15	88.41	88.72	89.01	89.24	88.99	
1.	Canada	-3.32	11.34	3.42	5.79	6.80	18.00	18.73	18.15	17.16	17.91	
2.	China	22.40	31.41	19.74	15.95	22.56	10.78	10.48	11.46	13.16	12.10	
3.	Mexico	2.50	8.00	-1.83	-0.69	1.75	11.59	11.28	10.99	10.76	11.01	
4.	Japan	-3.99	1.22	-2.32	-5.84	-2.23	10.46	9.73	9.44	8.97	9.38	
5.	Germany	5.80	13.21	18.80	0.24	9.19	5.38	5.36	5.63	4.97	5.35	
6.	United Kingdom	-1.51	11.05	-0.65	1.80	3.80	3.51	3.42	3.40	3.32	3.38	
7.	South Korea	1.11	2.06	0.49	1.72	3.05	3.06	2.83	2.87	2.83	2.91	
8.	Taiwan	-3.67	2.21	-5.78	-3.65	-2.10	2.77	2.49	2.51	2.59	2.50	
9.	France	-7.13	-0.17	2.33	1.13	2.42	2.43	2.33	2.29	2.24	2.29	
10.	Malaysia	7.47	-0.04	3.01	4.99	4.93	2.07	1.84	2.00	2.15	2.02	
Tota	l (10 countries)	1.93	10.37	4.41	3.44	6.33	70.05	68.49	68.73	68.15	68.85	

Source: Prepared by Banco de México with data from the U.S. Department of Commerce.

During the fourth quarter of 2003, the trade balance deficit was 2.604 billion US dollars, lower than that observed in the same period of 2002. The trade deficit for 2003 was 5.622 billion US dollars, lower than that recorded in 2002 (7.916 billion). The moderate trade deficit in 2003 was due, on one side, to the modest expansion of domestic demand and production and, on the other, to the significant increase in oil exports (4.153 billion US dollars).

During the fourth quarter of 2003, inflows by remittances from Mexican workers abroad totaled 3.329 billion US dollars. Thus, in 2003, accumulated figures were 13.266 billion US dollars (annual increase of 35.1 percent). Such flows stemmed from 41.3 million transactions averaging 321 US dollars each. The significant growth in remittances reflects, on one hand, an improvement in the accounting records covered on this component and, on the other, a higher number of Mexican workers abroad.

The results on the trade balance and on remittances, together with partial information on other items of the balance of payments, allows to estimate that the current account deficit reached nearly 3.5 billion US dollars during the fourth quarter of 2003. Thus, the accumulated current account deficit in 2003 is expected to have been 9.2 billion US dollars, figure significantly lower than that recorded in 2002 (14 billion).

The capital account of the balance of payments recorded moderate flows of foreign investment. Foreign direct investment in 2003 is expected to have been close to 11 billion US dollars, the lowest figure in the last seven years. This is attributed to the country's reduced growth in recent years but, most of all, to the lack of progress in implementing structural reforms. This situation has affected the business climate and lowered the profitability of investments in the country, thus also discouraging foreign investment.

Summing up, during the fourth quarter of 2003, the balance of payments is expected to have exhibited the following results: a moderate current account deficit of 3.5 billion US dollars; a significant capital account surplus of 8.8 billion US dollars (including errors and omissions); and, an accumulation of net international reserves of 5.317 billion US dollars. The capital account surplus for the entire 2003 is expected to have been 18.7 billion US dollars, while net international reserves are anticipated to have increased by 9.451 billion.

# II.4. Monetary Policy During the Fourth Quarter of 2003

### **II.4.1.** Monetary Policy Actions

As Banco de México has stated in previous Inflation Reports, monetary policy is conducted through an inflation targeting framework. One of the key elements of inflation targeting is the use of a systematic and transparent approach for analyzing the current economic conditions and identifying inflationary pressures.

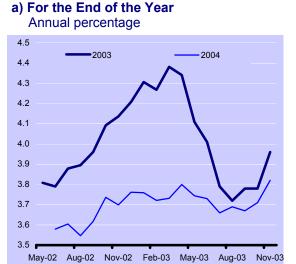
The supply shocks that affected the disinflation process in 2002 and at the beginning of 2003 were practically assimilated by the end of the year, thus allowing a faster convergence of non-core inflation with core inflation. As a result, year-end inflation expectations fell significantly in 2003 (Graph 11a). Nevertheless,

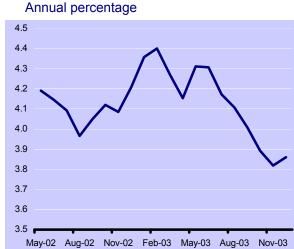
in the last months of the year, expectations increased slightly, influenced by the rise in CPI inflation in the first half of November. This was mainly attributed to the end of the summer electricity tariffs.

It should be mentioned that from 2004 onward the inflation target will operate continuously. Inflation expectations in a twelve-month horizon will gain relevance as they serve as a framework for continuously analyzing their congruence with the inflation target for a constant horizon. In general, inflation expectations for the next twelve months fell (Graph 11b) and those for the long term (2005-2008), drawn from Banco de México's survey, showed that economic analysts anticipate low and stable inflation, although still above the target (3.57 percent at December).

b) For the Next Twelve Months

Graph 11 Inflation Expectations Drawn from Banco de México's Survey





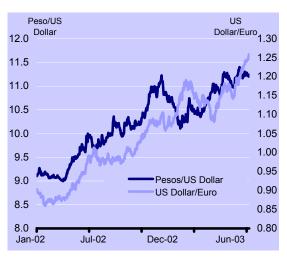
During the fourth quarter, several events increased the volatility in financial markets. This translated into fluctuations in both the exchange rate and short-term interest rates. Initially, the uncertainty in financial markets resulted from external factors, the depreciation of the US dollar against the most important world currencies, among others. Nonetheless, certain domestic factors gained importance. In particular, the lack of agreement to advance in the agenda of structural reforms worsened the negative perception over the problems related with the country's lack of competitiveness. Under such context, the exchange rate depreciated throughout the quarter, with some episodes of high volatility that eased by the end of the year (Graph 12a and Graph 12b). It is important to mention that up to date and, in general, the exchange

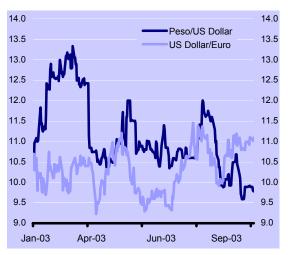
rate has had an orderly adjustment and with a small pass-through to inflation.

Graph 12 Exchange Rates and Implicit Volatility

## a) Peso/ US Dollar and US Dollar/Euro

## b) Implicit Volatility in 3-month Exchange Rate Options\* Percent





\*Source: UBS.

Interest rates reacted to the developments in exchange-rate market and the uncertainty regarding performance of the Mexican economy. In particular, during the fourth quarter of the year, short-term interest rates rose more than longer term ones, thus flattening the yield curve (Graph 13). However, medium and long-term interest rates remained close to historically low levels, due to both current economic conditions and structural factors. As for the first ones, the level of interest rates is related to the lower phase of the business cycle, where the lower profitability of capital usually reduces the demand for loans. Regarding structural factors, the progress made to attain an environment of low and stable inflation should be highlighted. since it tends to reduce permanently nominal interest rates as a result of lower inflationary risk. In balance, the reduction in interest rates is mostly due to the second factor.

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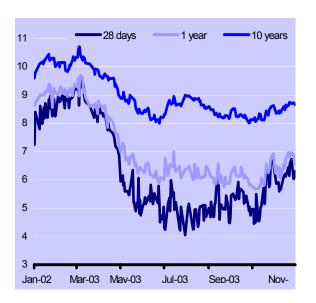
On October 28, 2003, the Ministry of Finance carried out its first auction of 20-year fixed nominal interest rate bonds in the domestic market. These instruments were placed at a 8.39 interest rate, which is approximately 0.30 percentage points higher than the yield offered by 10-year fixed rate government bonds on that same date.

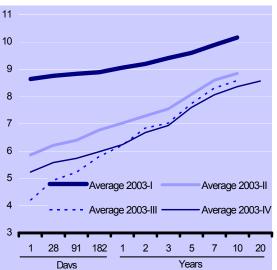
**Yield on Government Securities** Graph 13

## Annual percentage

## a) Yield in Secondary Market

b) Yield Curve





During the fourth quarter of 2003, the Board of Governors kept the "short" unchanged, at 25 million pesos. This decision was based on the fact that both aggregate supply and demand did not lead to inflationary pressures in the last quarter of the year nor are expected to do so in the near future given that the economy has been growing below potential for a considerable period. In addition, supply shocks had been dissipating without affecting inflation expectations. Based on such considerations, Banco de México estimated that inflation will continue its convergence to the target.

#### II.5. **Monetary and Credit Aggregates**

#### II.5.1. Monetary Base, Net Domestic Credit, and Net **International Assets**

In line with the Monetary Program for 2003, at the end of the year the monetary base was 303.6 thousand million pesos, thus posting an annual variation of 15 percent (16.4 percent on average of daily figures during the year). <sup>10</sup> Therefore, the process by which

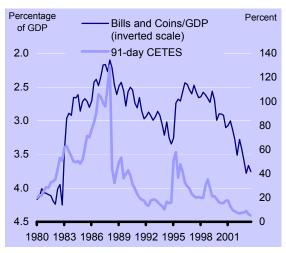
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<sup>&</sup>lt;sup>10</sup> The Monetary Program for 2003 anticipated that the monetary base would end the year at 300.9 thousand million pesos, thus implying an annual increase of 14 percent at December and of 16.9 percent on average daily stocks.

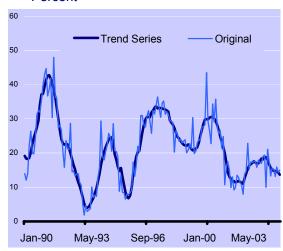
the monetary base has increased as a percentage of GDP continued (remonetization). Nonetheless, the rate of growth of this aggregate has declined, from an average annual variation of 17.5 percent in the first quarter of 2003 to 14.5 percent in the last quarter of the year (Graph 14). The process of remonetization recently undergone by the Mexican economy is due mainly to the significant reduction in the opportunity cost (interest rates) of holding money balances. Such process has resulted from the abatement of inflation.

Graph 14 Monetary Base

## a) Remonetization <sup>1/</sup> and Interest Rates



#### b) Annual Variation of Monetary Base Percent



1/ Calculated as the ratio bills and coins in circulation to GDP.

The reduction in interest rates has a lagged effect on the monetary base. The significant increase in the monetary base in 2002 and at the beginning of 2003 mainly reflected the sharp reduction in interest rates in 2001. By mid-2003, interest rates fell again, although not as sharply as in 2001. Consequently, the process of remonetization is expected to continue although at a slower pace than in previous quarters.

In 2003, Banco de México's net international assets rose by 8.337 billion US dollars, thus ending the year at 59.059 billion. Since this accumulation was above the increase in the monetary base, net domestic credit contracted by 52,972 million pesos in the year (Table 9).

<sup>&</sup>lt;sup>11</sup> Average daily stocks during the quarter.

<sup>&</sup>lt;sup>12</sup> Interest rates on 28-day CETES moved from a monthly average of 17.89 percent in January 2001 to 6.29 percent in December of that year.

Table 9 Monetary Base, Net International Assets and Net Domestic Credit
Millions

	Sto	cks	Flows in 2003					
	At Dec 31	At Dec 31	Quarter				Accumulated at	
	2002	2003	ı	II III		IV	Dec 31 2003	
(A) Monetary Base (Pesos)	263,937	303,614	-26,087	2,168	-1,315	64,912	39,677	
(B) Net International Assets (Pesos) 1/2/	529,503	663,657	35,442	13,649	-3,978	47,537	92,650	
Net International Assets (US dollars) 2/	50,722	59,059	3,280	1,312	-420	4,164	8,337	
(C) Net Domestic Credit (Pesos) [(A)-(B)] 1/	-265,566	-360,043	-61,529	-11,481	2,663	17,375	-52,972	
(D) International Reserves [(E)-(F)] 3/ (US dollars)	47,984	57,435	4,004	1,409	-1,280	5,317	9,451	
(E) Gross International Reserves (US dollars)	50,674	59,028	3,279	1,313	-405	4,167	8,354	
PEMEX			2,901	3,522	4,331	4,626	15,380	
Federal Government			-78	-1,684	-3,525	-536	-5,823	
Sale of Dollars to Commercial Banks 4/				-1,280	-1,360	-578	-3,218	
Other <sup>5/</sup>			456	755	149	656	2,015	
(F) Liabilities with less than six months to maturity (US dollars)	2,690	1,593	-726	-96	875	-1,150	-1,097	

<sup>1/</sup> In the estimation of cash flows of net international assets in pesos, the exchange rate applied to the transaction of each flow is considered.

5/ Includes yields on net international assets and other transactions.

In the fourth quarter of 2003, international reserves rose by 5.317 billion US dollars, thus accumulating 9.451 billion in the year. The mechanism to reduce the pace of accumulation of international reserves led to sales of 3.218 billion dollars from May 2 to December 31, 2003. As previously announced by Banco de México, from February 2 to April 30, 2004 a total of 45 million US dollars will be placed daily in the market. <sup>13</sup>

## II.5.2. Monetary Aggregates and Credit

In November 2003 the supply of financial savings by residents (M2) grew at an annual rate of 8.8 percent. The recovery of voluntary savings since the second quarter is significant, while savings from the Retirement Savings Fund (*Sistema de Ahorro para el Retiro*, *SAR*) has consolidated its position as the most dynamic source of financial funds. <sup>14</sup> The high volume of resources channeled to the SAR prevails despite the reduction in the number

<sup>2/</sup> 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 as well as credit agreements with central banks with less than six months to maturity.

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

<sup>4/</sup> Corresponds to the daily offering of US dollars made according to the mechanism to reduce the pace of accumulation of international reserves (see Exchange Commission's Press Release of March 20, 2003).

<sup>&</sup>lt;sup>13</sup> See Exchange Commission's press release (January 20, 2004).

<sup>&</sup>lt;sup>14</sup> In November, resources channeled to the SAR rose at a real annual rate of 13.3 percent.

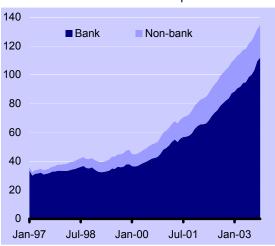
of workers insured by the IMSS. Such reduction has been more than offset by the increase in the IMSS average reference wage.<sup>15</sup>

Financial savings' growth has increased the volume of available funds for businesses, households, and the public sector. This has also been fostered by the sale of US dollars through the mechanism to reduce the pace of accumulation of international reserves. As a result of these auctions, it was not necessary to place nearly 34 thousand million pesos of central bank's monetary-regulating liabilities in 2003. Thus, these resources became available in the domestic market.

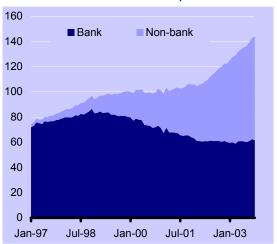
Under such conditions, lower interest rates together with a greater supply of credit have raised households' debt. Consumer credit has increased significantly (especially that granted by commercial banks). Mortgage credit has also recovered mainly supported by non-bank financial intermediaries (Graph 15). Nonetheless, despite the increase in households' indebtedness, they still maintain a significant net creditor position with the domestic financial system (25.3 percent of GDP at September 2003). 16

Graph 15 Total Financing to Households 1/

a) Consumer CreditStocks in thousand million pesos



## b) Mortgage Credit Stocks in thousand million pesos



1/ Does not include portfolio related with debt-restructuring programs (UDIs and IPAB-FOBAPROA).

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<sup>&</sup>lt;sup>15</sup> The number of permanent and temporary workers insured by the IMSS fell from 13 million individuals in November 2000 to 12.5 million in October 2003. The IMSS average reference wage rose by 27.2 percent during the same period (from 132.6 to 168.6 pesos per day).

The net credit position equals total household financial assets minus total household liabilities. Data drawn from the statistics included in the Outlook for Mexico's Financial System and Monetary Aggregates published by Banco de México.

Furthermore, businesses have taken advantage of the better domestic financial conditions by substituting external for domestic debt and increasing the term of their liabilities.<sup>17</sup> In this regard, the number of bonds issued in the market has been significant, as they expanded at a real annual rate of 36.1 percent in November.

Perhaps the most significant factor when considering the development and the structure of financial savings over the last years is that the economy has fewer credit restrictions. Low and stable inflation reduces uncertainty and risks over the granting or requesting of credit. As a result, financial system's resources are allocated more efficiently, therefore fostering the expansion of economic activity. Thus, a factor that had traditionally limited economic growth, has been considerably reduced.

<sup>&</sup>lt;sup>17</sup> From December 2002 to September 2003, the stock of external securities issued by the private sector decreased by 1.155 billion US dollars, while those in the domestic market increased by 39,682 million pesos.

# III.1. Forecasts for Economic Activity and for the Different Determinants of Inflation

A slight upward revision in inflation expectations for 2003 and modest growth in 2003 were the two main aspects from the forecasts of private sector economic analysts reported during the fourth quarter of 2003. Among the most important were the following (Table 10): i) expected GDP growth in 2003 was revised downward, from 1.60 percent in September to 1.16 percent in December; ii) a decline in the expected rate of growth of the different components of domestic demand, especially those related with consumption and private sector investment; iii) the economy is expected to grow at a faster pace in 2004 and 2005; iv) job creation in the formal sector is expected to have been modest in 2003; v) interest rates are expected to remain low in the next months; vi) both trade and current account deficits for 2003 were revised downward; vii) less inflows of foreign direct investment are expected in 2003 and 2004; viii) a slight drop during the fourth quarter of the year of Private Sector Economic Analysts' Confidence Index; and ix) the insistence that the main factors limiting both economic growth and more investment in the country are the lack of progress in structural reforms, and, to some extent, the political uncertainty that prevailed during the fourth quarter. Additionally, estimates for GDP growth in the United States for both 2003 and 2004 were revised upward.

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<sup>&</sup>lt;sup>18</sup> Unless otherwise stated, forecasts reported in this section are drawn from the monthly Survey on Private Sector Economic Analysts' Forecasts undertaken by Banco de México.

Table 10 Private Sector Economic Analysts' Forecasts: September and December 2003<sup>1/</sup>

	Sep.	Dec.		Sep.	Dec.
	2003	2003		2003	2003
Real GDP Growth in Mexico			Exchange Rate (Pesos/US dollar, year-end)		
2003	1.60%	1.16%	Banxico Survey 2003	10.88	11.10 *
2004	3.39%	3.22%	Futures <sup>2/</sup>	11.08	11.32
2005	n.a.	3.73%	Banxico Survey 2004	11.19	11.47
Trade Deficit (Million US dollars)			Mexican Oil Mix (Average US dollars per barrel)		
2003	6,550	5,426	Banxico Survey 2004	20.05	20.49
2004	9,560	8,777	Wage Increases		
Current Account Deficit (Million US dollars)			January 2004	n.a.	4.55
2003	12,042	10,763	February 2004	n.a.	4.51
2004	15,511	14,416	Business Climate		
Foreign Direct Investment (Million US dollars)			Will improve	67%	71%
2003	12,193	11,372	Will remain unchanged	30%	19%
2004	13,505	13,094	Will worsen	3%	10%
Real GDP Gro	wth and In	dustrial P	roduction in the U.S. in 2003 and 2004		
GDP Growth in 2003			GDP Growth in 2004		
Banxico Survey	2.57%	3.86%	Banxico Survey	3.54%	3.93%
Consensus Forecasts <sup>3/</sup>	2.7%	3.1%	Consensus Forecasts <sup>3/</sup>	4.0%	4.4%
Blue Chip Economic Indicators <sup>47</sup>	2.7%	3.1%	Blue Chip Economic Indicators <sup>4/</sup>	3.9%	4.4%
Industrial Production in 2003			Industrial Production in 2004		
Blue Chip Economic Indicators*/	0.2%	0.2%	Blue Chip Economic Indicators <sup>47</sup>	4.2%	4.3%

n.a. not available.

Private sector analysts' forecasts regarding other variables were the following: i) an upward revision in the expected exchange rate at the end of 2003 and for 2004; and ii) increases in nominal contractual wages in both January and February 2004 are expected to be slightly below those recorded in previous months.

## III.2. Inflation Forecasts

During the fourth quarter of 2003, inflation forecasts were revised upward, remaining, in general, within the variability interval of plus/minus one percentage point, although above the 3 percent target. Estimates for CPI inflation for the end of 2003 went from 3.78 percent in September to 3.99 percent in December. During such period, forecasts for core inflation for the year increased from 3.49 percent in September to 3.60 percent in December. Analysts anticipate a scenario of low and stable inflation for the next years: 3.86 percent in 2004 and 3.57 percent, on average, from 2005 to 2008.

<sup>1/</sup> Unless otherwise stated, data is drawn from the monthly Survey of Private Sector Economic Analysts' Forecasts undertaken by Banco de México.

<sup>2/</sup> Exchange rate futures of September 30<sup>th</sup> and December 15<sup>th</sup> 2003.

<sup>3/</sup> October 13th and December 8th 2003 issues of Consensus Forecasts

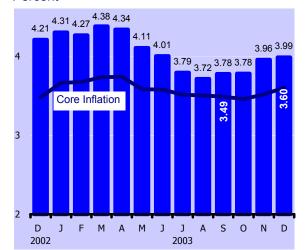
<sup>4/</sup> Blue Chip Economic Indicators (October 10<sup>th</sup> and December 10<sup>th</sup> 2003).

<sup>\*/</sup> Data from November survey.

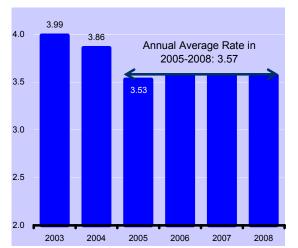
Graph 16 Private Sector Economic Analysts' Forecasts for Inflation

## **CPI and Core Inflation in 2003**

Percent



## **CPI Inflation for the Short and Long Terms**Percent



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

## IV. Monetary Program for 2004

During the last years the design and conduct of monetary policy has moved to an inflation targeting framework. The most important features of such framework are: a) the announcement of a multiannual inflation target; b) the systematic assessment of economic conditions and inflationary pressures; c) the description of Central Bank's instruments to reach the inflation objectives; and, d) a communication policy that fosters transparency and credibility in monetary policy and also allows economic agents to make more informed decisions.

## IV.1. Elements of the Monetary Program

## IV.1.1. Program Objectives

In the Inflation Report of the second quarter of 2002, the Board of Governors of Banco de México announced that monetary policy would be geared towards attaining an annual CPI inflation of 3 percent at December, and permanently maintaining it around that level, with a variability interval of plus/minus one percentage point. This means that from 2004 onward, the inflation target will operate continuously, and not just for the end of the year.

As previously stated, the target includes a variability interval. The purpose of such interval is to accommodate shocks to relative prices, which usually affect inflation only temporarily. Furthermore, the unexpected nature of these shocks makes it difficult for the Central Bank to effectively offset the different inflationary pressures.

## IV.1.2. Monetary Policy Decisions

Evidence shows that Central Bank's monetary policy actions have a lagged effect on the economy, specially, on the price level. Therefore, to attain the inflation target, the monetary authority must base its decisions on a careful assessment of the prevailing economic conditions and of the outlook for inflationary pressures.

The inflation targeting framework includes as one of its policy prescriptions that whenever inflationary pressures originate from aggregate demand, the monetary authority should tighten its policy stance. In this case it is understood that inflationary pressures are generalized and, if not curbed, inflation would increase.

However, when inflationary pressures originate from the supply side, they usually refer to changes in relative prices that have a transitory effect on inflation. In this case, the monetary authority should allow a temporary rise in inflation and only tighten the monetary policy stance when supply shocks contaminate inflation expectations. By doing so, it prevents further price increases (second round effects).

This highlights the importance of correctly identifying inflationary pressures and its probable effects on inflation expectations for monetary policy decisions. For that purpose, Banco de México systematically analyzes the economic conditions by using a broad array of variables and different models. <sup>19</sup> These allow to identify the factors behind the anticipated developments in inflation and to evaluate their impact on economic agents' inflation expectations.

### IV.1.3. Monetary Policy Implementation

Monetary policy conducted by central banks affects the conditions under which they supply liquidity to money market participants. These conditions depend on both the terms under which the central bank carries out its open market operations and the way bank's current accounts are handled by the central bank. Banco de México implements monetary policy through the aforementioned bank's current accounts. On March 1995, a framework of accumulated balances was adopted. Such framework has been modified on several occasions. The most recent one was the change from accumulated to daily balances, formally adopted since April 10, 2003.<sup>20</sup>

Banco de México's monetary policy instrument allows interest rates to be freely determined in the money market. Nevertheless, the Central Bank can influence them whenever monetary conditions are not consistent with the inflation target. The instrument allows Banco de México to change its monetary

<sup>&</sup>lt;sup>19</sup> Banco de México's web page (<u>www.banxico.org.mx</u>) presents a monetary base forecast for 2004, which can serve as a reference to analyze the economic conditions.

<sup>&</sup>lt;sup>20</sup> See Inflation Report January-March 2003, pp. 37-38.

policy stance through variations in the amount of money it supplies at interest rates different from those prevailing in the market. Therefore, from the total amount of resources requested by the market, the amount that corresponds to the negative daily settlement balances objective in banks' current accounts ("short"-corto) is supplied at interest rates higher than those in the market. By doing so, Banco de México guarantees at all times the required money market liquidity.

Whenever Banco de México intends to tighten its monetary policy stance to induce an increase in short-term interest rates, it raises the amount of resources supplied at interest rates higher than those prevailing in the market (increase in the "short"). On the other hand, when the Central Bank intends to loosen its monetary policy, it reduces the amount of money supplied at interest rates higher than those prevailing in the market (reduction in the "short"). It is important to point out that since Banco de México's main goal is to communicate to the public the Central Bank's monetary policy stance, the amount of money supplied at interest rates higher than those in the market ("short") is small, compared to the total amount of liquidity requested by the money market participants.

Consequently, both interest rates and monetary conditions are, in general, the result of an interaction between money market participants and the monetary authority. By changing the amount of money supplied at interest rates different from those in the market (change in the daily balances objective or "short"), the Central Bank intends to keep monetary conditions and inflation expectations in line with the inflation target.

## IV.1.4. Communication Policy

In order to attain price stability via an inflation targeting framework, the Central Bank must transmit clearly to the public the Bank's objectives, strategy and instruments. The announcement of inflation targets is important because it supports the convergence of the public's expectations with the inflation target. This results from the Central Bank's commitment to take the necessary actions to attain its inflation objective. Furthermore, the transparency of monetary policy decision-making has allowed economic agents to anticipate the Central Bank's actions under different scenarios. This understanding of the monetary policy process reduces the cost of inflation abatement. Furthermore, Banco de México's

<sup>&</sup>lt;sup>21</sup> Credit institutions' daily overdrafts are currently penalized with twice the daily inter-bank funding rate. Banks are not remunerated for keeping positive balances at the Central Bank.

transparency has contributed to strengthen the accountability that is essential in a democratic system.

Among the documents that support Banco de México's communication strategy is the Monetary Program and the Inflation Reports. Furthermore, since 2003 the Central Bank has announced its monetary policy decisions on previously established dates, together with a press release that explains the reasons for changing or maintaining the daily settlement balance objective.<sup>22</sup>

### IV.2. Outlook for 2004 and Balance of Risks

In 2004, the largest economies of the world are expected to continue their expansion, while the favorable external financial conditions faced by Mexico in 2003 are also expected to prevail. Following is a description of the expected international environment, the forecasts for Mexico's main macroeconomic variables for 2004, and the risks that could affect Banco de México's base scenario.

### IV.2.1. International Environment

In 2003, the U.S. economy grew at a faster pace, especially towards the second half of the year. Growth has expanded gradually to all sectors of the economy and the components of aggregate demand.

In 2004, the U.S. economy is anticipated to continue growing at a pace that would allow the output gap to narrow even further, especially during the first half of the year. This consideration is based on the perception that monetary and financial conditions will foster expenditure growth. The Federal Reserve Board announced that the accommodative monetary policy could be maintained for a considerable period due to low inflation and resource use slack. Non-residential investment, supported by the positive outlook for firms' profits, is expected to be the main engine of growth, while exports are expected to respond to the U.S. dollar depreciation. Furthermore, manufacturing purchasing managers' plans point to a robust recovery of this sector. As the expansion reaches all sectors of the economy, labor market conditions are expected to improve, thus supporting households' consumption.

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<sup>&</sup>lt;sup>22</sup> These dates are published in the Inflation Report of the previous year's third quarter.

In this context, Banco de México's base scenario anticipates that real GDP and industrial production in the United States in 2004 will grow 4.6 percent and 4.8 percent, respectively.

Despite the favorable outlook for the U.S. economy in the short term, two important risks should be noted, especially in the medium term. On the one hand, the U.S. fiscal position has deteriorated significantly in the last three years. Although public finances are expected to improve due to the economic recovery, the fiscal disequilibrium of long-term forecasts is a cause of concern. In this regard, an increasing number of analysts have mentioned that the U.S. public sector should adopt a fiscal adjustment program that includes both revenue and expenditure measures.

On the other hand, and partially related to the worsening of the fiscal position, the U.S. current account deficit has widened significantly. As the rest of the world stops financing indefinitely an excess of expenditure of such magnitude, an adjustment in revenues and expenditures in both the U.S. and the other world economies should be observed. Part of the adjustment in the current account deficit would likely originate from the higher potential growth of the U.S. economy, given the observed increases in productivity. Nonetheless, expenditure would also need to be redistributed worldwide, thus leading to a reduction in U.S. aggregate expenditure (a fiscal adjustment would contribute to this process) in relation to the other world economies' expenditure. Such macroeconomic adjustment would probably occur gradually during a long period. Moreover, it would include the following changes in relative prices: a depreciation of the U.S. dollar in real terms (as has been observed since 2002) and an increase in U.S. interest-rate differentials. Nonetheless, risks prevail (although unlikely) over the U.S. current account deficit exhibiting a sharp adjustment coming from a significant and faster depreciation of the U.S. dollar and an increase in volatility in global capital markets. Such scenario would materialize if the availability for financing such deficit becomes more difficult.

Regarding oil prices, the Mexican oil export mix is expected to average 20 US dollars per barrel in 2004. Oil futures suggest average prices will be below the 25.05 dollars per barrel figure observed in the last quarter of 2003. Moreover, given the behavior of raw materials' prices, oil prices could be subject to episodes of increased volatility. Finally, Mexico's access conditions to external financing are expected to remain favorable. Nonetheless, interest rates and interest-rate differentials for different assets are anticipated to increase throughout the upward phase of the business cycle.

## IV.2.2. Expected Development of the Main Macroeconomic Variables in 2004

The recovery of the Mexican economy is expected to gain momentum in 2004 by exhibiting higher growth than in the previous three years. On the aggregate demand side, exports are expected to continue reflecting the robust growth of the rest of the world economies, especially once the expansion of the U.S. manufacturing sector consolidates. Private consumption is expected to preserve its relative dynamism, owing to both favorable financial conditions and the availability of credit. Private investment is anticipated to recover as external demand consolidates, given the better financial position of firms and lower interest rates. Moreover, in an environment where there is slack in both labor market and installed capacity, aggregate supply should be able to satisfy the expansion of aggregate demand without any difficulties (at least in the short term).

Under such context, Banco de México's forecast for the main macroeconomic variables in 2004 is as follows:

**Economic Growth**: The economy is expected to increase its rate of growth throughout the year. Real GDP growth is expected to be between 3.0 and 3.5 percent.

**Employment**: Despite the fact that the economic recovery is expected to raise the demand for labor, contractual wage increases are not fully reflecting the slack in the labor market. This situation limits labor hires. Thus, around 300 thousand jobs are expected to be created in the formal sector.

**Current Account**: The current account deficit of the balance of payments is expected to be 2.2 percent of GDP.

**Inflation**: Annual CPI inflation is expected to fall by the end of the year. This behavior is in line with an eventual convergence of inflation to its 3 percent target, with a variability interval of plus/minus one percentage point. Nonetheless, it could rise above 4 percent during certain months of the year, especially in winter and summer. In this regard, the following should be considered:

- (a) Core inflation is expected to contribute slightly to the reduction of CPI inflation.
- (b) Core inflation of merchandises is expected to remain in an upward trend at least during the first months of the year due to the increase in international prices of foods' raw

materials and the higher exchange rate (despite having a relatively reduced pass-through coefficient). Afterwards, the path of the annual variation of the price subindex for merchandises would be expected to gradually revert as international prices of raw materials return to their historic averages.

- (c) Regarding core inflation of services, variations of prices of non-housing items are anticipated to regain its downward trend. Nonetheless, in order to strengthen such trend, contractual wage negotiations must be based on reasonable estimates of labor productivity gains, and on inflation expectations in line with the 3 percent target.
- (d) Annual variations in the price subindex for housing are expected to maintain its downward trend.
- (e) Non-core inflation is expected to contribute slightly to the reduction of CPI inflation.
- (f) Prices of agricultural products (excluding meat and eggs) had a favorable performance in 2003. Considering the nature of their fluctuations, they are expected to exhibit only a small reduction in their rate of growth.
- (g) Price increases have been announced for some goods and services concerted with the public sector (e.g., public transportation, property tax, and water fees in Mexico City). Prices of goods and services administered by the public sector are expected to exhibit a reduction in their rate of growth.
- (h) Finally, regarding prices of education, only a moderate reduction in the variation of school tuition is expected.

The base scenario for 2004 anticipates that inflation will continue its convergence towards its target. This trend is supported by two factors. On one hand, it is expected that the current slack in labor and goods' markets will allow an expansion of aggregate demand without implying significant inflationary pressures. On the other, no significant supply shocks are foreseen. Thus, price pressures from this source are expected to be moderate.

### IV.2.3. Balance of Risks

The above scenario is subject to several risk factors. Regarding the external ones, economic growth in the United States

could be affected by a disorderly adjustment in the U.S. fiscal and current account deficits in the medium term. This could affect the expected development of the Mexican economy, especially if such adjustment limits the demand for Mexican exports or creates excessive volatility in global capital markets.

As for the domestic ones, the higher growth in Mexico in 2004 is expected to be mainly of a cyclical nature. Therefore, the secular forces observed during the last years, which tend to reduce the economy's growth potential, should not be underestimated. In this regard, it is important to reiterate that Mexican exports have been losing competitiveness in global markets, as confirmed by their lower market share in U.S. imports. Such loss of competitiveness means Mexico is not taking advantage of the preferential treatment it has in the U.S. market, and which could deteriorate in a few years under the increasing trend in trade liberalization. Furthermore, despite the expected recovery of the economy, GDP growth seems to be below potential and insufficient to address poverty and other social problems efficiently.<sup>23</sup> In particular, the weakness of gross fixed investment in the last three years is a matter of concern for the long-term outlook for growth. The expected recovery in 2004 could weaken the perception that structural reforms are needed to offset the country's loss of competitiveness and productivity. postponement of such measures would have severe consequences for the welfare of Mexicans in the long run.

CPI inflation results at the end of 2003 imply the risk of having annual price increases of above 4 percent in certain months of the year. This, together with the presence of additional supply shocks, could negatively affect inflation expectations and, eventually, core inflation. This is particularly significant during January-March, given that many wage negotiations take place at this time of the year.

Thus, Banco de México will act accordingly to avoid the deterioration of inflation expectations and to maintain inflation in its path towards the 3 percent target.

The main challenge for Banco de México in the long term is to consolidate price stability around the inflation target. Although the gradual convergence towards low and stable inflation, together with the different financial reforms, have raised significantly the availability of credit, such achievement is just a

<sup>&</sup>lt;sup>23</sup> INEGI's indicators show that from 2000 to 2002 Mexico made some progress in addressing poverty and unequal income distribution.

first step in a long process. The additional reduction of inflation will lower interest rates even further with its subsequent benefits. Low and stable interest rates lead to a more efficient assessment of risks associated with the granting and the requesting of credit. As price stability consolidates, it creates structural conditions in the financial system that allow higher growth in the long term. Therefore, a historic restriction that had limited Mexico's economic growth could diminish considerably in the future.

Permanent price stability would also entail additional benefits. Both businesses and households would be favored by the absence of inflationary surprises, which could jeopardize their wealth. Moreover, they would have more certainty to undertake long-term projects, which would favor savings and investment. The abatement of inflation would also allow prices to fully reflect the scarce conditions in resource allocation and its adverse impact on income distribution would be avoided.

## V. Conclusions

Over the last years, Mexico has made significant progress towards price stability. Nonetheless, inflation as well as inflation expectations clearly indicate that such phenomenon has not been eradicated. Therefore, Banco de México considers necessary to continue the efforts needed to reach the 3 percent target.

The attainment of the inflation target does not imply the end of the stabilization effort. The Mexican economy is still subject to different unexpected shocks and also exhibits significant imbalances in some relative prices. The presence of unexpected shocks and the need to adjust some prices can make inflation deviate temporarily from its target. In addition, it should be remembered that monetary policy does not influence the path of inflation with absolute certainty and temporal precision. Banco de México is aware that the ongoing disinflation is part of a long and difficult process. At the same time, it reiterates its conviction that stability not only fosters the country's development but also contributes to a better distribution of its benefits.

For three years, the Mexican economy has grown below its potential. As a result, progress to abate poverty, improve infrastructure, create more jobs, foster investment in basic capacities and prepare new generations, has taken place less rapidly than expected.

Mexico's reduced growth should be analyzed in light of two phenomena that have been present in the last years. On the one hand, it is clear that the Mexican economy has been losing competitiveness in world markets. While we have lagged in the modernization of our economy, other countries have inserted themselves with determination into the global economy. On the other, manufacturing firms are continuously searching for more profitable locations throughout the world to base their production. Thus, manufacturing processes that use labor more intensively have migrated from countries with higher labor costs and bottlenecks in the main sectors of the economy to countries with lower labor costs and a more flexible and efficient economic framework. Manufacturing production in different sectors (textiles and apparel, and electronics, among others) has migrated from industrialized countries to emerging economies with higher competitiveness, especially in Asia. This phenomenon is quite significant considering that Mexico's link with foreign trade is in a sector in

which our main trading partner is losing market share in global markets.

Considering these two trends, it is clear that investment returns in Mexico have fallen when compared with other countries. As a result, Mexico has lost attractiveness for domestic and foreign investors, as confirmed by the behavior of both gross fixed investment and foreign direct investment. Thus, it is unfortunate that given the current economic conditions in which, for the first time in the last decade, credit supply does not seem to be a limiting factor for the expansion of the economy, the country's lack of growth comes from reduced levels of investment.

The fall in the economy's growth potential (as a result of reduced investment) could also affect the handling of inflation in the long run. A non-competitive economy is not able to make the cost reductions necessary to maintain the profitability of firms without increasing its prices. This is particularly significant for goods and services in non-tradable sectors.

In order to materialize and consolidate the Mexican economy's growth potential, its competitiveness must be increased. Our economy needs to be more flexible to adapt to the world's changing conditions. In order for this to occur, progress must be done in different areas. First of all, the government needs more resources to invest in infrastructure and human capital, and to extend the coverage of social welfare. In addition, the productivity and efficiency of the Mexican energy sector must be raised, providing it with the proper legal framework that meets the standards of a highly integrated world. Both fiscal and energy realms concur when it comes to price determination for different oil goods. Thus, it is contradictory that due to fiscal motives, some prices of goods are not reflecting the relative abundance of oil goods, therefore raising domestic industry's costs.

At the same time, the country needs to strengthen its rule of law, consolidate its economic stability, and have more efficient and active markets. Therefore, as in previous reports, Banco de México reiterates the convenience of reaching the agreements to both implement the structural reforms and strengthen the institutional framework required by our country.