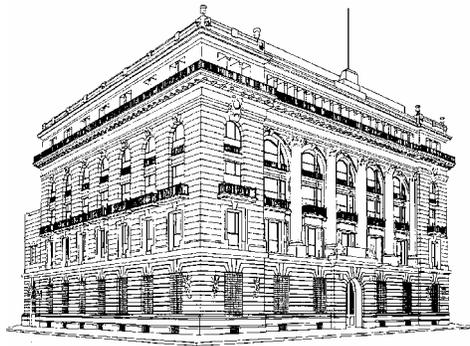


Inflation Report

April – June 2003



BANCO DE MEXICO

JULY 2003

BOARD OF GOVERNORS

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FOREWARNING

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Unless otherwise stated, this document has been prepared using data available as of July 25, 2003.

Figures are preliminary and subject to change.

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I. Introduction

During the second quarter of 2003, the path of inflation and the behavior of its main determinants were in line with the attainment of the 3 percent target (with a variability interval of plus/minus one percent) for the end of December and for the long term. Prevailing financial and monetary conditions and, in general, a weak aggregate demand, have contained inflationary pressures. Furthermore, the effects of the different supply shocks over the Consumer Price Index (CPI) in 2002 have finally dissipated, without having important consequences on the core price index. Accordingly, the gap between inflation expectations for the end of 2003 and the corresponding target narrowed significantly during the quarter. From 2004 onward, monetary policy will be focused on maintaining the long-term objective.

Annual headline inflation fell considerably during April-June 2003 due to the sharp reduction in the growth of the non-core component of the CPI, particularly, in the subindex for agricultural prices. Thus, annual non-core inflation kept converging to the target. In contrast, annual core inflation increased slightly but remained within the variability interval for the CPI inflation target. As for its components, the annual variation of the subindex for services declined while that for goods experienced a moderate upturn. This rebound is mainly explained by the atypically low increase this price subindex registered in the second quarter of 2002.

The disinflation process has evolved in an environment characterized by weak aggregate demand. On the one hand, falling industrial output in the United States has led to reduced external demand. On the other, domestic demand sluggishness prevails, since the increase in consumption has not been able to offset the contraction in investment spending.

At present, the world economy is facing overall sluggish economic activity. This has brought international interest rates down to levels unseen in the last decades, in a context in which financial conditions worldwide have loosened considerably.

Under the present scenario, and given the trend of inflation towards its target, two aspects of monetary policy need to be highlighted:

- (a) Domestic interest rates have fallen to historically low levels, reflecting the country's lower inflation and a higher liquidity in international financial markets; and
- (b) The Exchange Commission's decision to reduce the pace of accumulation of international reserves has increased, at the margin, the availability of resources for financing productive activities.

On this count, and by keeping a strict surveillance of the different indicators on inflation and its expectations, monetary policy is contributing to create favorable financial conditions that will enable the recovery of production.

The Board of Governors of Banco de México considers that, for the remainder of the year, annual headline inflation will continue its path towards the attainment of the 3 percent target while core inflation will remain within the variability interval for CPI inflation. Nonetheless, it is important to point out that this scenario is still subject to both external and domestic risks, among which the following deserve mention:

- (a) Although core inflation has remained clearly within the variability interval for more than a year, over the last months it has shown a downward rigidity;
- (b) Volatility in agricultural prices may make inflation deviate from its target by the end of the year although this would not affect the medium-term objective;
- (c) The effects of a sharp rise in LP-gas prices (which can be considered as a supply shock) would most likely not dissipate immediately; and
- (d) Recent wage settlements seem to be incompatible with the current slack in labor market conditions.

As for economic activity, concerns over a further delay in the recovery of industrial production in the United States could adversely affect the Mexican economy. Lastly, a postponement of structural reforms would continue to erode, in the medium term, the country's competitiveness.

Once inflation converges to its long-term target, Mexico's long disinflation process would come to an end. From that moment on, the goal of monetary policy would be to ensure price stability. On this count, monetary policy would then be focused on attaining the 3 percent inflation target, with a variability interval of plus/minus one percent. This range considers positive and negative shocks that might arise from adjustments in relative prices.

II. Recent Developments in Inflation

The behavior of prices during the second quarter of 2003 was overall favorable. Annual headline inflation fell significantly, supported by the behavior of prices of fruits, vegetables, and administered or regulated goods. Annual core inflation rebounded slightly. Thus, the main price indexes exhibited the following results:

- (a) Annual CPI inflation fell significantly;
- (b) Annual core inflation increased marginally due to the rise in core merchandise inflation, which was not entirely offset by the decline in that of services;
- (c) The annual rise in the core subindex for merchandises stemmed from the atypically low increases that this subindex registered in the same quarter of the previous year;
- (d) The drop in the annual variation of the subindex for agricultural prices responded to the substantial reduction in prices of fruits and vegetables;
- (e) The annual inflation of prices of goods and services administered or regulated by the public sector continued to fall, ending the quarter below annual headline inflation; and
- (f) Annual inflation of the Producer Price Index (PPI), excluding oil and services, reverted the upward trend it has shown since the second quarter of 2002.

II.1. Inflation Indicators

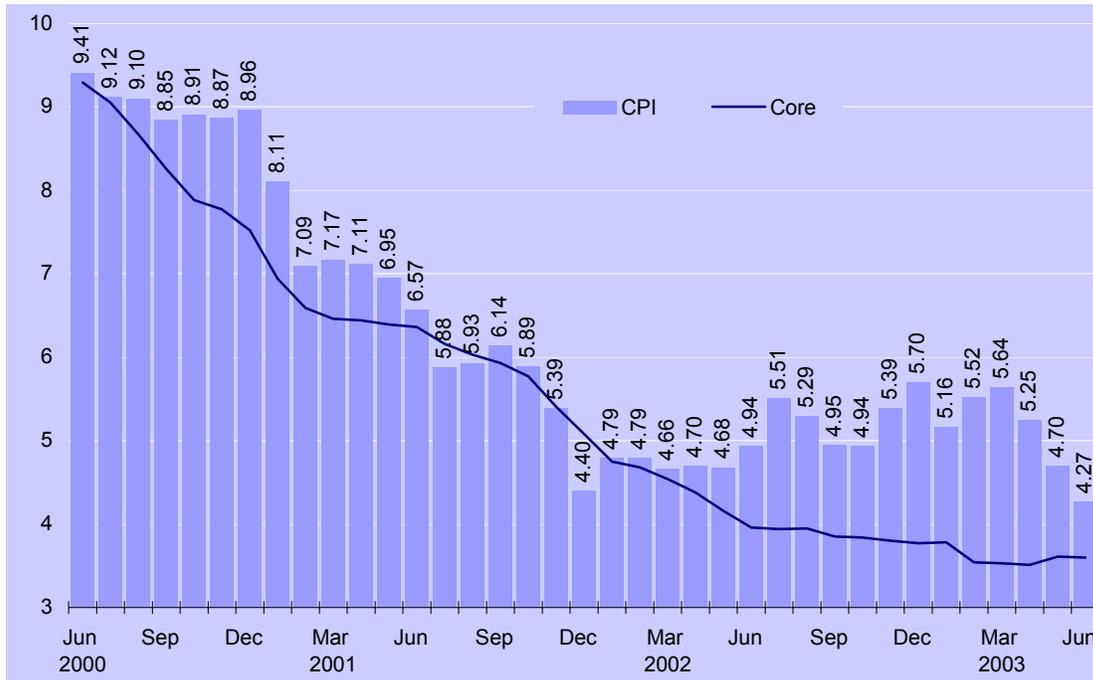
II.1.1. Annual Inflation of the Consumer Price Index and Core Price Index

In June 2003, annual CPI inflation was 4.27 percent (a reduction of 1.37 percentage points compared to March). This is the lowest inflation rate in three decades. During the same period, annual core inflation grew by a mere 0.07 percentage points, from 3.53 percent in March to 3.60 in June (Graph 1).

Graph 1

Consumer Price Index and Core Price Index

Annual percentage change



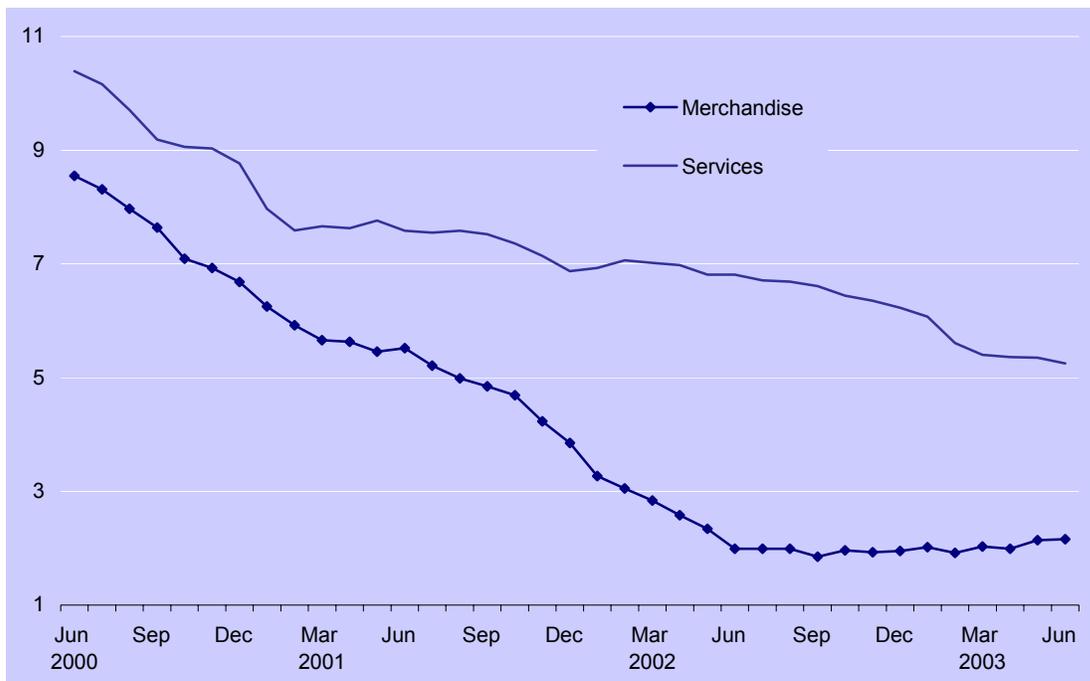
The drop in annual headline inflation during the quarter is attributed to the variation in the prices of the goods excluded from the CPI to compute the core index. In particular, both the annual inflation of agricultural products (Section II.2.6) and that of prices administered or regulated by the public sector dropped significantly (Table 1). This mainly responded to the fall of electricity tariffs which was relatively sharper than that of last year due to the beginning of the summer season in 13 northern cities (Section II.2.5).

At the end of June 2003, annual core inflation of goods turned out to be 2.16 percent (an increase of 0.13 percentage points compared to March). This rebound is mainly explained by the atypically low increases that this price subindex registered in the same quarter of the previous year, as confirmed by the monthly average percentage change of the subindex for goods (0.11 percent compared to 0.07 percent during the same period of 2002). Regarding inflation of services, this decreased from 5.40 to 5.25 percent (at an annual rate) during the same period (Graph 2).

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

	Annual Variations			Quarterly Variations		
	Jun 2003/	Mar 2003/	Jun 2002	Jun 2003/	Mar 2003/	Jun 2002
	Jun 2002	Mar 2002	Jun 2001	Mar 2003/	Dic 2002	Jun 2001
CPI	4.27	5.64	4.94	-0.07	1.32	1.24
Core	3.60	3.53	3.96	0.78	1.43	0.71
Merchandise	2.16	2.03	1.99	0.34	1.09	0.20
Services	5.25	5.40	6.81	1.28	1.81	1.43
Agricultural	6.09	13.42	5.15	-1.54	-0.77	5.27
Fruits and Vegetables	6.49	28.90	12.82	-3.88	-6.55	16.34
Meat and Eggs	5.81	4.37	0.42	0.11	3.73	-1.25
Education	10.31	10.24	13.16	0.26	1.17	0.20
Administered and Regulated	4.21	8.22	6.93	-2.80	1.93	0.95
Administered	6.86	15.02	7.27	-6.16	3.09	1.00
Regulated	2.01	2.60	6.66	0.33	0.88	0.91

Graph 2 Core Price Indexes for Merchandise and Services
Annual percentage change



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

During April-June 2003, monthly CPI inflation remained on a downward trend (Graph 3). Moreover, monthly observed inflation was significantly below the forecasts of private sector

economic analysts. The maximum difference was in May, when observed and expected inflation were -0.32 and 0.24 percent, respectively (Table 2).

Table 2 **Observed and Expected Monthly Inflation**

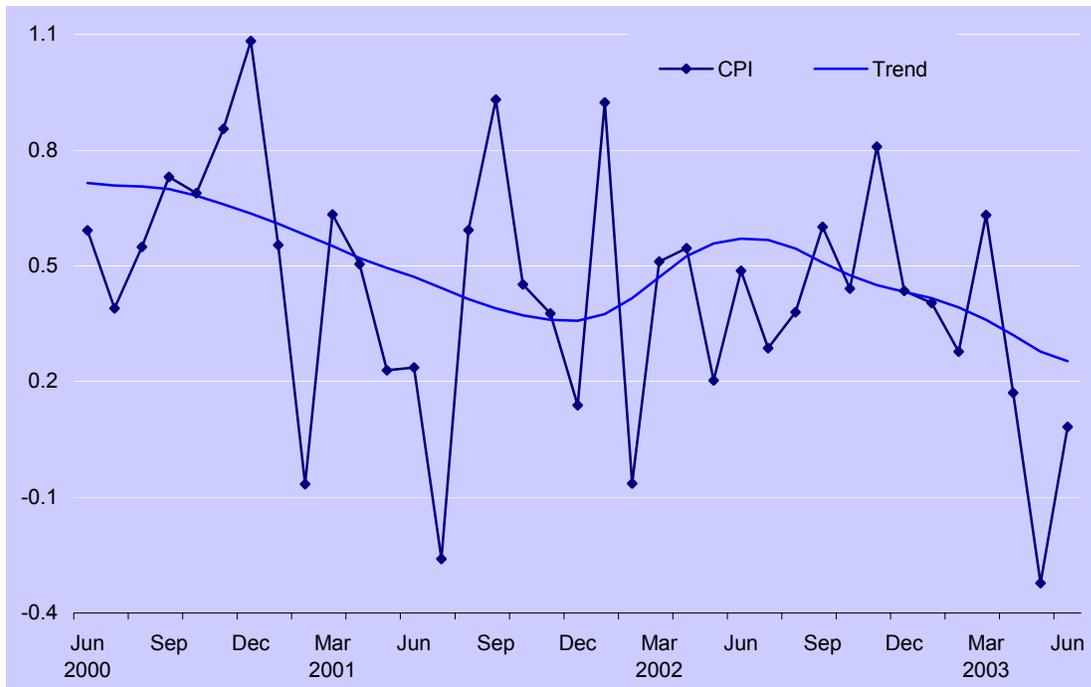
Monthly percentage change

	2003		2002	
	Observed	Expected ^{1/}	Observed	Expected ^{1/}
April	0.17	0.36	0.55	0.37
May	-0.32	0.24	0.20	0.22
June	0.08	0.29	0.49	0.24

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

Graph 3 **Consumer Price Index**

Monthly percentage change



II.1.3. Producer Price Index (PPI)

At the end of the second quarter of 2003, the annual variation of the PPI excluding oil and services was 5.71 percent. This compares with the 8.34 percent observed during the previous quarter. This reduction reverted the upward trend this indicator had

followed since the second quarter of the previous year, and was mainly due to the fall in the exports component of the PPI (excluding oil and services).

II.2. Main Determinants of Inflation

II.2.1. International Environment

During the second quarter of 2003, several external factors had a significant impact on the Mexican economy. Economic activity was affected by the unexpected delay in the recovery of the most important world economies. In particular, Mexico suffered from low industrial activity in the United States, due to the latter's close link with Mexican manufacturing exports. An additional factor was the reduction in oil export prices, whose high levels during the previous quarter contributed to stronger public finances. However, oil prices remained above Federal budget estimates. Once the prevailing geopolitical uncertainties cleared, the Mexican economy was favored by an improvement in the conditions for access to external capital markets.

II.2.1.1. Oil Prices

During the reference period, the average WTI oil price was 29.05 US dollars per barrel, five dollars less than that of the first quarter of 2003. This fall mainly responded to reduced uncertainty once the war in Iraq ended. The recovery of oil production in Venezuela contributed as well to such figure. Despite the latter, oil prices rebounded by mid-quarter due in part to low inventories in the United States and smaller than expected oil production in Iraq.

In April-June 2003, the price of the Mexican oil export mix was, on average, 22.46 US dollars per barrel. This figure is 4.53 dollars lower than that of the first quarter, but 4 dollars higher than the annual average used in Federal budget estimates for 2003. During the aforementioned period, the average differential between Mexican oil export and WTI oil prices was 6.62 US dollars per barrel, slightly lower than the first quarter's 6.84 US dollars per barrel. Although this differential continued to be above average figures since 1996 (4.80 US dollars per barrel), by the end of the third quarter it dropped to almost five dollars per barrel.

II.2.1.2. Developments in the United States Economy

After having experienced a weakening of the recovery process since Autumn of 2002, the United States economy exhibited mixed results during the second quarter of 2003. Despite the fact that production has continued to expand, it has not reached an adequate rate of growth to overcome idle capacity and offset the sharp fall in employment. The delay of economic recovery in the first quarter was attributed, to a great extent, to the uncertainty regarding the war in Iraq. This delay translated into quarterly GDP growth of 1.4 percent (in real terms). Despite the reduction of uncertainty in world financial markets once the war ended, the economy continued weakening during the second quarter. Thus, a small growth in GDP is foreseen for this period. As for industrial production, this contracted 1.7 percent from July 2002 to June 2003 (month in which it was slightly above the minimum levels observed in December 2001).

Sluggish economic activity has led to a slackened labor market. The rate of unemployment rose from 6.1 percent to 6.4 percent in May and July, respectively, whereas payroll employment fell by 236 thousand workers in 2003. This, along with other factors, led the National Bureau of Economic Research (NBER) to postpone for a long period its determination of recession's official ending date (Box 1).

Despite the unfavorable labor market conditions, consumption has remained strong, driven by an increase in households' indebtedness (particularly from mortgage refinancing) and by a recovery of confidence. Just like in previous quarters, the pick up in demand has relied on household spending, without showing clear signs of an expansion in investment by firms. The adoption of new projects by firms (which have made efforts to strengthen their financial position, mostly because of accrued liabilities from their workers' pension programs) may have been reduced by the uncertainty originated by last year's corporate scandals. Moreover, excess installed capacity has discouraged firms' decision to expand their factories and equipment, especially in the non-residential construction sector.

Box 1 Remarks on the End of the Recession in the United States

The Business Cycle Dating Committee of the National Bureau of Economic Research (NBER) is the panel in charge of determining the beginning and ending dates of recessions (and thus, of expansions) of business cycles in the United States. On July 17th 2003 the Committee announced that, despite the contraction of employment and unfavorable behavior of industrial production, the recession, which had begun in March 2001, ended on November 2001.

How are peaks and troughs in a business cycle determined?

The Committee does not use a fixed rule to identify the exact dates of peaks and troughs in a business cycle. This decision is based on an assessment of different monthly indicators of economic activity in the U.S. such as a) personal income less transfer payments; b) employment; c) industrial production; and d) volume of sales of the manufacturing and wholesale-retail sectors. The Committee also looks at quarterly series for GDP as well as monthly estimates for this series.¹

A necessary condition to mark the end of a recession is that economic activity surpasses its previous peak. Nonetheless, this is not sufficient. If economic activity exceeds its previous peak but goes again into a slump, the Committee might judge that this downturn is part of the previous recession and, therefore, does not constitute a new one.

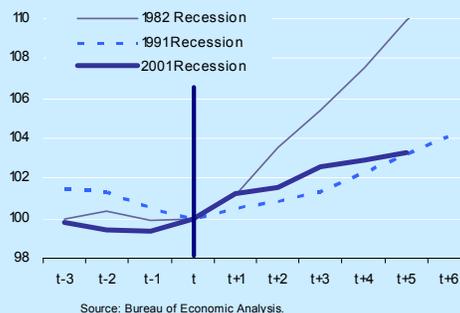
How did the Committee determine the ending date of the recession?

Over the last quarters, GDP growth in the United States has depended basically on the strength of consumer expenditure and has not been reflected in an increase in employment. The adjustment of corporate costs, and higher productivity gains have created a continuous slack in the labor market, greater than that observed in the recovery period at the beginning of the nineties (the so-called “job-less recovery”). Employment has not only been unable to reach its peak prior to February 2001 but rather, from that date onward, the total non-farm payroll has fallen by 2.6 million units, one million more job losses than in the previous recession (June 1990-February 1992). Nonetheless, and despite the fact that industrial output registered a meager recovery compared to its previous trough, the Committee pinpointed November 2001 as the ending date of the recession.

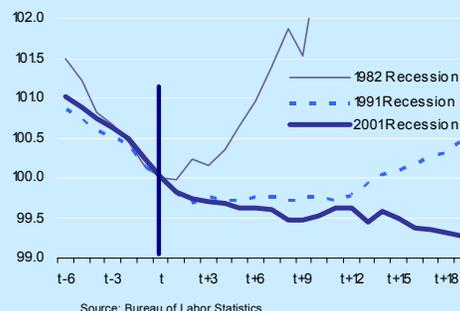
This decision is based on the favorable performance of GDP, which has exceeded, after three quarters, the peak of the first quarter of 2001. From that moment on, GDP has continually expanded. Compared to its lowest point (recorded during the third quarter of 2001), GDP has increased 4 percent. The fact that the broadest indicator of economic activity surpassed by far its level prior to the recession influenced the Committee’s decision that any other fall in economic activity should be considered as a separate event and, therefore, that the current recession had lasted from March to November 2001. Personal income and sales, which also topped their previous peaks, further contributed to the panel’s decision.

In sum, the Committee determined that the recession had ended and a new period of expansion had resumed in November 2001. However, this does not imply that from that date onward economic conditions have been favorable or that the economy has regained its full potential.

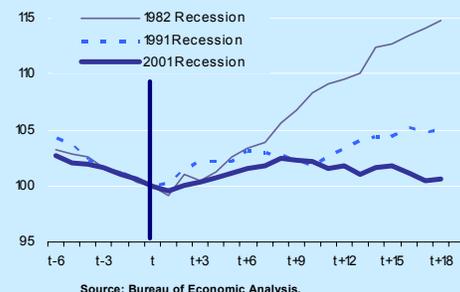
Graph 1²
Real Gross Domestic Product



Graph 2
Employment: Non-farm Payroll



Graph 3
Industrial Production



¹ This means that in addition to observing two consecutive quarters with negative growth, there are other variables that need to be considered when determining the starting date of a recession.

² Variables in graphs have been normalized to a value of 100 for period t, which corresponds to the date of the trough of each business cycle: November 1982 for the 1981-1982 recession, March 1991 for the 1990-1991 recession, and November 2001 for the recession in 2001. Periodicity in the Non-farm Payroll and Industrial Production graphs is monthly, whereas in that for GDP is quarterly.

Modest GDP growth has been reflected in a slow recovery of imports. This, together with the contraction in exports, has deteriorated the trade balance and forestalled the country's economic recovery.

During the second quarter, there was a considerable change in financial market sentiment in the United States, which will likely tend to foster demand over the next quarters. The loosening of monetary policy has created more favorable financial conditions by reducing interest rates to historically low levels and allowing a significant depreciation of the US dollar, particularly against the euro. Furthermore, risk premiums over corporate bonds have also diminished substantially. It is important to point out that the reduction in interest rates (especially long term) and in risk premiums can be attributed, at least to some extent, to the lower demand for credit stemming from the weak outlook in capital expenditure. Despite the latter, the existence of more relaxed monetary conditions will favor those domestic demand components that are more sensitive to interest rate variations, such as durable goods' consumption and residential investment. The continuous strength of the real estate market is a clear example of such effect. Following the same behavior, stock markets also rebounded after the war in Iraq ended.

Another noteworthy event that will likely spur economic growth during the second half of the year was the passing by Congress of tax cut measures totaling 330 billion US dollars for the next 10 years, as well as transfers to state governments for 20 billion to be assigned over the next two years. For fiscal year 2003, incentives have been estimated at 61 billion US dollars, of which more than half constitute lower individual income taxes. This last measure could give a further boost to consumption in the second half of the year. The new fiscal package, together with expenditures generated by the war in Iraq, have led the Congressional Budget Office (CBO) to adjust its estimated fiscal balance for 2003, from a deficit of 287 billion US dollars to one of more than 400 billion, more than one percentage of GDP. Although the effects of the new fiscal package will be mostly felt in 2004, it does represent a major shift in public finances' outlook for the medium term (negative balances are expected to prevail until 2013).

Thus, at the end of the second quarter, the United States economy continues exhibiting mixed results and recovery has not been fully achieved. On one hand, the improvement in consumers' confidence, looser financial conditions, and fiscal incentives point to an upturn in domestic demand in the second half of 2003. This

has kept economic analysts' forecasts of a swift recovery of the U.S. economy unchanged. On the other, the improvement in several U.S. economic indicators has not been reflected in industrial production or non-residential fixed investment. The upturn of the latter is fundamental to ensure a robust and long-lasting recovery. Although productivity gains and firms' efforts in cost restructuring allow to foresee greater earnings, there are still no signs of a decisive change in firms' plans for expansion.

Even if the United States' economy recovers during the second half of 2003, it will still be subject to certain disequilibria which, eventually, will have to be addressed. Most of these stem from public and private sectors' financial imbalances (especially those related to public finances) and from U.S. households' high level of indebtedness. These stock problems have as flow counterparts the fiscal deficit, a decline in personal savings, and a bulging deficit in the balance of payments' current account.

Based on the above, private sector analysts expect GDP growth to be below 2 percent (at an annualized rate) for the second quarter of 2003 and then jump to 3.5 percent during the following quarters. Thus, for the year as a whole, GDP growth is expected to average around 2.2 percent (Table 3).

Table 3

Forecasts for GDP Growth in the United States in 2003

Annual percentage change

	April 2003		July 2003	
	II-2003 ^{1/}	2003	II-2003 ^{1/}	2003
Consensus Forecasts ^{2/}	2.0	2.3	2.0	2.2
Blue Chip Economic Indicators ^{3/}	2.2	2.4	1.9	2.3
Economic Analysts (Average) ^{4/}	1.6	2.2	1.4	2.2

1/ Annualized quarterly percentage change of seasonally adjusted series.

2/ April 7th and July 14th 2003 issues of the *Consensus Forecasts*, except for quarterly estimates, which correspond to the March 10th and June 9th issues.

3/ Blue Chip Economic Indicators (March 10th and July 10th 2003).

4/ Average of brokerage firms (Deutsche Bank, Goldman Sachs, J.P. Morgan and Merrill Lynch). April 25th and July 21st 2003).

Inflationary pressures diminished significantly during the first months of the year. CPI core inflation reached its lowest figure in 37 years (1.5 percent in June, at an annual rate) by falling nearly one percentage point as compared to 2002. On the same count, inflation expectations have also been adjusted downward¹. This

¹ Economic analysts surveyed by the Consensus Forecasts have revised downward their forecasts for CPI inflation in the United States during 2004, from 2.3 percent in January 2003 to 1.8 in July of the same year.

reflects the persistence of lower than potential growth and the expectation that the output gap will start narrowing gradually until 2004 (once the economy begins to pick up).

On June 25th 2003 the Board of Governors of the Federal Reserve announced its decision to cut the federal funds rate by 25 basis points to 1 percent, its lowest value since 1963. The monetary authority judged that a slightly more expansive monetary policy would add further support to the incipient economic recovery. This decision reflected the Federal Reserve's interpretation that risks concerning the attainment of sustainable growth are balanced, while the probability of a greater disinflation exceeds that of an upturn in inflation (Box 2).

Box 2 Deflation: Meaning and Implications

Deflation can be defined as “a general decline in prices, with emphasis on the word ‘general’.[...] Sector-specific price declines, uncomfortable as they may be for producers in that sector, are generally not a problem for the economy as a whole and do not constitute deflation”.¹ The CPI core index in the United States has registered very low growth rates in 2003, thus sparking off discussions on the probability of this country entering into deflation. The Federal Reserve has also referred to this risk in its recent announcement of monetary policy decisions.² As mentioned in its press release of June 25th 2003, the risks of having “an unwelcome substantial fall in inflation”, although minimal, are higher than the risk of rising inflation.

Deflation usually arises from a sudden and sharp fall in aggregate demand (which can sometimes be gradual) in a context of a very low inflation.³ The latter suggests that in normal times the inflation target must be kept strictly above zero, and that the best way to prevent a deflationary episode is by using economic policies assertively to offset adverse demand shocks.

Deflation can have strong negative effects, especially on economic activity:

- Deflation redistributes income from debtors (who have high propensity to spend) to creditors (who more likely do not spend).
- In a context of deflation, nominal interest rates drop and may even reach their lowest limit (zero). At this point, a worsening deflation pushes real interest rates up, further diminishing economic activity.
- In combination with downward-rigid wages, deflation increases real labor costs, lowering profits and competitiveness, and creating unemployment.
- The real value of debt increases, haltering its service and jeopardizing the financial health of financial intermediaries.

The likelihood of nominal interest rates dropping to zero represents a challenge for monetary authorities. As part of their monetary policy, many central banks use operative targets for determining very-short-term nominal interest rates. One might think that once interest rates are cut to zero the central bank loses its power to affect monetary conditions and aggregate demand. However, such interpretation is mistaken. In general, funding and investment costs are linked to long-term nominal interest rates, which remain on an upward trend even when short-term interest rates are cut to zero. Furthermore, the central bank can affect long-term interest rates in several ways. For example, it can commit itself to maintain a fixed short-term interest rate for a relatively long period; announce and insure (via open market operations) a low nominal interest rate for medium and long-term instruments; and grant credit to commercial banks through different guarantees. Moreover, it can also buy private financial assets or finance a larger public deficit.⁴ Although some of these measures have already been used in the past, their current implementation is subject to an unusual degree of uncertainty due to recent lack of experience. Furthermore, the implementation of such measures would also require special attention given the likelihood of adverse collateral effects. Nonetheless, there is no doubt that monetary authorities count on a broad array of instruments to affect monetary conditions even during episodes of deflation.

Since World War II, there have been very few deflation experiences. At present, Japan is the country with the most clear-cut case of deflation. Most recently, the only Latin American country that experienced an episode of deflation was Argentina during the last years of the *convertibility* regime. However, both examples are different. In Argentina, deflation was the only way in which relative prices of non-tradable goods could be brought down to revert the real appreciation of its currency. In Japan, a country which operates under a floating exchange rate regime, deflation arose instead from a more conventional cause: a large adverse shock to demand. Exchange rate flexibility provides the Bank of Japan with the necessary instruments to fight deflation. Nonetheless, in practice, successful monetary policy actions in this country have been limited. Deflation was already entrenched when policy actions were just being implemented. Moreover, these actions have taken place in a context of world economic downturn and surrounded by a financial crisis in that country. Also, the existence of a large public deficit has limited the government’s power to support monetary policy actions to abate deflation.

¹ Ben Bernanke, member of the Board of Governors of the Federal Reserve System, speech given at the National Economists Club on November 21, 2002. From this definition it is clear that the economic conditions in Mexico in May 2003, when the CPI dropped because of seasonal factors, are not related in any way with deflation.

² Alan Greenspan, Chairman of the Board of Governors of the Federal Reserve System, stated that the United States is nowhere close to sliding into deflation. See speech given at the Economic Club of New York on December 19, 2002.

³ For a detailed description on the possible causes and effects of deflation, see International Monetary Fund, “Deflation: Determinants, Risks and Policy Options”, Washington D.C., April 2003; Paul Krugman, “Can Deflation be Prevented?”, available on Internet (<http://web.mit.edu/krugman>); and M. Koumar, “Deflation: The New Threat”, in *Finance and Development*, June 2003.

⁴ In some countries, the implementation of this type of measures may require changes to the law.

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

The Euro Zone economy remained stagnant during the second quarter of 2003. Thus, the European Commission revised downward its growth forecast for that period to 0-0.4 percent (using quarterly seasonally adjusted data)². Among the factors undermining a likely rebound are the low levels of business and consumer confidence indicators. Despite smaller geopolitical tension, these indicators continued to be affected by short-term domestic risk perceptions, among which the weak fiscal position of the most important economies in the region (which forestalls the implementation of countercyclical fiscal measures) and rising unemployment are noteworthy. Furthermore, the appreciation of the euro continued having a negative effect on exports, thus affecting industrial production.

Nonetheless, the European authorities and different analysts still expect an upturn in economic activity during the second half of the year, although it will take time and will gain momentum until 2004. A more flexible monetary policy should also add to this outlook given that it has been eased by the absence of inflationary pressures (both headline and core inflation have recently been below the 2 percent limit set by the European Central Bank, ECB). On this count, the ECB decided to reduce its discount rate by 50 basis points.

The outlook for the Japanese economy improved slightly during the second quarter, after the slump observed at the beginning of the year (economic activity grew a mere 0.1 percent during January-March 2003). June's Tankan survey indicates that an improvement in business confidence has brought along more plans for investment, while indicators of purchase orders for capital goods continue pointing in the same direction. However, the decline in employment and in households' income has resulted in low consumer spending. Under these circumstances, and given the persistent deflationary outlook, during the last days of April the Bank of Japan decided to provide more liquidity to the market and make its money market operations more efficient. Thus, the central

² In the first quarter of 2003, the economy of the Euro Zone grew 0.1 percent compared to the previous quarter. Nonetheless, during the same period Germany entered into a technical recession by exhibiting negative growth (-0.2 percent) for a second consecutive quarter (a new contraction is also expected for April-June). Italy's economy also contracted, without going into recession (it improved slightly in the last quarter of 2002). During the first quarter of 2003, France reverted the fall suffered during the previous period by growing 0.3 percent. Nonetheless, new worsening conditions may have arisen in this country during the second quarter of 2003.

bank adopted the unusual practice of including in its open market operations the purchase of bonds of small and medium companies³. Up to date, these changes have not met the expected results.

The economic situation of the main Latin American countries has stabilized, and the conditions for gaining access to international markets has improved in most countries of the region as compared to last year. However, expectations for 2003 are still of a modest GDP growth, partly because the Venezuelan economy plummeted during the first quarter as a result of its domestic political turmoil⁴.

Confidence levels have improved considerably in Brazil since the country's past elections⁵. The new government has strongly and continuously been implementing the necessary macroeconomic policies to attain economic stability. Moreover, it has also started the process for adopting structural reforms, particularly in the matters of social security and the fiscal system. However, in a context of weak aggregate demand, production has been sluggish. As for monetary policy in this country, this has been conducted properly to abate inflation. Inflationary pressures have eased while inflation expectations have been adjusted downward and the real has appreciated. In light of the above, the central bank recently cut its reference interest rate, thus reverting the upward trend followed since October 2002. This measure could also lower real interest rates, which are still very high (nearing double digits).

Economic activity in Argentina has gone up markedly as compared to last year's depressed conditions. Inflation has tapered off and, after having been above 40 percent at December 2002, the annual rate has currently settled at 10 percent. Progress made in the economic stabilization process has improved confidence in the Argentinean economy, as seen by the peso's appreciation against other currencies. Under this context, Argentina's monetary authorities have intervened in the exchange market to moderate the appreciation. Nonetheless, during the second quarter several signs pointing to a feeble recovery emerged; in particular, the end of industrial production's swift recovery in April. Despite the relative improvement in domestic economic conditions during the last year,

³ These are done via the purchase of financial instruments backed by commercial paper issued by companies. In order to further develop such market while, at the same time, ensure the financial strength of the central bank, the total amount authorized for these operations is one billion yens. Operations began on July 2003 and will end on March 2006.

⁴ Analysts surveyed by the Latin American Consensus Forecasts estimate regional real GDP growth in 2003 at 1.5 percent.

⁵ Mirroring markets' greater confidence, the EMBI+ Index for surcharge on Brazil's sovereign bonds declined almost 250 basis points.

the new administration, which took over in May 2002, faces major challenges. Specifically, it will have to solve structural problems related to public finances, public debt (domestic and external), and bank regulation, among others. The renegotiation of the large external debt and the settlement on its payment arrears constitute an important step in Argentina's reintegration to world capital markets.

II.2.2. Earnings and Employment

During the second quarter of 2003, Mexico's labor market remained stagnant. On one hand, unemployment rose slightly as compared to the previous quarter, and formal employment contracted. Moreover, sluggish productive activity continued to induce migration of employment from the formal to the informal sector, an event that will probably reduce the country's average productivity. On the other hand, contractual wage increases maintained a downward rigidity, ending the quarter slightly above 5 percent.

II.2.2.1. Earnings

On April 2003, both nominal and real earnings in all sectors for which information is available exhibited lower annual variations than those observed in the first quarter of 2003 (Table 4).

Table 4 **Earnings per Worker**
Annual percentage change

	Nominal						Real					
	2003				Average	Average	2003				Average	Average
	Jan	Feb	Mar	Apr	Mar-Apr 2003	Jan-Apr 2003	Jan	Feb	Mar	Apr	Mar-Apr 2003	Jan-Apr 2003
Manufacturing Industry	6.2	6.2	6.6	5.6	6.1	6.2	1.0	0.7	0.9	0.3	0.6	0.7
In-bond Industry	6.8	6.3	6.0	5.3	5.7	6.1	1.5	0.7	0.3	0.1	0.2	0.6
Commerce	12.8	10.1	9.5	7.2	8.3	9.8	7.3	4.4	3.6	1.8	2.7	4.2

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

In these same sectors, labor productivity recorded negative annual variations in April, while unit labor costs exhibited positive annual growth rates. Of course, this increase stemmed from both falling productivity and higher real earnings (Table 5).

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

	Output per Worker						Unit Labor Costs					
	2003				Average	Average	2003				Average	Average
	Jan	Feb	Mar	Apr	Mar-Apr 2003	Jan-Apr 2003	Jan	Feb	Mar	Apr	Mar-Apr 2003	Jan-Apr 2003
Manufacturing Industry	2.4	3.3	5.5	-3.7	0.7	1.7	-1.4	-2.6	-4.3	4.2	-0.3	-1.1
In-bond Industry	1.3	0.8	2.9	-2.3	0.3	0.7	0.2	-0.1	-2.4	2.4	-0.1	0.0
Commerce	-0.3	0.1	3.2	-2.0	0.6	0.3	7.5	4.2	0.4	3.9	2.2	4.0

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

Regarding the above, it is worth mentioning that the fall in productivity and the rise in unit labor costs in April were distorted by the statistical effect of the Easter holiday⁶, which affected the number of working days included in each month and, thus, the base of comparison. When analyzing the average in March-April, output per worker increased 0.7 percent in the manufacturing industry, 0.3 percent in the in-bond industry, and 0.6 percent in the commerce sector. These figures, together with those corresponding to real average earnings per worker in March and April, resulted in unit labor cost changes (for the same months) of -0.3 percent in the manufacturing industry, -0.1 percent in the in-bond industry, and 2.2 percent in the commerce sector (Table 5).

II.2.2.2. Contractual Wages

Contractual wages rose, on average, 5.1 percent, the same rate as in the previous quarter. The average quarterly increase was not particularly affected by June's 5.7 percent hike, since only a small number of wage agreements are made during this month.

During April-June 2003, the gap between wage increases and expected inflation for the following 12 months averaged 0.94 percent. This divergence may be compared with the previous quarter's figure of 0.72 percent. Such increase was a response to inflation's upturn in June (1.39 percent), the highest in the first half of the year (Graph 4).

⁶ Easter's holiday in 2002 took place in March while in 2003 it took place in April.

Graph 4 Contractual Wages and Expected Inflation for the Following 12 Months
Annual percentage change



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

During the second quarter of 2003, contractual wage increases in private and public enterprises exhibited a difference of 0.3 percentage points. In contrast, last quarter, such disparity amounted to 0.9 percentage points (Table 6). It is important to point out that this gap has narrowed due to higher wage increases in public enterprises.

Table 6 Contractual Wages by Sector and Type of Business
Annual percentage change weighed by number of workers

	2002			2003						
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun*	Jan-Jun*
Total	4.8	5.2	5.8	5.2	5.0	5.0	5.0	4.9	5.7	5.1
Public Enterprises	4.5	4.3	7.0	4.3	4.3	4.3	4.3	5.0	5.7	4.7
Private Enterprises	5.8	5.4	5.8	5.4	5.0	5.3	5.4	4.9	5.7	5.3

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

II.2.2.3. Employment

During April-June 2003, the different employment indicators remained weak. Thus, by the end of June, there were

12,205,240 workers with social security benefits by the IMSS (permanent and temporary urban workers), 2,059 less than March's figure (Graph 5). This reduction compares unfavorably with the nearly 103 thousand jobs that were created during the same quarter of 2002. As for the structure of formal employment, during the second quarter of 2003, the number of permanent workers insured by the IMSS declined by almost 36 thousand individuals, while that of temporary urban earners rose by approximately 34 thousand. In short, during the mentioned period, formal employment fell by more than 2 thousand posts while its current structure continued shifting markedly from permanent to temporary wage earners.

It should be mentioned that during this quarter, seasonally adjusted series for permanent and temporary urban workers with public benefits by the IMSS reveals more than 41 thousand job losses.

As for figures by sectors of the economy, the number of workers with IMSS benefits in the services sector rose by nearly 27 thousand individuals, of which 6 thousand corresponded to the commerce sector. In contrast, the number of workers in agriculture and in industry fell by 171 thousand and 29 thousand, respectively⁷.

The latter indicates that the structure of formal employment has continued to favor temporary jobs and employment in the services sector rather than in the industrial sector. This phenomenon may be affecting all sectors of the economy and inducing migration from formal to informal employment, therefore cutting overall average productivity.

Changes in the structure of labor demand could also respond to the prevailing labor market rigidities. On this count, the number of employees not receiving benefits during April-June 2003 increased from 48 to 49 percent compared to the first quarter, while wage-earners not receiving benefits increased from 24 to 25 percent⁸.

During the second quarter, the main unemployment indicators rose slightly as compared to the previous quarter. The average open unemployment rate was 2.95 percent, while in the

⁷ Figures for total number of workers with IMSS benefits by economic activity (nearly 173 thousand less workers in the second quarter of 2003) do not match those corresponding to the total number of permanent and temporary urban workers in 2003-II (2,059 workers). This is due to the fact that IMSS classification by economic activity includes workers in the agricultural, industrial and services sectors insured by the IMSS, as well as other insured workers such as temporary workers employed in farm activities, other temporary workers, and independent workers.

⁸ Figures drawn from the National Survey of Urban Employment (INEGI).

Aggregate supply and demand grew at annual rate of 1.9 percent (in real terms) during January-March 2003, due to a hike in all of their components (Table 7). Nonetheless, this growth rate was driven by the statistical effect of the Easter holiday which, during 2002, took place in March. Using seasonally adjusted data, aggregate supply and demand grew by a mere 0.4 percent (at an annual real rate).

On the aggregate supply side, its annual increase during the first quarter stemmed from both GDP and imports of goods and services, which grew 2.3 and 0.8 percent, respectively. As for aggregate demand, consumer expenditure rebounded during the first quarter after having slowed down in the third and fourth quarters of 2002. This recovery was driven by higher purchases of both non-durable goods and services (4 percent), as well as durable goods (2.5 percent). During the same period, public spending also expanded. The annual growth in investment resulted from both a fall in private investment and rising public investment. As for gross capital investment, its machinery and equipment component declined at an annual rate of 2.6 percent, while that of construction rose 5.9 percent (within this component, residential construction exhibited a significant growth rate).

Table 7 **Aggregate Demand and Supply in 2002 and 2003**
Annual percentage change

	Real Annual Percentage Change						Real Quarterly Percentage Change (Seasonally Adjusted Series)				
	2002					2003	2002				2003
	I	II	III	IV	Annual	I	I	II	III	IV	I
Aggregate Supply	-2.8	2.4	2.6	2.1	1.1	1.9	0.4	1.6	0.4	-0.2	-1.5
GDP	-2.2	2.0	1.8	1.9	0.9	2.3	0.5	0.9	0.6	0.0	-0.5
Imports	-4.5	3.5	4.8	2.5	1.6	0.8	0.3	3.7	-0.2	-0.5	-4.1
Aggregate Demand	-2.8	2.4	2.6	2.1	1.1	1.9	0.4	1.6	0.4	-0.2	-1.5
Total Consumption	-1.5	2.5	1.7	0.8	0.9	3.3	-0.3	1.6	-0.1	0.1	0.5
Private	-1.6	3.1	2.0	1.2	1.2	3.6	-0.2	1.8	-0.1	-0.1	0.8
Public	-1.1	-1.7	-0.8	-1.3	-1.3	1.1	-1.1	0.1	0.0	1.3	-1.0
Total Investment	-6.9	2.8	-0.8	0.0	-1.3	0.6	0.4	1.3	-1.3	-2.0	-0.1
Private	-5.9	1.3	-1.5	-5.2	-2.8	-1.7	-0.3	0.0	0.9	-5.5	-0.2
Public	-13.2	13.8	3.6	18.6	7.3	16.7	4.1	8.7	-12.0	18.1	0.3
Exports	-6.7	3.1	6.0	3.4	1.4	3.9	0.7	2.9	1.1	-2.5	1.6

Source: Banco de México and INEGI.

During the first quarter of 2003, annual GDP growth resulted from an expansion in the industrial (1.8 percent) and services (2.8 percent) sectors, as well as from a decline in agriculture (0.2 percent).

Although GDP expanded (at an annual rate) during the first quarter of the year, seasonally adjusted data point to a contraction of 0.5 percent in relation to the previous quarter. This result stemmed from the fact that the quarterly increases of private consumption and net exports were not able to offset the negative variations of gross capital formation, public expenditure, and of a sharp inventory adjustment. These results also show that the current structure of aggregate demand, in which consumption has a high share in GDP in relation to investment, does not foster the attainment of high and sustained growth, needed to spark the recovery of employment. Besides, reduced capital accumulation leads to lower GDP growth. It is important to point out that the behavior of both aggregate demand and industrial output in Mexico has mirrored the performance of those same aggregates in the U.S. (Section II.2.1).

Although seasonally adjusted data (at the margin) and those calculated at an annual rate provide different results, in general, they both concur in the same scenario for the Mexican economy: sluggish economic activity and weak domestic demand. Moreover, both sources of information indicate a higher share of consumption (rather than investment) in aggregate demand.

Available information on the recent behavior of economic activity suggests that the Mexican economy grew at a slow pace during 2003-II. On the side of production, several indicators point to a modest recovery:

- (a) In May, the Global Indicator for Economic Activity (*Indicador Global de Actividad Económica, IGAE*) did not change in relation to the same month of 2002. However, during January-May it grew at an annual rate of 1.2 percent;
- (b) In May, industrial output contracted at an annual rate of 2.3 percent mostly due to the weak performance of the manufacturing sector, which fell 3.5 percent. During that month, and using seasonally adjusted data, both industrial and manufacturing output dropped 1 and 0.9 percent, respectively, compared to April;
- (c) During the second quarter, both exports and imports of merchandises posted negative annual growth (except in June), mirroring the prevailing weakness of external and domestic demand (Section II.2.4);

- (d) At the end of June there were still no signs of an upturn in labor demand and formal employment in the manufacturing sector contracted severely (Section II.2.2); and
- (e) The Leading Cyclical Indicators prepared by different institutions (Banco de México and The Conference Board) suggest economic activity will grow moderately over the next months.

Indicators for domestic demand components point to a continuing boost in consumption and to an improvement in certain items of investment spending. The latter suggests that in the second half of the year, aggregate demand components may exhibit a more homogeneous growth, mainly favored by historically low interest rates. The following indicators deserve mention:

- (a) In May and June different indicators for retail sales exhibited annual increases;
- (b) In June, car retail sales grew moderately at an annual rate;
- (c) During the same month, performing credit granted by commercial banks to the private sector continued to expand (Section III.2.2);
- (d) During March and April, investment performed better than in the first two months of the year. Based on seasonally adjusted data, it expanded at an annual rate in March as well as in April;
- (e) By June, imports of capital goods had accumulated four consecutive months of growth (seasonally adjusted rates); and
- (f) Different confidence and business climate indicators, such as the Consumer Confidence Index and the Manufacturing Business Confidence Index, performed better during the second quarter of 2003⁹. During such period, the Private Sector Economic Analysts Confidence Index posted mixed results; nevertheless, June's results exceeded those of March¹⁰.

⁹ The former is prepared jointly by INEGI and Banco de México while the latter, by Banco de México.

¹⁰ Prepared by Banco de México.

It is important to mention that annualized supply and demand figures will be affected by the negative statistical effect of the Easter holiday. As a result, annual GDP growth is expected to have been approximately 0.3 percent during the second quarter of 2003, meaning that aggregate demand did not stir up inflationary pressures and will not likely do so for the remainder of the year.

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

During the second quarter of 2003, Mexico's external sector was characterized by the following: a) reduced exports (particularly, non-oil) as well as merchandise imports; b) small trade balance and current account deficits; c) increased household remittances from Mexican workers abroad; d) a smaller capital account surplus than the one recorded during the previous quarter and throughout 2002; and e) a net accumulation of international reserves.

From April to June 2003, Mexico's foreign trade performance was affected by the weakness in both external and domestic demand. The former affected negatively non-oil exports while the latter discouraged the demand for imports. Such conditions led to a moderate deficit in the trade balance and, consequently, in the balance of payments' current account. Even adjusted for the high prices of oil, both balances indicate that external accounts did not generate exchange rate pressures.

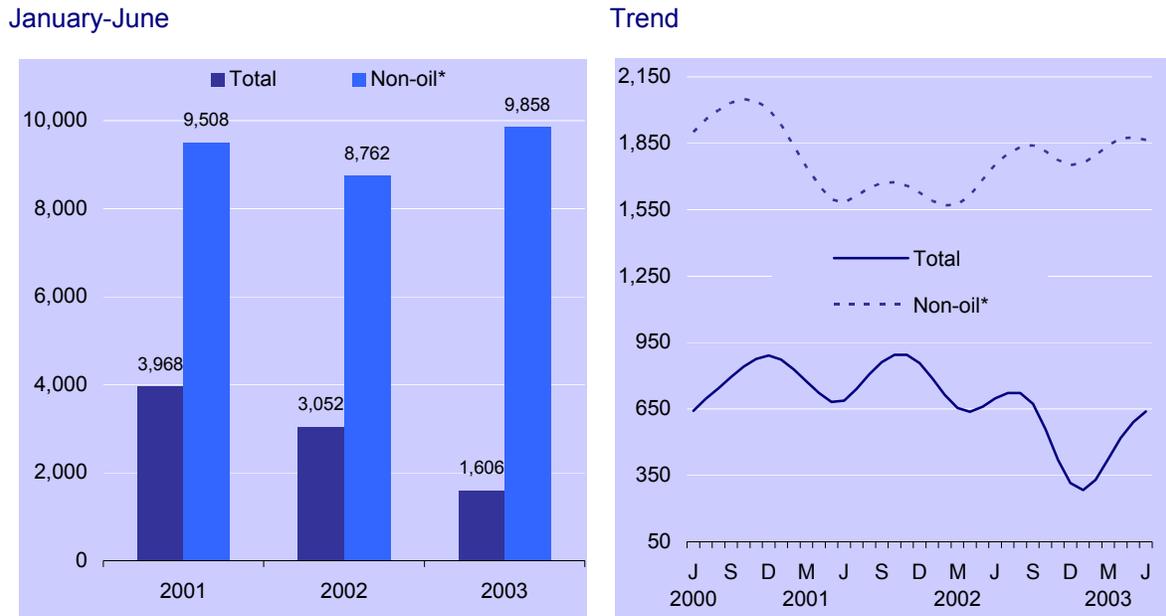
During the mentioned quarter, exports shrank 2.1 percent compared to the same period of 2002. These results were due to a fall in non-oil exports (3.6 percent) and an increase in oil exports (13.2 percent). The variation in non-oil exports mainly responded to reduced external sales of manufactured goods. However, in June, both non-oil and oil exports recorded positive annual growth rates.

After having grown 3.8 percent during the first quarter of 2003, imports of merchandises dropped at an annual rate of 2.5 percent during the second quarter. Imports of consumer and capital goods fell at annual rates of 7.9 and 8.7 percent, respectively, while those of intermediate goods diminished 0.5 percent.

Seasonally adjusted series of foreign trade indicate that during May-June, non-oil exports rebounded slightly while total imports exhibited an erratic behavior. However, in June, imports of capital goods recorded their fourth consecutive positive monthly variation (Graph 6).

for 750 million euros. The latter is part of the Federal Government's strategy for managing its external debt by reducing its servicing costs and improving its terms of redemption.

Graph 7 **Trade Deficit (Total and Excluding Oil)**
Million US dollars



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

The capital account (including errors and omissions) is expected to have ended the second quarter of 2003 at 3.200 billion US dollars. Considering this result, the accumulated surplus for the first half of 2003 would have been approximately 9.4 billion US dollars.

During April-June 2003, Mexico's conditions for external financing improved. After having fallen in the first quarter, interest rates on Mexican external debt dropped once more in the second quarter of 2003, and almost reached historically low levels. The average yield of UMS26 bonds declined in 56 basis points as compared to the previous quarter (Graph 8). However, as mentioned before, net inflows to the country were moderate, as recorded on the balance of payments' capital account. Reduced demand for external resources originated from the weakness in both domestic production and aggregate demand. Moreover, it also stemmed from the restructuring of liabilities by private issuers, who have sought financing in the domestic market in order to

reduce their external debts. The improvement in the country's conditions for gaining access to world capital markets is mainly due to the following factors:

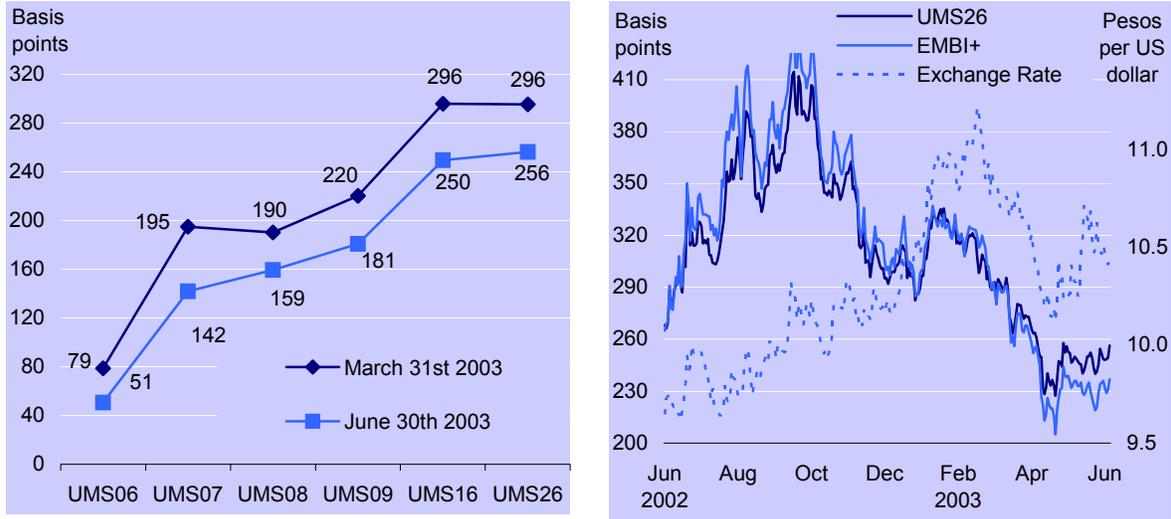
- (a) Geopolitical uncertainty diminished once the war in Iraq ended. Accordingly, financial and stock markets have shown a favorable performance, and risk aversion among investors has apparently diminished;
- (b) The current slack in world financial markets has increased liquidity in domestic markets; and
- (c) Reduced interest rates in industrial countries have made debt instruments issued by different developing countries, such as Mexico, more attractive for institutional investment funds.

During the second quarter of 2003, the abovementioned reduction in interest rates over Mexico's external debt seems to have been the main determinant for the exchange rate's trajectory, which ended the depreciating trend followed during the previous quarter. Despite being subject to high volatility, the exchange rate no longer tended to depreciate and registered an appreciation of 2.9 percent.

Graph 8

Yield on Mexico's External Public Debt and Exchange Rate

Net Yield on External Public Debt at Different Maturities Country Risk Indicators and Exchange Rate



Source: Bloomberg and Banco de México.
 Note: The net yield on the UMS26 bond is the difference between its gross yield and that of a U.S. Government bond of similar maturity.

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

During the second quarter of 2003, the monthly rate of growth of the subindex of prices of goods administered or regulated by the public sector (-0.09, -2.78, and 0.07 percent, respectively) was below that of CPI (0.17, -0.32, and 0.08 percent)¹¹. This behavior also compares favorably with that recorded during the same quarter of 2002¹².

The lower inflation in the subindex of prices and goods administered or regulated by the public sector was mainly due to the fall in prices of administered goods and services. The latter responded to the decline in both electricity tariffs and prices of low octane gasoline. Regarding the former, the reduction of electricity tariffs in April and May was due to the beginning of the summer season, when lower rates are charged in many northern cities, and

¹¹The basket of the subindex of goods administered by the public sector includes the following: high and low octane gasoline, domestic gas, and electricity. Products whose prices are regulated by the public sector are international long distance phone calls, domestic long distance phone calls, phone line installation and service fees, taxi fares, city bus fares, subway and electric transportation fares, inter-city bus services, parking lots, automobile ownership taxes, local phone services, highway tolls, oil and lubricants, and duties and licences.

¹² Increases in April, May and June were 0.66, -0.21 and 0.50 percent, respectively.

which ends in October and November. This short-lived effect will therefore revert in these months (especially in November).

II.2.6. Transitory Factors that Affected Inflation

During the second quarter, the subindex of agricultural products exhibited negative monthly variations of -0.88, -0.48 and -0.18, in April, May and June, respectively. Thus, the annual inflation of this subindex fell by more than half, from 13.42 percent in March 2003 to 6.09 percent in June of the same year. This was mainly due to the reduction of 22.41 percentage points in the annual inflation of the fruits and vegetables' component (from 28.90 percent in the first quarter to 6.49 percent in second), which more than offset the rise in annual inflation of meat and eggs (1.44 percentage points). The sharp fall in inflation of agricultural products (at an annual rate) during the second quarter of 2003 is not atypical, as this subindex is subject to high volatility due to factors such as supply shocks originated by floods and droughts, among other. The latter can definitely have significant, albeit transitory, effects on the CPI.

III. Monetary Policy During the Second Quarter of 2003

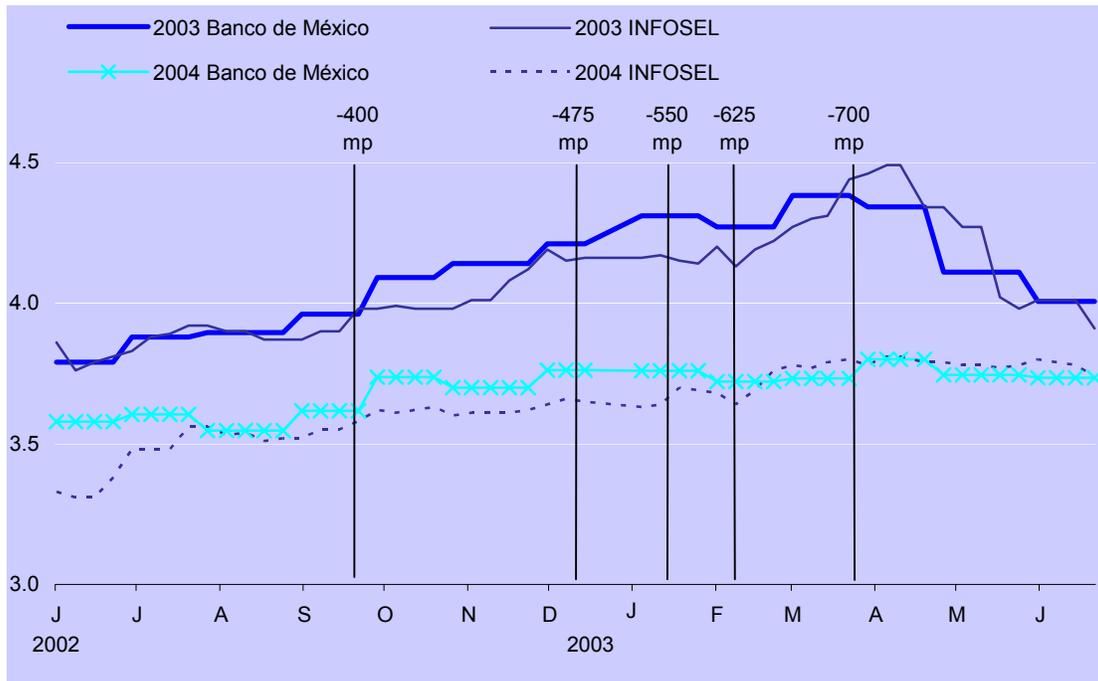
III.1. Monetary Policy Actions

During April, May and June of 2003, the daily level of the “short” was maintained at 25 million pesos¹³. Prior to this period, actions to restrict monetary policy had been adopted: the short was raised on three occasions throughout the first quarter of 2003 following the same guideline of monetary policies implemented in September and December of 2002. These actions were taken due to the fact that the economy was facing the effects of supply shocks that could have endangered price stability. Among these, rising non-core inflation, especially that of agricultural products and of prices of goods and services administered by the public sector, as well as inflationary pressures stemming from the exchange rate depreciation at the end of 2002 and in the first quarter of 2003, are to be noted.

During the second quarter, the goals of the aforementioned actions have been gradually achieved despite the lags under which monetary policy operates. Thus during the period, non-core inflation began to drop markedly. It is important to point out that its previous upturn, brought about mainly by the rise in electricity tariffs in 2002, apparently did not cause any contagion on core inflation. Moreover, the monetary conditions thus achieved also induced a change of trend in private sector analysts’ expectations for year-end inflation. In March, average expectations drawn from Banco de México’s survey were 4.38 percent and then declined to 4.01 percent in June. This means that a large number of analysts’ forecasts for headline inflation lie within the variability interval of plus/minus 1 percent around the 3 percent target. Also, forecasts for annual core inflation at the end of December 2003 were always within such interval. Indeed, reduced inflation expectations for December 2003 aid in making CPI headline inflation converge with the long-term target (Graph 9).

¹³ From April 10th, the regime of accumulated balances was substituted by a new one based on commercial bank’s daily current account balances at Banco de México.

Graph 9 Inflation Expectations for Year-end 2003 and 2004
Percent



Source: INFOSEL and Banco de México, Survey of Private Sector Economic Analysts' Forecasts.

On its press releases regarding the stance of monetary policy during the second quarter of 2003, Banco de México's Board of Governors announced that the further tightening of monetary policy implemented in previous quarters, together with an improvement in the country's financial conditions, would help to push down inflation. Furthermore, it was noted that the sluggish industrial recovery in the United States posted a very complex scenario for the Mexican economy and, under such conditions, aggregate demand would probably not jeopardize the disinflation process. Moreover, the fact that shocks to different prices had already started to dissipate was emphasized.

In order to analyze monetary conditions from April to June 2003, a brief description of developments in Mexico's financial markets, in light of the international environment surrounding them, is presented below.

Throughout the quarter, and once the war in Iraq ended, uncertainty in world financial markets diminished. Thus, in the context of reduced uncertainty, the demand for higher risk assets increased and the main stock market indexes began to pick up.

However, predictions of a weak world economy and the absence of inflationary pressures nurtured expectations regarding

the possibility that different central banks would continue to loosen monetary policy (which, in the event, did happen). As a consequence, interest rates fell to very low levels in most industrialized economies. The smaller demand for credit, especially that related with non-residential investment, also affected longer-maturity interest rates. The perception that a world cycle of restrictive monetary policy actions was not foreseeable in the near future also contributed to the overall drop in interest rates.

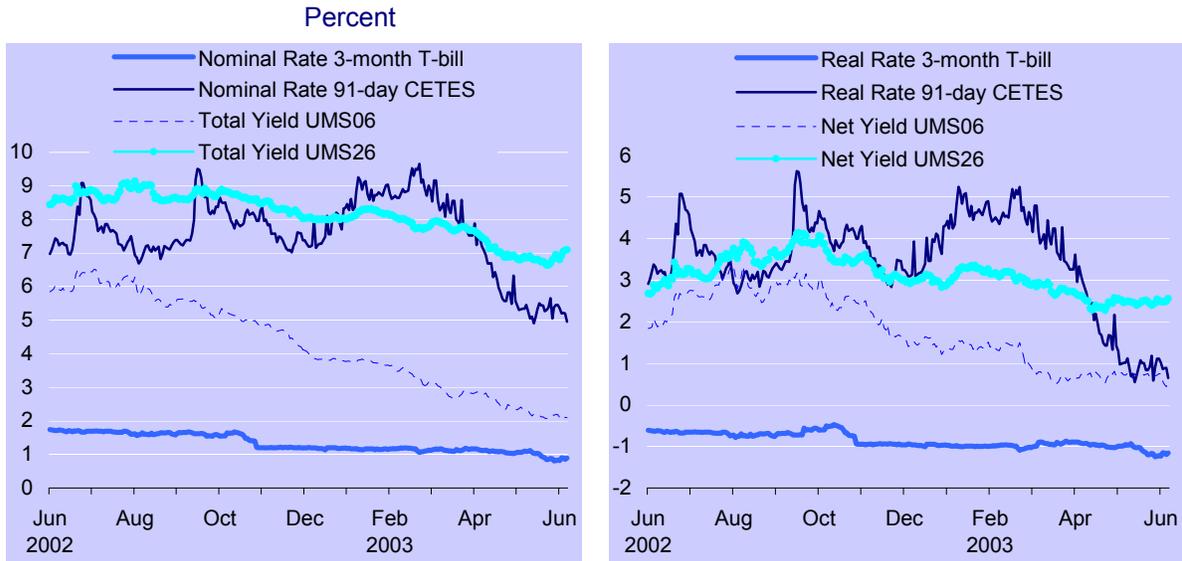
In a scenario of very low international interest rates and of a greater demand for debt instruments of certain developing countries, the yields on Mexico's sovereign bonds continued to fall (Section II.2.4). As a result, Mexico's country risk declined, on average, by more than 70 basis points (EMBI+) during the first and second quarters of 2003. Falling external interest rates, expectations of a lower exchange rate risk for the coming months, and a higher appetite for risk among investors, allowed domestic interest rates to decline significantly. Thus, the yield curve experienced a marked fall, dropping to very low levels in all terms, especially in those instruments with shorter maturity. Interest rates on 28-day and 91-day CETES declined, on average, 255 and 238 basis points between the first and second quarters of 2003, reaching historically low levels (Graph 10). As for the average yield on the 10-year bond, this declined 135 basis points during the same period. It should be mentioned that given the weakness of aggregate demand, and in the absence of further inflationary pressures on non-core prices, reduced interest rates do not risk the attainment of the inflation target.

Thus, the change in inflation expectations for the end of 2003, along with a less uncertain geopolitical scenario and slow productive activity worldwide, made interest rates in Mexico drop in a way consistent with the greater liquidity conditions prevailing in the main industrialized economies. On this count, the reduction of real returns on Mexican financial instruments took place in a context of negative real rates on short-term assets in the United States, and a decreasing trend in risk premiums.

The latter confirms that the behavior of domestic interest rates has been consistent with the orderly adjustment of the Mexican economy during the downturn phase of the business cycle. Under the present circumstances, monetary policy has been focused on two main aspects. On one hand, it has allowed a strong reduction of interest rates, which constitutes a direct incentive for expenditure. On the other, by reducing the speed at which the consolidated public sector absorbs resources, the reduction in the pace of accumulation of international reserves has increased, at the

margin, available resources for financing productive activities (Section III.2.2)¹⁴. This way, monetary policy has contributed in creating suitable conditions to foster stronger economic growth, without jeopardizing the attainment of the inflation target.

Graph 10 **Nominal Interest Rates, Real Interest Rates ^{1/} and Total Yield on UMS05 and UMS26 Bonds**



Source: Board of Governors of the Federal Reserve System, INFOSEL and Banco de México.
 1/ Nominal interest rates deflated by inflation expectations for the following 12 months.

Finally, it is important to make reference to the Exchange Commission’s decision to auction part of Banco de México’s accumulated reserves, published in its press release of March 20th 2003. Such announcement stated that the level of international reserves has strengthened investors’ confidence in the financial soundness of the Mexican economy, therefore improving private and public issuers’ conditions for gaining access to international capital markets. Nonetheless, this build-up of reserves entails a cost of “carry”, equal to the difference between the yield on reserves and the interest rate on domestic notes issued to finance the purchase of reserves. Given that the net benefits of the mentioned costs would be progressively lower at the margin, the Commission decided to channel part of the foreign currency flows that would have increased the level of international reserves to the market.

¹⁴ The consolidated public sector includes Banco de México.

III.2. Monetary and Credit Aggregates

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

During the second quarter of 2003, the monetary base continued to expand at high rates (annual variation of 17.3 percent of end-month stocks) compared to the inflation target and expected GDP growth. However, it is important to mention that this increase has been similar to that forecasted in the Monetary Program for the same period (18 percent).

Historical evidence confirms that income and interest rate shocks in economies with low inflation affect the demand for base money at a slower pace. Research demonstrates that the demand for bills and coins is more easily affected by interest rate variations in this type of economies. As a result, a sharp fall in interest rates (such as that observed over the last two years in Mexico) creates greater and more persistent effects on the demand for money than those that would have been observed ten years ago, when there was a higher rate of inflation¹⁵. Overall, the monetary base is expected to continue growing at relatively high rates, although maintaining a downward trend during 2003, and end the year at nearly 14 percent (at an annual rate)¹⁶. This growth reflects the strong process of remonetization that the economy is undergoing and, thus, is fully consistent with the attainment of the inflation target.

Banco de México's net domestic financing shrank 11,481 million pesos during March-June 2003. This result is mainly explained by the sterilization process that was undertaken to contain the expansion of international reserves.

During the same period, international reserves rose by 1.409 billion US dollars (Table 8). PEMEX operations were the main source for building up reserves (3.521 billion US dollars); in contrast, the Federal Government purchased 1.697 billion US dollars. In addition, by June 30th 1.280 billion US dollars had been sold via the mechanism to reduce the pace of accumulation of international reserves¹⁷. As a consequence of these sales, Banco de

¹⁵ An additional factor that might have contributed to the widening of the monetary base is the growing development of the informal sector of the economy.

¹⁶ Forecast published in the Monetary Program for 2003.

¹⁷ Banco de México's press release of April 22nd 2003. The first auction sale of dollars was done on May 2nd 2003. Since the sale of dollars is carried every 48 hours, the level of International reserves is always set with a 2-day lag.

México's public offering of liabilities declined (13,287 million pesos).

Table 8 **Monetary Base, Net International Assets and Net Domestic Credit**
Millions

	Stocks		Flows in 2003		
	At Dec 31 st 2002	At June 30 th 2003	1 st Quarter	2 nd Quarter	Accumulated at June 30 th 2003
(A) Monetary Base (Pesos)	263,937	240,017	-26,087	2,168	-23,919
(B) Net International Assets (Pesos) ^{1/2/}	529,503	577,320	35,442	13,649	49,091
Net International Assets (US dollars) ^{2/}	50,722	55,315	3,280	1,312	4,593
(C) Net Domestic Credit (Pesos) [(A)-(B)] ^{1/}	-265,566	-337,303	-61,529	-11,481	-73,010
(D) International Reserves [(E)-(F)] ^{3/} (US dollars)	47,984	53,397	4,004	1,409	5,413
(E) Gross International Reserves (US dollars)	50,674	55,266	3,279	1,313	4,592
<i>PEMEX</i>			2,899	3,521	6,420
<i>Federal Government</i>			-96	-1,697	-1,793
<i>Sale of Dollars to Commercial Banks</i> ^{4/}				-1,280	-1,280
<i>Other</i> ^{5/}			476	769	1,245
(F) Liabilities with less than six months to maturity (US dollars)	2,690	1,869	-726	-96	-821

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

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

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

4/ Corresponds to the daily offering of US dollars made according to the mechanism to reduce the pace of accumulation of international reserves (see Banco de México's Press Release of April 22, 2003).

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

III.2.2. Monetary Aggregates and Credit

A greater availability of financial domestic resources could aid the recovery of private investment and support consumer spending. On this count, the domestic supply of available financial resources from March 2002 to the same month in 2003, measured through the annual flow of the monetary aggregate M4 (311.5 thousand million pesos), accounted for 4.9 percent of GDP (Table 9). As for domestic saving sources, one third came from funds from the Retirement Savings System (*Sistema de Ahorro para el Retiro, SAR*).

Table 9

Monetary Aggregate M4: Variation from March 2002 to March 2003

Flows in thousand million pesos

Sources			Uses		
	t.m.p.	%		t.m.p.	%
Residents	300.3	96.4	International Reserves ^{1/}	101.4	32.6
SAR	102.7	33.0	Public Sector ^{2/}	98.1	31.5
SIEFORES	73.6	23.6	Private Sector	125.7	40.4
Other funds	29.1	9.3	Commercial Banks	44.8	14.4
Rest	197.6	63.4	Securities Issued	35.9	11.5
			Housing Funds (SAR) ^{3/}	45.0	14.4
Non-residents	11.2	3.6	Other items	-13.7	-4.4
Total	311.5	100.0	Total	311.5	100.0

1/ International Reserves' Accumulated Effective Nominal Flows (Banco de México's Law).

2/ Corresponds to domestic Public Sector Borrowing Requirements (PSBR) excluding Federal Government's net external debt and PIDIREGAS.

3/ INFONAVIT and FOVISSSTE.

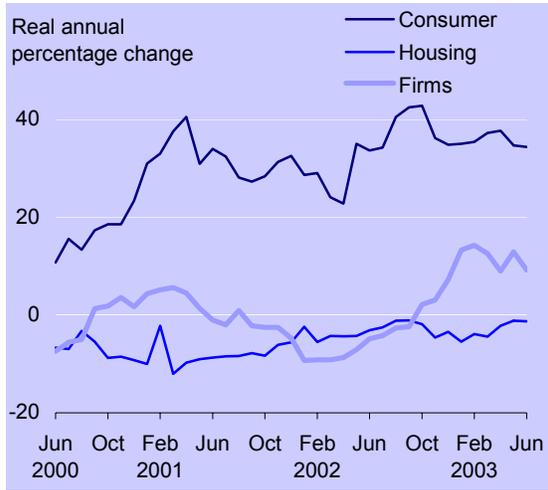
During the same period, total financing to the private sector represented 40.4 percent of such flow, of which a significant share was channeled through INFONAVIT and FOVISSSTE. As a result, available domestic financial resources for non-residential investment accounted for a little more than one fourth of total annual saving (25.9 percent). These figures underline the need to reduce the amount of domestic financial resources destined to the consolidated public sector.

Regarding the above, the favorable impact the mechanism to reduce the pace of accumulation of international reserves has had on the availability of financial resources should be highlighted. This is due to the fact that Banco de México finances international reserve accumulation via the placement of securities (mostly BREMS) and other debt instruments for monetary-regulation purposes.

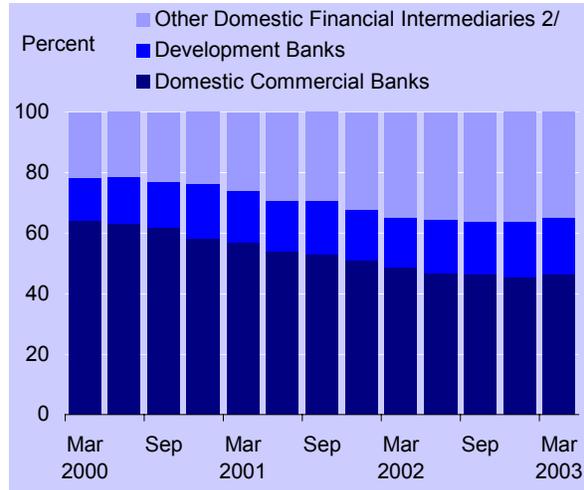
Performing credit granted by commercial banks recorded a real annual variation of 11.2 percent during the second quarter. Despite its dynamism, commercial banks' accumulated performing credit in the first half of the year (11.2 thousand million pesos) accounted for only 8 percent of financial saving available during the period and was mainly channeled to consumer spending. The rise in credit flows destined for consumption has eliminated traditional restrictions on this kind of expenditure and is one of the factors supporting its relative strength. However, the mentioned figures point to a gradual decline in commercial banks' relative importance as a lending provider (Graph 11).

Graph 11 Commercial Banks' Performing Credit and Consolidated Financial System

Commercial Banks' Performing Credit to the Private Sector ^{1/}



Total Domestic Financing by Intermediaries



1/ Direct loans only. Does not include portfolio related to debt-restructuring programs.

2/ Includes credit unions, savings and loans companies, investment companies, financial leasing companies, financial factoring companies, limited purpose financial companies (*Sociedades Financieras de Objeto Limitado, SOFOLES*), insurance companies, investment companies specialized in retirement funds, bonding companies, general deposit warehouses, economic development funds, and securities firms.

IV. Private Sector Outlook for 2003¹⁸

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

During the second quarter of 2003 and, in fact, throughout the first half of the year, private sector economic analysts' forecasts were as follows (Table 10): i) a downward revision in GDP's rate of growth for 2003, from 2.54 percent in March to 2.16 percent in June; ii) in line with the above, a decline in the expected annual expansion of the different components of aggregate demand, particularly, in consumption and private investment; iii) a fall in the number of expected formal jobs to be created in the year; iv) slightly lower interest rates for the remainder of the year; v) lower current account and trade balance deficits; and vi) a contraction in FDI to the country in 2003. This downward revision reflects, on the one hand, the use of updated information in the making of forecasts and, on the other, the acknowledgement that the recovery in economic activity has been delayed throughout the year.

Most economic analysts also revised downward their expectations for US GDP growth in 2003 and, to a great extent, for industrial production. Nevertheless, expectations in June regarding economic growth in Mexico and the United States point to a significant rebound in economic activity during the second half of the year.

The dispersion in private sector economic analysts' forecasts for GDP growth in Mexico in 2003 has narrowed. As observed on the right hand side of Graph 12, the corresponding distribution has been shifting to the left while at the same time it has become more concentrated around the mean¹⁹.

¹⁸ Unless otherwise stated, forecasts reported in this section are drawn from Banco de México's monthly Survey of Private Sector Economic Analysts' Expectations.

¹⁹ In addition to revealing the key drivers behind the expectations formation process for GDP growth in 2003, a narrowing dispersion in a certain period is also due to the fact that once the forecast horizon has been shortened, common data regarding the development of the economy is included in all surveyed questionnaires.

Table 10 Private Sector Forecasts: March and June 2003^{1/}

	March 2003	June 2003		March 2003	June 2003
Real GDP Growth in Mexico			Exchange Rate (Pesos/US dollar, year-end)		
2003	2.54%	2.16%	2003 Survey Banxico	10.88	10.68
2004	4.00%	3.71%	Futures ^{2/}	11.33	11.36
Trade Deficit (Million US dollars)			2004 Survey Banxico	11.23	11.03
2003	9,286	7,708	Mexican Oil Mix (Average US dollars per barrel)		
Current Account Deficit (Million US dollars)			2003 Survey Banxico	21.80	22.19
2003	16,234	14,716	Wage Settlements		
Foreign Direct Investment (Million US dollars)			July 2003	n.a.	4.84%
2003	13,201	12,906	August 2003	n.a.	4.83%
2004	14,348	14,117	Business Climate		
Real GDP Growth and Industrial Production in the U.S. in 2003					
GDP Growth			Will improve		
Survey Banxico	2.4%	2.3%	Will remain unchanged	57%	68%
Consensus Forecasts ^{3/}	2.3%	2.2%	Will worsen	40%	23%
Blue Chip Economic Indicators ^{4/}	2.4%	2.3%	Will improve		
Brokerage Firms (Average) ^{5/}	2.3%	2.2%	II Q. Brokerage Firms (Average) ^{6/}	1.5%	1.5%
Industrial Production			III Q. Brokerage Firms (Average) ^{6/}	4.0%	3.8%
Blue Chip Economic Indicators ^{4/}	1.80%	0.5%	IV Q. Brokerage Firms (Average) ^{6/}	3.3%	3.5%

n.a. not available.

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

2/ Exchange rate futures of March 31st 2002 and June 30th 2003.

3/ April 7th and July 14th 2003 issues of the *Consensus Forecasts*.

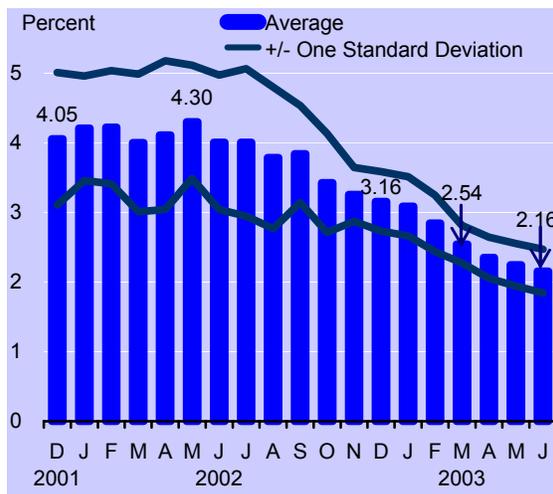
4/ Blue Chip Economic Indicators (April 10th and July 10th 2003).

5/ Average forecasts of Deutsche Bank, Goldman Sachs and JP Morgan's brokerage firms at April 21st and July 21st 2003.

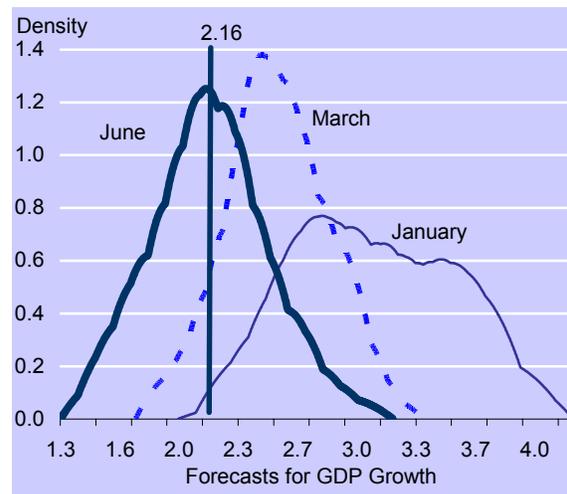
6/ Annualized quarterly variation.

Graph 12 Private Sector Analysts' Forecasts for GDP Growth in 2003

Real GDP Growth



Density Function of Forecasts for GDP Growth



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

Other aspects of the forecasts by private sector economic analysts worth mentioning are the following: i) expectations on

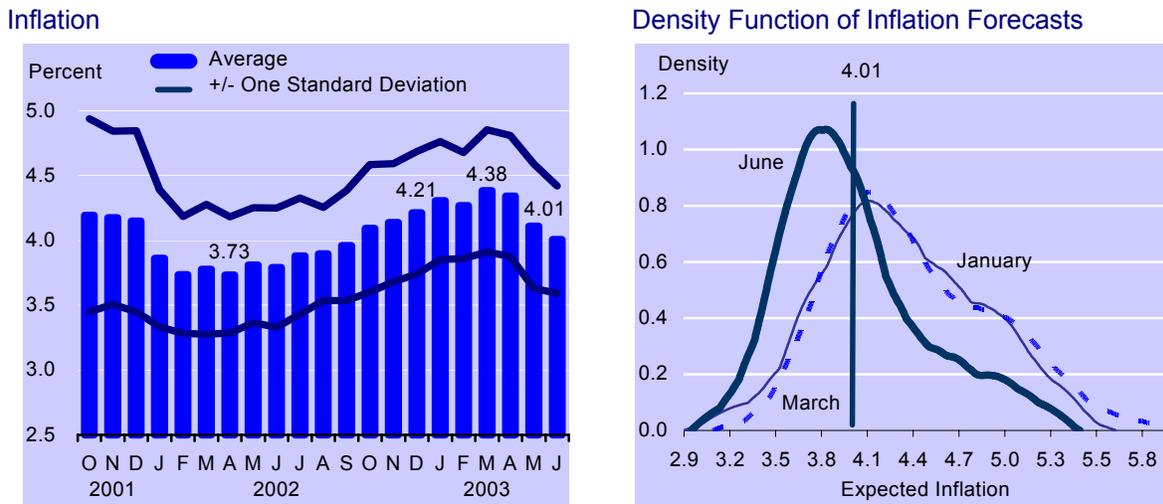
Mexico's exchange rate at the end of 2003 were revised downward during March-June; ii) nominal increases in contractual wages in July and August are expected to decline compared to the previous months; iii) business climate and business confidence indicators improved more in June when compared to March; and iv) the existence of both external and domestic factors could likely hinder economic activity during the second half of the year. Among these are the weakness in world markets, a sluggish domestic market, and uncertainty regarding the country's economic and political conditions. According to surveyed analysts, during the second quarter, in particular, the lack of structural changes was a key factor in restraining economic activity.

IV.2. Inflation Forecasts

Expected annual headline inflation for 2003 subsided considerably during the analyzed quarter, from 4.38 percent in March to 4.01 percent in June (a decline of 0.37 percentage points).

This significant revision has translated into smaller variations in the forecasts for annual headline inflation. The distribution of analysts' responses has been shifting towards lower inflation and the dispersion of inflation forecasts for 2003 has also narrowed significantly (Graph 13).

Graph 13 Private Sector Analysts' Forecasts for Inflation in 2003



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

V. Balance of Risks

During the second quarter of 2003, the Mexican economy was affected by the weakness of external and domestic demand. Moreover, the structure of domestic spending continued to change towards more consumption and less investment. On the supply side, this resulted in a smaller contribution of the industrial sector to GDP growth and employment, while that pertaining to services increased. Such changes in the structure of aggregate supply and demand –which have also taken place in the United States– do not foster sustained economic growth.

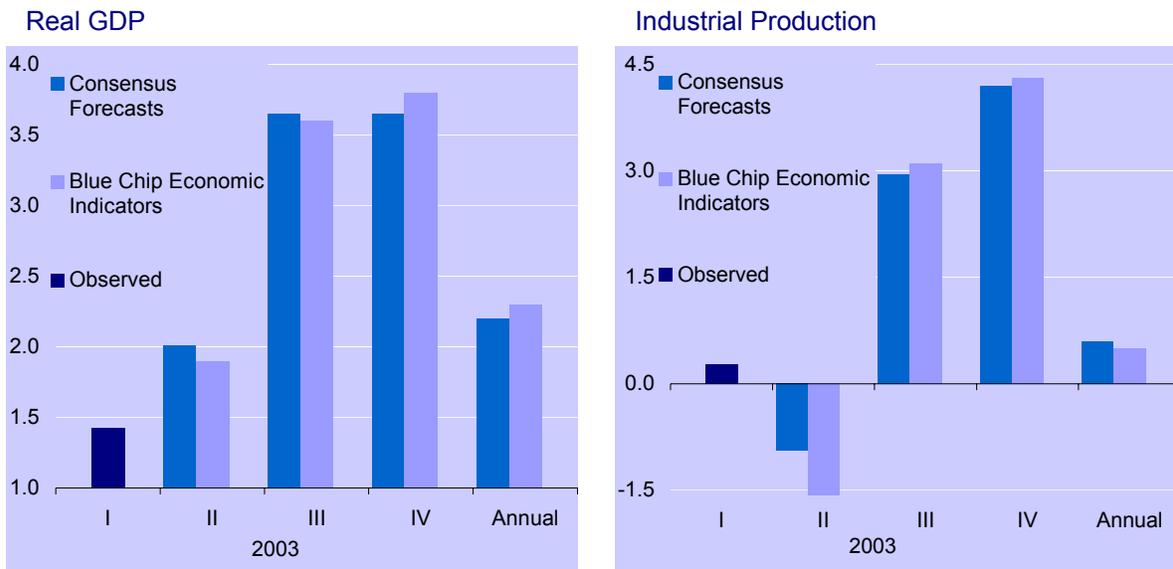
Given the above context, Banco de México's base scenario for the second half of the year considers the following assumptions:

- (a) Average annual GDP growth in the United States is expected to remain at 2.3 percent, although it is anticipated that industrial production will have expanded at a lower pace for the year as a whole (average annual increase revised downward from 1.4 to 0.6 percent). This revision already includes analysts' expectations regarding the upturn in industrial production during the second semester in relation to the first half of the year (Graph 14);
- (b) The Mexican oil export mix is expected to be, on average, 24 US dollars per barrel; and
- (c) Mexico's access to external financial markets will continue to be favorable for the rest of the year.

Graph 14

Forecasts for Real GDP Growth and Industrial Production in the United States in 2003

Annualized quarterly variation and annual percentage change



Source: Consensus Forecasts' Surveys and Blue Chip Economic Indicators of July 14th and 10th 2003, respectively.

Based on the previous assumptions and on recent information regarding the course of the economy, the following forecasting exercise was made:

Economic Growth: Annual GDP growth in 2003 is expected to be approximately 2 percent, lower than last quarter's forecast of 2.4 percent. This stemmed mainly from the downward revision on industrial production growth in the United States in 2003. Current estimates are subject to a high degree of uncertainty due to the risk factors mentioned further below. It is worth pointing out that revised forecasts for Mexican growth in 2003 are consistent with those of private sector economic analysts.

The annual variation in GDP during the second quarter of 2003 is anticipated to have been 0.3 percent. This moderate expansion was influenced by fewer working days compared to the same quarter in 2002. In contrast, economic activity is expected to grow more swiftly during the second semester. This rebound would result from the strength of private consumption, a slight impulse from the external sector, and a moderate recovery in private investment favored by reduced interest rates. As a result, the trend followed by the structure of aggregate demand and supply could revert throughout the rest of the year.

Employment: Due to the fact that forecasts for economic growth have been revised downward and increases in contractual wages continue forestalling new hires, less jobs are expected to be created than those projected in the previous quarter. Specifically, approximately 150 thousand jobs are expected to be created in the formal sector of the economy.

Current Account: The deficit is anticipated to be 2.2 percent of GDP.

Inflation: For the remainder of the year, inflation is expected to follow a path consistent with the attainment of the 3 percent target, with a variability interval of plus/minus one percent. In addition, annual core inflation is foreseen to remain firmly within such interval, falling gradually.

As for the different subindexes, annual core inflation of goods is anticipated to remain stable. The slight rebound in this subindex during the summer (owing to the atypically low inflation recorded in the same period of 2002), could be countered by the expectation of continued deflation in tradable goods in the United States. Regarding the core subindex for services, this is expected to further contribute to the abatement of headline inflation. Nonetheless, the magnitude of such contribution will depend, to a great extent, on the path of wage settlements.

The outlook for non-core inflation during the following months is, in general, compatible with the inflation target, in the absence of unexpected shocks. It should be pointed out that the effects coming from adjustments in administered prices in 2002 have practically dissipated, without having had any contagion on core inflation.

The described scenario is subject to different factors of uncertainty, among which the external ones are:

- (a) The duration and strength of increased industrial production and non-residential investment in the United States could affect the expected course of the economy; and
- (b) Oil price volatility.

As for the main domestic risks that could affect the base scenario, the following are:

- (a) The possible fall in Mexican exports' market share in the United States (despite the awaited recovery of industrial

production in that country in the second half of the year) due to the country's relative loss of competitiveness. The latter is evidenced by the increasing market share of Chinese exports in the U.S.;

- (b) The continuity and intensity of the economic rebound in Mexico will depend, to a great extent, on the restructuring of aggregate demand to favor investment, especially for machinery and equipment and non-residential construction;
- (c) Although core inflation has remained clearly within the variability interval, over the last months it has shown some downward rigidity;
- (d) Wage increases continue to be incompatible with the slack in labor market conditions;
- (e) Headline inflation might be affected by new supply "shocks", which could have an unfavorable impact on non-core inflation, particularly, on agricultural prices. In the short run, these type of shocks could make inflation deviate from its year-end target. Nevertheless, in such event, these deviations would likely be short-lived;
- (f) A sharp rise in LP-gas prices (which can also be considered as a supply shock) could also affect the path of non-core inflation and trigger inflationary pressures in the short-term. Volatility stemming from the uncertain geopolitical scenario has kept LP-gas prices unchanged since February, with a negative effect on PEMEX finances. Thus, it is advisable that these prices reflect their opportunity cost so that public finances are not affected and any distortions in production and consumption are reduced; and
- (g) The domestic industry's loss of competitiveness is a potential danger for the economy in the medium term. Competitiveness has a direct influence on the economy's potential growth and is also necessary to sustain low inflation in the medium run. This brings to the fore the urgent need to attain the necessary political agreements to push ahead the pending structural reform agenda.

Therefore, the recovery of the Mexican economy is subject to a certain degree of uncertainty. Nonetheless, on the external side, better global financial conditions (owing to the decline in international interest rates and to reduced risk aversion)

is a key factor for the recovery. On the domestic side, the decline in interest rates, favored by monetary policy, should also add to the economic rebound.

Notwithstanding the risks listed above, there are strong elements that allow foreseeing a convergence of headline inflation with the year-end target established by Banco de México's Board of Governors. In fact, should the expected domestic and external economic environment materialize, headline inflation in forthcoming years will be around the 3 percent target. In this regard, the long-term objective will apply permanently and not only for a year-end horizon. Once inflation converges to its target, the long disinflation process undertaken by Mexico will end and a new period aimed at consolidating permanent price stability will begin. Monetary policy would then be oriented to keep headline inflation in line with the long-term objective.

Monetary and fiscal discipline in Mexico have been essential in attaining a stable macroeconomic environment. As a result, the Mexican economy has become more resilient to external shocks and has decoupled from many other emerging economies. In this context, Mexico has gained a favorable access to international capital markets and has also been less affected by their volatility.

Nevertheless, macroeconomic stability is a necessary, but not a sufficient condition to foster growth in production, income, and employment. Further measures aimed at raising productivity and the level of competitiveness of the Mexican economy are also required. Structural reforms, the deregulation process and, in general, all policies aimed at increasing the country's flexibility and capacity to respond to the changing conditions in the world economy, must be oriented in this direction. Our country cannot afford to fall behind while other countries advance further in their economic development. If the process of economic modernization, necessary to guarantee the well-being of Mexico's population, is postponed, the country will fail to take advantage of the favorable conditions yielded by macroeconomic stability.