

## Inflation Report

*April-June 2002*

# Summary

**I**n this document Banco de México presents its assessment of the country's economic conditions which served as a basis for monetary policy decisions during the second quarter of 2002. It also includes the scenario behind the Central Bank's forecasts of inflation and economic activity. The balance of risks is also outlined.

This issue of the Inflation Report contains a new section where the inflation targets for 2003 and future years (the long-term objective) are established. The latter will guide monetary policy actions in the years beyond 2003, and will provide the public with a reference to evaluate Central Bank's actions. Therefore, the adoption of a long-term objective is indeed a significant advance in the accountability of Banco de México and in the transparency of the process of designing and implementing monetary policy.

### *Recent Developments in Inflation*

During the period, the evolution of the main price indexes was in line with the objective of attaining by year-end 2002 an annual inflation that does not exceed 4.5 percent. Annual overall inflation increased while core inflation decreased.

### *Behavior of Key Inflation Indicators*

CPI annual inflation went up during the second quarter of 2002 compared to the end of the previous quarter, from 4.66 percent in March to 4.94 percent in June.

Annual core inflation continued on a downward path as it decreased 0.58 percentage points, from 4.54 percent in March to 3.96

percent in June. This result can be explained by the reduction in goods and services' core inflation. For a second consecutive quarter, core inflation was lower than CPI inflation.

Annual inflation of agricultural and livestock goods fell during April and May but grew in June. Likewise, inflation of the subindex of administered prices rose, mainly due to the 16.01 percent increase in domestic gas prices from March to June 2002. A smaller seasonal reduction of electricity tariffs (11.66 percent compared to last year's 13.43 percent) contributed to higher levels of inflation in administered prices.

Core inflation of goods, which in past years had been very sensitive to exchange rate fluctuations, fell significantly during the quarter, even though the exchange rate depreciated considerably. In June, annual core inflation of goods turned out to be 1.99 percent, comparing favorably with that of March (2.84 percent), while core inflation of services posted a small reduction. The evolution of core inflation of services may have responded to the decline in the nominal growth rates of contractual wages over the last six months, which has probably started to have a moderating effect on this sector's price formation process. In June 2002, the growth rate of the core services subindex was 6.81 percent, compared to 7.02 percent in March.

### *Transitory Factors that Affected Inflation*

In the April-June quarter, annual inflation of agricultural and livestock goods closed at 5.15 percent, 2.30 percentage points higher than its level at end-March.

### *Main Determinants of Inflation*

The main external variables that affect the performance of the Mexican economy posted mixed results during the second quarter. Although real variables had a relatively favorable behavior, that of international financial markets was less promising, and by the end of the period new signs of uncertainty began to emerge in these markets. Furthermore, indicators of economic activity in the United States did not have a uniform evolution, as some variables continued to recover while others hardly showed any improvement. On balance, evidence from the real sector indicates that economic recovery in that country continues ahead, albeit not as vigorously as expected. Moreover, most recent news regarding the United States' financial markets have been worrisome and could undermine the country's economic rebound. Finally, economic perspectives for Latin America deteriorated, especially those for MERCOSUR members.

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In April 2002, nominal wages per worker showed annual increases between 9.3 and 14 percent, thus registering average annual percentage changes between 8.6 and 19.6 percent in the second quarter and real increases in an interval of 3.7 to 14 percent.

During the same month, productivity went up between 3.7 and 16.7 percent while changes in unit labor costs fluctuated between -10.6 percent and 2.8 percent. During January-April, productivity gains in the manufacturing industry more than offset the upward trend of real wages. However, productivity did not rise faster than real wages in the in-bond industry and in commerce and unit labor costs rose.

During the second quarter of 2002, prevailing labor market conditions began to show a modest improvement. On the one hand,

employment started to grow slightly after having fallen in 2001. Seasonally adjusted series for permanent and temporary urban employees affiliated to the Mexican Social Security Institute (IMSS) recorded an increase of nearly 90 thousand individuals, while open unemployment decreased moderately. It is worth mentioning that the increase in formal employment—which was below the average of 175 thousand jobs per quarter observed during the same period of 1996—was insufficient to provide the necessary jobs for the new entrants to the labor force. Consequently, the employment deficit continued widening. This suggests that a large number of individuals became part of the informal sector.

Nominal increases in contractual wages tapered off to between 5.8 and 6.5 percent. Nonetheless, these rates remain high given the slack in the labor market, therefore limiting the recovery of employment. In order to create the necessary jobs to satisfy the needs of an expanding labor force and begin to recover jobs lost in 2001, salary rises must continue to ease in order to be consistent with current conditions in the labor market.

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During the second quarter of 2002, from the aggregate supply side, GDP and imports fell at an annual rate of 2 percent and 3.8 percent, respectively. Regarding aggregate demand, and for the first time since the first quarter of 1996, private consumption decreased 1.5 percent.

The rest of the components of aggregate demand continued to decline, although at lower rates than observed in the final quarters of 2001. Private investment fell 5.9 percent compared to the second quarter of 2001 and exports grew 5.8 percent. On the other hand, at an annual rate, public sector expenditure contracted: consumption 1.1 percent and investment 13.3 percent.

Nonetheless, available information on aggregate demand and output in the second quarter of 2002 points to a rebound in economic activity:

- (a) The Global Economic Activity Indicator (*IGAE*) as well as industrial output registered positive annual variations in April;
- (b) Retail sales in May continued on an upward trend;
- (c) Domestic sales and output in the auto industry strongly advanced during the second quarter;
- (d) The number of workers affiliated to the IMSS continued expanding in June; and
- (e) The Coincident and Leading Indicators published by INEGI recorded monthly increases in April.

Based on available information, Banco de México estimates real GDP grew at an annual rate close to 1.8 percent during the second quarter of 2002.

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The incipient recovery of the industrial sector has mainly depended on the export sector. Thus, during the first stage of the economic upturn, the annual contraction in exports eased significantly. Although a similar phenomenon occurred regarding imports, the weakness of domestic demand contributed to a slower speed of adjustment in comparison to exports. As a result, the trade deficit for the second quarter of 2002 (3.2 billion dollars) was smaller than last year's (3.97 billion dollars). The current account deficit for the second quarter is expected to have amounted to 3.3 billion dollars and to approximately 7.2 billion in the first half of the year.

A less benign external environment and the change in foreign investors' expectations on the future growth of the economy contributed to worsen country risk perceptions, leading to higher costs of external financing for Mexico.

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By the end of the second quarter, the annual increase in the subindex of prices administered and regulated by the public sector was 6.9 percent. The growth of the annual inflation of this subindex was largely determined by the

upward movement in administered goods' prices, particularly those of domestic gas.

### *Monetary Policy during the Second Quarter of 2002*

#### *Monetary Policy Actions*

On February 8<sup>th</sup>, 2002 the "short" was raised to 360 million pesos. This measure was adopted to forestall a possible deterioration of inflation expectations and to prevent contagion of the price formation process in general. The latter, as a result of the inflationary impact due to the partial elimination of the electricity subsidy, announced by the Federal Government on January 29<sup>th</sup> and which went into effect on January 8<sup>th</sup>.

Monetary policy actions, together with other factors, apparently had the desired effect on the expectations' formation process. In addition, annual core inflation fell in February and March. Although annual inflation of services had not slowed markedly during the first months of the year, there existed several factors that pointed to its moderation such as the easing of contractual wage increases, the weakness of economic activity and the slack in the labor market.

Thus, on January 12<sup>th</sup>, the Board of Governors of Banco de México decided to reduce the "short" from 360 to 300 million pesos, maintaining it at that level throughout the rest of the quarter.

Nonetheless, during the period following the reduction to the "short" several external events of a negative sign came about, leading to a depreciation of the exchange rate and to higher interest rates. At the time of publishing this Report, there was no evidence suggesting that exchange rate adjustments had affected domestic prices, a development that could jeopardize attaining the inflation target. In any case, Banco de México will carefully monitor possible inflation pressures, to counter them should they arise.

The weakening of the passthrough effect from exchange rate fluctuations to domestic prices probably responded to the following factors:

- (a) Economic agents are more cautious today before modifying their prices, as the exchange rate usually experiences downward and upward movements;
- (b) A weak aggregate demand does not contribute to an environment suited to pass on to consumers the depreciation of the exchange rate;
- (c) Thousands of contracts and prices were set considering a higher rate of depreciation. Thus, the latter seems to have been already included in a large number of prices; and
- (d) Interest rates have increased in tandem with the depreciation of the exchange rate.

#### *Monetary and Credit Aggregates*

During the second quarter of 2002, the average annual growth rate of the stock of the monetary base was 15.3 percent, higher than that observed in the previous quarter (14 percent). This rate was also above that forecasted in the Monetary Program, thus leading to an average deviation of 3.4 percent during the quarter and of 5.3 percent at the end of the quarter.

The evolution of the monetary base can be explained by a stronger than expected economic growth and lower interest rates. Another factor that might have increased the demand for bills and coins was higher bank charges for cash withdrawals from automatic teller machines and for issuing checks.

During the first semester of 2002, Banco de México's net international assets increased 773 million dollars while net domestic credit decreased 21.3 billion pesos.

The average stock of narrow money (M1) went up 17.5 percent in real terms (13.3 percent its domestic currency components) while the broad monetary aggregate (M4) expanded at an average annual real rate of 9.3 percent. It should be mentioned that the growth rate of these aggregates continues to be influenced by the acquisition of Banamex by Citigroup. In the case of M1, the average annual real variation adjusted for this effect was 12.9 percent.

Data as of June 2002 indicates that although commercial banks' direct credit to the private sector remains lackluster, during the second quarter it expanded vis a vis the first. This was attributable to the rise in performing loans, as their balance at the end of that month turned out to be 22.3 billion pesos larger than in March.

The evolution of performing bank credit to the private sector basically responded to the expansion of consumer credit, whose stock posted a 32.9 percent real annual increase in June. However, performing bank credit to firms recorded a real annual contraction of 4.3 percent.

#### *Private Sector Outlook<sup>1</sup>*

During the April-June quarter, economic analysts' forecasts of the main macroeconomic variables for the present year remained practically unchanged:

- (a) Estimates of economic growth in the United States in 2002 went from 2 percent in March to 2.6 percent in June;
- (b) The average price of the Mexican crude-oil export mix is expected to be 19.97 dollars per barrel;
- (c) An exchange rate of 9.80 pesos per dollar at year-end 2002; and
- (d) Real GDP growth estimates for 2002 remained basically constant, 1.60 percent in June compared to 1.57 percent in May.

According to analysts, the main factors that could hinder economic growth over the next six months are the following: the weakness of external markets and of the world economy; the weakness of the domestic market and international financial instability; political uncertainty; and the availability of domestic financing.

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<sup>1</sup> Unless otherwise stated, all forecasts reported in this section are obtained from the Survey on Private Sector Economic Analysts' Expectations undertaken each month by Banco de México.

*Inflation Expectations*

Analysts modified their annual inflation forecasts for year-end 2002, from 4.58 percent in March to 4.76 percent in June. On the other hand, estimates for annual core inflation fell from 4.47 percent in March to 4.20 percent in June. Inflation expectations for the following twelve months went down from 4.44 percent in March to 4.15 percent in June.

*Long-term Inflation Objective*

Over the past few years, Banco de México's monetary policy has evolved towards an inflation targeting regime. The formal adoption of this framework was announced in the Monetary Program for 2001. The setting of medium and long-term inflation targets and timely communication of the central bank with society, are fundamental elements of an inflation targeting scheme.

The Board of Governors of Banco de México harbors the conviction that, since monetary policy actions have a lagged incidence on inflation, an appropriate strategy for abating it and ensuring that it will remain at low and stable levels must transcend the immediate horizon. Therefore, the fundamental element of such a strategy must be the setting of medium and long-term objectives to guide monetary policy actions and, at the same time, provide the public with the necessary references to understand and evaluate the actions undertaken by the Central Institute. Medium and long-term inflation targets serve society as a guide to the future behavior of the nominal variables, hence facilitating saving-investment decisions of economic agents, as well as the determination of prices and wages.

In this Report, both the inflation target for 2003 and the inflation objective that will guide monetary policy actions in the following years (the long-term inflation objective) are defined. The Board of Governors of Banco de México decided that monetary policy would be geared to attain by December 2003 an annual CPI inflation of 3 percent, and maintain it permanently around that level.

Even though monetary policy is aimed to comply with the objectives, the attainment of the latter is subject to a certain degree of uncertainty. Consequently, the Board of Governors decided to establish a "variability interval" of plus/minus one percentage point around the inflation objective for both December 2003 and the long term.

*Specifying the Reference Index for the Long Term Inflation Objective*

The Board of Governors defined the long-term inflation objective in reference to the CPI. The reasons behind this decision were the following:

- (a) The CPI is the best-known price indicator and the most-widely used by the general public to measure the cost of living for Mexican households;
- (b) The use of CPI inflation as a reference in countless contracts and negotiations is deeply entrenched in Mexican society; and
- (c) The CPI is published in a timely manner at regular intervals, and it is not subject to revisions.

*Specifying the Long-term Inflation Objective*

The main elements considered by the Board of Governors of Banco de México to determine the 3 percent level for the long-term inflation objective are listed next:

- (a) Research indicates that because of measuring biases price indexes tend to overestimate inflation;
- (b) The adoption of a very low long-term objective for inflation could imply negative price variations. A 3 percent inflation target allows the needed relative price adjustments in the economy to take place smoothly, even when prices and wages exhibit downward nominal rigidities;
- (c) An overly ambitious low inflation target could limit the margin for monetary policy under a scenario of deflation; and
- (d) Inflation targets in emerging market economies are set around a 3 percent level.

### *Variability in the Inflation Objectives*

The Board of Governors' decision to establish a variability interval of plus/minus one percentage point around the inflation targets for December 2003 and subsequent years, is based on the following considerations:

- (a) Monetary policy influences price behavior through different indirect channels known as the monetary policy transmission mechanism. This mechanism is subject to considerable lags and indetermination;
- (b) There are prices which are less influenced by monetary policy actions and experience high volatility. Therefore these prices typically undergo unpredictable changes; and
- (c) Unanticipated changes in wages and in the exchange rate also affect inflation. Given the lags under which the mechanism of transmission operates, monetary policy can only revert these effects in a relatively long period.

This interval is considered sufficient to cover, in most cases, any variations in annual CPI inflation. It was determined based on historical experience regarding the irregularity of core index inflation and those CPI subindexes that are not included in the core index.

Internationally, uncertainty regarding the attainment of inflation targets is reflected in the fact that most central banks with an inflation targeting regime have specified their long run objectives in terms of an interval around them.

It should be emphasized that the interval around the inflation objective is not an indifference or tolerance margin for the monetary authority.

Banco de México's adoption of a long-term inflation objective as from December 2003, whose compliance will be evaluated periodically, has the following advantages:

- (a) It will strengthen Banco de México's commitment to ensure overall price stability;
- (b) It will offer society a useful reference regarding the future path of inflation; and

- (c) It will contribute to more uniformly distributed price and wage adjustments throughout the year.

Under these circumstances, the long-term inflation objective will become the nominal anchor of the system.

Although the long-term objective has been specified using the CPI inflation as its reference, Banco de México will permanently assess the evolution of core inflation and this indicator will remain a very important input for monetary policy decisions.

According to the Board of Governors, the long-term objective of an annual CPI inflation of 3 percent and the variability interval of plus/minus one percentage point around it, adequately represent the concept of price stability which, by constitutional mandate, the Bank of Mexico should strive for.

In the years to come, Banco de México, in accordance with current practice, will provide to the public, through its Inflation Reports, detailed and timely information on the factors that have influenced the evolution of inflation, as well as the causes that could make it deviate temporarily from the objective.

Whenever there should be evidence confirming significant deviations in annual CPI inflation from the 3 percent target, Banco de México will explain thoroughly to the public its causes, its opinion on the evolution of inflation and the monetary policy actions being undertaken to retake the path consistent with attaining the long-term objective.

### *Balance of Risks and Final Remarks*

During the second quarter of 2002, the pace of Mexico's economy was mainly influenced by the following factors:

- (a) An increase in real GDP growth in the United States, although smaller than had been expected at the beginning of the quarter. Likewise, the balance of risks that has been taking shape in the last weeks suggests a weaker rebound in economic activity in the second half of the year than

assumed in the base scenario of Banco de México;

- (b) A real depreciation of the dollar in relation to the euro and yen;
- (c) A slight pick up of domestic demand; and
- (d) Volatility in the international capital markets, which led to reduced portfolio investment flows to Mexico and to the deterioration of country risk perceptions for Latin America.

For the remainder of 2002, developments in Mexico's economy will be conditioned by the previously identified external factors. Following are the main assumptions that support Banco de México's base scenario regarding the evolution of the international environment during the second half of the year:

- (a) Forecasts of economic growth in the United States in 2002 were revised upwards, from 2.2 percent in the previous Inflation Report to 2.7 percent currently;
- (b) The average price of the Mexican oil export mix will be close to 20 dollars per barrel; and
- (c) A conservative assumption is that the conditions that have prevailed during the past weeks for access to the international capital markets will continue. Furthermore, the increase in short-term interest rates in the United States will be postponed until the first months of 2003.

Based on these statements and on available information regarding the evolution of the Mexican economy during the second quarter of the year, a forecasting exercise for the main macroeconomic variables for the remainder of 2002 was carried out:

**Economic Growth:** The estimate for 2002 is 1.8 percent.

**Current Account:** Expectations for the current account deficit in 2002 remained constant at around 3 percent of GDP.

**Inflation:** The recent behavior of overall and core indexes' annual inflation, and the current stance of the monetary policy are consistent with the attainment of this year's target.

It should be noted that under the base scenario of Banco de Mexico, annual overall inflation at end-December 2002 would resent the unfavorable influence of the following two factors:

- (a) An annual inflation of the subindex of prices administered and regulated by the public sector above 4.5 percent; and
- (b) The inflationary impact of the luxury tax introduced earlier this year

In the second half of 2002, the monetary policy stance should be progressively oriented –as the main factors that will condition the evolution of the economy in 2003 are defined more clearly– to consolidate the monetary environment consistent with achieving the long-term inflation target by December 2003. In order to decide on the proper course of action, forecasts on the evolution of the main macroeconomic variables in 2003 must be relied upon. For this reason, Banco de México extended its forecasts to the next year.

The estimate for 2003 is that the Mexican economy could grow 4 percent. As for inflation, forecasts indicate that the current stance of monetary policy is consistent with a decline in inflation and with attaining the target.

The risks implicit in the base scenario for the remainder of 2002 and for 2003 are substantially higher than those envisioned in past quarters.

Among the main external risks foreseen, the following are noteworthy:

- (a) That the United States economy does not recover during the second half of the year as expected in the base scenario;
- (b) That a more pronounced correction of the dollar/ euro exchange rate should take place; and
- (c) That a substantial additional contraction in capital flows to the emerging markets should occur.

The main domestic risk elements that could alter Banco de Mexico's base scenario are described next:

- (a) As for developments in inflation, the main risk in the following months is that a significant passthrough of exchange rate depreciation to prices, inflation expectations and wage settlements should materialize; and
- (b) The greater deterioration of medium-term growth expectations caused by an unfavorable perception on the future of the country's structural reform agenda and by the lack of agreements due to political strains.

Should there be a more intense passthrough from fluctuations in the exchange rate to prices, a more restrictive monetary policy would need to be applied in order to attain the targets. The move towards a more restrictive stance would also take place if the second risk element would occur and a depreciation of the exchange rate together with a contamination of the inflation process should take place.

On the other hand, the persistence of political disagreements could hinder progress in the pending structural reforms. Regrettably, this would restrain investment flows and also induce greater volatility in interest rates and in

the exchange rate. These phenomena would further accentuate the difficulties inherent to a world scenario characterized by uncertainty. In such circumstances, economic growth perspectives would be adversely affected, translating into lower productivity gains and fewer jobs created, and also hindering any improvements in real wages. In short, given the complexity of the current economic conditions it is of utmost importance to reach a consensus – in the short term - that will allow advances in the country's economic modernization process.

Finally, it should be mentioned that even under the base scenario, the attainment of the long-term inflation target by year-end 2003 is a very ambitious goal. In the following months, the Board of Governors of Banco de México will continue assessing the behavior of the main determinants of inflation for the remainder of 2002 and for 2003. Based on the evolution of these factors and, therefore, on the short and long-term inflationary pressures, the Central Bank will determine the necessary monetary policy actions to ensure the achievement of the objectives.