

## Inflation Report

*July-September 2002*

# Summary

This document presents Banco de México's assessment which served as the basis for monetary policy decisions in July-September 2002. The scenario for the Central Bank's forecasts for the remainder of 2002 and 2003 concerning the path of inflation and economic activity, as well as the balance of risks, are also outlined.

This issue of the Inflation Report includes a section that explains that from 2003 on, the Board of Governors of Banco de México will announce its monetary policy decisions on predetermined dates. It also discusses the Board of Governors' reasons to introduce additional communication mechanisms to increase the frequency and improve the timeliness of the information provided to the public.

### *Recent Developments in Inflation*

During the third quarter of 2002, prices followed a trajectory consistent with that forecasted in the previous Inflation Report. While annual CPI inflation fluctuated, annual core inflation remained stable. Nonetheless, both indicators ended the quarter at a level similar to that posted at end-June.

### *Evolution of Several Inflation Indicators*

During July-September, the most noteworthy events regarding price behavior were as follows:

(a) Annual CPI inflation ended practically at the same level seen in June (4.95 percent) while core inflation decreased slightly to 3.85 percent;

- (b) Notwithstanding the depreciation of the exchange rate during the third quarter, annual core inflation of tradable goods fell to 1.85 percent;
- (c) Annual core inflation of services declined to 6.61 percent. Throughout the year, annual inflation of this subindex experienced a moderate decrease due mainly to rising prices in three of its components: Owner occupied homes (imputed rent), home rentals, and car insurance;
- (d) Annual inflation of the subindex of prices administered by the public sector continued rising, reaching 12.93 percent by the end of the third quarter, the highest figure for any of the main CPI components;
- (e) Although annual inflation of educational services went down (to 10.10 percent), it still remains above headline and core inflation;
- (f) Annual inflation of the main CPI components registered fluctuations as a result of the recently updated weights of the CPI; and
- (g) Although annual PPI inflation excluding oil and services went up during the period, there is no evidence of a passthrough effect on the CPI.

### *Main Determinants of Inflation*

During the third quarter, the external variables that influence the evolution of the Mexican economy moved adversely. In balance, the

behavior of the main indicators of economic activity in the U.S. was negative. Although recovery in that country continued moving forward, it has been sluggish and clouded by an environment of growing uncertainty. Moreover, perspectives for Latin America, specially for MERCOSUR members, remained weak. The main positive development –in the short run– that served as a partial counterbalance for these unfavorable effects was the rise in oil prices. Thus, the price of the Mexican oil mix reached 23.95 US dollars on average during the period (an increase of nearly 7 percent compared to the second quarter).

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During the July-September quarter, the different indicators of compensations, wages and employment pointed to a change of labor market conditions. On the one side, the downward trend experienced by the growth in contractual wages during the first half of 2002 reverted. At the same time, the pace of job creation eased and the different rates of unemployment worsened compared to their levels in the previous quarter. On the other hand, productivity in the manufacturing sector continued growing while increases in nominal wages and unit labor costs continued falling. Given the weakness of the economy and greater uncertainty concerning its recovery, the favorable evolution of the latter two variables is unlikely to persist. The balance of these trends is negative, thus employment is not likely to experience a robust recovery in the short term.

Most of the indicators of compensations, wages and employment suggest a weakening of labor market conditions. Under this scenario, as has been repeatedly mentioned in previous Inflation Reports, it is very important that nominal wages ease in order to serve as an adjustment variable in this market. This would not only help to create more jobs but also prevent sudden downward adjustments in the workforce.

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Aggregate supply and demand posted an annual increase of 2.5 percent, the first positive number after three consecutive quarters of contraction. On the aggregate supply side, GDP and imports of goods and services registered annual increases of 2.1 and 3.6 percent, respectively. As for aggregate demand, its three main components showed annual positive changes which compared favorably to those seen in the previous quarter. During the reported period, exports of goods and services rose 3.3 percent; investment increased 2.7 percent; and consumption went up 2.3 percent.

The assessment of the evolution of the main components of aggregate supply and demand with seasonally adjusted data confirm that economic recovery is underway, as signaled by first quarter figures.

Available information regarding aggregate demand and production in the third quarter indicates that economic recovery has continued. Nevertheless, it also suggests that the upturn in economic activity might be taking place at a slower pace than that observed in the second quarter.

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Both imports and exports posted annual positive variations during July-September 2002 being more vigorous for the latter.

The recovery of exports, the modest rebound in the demand for imported goods, rising oil prices and the low level of the private and public external debt service are the factors that explain why the demand for foreign resources did not grow significantly during the period. The results of the current account allowed an orderly adjustment to the volatility prevailing in the international capital markets.

As for the capital account, during the third quarter a reduction of portfolio investment inflows took place, mainly due to higher risk aversion prompted by the worsening of the international environment. It is estimated that the capital account surplus amounted to nearly 5.7 billion US dollars (including errors and omissions).

Capital inflows to Mexico during the third quarter had a relatively positive outcome, in light of the generalized contraction of these flows to other Latin American countries.

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As for the evolution of the exchange rate, the positive correlation of the peso vis-à-vis the movements of the US dollar/euro rate that had been observed in recent months ceased. Between end-June and September the peso depreciated 2.4 percent against the US dollar while the latter appreciated 0.5 percent vis-à-vis the euro. During the period under analysis, the path of the exchange rate was more closely linked to the behavior of country risk indicators and to expectations on the future course of the United States economy.

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In September 2002, the subindex of prices administered or regulated by the public sector increased at an annual rate of 9.2 percent. Annual inflation of this subindex was higher than the 6.9 percent registered at the end of the previous quarter. This upward movement responded to the rise in the prices of electricity for residential use during July, August and September, and in domestic gas during September.

It is important to point out that during September domestic gas prices went up 5.05 percent in relation to August. This monthly increase, the sharpest since May 2002, contributed to higher inflation in the subindex of prices administered or regulated during September.

### ***Monetary Policy During the Third Quarter of 2002***

#### ***Monetary Policy Actions***

During the first half of 2002, Banco de México decided to increase the “short” on February 8th and later reduce it on April 12th down to its previous level. The restrictive stance of monetary policy was intensified in order to prevent a likely deterioration of inflation expectations and forestall any contagion effects on headline inflation. This, given the

inflationary impact that could arise from the partial elimination of the subsidy on prices of electricity for residential use that went into effect on February 8th. The reduction of the “short” on April 12 basically responded to the following reasons: i) the expected contagion did not materialize, i.e., there were no second-round inflationary pressures associated with the rise in public prices; ii) contractual wage increases had already begun to ease since the first quarter; and iii) the perception that the slack in the labor market would contribute to moderate increases in wages during the following months.

On September 23rd the Board of Governors decided to raise the level of the “short” from 300 to 400 million pesos. This decision was forward looking and consistent with the need to modify monetary conditions in order to attain the 3 percent inflation target by end-2003, given the rigidity of inflation expectations for that year, the lack of downward flexibility of nominal wage increases, and the volatility of the financial markets.

Although at the time of publishing this Report there were no signs of contagion of inflation expectations for 2003, they remained at levels above the target for next year. Likewise, the downward rigidity of core inflation of services and of contractual wage revisions are additional factors that could jeopardize the attainment of the inflation target. To comply with the target in 2003, monetary conditions need to be more restrictive in order to send a clear signal to the market that Banco de México will act accordingly.

In the absence of excessive increases in public sector prices and assuming a relatively stable external sector, annual CPI inflation will likely fall during the first half of 2003, along with an additional reduction of core inflation. This will allow the growth of prices to move in a trajectory consistent with attaining the 3 percent inflation target by the end of next year.

On a somewhat different topic, the Board of Governors of Banco de México considered necessary for credit institutions to make a new (mandatory) deposit at the Central Bank

amounting to 150,000 million pesos as from September 26th. This deposit replaced the one then existing for 95,396 million pesos. It should be emphasized that this new deposit did not modify the monetary policy stance of Banco de México.

#### *Monetary and Credit Aggregates*

During July-September 2002, the average growth of the stock of the monetary base at an annual rate (17.8 percent) was higher than that observed in the previous quarter (15.3 percent). The deviation of this stock from the forecast published in the Monetary Program was 5.1 percent on average and at the end of the quarter, 6.6 percent.

Available information suggests that this deviation could be transitory. This follows from the fact that although the seasonal behavior of the monetary base has decoupled from the pattern foreseen (obtained from historic data), it has been similar to that observed in 2001.

Nowadays, the incipient recovery of the economy and lower interest rates compared to last year's have raised the demand for base money.

During the third quarter, net international assets of Banco de México rose 1.107 billion US dollars and closed at a level of 46.737 billion. Net domestic credit shrank 11.6 thousand million pesos, reaching in September an accumulated contraction of 33 thousand million pesos.

Available information as of September 2002 indicates that although direct performing credit granted by commercial banks to the private sector remains depressed, it showed signs of recovery during the third quarter of the year. During that period credit flows amounted to 14.1 thousand million pesos. Mortgages as well as credit granted to non-bank financial intermediaries remained lackluster while credit to consumption grew, and financing to the private sector began to show signs of an incipient recovery (7.3 thousand million pesos during the quarter).

#### *Private Sector Outlook for 2002<sup>1</sup>*

Throughout July-September 2002, private sector analysts revised their forecasts as follows: lower GDP growth and higher inflation.

Most private sector analysts revised their estimates for growth in the United States economy in 2002 and 2003 downward, to 2.4 and 3 percent, respectively. They also expect real GDP in Mexico during 2002 will increase 1.58 percent. The only variable with a favorable forecast was the price of the Mexican oil export mix for 2002.

Exchange rate expectations were modified upwards. Also, surveyed analysts foresee a small increase (in relation to September) in the nominal contractual wage revisions in October and November.

Annual expected inflation for year-end 2002 rose from 4.76 percent in June to 4.98 percent in September. However, core inflation estimates for December 2002 went down from 4.20 percent in June to 3.97 percent in September, while inflation expectations for the following twelve months went from 4.15 percent in June to 4.05 percent in September. Inflation expectations for 2003 and 2004 are 3.96 and 3.62, respectively.

#### *Announcements of Monetary Policy Decisions*

After the adoption of a floating exchange rate regime as a result of the balance of payments crisis of 1994-1995, the exchange rate ceased to function as the instrument of monetary policy that guided inflation expectations towards the targets set by the monetary authority. Under such circumstances, the timely application of monetary policy instruments to attain the targets became the nominal anchor of the economy.

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

In order to have a framework that would allow the exchange rate and interest rates to be determined freely by the market, Banco de México made the following two decisions of an operational nature: i) The introduction of a “zero-average reserve requirement” and ii) the use of the accumulated balances objective for current accounts held by the banks at the Central Bank as the instrument of monetary policy. Through the latter mechanism, Banco de México would send signals to the financial markets without predetermining the level of interest rates or the exchange rate.

Evidence of the effectiveness of the “short” to modify interest rates has been obtained from several studies. Under the accumulated balances framework, interest rates are determined by the interaction of market participants and by the discretionary decisions of the monetary authority. The “short” has proven to be a very efficient instrument to allow a spontaneous distribution of the adjustment to external and domestic shocks between the exchange rate and interest rates. This characteristic is of utmost importance to an economy like Mexico’s, which has been subject to a high degree of volatility and to an intense pass-through of exchange rate fluctuations to domestic prices.

Although a short-term interest rate objective may be a more easily understood policy instrument, as attested by its broad use worldwide, the accumulated balances’ scheme and the use of the “short” have been effective, given the conditions of volatility that have affected the Mexican economy. The Board of Governors has been evaluating the convenience of adopting an interest rate objective as an operational instrument. On this count, the Board considers that the lesser volatility experienced by domestic markets brings us closer to a situation in which the necessary conditions to migrate would be met. Nonetheless, given the high degree of uncertainty currently affecting international markets and the vulnerability of domestic markets stemming from structural problems of the public finances in México, the adoption of

an interest rate instrument will not likely occur in the near future.

The modification of the monetary policy framework over several years has led to a gradual convergence towards the current inflation-targeting regime, formally adopted in the Monetary Program for 2001. A key element of this transition has been the efforts undertaken since 1999 to improve the transparency, the communication with the public and the accountability of the Central Bank.

One procedure used by several central banks, which contributes to maintaining a close communication with the public and to reduce uncertainty, consists in announcing on predetermined dates the decision, as well as the reasons behind it, to modify or not the monetary policy stance. Announcements are made at regular intervals throughout the year on predetermined dates.

Based on a careful analysis of its own and other countries’ experiences, the Board of Governors of Banco de México has considered that since inflation and uncertainty on the evolution of the economy have been significantly reduced, it is convenient to announce its monetary policy decisions on predetermined dates. The adoption of a calendar for those policy decisions is an additional element of the ongoing transformation of Banco de México’s monetary policy framework.

The calendar will help mitigate the uncertainty regarding the timing of the monetary authority’s decision to modify its policy instrument. As a result public discussions would turn to the monetary policy stance itself. This will foster a more efficient operation of the financial markets. Moreover, the announcement of monetary policy decisions on predetermined dates will allow the Central Bank to inform the public on a regular and timely basis on the factors that could be influencing the current behavior of inflation, the balance of risks regarding the future path of inflation, and the reasons supporting the



decision to modify or not the monetary policy stance.

The Board of Governors of Banco de México believes that such practice will foster a better understanding by the public of central bank actions and at the same time contribute to improve market participants' capacity to foresee the likely changes of the monetary policy stance. The adoption of the aforementioned calendar will not only improve the transparency of monetary policy but also help to reinforce the effectiveness of policy measures.

In addition, the Board of Governors decided to publish a monthly press bulletin that will provide the public, on a regular and timely basis, information on the reasons that motivate the modification or not of the monetary policy stance.

#### *Considerations for Adopting a Calendar to Announce Monetary Policy Decisions*

At present, the Board of Governors meets on a daily basis. The main goal of these meetings is to analyze information pertaining to the evolution of inflation, the economy, and the financial markets, and to assess the monetary policy stance in light of the inflation objectives. The Board of Governors may announce at any time a modification of the monetary policy stance. The decision is made public at 12:00 A.M.

The current framework under which the Board of Governors operates has proven effective in conducting monetary policy and attaining the targets. Nonetheless, given the advances in the disinflation efforts and lesser uncertainty on the evolution of the economy, Banco de México's need to have the flexibility to modify the monetary policy at any time has eased.

Among the advantages of adopting a calendar are the following:

- (a) It provides more certainty to the public on the monetary policy stance and on the desirable path of interest rates in the short term;
- (b) It emphasizes the Board of Governors' medium-term perspective for monetary

policy decisions. Announcements made at regular intervals will prevent such decisions from being associated by some market participants with certain phenomena that could affect inflation in a transitory way, with fluctuations in any specific market (such as the exchange rate market), or with the release of specific economic data; and

- (c) It will allow the monetary authority to inform the public on a regular and timely manner on the balance of risks behind the stance of monetary policy.

Therefore, the Board of Governors has determined that as from January 2003 all announcements of the decisions regarding the stance of monetary policy will be made on preestablished dates. From that date on, these will be presented to the public with the publication of the Inflation Report for the third quarter of the previous year. The monetary authority decided to retain the faculty to alter the monetary policy stance in dates different from those set in the calendar, should there be exceptional circumstances that might require the Central Bank's intervention.

In addition, the Board of Governors will continue with the present scheme of daily meetings in order to evaluate, on a day to day basis, in light of the targets, the factors that condition the current behavior of inflation, the potential risks affecting the future path of inflation, and the stance of monetary policy.

#### *Considerations for Determining a Calendar to Announce Monetary Policy Decisions*

Twenty-three dates during the year will be established to announce the decisions regarding the stance of monetary policy. Although the stability of the Mexican economy has strengthened in recent years, some degree of volatility still remains that could make necessary to modify the monetary policy stance with some frequency;

Two types of announcements on monetary policy decisions will be made each month. Specifically:

- (a) **End-month announcement:** An announcement on whether or not the monetary policy stance is modified will be made on the Friday preceding to the last Monday of every month, except in December, when it will be made ahead of time. Likewise, a press bulletin will be released specifying the motives that support Banco de México's decisions.
- (b) **Mid-month announcement:** Eleven additional dates will be established when intermediate announcements will be made, on the Fridays at the mid-point of the interval between end-month announcements. No intermediate announcement will be programmed in December. Intermediate announcements will only be accompanied by a press release should there be a decision to modify the monetary policy stance;
- (c) All announcements will be made by electronic and other means at 9:00 A.M.
- (d) The release of the quarterly Inflation Report will occur on the last Monday, Tuesday or Wednesday of January, April, July and October; and
- (e) Once the third quarter Inflation Report for a given year has been published, the annual calendar for announcements of monetary policy decisions, monthly press bulletins and the quarterly Inflation Reports will be available to the public on Banco de México's web page.

**Calendar of Announcements of Monetary Policy Decisions, Press Releases on Monetary Policy and Quarterly Inflation Reports in 2003**

Month	Monetary Policy Announcement	Press Release	Publication of Inflation Reports
January	10, 24	24	29 <sup>1/</sup>
February	7, 21	21	
March	14, 28	28	
April	11, 25	25	29
May	9, 23	23	
June	13, 27	27	
July	11, 25	25	30
August	8, 22	22	
September	12, 26	26	
October	10, 24	24	29
November	7, 21	21	
December	11	11	

1/ Includes the Monetary Program for 2003

***Balance of Risks and Conclusions***

During the third quarter of 2002, the evolution of the Mexican economy was conditioned by the following factors:

- (a) The downturn in industrial production in the United States and growing concerns regarding the future course of economic activity in that country;
- (b) Volatility in the stock markets world wide, higher risk aversion and the deterioration of country risk perception for emerging markets, specially for Latin America. This, in response to the deepening of the Argentinean crisis and the intensification of financial problems in Brazil;
- (c) A complex geopolitical scenario;
- (d) Pessimism regarding the progress of structural reforms in Mexico; and
- (e) Uncertainty resulting from the threat of a strike at PEMEX.

It is estimated that the annual GDP growth rate in the third quarter was 2.0 percent (below expectations), mainly due to the slowdown in industrial production experienced in the United States, which had a negative effect in the same activity in Mexico.

For the remainder of 2002, the evolution of the Mexican economy will be influenced by external factors, particularly by economic

growth in the United States and by the cost and availability of external financing:

- (a) The forecast for economic growth in the United States in 2002 was revised downwards, from 2.7 percent in the previous Inflation Report to 2.4 percent at present.
- (b) The average price of the Mexican oil export mix is expected to be around 21.7 US dollars per barrel; and
- (c) A conservative assumption is that the conditions for access to international capital markets will continue under the terms prevailing over the last few weeks. Short-term interest rates in the United States are expected to decline in the near future.

Taking into account the above assumptions, a forecasting exercise of the main macroeconomic variables for the remainder of 2002 was made:

**Economic growth:** Estimates for economic growth in 2002 were revised downwards, to approximately 1.3 percent.

**Current Account:** The expected current account deficit in 2002 was modified, to below 3 percent of GDP.

**Inflation:** For the remainder of 2002, core inflation is expected to be relatively constant. Therefore, headline inflation will be determined by the path of the prices of agriculture products –difficult to predict given their volatility- and by the evolution of prices administered or regulated by the public sector –influenced by fluctuations in the international prices of certain products such as domestic gas. In any case, it should be remembered that during the last two months of 2001, the prices of agricultural products were unusually low, and administered prices experienced a negative variation in December. As a result, this could translate into an upward statistical effect in year-end 2002. The phenomenon that allowed overall annual inflation to finish below target in 2001 and lower than core inflation would probably tend to raise overall inflation above core inflation levels in 2002. It is also

important to mention that the unforeseen hike in administered prices that occurred at the beginning of 2002 was a factor that from the onset prompted a deviation from the target.

Should annual inflation deviate from the 4.5 percent objective, it will be entirely due to the factors already mentioned, and therefore it would be short-lived. If public prices are set in order to achieve an inflation of 3 percent in 2003, overall inflation will probably converge rapidly towards core inflation in the first half of 2003.

The base scenario for the remainder of 2002 and for 2003 implies an average growth of approximately 1.4 percent of Mexico's economy during 2001-2003, significantly below potential GDP. This would be accompanied by scant job creation. The main reason behind this low growth phase of the domestic economy is the weakness of the global economic expansion. In order to counter external influences, domestic sources of growth need to be strengthened via the implementation of pending structural reforms that would make possible higher levels of productivity in all sectors of economic activity and induce more flexibility in their markets.

The base scenario for the remainder of 2002 and 2003 is subject to an unusually high degree of uncertainty. Among the most relevant risks the following are noteworthy:

- (a) That economic growth in the United States turns out to be lower than anticipated, and in a very extreme case, that the economy undergoes another recession.
- (b) That an additional contraction of capital flows to the Latin American economies should take place, as a result of an environment of growing financial problems.

The materialization of either scenario will probably hinder economic growth in Mexico. However, the effects on inflation would be ambiguous. Even though slower economic growth may lead to a weakening of inflationary pressures in the first scenario, the unfavorable effect on exports and economic activity in



Mexico could widen the external deficit. Furthermore, in both scenarios there would be less demand for the country's assets. These factors could cause a depreciation of the exchange rate, paving the way to additional inflationary pressures.

The main domestic risks that could affect Banco de México's central scenario are as follows:

- (a) That the lack of progress in the agenda of pending structural reforms should cause a downward revision of growth expectations for the Mexican economy over the medium and long terms;
- (b) That the current period of low economic growth in Mexico's economy and the absence of a full-fledged fiscal reform should affect the perception regarding the solvency of the public finances;
- (c) That a more intense passthrough of exchange rate fluctuations to domestic prices should occur; and
- (d) That the moderation of wage increases needed to significantly reduce core inflation of services should not be attained.

The combination of an environment of low growth and fiscal vulnerability could eventually erode the financial strengths of

Mexico's economy, making it vulnerable to episodes of speculative pressures.

It should be stressed that even under the outlined base scenario, the attainment of the long-term inflation target for year-end 2003 is a very ambitious goal.

The present external environment, characterized by growing uncertainty, complicates even more the assessment and the implementation of economic policies. Therefore, the modification of the inflation-targeting framework presented in this document should help mitigate the uncertainty regarding the precise dates of the monetary policy decisions and the reasons that support them, and will also contribute to improve their effectiveness. During the coming months, the Board of Governors of Banco de México will continue to assess the behavior of the main determinants of inflation for the remainder of 2002 and for 2003. Based on the evolution of those factors and, consequently, of inflationary pressures in the short and long-term that may be identified, the Central Bank will determine the monetary policy actions necessary to accomplish the targets.