# Annual Report

# 1999



BANCODEMEXICO

APRIL 2000

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As of this year, the translation of Banco de México's "Annual Report" replaces the publication of "The Mexican Economy". The Spanish version of this Annual Report was Submitted to the President and the Congress of Mexico, in accordance with Banco de México's Law, Article 51, section III.

# FOREWARNING

The figures presented for 1999 are preliminary, and are subject to change. Although the data are consistent within each section, comparing figures drawn from various sections may result in discrepancies, because they have been estimated on the basis of different sources and methodologies.

Banco de México has always given the utmost importance to the publication of information that will help decision-making and allow the public to evaluate the execution of its policies. This text is provided only as a convenience to the reader, and discrepancies could eventually arise from the translation of the original document into English. The original and unabridged Annual Report in Spanish is the only official document.

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# Introduction

The main variables in the Mexican economy performed better in 1999 than had been anticipated at the start of the year, as opposed to the rest of Latin American countries, where average economic growth was the lowest of the last ten years.

In 1999, Mexico's Gross Domestic Product (GDP) grew 3.7 percent in real terms, 0.7 percentage points above official estimates and 1.36 points more than private-sector analysts had forecasted when the year began. Economic development in 1999 was balanced both in terms of its distribution across economic sectors and across the various components of aggregate demand. At the same time, the National Consumer Price Index (INPC) rose 12.32 percent during the year, 0.68 percentage points below Banco de México's 13 percent official target, and 4.20 points less than had been predicted early in the year by the aforementioned group of private economic specialists. The combination of declining inflation and stronger than expected economic expansion confirms once again that reducing inflation has positive effects on economic activity. In fact, price stability is an indispensable requirement for sustained economic growth.

Other indicators whose performance during the past year is worth mentioning are:

- (a) Some 701,000 formal jobs were created, real wages in the manufacturing industry rose 5.3 percent, and the real payroll level increased by 6.8 percent.
- (b) The trade balance and current account deficits of the balance of payments declined from 1.9 and 3.7 percent of GDP in 1998 to 1.1 and 2.9 percent, respectively, in 1999.
- (c) The current account deficit was financed predominantly by long-term capital flows, including 11.568 billion dollars in foreign direct investment, which covered 82.6 percent of that deficit.
- (d) Non-oil exports grew 14.9 percent.

- (e) Private sector investment and consumption increased by 9 and 4.3 percent, respectively.
- (f) The central bank accumulated more foreign currency reserves than anticipated, bringing the year-end stock to 30.733 billion dollars.

The macroeconomic results of 1999 can be attributed to the implementation of an appropriate economic policy, combined with a beneficial external environment. The government's achievements in the area of fiscal policy confirmed its commitment to keeping sound public finances, increasing investors' confidence in the prospects for the Mexican economy. In addition, a prompt and preemptive application of monetary policy, aimed at keeping inflation within the official target, helped to maintain financial markets stable.

On the external front, two factors were key: first, economic growth in the United States —which was approximately double than the initial projections— encouraged an expansion in Mexican exports; and second, an upturn in oil prices, which bolstered Mexico's external accounts and public finances.

The combination of positive internal and external factors played a crucial role in restoring normalcy to international capital markets after the Russian crisis of 1998. Consequently, investors' perception of Mexico's country-risk improved, more swiftly than for other emerging markets.

This improvement, together with the easing of inflation and inflation expectations, induced a decline in domestic nominal and real interest rates. The result was a pickup in private consumption and investment, which in conjunction with the strength of exports gave a significant boost to economic growth.

By constitutional mandate, the main objective of monetary policy is the abatement of inflation. To gradually achieve its price stability goal and to minimize the costs of such process, the Board of Governors of Banco de México has established a medium-term monetary policy goal of bringing Mexican inflation into line with that of the country's main trading partners by the year 2003. Consequently, the inflation target for 1999 was set at 13 percent, and monetary policy was applied in pursuit of this objective starting in the last few months of 1998 and throughout 1999. Inflationary disturbances affecting the Mexican economy in the second half of 1998 sparked a severe deterioration of inflation expectations for 1999. Therefore, in November 1998 the Central Bank's Board of Governors agreed to increase the "short" to 130 million pesos. The purpose of this measure was to mitigate economic agents' upward revision of inflation expectations and to increase the feasibility of attaining the inflation target established for 1999.

In January 1999, the domestic financial markets were negatively affected once again, this time by the devaluation of the Brazilian currency and by fears that the financial instability in that country would spread to other emerging economies. In response to this situation, on January 13, the day the Brazilian authorities began their transition to a floating exchange rate regime, the Board of Governors of Banco de México agreed to another increase of the "short", from 130 to 160 million pesos. The prompt reaction by the monetary authorities limited the impact of these phenomena on the exchange rate, swiftly restoring stability to the domestic financial markets.

After the January 13 adjustment, the "short" remained at 160 million pesos for the rest of the year. As it was mentioned previously, this monetary policy stance was necessary to bring inflation in line with the target, especially in light of the inflationary pressures carried over from late 1998 and amid the public's general skepticism regarding the attainability of the inflation target for the year.

In addition, as the negative external factors present during the second half of 1998 subsided, the Mexican peso appreciated in the first months of 1999, followed by a period of exchange rate stability. Indisputably, this was a powerful contributing factor in reducing inflation. The decline in the prices of fruits and vegetables was another element that helped bring inflation below the initial target.

It is worth noting that the abatement of inflation was also assisted by a solid fiscal stance and by the fact that prices on most government-supplied goods and services behaved according to program.

Lastly, in September 1999, Banco de México and the federal government agreed that the goal of monetary policy for the year 2000 was to keep inflation below 10 percent. This was announced prior to the publication of Banco de México's monetary policy program in order to reduce uncertainty over the future performance of the main nominal

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variables and facilitate decision-making by economic agents in the last quarter of 1998. This inflation objective was confirmed in the Monetary Program published by this Institution in January 2000.

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The strong performance of the Mexican economy in 1999 adds to that of the two previous years, and demonstrates that the current economic strategy is generating clear benefits for all segments of society.

In pointing out these recent achievements, it is not intended to ignore the problems that afflict the economy, including high poverty indices and an unequal distribution of income. In the last two decades, recurring crises and high inflation have severely affected real wages and employment, which has had ill effects for income distribution. Therefore, in order to continue along the path of sustained growth and avoid the recurrent crises that have done so much damage to the Mexican economy, it is imperative to persevere in the economic policy strategies applied until now. This implies that the authorities' principal lines of action must include stepping up fiscal discipline, monetary prudence, trade liberalization, reforms to the education and health systems, the strengthening the nation's financial institutions, and the modernization of the judicial system and the regulatory and institutional frameworks.

With respect to monetary policy, despite the progress made in recent years, inflation in Mexico remains high. Domestic and international experience proves overwhelmingly that inflation has highly pernicious effects. Inflation erodes real wages, hampers job creation and the distribution of wealth; it also weakens the development of the financial markets, investment, and economic growth; and it damages the health of public finances. Therefore, in order to move definitively toward sustained economic growth, it is imperative to persevere in the efforts to reduce inflation.

# International Environment

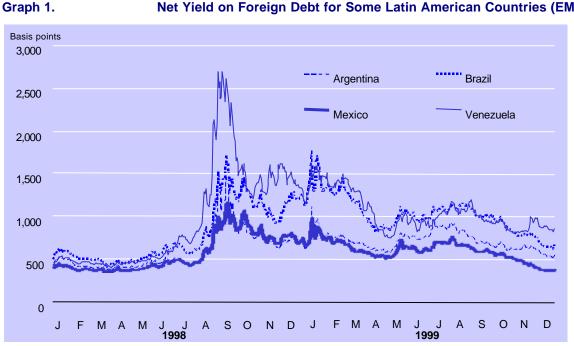
The financial turbulence of 1998 and the economic problems faced by Brazil in early 1999 augured a difficult external environment for Mexico as the year began. Over the course of 1999, however, worldwide economic and financial conditions improved, and as a result, the Mexican economy actually encountered a much better external situation than in the previous year. Specifically, the momentum of the United States economy, the rise in international oil prices, the economic recovery of Asian countries and the limited impact of the Brazilian crisis on international financial conditions, all had a positive effect on the Mexican economy.

Nevertheless, the emerging economies, particularly those of Latin America, continued to show relatively high levels of country-risk in 1999<sup>1</sup>. This was basically due to the prevailing uncertainty fueled by a variety of factors: the Russian debt moratorium of 1998, the possibility of significant interest rate hikes in the United States if inflation spiked upward, and the international markets' risk perception over the degree to which emerging economies were prepared for what was called the "Y2K bug".

In the first half of 1999, the yield on sovereign bonds of Latin American countries showed a declining tendency (see Graph 1). At about mid-year, however, rates turned around again, basically because of the restrictive bias of monetary policy adopted by the U.S. Federal Reserve and the financial problems in Ecuador. Mexico stood out clearly from the rest of the region, because its bond yields were lower than those of other countries at the end of 1999, and in fact were close to where they had been in the first half of 1998. This is a sign of how significantly the perception of Mexico's country-risk has improved.

Π.

<sup>&</sup>lt;sup>1</sup> Measured in terms of the net average yield on sovereign bonds, through JP Morgan's EMBI+ index, which includes the net yield on foreign debt instruments denominated in foreign currency. For the economies mentioned in Graph 1, this includes mainly Brady bonds, Eurobonds, and some issues by the largest local companies.



Net Yield on Foreign Debt for Some Latin American Countries (EMBI+)

Source: JP Morgan

Technological innovations in recent years coupled with rising productivity brought about an unexpectedly vigorous growth in the U.S. economy in 1999, continuing an unprecedented phase of expansion that has lasted for nine years. Expectations over the strong performance of the U.S. economy drove up asset prices, which has in turn been linked to increased household borrowing and consumption. The swift growth of aggregate demand, the upturn in oil prices and the reduction of unemployment prompted the Federal Reserve of the United States to adopt a more restrictive monetary policy. Thus, the federal funds rate was raised 75 basis points last year, driving up the yield on the 30-year Treasury Bond by 139 basis points and fostering increased volatility in the capital markets during the second half of the year.

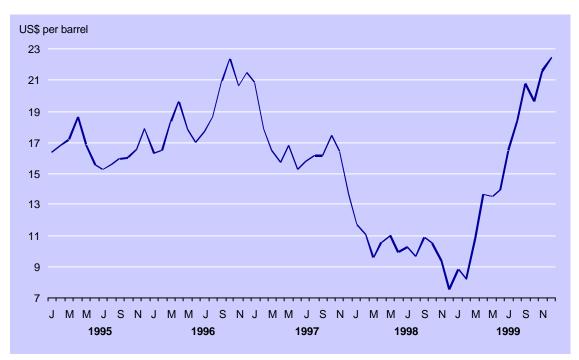
Among the factors that contributed to the recovery of the European economies in 1999 was the depreciation of the Euro after it was introduced at the start of the year, and the European Central Bank's reduction of the official interest rate, in a climate of price stability. This reduction was partially reversed toward the end of the year, however, as the authorities of that bank raised the official rate by 50 basis points.

In 1999, the Asian economies staged a strong comeback. Adequate macroeconomic management following the 1997 financial crisis favored the recovery and helped stabilize financial markets. In Japan's

case, the expansionary fiscal and monetary policies began to have a positive impact on economic activity.

With the exception of Brazil, Mexico and Peru, all the leading economies of Latin America experienced a recession in 1999, particularly Argentina, Chile, Colombia, Ecuador and Venezuela. Political uncertainty within some countries and monetary restriction in the U.S. made access to the international capital markets more difficult for these nations. Furthermore, the behavior of some commodity prices weakened several country's exports of these products and as a result reduced their economic growth. As the year went on, Latin American countries had better access to international financial markets and their prospects for economic growth improved.

The trend in international oil prices was another important factor in favor of an improved perception of Mexico's country-risk in 1999 (see Graph 2). After oil-producing nations agreed to cut production, the average price of Mexico's export oil mix rose to 15.62 dollars a barrel, 6.37 dollars higher than had been envisaged for the year.





Source: PEMEX

Aside from this propitious international environment, in 1999 the Mexican economy drew strength from the consistent application of economic policies, particularly fiscal and monetary policies. As the result of prudent macroeconomic management, international investors and rating agencies began to more clearly differentiate Mexico from the other emerging markets. Consequently, in 1999, Moody's upgraded Mexican long-term foreign currency debt from Ba2 to Ba1, and Standard & Poor's from "stable" to "positive." The improved international perception regarding the Mexican economy made it possible for the government to negotiate the Financial Strengthening Program for 1999-2000. As announced, the package consists of 6.8 billion dollars in contingent credit lines, backed by the North American Financial Agreement, and 16.9 billion dollars in lines of refinancing and foreign trade. III.

# The Economy in 1999: An Overview

# III.1. Economic Activity

In 1999, economic activity in Mexico made substantial progress. Economic growth and domestic spending intensified, creating new jobs and reducing the rate of unemployment to one of its lowest levels in history. This occurred even though, as the Central Bank had pointed out in its 1998 Annual Report, economic activity was somewhat weak in the last months of that year. This had been caused by instability in international financial markets during the third and fourth quarters of 1998, which had weakened domestic economic activity and dimmed expectations and perceptions of the business climate. The situation continued on into the early months of 1999, but the Mexican economy came back to enjoy a solid performance for the rest of the year.

The most notable features of Mexican economic activity in 1999 were as follows:

- (a) A pickup in GDP growth throughout the year. The pace of economic activity was better than most economic analysts had expected, and resulted in an increase in per-capita GDP.
- (b) An expansion of all components of aggregate demand, with the exception of public investment. The fastest-growing component was exports of goods and services, followed by private investment.
- (c) A reactivation of private consumption starting in the second quarter of the year, driven by economic growth and the expansion of total labor compensations, which spurred a rise in per-capita consumption.
- (d) An improvement in expectations regarding the business climate and the level of confidence starting in late February. According to indicators compiled monthly by Banco de México (from private sector economic analysts and manufacturing companies), the improvement continued throughout the year.

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(e) Growth in all the major divisions of production except mining.

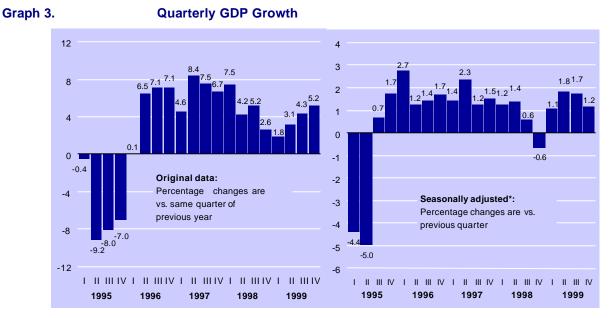
According to the National Institute for Statistics, Geography and Information Technologies (*Instituto Nacional de Estadística*, *Geografía e Informática*, INEGI), in 1999 Mexican GDP grew 3.7 percent at constant prices. This resulted from annual growth rates in each quarter of the year of 1.8, 3.1, 4.3 and 5.2 percent respectively. By the end of 1999, the Mexican economy had grown, on a annual basis, for 16 consecutive quarters (see Graph 3 and Table 1).

As reported by the monthly surveys conducted by Banco de México, throughout 1999 private sector economic specialists continually upgraded their GDP growth projections. Beginning with a forecast rate of 2.3 percent in January, it rose to 2.7 percent in April, 3.1 percent in August, and 3.6 percent in December. Seasonally adjusted GDP expanded in all four quarters of the year. On a quarter-to-quarter basis, the growth rates in the first, second and third quarters were 1.1, 1.8, and 1.7 percent, respectively. GDP growth in the fourth quarter was 1.2 percent, a rate that is considered more sustainable than those of the second and third quarters.

The improvement in economic activity in 1999 confirmed that its previous weakness was only temporary, and was caused by an adverse external environment in the preceding year. The strong performance of the Mexican economy was the result of solid economic fundamentals, a coherent and flexible application of economic policy, and the expansion of the U.S. economy that bolstered Mexican exports. The economic fundamentals have been shored up to better withstand external or domestic disturbances, and a more propitious climate of confidence has encouraged investment and the capital inflows from abroad.

In the first half of 1999, aggregate supply and demand, measured at constant prices, grew at an annual rate of 3.8 percent over the same period of 1998 (see Table 1), rising to 7.8 percent in the second half. In the first six months of the year, GDP grew at an annual rate of 2.5 percent, driven by both domestic demand and exports of goods and services. Within domestic demand, private investment and consumption were both exceptionally strong. These components advanced at a combined rate of 3.6 percent at constant prices over the first half of 1998. In the same period, government spending (both consumption and investment) decreased by 0.5 percent. In the second half of 1999, annual GDP growth accelerated to 4.8 percent. Exports

and domestic demand were the driving force behind this growth, expanding 16.7 and 5.1 percent, respectively, as compared to the second half of 1998.



 \* Seasonal adjustment calculated by Banco de México Source: INEGI

> Fixed capital formation also picked up in 1999 stimulated by private investment among exporting and non-exporting companies. This was due to the following factors: a steady growth in Mexican companies' domestic and external sales; higher profits of the country's major firms; a gradual increase in confidence and the improvement in business climate throughout the year; a reduction in unit labor costs in the manufacturing sector; and greater access to foreign credit.

> In the first half of 1999, gross capital formation grew 4.9 percent over the same period of 1998, and the annual growth rate in the second semester was 6.6 percent. Increased spending on machinery and equipment (7.1 percent) and on construction (4.5 percent) drove the expansion of investment in 1999. In the first category, spending on imported machinery and equipment was particularly vigorous, rising 15 percent at constant prices.

Table 1.

# Aggregate Supply and Demand

# Annual change in percent

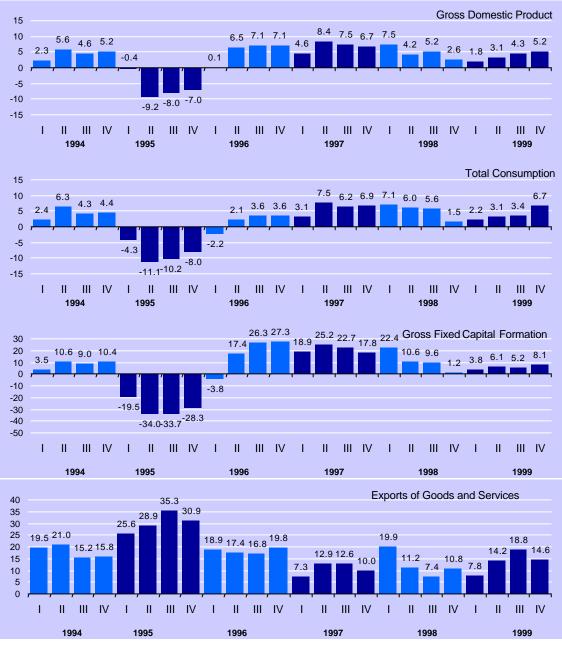
			_		1999	
	1996	1997	1998	l Half	II Half	Annual
Aggregate Supply	8.1	9.8	7.3	3.8	7.8	5.8
GDP	5.1	6.8	4.8	2.5	4.8	3.7
Imports of Goods & Services	22.9	22.7	16.5	8.0	17.3	12.8
Aggregate Demand	8.1	9.8	7.3	3.8	7.8	5.8
Total Consumption	1.8	6.0	5.0	2.6	5.1	3.9
Private	2.2	6.5	5.4	2.8	5.8	4.3
Public	-0.7	2.9	2.2	1.7	0.3	1.0
Total Investment	16.4	21.0	10.3	4.9	6.6	5.8
Private	26.7	23.5	15.0	6.8	11.2	9.0
Public	-14.8	10.1	-13.7	-13.0	-16.6	-15.3
Exports of Goods & Services	18.2	10.7	12.1	11.0	16.7	13.9

Source: Mexican System of National Accounts. (Instituto Nacional de Estadística, Geografía e Informática, INEGI).

The rise in investment came primarily from private investment, which grew 9 percent in 1999. The growth of this component was stronger in the second half than in the first (11.2 and 6.8 percent, respectively). In the same year, public investment dropped 15.3 percent. The expansion of private investment was the highest recorded since this indicator was first published in 1970.

In the first quarter of 1999, the growth in consumption was moderate (2.2 percent at constant prices), a trend that had been noticeable since late 1998. However, consumption took an upturn in the second quarter of 1999, as economic growth accelerated and employment and total labor compensations improved significantly. This occurred despite the persistent weakness of bank consumer–credit throughout the year.

# Graph 4. Total Consumption, Gross Capital Formation and Exports of Goods and Services

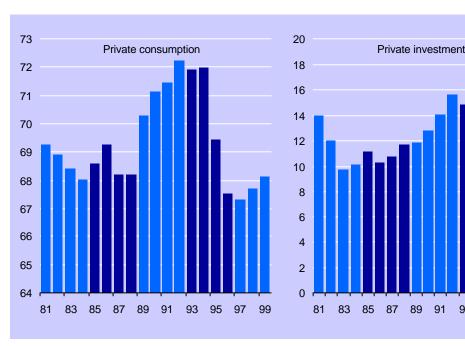


Annual change in percent

Source: INEGI

In the first half of 1999, consumption grew 2.6 percent on a yearly basis, driven by private sector consumption, which rose 2.8 percent, while public sector consumption advanced at a more modest

pace of 1.7 percent. The increase in consumption intensified in the second half of the year, rising at a rate of 5.1 percent. This reactivation can be explained mainly by an upturn in private consumption, which posted an annual growth rate of 5.8 percent in the same period. In fact, in the fourth quarter, the growth rate of private consumption (7.6 percent) outpaced that of overall GDP (5.2 percent), negatively affecting the domestic private savings.



# Graph 5. Private-Sector Consumption and Investment

As percentage of GDP, at constant prices

Source: INEGI

In 1999, the federal government sought to enhance the efficiency of its spending by improving budget allocation and controls, placing a priority on social programs spending. Social programs accounted for 62 percent of programmable spending in 1999, and most of these resources went to education, health and social security in an effort to improve the living standards of Mexico's poorest citizens. In contrast, the public sector's capital spending was reduced 15.3 percent in the year.

93 95 97

99

The fastest growing component of aggregate demand in 1999 was exports of goods and services. Their momentum was due to two basic factors: i) structural changes in the Mexican economy, particularly with regard to foreign trade liberalization; and ii) the strength of the U.S. economy. Structural change in Mexico has promoted strong investment in the export sector, raising productivity and increasing domestic companies' competitiveness on international markets. Thus, in 1999 exports of goods and services grew 13.9 percent at constant prices, surpassing the 1998 rate of 12.1 percent. These exports also grew substantially as a percentage of GDP. In 1999, at constant prices, this ratio reached 32.7 percent (as compared to 29.8 percent in 1998). In fact, the degree of Mexico's economic opening, measured as the sum of exports and imports of goods and services as a percentage of GDP, reached an unprecedented level of 65.5 percent in 1999.

As mentioned above, economic expansion in 1999 (3.7 percent) was driven by increases in both domestic demand and exports of goods and services. While in the first semester exports contributed more to GDP than domestic demand (see Table 2), in the second half of the year —when GDP growth increased— domestic demand moved ahead of exports, although both grew stronger than in the first semester.

# Table 2.Contribution of Domestic Demand and Exports of Goods and Services<br/>to Annual GDP Growth 1/

Period	Real	Growth Originating in :						
	GDP Growth	Domestic Demand 2/	External Demand = Net Exports 3/					
	(1) = (2) + (3)	(2)	(3)					
1995	-6.2	-8.7	2.5					
1996	5.1	3.2	1.9					
1997	6.8	5.7	1.1					
1998	4.8	3.4	1.4					
1999	3.7	1.9	1.8					
I Semester	2.5	1.2	1.3					
II Semester	4.8	2.5	2.3					

Percent annual change

1/ The sum of domestic demand and exports of goods and services, minus the imported component of each, is equal to GDP.

2/ Domestic demand net of imports.

3/ Exports net of their imported component.

Gross fixed capital formation, measured as a percentage of GDP at constant prices, rose to 21 percent in 1999. Domestic savings contributed 18.1 points of GDP to financing gross capital formation, while external savings, measured as the deficit in the current account of the balance of payments, contributed 2.9 points (see Graph 6 and Table 3).

Domestic savings thus financed a considerably greater percentage of investment in 1999, reaching its highest level in the last fourteen years.

# Table 3. Investment Financing with Domestic and External Savings Percent of GDP at Current Prices

#### Item 1994 1995 1996 1997 1998 1999p/ 1999p/ 1999p/ II Sem I Sem Annual Gross Fixed Capital Formation 19.4 16.2 17.9 19.5 20.9 21.3 20.6 21.0 Financing with External Savings 7.1 0.5 0.7 1.9 2.8 3.0 2.9 3.8 12.3 Financing with Domestic Savings 15 7 17 2 17 6 17 1 17 8 18.3 18 1

# p/ Preliminary.

Source: Data on gross fixed capital formation is drawn from INEGI and does not include the variation in inventories. External saving is equal to the current account deficit of the balance of payments at current prices. This calculation may be somewhat imprecise, since a portion of external saving may have been used to finance some accumulation of inventories.

# Graph 6. Investment Financing\* with Domestic and External Savings

#### 24 Investment 21 18 Financing with External Savings 15 12 9 Financing with Domestic 6 Savings 3 0 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1988 1999

# Percent of GDP at constant prices

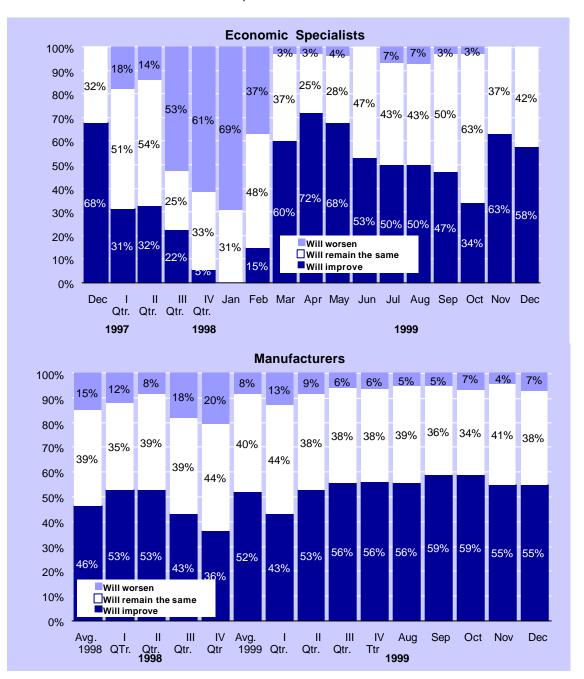
\* Investment does not include the variation in inventories.

Economic expectations improved considerably in 1999, coming back from a severe deterioration in the second half of 1998 that lasted into early 1999. After January of that year, however, the outlook began to brighten rapidly, as confirmed by Banco de México's monthly survey of manufacturing establishments and economic analysts (see Graph 7). Starting in February, expectations regarding the business climate for the next six months began to improve, and this trend continued for the remainder of the year. Other indicators that measure the level of confidence also showed an improvement (see Graph 8). This phenomenon was particularly noticeable in two sets of indicators: first, those regarding perceptions of the economic climate as compared to the previous year; and second, firms' perceptions regarding economic performance for the following six months. This improvement in expectations was also evident in surveys of investment intentions. It is interesting to note that, in these surveys, the expectations of manufacturing entrepreneurs were more stable than those of economic analysts.

Another two indicators that show the improvement in expectations of economic analysts were their projections on inflation for 1999 and 2000 —which dropped steadily from month to month— and their forecast for real economic growth in 1999, which rose continuously from 2.4 percent in the first two months to 3.1 percent in late August and 3.6 percent at the close of December. Projected real growth for the year 2000 was also adjusted accordingly.

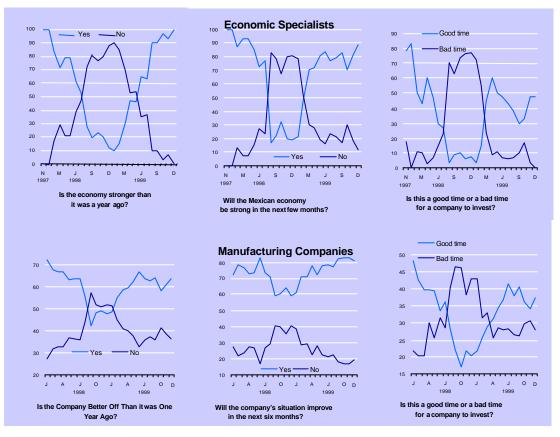
In 1999, GDP growth was driven by an expansion of all the major divisions of production, except for mining. Output of the agriculture, forestry and fishing sector rose at a real annual rate of 3.5 percent (see Table 4), the highest rate in three years for that branch of economic activity, and the second highest in the last nine years. This occurred despite adverse climatic conditions for many of Mexico's producing regions —drought in some months and flooding in others. These phenomena weakened the yield of some products and made their transportation more difficult, but did not hamper the general growth of the sector since agriculture and livestock production increased significantly.





Percent of responses





Percent of responses

The pace of activity in the industrial sector (mining, manufacturing, construction and utilities) intensified in 1999. In the first semester, annual growth for industrial GDP was 3.2 percent, rising to 4.4 percent in the second half, for a compounded annual expansion of 3.8 percent. Within this sector, three of the four divisions advanced (manufacturing, construction and utilities), while mining fell back 3.2 percent. Mining output was weakened by a reduction in the volume of crude oil and natural gas extracted and by lower production of some minerals and metals (gold, silver, zinc, coal and iron).

Table 4.	Real Gross Domestic Product

	1996	1997	19	98					
	Annual	Annual	IV	Annual	I	П	Ш	IV	Annual
Total	5.1	6.8	2.6	4.8	1.8	3.1	4.3	5.2	3.7
Agriculture, Forestry and Fishing	3.6	0.2	3.1	0.8	5.0	1.8	2.9	3.9	3.5
Industrial Sector	10.1	9.3	3.3	6.3	1.9	4.4	4.2	4.6	3.8
Mining	8.1	4.5	-0.3	2.7	-1.4	-5.1	-3.5	-2.9	-3.2
Manufacturing	10.8	9.9	4.2	7.3	1.6	4.7	5.1	4.8	4.1
Construction	9.8	9.3	1.4	4.2	3.9	5.6	2.5	5.9	4.5
Utilities	4.6	5.2	0.3	1.9	4.0	4.8	3.5	5.3	4.4
Services Sector	3.0	6.6	2.3	4.6	1.6	2.8	4.6	5.7	3.7
Retail, Restaurants and Hotels	4.8	10.7	-0.3	5.6	-0.9	1.9	5.9	9.2	4.1
Transportation and Communications	8.0	9.9	6.2	6.3	7.6	8.9	9.4	9.2	8.8
Financial, Insurance and Real Estate	0.6	3.7	3.3	4.5	2.3	2.1	2.6	3.8	2.7
Community, Social and Personal Servic	ces 1.0	3.3	2.4	2.8	0.7	1.4	2.0	2.0	1.5

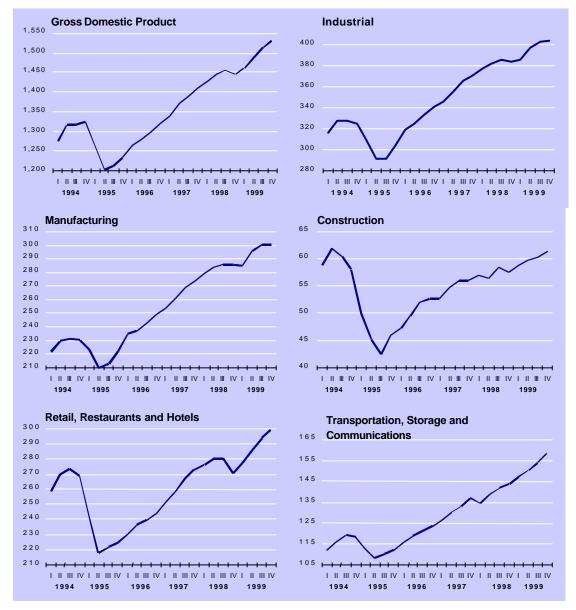
Change compared to the same period of the previous year in percent

Source: INEGI.

In 1999, manufacturing GDP grew 4.1 percent, rising 3.2 and 4.9 percent in the first and second quarters, respectively. Industrial processing output expanded 3.5 percent and in-bond manufacturing 12 percent. This performance of the manufacturing industry reflected growth in most of its components: of the 49 manufacturing branches, 37 reported an increase (76 percent of the total). Of the remaining branches —which make up 24 percent of the total— 11 reported declines and one showed no change.

The automotive industry is a very important branch of manufacturing production in Mexico, not only because of its production value, but also because of the jobs it generates and its contribution to total exports. In 1995 the number of vehicles produced increased 5.3 percent over the previous year; domestic auto sales rose 5.9 percent and export sales 11.6 percent. These exports —representing a total of 1,092,989 cars and trucks— rose to 71 percent of domestic automotive output in 1999.

# Graph 9.Total and Sectorial Gross Domestic ProductThousands of millions of pesos at 1993 prices.



Seasonally adjusted figures \*

The expansion of investment spending in 1999 had a pronounced positive effect on the construction industry, where production increased by 4.5 percent in the year. This growth was driven primarily by an increase in the number of general construction works; transportation,

<sup>\*</sup> Seasonal adjustment calculated by Banco de México Source: INEGI

# BANCO DE MÉXICO

urbanization and road works; and oil and petrochemical projects. GDP for the utilities sector (electricity, gas and water) moved up 4.4 percent in 1999, in response to rising demand from various segments of the market.

GDP for the services sector grew 3.7 percent in 1999, gaining speed in the second half of the year (5.2 percent as compared to 2.2 percent in the first semester). The fastest growing branches were transportation, warehousing and communications (up 8.8 percent in annual terms) and retail, restaurants and hotels (up 4.1 percent). The expansion of transportation services was sustained by growth in various areas: automotive freight, automotive passenger transportation, railway kilometer-tons, airline passengers, and the flow of traffic on toll highways. The advance in communications output was fueled by growth in telephone services, both local and long distance, and a brisk expansion of the cellular phone business.

GDP for retail, restaurants and hotels moved up at an annual rate of 4.1 percent, which was the result of a 0.5 percent advance in the first semester and a 7.5 percent growth in the second half of the year. The dramatic acceleration of retail trade in the second semester was spurred by a recovery of both domestic sales and foreign trade (non-oil exports and imports of final consumer goods). The GDP of the community, social and personal services branch rose 1.5 percent in 1999, due, among other factors, to an expansion of educational and professional services, leisure services and medical care. GDP for financial services, insurance, real-estate and rental services grew 2.7 percent in 1999. This expansion was caused mainly by an advance in the insurance, real-estate and rental divisions.

# III.2. Employment, Wages and Productivity

In overall terms, the Mexican labor market improved in 1999. The expansion of economic activity bolstered the demand for labor, and as inflation was brought under control, it drove an expansion of total and average labor compensation in real terms. The most outstanding aspects of the labor markets' evolution last year were the following:

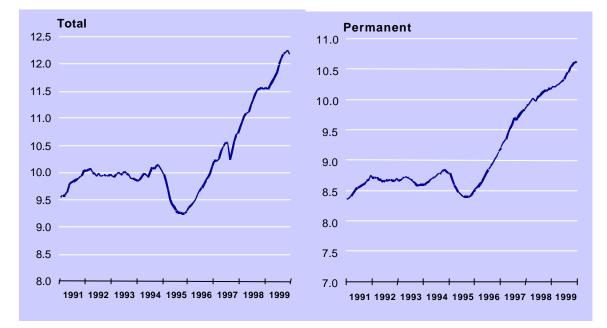
- (a) A significant increase in employment in most sectors;
- (b) A downward trend in the rate of unemployment in urban areas;

- (c) An increase in nominal wages obtained through contractual negotiations above the expected rate of inflation for the corresponding contract period;
- (d) A real growth in total compensation in various sectors, which contributed to the rise in consumption;
- (e) A gradual recovery of indicators on real compensation per worker in various sectors of activity; and
- (f) A growth in average manufacturing productivity per worker greater than that of real compensation per worker. This means unit labor costs in that sector have declined, boosting Mexico's international competitiveness.

The strength of labor demand in 1999 contributed to an increase in the total number of workers registered with the Mexican Social Security Institute (IMSS). At the close of December, this number grew 6.1 percent as compared to its level at year-end 1998; in absolute terms, this meant 701,000 additional workers. The expansion of employment was observed in most economic sectors. Between December 1998 and December 1999, the number of non-in-bond manufacturing workers affiliated to IMSS grew at an annual rate of 7 percent. The increases in the number of IMSS-affiliated workers in the following industries are also worth mentioning: construction (5.1 percent); social, community and personal services (9.5 percent); transportation and communications (5.6 percent); and retail (5.4 percent).

In-bond manufacturing has played an outstanding role in job creation in recent years, both because of the remarkable growth in its production level and its intensive use of labor. In December 1999, this industry employed 1,196,678 workers, almost 158,000 new jobs over the preceding year (an annual increase of 15.1 percent). In the five-year period between December 1994 and December 1999, the in-bond industry has generated 596,000 new jobs.

# Graph 10. Workers Affiliated with the Mexican Social Security Institute Seasonally adjusted\* Millions of workers

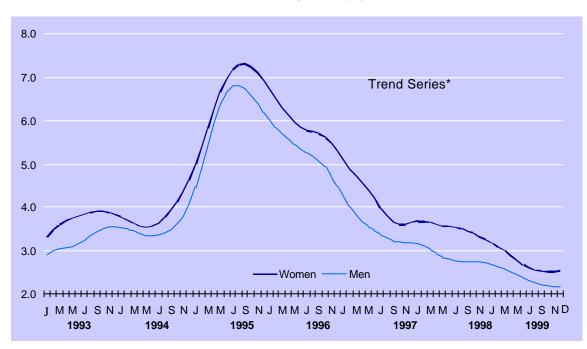


\* Seasonal adjustment calculated by Banco de México Source: IMSS

# Table 5. Employment Indicators

	1996	1997	1998			1	999			
	Annual	Annual	Annual	I	II	Ш	IV	Nov.	Dec.	Annual
Insured with the IMSS Annual percent										
Total	2.6	7.7	7.8	6.0	5.4	5.7	5.9	5.9	6.1	5.7
Permanent	3.7	8.7	4.9	3.0	2.8	3.6	4.5	4.4	4.8	3.5
Non-permanent	-7.7	-2.1	40.1	34.3	27.5	22.3	16.9	16.8	15.6	24.6
Non-in-bond Manufacturing	7.0	12.9	12.1	7.6	6.6	7.0	7.2	7.6	7.0	7.1
Agriculture	1.3	5.0	0.4	8.3	2.9	-1.2	-1.7	-1.8	-2.2	2.1
Mining	5.9	4.2	-0.1	-3.5	-1.1	0.2	-1.0	-0.8	-2.3	-1.3
Construction	-9.1	0.3	5.9	13.3	12.0	9.4	6.9	7.6	5.1	10.3
Workers Employed in the In-Bond Manuf. Industry	16.3	19.9	11.6	10.4	13.1	14.6	14.4	14.3	15.2	13.1
			Percent of t	he econo	mically a	active po	pulation	1		
Urban Open		0.7			0.0			0.4	0.0	0.5
Unemployment Rate	5.5	3.7	3.2	2.9	2.6	2.3	2.2	2.1	2.0	2.5
Mexico City	6.9	4.4	4.0	3.7	3.3	2.9	2.8	2.5	2.7	3.2
Guadalaiara	5.0	3.3	2.8	2.4	2.4	1.9	1.5	1.5	1.4	2.1
Monterrey	6.0	3.9	3.1	3.0	2.4	1.9	1.7	1.4	1.7	2.2

Source: IMSS and INEGI.



Graph 11. Open Unemployment Rate in Urban Areas

Percent of economically active population

\* Trend adjustment by Banco de México. Source: INEGI

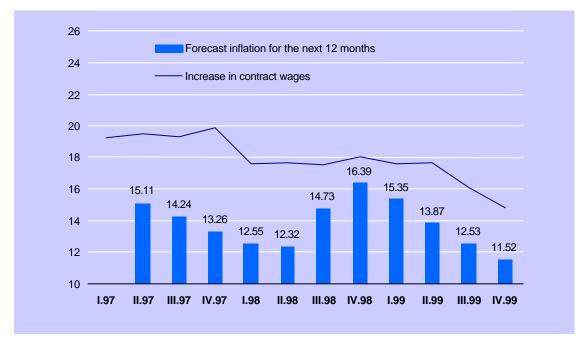
One indicator of the strength gained by labor demand in 1999 is the reduction of the open employment rate<sup>2</sup> in urban areas. In December of that year, this rate was 2 percent, its lowest level since 1985 when this indicator began to be measured on a nationwide basis (see Graph 11). In the overall labor market, there was a clear increase in the number of personnel working 35 hours or more per week: this percentage rose from 76.5 percent in 1998 to 79.3 percent in 1999.

In the first semester of last year, contractual wages revisions resulted in direct increases to base salaries averaging 17.6 percent. This was similar to the rate posted in 1998 of 17.7 percent, and above the inflation rate forecasted by private sector economic specialists for the period the respective new contracts would be in effect (see Graph 12). In the third and fourth quarters, the corresponding wage increases fluctuated, averaging 15.9 percent in November and December.

<sup>&</sup>lt;sup>2</sup> The open unemployment rate is defined according to the criteria set forth by the International Labor Organization (ILO). It measures the proportion of the Economically Active Population (EAP), represented by individuals 12 years of age or more, who during the reference period did not work at least one hour a week, despite being looking for a remunerated job or working on their own.

Nevertheless, these revisions were still at rates higher than the expected rate of inflation for the following twelve months.

# Graph 12. Direct Increase in Base Contract Wages and Inflation Expectations for the Next 12 Months.



Annual percentage change

\* The indicator on forecasted inflation for the following 12 months comes from the monthly survey conducted by Banco de México among private sector economic analysts .

# Table 6.

# Leading Indicators of Nominal Compensation per Worker

# Annual change in percent

		1998					1999				
	1	Ш	III	IV	Annual	1	Ш	Ш	IV	Annual	
Contract Wages	17.7	17.7	17.6	18.0	17.7	17.6	17.7	16.1	14.8	16.5	
Non-in-bond Manufacturing	19.4	17.8	20.3	19.6	19.3	18.9	18.9	16.8	17.0	17.8	
In-bond Industry	14.8	18.4	20.8	23.3	19.5	24.8	20.1	18.3	13.9	19.0	
Construction Industry	21.7	17.4	14.6	19.0	18.1	19.5	17.9	19.4	18.2	18.8	
Wholesale Trade	17.3	18.6	18.2	19.4	18.4	15.2	15.5	14.7	13.6	14.7	
Retail Trade	21.2	19.8	21.1	21.2	20.8	19.5	18.9	18.6	16.7	18.3	

Source: Compiled by Banco de México based on information from the Ministry of Labor (Secretaría del Trabajo y Previsión Social, STPS) and from INEGI.

In 1999, the most pronounced increases in nominal wages per worker were in the in-bond manufacturing sector, while the lowest were reported in wholesale trade (see Table 6). In the rest of the manufacturing sector, nominal compensation per worker rose 17.8 percent in the year.

The real total payroll (sum of wages, salaries and benefits, discounting the effect of inflation) rose in various sectors of the economy in 1999. In the in-bond manufacturing industry, this aggregate increased 15.6 percent in the year. This was in response to both a pickup in employment and advances in real average compensation (see Table 7). In the rest of the manufacturing sector, the expansion of the real total payroll was 6.8 percent as of December, while real wages per worker increased 5.3 percent in the same period.

#### Real Total and Average Compensation, by Sector

	1999							
		11	III	IV	Oct.	Nov.	Dec.	Annual
Total Payroll								
Non-in-bond Manufacturing	1.2	0.7	0.8	4.0	1.1	3.4	6.8	1.7
In-bond Industry	16.2	15.2	16.4	14.6	14.1	17.4	12.7	15.6
Construction Industry */	0.4	-2.5	-2.0	-3.9	-5.4	-2.3	n.a.	-1.8
Wholesale Trade	-1.5	0.9	1.0	1.5	2.2	3.8	-0.4	0.5
Retail Trade	4.0	4.2	5.8	6.2	4.3	6.7	7.1	5.1
Real Compensation per Worker								
Non-in-bond Manufacturing	0.3	0.8	0.2	3.0	0.4	2.5	5.3	1.1
In-bond Industry	5.3	1.9	1.6	0.2	0.5	2.7	-2.2	2.2
Construction Industry */	0.8	0.0	2.5	3.3	0.8	5.8	n.a.	1.4
Wholesale Trade	-2.8	-2.0	-1.6	0.1	-1.0	0.5	0.6	-1.5
Retail Trade	0.8	0.9	1.8	2.8	0.0	4.1	3.8	1.6

Annual change in percent

\*/ Data for the fourth quarter correspond to the October-November period, and annual data correspond to January-November.

n.a. Not available

Table 7.

Source: Compiled by Banco de México based on information from INEGI.

In 1999, labor productivity in the manufacturing sector (excluding in-bond industries) improved once again: productivity per worker increased 2.9 percent, outpacing the 1.1 percent increase in real average wages. This resulted in a reduction in labor costs per product unit, which is important considering that this sector accounts for 90 percent of the total value of Mexico's merchandise exports.

A number of indicators on the real exchange rate for the Mexican peso reveal an appreciation in 1999. One of these measures, which is very useful for tracking the international competitiveness of the manufacturing sector, is the real exchange rate based on unit labor costs. This index shows an appreciation in 1999 despite the rise in productivity recorded during the year. This real appreciation is the result of a nominal appreciation of the peso throughout 1999. Even so, the real exchange rate is still significantly weaker than it was in 1994 (see Graph 13).

## Graph 13. Real Exchange Rate Index based on Unit Labor Costs in the Manufacturing Sector \*



Calculated with respect to Mexico's eight largest trading partners in the manufacturing sector (United States, United Kingdom, France, Italy, Spain, German, Japan and Canada).

An additional indicator on the evolution of the labor market is the number of calls out on strike and the number of strikes that actually took place. In 1999, 7,972 calls out on strike were recorded in the negotiations under federal jurisdiction, but only 32 of them resulted in actual strikes. Although the number of calls in 1999 was greater than the year before (7,352), the number of strikes was slightly lower (33 the year before), and, in fact, was the lowest in the last seven years.

Index: 1990=100

## III.3. External Sector

The outstanding features of the evolution of the external sector during 1999 were the following:

- (a) A positive performance of merchandise exports: their annual growth was higher than that experienced in 1998, fueled by non-oil exports, which were in turn encouraged by the expansion of the U.S. economy;
- (b) A recovery of the value of oil exports starting in March, driven by an upturn in international prices of crude oil;
- (c) A slowdown in the growth of merchandise imports as compared to the year before. After demand for imported merchandise weakened in the second half of 1998 and first quarter of 1999, it began to rise again. This reflects the strength of productive activity and domestic demand, as well as an expansion of manufacturing exports that require imported inputs;
- (d) A contraction in the trade deficit from its 1998 levels;
- (e) A moderate deficit in the current account of the balance of payments, lower than in 1998 in both dollar terms and as a percentage of GDP;
- (f) A surplus in the capital account of the balance of payments, primarily from an inflow of long-term foreign investment.
   Foreign direct investment was particularly strong, financing more than four-fifths of the current account deficit;
- (g) A greater access to external financial markets for the Mexican private sector, after a relative restriction in the second half of 1998;
- (h) A negotiated refinancing of Mexico's external debt for the remainder of this presidential administration. The Financial Strengthening Program for 1999–2000 announced in mid-June has buttressed the Mexican economy and reduced its vulnerability to internal and external disturbances; and

 A substantial accumulation of international reserves and net international assets. As a result, Mexico's net international reserves closed the year at its highest recorded level.

## Table 8.Trade Balance

Millions of U.S. dollars

				Absolute	Percent	Change
ltem	1997	1998	1999	Change in 1999	1998	1999
	(1)	(2)	(3)	(3) - (2)	(2) / (1)	(3) / (2)
Exports	110 431	117,460	136,703	19 244	64	16.4
Oil	11.323	7.134	9.920	2.786	-37.0	39.1
Non-oil	99,108	110,325	126,783	16,458	11.3	14.9
Agricultural	3,828	3,797	4,145	348	-0.8	9.2
Minining	478	466	452	-14	-2.4	-3.0
Manufacturing	94,802	106,062	122,186	16,123	11.9	15.2
In-bond	45,166	53,083	63,749	10,666	17.5	20.1
Others	49,637	52,979	58 437	5 457	67	10.3
mports	109.808	125.373	142.064	16.691	14.2	13.3
Consumer Goods	9,326	11,108	12,175	1,067	19.1	9.6
Intermediate Goods	85,366	96,935	109,359	12,423	13.6	12.8
In-bond	36,332	42,557	50,409	7,853	17.1	18.5
Others	49,034	54,379	58,949	4,571	10.9	8.4
Linked to Exports	59,403	67,953	78,013	10,060	14.4	14.8
Not Linked to Exports	25.963	28.982	31.346	2.364	11.6	8.2
Capital Goods	15,116	17,329	20,530	3,201	14.6	18.5
Export Firms	4,956	5,482	6,842	1,359	10.6	24.8
Non-export Firms	10,160	11,847	13,689	1,842	16.6	15.5
Total Trade Balance	624	-7.913	-5.361	2.552	n.s.	-32.3

n.s. not significant

The trade balance for 1999 was a deficit of 5.361 billion dollars, 32.3 percent less than the 1998 deficit of 7.913 billion. Mexico exported 136.703 billion dollars in merchandise during the year, and imported 142.064 billion. Table 8 shows that in 1999 the growth of merchandise exports was greater than that of imports.

Merchandise exports grew 16.4 percent in 1999, picking up speed from their 1998 growth rate of 6.4 percent. As in 1998, the expansion of Mexican exports was one of the highest in the world last year. In a sample of 30 leading countries in international trade, which supply more than four-fifths of world exports, only one (the Philippines) reported in 1999 a stronger increase in foreign sales than Mexico (see Table 9).

Table 9.

Growth\* in the Value of Exports of 30 Selected Countries in 1999 Current U.S. dollars

Countries	Growth	Countries	Growth
Industrial Economies			Rate
United States	1.9	Korea	9.0
Canada	11.7	Hong Kong	0.0
Japan	8.1	Taiwan	9.9
Germany	-0.6	Singapore	4.4
France	-2.5	China	6.5
United Kingdom	-1.8	Philippines	18.8
Spain	1.0	Indonesia	-0.7
Italy	-6.4	Thailand	7.2
Australia	0.4	Malaysia	15.7
Finland	-2.7	India	12.9
Netherlands	-1.9	Israel	10.3
New Zealand	3.0	Argentina	-11.8
Norway	13.2	Brazil	-6.0
Sweden	-0.1	Chile	5.3
Switzerland	0.9		
exico :			
Total Exports	16.4		
Manufacturing Exports	15.2		
Non-oil Exports	14.9		

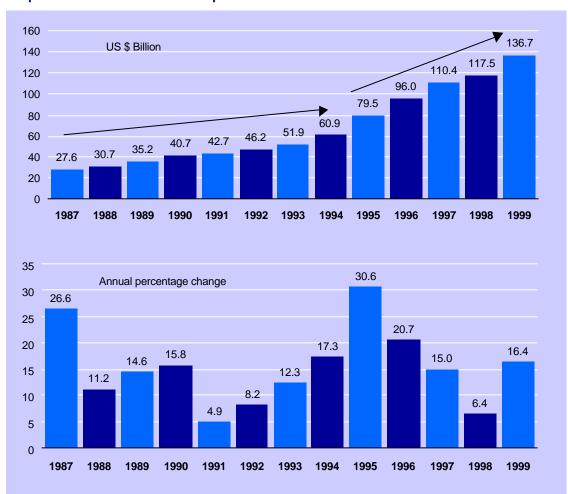
\*/ Growth rate with respect to the same period of previous year. Exports by these economies

accounted for 82 percent of world exports in 1998.

Both categories of merchandise exports —non-oil and oil products— advanced in 1999, the former by 14.9 percent and the latter by 39.1 percent.

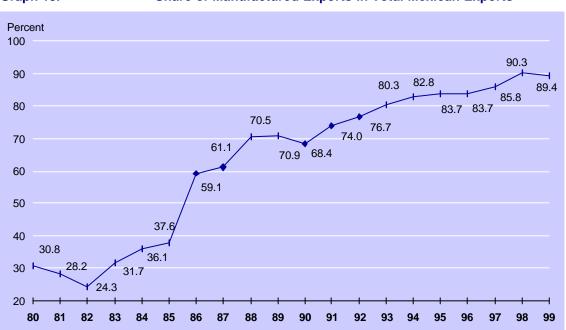
Exports of manufactured products were particularly vigorous in 1999. Their value totaled 122.186 billion dollars, 15.2 percent more than in 1998. This growth was spurred by a steady economic expansion in the U.S., which is Mexico's main trading partner, and by the intensive process of investment experienced by the manufacturing export sector in the last few years. In 1999, exports by the in-bond manufacturing industry moved up 20.1 percent, and exports by other manufacturers rose 10.3 percent. The manufacturing branches reporting the highest growth rates in 1999 were: machinery for various industries (23 percent); plastic products (18.6 percent); electric and electronic devices (18.4 percent); professional and scientific equipment (17.8 percent);

manufacture of products based on non-metallic minerals (12.9 percent); and the automotive industry (15.2 percent).



Graph 14. Total Exports

The downward trend of international oil prices observed throughout 1998 continued into early 1999 notwithstanding the measures adopted by a number of oil-producing countries, including Mexico, to reduce the world supply of that commodity. This situation prompted some of the world's leading crude oil producers to agree on further production cutbacks starting in April 1999. Complying with that agreement, Mexico cut an additional 125,000 barrels a day from its export platform. Ultimately, these production cuts —combined with a reactivation of demand for crude oil that accompanied economic recovery in some of the largest oil-consuming nations— brought a significant rebound in fuel prices, including the price of Mexico's export crude oil mix. Thus, in 1999 Mexico's oil exports totaled 9.92 billion dollars, 39.1 percent more than in 1998. The average price of the Mexican crude oil mix for export was 15.62 dollars per barrel that year, rising 5.46 dollars from its 1998 level.

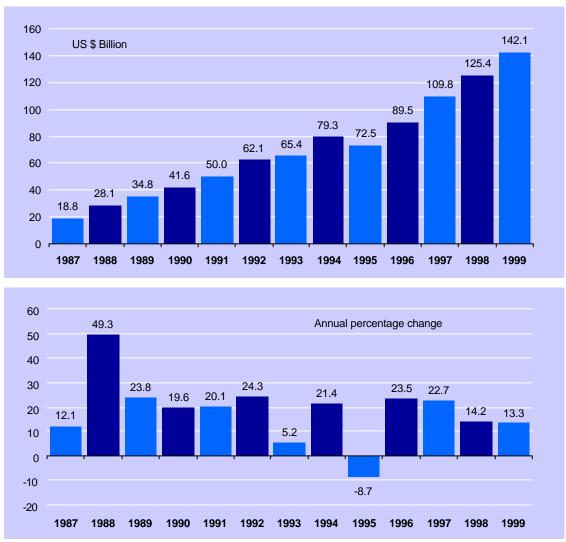


Graph 15. Share of Manufactured Exports in Total Mexican Exports

Exports of agricultural products totaled 4.145 billion dollars in 1999, up 9.2 percent from its level of 1998. The highest growth rates were on cantaloupe and watermelon (73.4 percent), livestock (57.7 percent) and fresh fruits and vegetables (17.1 percent). In contrast, coffee exports dropped 5.1 percent as a result of the decline in international coffee prices.

The percentage structure of the value of Mexican merchandise exports in 1999 breaks down as follows: manufactured goods, 89.4 percent; oil products, 7.3 percent; agricultural goods, 3 percent; and non-oil extractive products, 0.3 percent.

The growth rate of imports slowed in 1999 from its 1998 level, despite a slight recovery in purchases abroad. This recovery was fueled by the improvement experienced throughout the year in economic activity and domestic demand and by an expansion of manufacturing exports that require imported inputs. The value of Mexico's merchandise imports totaled 142.064 billion dollars, 13.3 percent more than in 1998. This rate is lower than the one obtained in 1998 of 14.2 percent (see Graph 16). The expansion of imports gained speed as the year went on, rising from 4.5 percent in the first quarter to 11.6 percent in the second quarter, 16.9 percent in third, and 19.5 percent in the last quarter.





Imports of intermediate goods grew 12.8 percent in 1999, fueled by the strength of exports and an increase in production for the domestic market. While exporters purchased 14.8 percent more imported inputs than in 1998, other companies increased their imports by 8.2 percent only. Imports of inputs for the production of goods for subsequent export accounted for 71 percent of total intermediate goods imports in 1999.

Mexico imported 12.175 billion dollars in consumer goods in 1999, 9.6 percent above the 1998 figure. In the first quarter, these imports dropped sharply (9.6 percent), but came back when private consumption began to expand, reaching annual growth rates of 8.8, 12.7 and 24.1 percent in the next three quarters. The fastest-growing consumer goods imports were: special prepared foods (30.7 percent); medicines (17.7 percent); fresh meat (11.5 percent); butane and propane gas (34.3 percent); automobiles (20.6 percent) and electrical and electronic devices and equipment (12 percent).

The import category that posted the strongest growth in 1999 was capital goods, fueled by investment spending by both exporting and non-exporting companies. In fact, this was the only import category that surpassed its 1998 growth rate. These purchases totaled 20.530 billion dollars, 18.5 percent more than in 1998.

From a regional standpoint, the most interesting features of Mexico's foreign trade activity in 1999 were: i) a substantial consolidated trade surplus with NAFTA countries, made up of a surplus with the United States (15.25 billion dollars) and a deficit with Canada (638 million dollars); ii) a surplus with the rest of Central and South America; and iii) a deficit with Europe, Asia and the rest of the world. Briefly, the narrowing of Mexico's trade deficit in 1999 was caused by a combination of a higher surplus with the NAFTA region, a lower surplus with other countries in America, a reduction of the deficit with Europe, and an increase in the deficit with Asia (see Table 10).

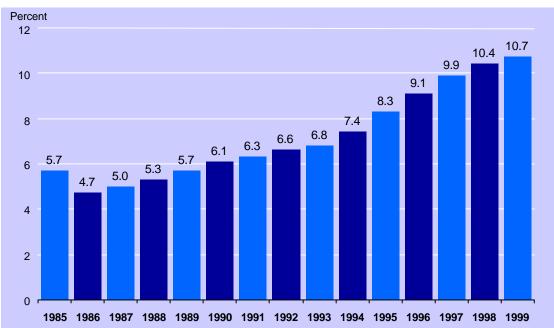
Mexico remained the third leading exporter of merchandises to the United States in 1999, after Canada and Japan; nonetheless, Mexican exports to the U.S. grew faster than those of the other two countries. The country's share of total U.S. imports rose to 10.7 percent, from 10.4 percent in 1998 (see Graph 17). As in the previous year, the value of Mexican exports to the United States was greater than those of its two leading European trade partners combined (Germany and the United Kingdom), as well as those of all four of the "Asian Tigers" (Hong Kong, South Korea, Singapore and Taiwan).

Millions of U.S. dollars

					Percent Change			
Item	1997	1998	1999	Change	Expo	Exports		orts
	(A)	(B)	(C)	(C)-(B)	1998	1998 1999 1	1998	1999
Total	624	-7,913	-5,361	2,552	6.4	16.4	14.2	13.3
NAFTA Zone	12,490	9,064	14,615	5,551	8.5	17.5	13.8	13.4
United States	12,301	9.835	15.253	5.418	9.3	17.0	13.7	13.0
Canada	189	-771	-638	133	-29.6	52.2	16.4	28.8
Rest of World	-11,866	-16,977	-19.976	-2.999	-8.1	7.3	15.4	13.2
Rest of America	4,022	2,975	2,010	-965	-11.3	-9.4	9.9	12.9
Europe	-6.270	-8.284	-7.821	463	-3.5	37.7	17.3	9.2
Asia	-9,106	-10,902	-13.092	-2,190	-8.2	-3.9	13.9	16.0
Others	-512	-766	-1,073	-306	0.4	-12.6	32.8	26.2

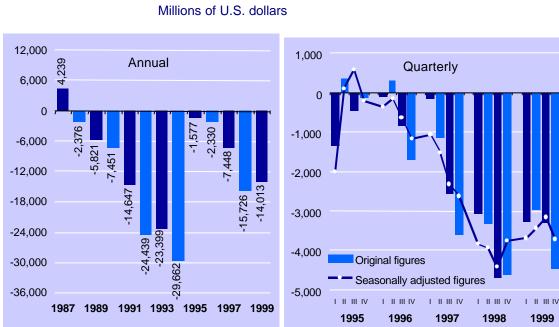
Mexican exports to the United States grew 15.9 percent in 1999, while Canada's and Japanese exports to that county rose 14.5 and 7.8 percent, respectively. Exports by Taiwan, Malaysia, China and Thailand increased 6.3, 12.8, 14.9, and 6.6 percent, respectively. Exports from other Asian countries to the U.S. market also grew more slowly than Mexico's. Korea was the only Asian country that outperformed Mexico in terms of the increase in its exports to the U.S. (30.6 percent), but this followed on a very modest growth in 1998.





In 1999, the deficit in Mexico's current account of the balance of payments was lower than in 1998, both in dollar terms and as a percentage of GDP: the deficit was 14.013 billion dollars, equivalent to 2.9 percent of GDP, dropping from 15.726 billion the year before (3.7 percent of GDP). Analyzing the quarterly trend in the current account, a slowdown can be detected in the first two quarters of 1999, followed by an upturn in the third and fourth quarters.

The current account deficit in 1999 was financed primarily with long-term investment. Foreign direct investment (FDI) accounted for a little more than four-fifths of that deficit. The favorable opinion abroad regarding the prospects for the Mexican economy and on investment opportunities in Mexico has brought a steady inflow of FDI in recent years.



## Graph 18. Current Account of the Balance of Payments

The aforementioned current account deficit was the result of a surplus in the transfer balance (6.315 billion dollars), and deficits in the

trade balance (5.361 billion), in the non-factor services balance (1.619 billion), and in the factor services balance (13.348 billion).

The non-factor services balance showed a deficit of 1.619 billion dollars in 1999, the product of 11.898 billion dollars in income and 13.517 billion in expenditures. The balance of international travelers (tourists and one-day visitors) posted a 3.050 billion dollar surplus, combining 7.587 billion in income and 4.537 billion in expenditures. Income was 3.9 percent lower than the year before, and expenditure was 6.3 percent higher. Although there was a significant rise in the number of visitors, the reduction in income from travelers was due to a sharp drop in their average spending. The drop in per-tourist spending was in turn the result of an increase in the number of visitors coming to Mexico on "charter" trips and all-inclusive touristic services; nonetheless, these visitors spent less on average than other tourists arriving by air. Finally, the other components of the balance of non-factor services represented a combined deficit of 4.669 billion dollars, mainly from expenses related to foreign trade, like freight and insurance.

#### **Current Account of the Balance of Payments**

ltem	1998 (A)	1999 (B)	Absolute Change (B - A)
Current Account	-15,726	-14.013	1,713
Trade Balance	-7.913	-5.361	2.552
Exports	117,460	136,703	19,243
Imports	125.373	142.064	16.691
Non-factor Services	-559	-1,619	-1,060
Factor Services	-13.266	-13.348	-82
Transfers	6.012	6 315	303

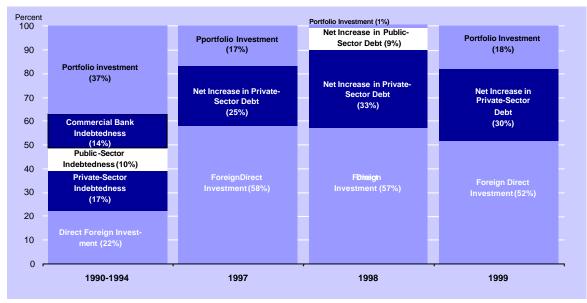
Millions of U.S. dollars

In 1999, the factor services balance showed a deficit of 13.348 billion dollars, barely 0.6 percent larger than the previous year. The interest line item showed net revenues (revenues minus expenditures) of 8.828 billion dollars, 380 million more than in 1998. In the year covered by this Report, interest expenditures rose 4 percent, due primarily to higher interest payments by the non-bank private sector, which in turn were the result of an increase in the net foreign indebtedness of this sector.

The surplus in the transfer balance grew to 6.315 billion dollars in 1999, 5 percent more than the previous year. The biggest component of this line item was money sent by Mexicans living abroad to their family members in Mexico. To put these money transfers in perspective, it is worth mentioning that they totaled 5.910 billion dollars in 1999, equivalent to 44 percent of the trade surplus of Mexico's in-bond industry and 51 percent of the foreign direct investment flow.

In 1999, the capital account of the balance of payments showed a surplus of 14.142 billion dollars, based mainly on incoming long-term foreign resources. Thus, this surplus was caused by a steady inflow of FDI, by an increase in the net indebtedness of the non-bank private sector, and, to a lesser degree, by an inflow of portfolio foreign investment.

Income from FDI totaled 11.568 billion dollars in 1999. This flow was the result of investment from 5,412 companies, 1,635 of them pertaining to the in-bond industry. The breakdown of FDI in the period in question was as follows: 4.448 billion dollars in new investment; 2.887 billion in re-invested profits; 2.778 billion in imports of fixed assets by inbond manufacturers; and a 1.455 billion dollar increase in liabilities with parent companies. In terms of its sectoral destiny, 77 percent of FDI went to the manufacturing industry, 8 percent to retail trade, and 5 percent to financial services.



## Graph 19. Breakdown of Net Capital Inflows

As it was mentioned earlier, the international financial markets' assessment of Mexico improved in 1999, leading to greater access to these markets for the issuing of both government and private Mexican securities. This was the reason for the rising inflow of portfolio investment, particularly in the second semester. In the year as a whole, this type of investment totaled 3.901 billion dollars, of which 3.769 billion went to the stock market and 132 million to the money market.

## Table 12.

## **Balance of Payments**

Millions of U.S. dollars

Item	1998	1999
Current Account	-15.726	-14.013
Capital Account	17,464	14,142
Liabilities	17.032	16,782
Net Increase in Debt	6,173	1,313
Development Banks	-725	-1,775
Commercial Banks	-928	-1,721
Banco de México	-1,072	-3,685
Non-bank Public	2,433	1,708
Non-bank Private	6,465	6,786
Foreign Investment	10.859	15,469
Direct	11,311	11,568
Portfolio	-452	3,901
Stock Market	-666	3.769
Money Market	214	132
Assets	432	-2,640
Errors and Omissions	401	463
Chge. Net. Int'l Rsves.	2,137	594
Adjustments	2	-2

Net external indebtedness of the private sector totaled 5.065 billion dollars in 1999, resulting from a reduction of 1.721 billion in commercial banks' indebtedness, and a net increase in the non-bank private sector indebtedness amounting to 6.786 billion. The average interest rates paid by the non-bank private sector's foreign debt placements were lower last year, falling from 10.1 percent in 1998 to 8.8 percent in 1999. The average maturity of these instruments was 6.4 years.

Foreign currency liabilities were taken on mainly by exporting companies. At the close of 1999, the value of foreign currency liabilities held by non-financial firms listed on the Mexican Stock Exchange totaled 32.080 billion dollars, while their assets denominated in foreign currency totaled 31.054 billion. Exporting companies accounted for 97.1 percent of those liabilities (see Table 13). A considerable percentage of the sales of this group of firms were made abroad (23.9 percent) and the ratio of their foreign currency sales to their foreign currency liabilities was very high, 59.6 percent. A sub-group of these firms, the so-called "strong exporters", have most of their liabilities in foreign currency (57.1 percent) and their average ratio of foreign sales to external liabilities is a very significant 73.7 percent.

## Indicators on External Liabilities of Firms Listed on the Mexican Stock Exchange\*

Percent

_	Exporters				New	
	Total Exporters	Strong Exporters	Medium Exporters	Low Exporters	Non- Exporters	Total
Breakdown of						
Forex Liabilities,	97.1	57.1	20.6	19.4	2.9	100.0
Foreign Sales	100.0	72.6	21.3	6.1	0.0	100.0
Indicators:						
Foreign Sales/Total Sales	23.9	43.5	18.6	4.5	0.0	20.3
Foreign Sales/Forex Liabilities	59.6	73.7	54.4	23.7	0.0	57.9
Forex Liabilities/Total	51.1	67.4	44.6	32.8	19.7	48.8

\*/ Includes 98 issuers. "Strong exporters" are defined as those whose foreign sales account for more than 25 percent of their total sales; "medium exporters" and "low exporters" report percentages of 10 to 25 and less than 10 percent, respectively.

In 1999, net public sector's indebtedness diminished by 67 million dollars, combining 22.066 billion in new liabilities and 22.133 billion in principal payments. From another perspective, this was also the result of net indebtedness of the Federal Government by 1.295 billion dollars and 413 million of net indebtedness by the rest of the non-financial public sector, and net principal payments of development banks totaling 1.775 billion dollars. One indicator of the public sector's improved access to international capital markets is the longer average maturity of its placements, which rose from 7.7 years in 1998 to 8.4 years in 1999.

In June 1999, the finance authorities announced that they had formally established the Financial Strengthening Program 1999-2000. This fact attests to the tremendous efforts made to buttress the Mexican economy and to reduce its vulnerability to unexpected changes on both the international and domestic economic environments. The program intends to keep the economy stable during the transition to the next presidential administration, securing the refinancing of foreign public debt for the rest of the current administration.

## Table 13.

During 1999, Banco de México made net principal payments of 3.685 billion dollars to the International Monetary Fund (IMF). On July 7, 1999, Mexico subscribed a Stand-by Arrangement with the IMF, gaining access to about 4.200 billion dollars (3.103 billion Special Drawing Rights). Mexico made two disbursements in 1999: 688 million dollars in July and 714 million in September (517.2 million SDR's each). Principal payments on Mexico's liabilities with the IMF totaled 5.089 billion dollars in 1999.

As a result of all these movements —a current account deficit of 14.013 billion dollars, a capital account surplus of 14.142 billion, and a 463 million dollar net inflow in the errors and omissions line item— Banco de México's net international reserves increased 594 million dollars in 1999.<sup>3</sup> Net international reserves<sup>4</sup> totaled 30.733 billion dollars on December 31, 1999, while net international assets<sup>5</sup> reached 27.380 billion. Thus, the balance corresponding to both definitions of reserves ended the year at their highest levels ever.

## III.4. Public Finances

In 1999, the federal government and public entities complied with their economic deficit goal. Although the Mexican Congress revised the Federal Revenues Law (*Ley de Ingresos de la Federación*) and the Federal Expenditure Budget (*Presupuesto de Egresos de la Federación*) making some changes to the sources of revenues and reallocating some expenditures, this revision did not affect the above mentioned goal.

Fiscal measures adopted over the course of the year and the expansion of the economy helped raise public revenues. At the same

<sup>&</sup>lt;sup>3</sup> For the sum of the current account, capital account and errors and omissions balances to equal the change in net international reserves at Banco de México, an adjustment must be made due to variations in the valuation of net international reserves. In 1999, this adjustment amounted to 2 million dollars.

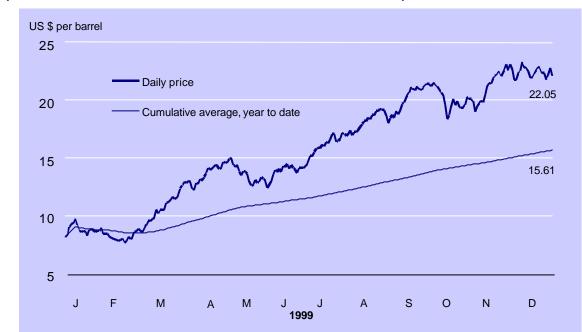
<sup>&</sup>lt;sup>4</sup> As defined by the Banco de México's Law.

<sup>&</sup>lt;sup>5</sup> Net international assets are defined as gross reserves plus credit agreements with central banks with maturities of more than six months, minus liabilities with the IMF and liabilities with maturities under six months resulting from agreements with central banks. To calculate this figure, Banco de México's liabilities with the IMF and its holdings of gold are valued at the SDR/Dollar exchange rate and gold prices in dollar terms, respectively, as of the date the balance is calculated.

time, spending on social development rose at almost twice the growth rate of GDP, accounting for 61.5 percent of programmable spending.

On March 17, 1999, the authorities announced that Mexico's oil export platform would be reduced by 125,000 barrels a day. Adding to the cutbacks already made in 1998, this lowered Mexican oil exports by a total of 325,000 barrels a day from the original export platform projected for 1999. In response to Mexico's commitment and those assumed by Venezuela and Saudi Arabia, starting in April OPEC member nations and other independent producers supplied the markets with 2.104 million barrels a day less. This sparked a considerable upturn in oil prices. Thus, the price of the Mexican crude oil mix for export rose from 7.66 dollars a barrel on February 15 to a high of 23.30 dollars on December 6 (see Graph 20.)

In addition, a favorable external situation and a drop in domestic interest rates and inflation invigorated the Mexican economy in 1999, and thus bolstered public finances.



#### Price of the Mexican Crude Oil Mix for Export

Source: PEMEX

Graph 20.

### III.4.1. Developments in Public Finances

The economic deficit of the non-financial public sector dropped to 52,509 million pesos in 1999, equivalent to 1.14 percent of GDP (see Table 14).<sup>6</sup> Both numbers were lower than those projected in the General Criteria for Economic Policy (*Criterios Generales de Política Económica*, CGPE) for the year, which were, respectively, 58,302 million pesos and 1.25 percent. Fiscal policy thus contributed substantially to lowering interest rates and strengthening economic stability.

The aforementioned results, were achieved basically because of lower interest payments and higher revenues. As a percentage of GDP, budget revenues were 0.23 percent higher than expected, while total interest payments turned out to be 0.46 percent lower than the initial objective. The primary surplus closed at 2.53 percent of GDP, also below projected levels.

#### Table 14. Economic and Primary Balances of the Public Sector 1/

Percent of GDP 2/

Item	1998	1999	
	Observed	Programmed	Observed
I. Economic Balance on a Cash-flow Basis (1+2)	-1.25	-1.25	-1.14
1. Budget	-1.24	-1.35	-1.13
2. Extra-budgetary	-0.01	0.10	-0.01
II. Total Interest (3+4)	2.91	4.02	3.56
3. Budget	2.89	4.00	3.55
4. Extra-budgetary	0.01	0.02	0.01
III. Primary Economic Balance (5+6)	1.71	2.77	2.53
5. Budget	1.66	2.65	2.42
6. Extra-budgetary 3/	0.05	0.12	0.10

1/ Deficit (-) or Surplus (+).

2/ The sum of the components may not coincide with the total due to rounding off.

3/ Includes a difference with the sources of financing methodology.

Source: SHCP.

## III.4.2. Public Revenues

In 1999, revenues for the non-financial public sector rose 4.6 percent in real terms as compared to the previous year. This was mainly

<sup>&</sup>lt;sup>6</sup> Numbers expressed as a percentage of GDP appearing in this Report are based on data published by INEGI for 1999, which differ from those contained in the Mexican Finance Ministry's report to the Congress ("Report on the Economic Situation, Public Finances and Public Debt"), which used a preliminary measurement of GDP.

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the result of the tax collection achieved by the Federal Government, which was equivalent to 11.21 percent of GDP. A second contributing factor was the recovery of oil prices, which raised oil revenues by 5.2 percent in real terms over those of 1998.

Tax revenues increased 10 percent in real terms in 1999 (see Table 15). The collection of Special Taxes on Production and Services (Impuesto Especial sobre Producción y Servicios, IEPS) posted the most vigorous growth, more than 18.5 percent higher in real terms than its 1998 level. Within this revenue item, the fastest-growing component was the special tax on gasoline and diesel fuel.<sup>7</sup> Revenues from import duties increased as well, driven by a rise in duties on products imported from countries with which Mexico has not signed free trade agreements. Revenues from the value-added tax (VAT) were 8.2 percent higher after adjusting for inflation, strengthened by new administrative measures to crack down on tax evasion. Also as a result of some fiscal adjustments, income tax (Impuesto sobre la Renta, ISR) revenues outpaced the growth of the overall economy. Among the changes made were the elimination of the immediate deductibility of investments; stricter requirements to have recourse to the fiscal consolidation regime; broader fiscal enforcement powers of the authorities; and new facilities for making income tax payments.

In 1999 non-tax revenues fell 6.9 percent in real terms from their 1998 level and were 0.19 percentage points of GDP below budget. Public revenues from official fees and licenses were 12.9 percent lower in real terms. This was because oil duties, measured on a cash-flow basis, were affected by the reduction of the crude oil export platform and the drop in revenues from the domestic sale of some oil derivatives. In addition, the extra revenues resulting from higher oil prices were partly offset by a drop in revenues from the privatization of public assets and from those associated with the operational surplus of Banco de México.

<sup>&</sup>lt;sup>7</sup> The IEPS on gasoline and diesel fuel reflects the difference between the domestic price of these fuels and their international benchmarks. Because of weak oil prices in the last months of 1998 and early 1999, international gasoline prices were also low, which implied a higher IEPS.

### Table 15. F

## Federal Government Revenues

Percent of GDP and annual change in percent 1/

ltem	1998	1999	% Real Change
Total Revenues 2/	14.17	14.52	5.6
Tax Revenues	10.51	11.21	10.0
Income Tax (ISR)3/	4.41	4.62	8.0
Value-added Tax (VAT)	3.12	3.27	8.2
Special Taxes on Production and Services (IEPS)	1.99	2.29	18.5
Import Duties	0.56	0.60	10.5
Others	0.44	0.44	3.3
Non-tax Revenues	3.66	3.31	-6.9

1/ The sum of the components may not add up to the total due to rounding off.

2/ Tax revenues include VAT and IEPS on the sale of oil products; non-tax revenues include levies on the extraction and sale of oil products.

3/ Includes the tax on firms' assets.

Source: SHCP.

Although the growth in revenues from public sector companies under direct budgetary control (2.3 percent) was modest when compared to 1998, they ended the year 0.51 percentage points of GDP higher than expected. The entities reporting the sharpest increase in revenues last year were PEMEX, the Federal Electricity Commission (*Comisión Federal de Electricidad*, CFE), the Mexican Institute of Social Security (IMSS), and the Federal Public Servant's Social Security Institute (ISSSTE).

## III.4.3. Public Expenditure

In 1999, public expenditure grew 4 percent in real terms over its 1998 level. They were equivalent to 21.78 percent of GDP, that is 0.19 percentage points higher than the previous year. Public expenditure ended the year within the limits established in the Approving Decree of the Federal Expenditure Budget, which is indicative of the effort made to keep expenditures at a level consistent with available financing. With respect to budget goals, the expenditure breakdown by category shows that programmable expenditure was higher than originally programmed, and the financial cost of the debt was lower than expected. Within programmable expenditure, social program expenditure continued on the rising trend it has followed for the past four years. In 1999, this item was equivalent to 9.28 percent of GDP, 0.34 percentage points greater than in 1998. The real increase in budget spending compared to the previous year was due mainly to a rise in revenue transfers to states and municipalities (via contributions and tax-sharing), as well as an increase in financing costs (interest payments and the financial support package). Interest payments were equivalent to 3.55 percent of GDP, 0.66 percentage points higher than the year before (Table 16). This was 0.45 percentage points less than was budgeted, however, mainly because financing costs on the public debt denominated in foreign currency were lower than expected in peso terms, as a result of the peso's appreciation.

#### Financial Cost of the Budgetary Public Debt

#### Percent of GDP

Table 16.

ltem	1998	1999
Total Financial Cost 1/	2.89	3.55
Domestic Interest	1.23	1.68
Financial Support Package	0.26	0.51
External Interest	1.40	1.35

1/ Does not include interest payments to entities under direct budget control. Source: SHCP.

The real annual growth in contributions and tax-sharing for state and municipal governments (13.5 percent and 6.1 percent, respectively) was the result of an increased transfer of federal responsibilities and resources to local governments. Tax-sharing rose because of an overall increase in tax revenues.

Expenditures in connection with public administration<sup>8</sup> rose 6.6 percent in real terms last year, chiefly because of environmental protection and improvement programs. Social program spending<sup>9</sup> grew 7 percent in real terms, with higher expenditures going to health, social security and regional and urban development. In contrast, real spending on productive activities<sup>10</sup> declined 13.6 percent. It is worth mentioning that budget cutbacks and re-allocations have had a considerable impact on this line item in recent years. Thus, this policy has resulted in a reduction of direct capital expenditures by the public sector in real terms

<sup>&</sup>lt;sup>8</sup> Activities carried out in connection with the duties of government.

<sup>&</sup>lt;sup>9</sup> Programs to increase or improve basic services, employment, distribution of goods, social assistance and regional and urban development.

<sup>&</sup>lt;sup>10</sup> Production and sale of goods and services that are strategic to social development.

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(5.2 percent in 1999). These outlays have been replaced by investments financed and executed by non-governmental parties, particularly in the case of Pemex's and CFE's infrastructure projects.

Programmable spending of the public sector companies under direct budgetary control dropped 0.1 percent in real terms from 1998 to 1999. Spending by state-owned entities dropped by less than planned, because their increased revenues allowed them to expand their spending budget. Those reporting the greatest increase in their expenditures were Compañía de Luz y Fuerza del Centro, IMSS and ISSSTE.

## III.4.4. Net Public Debt<sup>11</sup>

In 1999, the average stock of the public sector's net total debt in its broad economic definition was 21.77 of GDP, and 20.73 percent when consolidated with Banco de México. The average net broad economic debt dropped slightly from its 1998 level, while the average consolidated debt gained 0.29 points as a percentage of GDP. It is worth noting that if total net debt at the end of the period is considered, both definitions showed a reduction as a percentage of GDP. This difference arose as external debt dropped off more sharply toward the end of the year (in annual terms), due to the appreciation of the peso.

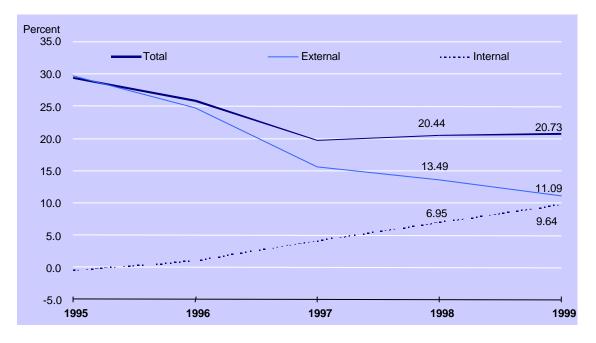
The average broad net economic external debt was equivalent to 16.34 percent of GDP in 1999, 2.34 percentage points less than in 1998. This is the lowest level this indicator has reached since 1980, driven by a modest increase in average new debt in dollar terms and the appreciation of the peso.

Despite the climate of uncertainty prevailing in international financial markets at the time, in February the government issued a tenyear Global Bond worth one billion dollars, which was increased by another 500 million dollars in April. The bond included an option to

<sup>&</sup>lt;sup>11</sup> Broad net economic debt includes net liabilities of the Federal Government and public enterprises, as well as the debt, financial assets and results of official financial intermediaries (namely development banks and official development trusts). Likewise, the net debt consolidated with Banco de México also includes financial assets and liabilities of the Central Bank with the private sector, with commercial banks and with the external sector. In addition, net financing granted by Banco de México to the remainder of the public sector is eliminated from this definition. It is worth pointing out that due to these methodological considerations, the definitions of public debt explained herein are not directly comparable with those presented in the Ministry of Finance's regular reports to the Mexican Congress.

exchange Brady Bonds for a new certificate to be issued by the Federal Government in one year. In addition, two other Brady/debt swaps were performed in 1999: the first one in August, involving an issue of 400 million dollars in Global Bonds, and the second one for 425 million in October. These two transactions will allow for reductions in the nominal amount of the gross external debt by 110 and 100 million dollars, respectively, given that Bradys are discount bonds. These swaps also enhanced the liquidity of the Federal Government by recovering the collateral tied up to these bonds. Additional issues placed in 1999 included: one billion dollars at 6 years, in April; 400 million dollars in Euros, in June; and 280 million dollars on the Japanese market in Finally, in June the authorities announced the Financial November. Strengthening Program 1999-2000, by which Mexico secured the resources necessary to refinance the external debt for the rest of the current presidential administration. The program includes mainly financing from the IMF, the World Bank, the IDB and the United States' Eximbank.





As is also the case with the broad economic net external debt, the average external debt consolidated with Banco de México dropped by 2.4 points of GDP, from 13.49 percent in 1998 to 11.09 in 1999. The latter figure is also the lowest for this indicator in 20 years. Aside from the appreciation of the Mexican peso, this decline was the result of 2.574 billion dollars worth of principal payments made by the Central Bank to the IMF, and an increase in average gross international reserves amounting to 1.391 billion dollars.

In contrast, the stocks of net domestic debt, both in its broad economic definition and consolidated with Banco de México, have been on the rise. In 1999, these two items grew by 2.02 and 2.69 percentage points of GDP, respectively. The increase in net domestic debt was due primarily to more placements of government securities. Net domestic debt consolidated with Banco de México grew more rapidly than the broad economic debt in response to the expansion of the monetary base (see Section IV).

#### Table 17.

#### Government Securities "Pre-established" Auctions in 1999

Millions of pesos

Instrument and Term	First Quarter			nird arter		Fourth Quarter	
			Odd Weeks	Even Weeks	Odd Weeks	Even Weeks	
Cetes	6,500	7,100	6,500	9,700	7,000	10,600	
28 days	2,500	2,500	3,000	3.000	3.000	3.000	
91 days	3.000	3.000	3.500	3.500	4.000	4.000	
182 days	500	1,000		2,000		2,200	
364 days	500	600	-	1,200	-	1.400	
Bondes	4.200	3.700	3.000	3.000	4.000	4.000	
280 days	3.200						
720 days	-	2,400	variable	variable	variable	variable	
1.078 days	1.000	1.300	variable	variable	variable	variable	
Udibonos (Millions of UDIs) 1/	200	250	250	_	250	_	
_5 vears	200	250	250	-	variable	_	
10 years	-	-	-	-	variable	-	
Free Assignment (Average)	-	-	1,281	1,281	-	-	
Weekly Average 2/	10.946	11.117	11.428	13.981	11.662	14.600	

1/ Biweekly amounts.

2/ Calculated according to the value of the UDI during the period.

As in the previous year, the 1999 auctions of government securities were conducted according to a pre-established format. Table 17 shows the program and structure of the auctions announced at the start of each quarter. Cetes with maturities over 3 months and Udibonos were once again available beginning in the first quarter of the year. Placement of these instruments had been suspended due to financial market volatility at the end of 1998.

The standard format for the auctions was defined at the start of each quarter, according to the conditions prevailing in the domestic economy at the time. Thus, as market instability eased and domestic interest rates moved downward, the size of securities placements was enlarged , particularly in the case of Bondes and Cetes. The average maturity of government securities was also increased by the placement of the following instruments: Cetes at a maturity of more than 3 months, 28-day adjustable-rate Bondes maturing in two years (instead of nine months) and, in the last quarter of the year, a 10-year Udibono. With these instruments on the market, the average maturity of government securities rose from 411 days in January 1999 to 554 days in December of that year (see Graph 22).

### Graph 22. Average Maturity of Outstanding Government Securities



Days

At year-end 1999, there were a total of 546,300 million pesos in government securities outstanding (93,700 million of them for monetary regulation purposes). Bondes increased their share, from 43 percent of this total in 1998, to 62 percent in 1999. The respective share of Cetes, Ajustabonos and Udibonos dropped from 36, 3, and 18 percent to 24, 0, and 15 percent in the same period. Private firms and individuals increased their holdings of government securities from 91 percent in December 1998 to 94 percent at the end of 1999. The value of government securities held by non-residents dropped slightly, from 2.307 billion dollars in December 1998 to 2.188 billion dollars at year-end 1999.

## III.5. Evolution of Monetary and Credit Aggregates and of the Securities Market

In the Monetary Policy Report for the first semester of 1999, Banco de México introduced a new definition of monetary aggregates<sup>12</sup>. Under the new perspective, the main criteria for classifying financial savings are the holder's country of residency (Mexico or abroad) and the sector (public or private) issuing the investment instruments.

## III.5.1. M1 Monetary Aggregate

In 1999, the narrow monetary aggregate (M1) posted a 12.1 percent real annual growth rate, contrasting with the relative stand still of 1998 (see Table 18). Among the components of M1 that contributed the most to its performance in 1999 were bills and coins held by the public and checking accounts in domestic currency.

### Table 18.M1 Monetary Aggregate

Thousands of millions of pesos

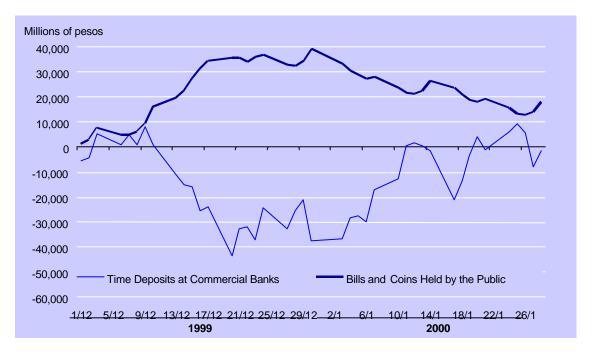
	Stocks			Flo	ws	% Real C		Contribution to Growth of M1	
	Dec 97	Dec 98	Dec 99	Dec 97 - Dec 98	Dec 98 - Dec 99	Dec 97 - Dec 98	Dec 98 - Dec 99	Dec 97 - Dec 98	Dec 98 - Dec 99
M1	325.4	387.9	488.6	62.5	100.7	0.5	12.1	0.5	12.1
Bills and Coins in Circulation	94.2	115.9	164.2	21.7	48.3	3.8	26.1	1.1	7.8
Checking Accounts in Pesos	175.5	193.8	232.9	18.3	39.1	-6.9	7.0	-3.7	3.5
Checking Accounts in Foreign Currency	24.5	37.2	42.8	12.7	5.6	27.9	2.4	2.1	0.2
Current Account Deposits in Pesos	31.2	40.9	48.7	9.8	7.8	10.8	6.0	1.0	0.6

In the first six months of 1999, M1 grew at a real average annual rate of -0.1 percent, while the corresponding figure for the second half of the year was 5.7 percent. This upturn was in part due to the increasing momentum of economic activity in the second semester and to the remonetization process that has been taking place in the economy. The latter phenomenon has occurred as result of the declining inflation and

<sup>&</sup>lt;sup>12</sup> See also Banco de México Press Bulletin No. 88, dated July 29, 1999.

its impact on nominal interest rates<sup>13</sup>, both of which have increased the opportunity cost of holding liquid means of payment.

## Graph 23. Time Deposits at Commercial Banks and Bills and Coins Held by the Public



Accumulated flows, starting on November 30, 1999

In addition, in December 1999 there was a pronounced growth in M1, mainly in response to the extraordinary demand for liquidity prompted by the public's uncertainty regarding the Y2K problem. The preference for liquidity observed in the last two weeks of 1999 (see Graph 23) was accompanied by an unusual fall in banks' time deposits. The effect of this substitution of liquid means of payment for term deposits was reverted in January 2000, as the public reduced their holding of bills and coins and, consequently, commercial banks' deposits increased. This supports the argument that the expansion of means of payment reported in December 1999 was a temporary and extraordinary occurrence.

<sup>&</sup>lt;sup>13</sup> See "Monetary Policy Program for the Year 2000", Banco de México.

## III.5.2. Broader Monetary Aggregates

In 1999, M2 —which measures domestic financial assets held by private sector economic agents residing in Mexico— grew at an 8.3 percent real rate. This was the result of a very significant increase in the stock of Federal Government securities held by residents of Mexico which rose 193,400 million pesos, equivalent to a 46.9 percent real growth rate. The reduction in banks' role as financial saving intermediaries was evidenced by the decline in banks' time deposits, which fell 8 percent in real terms in 1999 (see Table 19). The fears regarding the Y2K issue had much to do with the latter phenomenon, especially in the second half of 1999 when these deposits rose at a real annual rate of only 0.5 percent. In other words, banks' time deposits had already been showing some sluggishness in the first semester of the year, and their trend was reinforced by the exceptional preference for liquidity seen in December for the reasons explained above.

Econometric techniques can be useful for analyzing the evolution of monetary aggregates. A study of M2 leads to the following conclusions (see Graph 24): i) in 1999, economic activity was the driving force behind the growth of this aggregate; ii) in the second half of the year, the stability of the exchange rate contributed substantially to the expansion of M2; and iii) in contrast, the reduction of interest rates in the second quarter weakened the incentive to save and therefore had less of an impact on the expansion of this aggregate. Nevertheless, the joint contribution of interest rates and exchange rate volatility to the expansion of M2 intensified considerably in 1999.

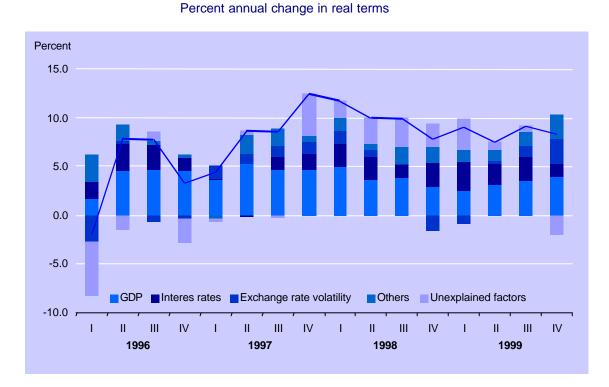
In addition to the items that make up M2, the M3 monetary aggregate includes domestic financial assets held by non-residents, while M4 also includes deposits in Mexican banks' agencies abroad. In 1999 these two items declined by 9.1 and 23.6 percent in real terms, respectively. In fact, the real annual growth in M4 last year (6.5 percent) was explained by a 7.8 percentage point increase in residents' savings in domestic financial assets, and a 1.3 percentage point decline in the sum of non-residents' savings in the domestic market and deposits in banks' agencies abroad. Among the components of M4, deposits in banks' agencies abroad suffered the sharpest reduction in real terms. This was due to the drop in deposit needs among commercial banks during the year, both because of the weakness in bank lending and the downturn in bank transactions denominated in foreign currency.

## Table 19.M1, M2, M3 and M4 Monetary Aggregates

	Stocks			Flows		Percen Chan	ge in	Contribution to Growth of M4	
	Dec.	Dec.	Dec.	Dec. 97 -	Dec. 98 -	Dec. 97 -	Dec. 98 -	Dec 97 -	Dec 98 -
	97	98	99	Dec 98	Dec 99	Dec 98	Dec 99	Dec 98	Dec 99
<u>1. M1</u>	325.4	387.9	488.6	62.5	100.7	0.5	12.1	0.1	2.7
2. Deposits by Mexican residents in domestic banks	604.0	761.9	787.0	158.0	25.1	6.4	-8.0	2.7	-3.5
3. Federal government securities held by Mexican residents (including									
Siefores)	187.2	297.4	490.8	110.2	193.4	33.9	46.9	4.5	7.9
4. Securities issued by private entities residing in Mexico, held by Mexican residents (including Siefores)	57.4	73.0	74.3	15.6	1.3	7.2	-9.4	0.3	-0.4
5. Retirement Funds, excluding									
Siefores	121.2	135.9	173.6	14.8	37.7	-5.4	13.7	-0.5	1.1
6. M2=(1+2+3+4+5)	1295.1	1656.1	2014.3	361.0	358.2	7.8	8.3	7.2	7.8
7. Deposits by non-Mexican residents in Mexican-resident banks	5.1	4.3	6.8	-0.9	2.5	-30.0	41.4	-0.1	0.1
8. Federal government securities held by non-Mexican residents	25.3	22.8	20.8	-2.6	-1.9	-24.3	-18.6	-0.4	-0.2
9. M3=(6+7+8)	1325.6	1683.2	2041.9	357.6	358.7	7.1	8.0	6.7	7.6
10. Deposits by Mexican residents in Mexican banks' branches and									
agencies abroad	41.4	41.6	33.9	0.2	-7.7	-15.3	-27.4	-0.4	-0.6
11.Deposits by non-Mexican residents in Mexican banks' branches									
and agencies abroad	38.4	44.3	39.8	5.8	-4.5	-2.9	-20.1	-0.1	-0.5
12. M4=(9+10+11)	1405.4	1769.0	2115.6	363.6	346.5	6.1	6.5	6.1	6.5

Stocks in thousands of millions of pesos

The new definition of monetary aggregates allows for the identification of the domestic liabilities of economic agents held by non-Mexican residents, as well as separating these liabilities by the type of currency in which they are denominated. Graph 25 shows the sum of non-residents' savings in domestic financial instruments and deposits in banks' agencies abroad (M4 minus M2), considered the most volatile components of financial savings. From December 1993 to the same month of 1999, the stock of this aggregate fell from 35.612 billion dollars to 10.646 billion. In addition, the graph also presents the sum of the components of M4 denominated in foreign currency as a percentage of the total aggregate; this ratio closed December 1999 at 6.81 percent, its lowest level since June 1988. This reveals the Mexican financial intermediation system's declining vulnerability to possible domestic or external shocks.

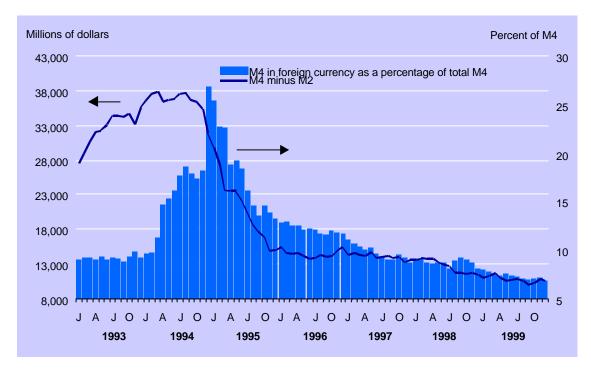


Graph 24. Evolution of the M2 Monetary Aggregate

### Graph 25.

## Difference between M4 and M2, and M4 in Foreign Currency

Stocks in millions of dollars and as a percentage of M4



## III.5.3. Lending to the Private Sector

Since late 1994, lending by commercial banks and development banks has been declining noticeably. This has forced the private sector to seek out other sources of financing. This phenomenon has caused both a tightening of total financing in the economy and a substantial alteration of the financial intermediation process. Alternative sources of financing —like suppliers and foreign banks— have been gaining importance, while financing from domestic banks has been loosing it. In addition, other agents have partially addressed specific segments of the market, such as consumer and housing credit.

Table 20 shows an approximate calculation of the stock of total financing to the private sector, separating the bank component (commercial and development banks) from other alternative sources. Although the share of non-bank lending has risen since 1994, in 1999 its real annual growth rate diminished. Meanwhile, bank financing has continued to post a steady decline in real terms. This means that even though alternative sources of credit have partially filled the gap left by bank financing, they could hardly stand in for the banking system on a permanent basis.

At the close of 1999, credit granted by department stores through their credit cards accounted for more than 34.1 percent of total consumer credit. Although still limited compared to bank activity, the housing loan portfolio of limited purpose financial companies (SOFOLES) has been growing rapidly in recent years and boasts a low ratio of non-performing to total loan portfolio (0.5 percent). At year-end 1999, the stock of total financing to firms and individuals with entrepreneurial activities diminished in real terms —the rise in non-bank financing was more than offset by the reduction in bank lending.

Although the real annual growth rate of foreign financing for firms and individuals with entrepreneurial activities dropped 0.6 percent in the year, this figure was mainly the result of the exchange rate appreciation observed in 1999. In dollar terms, this type of financing actually rose by 6.338 billion dollars (15.8 percent).

## Table 20. Financing to the Private Sector: Banks and Alternative Sources Stocks in millions of 1994 pesos, percent of total and percent annual change

	٦	otal Financi	ng	Consumer Credit Housing Loans F				Housing Loans		Financing	to Firms a	nd Individ Activitie	duals with Entrepreneuria	
	Total	Non-bank 3/ 5/ 6/	Bank 4/	Total	Non-bank 1/	Bank	Total	Non-bank 2/	Bank	Total	Non-bank 3/ 5/ 6/	Bank 4/	Ledg	jer
													Foreign Financing	Credit Union Loans
Dec. 1994 Real Stock % of total	806,341 100.0	218,751 27.1	587,590 72.9	44,909 5.6	1,844 4.1	43,065 95.9	103,105 12.8	1,917 1,9	101,188 98.1	658,327 81.6	214,990 32.7	443,337 67.3	126,837 19.3	12,333 1.9
Dec. 1995	100.0	27.1	12.9	5.0	4.1	90.9	12.0	1.9	90.1	01.0	32.1	07.3	19.5	1.9
Real Stock % of total	706,401 100.0	216,196 30.6	490,205 69.4	25,768 3.6	2,135 8.3	23,633 91.7	106,417 15.1	1,189 1.1	105,228 98.9	574,216 81.3	212,872 37.1	361,343 62.9	135,370 23.6	10,203 1.8
Real annual cho			-16.6	-42.6	15.8	-45.1	3.2		4.0		-1.0	-18.5	6.7	-17.3
Dec. 1996														
Real Stock	630,595	193,546	437,049	18,144	3,771	14,373	105,934	2,654	103,280	506,517	187,121	319,396	119,232	8,002
% of total	100.0	30.7	69.3	2.9	20.8	79.2	16.8	2.5	97.5	80.3	36.9	63.1	23.5	1.6
Real annual chge	-10.7	-10.5	-10.8	-29.6	76.6	-39.2	-0.5	123.2	-1.9	-11.8	-12.1	-11.6	-11.9	-21.6
Dec. 1997														
Real Stock	610,972	200,852	410,120	18,502	4,440	14,062	101,366	3,213	98,153	491,103	193,198	297,905	124,112	8,913
% of total	100.0	32.9	67.1	3.0	24.0	76.0	16.6	3.2	96.8		39.3	60.7	25.3	1.8
Real annual cho	-3.1	3.8	-6.2	2.0	17.7	-2.2	-4.3	21.1	-5.0	-3.0	3.2	-6.7	4.1	11.4
Dec. 1998														
Real Stock	630,406		397,988	17,223	4,390	12,833	98,254	4,975	93,279	514,928	223,052		144,379	8,634
% of total	100.0	36.9	63.1	2.7	25.5	74.5	15.6	5.1	94.9		43.3	56.7	28.0	1.7
Real annual chqe	3.2	15.7	-3.0	-6.9	-1.1	-8.7	-3.1	54.8	-5.0	4.9	15.5	-2.0	16.3	-3.1
Dec. 1999 Real Stock	502 220	245.623	247 645	10 405	6 205	10 101	02 5 40	7 000	05 220	400.004	232.099	250.125	1 4 2 4 0 4	0 704
	593,238		347,615	18,465	6,305	12,161	92,549	7,220	85,329	482,224	- 1	1 -	143,494	8,734
% of total Real annual chge	100.0 -5.9	41.4 5.7	58.6 -12.7	3.1 7.2	34.1 43.6	65.9 -5.2	15.6 -5.8	7.8 45.1	92.2 -8.5	81.3 -6.4	48.1 4.1	51.9 -14.3	29.8 -0.6	1.8 1.2
ivedi annuai chge	-0.9	0.7	-12.7	1.2	43.0	-0.Z	-0.0	40.1	-0.5	-0.4	4.1	-14.3	-0.0	1.4

1/ Credit from department stores (and their affiliates) through their own credit cards. Includes: El Palacio de Hierro, El Puerto de Liverpool, Elektra, Salinas y Rocha, Sears y Soriana.

2/ Information drawn from statistics on the resources and obligations of savings and loan companies, limited purpose financial companies (SOFOLES) and insurance institutions.

3/ Information drawn from consolidated balance sheets of 171 companies (including their affiliates) listed on the Mexican Stock Exchange, particularly liabilities with domestic and foreign suppliers and commercial paper; statistics on the resources and obligations of limited purpose financial companies (SOFOLES); financial leasing companies; factoring firms; and insurance institutions.

4/ Drawn from statistics on commercial and development banks' resources and obligations and list of responsibilities, particularly securities and credits granted to the Mexican private sector. The latter line item includes performing, past-due, discounted, and UDI-restructured loan portfolios, Fobaproa-related loan portfolios, and accrued interest.

5/ Drawn from the survey of liabilities contracted by Mexican non-financial firms with foreign banks, as well as placements of private debt securities.

6/ Drawn from credit union balance sheets, specifically the loans granted line item. Beginning in 1996, the figures include Fideliq.

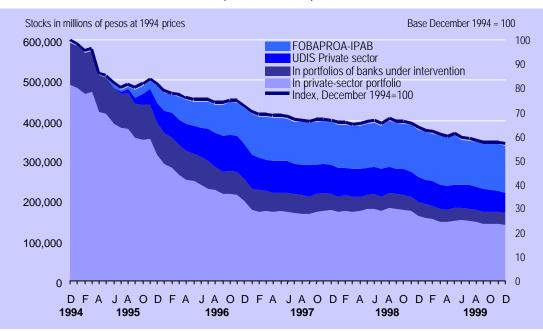
Banco de México's quarterly Survey of Credit Market Conditions (*Encuesta de Evaluación Coyuntural del Mercado Crediticio*), whose results are shown in Table 21, corroborates that alternative sources of financing are substituting for bank credit. The most important conclusions that can be drawn from this information are the following:

- in 1999, supplier credit continued to be the predominant source of corporate financing, particularly among small and nonexporting companies.
- (b) less than 40 percent of the companies surveyed made use of bank credit. Small and non-exporting companies were the least likely to have received bank credit;

- (c) the main reasons mentioned by surveyed companies for not having made use of bank loans in 1999 were high interest rates and the banks' own reluctance to lend; and
- (d) the companies that did take out bank loans in 1999 used the resources thus obtained mainly for working capital.

As has been mentioned previously, financial intermediation by the commercial banks has diminished considerably in recent years. At the end of December 1999, the stock of commercial bank lending to the private sector had fallen to 56.9 percent of its December 1994 level in real terms (see Graph 26). From another perspective, domestic lending to the private sector dropped 10.3 percent in real annual terms last year (see Table 22). On the other hand, the share of FOBAPROA and IPAB securities in total financing increased, reaching 34.4 percent in December 1999. If the stock of these securities is added to the stock of intervened banks' own portfolios, 43 percent of total commercial bank financing in 1999 was linked to banking-system bailout programs.

#### Financing from Commercial Banks to Non-bank Private Sector



#### Stocks in millions of pesos at 1994 prices

Graph 26.

# Table 21. Results of Quarterly Surveys on Credit Market Conditions Fourth Quarter of 1999 1/

#### Percent of responses

						1999					
	1st	2 n d	3rd				4 th Qu	uarter			
				By Company size 2/					By Company Type 3/		
ltem	Total	Total	Total	Total	Sm	М	L	AAA	Export.	Non-Expo	
Sources of Financing	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Suppliers	49.7	47.4	45.7	46.8	56.9	46.3	35.9	26.3	41.6	54.2	
Commercial banks	21.0	26.7	27.5	24.8	18.8	26.3	29.4	36.8	26.6	21.8	
Foreign banks	6.7	7.3	7.7	7.7	5.1	5.4	12.4	21.1	10.0	4.6	
Other companies in same corporate group	14.1	12.1	12.7	12.4	10.6	14.2	14.4	5.3	10.0	15.8	
Development banks	4.0	2.5	2.3	2.8	3.5	3.3	1.3	0.0	4.3	0.7	
Headquarters	2.6	2.6	2.7	3.9	4.7	3.8	3.9	0.0	6.0	1.1	
Other liabilities	1.9	1.4	1.4	1.6	0.4	0.7	2.7	10.5	1.5	1.8	
Companies that made use of bank credit	33.3	38.1	39.6	38.2	28.1	38.3	52.3	61.3	45.6	29.5	
Use of credit:											
Working capital	61.6	56.3	60.5	62.7	66.2	56.3	64.0	76.2	58.2	73.5	
Refinancing liabilities	9.4	15.9	12.0	10.0	3.7	13.6	10.7	14.3	10.3	8.4	
Import-export transactions	5.4	7.8	9.4	9.0	11.3	10.7	5.3	4.8	10.8	4.8	
Investment	18.7	14.8	16.4	16.1	18.8	15.5	17.3	4.7	17.5	13.3	
Other purposes	4.9	5.2	1.7	2.2	0.0	3.9	2.7	0.0	3.2	0.0	
Companies that did not use bank credit	66.7	61.9	60.4	61.8	71.9	61.7	47.7	38.7	54.4	70.5	
Reason:											
High interest rates	34.6	33.0	31.9	37.2	36.0	35.5	38.2	59.3	35.1	40.0	
Problems with demand for their products	3.7	4.3	3.5	4.2	3.5	5.6	4.1	0.0	5.2	2.7	
Banks reluctant to extend credit	19.9	20.1	20.8	18.6	20.1	18.4	17.9	7.4	19.1	18.1	
Uncertainty over the economic situation	14.7	11.9	13.4	13.5	13.8	13.7	11.4	18.5	12.2	15.1	
Debt refinancing problems	9.4	11.7	11.3	9.0	8.5	10.3	8.9	3.7	9.9	7.7	
Applications rejected	3.1	3.5	4.8	6.0	7.1	4.3	7.3	3.7	5.0	7.4	
Past-due Ioans	5.8	7.1	7.6	5.5	5.3	6.0	6.5	0.0	6.4	4.4	
Problems with competition	4.5	3.2	3.5	4.2	3.9	5.1	3.3	3.7	5.2	2.7	
Others	4.3	5.2	3.2	1.8	1.8	1.1	2.4	3.7	1.9	1.6	
Companies that extended some sort											
of credit	-	71.9	73.5	76.9	76.3	80.6	75.7	61.3	83.6	69.8	
Destination:											
Clients		77.2	76.6	77.2	82.4	74.2	77.0	60.0	74.6	81.3	
Suppliers	-	11.3	11.6	11.0	9.8	12.7	10.0	12.0	14.1	6.5	
Other companies in same group	-	10.7	11.2	11.0	7.3	11.7	13.0	28.0	10.1	12.2	
Others	-	0.8	0.6	0.8	0.5	1.4	0.0	0.0	1.2	0.0	
Average term of financing (days)											
Clients	-	41	38	38	37	38	42	48	39	37	
Suppliers	-	35	34	35	41	30	34	35	34	37	
Other companies in same group		60	48	43	47	40	43	49	4.6	4 0	
Will apply for credit within next 3 months	55.3	52.5	55.0	56.1	55.7	50.5	69.4	48.4	58.4	53.4	

1/ National sample, with responses from at least 500 companies. Responses are voluntary and confidential.

2/ 110 3120 01 110 00	inpanies was determined based on their se	
	Value of 1997 sales	Percentage breakdown of sample
Small =	1-100 million pesos	38.2
Medium =	101-500 million pesos	35.4
Large =	501-5,000 million pesos	22.5
AAA =	More than 5,000 million pesos	3.9

3/ Non-exporting companies are those that have no foreign trade activity, or only import merchandise and services.

Although in 1994 the private sector was heavily in debt, by 1999, lending from commercial banks to the private sector was equivalent to 22.6 percent of GDP, its lowest level since 1991.

Nevertheless, there are signs that the contraction in bank financing has come to an end. Graph 27 shows that in December 1999, the real annual growth rate of consumer credit was no longer dropping. In previous instances, consumer credit has spearheaded the upturn in credit to firms and individuals with entrepreneurial activities.

#### Table 22. Domestic Financing from Commercial Banks to Non-bank Sector 1/ Thousands of millions of pesos

		ocks as of ecember		Annu Flov	Percent Real Chge in Stocks	
	1997	1998	1999	1998	1999	Dec. 1999/ Dec. 1998
mestic financing per type of portfolio	990.3	1127.4	1141.9	137.2	14.5	-9.8
1. Own portfolio with non-bank sector	543.2	602.1	589.3	58.8	-12.8	-12.9
1.a Private sector 2/	499.1	539.5	521.9	40.4	-17.6	-13.9
1.b State and municipal govts.	9.7	14.1	14.1	4.4	0.0	-10.9
1.c Non-financial public sector	34.5	48.5	53.3	14.0	4.8	-2.1
2. FOBAPROA-IPAB securities 3/	245.9	325.5	359.6	79.6	34.1	-1.6
3. Special CETES (UDIs restructurings) 4/	201.2	199.9	193.1	-1.3	-6.8	-14.0
3.a For transferred portfolio from private sector	173.7	172.0	162.9	-1.7	-9.1	-15.7
3.b For transferred portfolios from state and mun. govt:	27.4	27.9	30.1	0.5	2.2	-3.8
omestic financing to the non-bank sector	990.3	1127.4	1141.9	137.2	14.5	-9.8
4. Financing to the private sector (1.a+2+3.a) 5/	918.7	1037.0	1044.4	118.3	7.4	-10.3
5. Financing to state & mun. govts. (1.b+3.b)	37.1	42.0	44.2	4.9	2.3	-6.2
6. Financing to non-financial public sector (1.c)	34.5	48.5	53.3	14.0	4.8	-2.1

Includes performing, past-due, and re-discounted portfolio, portfolios sold to FOBAPROA-IPAB, portfolios transfers to UDI 1/ trusts, accrued interest (both current and past-due), and loans from Mexican banks' agencies abroad.

2/ Includes firms, individuals, and non-bank financial intermediaries.

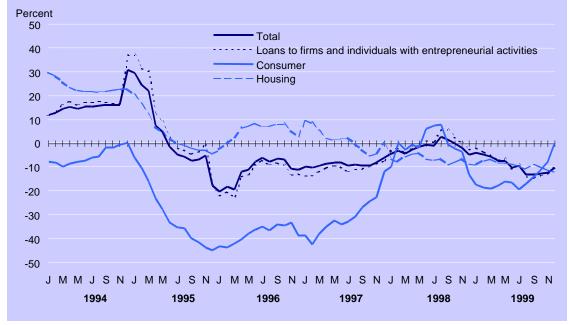
3/ Securities acquired in connection with transfer of portfolio to FOBAPROA-IPAB. 4/ Securities acquired in connection with transfer of portfolio to UDI trusts.

Includes credit and securities held by commercial banks, plus portfolio transferred to FOBAPROA-IPAB, plus portfolio 5/ transferred to UDI trusts.

Note: The stocks of aggregate items may not coincide with sum of their components due to rounding off.

#### Lending by Commercial Banks to Non-bank Private Sector, Graph 27. Excluding Banks under Intervention or in Special Situation <sup>1/</sup>





1/ Figures include performing and rediscounted portfolio, accrued interest, and portfolio transferred to FOBAPROA and to trusts created to administer UDI-restructured loans.

Among the factors that explain the downturn in real bank lending —even in the context of economic growth over the past few years— are: i) a growing participation by alternative sources of financing, mainly supplier financing, non-bank financial intermediaries and foreign banks, and ii) the reduction in the private sector's net debt due to debtor relief and bank bailout programs.

Despite the strong performance of the Mexican economy in 1999, bank lending must be restored for production to grow at a stronger pace and develop fully. This assertion is based on the following considerations:

- (a) because of its organization and institutional development, the banking system must in principle achieve a more efficient intermediation of resources between savers and users of credit;
- (b) the recent evolution of credit has increased the disparities among firms with regard to financing opportunities: larger corporations have access to external financing while small and mid-sized companies depend on loans from domestic banks.
- (c) the current situation reduces the flexibility of the aggregate supply of goods and services, to the extent that alternative sources of financing make it harder to properly channel financial resources in the amounts and at the terms that companies need; and
- (d) the lack of bank credit makes it more difficult for families to have access to a broader range of consumer goods that would normally be purchased on credit.

This rationale makes it clear that efforts must be redoubled to invigorate bank lending in Mexico. To this end, the financial authorities have taken a series of measures to promote banks' soundness and thus re-establish the flow of credit to different sectors of the economy. Among these were the creation of the Institute for the Protection of Bank Savings (see Appendix 3) and amendments to the rules on bank capitalization and loan portfolio rating, issued by the Ministry of Finance. Congressional approval is still pending on new legislation regarding loan collateral and the Law of Mercantile Contests (*Ley de Concursos Mercantiles*), which will replace the current Law on Bankruptcy and Suspension of Payment (*Ley de Quiebras y Suspensión de Pagos*). These measures must be operating simultaneously in order to stimulate the recovery of bank lending.

### III.5.4. Flow of Funds

The flow of funds matrix (see Table 23) summarizes the transfer of financial resources among the various sectors of the economy, identifying which sectors were net suppliers and which were net users of resources during the year.<sup>14</sup> Following are the main conclusions that can be drawn from the matrix for 1999:

- (a) In the domestic financial market, the private sector saved more than it used in financing. In other words, in 1999 the private sector increased its net domestic assets position by the equivalent of 3.3 percent of GDP. The variation in the position of this sector with foreign agents, on the other hand, implied an increase in its net liabilities for the equivalent of 4.3 percent of GDP, and much of this came through foreign direct investment. This underscores the availability of external resources and domestic banks' limitations to channel savings to the private sector.
- (b) In 1999, the consolidated bank sector obtained more domestic deposits and other resources than it could grant through financing. The excess resources were channeled to reducing its own external debt (1.3 percent of GDP) and to increasing its financial asset holdings abroad. While commercial and development banks increased their assets abroad by an amount equivalent to 0.6 percent of GDP (line 13 in Table 23), Banco de México accumulated international reserves by the equivalent to 0.1 percent of GDP (line 14).
- (c) The non-financial public sector closed 1999 with a net liability position totaling 1.8 percent of GDP<sup>15</sup>, which was financed domestically via the placement of government

<sup>&</sup>lt;sup>14</sup> For a detailed explanation of the guidelines used in the presentation of the funds flow matrix, see "1998 Annual Report," Appendix 6, Banco de México, p. 243.

<sup>&</sup>lt;sup>15</sup> The total flow of financing to the non-financial public sector includes unpaid or uncollected accrued transactions. The Ministry of Finance presents figures that only account for cash flow transactions; therefore, the two methodologies are not comparable.

securities. This sector also ended with a net asset position abroad, mainly because of the increase in the value of its cash holdings outside of Mexico.

- (d) Foreign resources channeled to the domestic financial sector were equivalent to 0.6 percent of GDP, as a result of three factors combined: an increase in foreign investment in the Mexican stock market equal to 0.8 percent of GDP, and declines in foreign holdings of both Mexican government securities and bank deposit instruments.
- (e) Looking at the total variation in financial instruments, in 1999 the net liability positions of the private sector (1.1 percent of GDP) and of the non-financial public sector (1.8 percent of GDP) were funded by external financing, which was reflected in the current account deficit (2.9 percent of GDP).

Table 23.	Funds Flow Matrix for the Institutional Financial System in 1999 1/
	Revalued flows in millions of pesos 2/

	Private sector residing in Mexico 3/		Non-finan	n-financial public sector 4/ Ba		ank sector 5/		External sector				
		Source of resources (Liab.)	Net Financ. recvd.	Use of resources Assets d	Source of resources (Liab.) e	Net Financ. recvd. f = e - d		Source of resources (Liab.)	Net Financ. recvd. i = h - q	Use of resources (Assets) i		Net Financ recvd. I = k - j
		b	c = b - a									
1. Change in domestic financial instruments (2 + 7 + 8 + 9)	7.1	3.8	-3.3	0.4	2.3	1.9	0.8	2.8	2.0	0.6		-0.6
2. Domestic financial instruments	7.1		-7.1	0.1	2.7	2.6	-1.6	2.8	4.4	-0.2		0.2
<ol><li>Bills and coins</li></ol>	1.0		-1.0					1.0	1.0			
<ol><li>Bank deposit instruments</li></ol>	1.7		-1.7	0.1		-0.1		1.7	1.7	-0.1		0.1
5. Government securities 6/	4.2		-4.2		2.6	2.6	-1.6		1.6	-0.1		0.1
6. SAR and ISSSTE pension funds 7/	0.1		-0.1		0.1	0.1						
7. Financing from the banking sector 5/		1.3	1.3		-0.4	-0.4	0.9		-0.9			
8. Stock market		0.8	0.8				0.0		0.0	0.8		-0.8
9. Other financial system items 8/		1.7	1.7	0.3		-0.3	1.4		-1.4			
10. Change in external financial												
nstruments (11 + 12 + 13 + 14 + 15)	-0.3	4.0	4.3	0.3	0.2	-0.1	0.7	-1.3	-2.0	2.9	0.7	-2.2
11. Foreign direct investment		2.4	2.4							2.4		-2.4
12. Financing from abroad		1.5	1.5		0.2	0.2		-1.3	-1.3	0.4		-0.4
13. Foreign cash and banks	-0.3		0.3	0.3		-0.3	0.6		-0.6		0.6	0.6
14. Banco de México's international reserves							0.1		-0.1		0.1	0.1
15. Errors and omissions (Balance of Payments)		0.1	0.1							0.1		-0.1
16. Statistical discrepancy 9/		0.1	0.1							0.1		-0.1

instruments (1+ 10+16) 6.8 7.9 1.1 0.7 2.5 1.8 1.5 1.5 0.0 3.6 0.7 -2.9 10/ 1/ This exercise uses the accounting criteria that took effect in January 1997 (National Banking Commission, Bulletin 1343). Therefore, the items presented in this Table may not coincide with those of previous reports.

2/ Excludes the valuation effects derived from converting the flows of resources denominated in foreign currency into domestic currency. Preliminary figures. The sum of the components may not coincide with the total due to rounding off.

3/ The private sector includes firms, individuals and non-bank financial intermediaries.

I/ The non-financial public sector includes the Federal Government and public agencies and companies.

5/ The banking sector includes Banco de México, development banks and commercial banks (including their agencies abroad). By construction, this sector has a net total position of zero (line 17) because these are financial intermediaries. The financial flows of the banking sector were consolidated using statistics on resources and obligations of commercial and development banks.

6/ Includes securities held by firms, individuals and retirement mutual funds (SIEFORES) in the private sector column, and holdings by foreign residents in the external sector column.

7/ Includes retirement funds from ISSSTE and IMSS on deposit at Banco de México.

8/ Includes non-classified assets, real estate assets and others, as well as equity and profit and loss accounts of the banking sector.

9/ Difference between financial information and balance of payments information.

10/ Corresponds to the current account reported in the balance of payments. A negative result implies external sector financing to the domestic economy (external sector surplus), which is equivalent to a current account deficit.

### III.5.5. The Stock Market

In 1999, the Mexican stock market expanded vigorously, in marked contrast to its lackluster performance in 1998. The Mexican stock market index (IPC) rose 80.1 percent in nominal terms during the year, equivalent to a 60.3 percent real growth rate and an 86.7 percent gain in dollar terms (see Graph 28). This outstanding performance was more pronounced in the first and fourth quarters of the year. Nevertheless, the yield on the IPC in the 1998-1999 period was a scant 2.3 percent in real terms.

### Graph 28. Performance of the Mexican Stock Market 1/



Base: January 2, 1998 = 100.

1/ Price and Quotations Index (Indice de Precios y Cotizaciones, IPC) of the Mexican Stock Exchange. Last datum: December 30, 1999.

The performance of stock prices per industry groups showed an across-the-board recovery in 1999. The ascent was led by the sectors of communications and transportation, and services and construction (see Table 24). For the 1998-1999 period, the topperforming sectorial index was also in communications and transportation, whereas the worst results were posted by the indices for holding companies and manufacturing industries.

### Table 24. Performance of the Mexican Stock Exchange

Real Percent Change Dec. 1997 Dec. 1998 Dec. 1997 --Dec. 1998 Dec. 1999 Dec. 1999 General Index -36.2 60.3 2.3 Extractive Industry -25.3 26.1 -5.8 -30.6 1.6 -29.5 Manufacturing Construction 68.8 -16.6 -50.6 35.7 -22.6 Commerce -43.0 **Communications and Transportation** -18.4 100.1 63.2 Services -50.4 92.4 -4.5 Others 1/ -46.8 24.4 -33.8

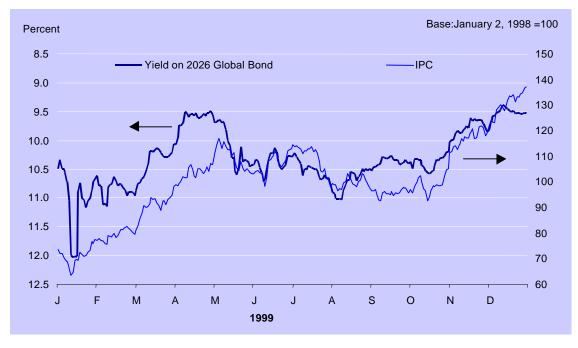
By sector of economic activity

1/ Includes mainly holding companies. Source: Mexican Stock Exchange

Source: Mexican Stock Exchange

The performance of the Mexican stock market in 1999 was mainly driven by the following factors: i) an improvement in the external environment; ii) the continued momentum of U.S. stock markets; iii) a decline in emerging markets' country-risk premiums; and iv) the increasing strength of the Mexican economy. With respect to the latter item, the following developments were especially relevant to consolidate economic agents' favorable economic expectations: the attainment of the inflation target for the year, a prudent handling of public finances, the growing vigor of the Mexican economy, and the rise in oil prices.

Graph 29 shows how the aforementioned factors had an impact on the performance of the IPC as well as on country-risk perceptions (measured in terms of the rate on the Federal Government's global bond issue maturing in 2026). Unsurprisingly, these elements stirred a reactivation of foreign investment in the Mexican stock market. In 1999, the market received a 3.769 billion dollar inflow from abroad, contrasting with a 655.5 million dollar outflow the year before.





### III.6. Inflation

Inflation in 1999 came in well below the official target for the year, at 12.32 percent. This was 0.68 percentage points lower than the 13 percent target. Annual inflation thus reached its lowest level in the last five years. The main factors that account for the moderation of price growth throughout 1999 are the following: i) the consistent application of a monetary policy focused, firstly, on tempering the inflationary effects of external shocks and increases in the prices of government-supplied goods and services that took place in late 1998, and secondly, on achieving the inflation target; ii) the appreciation and subsequent stabilization of the exchange rate; iii) a reduction in the prices of fruits and vegetables; iv) the prices of government-supplied goods and services that rose in line with the terms foreseen in the General Economic Policy Criteria for 1999 (Criterios Generales de Política Económica); and v) a solid fiscal policy which contributed to an environment propitious for reducing inflation.

On the other hand, the slow convergence of inflation expectations —implicit in contracts of all kinds— with the official target unquestionably hindered the battle to curb inflation.

### III.6.1. Evolution of Consumer Prices in 1999

The January 1999 monthly inflation rate was interpreted by most economic agents as a confirmation that the turbulent economic climate prevailing at that time would present serious obstacles for attaining the year's macroeconomic goals, particularly the inflation target. In fact, as a result of several developments —including the inflationary carryover from 1998, the deregulation of tortilla prices and the atypical growth in fruit and vegetable prices— inflation reached 2.53 percent in the first month of 1999. This rate was above the one posted twelve months earlier, of 2.18 percent. Consequently, in January 1999 the annual growth in the INPC (National Consumer Price Index) was 19.02 percent, the highest rate since August 1997. By the end of that month, most financial specialists had therefore raised their inflation projections for the year to around 17 percent.

Beginning in February, however, price growth decelerated and continued to do so for the following ten months, thus reverting the upward trend that had begun in June 1998. Again, this was essentially the result of the mitigating influence of monetary policy, the appreciation and later stability of the peso exchange rate, the favorable evolution of fruit and vegetable prices, and the according to program behavior of price increases for government-supplied goods and services (gasoline and electricity).

Table 25 shows the monthly, annual and accumulated (as compared to the level for the previous December) changes in the INPC. Graphs 30 and 31 present the annualized and accumulated inflation for the 1995-1999 period.

### Table 25.

### **National Consumer Price Index**

Changes in percent

	Month	nly	Anı	nual
Month				
	1998	1999	1998	1999
January	2.18	2.53	15.27	19.02
February	1.75	1.34	15.35	18.54
March	1.17	0.93	15.27	18.26
April	0.94	0.92	15.10	18.23
Мау	0.80	0.60	14.97	18.01
June	1.18	0.66	15.31	17.39
July	0.96	0.66	15.41	17.04
August	0.96	0.56	15.50	16.58
September	1.62	0.97	15.92	15.83
October	1.43	0.63	16.65	14.91
November	1.77	0.89	17.41	13.92
December	2.44	1.00	18.61	12.32



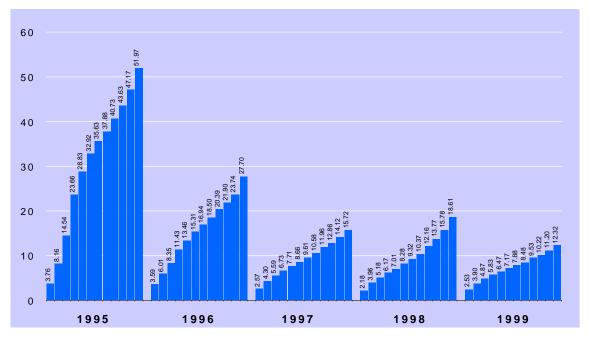
### National Consumer Price Index

### Annual change in percent









The following conclusions can be drawn from the information contained in Table 25, Graph 30 and Graph 31:

- (a) in January 1999 monthly inflation was the highest on record since January 1997, and the corresponding annual figure the highest since August 1997.
- (b) from February to December 1999, the monthly inflation rates were the lowest for each corresponding month since 1994;
- (c) starting in February 1999, the accumulated increase in the INPC was the lowest of the past five years for each equivalent period; and
- (d) in general terms, throughout the period analyzed (1995-1999), the INPC monthly growth rates followed a downward trend.

The following is a brief analysis of the monthly evolution of inflation between February and December 1999.

In February, price growth was lessened by two factors: i) a sharp drop in prices of fruits and vegetables; and ii) the fact that by that time the inflationary carryover from the previous year had practically dissipated. The combination of these two elements spurred a steep decline in the monthly inflation rate in February, to 1.34 percent.

In March, monthly inflation was 0.93 percent, once again influenced by lower fruit and vegetable prices. Another positive factor that month was the exchange rate's stability. In April, with these factors still in effect, monthly inflation was once again encouraging, at 0.92 percent.

In May, the monthly growth in the INPC was only 0.60 percent. In addition to the favorable impact of a stable exchange rate, inflation was also tempered by reductions in the prices of domestic gas and electricity. The latter element was in turn the result of the lower summer electricity rates taking effect in various cities of Northern Mexico. These transitory elements are estimated to have shaved 0.3 percentage points off the monthly change in the INPC. Nonetheless, even without these temporary factors, inflation would have remained on its downward trend in May.

In June, the INPC monthly increase was 0.66 percent, slightly higher than in May. This was de to the fact that no favorable developments like those seen in May were present in June, except for a modest increase in fruit and vegetable prices which was lower than the average rate for this price sub-index over the last twelve years.

In July and August, inflation showed further signs of decelerating, coming at 0.66 and 0.56 percent, respectively. July inflation was affected by a one-time hike in telephone service charges, which added 0.05 percentage points to inflation. Even so, inflation was unchanged with respect to the previous month.

The 0.97 percent monthly inflation rate for September was heavily affected by the seasonal back-to-school expenses, which accounted for 0.38 percentage points of said increase.

In October, November and December, monthly inflation closed at 0.63, 0.89 and 1.00 percent, respectively. In this last quarter of the year, price growth was driven, among other factors, by the behavior of fruit and vegetable prices. While the latter declined in October and November, they posted a modest upturn in December, although lower than what might have been expected according to the seasonal pattern. On the other hand, in October and November the summer electricity rates stopped being applied in some cities of Mexico, which added 0.07 and 0.26 percentage points to inflation in those months. Although the traditional Christmas-season price hikes did take place in December, during this month of 1999 the minimum wage increase for 2000 was not applied in advance, nor were there any unforeseen adjustments in the prices of public goods (gasoline and electricity). Therefore, the inflation rate for December 1999 was the lowest for that month in the last five years.

### III.6.2. Evolution of the Variables that Affect Inflation

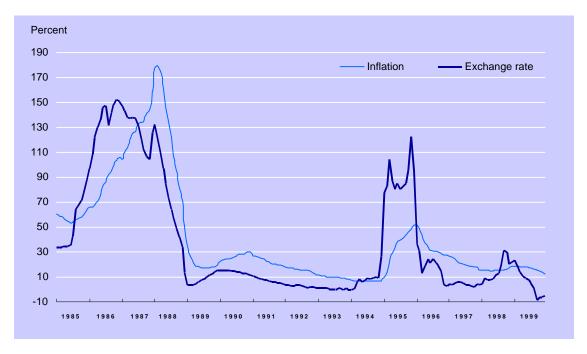
To analyze more thoroughly the causes and internal dynamics of inflation in 1999, a more detailed examination of some of the components of the INPC seems appropriate. Traditionally, this analysis has focused on two subindices: tradable goods and nontradable goods. In the past, tradable goods included fruits and vegetables, merchandises (excluding tortillas, corn dough and light petroleum) and hotel services. Non-tradable goods included services (without hotels) and some merchandise like tortillas, corn dough and light petroleum.

The aforementioned classification of tradable goods included gasoline, while non-tradable goods included domestic gas and electricity. In Mexico, changes in the prices of gasoline and electricity are determined by the government, while the price of domestic gas in Mexico is linked to its international price by means of a formula. Since including these goods in the tradable and nontradable classifications did not seem to be a very useful practice, a functional re-classification of these subindices was deemed appropriate. The new classification does not imply any fundamental change in the measurement of inflation, but it does offer a more precise and objective framework for analyzing the components of the INPC that follow similar statistical patterns. Thus, the new subindices have been constructed as follows: fruits and vegetables, merchandise (excluding gasoline), services (excluding domestic gas and electricity) and goods whose prices are administered by the public sector (gasoline, electricity and domestic gas).

Exchange rate fluctuations are among the factors that have the biggest impact on inflation in Mexico. This impact is manifested in two ways: i) directly, on merchandise prices, and ii) indirectly, by affecting inflation expectations, which in turn influence contract negotiations (wages, credit terms, etc.) and thereby the prices of services and many goods in the economy. Graph 32 shows the historical correlation between exchange rate fluctuations and the INPC annual inflation rate.

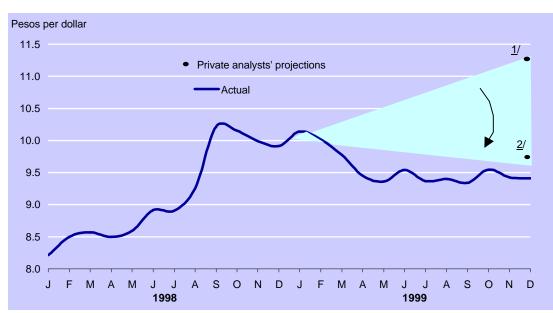
### Graph 32. Inflation and the Exchange Rate

Annual change in percent



Bearing in mind this important empirical evidence, the appreciation of the exchange rate in late January 1999 and its subsequent stability through the end of the year played a key role in curbing inflation. In this sense, it is worth noting that since February the peso-dollar exchange rate was consistently at a more appreciated level than the projections of private sector economic specialists, as measured by the surveys conducted by Banco de México on a monthly basis<sup>16</sup>. In keeping with this behavior, the exchange rate ended the year below its forecast levels (see Graph 33).

<sup>&</sup>lt;sup>16</sup> Survey of the Expectations of Private Sector Economic Specialists, Banco de México.



### Graph 33. Exchange Rate: Actual and Forecasted Paths

1/ Projections for year-end 1999, estimated in December 1998.

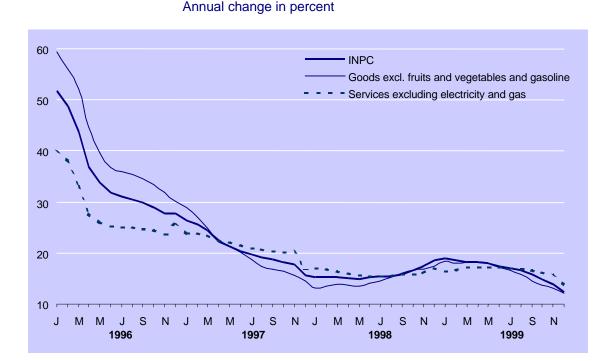
2/ Last projection for year-end 1999, obtained from the December survey.

To expand on this topic, Graph 34 shows the annual changes in the prices of both goods and services. In early 1999, the annual increase in the prices of goods was almost two percentage points above that of services. However, the gap narrowed gradually and by July the inflation rate for goods was below that for services. The spread widened again in the second and third quarters, so that by year-end the annual growth rate in goods prices was 12.24 percent, while services prices had risen 14 percent.

As it has been mentioned previously, the evolution of the exchange rate can directly and swiftly affect domestic inflation via the prices of goods. This connection confirms the substantial contribution of a stable exchange rate to the moderation of inflation in 1999.

Despite the improvement in inflation and the resulting decline in inflation expectations during the year, nominal contractual wages rose more than these expectations would have warranted. The development implied a risk, nevertheless: should the productivity gains implicit in the expected increase in real wages not materialize, unit production costs would be negatively affected, having a particular impact on services prices. This situation did in fact occur, and hence inflation in services prices was higher than that of goods prices by the end of 1999 (see Graph 34).

Graph 34. Prices of Goods and Services



The goods and services price subindices are also particularly useful for analyzing, from another perspective, the effects of the exchange rate and wages on inflation. It is possible to demonstrate statistically that the exchange rate has more of an impact on goods prices than on the prices of services. This is so because it is possible to trade goods abroad, and therefore their prices tend to respond more to their international references. On the other hand, wages (both minimum wages and those in the manufacturing industry) have more of an impact on the prices of services than of goods because labor compensation is a very significant component of the production cost of services.

It is also possible to statistically measure the time it takes for a variation in the exchange rate or in wages to have an impact on prices. For goods, this period is six months, while for services it is only three months. These facts explain why in December 1999, given the evolution of the exchange rate and wages, the growth rate of services prices was higher than that of goods. The reason for last year's decline in fruit and vegetable prices was that, despite summer flooding in the Gulf of Mexico area, 1999 was a good year for agricultural production in Mexico. This fact was reflected in fruit and vegetable consumer prices, which dropped 3.66 percent between January and December 1999. This was also due in part to the very high levels these prices reached at year-end 1998, and because agricultural exports posted only modest growth (except for cantaloupe and watermelon), which translated into a domestic supply of these products sufficient to prevent upward pressures in their prices (see Table 26).

### Table 26. Exports of Fruits and Vegetables

Annual change in exported volume in percent

Product	1996	1997	1998	1999
Tomatoes	6.1	-9.6	11.3	-12.8
Fresh Vegetables 1/	-4.7	16.1	9.7	4.3
Cantaloupe and Watermelon	38.2	24.3	-10.8	51.7
Other Fresh Fruits 2/	7.2	15.4	12.1	-3.5

1/ Includes onions, lettuce, potatoes, cucumber, and carrots.

2/ Includes avocados, limes, apples, oranges, papayas and grapes.

With regard to the prices of goods administered by the public sector, gasoline and electricity remained within the programmed guidelines throughout the year (rising 13 percent in both cases). Domestic gas prices moved up 25 percent as they are determined by using a formula linking them to their external prices, which rose on international markets.

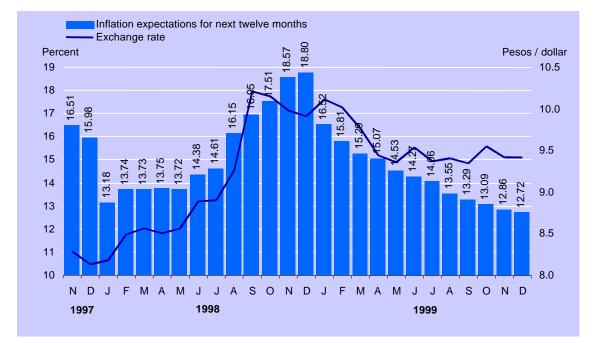
Another sub-index of the INPC worth analyzing is that for goods and services included in the basic consumer basket. This subindex rose 13.15 percent in 1999, a rate that was above the one corresponding to the general price index but significantly below the rate posted in 1998 (18.95 percent). The items that had the biggest impact on price growth for this basket of goods in 1999 were: corn tortillas, gasoline, domestic gas, inter-city bus fares, bottled soft drinks, detergents, electricity, pasteurized milk, urban bus fares, mass transit fares and beer.

### III.6.3. Evolution of Inflation Expectations in 1999

Inflation expectations are the estimates of future price growth made by economic agents. A sample of these expectations is obtained by means of the monthly surveys conducted among economic analysts on the subject. The Mexican experience in the past few decades has shown that the exchange rate has a significant impact on inflation expectations, although the effects of appreciations and depreciations are not symmetrical. When the local currency weakens, inflation pressures are stronger and transmitted more swiftly. Graph 25 shows how inflation expectations diminished gradually over the course of 1999, as the exchange rate appreciated in the first quarter and then remained stable for the remainder of the year.

### Graph 35. Inflation Expectations and Exchange Rate

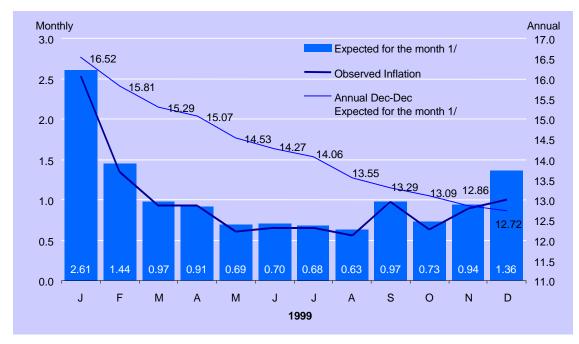




Another factor contributing to diminishing inflation expectations in 1999 was the positive inflation results obtained throughout the year. As Graph 36 illustrates, the fact that observed monthly inflation rates were consistently below the projections put forth at the start of every month of the year contributed to the gradual correction of these estimates. The two elements described above, acting concurrently, helped bring inflation expectations down from 16.52 percent in January 1999 to 12.72 percent in December.



Changes in percent



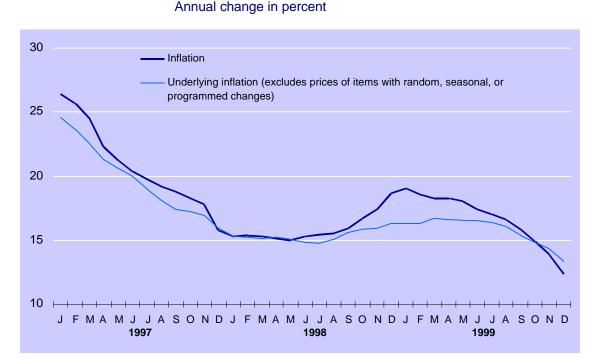
1/ Based on Banco de México's Survey of the Expectations of Private Sector Economic Specialists.

In order to improve the analysis of inflation, the effects of changes in the prices of some goods and services must be eliminated, including those with a significant random component (such as prices on fruits and vegetables), those that follow seasonal cycles (such as school supplies and tuition), and prices whose path is predetermined from the start of the year (such as prices of fuels and of other products and services administered by the public sector). A special index has been constructed to exclude these items. The resulting price sub-index measures what is known as underlying inflation, which, in theory, is affected only by changes in the exchange rate, wages, and prevailing monetary conditions in general<sup>17</sup>. Indices of this kind have become a very useful tool for analyzing inflationary pressures, since they eliminate transitory phenomena from the measurement of inflation. This is why most of the world's central banks have been developing similar indices to analyze the effective trend in inflation. Graph 37 depicts a comparison between general

<sup>&</sup>lt;sup>17</sup> A detailed explanation of the methodology used to compile special price indices similar to the one described above can be found in Banco de México's Research Document No. 9802, "Alternative Measurements of Inflation", July 1998

inflation, as measured by the INPC, and underlying inflation in Mexico between 1997 and 1999.

## Graph 37. Inflation and Underlying Inflation



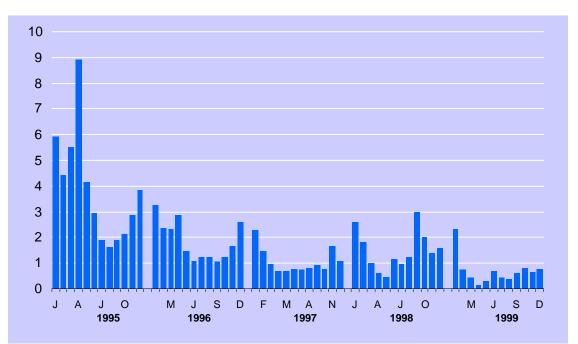
What this graph shows is that the inflationary bubble that had been forming since June 1998 was contained in 1999. The gap between changes in the INPC and in underlying inflation narrowed steadily from February 1999 until it disappeared in October of that year. Furthermore, although underlying inflation was stable in the first half of the year, it started to decline noticeably starting in August. As a result, in the last five months of 1999 this indicator's annual growth rate dropped 3.07 percentage points, to close the year at 13.23 percent. This provides further evidence that the reduction of inflation in 1999 was not due exclusively to the random factors mentioned earlier in this section, but also to the downward trend of the main factors that determine prices. Beginning in November 1999, however, annual inflation measured by the INPC fell below that posted by the underlying inflation sub-index. This indicates that price growth in the last months of 1999 benefited in part from transitory phenomena, such as the steep decline in fruit and vegetable prices compared to their levels prevailing in the last quarter of 1998.

### III.6.4. National Producer Price Index

In 1999, the National Producer Price Index (INPP), excluding oil and services, rose 8.66 percent. This was less than half the 1998 growth of that index, which was 19.41 percent. In fact, the 1999 annual change in the INPP was the lowest on record for the last five years.

The monthly evolution of the INPP excluding oil and services was also favorable: except for January and October, the monthly changes recorded were the lowest for similar months since 1994. Moreover, producer price inflation in April and May (0.14 and 0.30 percent, respectively) were the lowest for these months since 1980.

### Graph 38. National Producer Price Index Without Services and Without Crude Oil



Monthly change in percent

In turn, the INPP including services and excluding oil grew 11.95 percent between December 1998 and December 1999, 6.64 percentage points less than in the previous 12-month period (18.59 percent). If crude oil prices are included in this index, the corresponding producer inflation rate would have been 12.45 percent.

The key elements that contributed to moderating producer price growth in 1999 were:

- (a) the appreciation of the exchange rate, which eased price growth on exports (0.36 percent); and
- (b) a 22.67 percent reduction in vegetable prices.

In addition, as with consumer prices, the 1999 evolution of producer prices benefited from the following circumstances: i) good weather conditions in Mexico and in the country's main trading partners; ii) a decline in export volume of some agricultural products; and iii) a comparatively high producer price level at the end of 1998.

The prices involved in the following economic activities were among those which contributed the most to the growth in the INPP including services and excluding oil: leisure services, oil refining, alcoholic beverages, corn milling, medicinal products, and plastic articles.

The economic activities that benefited the most from favorable prices of domestic raw materials included in the INPP were: oil refining; basic petrochemicals; electricity and gas; fishing and hunting; synthetic and artificial resins; and cement.

According to the data displayed in Table 28, the prices of domestic inputs and final production goods rose moderately in 1999. It should also be mentioned that the prices of raw materials for processing, excluding oil, rose by only 5.65 percent, indicating that there were no bottlenecks present in this economic activity branch that might have otherwise stirred up inflationary pressures.

### Table 27. National Producer Price Index (INPP) with Services and Without Crude Oil for Export

Classification by origin of final goods, at branch group level

Percent

ltem	Change From Dec.98	Breakdown of Change in General Index 1/			
	to Dec.99	Contribution	Percentage		
GENERAL INDEX	11.95	11.95	100		
Primary Economic Sector	-7.06	-0.32	-2.68		
Agriculture, Forestry and Fishing	-7.61	-0.33	-2.73		
Mining	2.56	0.01	0.05		
Secondary Economic Sector	10.26	4.31	36.1		
Manufacturing Industry	9.55	3.07	25.66		
Food, Beverages and Tobacco	11.01	1.27	10.64		
Textiles, Apparel and Leather	8.05	0.17	1.44		
Wood and Wood Products	9.56	0.06	0.48		
Paper and Paper Products, Printing and Publishing	12.92	0.12	0.99		
Chemicals, Oil, Rubber and Plastic	15.57	1.04	8.69		
Non-metallic Minerals	7.8	0.04	0.31		
Basic Metal Industries	-2.23	-0.01	-0.06		
Metal Products, Machinery and Equipment	3.97	0.34	2.85		
Other Manufacturing Industries	4.66	0.04	0.34		
Construction	12.53	1.25	10.44		
Tertiary Economic Sector	14.89	7.95	66.58		
Electricity and Gas	12.37	0.14	1.18		
Retail, Restaurants and Hotels	16.57	3.58	30.01		
Transportation and Communication	11.75	1.16	9.67		
Real-estate Rental	12.11	0.86	7.19		
Medical Care, Education and Leisure	16.14	2.21	18.53		

1/ Based on the relative importance of each group in the General Index.

By analyzing the behavior of producer prices according to the degree of processing of the goods involved, the mechanism by which changes in the prices of intermediate goods are transmitted to final goods can be identified. For these purposes, the following conclusions can be drawn from Table 28:

- (a) the decline in annual price growth for all categories that had begun in 1996 was interrupted in 1998;
- (b) in the last three years, the annual change in the prices of raw materials for processing has been lower than that of other inputs;
- (c) the average rise in the prices of raw materials in 1999 was lower than the increase in the prices of final goods and services;

- (d) in 1999 the relative prices of goods and services aimed at satisfying domestic demand rose by 8.53 percentage points more than those of goods destined for export; and
- (e) in 1999 the prices of final goods (domestic demand plus exports) grew at a rate 6.23 percentage points lower than that of service prices.

### Table 28. Producer Price System

Annual change in percent

Item	From	Dec. 94	Dec. 95	Dec. 96	Dec. 97	Dec. 98	Dec. 94
	to	Dec. 95	Dec. 96	Dec. 97	Dec. 98	Dec. 99	Dec. 99
Inputs							
Raw Materials for Processing		63.53	26.78	6.80	7.71	5.65	151.97
Trade in Intermediate Goods		71.31	20.01	7.92	13.69	7.84	172.02
Domestic Raw Materials		60.14	23.57	10.37	14.34	9.60	173.70
Final Goods and Services							
1 Domestic Demand		48.37	27.77	15.86	18.84	12.89	194.66
1.1 Goods		55.26	25.56	13.60	19.76	9.71	191.00
1.2 Services		41.60	29.87	17.94	18.03	15.74	196.27
2 Exports		73.61	17.61	9.75	16.50	3.94	171.37
2.1 Goods		78.25	18.88	14.06	16.68	0.36	183.03
2.2 Services		76.34	15.10	4.88	15.20	7.08	162.60
Total Final Goods and Services (1 + 2)		51.01	26.55	15.18	18.59	11.95	192.22
Final Goods (1.1 + 2.1)		56.90	24.76	13.66	19.41	8.66	188.66
Final Services (1.2 + 2.2)		45.15	28.04	16.48	17.75	14.89	192.84

# III.6.5. The National Index of Social-Interest Housing Construction Cost (INCEVIS).

In 1999, the National Index of Social-Interest Construction Cost (*Índice Nacional de Costo de Edificación para la Vivienda de Interés Social*) posted a 14.37 percent increase (as compared to 19.14 percent in 1998). This annual growth rate is explained by a 15.45 percent increase in the prices of construction materials and an 8.85 percent rise in labor costs.

The materials for which prices rose most sharply were: ready-mix concrete (32.10 percent), plaster (28.02), quicklime (26.93), PVC piping (26.83), sand (20.56), cisterns (20.22) cinderblocks (19.11) and gravel (17.93). By cities, the most pronounced increases occurred in Acapulco (19.52 percent), Monterrey (17.90), Iguala (17.32), Culiacán (17.28) and Guadalajara (17.21).

### Monetary and Exchange Rate Policy

### IV.1. Monetary Policy

Banco de México's monetary program for 1999 was designed in awareness of the possibility that monetary policy might have to be implemented in an unstable and uncertain international environment that year. One of the motivations present in drafting that program was to make monetary policy flexible enough to deal with the possibility of excessive volatility in international financial markets, characterized by a more limited access to private capital for emerging economies and by the financial fragility of some nations. Furthermore, the outlook at the time was for a general decline in the pace of worldwide economic activity.

Under an international scenario such as the one described above, the authorities believed the best approach for the 1999 monetary program was to make it adaptable to adverse conditions, but consistent with the rest of economic policies. A prompt and coordinated implementation of the various economic policy tools helps strengthen the economy, allowing it to face any disturbances in an orderly fashion and with the lowest social cost possible.

To this end, the program incorporated operational rules aimed at achieving two goals: avoiding excess money supply, and keeping monetary policy flexible through discretionary measures on the part of the Central Bank.

Including this flexibility component in Banco de México's monetary programs in recent years has one basic reason at heart: the conviction that a monetary policy based exclusively on automatic operational rules is insufficient to contain the inflationary effects of financial shocks that arise from time to time and hamper the stabilization process. This discretionary element allows the monetary authorities to react swiftly to unexpected situations, and to be in an optimum position to keep unpredictable events from translating into additional inflationary pressures.

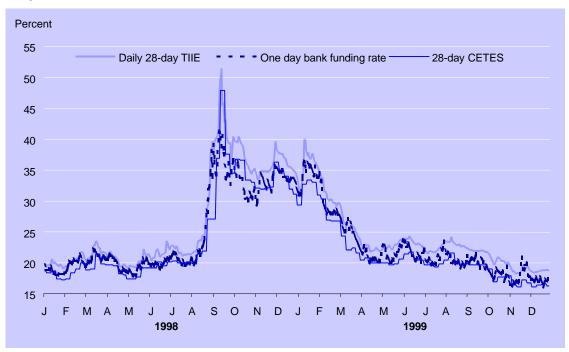
It was no coincidence therefore that with this element of flexibility present, monetary policy maintained a restrictive bias throughout the year and turned to be a key factor in reducing inflation expectations. These expectations are particularly important in the battle against inflation, since there is a close link between them and key prices in the economy. To a large extent, they are indicative of the possibility that the Central Bank can attain its inflation targets. The purpose of ensuring that the monetary authorities can react swiftly to unexpected inflationary shocks is to prevent these from affecting inflation expectations and other prices in the economy. The ultimate goal is to make it easier to attain the inflation target.

The substantial fall in nominal interest rates last year was determined precisely by the steady decline in inflation forecasts over 1999 and a lower country-risk —which in turn stemmed from the consistency among the various economic policies. The behavior of interest rates cannot be attributed to a relaxation of monetary policy; if this had been the case, it would have been inevitably accompanied by an immediate depreciation of the exchange rate.

The Mexican financial markets were influenced by both internal and external events in 1999. Although the external factors were more favorable than anticipated, uncertainty over the world economy sparked some jitters over the country's main macroeconomic and financial variables. The uncertainty that prevailed during the year was evident primarily in interest rates (see Graph 39).

Nominal interest rates posted sharp reductions throughout 1999, reaching levels similar to those observed in March 1998, before Banco de México modified its monetary policy stance from neutral to restrictive. Despite this, real interest rates remained high in 1999.

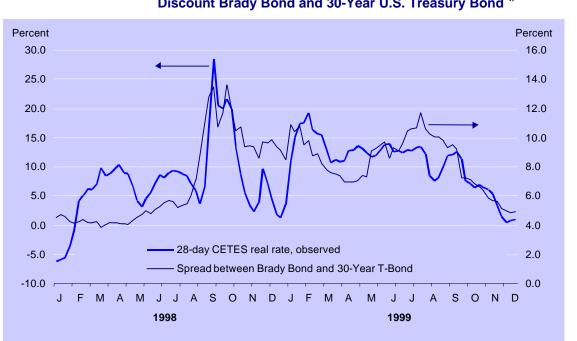
Banco de México's restrictive monetary policy in 1999 induced temporary nominal and real interest rate hikes. The reasons that real interest rates remained fairly high, however, were basically non-monetary in nature and had nothing to do with the restrictive monetary policy stance. Graph 40 shows the close correlation between real interest rates in Mexico and the spread between the net yield on the Mexican discount Brady Bond and the yield on the 30year U.S. Treasury Bond. The behavior of real interest rates in Mexico during 1999 was driven largely by the uncertainty affecting emerging economies that year. Moreover, the instability that generally characterizes inflationary processes, and the fact that inflation in Mexico is still higher than that of its main trading partners, drives financial market participants to demand risk premiums on their peso-denominated operations.



Graph 39. Evolution of Nominal Interest Rates

Last observation: December 30, 1999.

Banco de México generally applies its restrictive monetary policy by using or widening the "short", which is currently the main policy instrument available to the Central Bank. The "short" occurs when the Central Institute establishes or increases the negative target for the consolidated balance of the current accounts it holds for banks. This tends to temporarily raise short-term interest rates, which limits the effect of existing inflationary pressures on prices. Afterwards, however, once Banco de México's action has had its impact on prices and inflation expectations, the monetary policy instrument facilitates the orderly decline in interest rates without affecting the stability of domestic financial markets.



Real Interest Rates in Mexico and Spread between the Yield on Discount Brady Bond and 30-Year U.S. Treasury Bond <sup>1/</sup>

1/ Weekly data. Last observation, December 30, 1999.

Graph 40.

The reader should bear in mind that in an open economy, with internationally integrated financial markets, no central bank can permanently reduce real interest rates by any other means than by abating inflation. Adopting a lax monetary policy in order to artificially lower interest rates invariably results in a deterioration of inflation expectations and an increase in the risk premium demanded on investments denominated in local currency.

Over the years, economic experts have come to the conclusion that the best way a central bank can contribute to the economic welfare of the population is by fighting inflation. Consequently, price stability is not an end in itself, but rather a means to foster economic development. International experience, as well as Mexico's own history, has clearly shown that inflation has insidious effects on economic growth, real wages, income distribution and public finances<sup>18</sup>. Faced with this evidence, Banco de México has focused its monetary policy in recent years on a gradual but definitive stabilization of prices.

<sup>&</sup>lt;sup>18</sup> See "Monetary Policy Report on the First Semester of 1999," Banco de México, September 1999.

Because monetary policy actions have a delayed impact on inflation, the current inflation control strategy of this Institution has tried to transcend the short term and implement a program to attain price stability in the medium term. To this end, in January 1999 the Board of Governors of Banco de México proposed to bring Mexico's inflation down to a level comparable to the rates prevailing in the country's main trading partners by the end of year 2003. In order to set a short–term reference for this trend toward price stability, in September 1999 Banco de México established an inflation rate of no more than 10 percent as the monetary policy target for the year 2000.

On the road to achieving a more moderate rate of inflation, the central bank must always be ready to apply a restrictive monetary policy. This is not always enough to attain price stability at a socially acceptable cost, however. There are factors beyond the control of the monetary authorities, such as the stand of public finances or external shocks, that may impinge on achieving the inflation target. Therefore, in order to reduce inflation with the lowest possible social cost, other elements of economic policy must be consistent with this quest for stability. Banco de México has led the effort entrusted to it, in accordance with its legal mandate, to ensure that the various factors that affect price growth are channeled to reducing inflation.

### IV.1.1. Main Elements of the 1999 Monetary Program

The monetary program for 1999 was built around a 13 percent annual inflation target. The basic elements of this program were:

First: Banco de México pledged, as a general rule, to adjust the supply of primary money on a daily basis so as to meet the demand for money at all times. The purpose of this operational rule —which remains in effect— is to offer the utmost assurance that the Central Bank will not deliberately create an excess supply of monetary base. In technical terms, this rule is tantamount to saying that in conducting its open market operations, Banco de México will maintain a zero target for the consolidated balance of the current accounts that commercial banks hold at the Central Bank; in other words, it will maintain a "short" equivalent to zero<sup>19</sup>. It also means

<sup>&</sup>lt;sup>19</sup> For a detailed description of the accumulated balances mechanism, see the *Informe Anual* (Annual Report) of Banco de México for 1996.

that Banco de México must sterilize the monetary impact stemming from changes in net international assets and from transactions conducted by the Federal Treasury in its account with the Central Institution.

Second: Banco de México published a day-by-day projection for the monetary base path. This projection was estimated based on information available in January 1999, and at the time it was consistent with the inflation objective for that year —provided the assumptions incorporated into the estimation would indeed materialize.

Originally, Banco de México projected that by the end of 1999 the stock of the monetary base would rise 18.1 percent as compared to its 1998 year-end level. This meant that the expected increase in the monetary base was greater than the product of the real economic growth and inflation projections put forth at the start of the year; this was so because of an anticipated remonetization of around 1.5 percent of the monetary base stock at the close of 1998.

In spite of the fact that it can be very useful to compare the observed monetary base against its projected level on a daily basis, Banco de México explained the limitations of this practice. The Central Bank pointed out that the monetary base path is difficult to predict accurately, for the following reasons: i) the relationship between inflation and the monetary base can be modified over time, ii) the basic assumptions underlying the projected demand for monetary base during the year (GDP growth and interest rates) might not materialize; iii) the relationship between demand for monetary base and the variables that influence its behavior may also change over time; and iv) extraordinary events may occur that temporarily alter the demand for monetary base.

For these reasons, in conducting its monetary policy, Banco de México performs a detailed daily analysis of other indicators that provide information on the future trend in inflation. These indicators are the exchange rate, factors that affect aggregate supply (contractual wages and productivity, for example), and various measures of inflation expectations.

The monetary program for 1999 stated that the projected monetary base path would serve primarily as a reference in the event of substantial deviations between observed and programmed levels. The document also mentioned that if this type of deviation occurred, Banco de México would evaluate the situation and would only restrict monetary policy if the deviation implied additional inflationary pressures.

Third: in order to give the public an additional element of information and analysis —and thus offer further assurance that the Central Institute would under no circumstance generate inflationary pressures by creating an excess supply of monetary base—the monetary program for the year included quarterly limits on the variations of net domestic credit and a commitment to at least keep net international assets at their 1998 year-end level.

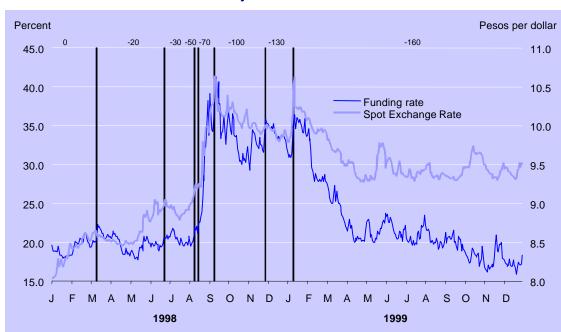
Notwithstanding the above, the elements of the monetary program could not in and of themselves guarantee that inflation would be controlled as programmed; unexpected inflationary pressures could emerge from channels outside the scope of monetary factors. Mindful of this possibility, in the past few years Banco de México has been incorporating an element into its monetary policy programs that allows it to adjust its monetary stance according to the conditions prevailing in the economy. This gave rise to the last fundamental element in the monetary program for that year.

Fourth: Banco de México reserves the right to adjust monetary policy —relaxing or restricting it— should circumstances arise that make such an adjustment advisable.

### IV.1.2. Implementation of the Monetary Program

At the start of 1999, the Mexican financial markets were hit by the repercussions of Brazil's exchange rate difficulties and by fears that financial instability in that country would spread to other emerging economies. Thus, the devaluation of the Brazilian currency was accompanied by a significant depreciation of the Mexican peso. In response to this situation, on the same date the Brazilian real's movement was recorded (January 13), Banco de México decided to tighten its monetary policy by raising the "short" from 130 to 160 million pesos. This was done with three additional objectives in mind: to limit the depreciation of the domestic currency, to reestablish orderly conditions in the foreign exchange market, and to preserve the chances for attaining the 1999 inflation target of 13 percent. The peso reacted positively to this measure (see Graph 41).

However, the Brazilian authorities' decision to let the real float only two days later revived market volatility. After the news from Brazil came out, the peso lost considerable ground —briefly shooting past 11 pesos per dollar— although it corrected itself quickly before the day ended. Finally, the peso ended January 15 with a modest appreciation against the U.S. currency (at 10.25 pesos per dollar). This favorable reaction of the exchange rate did not occur in isolation. Other variables like interest rates and the Mexican stock exchange index also posted satisfactory recoveries. In short, it is clear that the monetary authorities' swift reaction to this situation helped to restore a climate of stability in the domestic financial markets.



Graph 41. Funding Interest Rate, Spot Exchange Rate and Accumulated Balances Objective

Last observation: December 30, 1999.

In order to bolster the effectiveness of monetary policy instruments, and specifically with the intent of enhancing the Central Bank's capacity to influence the evolution of short-term interest rates, in February, the Board of Governors of Banco de México made an additional decision. Beginning on February 15, it required banks to deposit 5,000 million pesos each banking day in the Central Institute until a cumulative amount of 25,000 million had been reached, maintaining that deposit for an indefinite period of time. These deposits would accrue interest at a rate equivalent to the 28day Interbank Equilibrium Interest Rate (TIIE), and the amount each bank would have to deposit would be determined based on the balance of their total liabilities at the close of 1998.

The Central Bank would completely return to the system the liquidity withdrawn by means of this measure through short terms open market transactions. This, together with the placement of long–term government securities on the open market, allowed the Central Bank to operate within a context where money market participants began every day with a shortage of liquidity. This shortage was replaced through open market operations, and, in general, through short–term credit auctions. A situation such as this, in which the Central Institute participates daily as a supplier of liquidity in the money market, allows for an improved control over the conditions in which interbank credit is extended. Therefore, establishing these mandatory deposits increased the effectiveness of the accumulated balances objective as an instrument of monetary policy. Therein lies its importance.

It must be underscored that this measure never altered the level of liquidity prevailing in the money market, but merely created the right conditions for interest rates to react more swiftly to changes in monetary policy.

After the January 13 adjustment, the "short" remained at 160 million pesos for the rest of the year. This action was necessary to reduce inflation as programmed, in the context of the following circumstances: inflation pressures carried over from the end of 1998, a deterioration in the credibility of the official inflation target, and inflationary pressures induced by contractual wage negotiations.

Although various phenomena arose starting in February 1999 that had a positive influence on the evolution of inflation, and price growth followed a trajectory consistent with the 13 percent target, it took somewhat longer for the private sector's inflation expectations —implicit in all types of contracts— to converge with said target. This was the reason for the monetary authorities' decision to maintain monetary restriction. Additionally, given the delayed impact of monetary policy actions on the inflation process, the stance of this policy in the second semester of 1999 was also determined in consideration of its subsequent impact on inflation in the year 2000. In this respect, the gap between private sector inflation expectations and the target set for the year 2000 was another indication of the need to maintain a restrictive monetary policy.

### IV.1.3. Evolution of the Monetary Base

One phenomenon that attracted the attention of financial analysts in 1999 was the growth of the monetary base. As was widely reported at the time, starting in June of that year the monetary base pulled gradually away from its programmed path. The disparity between observed and programmed levels increased until it reached 33,829 million pesos on December 31 —a 21.8 percent deviation (see Graph 42).

Graph 42. Deviations in the Observed Daily Stock of the Monetary Base from the Projected Levels



A careful analysis of the situation led the authorities at Banco de México to the conviction that this unanticipated growth in the monetary base was entirely due to an increase in demand. A close examination of the monetary base's behavior is therefore appropriate.

From the perspective of the monetary base's uses, it is made up of bills and coins in circulation plus the resources the banking system maintains on deposit with the Central Bank. Under the zero average reserve requirement currently in effect, banks have neither an obligation nor an incentive to maintain a positive balance in their current accounts with Banco de México. Consequently, if the Central Institute had arbitrarily expanded the monetary base, and this expansion had not been matched by an increased demand for bills and coins, the consolidated balance of bank deposits with the Central Institute would have been continuously positive. Clearly, this would have been reflected in an excess supply of money in the economy, but this was obviously not the case in 1999.

Banco de México can generate an excess supply of bills and coins only by establishing a positive accumulated balances objective —in other words, by applying a "long" to the system. It should be recalled that throughout 1999 the Central Bank maintained a negative accumulated balances objective for the accounts it keeps for the banking system. At no time did the Central Institute inject more liquidity than strictly necessary to satisfy the demand for bills and coins. Furthermore, having maintained a 160 million peso "short" throughout the year, Banco de México forced the banking system to generate an overdraft in the accounts that banks maintain with the Central Institute. In 1999, this fraction of demand for the monetary base was always supplied at interest rates well above those prevailing on the market.

If the authorities had deliberately injected an excess supply of monetary base, the surplus would have been reflected in the financial markets' performance in 1999. Specifically, economic agents would have wanted to unload their excess bills and coins by purchasing assets denominated in foreign currency, thus causing a depreciation of the exchange rate. Clearly, the behavior of the exchange rate throughout 1999 cannot be associated with the presence of an excess supply of monetary base.

Since the deviation in the monetary base with respect to its projected levels was not the result of an expansionist monetary policy, the analysis must focus on evaluating which factors explain the rise in the demand for monetary base in the past year.

The following are the elements to which the unexpectedly high demand for monetary base can be attributed:

(a) in 1999 economic growth, employment and real wages were all higher than expected at the time the projections on the demand for monetary base were formulated. The difference between observed economic growth (3.7 percent) and the original estimation (3.0 percent) was particularly significant;

- (b) a more favorable climate than anticipated, which made interest rates lower than expected during the year. This reduced the opportunity cost of maintaining real money balances, and therefore increased demand;
- (c) Banco de México's efforts to encourage a more intensive use of the 500 peso bank note. This led to an adjustment in cash handling by banks and commercial establishments, and an increase in the demand for monetary base among the public;
- (d) a greater preference on the part of the public for the use of bills and coins as a means of payment, instead of checking accounts. This was attributable in part to the lower yields offered on these accounts in 1999;
- (e) as is common in election years, the expenses relating to political campaigns bring a transformation of bank deposits into bills and coins, since political parties need cash for a variety of payments. Adding to this is the fact that several parties moved up their campaign schedules;
- (f) in the last weeks of the year there was a temporary rise in the demand for bills and coins as a result of uncertainty over the degree to which bank computer systems were prepared to deal with the Y2K problem. The 1999 monetary program warned of this eventuality, stating that its possible effects had not been included in the calculations of the projected monetary base path as there were no solid or sufficient elements to estimate them; and
- (g) Banco de México's under-estimation of the remonetization process taking place in the Mexican economy due to the reduction of inflation.

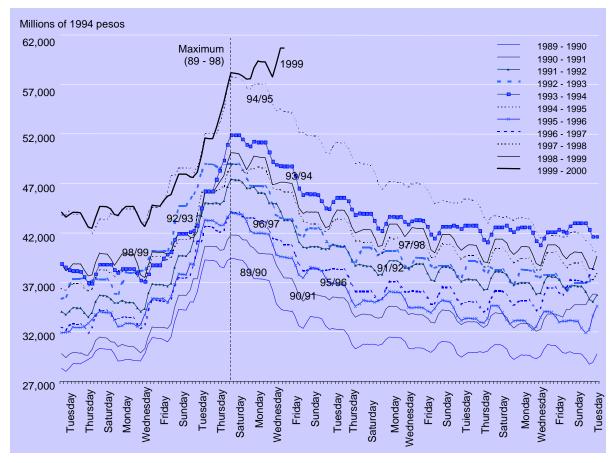
These last two factors are analyzed in greater detail below.

# IV.1.4. Increase in the Demand for Monetary Base Due to the Y2K Issue

The behavior of the monetary base during the last week of 1999 revealed a temporary rise in demand, attributable to the influence of the Y2K problem. This can be clearly observed in Graph 43, which shows that in each of the last ten years the monetary base reached its highest annual level on the Friday before or coinciding with December 24. In 1999, however, the maximum stock of the monetary base was attained on the last day of the year, due to the Y2K issue. This atypical movement has made it more difficult to interpret the year's monetary results, which is why Banco de México believed it was necessary to have a year-end stock for this aggregate that was not "contaminated" by the effects of the change of millennium. To this end, a methodology was developed to separate the seasonal component from the total monetary base stock. Thus, the monetary base flows for December 1999 were estimated based on the seasonal behavior this aggregate exhibits every December and on the flows recorded for this month in a "coinciding year." The latter is understood as a year that is similar in terms of the days of the month on which holidays and weekends fell (1993, for example).

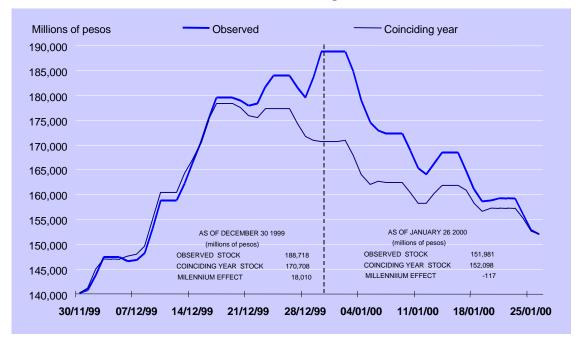
Thus, the estimate of the monetary base —that is the projection for which only the seasonal behavior was considered—was calculated as follows: adding the daily flows recorded as of November 30, 1993 —converted into 1999 prices—to the observed monetary base stock on November 30, 1999 (see Graph 44).

In turn, the effects of the change of millennium on the monetary base were calculated by subtracting the stock estimated using the above procedure (170,708 million pesos) from the monetary base stock observed at year-end 1999 (188,718 million pesos). According to this methodology, the effect of the Y2K problem on the monetary base stock amounted to 18,010 million pesos. Since this estimate provides only a general idea of the magnitude of the Y2K effect on the demand for monetary base, it should be taken with some reservations. In particular, this methodology assumes that the difference between the observed monetary base stock and the stock obtained according to the seasonal pattern is due exclusively to the Y2K problem.



## Graph 43 Evolution of Bills and Coins in Circulation in the Months of December and January (1989 – 1999)

In light of the evolution of the monetary base in January 2000, it may be concluded that the impact of the end-of-millennium situation on the monetary base was probably close to the recently described estimation, which was also published in the Monetary Program for 2000 (18,010 million pesos). This is corroborated by the fact that by January 26, 2000, the monetary base stock was already 116.6 million lower than the result obtained using the aforementioned methodology, which allows for the isolation of the seasonal effect on the demand for monetary base (see Graph 44). In other words, based on the methodology used to calculate the additional demand for monetary base resulting from the Y2K issue, it can be claimed that this effect had completely dissipated by January 26, 2000.



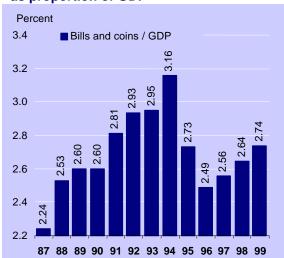


## IV.1.5. Considerations on the Phenomenon of Remonetization

Economic literature refers to remonetization as a reduction in the speed of circulation of money; or in other words, a growth in the amount of money in circulation greater than the expansion of nominal GDP.

In the past four years, and in line with the ongoing disinflation, the Mexican economy has undergone a very noticeable remonetization process, in other words, an increase in the amount of bills and coins in circulation as a proportion of GDP. Graph 45 shows that the proportion of bills and coins to GDP in 1998 and 1999 was lower than in 1991 and 1992, when inflation levels were similar.

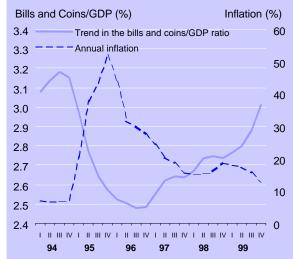
#### Bills and Coins in Circulation as a Proportion of GDP and Inflation\*



## a) Bills and Coins in Circulation as proportion of GDP

Graph 45

### b) Bills and Coins in Circulation as Proportion of GDP and Inflation

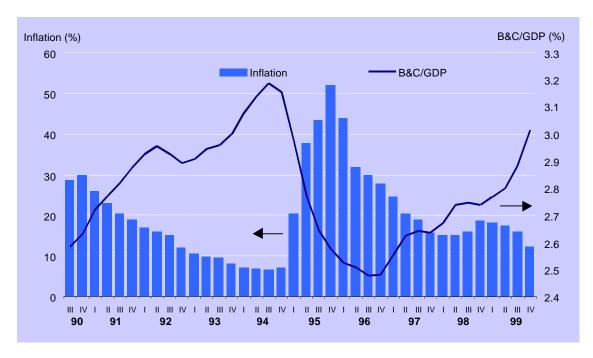


<sup>\*</sup>The bills and coins in circulation stock in Graph a) represent annual daily averages.

Graph 46 depicts the relationship between inflation and bills and coins in circulation from the third quarter of 1990 to year-end 1999. Early in the 1990's, the disinflation process led to a pronounced remonetization in the economy, which turned around when inflation took an upturn in 1995. Similarly, the remonetization seen in the Mexican economy starting in late 1996 has also been associated with a disinflation process. This process was temporarily interrupted, however, by a rise in inflation in the second half of 1998, resulting from external shocks to the economy during that period. The remonetization picked up strength again once inflation resumed its declining trend<sup>20</sup>. Therefore, as inflation declines further, it can be reasonably expected that the proportion of bills and coins to GDP will continue to rise. Graph 46 clearly shows that demonetization episodes occur much more swiftly than those of remonetization.

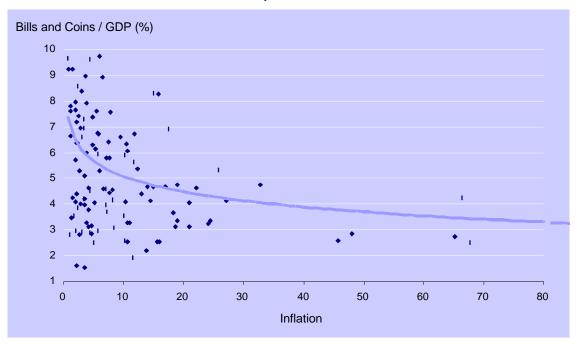
<sup>&</sup>lt;sup>20</sup> Remonetization measured by the broader monetary aggregate also shows a similar performance.





1990-1999

#### Graph 47. Bills and Coins in Circulation as a Proportion of GDP and Inflation: International Experience\*



\* Annual sample of 35 countries for the 1980-1998 period.

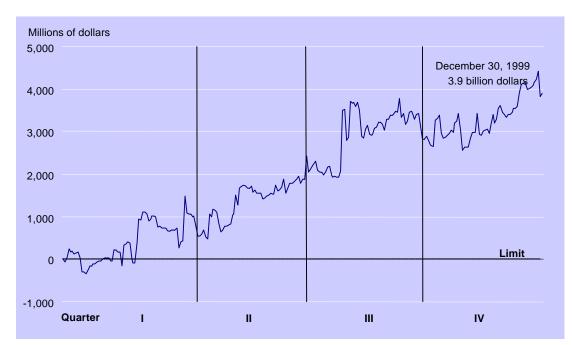
International experience supports the aforementioned argument regarding remonetization. Graph 47 depicts the inverse relationship between the ratio of bills and coins to GDP and inflation for a sample of 35 countries. It also reveals that remonetization processes intensify when inflation reaches low levels.

This analysis makes it clear that the remonetization process that took place in 1999 was not an unprecedented episode bearing no relation to previous years' events. On the contrary, it corroborates the close relationship between the degree of monetization in the Mexican economy and inflation.

#### IV.1.6. Net International Assets and Net Domestic Credit

Between December 31, 1998, and year-end 1999, the stock of net international assets rose by 3.9 billion dollars (see Graph 48). This increase was greater than planned for in the monetary program for the year, the goal of which was only to avoid a reduction in net international assets.

### Graph 48. Net International Assets in 1999



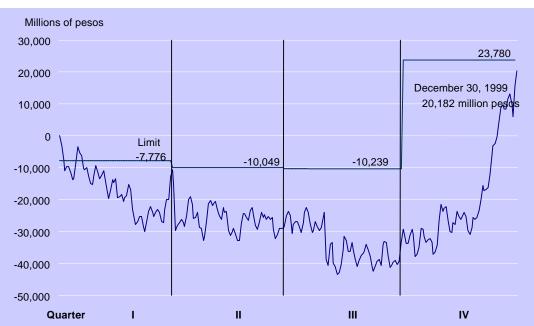
Accumulated flows\*

\*Cumulative from the start of each year.

This accumulation of foreign currency was the result of the following factors:

- (a) net revenues of 7.421 billion dollars from transactions with Pemex;
- (b) net revenues of 1.820 billion dollars from operations with credit institutions. This figure is the net result of dollar put options placed by the Central Institute throughout the year (2.225 billion dollars) minus the foreign currency sold through the automatic dollar auction mechanism (405 million dollars);
- (c) net revenues from deposits made by trust funds (50 million dollars)
- (d) outlays due to net foreign currency sales to the federal government (6.415 billion dollars); and
- (e) net positive result of other transactions (1.024 billion dollars), including the return on net international assets.

### Graph 49. Net Domestic Credit in 1999



Accumulated Flows\*

\*Cumulative from the start of each year.

Net domestic credit by the Central Bank is defined as the difference between the monetary base stock and the stock of net international assets. Consequently, changes in this aggregate are always the result of fluctuations in the monetary base and in net international assets.

At year-end 1999, the net domestic credit accumulated flow was 20,182.2 million pesos. This figure fully complies with the corresponding limit announced in the monetary program (see Graph 49).

## IV.2. Exchange Rate Policy

In 1999, the exchange rate of the Mexican peso against the United States dollar —under the current floating exchange rate regime— followed a general trend toward appreciation. The dilution of negative external influences that had prevailed in the second half of 1998 set off a revaluation of the Mexican peso in the early months of 1999, followed by the stabilization of the exchange rate. In addition, the recovery of international oil prices and the strength of the U.S. economy were reflected in a substantial increase in Mexican exports. The appreciation of the peso was therefore accompanied by a reduction in Mexico's trade deficit.

In 1999, the floating exchange rate regime once again proved its effectiveness in absorbing the impact of external shocks. There is no question that within an uncertain international context, and given the volatility of international capital flows, this exchange rate regime is currently the most appropriate for the Mexican economy.

In recent times, the currencies of other countries that also have floating exchange rate regimes have performed similarly to the peso against the U.S. dollar. For the purposes of comparison, Table 29 shows the volatility of a broad sampling of currencies, including the Mexican peso. The Table reveals that throughout the eight half-year periods under analysis, between 1996 and 1999, the peso's volatility was very similar —and in some cases less severe than those posted by the currencies of countries that have traditionally had robust economic fundamentals and coherent policies.

## Table 29.Volatility of Exchange Rates against the U. S. Dollar in a Sample of<br/>Twelve Countries

	1996-l	1996-ll	1997-l	1997-ll	1998-l	1998-II	1999-l	1999-II
Mexico	5.995.31	5.31	4.92	10.69	6.68	10.95	9.92	7.05
New Zealand	5.56	6.01	5.88	8.61	12.45	14.95	9.54	10.09
Australia	6.10	6.70	7.65	10.29	11.91	14.93	12.09	11.88
Finland	7.43	7.28	10.04	9.51	8.31	9.17	8.85	9.99
Sweden	8.02	7.28	10.26	10.58	9.57	12.59	8.73	9.22
Canada	3.64	3.33	5.46	4.24	4.32	6.95	5.72	5.24
Italy	5.97	5.73	8.95	9.15	7.82	9.29	8.86	9.99
South Africa	13.86	7.20	5.25	4.34	5.35	23.07	12.01	5.64
United Kingdom	5.60	6.30	8.13	8.03	7.11	7.33	6.86	7.28
Switzerland	7.77	8.84	11.70	9.81	8.70	10.91	9.63	10.90
Japan	8.14	7.09	12.56	12.29	12.56	20.08	13.60	12.49
Germany	6.28	6.87	9.79	9.76	8.14	9.15	8.87	9.99

Annualized volatility \* in percent

\*/ Annualized volatility is defined as the annualized standard deviation of daily variations in the exchange rate.

In accordance with the guidelines established by the Exchange Commission<sup>21</sup>, in 1999 Banco de México participated in the foreign exchange market under two mechanisms: dollar purchases through put options, and the contingent dollar sales scheme.

The put options mechanism has proven very useful for accumulating international reserves under a floating exchange rate regime. This is due to the following reasons: this mechanism favors sales of foreign currency to the Central Bank only when the supply of dollars predominates on the foreign exchange market, and inhibits such sales when there is a relatively greater demand for such currency; and the scheme does not alter the nature of the floating exchange rate regime, one of whose primary characteristics is that it does not pre-determine the level of the exchange rate.

In 1999, Banco de México bought 2.225 billion dollars through the options mechanism (see Table 30), more than the amount purchased in 1998 (1.428 billion dollars).

<sup>&</sup>lt;sup>21</sup> The Exchange Commission is made up of officials from the Ministry of Finance (Secretaría de Hacienda y Crédito Público) and Banco de México. It is in charge of determining the country's exchange rate policy.

## Table 30. Dollar Purchases from Credit Institutions Under the Options Mechanism

Millions of U.S. dollars

Years	Amount Auctioned	Amount Exercised
1998*	2,750	1,428
1999		
January	250	215
February	250	250
March	250	250
April	250	250
May	250	205
June	250	250
July	250	180
August	250	200
September	250	145
October	250	0
November	250	250
December	250	30
TOTAL	3,000	2,225

\*/ In 1998, the options scheme was only in effect from January through September.

Graph 50 shows the interbank exchange rate (or fix) path and its moving average for the twenty prior business days. The condition that must be met for option holders to sell their dollars to Banco de México is that the fix rate on the previous business day must be lower than its average over the twenty preceding business days. The graph clearly shows that this condition for exercising the dollar put options was present throughout 1999 with the exception of some brief episodes sparked by external disturbances.

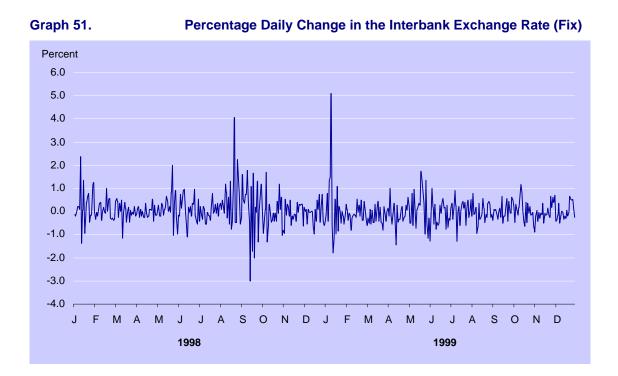
In short, the options mechanism has fulfilled the basic objective for which it was created: it has allowed the Central Bank to accumulate international reserves in the context of a floating exchange rate regime. In adopting this mechanism, the Exchange Commission was acting on the conviction that an appropriate amount of international assets contributes to the country's financial strength, and in turn makes it possible for Mexico to obtain better conditions on financing contracted abroad.

In 1999 Banco de México participated less frequently in the foreign exchange market than it had the previous year through its contingent dollar sale mechanism. As the reader will recall, according to the corresponding formula, on a daily basis the Central Institute may auction off up to 200 million dollars to banks that present, at certain pre-established times, bids with an exchange rate at least two percent higher than that of the preceding day. Of course, the daily volatility of the exchange rate in 1999 was less than in 1998 (see Graph 51)<sup>22</sup>, and therefore the conditions under which banks would want to participate in the dollar auction sales occurred less frequently during this past year. The occasions on which this mechanism was implemented in 1999 were entirely due to external shocks.



## Graph 50. Interbank Exchange Rate (Fix) and its Moving Average for the Previous 20 Business Days

<sup>&</sup>lt;sup>22</sup> Graph 51 does not show all the instances on which the conditions for foreign currency sales by Banco de México were present. This is because it was prepared based on the fix rate, even though the condition may have been met at the time the auction was called.



Thus, in 1999 Banco de México sold a total of 405 million dollars through this mechanism, as compared to 895 million dollars the year before (see Table 31).

#### Table 31.

## Banco de México: Dollar Sales through the Auction Mechanism

Millions of U.S. dollars

Date	Amount
Total 1998	895
January 12, 1999	140
January 13, 1999	200
May 25, 1999	65
Total 1999	405

It is important to bear in mind that the purpose of this scheme is only to help moderate the exchange rate volatility that may occur from time to time, not to defend a specific exchange rate level.

The volatility of the exchange rate tends to intensify as the market becomes less liquid. When there is a pronounced shortage of liquidity, even a moderate demand for foreign currency can cause a disproportionate depreciation of the peso. These situations can lead to the formation of devaluatory spirals, with serious consequences on inflation and interest rates and, in turn, for economic activity and employment. It was precisely in order to reduce the risk of situations like this occurring that the authorities adopted the scheme of contingent foreign currency sales. In addition, this is done without incurring the risk of losing significant amounts of international reserves. In fact, comparing the amounts of foreign currency bought by the Central Bank through put options and those provided to the market by means of automatic foreign currency sales, Banco de México was a net buyer of dollars in 1999.

## **Final Remarks**

In the 1996-1999 period, the Mexican economy grew at an average annual rate of 5.1 percent in real terms, while inflation dropped from 52 percent in December 1995 to 12.32 percent in December 1999. In the same period, 2.9 million new formal jobs were created. Real wages in the manufacturing sector advanced 8.6 percent between December 1996 and December 1999. The improvements in these areas can be explained by several factors, including the following:

- (a) the coherence of macroeconomic policies generated a climate of stability that allowed for the development of investment projects and a gradual recovery of private consumption; and
- (b) the structural reform begun in the mid-1980's brought a significant increase and diversification of Mexico's foreign trade, reducing the dependence of our external accounts on oil prices movements and efficiently linking the economy with those of the country's main trading partners. This has allowed Mexico to take advantage of the prolonged expansion of the United States economy.

To a large extent, the combination of these factors explains how the Mexican economy has been able to avoid the severe recessive impact of the recent international financial crisis that affected almost all the Latin American economies.

In 1999, the Mexican economy expanded more vigorously than expected, and inflation ended the year below the official target. After the economic slowdown and inflationary upturn that took place in the second half of 1998, beginning in the first quarter of 1999 these trends turned around. Throughout 1999, the pace of economic growth intensified steadily while annual inflation dropped continuously. Information available to date suggests that the strength of economic activity has increased in the first quarter of 2000 while inflation is still declining. For these reasons, at the time this Report went to press, the private sector economic expectations, compiled by Banco de México through surveys of manufacturing companies and economic consultants, had already converged with the official GDP growth and inflation targets for the year 2000.

The favorable evolution of the economy and the improvement in expectations are the result of the implementation of adequate economic policies and the influence of a favorable international environment.

With regard to the latter factor, the trends observed in 1999 have continued with no apparent change in the early months of 2000. The price of the Mexican oil mix for export remains high, the projected growth of the U.S. economy has been revised upward, and capital flows into Mexico have increased. In addition, the new upgrade of ratings on Mexico's foreign debt by specialized rating agencies is expected to increase foreign capital inflows. In the past, episodes of heavy foreign capital inflow have prompted market participants and the authorities to let themselves be carried away by a wave of optimism, while macroeconomic fundamentals deteriorated. Nowadays, advantage must be taken of the current circumstances to revamp economic policy discipline and consolidate the achievements obtained up until now.

Although the external situation is expected to remain favorable for the rest of 2000, there is always a risk of a surprising turnabout in a volatile international context. It is therefore crucial that the authorities remain on the alert and that economic policy retains its capacity to react.

The main uncertainty factor for Mexico's economic performance at the moment is the growth of the U.S. economy. Specifically, a scenario in which that country's economy is unable to pull off a "smooth landing" toward its long term trend could be accompanied by greater than expected interest rate hikes and a dramatic correction in the stock prices listed in the U.S. stock exchanges. This possibility may affect the flow of capital to Mexico as well as the momentum of Mexican exports.

Should this scenario materialize, it would affect domestic financial markets and might also hamper efforts to reduce inflation.

The Mexican economy has a number of strengths that will help it to deal with an uncertain international climate. These may be very important in lessening the impact of this potential scenario on the country's development. Past experience has shown that the negative effects of domestic and external disturbances tend to be magnified in the presence of any of the following elements: a high current account deficit financed with short term capital, an excessive expansion of bank lending, a weak fiscal position, an unwarranted concentration of foreign debt maturities, substantial rigidity in the determination of interest rates, and a fixed exchange rate regime or one with restricted flexibility.

The current administration has made an effort to remove these weaknesses in order to ensure a stable transition to the next presidential administration. The sound stance of public finances and the implementation of a disciplined monetary policy have been key factors in keeping the current account deficit at a relatively moderate level and ensuring that it is financed primarily with foreign direct investment. In this respect, this type of capital is expected to finance around 70 percent of the current account deficit in the year 2000.

Furthermore, the current schedule of public debt maturities is distributed appropriately over time, and with manageable maturities for the years 2000 and 2001. Adding to this is the amount of international reserves Banco de México has accumulated since 1995, which are currently at the highest level in the country's financial history.

In 1999, additional efforts were made to strengthen the Mexican banking system by raising banks' capitalization levels, improving regulation and bank supervision, and enhancing the industry's operating efficiency. This means that, although further actions are still necessary for the banking system to attain a sound condition, the financial system is no longer a major factor of vulnerability.

Finally, another key element for dealing with possible external volatility is the floating exchange rate regime. It allows for prompt adjustments in the exchange rate when underlying conditions warrant them. In addition, the floating exchange rate and flexible interest rates serve to inhibit speculative, short–term capital inflows.

Avoiding another financial crisis by strengthening the capacity of the Mexican economy to confront domestic and external disturbances will contribute directly to the well being of the nation's poorest citizens. The recurrent financial crises that Mexico has suffered in the past 25 years have been one of the main reasons for the deterioration of income among these social groups. These crises have resulted in such a drastic erosion of real wages that they have done away with the gains obtained during periods of stability. In particular, the 1982 and 1994 balance of payment crises were associated with 36 and 26 percent declines in real manufacturing wages.

Inflation reduction is essential to bring about sustainable growth in real wages. To illustrate this, between 1957 and 1999, in the years in which annual inflation rose above one-digit levels, real wages lost an average of 1.2 percent per annum. Conversely, in the years in which inflation was in the one-digit range, the corresponding real average growth rate was 5.3 percent.

Consequently, a monetary policy aimed at a gradual, sustained reduction of inflation, together with an economic policy strategy that reduces the sources of economic vulnerability, are indispensable to achieve price stability in the medium term and avoid recurrent crises. This is why the progress made on these fronts ultimately adds to the foundations of sustained growth, which will in turn allow for a progressive growth in real wages and employment.

\* \* \*

The economic performance of the past four years stands in contrast with the cyclical crises of high inflation and sluggish growth that marked Mexico's economy in the past. The recent results have taken place in a context in which the economic instability of the past still impinges with considerable weight on the population's investment and consumption decisions. Therefore, the benefits thus far obtained represent only a fraction of the potential that the Mexican economy truly has. As shown by other countries that undertook programs of integration and convergence with the economies of industrialized nations, the benefits to be obtained in the long term are far greater than those seen in the early years of the process.

Therefore, in order to transform the recent economic strength into a sustained process of growth, the structural reform of the economy must be intensified and the advances obtained in macroeconomic terms must consolidate to guarantee the public sector's solvency and complete the task of controlling inflation.

A recent step in the process of structural change was the signing of a free trade agreement with the European Union, which

will provide an additional boost to Mexican exports and encourage increased foreign direct investment.

It is also particularly important that the consolidation of the financial sector be continued. In this regard, it is surprising that the recent recovery of the Mexican economy has occurred without the support of domestic banks' credit. This situation fosters disparities in development from sector to sector and is therefore undesirable in the medium term. Because credit is based on borrowers' commitment, capacity and will to pay in the future, the sound development of the financial system depends fundamentally on the legal framework. Some of the most important steps that must be taken for a future reactivation of lending and to consolidate the banking system are the passing of bills on the Federal Mercantile Contest Law (*Ley Federal de Concursos Mercantiles*) and the Miscellaneous Regulations on Credit Guarantees (*Miscelánea de Garantías de Crédito*).

Reforms to the financial system will also allow for an efficient intermediation of capital flows from abroad, since in this context banks will attract longer term resources and allocate them to more profitable projects. This formula spreads the risks of substantial capital inflows while maximizing their benefits.

On the macroeconomic front, the recent years have been marked by the implementation of a disciplined fiscal policy, with an average primary surplus equivalent to 3.3 percent of GDP. Although the authorities reacted swiftly to offset the plunge in international oil prices in 1998, in order to continue the achievements made in the fiscal realm, tax revenues must be enhanced to reduce budget dependence on oil revenues and guarantee that public finances will remain sound in the long term.

The other fundamental element in strengthening the macroeconomic framework is wrapping up the process to curb inflation. Despite the progress made recently on this front, inflation in Mexico is still high. Domestic and international evidence proves that inflation negatively affects economic growth, real wages, job creation, income distribution, the development of financial markets, public finances and the competitiveness of the economy. It is therefore vital to persevere in the efforts to stabilize the economy by applying a restrictive monetary policy. Fighting inflation is the priority objective of Banco de México's monetary programs. The program for the year 2000 includes new components aimed at

improving the implementation of monetary policy, continuing the transition toward an inflation targeting regime.

As inflation declines, the short-term relationship between the growth of the monetary base and inflation has become more unstable. This has reduced the usefulness of the monetary base's growth rate as an indicator to analyze inflationary pressures. Bearing this in mind, and in order to improve communication with society at large and increase transparency regarding Central Bank operations, the Board of Governors has decided to publish quarterly inflation reports starting in April.

Increased transparency in the conduction of monetary policy will be an important factor for achieving the swift convergence of the public's inflation expectations with the official short and medium term inflation targets. As this convergence takes place, nominal and real interest rates will decline and inflation will be reduced at a lower social cost.

For this reason, it is particularly important that society at large supports the battle against inflation. To the extent that economic agents base their decisions on inflation expectations consistent with the official targets, less monetary restriction will be necessary to achieve these goals, thus reducing the cost of the stabilization process.

The monetary program for the year 2000 establishes that the monetary strategy's medium term objective is bringing Mexican inflation into line with that of its leading trading partners by the year 2003. This is clearly an ambitious goal, but one that responds to the need to definitively lay the groundwork for sustained social progress.

## Appendices <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Starting this year, the printed version of the Annual Report of Banco de México does not include the appendix entitled "Reforms to the Financial System", since this information is available on the Institution's Internet site (<u>http://www.banxico.org.mx</u>).

## Appendix 1

## The Year 2000 Computer Challenge

### Background

The Mexican financial system has attained a high level of automation, despite its relatively small size in terms of both the number of institutions and the volume of its transactions. The country's high-value payment system has been upgraded over the past four years and now includes three new developments: i) electronic high-value payments; ii) a delivery-versus-payment mechanism for securities settlement; and iii) a very modern check clearing system.

In 1998, the Mexican Stock Exchange phased out open outcry trading in the stock market and switched to an electronic trading system. For some years now, Banco de México has been carrying out its open market transactions and placements of government securities through electronic auctions. The fix exchange rate and the interbank interest rate are also determined electronically. Banks have an extensive network of automatic tellers and automated In addition, they have been offering electronic points of sale. banking services to both individuals and firms for several years, and are now entering the on-line banking market. In the pension funds realm, two years ago a scheme of individual accounts was introduced that today is almost totally automated. Electronic systems like these have been made possible through the development of public and private telecommunication networks that operate with the necessary speed and reliability.

All things considered, the intensive use of technology in the Mexican financial system clearly makes it more sensitive to system failures. Some years ago, financial institutions realized that their systems contained a type of error that they had not been fully aware of before that time. The fault consisted in the systems' inability to adequately process some transactions involving dates after 1999. This error dates back to the origins of computer technology. In order to reduce the volume of information stored, and given the expense involved in storage on magnetic media, applications were

developed using the convention of expressing the year in only two digits: "99" instead of "1999," for example. This convention is at the heart of the errors discovered because the systems cannot distinguish between years in different centuries. Thus, for example, in the existing applications the year "2000" would be expressed as "00", the same as the year 1900.

The problem began to be addressed by systems specialists in some institutions even before the authorities got involved in and issued regulations on the matter. In February 1997, Banco de México, in keeping with its responsibility to oversee the sound functioning of the country's payments system, issued regulations instructing banks and brokerage firms to draft well-structured programs to review, update and test their computer and telecommunication systems and equipment for the arrival of the year 2000.

## Year 2000 Computer Conversion: The Mandate of Banco de México

In July 1998, the Year 2000 Computer Conversion National Commission was created by presidential decree. This Commission invited Banco de México to coordinate the financial sector's Y2K transition efforts. The Y2K project was divided into three phases. The first one involved programming code conversion and internal testing of systems, equipment and applications. The second stage involved analyzing the business processes in which several institutions participate (clearinghouses, for example) and validating them through multi-institution and industry-wide testing. The third phase involved the design and implementation of contingency plans that would guarantee the continuity of financial services at all times.

At that time, the financial authorities instructed financial institutions to conclude the first phase between December 1998 and April 1999, and these tasks were successfully completed on time.

The financial system processes considered critical for the second phase were the following:

- (a) fund transfers via the high-value electronic payment systems (SIAC, SPEUA);
- (b) negotiation and settlement of transactions on the money, securities, foreign exchange and derivatives markets;

- (c) negotiation and settlement of financial transactions with foreign agents;
- (d) processing, clearing and settling checks;
- (e) electronic fund transfers through the Interbank Payment System;
- (f) processing, clearing, and settling credit and debit card transactions;
- (g) affiliation, contribution, withdrawal and transfer of funds processes in the Retirement Savings System (SAR) accounts;
- (h) tax collection;
- (i) production, storage and distribution of bank notes;
- (j) collection and distribution of credit information; and
- (k) compilation and processing of financial and economic information.

In order to take the necessary actions a specific work group was created for each of the processes. These processes were analyzed during the last quarter of 1998. All the work groups performed and concluded their testing between November 1998 and July 1999. The evaluation was considered satisfactory both in terms of the number of participating institutions and the results obtained. Some tests revealed logistical problems but there were no cases in which Y2K problems were reported. Outstanding among these efforts was the participation of Mexican institutions in the test conducted by the New York Clearinghouse on June 12 and 13, 1999, together with 18 other countries, to test the international payment system. The test was successful, increasing confidence in this group of nations' payment systems as part of their preparations for the year 2000.

## **Contingency Plans**

Activities for the third phase began in February 1999. In that month, Mexican financial authorities issued regulation instructing financial institutions, clearinghouses and stock exchanges to draft and test contingency plans that would guarantee an uninterrupted flow of operations, even in the event of unforeseen circumstances. The deadline for this phase was set for the last day of August.

On March 15, 1999, the financial institutions submitted their working plans for preparing their contingency measures. Starting in April, institutions began to submit monthly status reports. The August 31 reports showed that most institutions had concluded the preparation of their contingency plans on time.

Part of those plans was the decision to make December 31, 1999, a bank holiday. That day was used by financial institutions and strategic service companies to close their books for the year and to back up their data bases while their systems were still operating in the year 1999. All of this would offer one more assurance that, in the event of any failure, the situation of each company would be fully backed up by its year-end records.

The work groups in charge of analyzing and testing the industry's business processes also prepared contingency plans so that the processes would function in emergency situations.

Bearing in mind the millenium change, Banco de México, like other central banks, made the decision to increase the inventory of bills that it usually maintains to cover unforeseen fluctuations in the demand for cash. It was thus prepared to satisfy the demand from any economic agent that, as a precautionary measure, wanted to store up an additional reserve of cash.

The Central Institute also considered it advisable to install measures that would ensure the uninterrupted operation of the payment system and the financial markets. To this end, alternative mechanisms were prepared to operate in situations of system failure, as well as measures to support financial institutions in its capacity as lender of last resort.

#### **Command Centers**

As an additional element in the overall plan to deal with the Y2K transition, in September 1999 the financial authorities issued a regulation which required each institution to set up a command center that would coordinate activities relating to this transition. The purpose of these centers was to collect and analyze information on the status of each system and process, make the decisions necessary

to handle any eventuality, and disseminate information both within each institution and to the financial system as a whole.

In the forums in which this topic was discussed, participants concluded that an information center network should be created to supply information on the national and worldwide situation during the transition to the year 2000. In response to this recommendation, the United Nations created the International Year 2000 Cooperation Center (IY2KCC), which was responsible for gathering information on the general situation in all countries. In Mexico, the contact was an information center called CNIY2K, staffed by the member institutions of the Year 2000 Computer Conversion National Commission.

Leadership of the international financial systems' effort was headed by the Joint Year 2000 Council (JY2KC), with headquarters at the Bank for International Settlements (BIS). This Council was in charge of coordinating the exchange of information among countries with major financial markets. For this purpose, the Market Authorities Communications Services (MACS) project was designed. Mexico participated in it through a center that gathered information from the financial sector and was located at Banco de México. This was called the Center for Information and Command of the Financial Sector (CIMSF, according to its initials in Spanish).

In addition, since the Mexican financial system is divided into various areas of activity, it seemed to be a good idea to establish one such information center for each area. Therefore, Information and Command Centers were set up for each of the following areas of activity:

- (a) Foreign-Exchange Market
- (b) Money Market
- (c) Stock Market
- (d) Derivatives Market
- (e) High-Value Payment System
- (f) Cash Transactions
- (g) Banking Services
- (h) Retirement Savings System

- (i) Insurance and Bonding Services
- (j) Auxiliary Credit Organizations
- (k) Infrastructure

#### **Information Gathering**

Throughout the year 2000 transition efforts, information was collected on three major subjects:

- (a) Infrastructure.
- (b) Mexican financial markets and services.
- (c) International financial markets and services.

The infrastructure topic included basic services like telecommunications, electricity, transportation, water and financial services. An Infrastructure Center was created to be the only recipient of information from CNIY2K, and from strategic companies involved with Mexico's infrastructure. This center gathered information on the infrastructure of the financial system through the financial institutions themselves and from service suppliers.

On the subject of Mexican financial markets and services, information on the financial system's operation was gathered by the centers established for each activity area within the system. This preserved the usual communication channels, although these were complemented with additional ones. For example, if a commercial bank had to send information to the money market command center, the corresponding information had to be supplied by the individuals responsible for these duties within the bank.

Finally, for the international financial markets and services subject, the CIMSF was in charge of collecting information through the MACS project.

In order to simplify the task of gathering information, questionnaires were drafted for each center and dates and times for delivery were established.

This meant that the Information and Command Centers could send the CIMSF a concise summary of the information received, and the CIMSF would in turn publish the general information on the sector over the Internet. Access to the information page was restricted, but all the centers had continuous access to the general information and to that on their area of involvement. Financial institutions had access to the information they had supplied as well as to the general information on the financial system.

In addition, some strategic service companies like INDEVAL, CECOBAN, PROSA and PROCESAR gathered information from their clients and sent it to the center assigned to them.

### **Zero-Day Activities**

The Center for Information and Command of the Financial Sector (CIMSF) operated in Banco de México from December 27, 1999, to January 7, 2000. From December 27 to 30 and according to pre-established schedules, the institutions that make up the financial sector reported daily to their respective command centers on the status of their systems. After obtaining this information, the financial sector command centers sent it to the CIMSF. In turn, once it had received all the information from the command centers, the CIMSF reviewed it and sent it to the Year 2000 Computer Conversion National Commission and to the World Financial System Command Center located at the BIS.

On December 31, starting at seven o'clock in the morning, the tracking of the new year began in Sydney, Australia, followed by other countries that welcomed the year 2000 before Mexico. The reason for this procedure was to identify problems in other locations to try and correct similar scenarios in Mexico in advance. In addition, conference calls were set up with the central banks of Australia, Japan, Hong Kong, France, Germany, England and the United States, to learn of their status regarding the change of millennium. Infrastructure and systems tests and the opening and closing of markets during the first business days of the New Year were also closely tracked. The first reports received on December 31 -which were satisfactory showed that the information system back ups of the Mexican financial system had been completed without any problems. Finally, from the first minutes of the year 2000, the reports on infrastructure began to come in, showing a normal situation in all cases. In the early hours of January 1 and throughout that day, the status of the financial system was reported through the various command centers. These reports were

performed according to pre-announced schedules and were received by personnel in charge of the CIMSF. All of them confirmed a normal situation in the Mexican financial sector, and this news was duly passed on to the Year 2000 Computer Conversion National Commission and the BIS. On January 1 and 2, financial institutions tested their systems and again the results were satisfactory. On January 3, the first day of business activity in the Mexican financial markets in the year 2000, transactions went ahead without complications. The same occurred on January 4, when the last closing reports on the first day of trading came in. The status of the situation was reported on an ongoing basis to the Year 2000 Computer Conversion National Commission and the BIS until January 7. In Mexico, other sectors also successfully concluded their year 2000 projects. The country was therefore unaffected by adverse situations such as those reported in other regions of the world.

#### Conclusions

In addition to making a smooth transition into the year 2000, the project described above allowed every institution in the financial sector to obtain an inventory of its systems, equipment and software and thus to be better informed about the resources available within each institution. At the same time, the project helped raise awareness in the computer community about the need to maintain complete and updated documentation on their systems. Furthermore, thanks to this project, some institutions developed contingency plans that they had not developed earlier. The same was true for the "command centers" —these units allowed each institution to improve the customer service centers they already had or to adopt similar schemes that would function on a permanent basis.

Another important lesson of this process was the evidence that all the institutions' business areas are closely linked to the technology realm. Thus, although the problem was essentially technical in nature, the collaboration of users and decision-making personnel throughout every institution was necessary. Therefore, the joint participation of information technology experts and experts in other areas of the institutions' business was fundamental to the success of the project. This proves the level of communication and coordination that exists in the Mexican financial sector.

### Appendix 2

# Mexico's Relationship with International Financial Organizations

#### **International Monetary Fund**

Mexico has been a member of the International Monetary Fund since it was founded in 1944. Mexico has a quota of 2,585.8 million Special Drawing Rights (SDR) with that organization, representing 1.23 percent of the IMF's total. The amount of the quota determines each country's access to IMF resources.

On June 15, 1999, the Ministry of Finance and Banco de México sent a letter of intent to the International Monetary Fund, requesting financial resources in the form of a Stand-by Agreement for 3,103 million SDR (around 4.2 billion dollars).

On July 7, the Executive Directors of the IMF approved the request, granting a 17-month loan under the Stand-by Agreement. The amount of that loan was equivalent to 120 percent of Mexico's quota. The program backed by IMF resources is consistent with the country's goals and targets for the 1999-2000 period, as contained in the General Economic Policy Criteria (*Criterios Generales de Política Económica*) and in Banco de México's Monetary Program for 1999. The first tranche of 517 million SDR was disbursed on July 12, and the second, for the same amount, on September 27. The remainder of the resources committed in the Agreement, 2,069 million SDR, will be available in the year 2000. The resources of this Stand-by Agreement allow Mexico to refinance more than two thirds of its debt maturities with the IMF in 1999-2000, so that they will now be due between 2003 and 2005.

This support from the IMF is a clear recognition of the strength and viability of Mexico's medium term economic program. Since the proceeds are part of the Financial Strengthening Program, they have contributed to a climate of increased certainty in the domestic financial markets, enhanced the ability of the Mexican economy to deal with abrupt changes in the international environment, and encouraged an orderly transition to the next administration.

In 1999, Mexico paid 3,726 million SDR to the IMF — mostly in connection with the loan approved in February 1995— and disbursed 1,034 million SDR under the new credit agreement. As of December 30, 1999, the outstanding balance of debt with the IMF totaled 3,259 million SDR.

## Mexico's participation in the IMF's Special Data Dissemination Standard

In 1996, the Executive Directors of the IMF approved an initiative regarding the adoption of a set of voluntary data dissemination guidelines for countries that participate in the international financial markets or seek to do so.

The Special Data Dissemination Standard (SDDS) is a set of guidelines on the scope, frequency, timeliness and quality of economic and financial information that countries publish. If followed, these guidelines contribute to the formulation of more effective macroeconomic policy and a more efficient functioning of the financial markets. They encourage immediate and fair access to information, help users of economic and financial statistics to evaluate the quality of the data disseminated, and help guarantee objectivity and integrity in compiling and publishing them.

In August 1996, the Minister of Finance and the Governor of Banco de México signed the SDDS on behalf of Mexico. Today, Mexico is one of 46 countries that participate in international capital markets and follow the SDDS in order to publish their own economic and financial information promptly and on comparable bases. In September of the same year, the IMF started up a Dissemination Standards Bulletin Board (DSBB) through the Internet, which allows user to look up information on the ways statistics are gathered and disseminated (metadata) by countries that have subscribed to the standard.

At first, the SDDS were established for 21 variables, divided into four economic sectors: national accounts, public finances, the financial and external sector, and a category on population. In December 1998, the information requirements were extended to include data on international reserves and external debt. As a result, following a transition period, subscribing countries will have to publish more detailed information on their international reserves, foreign-currency obligations and transactions with derivative financial instruments. Throughout the past four years, Mexico has played a pilot role in each SDSS project in which it has been invited to participate. The domestic agencies involved —the National Institute for Statistics, Geography and Information Systems (INEGI), the Ministry of Finance and Banco de México— have participated actively in SDSS compliance in their areas of competence, and in general have been able to adjust to the new requirements on deadlines, scope and frequency. Through their efforts, dissemination systems have been brought up to international standards, thus facilitating decision-making by all information users.

## International Bank for Reconstruction and Development (IBRD) and the Inter-American Development Bank (IADB)

As of December 31, 1999, the Mexican government held 18,804 shares of the International Bank for Reconstruction and Development, giving it 1.20 percent of the voting rights and worth 2.268 billion dollars. Of this amount, only 139 million dollars have been paid in cash; the remainder (2.129 billion dollars) constitute callable capital, which would only be required in the event of that organization facing a serious financial contingency.

At year-end 1999, the IBRD had 29 loans under execution in Mexico, for a total of 6.578 billion dollars, of which 3.144 billion had already been disbursed. During 1999, the institution approved four loans to Mexico, totaling 1.671 billion dollars. Of this amount, 505 million dollars were for housing programs, 606 million for decentralization programs, 505 million for capitalizing the banking system, and 55 million for development in poverty-stricken rural areas.

As of December 31, 1999, the Mexican government held 578,632 shares of the Inter-American Development Bank, representing 6.917 percent of the vote and worth a total of 6.980 billion dollars. Of this amount, 298.9 million dollars had been paid in cash and the rest (6.681 billion dollars) had been made part of callable capital. On December 31, 1999, there were 15 IADB loans in execution in Mexico, totaling 3.049 billion dollars, of which 1.199 billion had already been disbursed. The IADB approved one transaction for Mexico in 1999 for 800 million dollars to be used to enhance administrative and fiscal control at the state and municipal governments level.

#### Bank for International Settlements (BIS)

Banco de México has been a member of the BIS since November 1996, having subscribed 3,000 shares of that organization's third tier of capital. Since then, this Central Bank has been participating actively in monthly meetings of central bank governors of member countries as well as in various committees and work groups within that organization.

These monthly meetings cover topics of interest for central banks. Among the ones addressed in 1999 were: the restructuring of the banking system, the financial crisis in Brazil, requirements to strengthen the international monetary system, the dangers of deflation, the participation of central banks in efforts to maintain financial stability, operating procedures of monetary policy, the lessons of the Asian financial crisis, expectations regarding the European Central Bank and the Euro, the role of the private sector in resolving financial crises, and the role of credit ratings agencies. Banco de México also helped to prepare comparative studies on the mandates and powers of central banks in various countries.

During its February 8, 1999, meeting, the Board of Directors of the BIS elected Urban Bäckstrom, Governor of the Sveriges Riksbank (Swedish central bank), as Chairman of the Board and President of the organization for a three-year period that began March 1 of that year.

In November 1999, the central banks of Argentina, the European Union, Indonesia, Malaysia and Thailand were invited to become BIS members. These institutions will become full members of the organization as soon as the necessary formalities regarding subscription of stock in the third tier of capital are met.

## Appendix 3

### The Institute for the Protection of Bank Savings

As was mentioned in the 1998 Annual Report, the Law for the Protection of Bank Savings established the terms for the organization and operation of the Institute for the Protection of Bank Savings (*Instituto para la Protección al Ahorro Bancario*, IPAB), which was officially created on May 6, 1999. The IPAB is a decentralized organism of the federal public administration, with an independent legal status and its own capital.

In accordance with the aforementioned Law, on May 28, 1999, the IPAB announced a program to gradually reduce the protection offered for the public's savings (see Table 1). By December 31, 2005, at the latest, the protection offered by IPAB on deposits and loans that commercial banking institutions receive from the public will be limited to an amount equivalent to 400,000 UDIs per person conducting operations with any single institution.

The same law states that the commercial banks must contribute to attaining IPAB's objectives by paying two types of fees: i) ordinary fees, which shall not be less than 0.4 percent of the value of each institution's liability transactions; and ii) extraordinary fees, which may not exceed 0.3 percent of said transactions in a year. According to this, the IPAB has established ordinary monthly fees payable by commercial banks equivalent to one-twelfth of the 0.4 percent ratio mentioned above, calculated on the basis of the monthly average of their daily liability balances.

IPAB carried out the following transactions in 1999 in order to advance the soundness of Mexico's banks:

- (a) capitalization of Banca Serfín after the control stockholders of Grupo Financiero Serfín had renounced their right to subscribe the additional capital required by the institution. As a result, IPAB temporarily assumed control of the group and it has since begun the process of selling it.
- (b) taking the stock control and implementing the capitalization of Bancrecer, S.A., in order to guarantee the deposits of 1.5 million savers.

 (c) in accordance with agreements signed in 1996 by the Bank of Nova Scotia and FOBAPROA —under which the latter pledged to maintain the capitalization index of Inverlat— IPAB acquired subordinated debentures which are convertible into capital stock of Grupo Financiero Inverlat.

## Table 1 Schedule of Obligations Guaranteed by the IPAB during the Transition Period

Phase	Date	Liabilities Excluded from IPAB's Protection		
1 <sup>st</sup>	Starting June 1, 1999	Subordinated debentures and other liabilities <sup>17</sup>		
2 <sup>nd</sup>	Starting January 1, 2000	Liabilities included in the 1 <sup>st</sup> phase plus obligations acquired by institutions through derivative operations involving stocks and metals.		
3 <sup>rd</sup>	Starting January 1, 2001	Liabilities included in the 2 <sup>nd</sup> phase plus obligations resulting from derivative financial transactions involving recognized stock exchanges.		
4 <sup>th</sup>	Starting January 1, 2002	Liabilities included in the 3 <sup>rd</sup> phase plus obligations resulting from collateral deposits, tax collection, contributions to the Federal Treasury and securities settlement accounts.		
5 <sup>th</sup>	Starting January 1, 2003	Liabilities included in the 4 <sup>th</sup> phase and any liability that exceeds the equivalent of 10 million UDIs per individual or legal entity, regardless of the number or class of said liabilities for any one institution.		
6 <sup>th</sup>	Starting January 1, 2004	IPAB's coverage will be limited to deposits, loans and credits mentioned in sections I and II of Article 46 of the Credit Institutions Law <sup>2/</sup> , up to a maximum of 5 million UDIs per individual or legal entity, regardless of the number or class of said liabilities for any one institution.		
7 <sup>th</sup>	Starting January 1, 2005	IPAB's coverage will be limited to the payment of the principal and accessories of guaranteed obligations involved in the operations referred to in sections I and II of Article 46 of the Credit Institutions Law <sup>2/</sup> , up to a maximum of 400,000 UDIs per individual or legal entity, regardless of the number or class of said liabilities for any one institution, and excluding operations mentioned under Article 10 of the Law for the Protection of Bank Savings <sup>3/</sup>		

Excluding the following: liabilities stemming from loans granted by one bank to another to back obligations in favor of Banco de México when both institutions participate in the fund transfer systems administered by Banco de México; obligations payable to financial intermediaries that are part of the same financial group as the bank in question; transactions that have not met legal, regulatory or administrative provisions, or which have been made in violation of sound banking practice and uses, in which the holder acted in bad faith; obligations and deposits payable to stockholders, members of the Board of Administrativa and officials of the top two levels of hierarchy of the institution in question, or payable to legal representatives with administrative and general management faculties in these institutions; and any obligations relating to illegal acts or transactions that meet the definitions contained in Article 400-Bis of the Federal Penal Code.
 Refers to: I.- Receiving bank deposits of money; a) on demand b) withdrawable on pre-established days; c) on savings, and d) at term,

2/ Refers to: I.- Receiving bank deposits of money; a) on demand b) withdrawable on pre-established days; c) on savings, and d) at term, with previous notice. II. – Accepting loans and credits.

3/ Obligations payable to domestic or foreign financial institutions; obligations payable to any firm that is part of the same financial group as the institution in question; and liabilities documented in negotiable securities, as well as bearer securities; obligations and deposits payable to stockholders, members of the Board of Administration and certain officials and legal representatives of the institution; and transactions that have not met legal, regulatory or administrative provisions or have been made in violation of sound banking practice and uses; those in which the holder acted in bad faith; and those which were made in connection with illegal acts or transactions.

Article 2 of the Federal Revenue Law (*Ley de Ingresos de la Federación*) for fiscal year 2000 authorizes the IPAB to contract credit or issue securities in order to exchange or refinance its financial obligations. The objective is to allow the IPAB to meet its payment obligations, make its securities liquid, and, in general, improve the terms and conditions of its financial obligations.

In addition, Banco de México was appointed to act as the financial agent of IPAB for the issuing, placement, buying and selling (on the domestic market) of securities representing the debt of that Institute and, in general, for servicing that debt. If on the date the payment of principal or interest is due, the IPAB does not have sufficient resources on hand to meet these payments on the securities that Banco de México places on its behalf, the Central Bank must issue and place securities payable by IPAB for the amount necessary to cover the corresponding payments<sup>1</sup>. Until these placements are carried out, Banco de México may charge the current account of the Federal Treasury for the amount necessary to service the debt issued by the IPAB, without requiring prior instruction from the Federal Treasury.

Finally, as of December 1999, IPAB reported 722,500 million pesos in liabilities, and 185,200 million pesos in assets. These figures include: both bailout and capitalization programs, loan portfolio purchases, and debtor relief measures.

1

Banco de México must place the securities referred to within fifteen business days after the date on which the insufficiency of funds in IPAB's account first occurs.

### Appendix 4

### Total Public-Sector Borrowing Requirements (PSBR)

The PSBR measure the use of net financial resources by the financial and non-financial public sector. This aggregate is estimated on the side of the sources of financing and is measured in terms of accrued flows. The methodology herein described is different from the one used by the Ministry of Finance to determine the public sector's revenues/expenses and cash flows.<sup>1</sup> As a result, the figures reported in Table 1 are not comparable with those contained in the document entitled Report on the Economic Situation, Public Finances and Public Debt (*Informes sobre la Situación Económica, las Finanzas Públicas y la Deuda Pública*) that the Ministry of Finance submits to the Mexican Congress on a quarterly basis.

At the close of 1999, the PSBR —including revenues from the sale of state-owned enterprises— totaled 85,500 million pesos, equivalent to 1.85 percent of GDP. The PSBR excluding revenues from the sale of state-owned enterprises totaled 88,900 million pesos, or 1.92 percent of GDP (Table 1). The revenues generated by the sale of state-owned enterprises totaled 3,400 million pesos, and corresponded to the sale of *Ferrocarriles Nacionales de México* (Ferronales) and *Aeropuertos y Servicios Auxiliares* (ASA).

The PSBR (including revenues from the sale of state-owned enterprises) were met with domestic resources, since the government reported a 15,900 million peso reduction in its net foreign debt. Net domestic financing totaled 101,400 million pesos and was obtained primarily through larger placements of government securities (193,400 million pesos), which were partially offset by an accumulation of public sector liquid assets with Banco de México (79,300 million pesos) and with commercial banks (41,800 million pesos).

Measurement of the PSBR via the sources of financing methodology includes unpaid or uncollected accrued operations —which are excluded from the cash deficit. The second difference between the revenues/expenses and sources of financing methodologies is that the latter includes changes in the public sector's net debt, while the revenues/expenses methodology does not include amortizations under the expenses. The third difference is in the valuation of government securities: in the cash flow methodology, they are entered at their placement value, while in the measure of sources of financing they are counted at market value.

In 1999, the accrued economic deficit  $^2$  —estimated through its sources of financing and counting revenues from the sale of state-owned enterprises— was 83,300 million pesos, equivalent to 1.8 percent of GDP. This deficit was 0.02 percentage points lower than in 1998.

#### Table 1

## Sources and Uses of Public Sector Borrowing Requirements in 1999 1/

Excluding Extraordinary Revenues	% of GDP	Including Extraordinary Revenues	% of GDP
-88.9	-1.92	-85.5	-1.85
15.9	0.34	15.9	0.34
(1.7)		(1.7)	
-104.7	-2.27	-101.4	-2.19
76.0	1.64	79.3	1.72
41.8	0.90	41.8	0.90
-27.4	-0.59	-27.4	-0.59
-1.7	-0.04	-1.7	-0.04
-193.4	-4.18	-193.4	-4.18
-88.9	-1.92	-85.5	-1.85
-86.7	-1.87	-83.3	-1.80
-119.2	-2.58	-115.9	-2.51
32.6	0.70	32.6	0.70
-2.2	-0.05	-2.2	-0.05
	Extraordinary Revenues	Extraordinary Revenues         % of GDP           -88.9         -1.92           15.9         0.34           (1.7)         -104.7           -104.7         -2.27           76.0         1.64           41.8         0.90           -27.4         -0.59           -1.7         -0.04           -193.4         -4.18           -88.9         -1.92           -86.7         -1.87           -119.2         -2.58           32.6         0.70	Extraordinary Revenues         % of GDP         Extraordinary Revenues           -88.9         -1.92         -85.5           15.9         0.34         15.9           (1.7)         (1.7)           -104.7         -2.27         -101.4           76.0         1.64         79.3           41.8         0.90         41.8           -27.4         -0.59         -27.4           -1.7         -0.04         -1.7           -193.4         -4.18         -193.4           -88.9         -1.92         -85.5           -86.7         -1.87         -83.3           -119.2         -2.58         -115.9           32.6         0.70         32.6

#### Accrued flows in thousands of millions of pesos

1/ Deficit (-) Surplus (+)

2/ This calculation eliminates the effect of changes in the peso/U.S. dollar exchange rate, as well as in the exchange rate of the dollar against other currencies.

3/ Net external financing is calculated by subtracting amortizations and changes in the balances of financial assets from the total disbursements.

4/ This figure includes both debt contracted directly by the public sector as well as the use of other external resources originally obtained by the agencies of Mexican banks abroad, among others. This definition is different from the one used in the balance of payments and external debt sections of this Report. In the latter sections, the debt of commercial banks' agencies abroad is classified as liabilities of commercial banks.

5/ Includes only securities held by the private sector. Federal government securities held by banks are included in the net financing extended by the banking system.

<sup>&</sup>lt;sup>2</sup> In the measurement of the accrued economic deficit, the federal government and state-owned enterprises are included in the definition of the public sector.

# **Statistical Appendix**

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## **Basic Information**

#### Table A 1 **Summary of Selected Indicators**

				1999
Social and Demographic Indicators				
Area (sq km)				1,953,162
Population (millions) 1/				98.
Annual rate of population increase 1/				1.
Life expectancy at birth 1/				7
	1996	1997	1998	1999 p/
Production and Prices				
Gross domestic product (GDP, in thousand million of pesc	os) 2,526	3,174	3,847	4,623
	(/	Annual percent	age changes)	
Real gross domestic product	5.2	6.8	4.8	3.
Consumer price index (DecDec)	27.70	15.72	18.61	12.3
Money and Finance				
Monetary Aggregates 2/	(Re	al annual perce	entage changes	;)
Monetary base	-1.6	12.0	1.8	, 27.
Narrow money (M1)	11.9	14.7	0.5	12.
Broad money (M4)	0.5	8.8	6.1	6.
Interest Rates 3/		(Annual perce	ntage rates)	
Cetes, 28 days	31.39	19.80	24.76	21.4
Average interbank interest rate (TIIP)	33.66	21.91	26.89	24.1
		(Pesos pe	er dollar)	
Market Exchange Rate (end of period) 4/	7.8509	8.0833	9.8650	9.5143
Public Sector		(Percentag	e of GDP)	
Economic balance	0.0	-0.7	-1.2	-1.1
Primary balance	4.3	3.5	1.7	2.
Total net public debt	31.1	23.4	25.0	23.
External Sector		(Percentag	e of GDP)	
Trade balance (includes in-bond industries)	2.0		-1.9	-1.1
Current account balance	-0.7	-1.9	-3.7	-2.9
Capital account balance	1.2	3.9	4.1	2.
Total external debt	49.2	38.1	38.5	33.
Interest payments	4.0	3.1	3.0	2.
			of dollars)	2.
Net international reserves (stocks at end of period) 5/	17.5	28.0	30.1	30.

 1/
 Estimated for 1999.

 2/
 End of period.

 3/
 Average of period.

 4/
 Used for the settlement of liabilities denominated in foreign currency payable in Mexico.

 5/
 Gross international reserves minus international liabilities of the Central Bank with maturities under 6 months.

 p/
 Preliminary.

 Source:
 Banco de México, SHCP, INEGI,CONAPO.

Table A 2	Demographic and Social Indicators
-----------	-----------------------------------

	1990	1995	1997	1998	1999 p/
Population (millions)	81.2	91.2	94.7	96.3	98.1
Urban population 1/	71.3	73.5	74.2	74.6	75.0
Rural population 1/	28.7	26.5	25.8	25.4	25.0
Population per sq. Km.	42.0	47.0	48.0	49.0	50.2
Annual rate of population growth	2.0	1.8	1.7	1.6	1.8
Economically active population	34.1	35.6	38.3	39.5	n.a.
Open unemployment rate	2.7	6.3	3.7	3.2	2.5
Life expectancy at birth (years)	70.8	72.0	73.0	73.9	75.0
Global fertility rate 2/	3.3	2.8	2.6	2.6	2.5
Mortality rate (per thousand)	5.1	4.6	4.5	4.4	4.3
Infant mortality rate (per thousand live births)	23.9	15.7	n.a.	n.a.	n.a.
Number of physician (per 100,000 persons) 3/	107.5	122.0	127.5	131.0	130.6
Number of hospital beds (per 100,000 persons) 3/	75.7	72.7	74.0	75.3	75.2
Illiteracy rate for population aged 15 and over	12.6	10.6	n.a.	n.a.	n.a.
Students per teacher (elementary school)	30.9	29.4	29.3	29.3	29.2
Population with access to potable water 1/	77.8	84.2	85.8	86.5	86.7

As percentage of total population.
 At the end of women's reproductive life.
 National health system only.
 p/ Preliminary.
 n.a. Not available.
 Source: Quinto Informe de Gobierno, 1999. Presidencia de la República: INEGI and CONAPO.

#### Table A 3 **Infrastructure and Natural Resources**

	1990	1996	1997	1998	1999 p/
Roads (Km)	239.235	312.301	321.739	322.034	n.a
Federal toll roads (Km)	1,761	6,407	6,594	6,441	n.a.
Federal non-toll roads (Km)	45,743	43,106	43,008	43,125	n.a.
Paved roads (Km)	83,925	99,165	104,827	104,302	n.a.
Railroad transportation					
Railways (Km)	26,361	26,623	26,623	26,623	26,595
Passengers-Km. (millons)	5,336	1,799	1,508	460	216
Cargo transported (millones of tons-km)	36,417	41,723	42,442	46,873	49,955
Air transportation					
International airports (number)	42	53	54	55	55
Passengers (thousands)	20,449	26,493	28,896	30,922	32,951
Cargo transported (thousands of tons)	164	285	335	388	431
Maritime transportation					
Ports (number)	84	84	107	107	107
Passengers (thousands)	3.8	6.4	6.2	7.2	7.8
Shipping (thousands of tons loaded and unloaded)	169,139	208.581	219,653	237,380	240,419
Telephones (thousands of lines in service)	5,355	8,826	9,254	9,927	10,703
Cellular telephones (thousands of subscribers)	63.9	1,022	1,741	3,350	6,272
Telegraph service (offices)	2,604	1,771	1,813	1,868	1,892
Postal service (locations served)	22,000	30.828	31,167	31,515	32.015
Radio stations 1/	1,045	1,325	1,342	1,351	1,347
TV stations 1/	540	545	580	584	583
Telex service (installed lines)	24,718	19,625	17,300	18,765	18,765
Hotel capacity (rooms)	33,547	381,522	382,364	398,722	409,817
Gross generation of electric power (gigawatts/hour)	114,325	151,889	161,385	170,982	181,988
Oil reserves (millions of barrels)	66,450	62,058	60,900	60,160	58,683

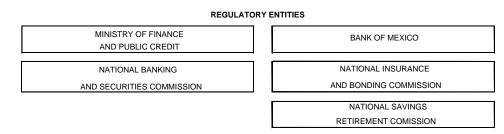
 1/
 Includes broadcasting concessions and licenses.

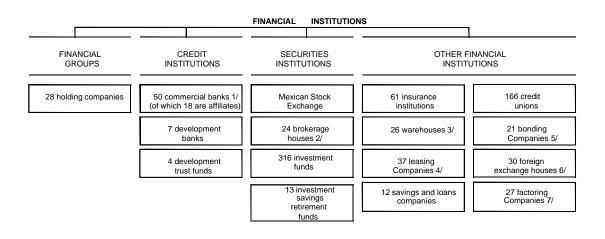
 p/
 Preliminary.

 n.a.
 Not avaible.

 Sources: Cuarto and Quinto Informe de Gobierno, 1998, 1999. Presidencia de la República.

### Table A 4 Structure of the Mexican Financial System





- 1/ Of which 13 are under financial authorities' administration.
- 2/ Of which 2 are under financial authorities' administration.
- 3/ Of which 1 is under financial authorities' administration.
- 4/ Of which 2 are under financial authorities' administration.
- 5/ Of which 3 are under financial authorities' administration.
- 6/ Of which 1 is under financial authorities' administration.
- 7/ Of which 7 are under financial authorities' administration.

Last datum: december, 1999.

# Production, Employment and Productivity

Table A 5

### Selected Indicators of Production and Employment

	1994	1995	1996	1997	1998	1999p	
		Real ar	nual perc	entage ch	anges		
Gross domestic product	4.5	-6.2	5.1	6.8	4.8	3.7	
Private consumption	4.6	-9.5	2.2	6.5	5.4	4.3	
Public consumption	2.9	-1.3	-0.7	2.9	2.2	1.0	
Private gross fixed capital formation	1.0	-28.2	26.7	23.5	15.0	9.0	
Public gross fixed capital formation	37.3	-31.3	-14.8	10.1	-13.7	-15.3	
Exports of goods and services	17.8	30.2	18.2	10.7	12.1	13.9	
Imports of goods and services	21.3	-15.0	22.9	22.7	16.5	12.8	
		Perc	entage of	nominal G	DP		
Gross Fixed Capital Formation (Financing)	19.4	16.2	17.9	19.5	20.9	21.0	
External saving	7.1	0.5	0.7	1.9	3.8	2.9	
Domestic saving	12.3	15.7	17.2	17.6	17.1	18.1	
		Index 1990=100					
Manufacturing:							
Employment	85.2	77.6	79.4	83.2	86.3	86.7	
Average productivity 1/	128.0	132.2	142.4	149.1	153.9	158.3	
Unit labor cost 2/	98.1	83.1	69.4	65.9	65.7	64.6	

 1/
 Output per worker.

 2/
 Wages per hour/output per man-hour.

 p/
 Preliminary.

 Source: INEGI and Banco de México.

### Table A 6

#### **Gross Domestic Product**

Year	Current Prices	1993 Prices	Real Annual Growth Rates (%)
1991	949,147.6	1,189,017.0	4.2
1992	1,125,334.3	1,232,162.3	3.6
1993	1,256,196.0	1,256,196.0	2.0
1994	1,420,159.5	1,311,661.1	4.4
1995	1,837,019.1	1,230,771.1	-6.2
1996	2,525,575.1	1,294,196.6	5.2
1997	3,174,193.3	1,381,665.6	6.8
1998	3,846,738.9	1,448,134.7	4.8
1999	4,622,788.8	1,501,008.2	3.7

Source: INEGI.

### Table A 7 Gross Domestic Product

Year	Current Prices	Exchange Rate	US Dollars
1991	949,147.6	3.018	314,508.5
1992	1,125,334.3	3.094	363,662.1
1993	1,256,196.0	3.115	403,273.2
1994	1,420,159.5	3.375	420,788.0
1995	1,837,019.1	6.419	286,184.6
1996	2,525,575.1	7.599	332,356.2
1997	3,174,193.3	7.918	400,883.2
1998	3,846,738.9	9.136	421,052.9
1999	4,622,788.8	9.561	483,504.7

Source: INEGI and Banco de México.

#### Table A 8

## Aggregate Supply and Demand

1993 Prices

		Annual percentage changes						Shares of GDP		
	1994	1995	1996	1997	1998	1999	1993	1999		
Supply	7.2	-7.8	8.1	9.8	7.3	5.8	119.2	132.8		
Gross domestic product	4.5	-6.2	5.1	6.8	4.8	3.7	100.0	100.0		
Imports of goods and services	21.3	-15.0	22.9	22.7	16.5	12.8	19.2	32.8		
Demand	7.2	-7.8	8.1	9.8	7.3	5.8	119.2	132.8		
Consumption	4.4	-8.4	1.8	6.0	5.0	3.9	82.9	78.0		
Private	4.6	-9.5	2.2	6.5	5.4	4.3	71.9	68.1		
Public	2.9	-1.3	-0.7	2.9	2.2	1.0	11.0	9.9		
Gross fixed capital formation	8.4	-29.0	16.4	21.0	10.3	5.8	18.6	19.7		
Private	1.0	-28.2	26.7	23.5	15.0	9.0	14.8	17.6		
Public	37.3	-31.3	-14.8	10.1	-13.7	-15.3	3.8	2.0		
Exports of goods and servicies	17.8	30.2	18.2	10.7	12.1	13.9	15.2	32.7		

Source: INEGI.

## Table A 9

## **Gross Fixed Capital Formation (Financing)**

## Percentage of Nominal GDP

	1993	1994	1995	1996	1997	1998	1999p/
Gross Fixed Capital Formation (Financing)	18.6	19.4	16.2	17.9	19.5	20.9	21.0
External saving	5.8	7.1	0.5	0.7	1.9	3.8	2.9
Domestic saving	12.8	12.3	15.7	17.2	17.6	17.1	18.1

p/ Preliminary.

#### Table A 10 **Gross Domestic Product by Sector**

1993 Prices

	Annual Percentage Change (%)							are of NP(%)				
	1990	1991	1992	1993	1994	1995	1996	1997	1998 /p	1999 /p	1993	1999 /p
GNP	5.2	4.2	3.5	1.9	4.5	-6.2	5.1	6.8	4.8	3.7	100.0	100.0
Agriculture, livestock, forestry and fishery	7.3	2.2	-2.2	2.9	0.9	0.9	3.6	0.2	0.8	3.5	5.8	5.3
Industrial sector	6.7	3.4	4.4	0.3	4.8	-7.8	10.1	9.3	6.3	3.8	24.7	26.5
Mining	3.4	1.0	1.3	1.8	2.5	-2.7	8.1	4.5	2.7	-3.2	1.3	1.2
Manufacturing industry	6.8	3.4	4.2	-0.7	4.1	-4.9	10.8	9.9	7.3	4.1	17.5	19.7
Construction	9.2	4.9	6.7	3.0	8.4	-23.5	9.8	9.3	4.2	4.5	4.4	4.0
Electricity, gas and water	2.6	0.4	3.1	2.6	4.8	2.2	4.6	5.2	1.9	4.4	1.5	1.5
Services	4.4	4.9	3.9	2.8	4.9	-6.4	3.0	6.6	4.6	3.7	64.2	62.8
Commerce, restaurants and hotels	6.2	6.1	5.3	0.1	6.8	-15.5	4.8	10.7	5.6	4.1	20.0	19.3
Transportation and												
communications	3.6	3.4	5.3	4.0	8.7	-4.9	8.0	9.9	6.3	8.8	8.6	10.2
Financial services, insurance and												
real estate leasing	4.4	4.7	4.6	5.4	5.4	-0.3	0.6	3.7	4.5	2.7	14.6	14.4
Social and community												
services	3.1	4.5	1.5	3.3	1.3	-2.3	1.0	3.3	2.8	1.5	21.0	18.9
Imputed banking services	6.7	8.1	6.5	10.8	11.1	-10.7	-5.1	10.6	5.6	5.7	-2.7	-2.6
Net taxes	5.2	4.2	3.5	1.9	4.4	-6.2	5.2	6.7	4.9	3.7	8.0	8.0

p/ Preliminary Source: INEGI.

### Table A 11

## **Growth Rates in Manufacturing Industries**

1993 prices

			А	nnual	Perce	ntage (	Change	e (%)				re of ?(%) 1/
	1990	1991	1992	1993	1994	1995	1996	1997	1998 /p	1999 /p	1993	<u>1999 /p</u>
Total	6.8	3.4	4.2	-0.7	4.1	-4.9	10.8	9.9	7.3	4.1	17.5	19.7
Food, beverages and tobacco	4.5	3.2	4.1	3.1	3.3	0.0	3.3	3.2	6.6	5.1	4.7	4.9
Textile, apparel and leather industry	5.8	2.6	-0.1	-2.7	1.1	-6.3	15.7	10.5	3.7	2.6	1.5	1.7
Lumber and derivatives	-0.4	0.7	2.8	-2.5	1.9	-7.8	6.9	6.7	4.4	-0.4	0.6	0.5
Paper, printing and	8.0	3.8	3.5	-2.0	2.9	-7.6	1.3	12.7	5.9	4.6	0.9	0.9
Chemical, petroleum												
rubber and plastics	4.3	1.0	1.8	-1.7	3.4	-0.9	6.6	6.8	6.0	2.8	2.8	3.0
Non-metallic minerals, except	6.5	3.6	6.3	2.7	4.6	-11.7	8.1	5.9	5.2	3.2	1.4	1.3
Basic metal industries	7.2	-4.8	1.5	3.2	6.2	4.1	18.8	11.1	4.0	-0.3	0.8	1.0
Metal products, machinery and	11.2	8.1	6.2	-4.1	6.7	-10.3	22.3	19.1	11.5	5.7	4.3	5.9
Other industries	18.1	-0.8	16.1	-2.5	2.2	-10.2	14.4	10.5	7.7	3.3	0.5	0.6

 1/
 Figures may not add because of rounding off.

 p/
 Preliminary.

 Source: INEGI.

### Table A 12

#### **Crude Oil and Gas Production and Crude Oil Reserves**

Year	(Million barrels per day) (Million cu		Gas (Million cubic feet per day)	Proven Crude Oil Reserves (Billon barrels at enc of period)
	Total	Daily Average	Total	Total
1981	839.5	2.300	4.061	72.0
1982	1,002.3	2.746	4,246	72.0
1983	973.1	2.666	4,054	72.5
1984	982.7	2.685	3,753	71.8
1985	960.3	2.631	3,604	70.9
1986	886.2	2.428	3,431	70.0
1987	927.5	2.541	3,498	69.0
1988	917.2	2.506	3,478	67.6
1989	917.2	2.513	3,572	66.5
1990	930.0	2.548	3,651	65.5
1991	976.7	2.676	3,634	65.0
1992	976.5	2.668	3,584	65.1
1993	975.6	2.673	3,576	64.5
1994	980.0	2.685	3,625	63.2
1995	955.6	2.618	3,759	62.1
1996	1,046.0	2.858	4,195	60.9
1997	1,103.0	3.022	4,467	60.2
1998 /p	1,120.9	3.071	4,791	58.7
1999 /p	1,060.7	2.906	4,790	58.2

p/ Preliminary. Source: Memoria de Labores 1989-1998 e Indicadores Petroleros Vol. XII Núm.1. PEMEX

#### Production, Employment, Productivity, and Unit Labor Costs in Table A 13 Manufacturing

Index 1990 = 100

Year	Production	Employment	Average Productivity 1/	Unit Labor Cost 2/
1987	87.4	97.9	89.3	100.1
1988	89.5	97.6	91.7	96.9
1989	95.1	99.9	95.1	101.9
1990	100.0	100.0	100.0	100.0
1991	103.9	98.4	105.6	99.2
1992	106.4	94.6	112.5	102.1
1993	105.2	87.9	119.8	100.5
1994	109.0	85.2	128.0	98.1
1995	102.6	77.6	132.2	83.1
1996	113.1	79.4	142.4	69.4
1997	124.0	83.2	149.1	65.9
1998 Jan	126.0	85.5	147.4	65.7
Feb	124.5	85.7	145.3	66.4
Mar	138.9	86.2	161.1	62.7
Apr	129.9	86.1	150.8	66.3
May	134.3	86.5	155.3	63.5
Jun	135.8	87.5	155.2	63.0
Jul	133.8	86.8	154.2	64.8
Aug	134.0	86.8	154.3	63.8
Sep	133.3	86.5	154.2	63.3
Oct	138.1	86.1	160.3	62.2
Nov	132.9	86.4	153.9	62.9
Dec	131.7	84.9	155.1	83.4
1999 Jan	126.3	86.6	145.8	66.0
Feb	126.9	86.6	146.6	65.7
Mar	140.2	86.6	161.9	63.4
Apr	135.3	86.3	156.8	63.8
May	138.7	86.4	160.6	61.8
Jun	142.7	87.0	164.1	60.7
Jul	140.1	87.0	161.0	62.0
Aug	140.4	87.5	160.5	61.0
Sep	137.9	87.0	158.5	62.4
Oct	140.5	86.8	162.0	61.7
Nov	140.5	87.1	161.2	61.6
Dec	138.7	86.1	161.1	84.6

 1/
 Output per worker

 2/
 Wages per hour/output per man-hour

 Source:
 Banco de Mexico and INEGI.

# Table A 14 Employment: Total Number of Employees Enrolled in IMSS

Thousands

'ear	Permanent	Temporary	Total
989	7,730	1,125	8,855
990	8,344	1,235	9,579
991	8,786	1,284	10,070
992	8,748	1,264	10,012
993	8,633	1,269	9,902
994	8,818	1,268	10,086
995	8,502	820	9,322
96	9,163	979	10,142
997	9,837	916	10,753
998 Jan	9,785	964	10,749
Feb	9,886	1,066	10,953
Mar	9,966	1,111	11,077
Apr	10,005	1,093	11,098
May	9,963	1,164	11,127
Jun	10,047	1,194	11,242
Jul	10,055	1,228	11,283
Aug	10,096	1,274	11,370
Sep	10,147	1,311	11,458
Oct	10,217	1,370	11,587
Nov	10,264	1,418	11,682
Dec	10,141	1,366	11,507
999 Jan	10,116	1,381	11,496
Feb	10,179	1,401	11,579
Mar	10,218	1,439	11,657
Apr	10,243	1,448	11,691
May	10,282	1,461	11,743
Jun	10,334	1,490	11,825
Jul	10,394	1,523	11,917
Aug	10,436	1,554	11,990
Sep	10,546	1,587	12,133
Oct	10,641	1,619	12,260
Nov	10,721	1,656	12,377
Dec	10,629	1,578	12,207

Source: IMSS

Table A 15

#### **Unemployment Rates in Urban Areas**

		Open 1/	Broad Open 2/	Labor Market Pressure 3/	Under- Employment 4/	Insufficient Income 5/
1987		3.9	6.0	5.1	23.3	30.8
1988		3.6	5.3	4.9	23.1	21.8
1989		3.0	4.4	4.1	21.0	18.3
1990		2.8	4.4	3.6	20.5	14.6
1991		2.6	4.2	3.5	20.8	11.7
1992		2.8	4.8	4.0	21.6	10.9
1993		3.4	5.6	4.8	23.0	12.4
1994 6/		3.7	6.1	4.7	22.1	11.3
1995		6.3	8.6	7.7	25.9	16.2
1996 7/, 8/		5.5	6.4	6.9	25.2	17.4
1997		3.8	4.6	4.9	23.4	16.4
1998 p/	I	3.5	4.5	4.4	22.8	17.3
		3.2	4.2	4.1	23.7	11.7
-	III	3.2	4.2	4.0	18.7	13.8
_	IV	2.8	3.8	3.5	21.8	12.5
1999 p/	I 9/	2.9	4.0	3.6	20.3	14.8
		2.6	3.4	3.2	20.4	13.1
-	III	2.3	3.1	2.9	17.3	12.1
	IV	2.2	2.9	2.6	18.3	11.3

1/ Traditional open unemployment rate: persons aged 12 and over who in the reference period: a) did not work, b) were available for employment and c) unsuccessfully sought employment in the 2 months prior to the reference period.

2/ The broad concept of unemployed population includes no only the openly unemployed, but also those who stopped looking for work to dedicate themselves to domestic activities or schooling, but were nevertheless available for employment.

3/ Measures the proportion of the economically active population that is unemployment or is employed and seeking additional employment

4/ Measures the proportion of the economically active population that is unemployed or is employed for less than 35 hours for week.

5/ Measures the proportion of the economically active population that is unemployed or is employed but earns an income below the minimum wage.

6/ The sample was expanded to 39 urban areas.

7/ The sample was expanded to 41 urban areas.

8/ The sample was expanded to 43 urban areas.

9/ The sample was expanded to 44 urban areas.

P/ Preliminary.

Source: INEGI.

Table A 16

### Real Exchange Rate1/

Index 1990 = 100

Year	Based on Unit Labor Costs in the Manufacturing Industry 2/	Annual Percentage Change
1975	56.9	
1976	53.3	-6.2
1977	66.2	24.1
1978	65.1	-1.5
1979	63.4	-2.7
1980	58.4	-7.8
1981	50.5	-13.5
1982	71.0	40.6
1983	105.2	48.1
1984	100.7	-4.3
1985	100.5	-0.2
1986	137.5	36.8
1987	147.4	7.2
1988	120.0	-18.6
1989	105.2	-12.3
1990	100.0	-5.0
1991	91.1	-8.9
1992	78.5	-13.8
1993	72.9	-7.1
1994	75.2	3.1
1995	125.6	67.0
1996	129.0	2.7
1997	115.2	-10.7
1998	l 113.5	-5.3
	II 112.3	-4.0
	III 117.0	5.0
<u> </u>	V 120.2	7.0
1999	l 113.6	0.1
_	II 105.9	-5.8
_	III 101.7	-13.1
<u> </u>	V 98.9	-17.7

Increases of the index mean a depreciation of the peso.
 Real effective exchange rate estimated on the basis of wages per hour/output per man hour for Mexico's eight major trading partners.
 Source: Banco de Mexico, International Monetary Fund, and INEGI

# **Prices and Wages**

#### Table A 17 **Prices and Compensations Main Indicators**

	1994	1995	1996	1997	1998	1999		
Prices	Annual percentage change							
Consumer prices								
End of period	7.05	51.97	27.70	15.72	18.61	12.32		
Annual average	6.97	35.00	34.38	20.63	15.93	16.59		
Producer prices less services								
End of period	7.09	56.90	24.76	13.66	19.41	8.66		
Annual average	6.11	38.64	33.88	17.55	15.98	14.24		
Producer prices including services								
End of period	n.a.	51.01	26.55	15.18	18.59	11.94		
Annual average	n.a.	36.01	32.32	19.88	16.01	15.98		
Producer prices including services and oil								
End of period	n.a.	52.60	26.68	13.51	17.60	13.71		
Annual average	n.a.	37.62	32.56	18.97	14.89	16.62		
Welfare housing construction costs								
End of period	4.65	45.59	25.38	15.88	19.14	14.37		
Annual average	4.45	31.85	29.09	17.91	18.11	17.62		
Compensations	Average annual percentage changes							
Manufacturing w ages	10.9	16.4	20.0	19.9	18.5	18.2		
Contractual w ages	5.3	12.3	21.0	19.5	17.7	16.5		
Construction w ages	7.2	19.1	8.3	16.4	18.1	18.5		
'Maquiladora" Indistry w ages	11.6	26.4	27.5	22.8	19.5	19.0		
Wolesale trade establishment w ages	n.a.	18.9	18.7	26.4	18.4	14.7		
Retail trade establishment w ages	n.a.	19.3	21.3	22.7	20.8	18.3		
Minimun wages	7.0	17.5	24.2	19.2	16.4	12.8		

n.a: Not available Sources: Banco de México, INEGI, Labor Departament and minimun wages bureau.

Table A 18

## National Consumer Price Index (NCPI)

Base year 1994=100

Mor	nth NCPI		centage Change nual	Monthly
	<u> </u>	End of Period	12 Months	_ montany
			Moving Average	
1989 Dec	51.687	19.70	20.01	
1990 Dec		29.93	26.65	
1991 Dec		18.79	22.66	
1992 Dec		11.94	15.51	
1993 Dec		8.01	9.75	
1994 Dec		7.05	6.97	
1995 Dec		51.97	35.00	
1996 Dec		27.70	34.38	
1997 Dec		15.72	20.63	
	201.000	10.72	20.00	
1998 Jan	236.931	15.27	19.70	2.18
Feb	241.079	15.35	18.87	1.75
Mar	243.903	15.27	18.12	1.17
Apr	246.185	15.10	17.53	0.94
May		14.97	17.02	0.80
Jun	251.079	15.31	16.62	1.18
Jul	253.500	15.41	16.28	0.96
Aug		15.50	16.00	0.96
Sep		15.92	15.78	1.62
Oct		16.65	15.68	1.43
Nov		17.41	15.67	1.77
Dec		18.61	15.93	2.44
	213.030	10.01	10.00	2.77
1999 Jan	281.983	19.02	16.25	2.53
Feb	285.773	18.54	16.53	1.34
Mar	288.428	18.26	16.78	0.93
Apr	291.075	18.23	17.04	0.92
May		18.01	17.29	0.60
Jun	294.750	17.39	17.45	0.66
Jul	296.698	17.04	17.57	0.66
Aug		16.58	17.64	0.56
Sep	301.251	15.83	17.61	0.97
Oct	303.159	14.91	17.45	0.63
Nov		13.92	17.13	0.89
Dec		12.32	16.59	1.00

## Table A 19 National Consumer Price Index. Major Groups of Items

## Percentage annual change

Base year 1994=100

			Food,			House hold	Health	Tranportation	Education	Other
	Month	NCPI	Beberages	Apparel	Housing	and	and Personal		and	Goods and
			and Tobacco			Furnishin	Care		Entretaiment	Services
1991	Dec	18.79	15.51	11.72	23.88	<b>^</b> 11.91	16.74	29.83	24.07	13.65
1992	Dec	11.94	8.58	13.16	13.55	10.94	16.82	10.09	21.75	14.18
1993	Dec	8.01	4.74	6.65	10.22	5.94	9.28	8.53	15.80	10.37
1994	Dec	7.05	6.94	4.76	8.04	5.69	9.78	6.94	8.64	5.12
1995	Dec	51.97	61.73	44.85	41.77	62.54	58.01	55.84	40.52	39.58
1996	Dec	27.70	29.12	28.65	26.00	26.77	24.68	33.48	20.19	24.46
1997	Dec	15.72	13.30	18.38	17.69	15.61	17.56	15.87	15.18	16.73
1998	Jan	15.27	12.19	17.24	17.47	14.47	16.52	16.71	15.63	16.75
	Feb	15.35	12.93	17.44	17.13	14.10	16.41	15.93	16.21	17.03
	Mar	15.27	13.48	16.98	16.92	13.80	16.45	14.90	16.18	17.05
	Apr	15.10	13.52	16.24	16.93	13.67	17.35	13.73	16.36	16.93
	May	14.97	14.21	16.17	15.66	13.21	17.37	13.38	16.69	16.55
	Jun	15.31	15.94	16.07	15.17	13.04	17.06	13.18	16.50	16.44
	Jul	15.41	16.60	15.71	14.78	13.84	16.80	13.12	16.07	16.80
	Aug	15.50	16.54	15.90	14.59	13.91	17.37	13.23	16.51	17.41
	Sep	15.92	17.24	16.27	14.77	14.69	17.98	13.66	16.49	17.26
	Oct	16.65	19.25	16.08	14.92	15.46	18.42	13.79	16.66	17.09
	Nov	17.41	20.21	16.31	14.58	15.93	19.11	16.34	16.90	17.36
	Dec	18.61	22.02	16.56	14.10	16.37	20.18	19.86	17.13	18.27
1999	Jan	19.02	23.94	17.04	13.71	17.33	20.63	18.76	16.82	17.85
	Feb	18.54	21.85	16.57	13.54	18.03	21.07	19.47	17.04	18.10
	Mar	18.26	19.69	16.84	14.07	18.90	22.22	19.88	17.56	18.17
	Apr	18.23	19.21	17.28	14.10	19.65	21.61	20.29	17.61	18.51
	May	18.01	18.58	17.04	13.65	19.56	21.87	20.62	17.20	18.91
	Jun	17.39	16.72	16.67	13.62	19.55	22.20	20.52	17.14	18.61
	Jul	17.04	15.81	16.39	13.85	18.74	22.17	20.30	17.18	18.31
	Aug	16.58	14.98	15.85	13.82	18.51	21.53	19.87	16.78	18.11
	Sep	15.83	13.15	15.25	13.54	17.47	21.28	19.58	17.01	18.41
	Oct	14.91	11.21	15.16	12.81	16.60	20.94	19.41	16.58	18.29
	Nov	13.92	9.73	14.80	12.95	15.76	20.53	16.79	16.28	17.86
	Dec	12.32	7.85	13.88	13.11	14.67	19.14	12.27	15.95	16.75

### Table A 20 National Consumer Price Index

## Annual percentage change

Base year 1994=100

		Fruits	Commodities	Services	Administered	NCPI	Basic
	Month	and	less	less Energy	Prices (Motorfuel,		Needs
		Vegetables	Motorfuel	Items	Gas and Electricity)		Items
1991	Dec	14.22	15.05	22.44	40.78	18.79	21.21
1992	Dec	14.31	9.08	16.41	6.72	11.94	8.10
1993	Dec	2.63	6.03	10.50	12.67	8.01	7.53
1994	Dec	6.61	6.73	7.38	8.85	7.05	8.10
1995	Dec	76.51	60.98	38.54	58.27	51.97	60.57
1996	Dec	12.06	30.19	25.77	33.33	27.70	33.30
1997	Dec	16.86	14.44	16.71	18.24	15.72	14.89
1998	Jan	17.82	13.11	17.12	18.27	15.27	14.72
	Feb	16.99	13.61	16.87	17.88	15.35	15.20
	Mar	16.58	13.87	16.44	17.50	15.27	14.84
	Apr	17.15	13.81	16.05	17.50	15.10	14.43
	May	24.08	13.54	15.75	15.02	14.97	13.64
	Jun	29.50	14.03	15.56	14.23	15.31	14.18
	Jul	28.26	14.47	15.44	13.77	15.41	14.43
	Aug	19.95	15.31	15.55	13.51	15.50	15.05
	Sep	19.60	16.09	15.79	13.18	15.92	15.74
	Oct	29.58	16.72	15.85	12.74	16.65	16.43
	Nov	37.22	16.83	15.96	17.21	17.41	17.54
	Dec	45.32	17.37	17.09	18.68	18.61	18.95
1999	Jan	49.90	18.35	16.48	17.70	19.02	19.66
	Feb	41.09	18.07	16.58	18.26	18.54	19.58
	Mar	29.35	18.11	17.18	18.26	18.26	20.01
	Apr	27.44	18.14	17.27	18.52	18.23	20.23
	May	24.29	18.03	17.26	17.95	18.01	20.19
	Jun	19.91	17.23	17.17	18.10	17.39	19.32
	Jul	17.79	16.71	17.09	18.56	17.04	19.02
	Aug	17.59	15.94	16.79	19.11	16.58	18.17
	Sep	16.57	14.50	16.63	20.06	15.83	16.88
	Oct	9.63	13.63	16.29	19.74	14.91	15.89
	Nov	2.49	13.17	15.86	16.40	13.92	14.81
	Dec	-3.66	12.24	14.00	15.74	12.32	13.15

## Table A 21 National Producer Price Index Less Oil (NPPI)

Base year 1994 = 100
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	Less Services		Services			With Services			
Period		Percentage Change			Percentag	Percentage Change		Percentage Change	
	Index	Annual	Monthly	Index	Annual	Monthly	Index	Annual	Monthly
1994 Dec	103.478	7.09		103.518	n.a.		103.691	n.a.	
1995 Dec	162.355	56.90		150.255	45.15		156.586	51.01	
1996 Dec	202.549	24.76		192.386	28.04		198.153	26.55	
1997 Jan	207.143	23.55	2.27	197.650	27.28	2.74	203.126	25.52	2.51
Feb	210.203	22.50	1.48	201.145	26.78	1.77	206.448	24.75	1.64
Mar	212.220	20.87	0.96	203.578	25.67	1.21	208.696	23.38	1.09
Apr	213.687	18.32	0.69	206.443	23.43	1.41	210.937	20.99	1.07
May	215.161	17.43	0.69	209.239	23.26	1.35	213.149	20.47	1.05
Jun	216.841	17.06	0.78	211.379	22.47	1.02	215.092	19.89	0.91
Jul	218.455	16.50	0.74	212.499	21.10	0.53	216.463	18.92	0.64
Aug	220.205	15.98	0.80	214.146	20.78	0.78	218.185	18.50	0.80
Sep	222.279	15.85	0.94	216.602	19.91	1.15	220.485	18.00	1.05
Oct	224.013	15.34	0.78	219.083	19.63	1.15	222.633	17.61	0.97
Nov	227.744	15.34	1.67	221.702	19.38	1.20	225.767	17.48	1.41
Dec	230.208	13.66	1.08	224.093	16.48	1.08	228.227	15.18	1.09
1998 Jan	236.152	14.00	2.58	228.679	15.70	2.05	233.488	14.95	2.31
Feb	240.461	14.39	1.82	232.824	15.75	1.81	237.753	15.16	1.83
Mar	242.907	14.46	1.02	235.521	15.69	1.16	240.366	15.18	1.10
Apr	244.452	14.40	0.64	237.990	15.28	1.05	242.432	14.93	0.86
May	245.562	14.13	0.45	240.784	15.08	1.17	244.467	14.69	0.84
Jun	248.421	14.56	1.16	243.922	15.40	1.30	247.506	15.07	1.24
Jul	250.782	14.80	0.95	245.901	15.72	0.81	249.680	15.35	0.88
Aug	253.938	15.32	1.26	248.643	16.11	1.12	252.613	15.78	1.17
Sep	261.500	17.64	2.98	251.939	16.31	1.33	257.958	17.00	2.12
Oct	266.810	19.10	2.03	254.002	15.94	0.82	261.564	17.49	1.40
Nov	270.548	18.79	1.40	257.407	16.10	1.34	265.156	17.45	1.37
Dec	274.892	19.41	1.61	263.860	17.75	2.51	270.662	18.59	2.08
1000	201 220	10.12	2.24	070 475	40.45	2.20	077.060	49.66	2.20
<u>1999 Jan</u>	281.328	19.13	2.34	270.175	18.15	2.39	277.062	18.66	2.36
Feb	283.373	17.85	0.73	274.705	17.99	1.68	280.459	17.96	1.23
Mar	284.551	17.14	0.42	278.673	18.32	1.44	283.179	17.81	0.97
<u>Apr</u>	284.950	16.57	0.14	281.477	<u>18.27</u> 18.31	<u>1.01</u> 1.21	284.900	<u>17.52</u> 17.45	0.61
May	285.794	16.38		284.874			287.125		0.78
Jun	287.795	15.85	0.70	287.948	18.05	1.08	289.703	17.05	0.90
Jul	289.051	15.26	0.44	290.322	18.06	0.82	291.591	16.79	0.65
Aug	290.222	14.29	0.41	291.947	17.42	0.56	293.011	15.99	0.49
Sep Oct	292.075	11.69	0.64	295.142	17.15	1.09	295.599	14.59	0.88
Oct	294.413	10.35	0.80	297.552	17.15	0.82	297.978	13.92	0.80
Nov	296.408	9.56	0.68	299.892	16.50	0.79	300.177	13.21	0.74
Dec	298.707	8.66	0.78	303.102	14.87	1.07	302.980	11.95	0.93

n.a. Not available.

## Table A 22 National Producer Price Index Less Oil (NPPI)

Final goods destination

Annual percentage changes for december

CONCEPT	1995	1996	1997	1998	1999
NPPI with services	51.01	26.55	15.18	18.59	11.95
Interlan demand	48.37	27.77	15.86	18.84	12.88
Private consumption	49.54	28.47	16.05	18.87	12.78
Goverment consumption	22.28	22.93	20.33	18.80	14.61
Invertment	55.94	26.87	13.55	18.77	12.59
Export	73.61	17.61	9.75	16.50	3.94
NPPI less services	56.90	24.76	13.66	19.41	8.66
Interlan demand	55.26	25.56	13.60	19.76	9.71
Private consumption	55.46	26.62	14.27	20.25	9.05
Goverment consumption	67.01	18.57	13.44	16.53	9.78
Invertment	53.95	23.72	12.28	18.89	11.07
Export	78.25	18.88	14.06	16.68	0.36
NPPIservices	45.15	28.04	16.48	17.75	14.87
Interlan demand	41.60	29.87	17.94	18.03	15.72
Private consumption	44.53	29.89	17.37	17.87	15.54
Goverment consumption	19.67	23.28	20.86	18.96	14.95
Invertment	61.29	44.33	19.56	18.24	19.42
Export	76.34	15.10	4.88	15.20	7.08

## Table A 23 National Producer Price Index With Services Less Oil (NPPI)

Final goods origin

Annual percentage change in december

CONCEPT	1995	1996	1997	1998	1999
IPPI with services	51.01	26.55	15.18	18.59	11.95
Primary sector	46.71	26.67	11.01	31.82	-7.06
Agriculture, livestock, wood and fishing	40.01	29.67	11.24	33.34	-7.61
Mining	146.20	-4.11	7.72	9.92	2.56
Secondary sector	59.53	24.54	13.91	18.34	10.26
Manufacturing	62.97	24.07	14.59	18.15	9.55
Food, beberages and tobacco	58.96	26.34	15.33	18.91	11.01
Textils, apparel and healther	54.02	28.24	14.06	16.20	8.05
Wood	52.83	19.44	16.29	11.29	9.56
Paper, printing and publishing	71.52	4.62	5.60	15.77	12.92
quemicals, oil and plastics	67.74	30.95	14.41	17.48	15.57
Non metalic minerals	37.28	25.84	21.40	21.47	7.80
Basic metal industries	113.77	7.10	9.99	22.63	-2.23
Metal products, machins and equipement	74.17	19.12	14.27	18.39	3.97
Other manufacturs	86.14	21.83	12.90	20.30	4.66
Construction	45.41	26.05	11.75	18.95	12.53
Terciary sector	44.65	28.19	16.53	17.79	14.88
Utilities	48.23	25.81	14.06	14.68	12.37
Trade, restaurants and hotels	59.53	33.30	16.77	17.33	16.54
Transportation and cominications	48.28	32.26	15.69	20.34	11.75
Leasing	42.57	22.68	16.10	15.97	12.11
Personal and social services	26.74	21.24	17.19	17.95	16.14

## Table A 24 National Welfare Housing Construction Cost Index

## Annual percentage changes

_		National			México City Are	а
	All Cost	Materials	Labor	All Cost	Materials	Labor
1004 D.	4.05		7.07		0.40	7.00
1994 Dec	4.65	4.01	7.37	4.11	3.49	7.03
1995 Dec	45.59	49.00	31.37	45.44	48.63	30.99
1996 Dec	25.38	24.12	31.34	26.38	25.48	31.00
1997 Jan	23.65	22.06	31.40	24.29	23.02	31.08
Feb	22.51	20.75	31.39	22.21	20.60	31.08
Mar	20.75	18.70	31.38	20.40	18.52	31.08
Apr	17.80	17.90	17.30	17.50	17.58	17.04
May	17.01	16.95	17.30	16.40	16.27	17.04
Jun	16.46	16.29	17.30	15.80	15.57	17.04
Jul	15.58	15.23	17.30	14.78	14.37	17.04
Aug	15.60	15.26	17.30	15.02	14.65	17.04
Sep	16.18	15.96	17.30	15.96	15.76	17.04
Oct	16.74	16.63	17.30	16.76	16.71	17.04
Nov	18.18	18.36	17.30	18.39	18.63	17.04
Dec	15.88	19.21	0.99	16.06	19.12	0.98
998 Jan	17.80	18.51	14.60	17.52	18.19	14.18
Feb	16.85	17.34	14.60	16.61	17.09	14.18
Mar	16.93	17.43	14.60	16.56	17.03	14.18
Apr	18.01	18.74	14.59	17.16	17.73	14.18
May	17.91	18.61	14.59	16.41	16.83	14.18
Jun	17.72	18.38	14.59	15.98	16.32	14.18
Jul	17.47	18.06	14.59	15.81	16.12	14.18
Aug	17.48	18.07	14.59	16.24	16.63	14.18
Sep	18.76	19.60	14.59	17.73	18.38	14.18
Oct	19.83	20.88	14.59	18.78	19.62	14.18
Nov	19.07	19.94	14.59	18.34	19.08	14.18
Dec	19.14	18.61	21.90	18.51	18.01	21.40
1999 Jan	16.97	18.10	11.66	16.57	17.48	11.85
_Feb	17.69	18.62	13.26	17.56	18.18	14.32
Mar	19.96	21.30	13.55	19.51	20.49	14.32
Apr	18.83	19.86	13.81	18.71	19.53	14.32
May	18.58	19.51	13.99	18.79	19.62	14.32
Jun	18.94	19.82	14.60	19.20	20.11	14.32
Jul	19.27	20.00	15.61	19.54	20.51	14.32
Aug	19.18	19.87	15.70	19.36	20.28	14.32
Sep	17.65	18.02	15.72	17.64	18.23	14.32
Oct	15.80	15.81	15.74	<u>17.04</u> 15.30	15.46	14.32
Nov	14.82	14.64	15.75	13.82	13.74	14.32
Dec	14.37	15.45	8.85	12.92	13.87	7.52

Table A 25

#### **Minimum Wage Rate**

#### Pesos per day

		Nationw ide	Geog	on 2/	
		Average 1/	Α	В	С
1987	January 1	2.7608	3.0500	2.8200	2.5350
1987	April 1	3.3148	3.6600	3.3850	3.0450
1987	July 1	4.0801	4.5000	4.1650	3.7500
1987	October 1	5.1020	5.6250	5.2100	4.6900
1987	December 1	5.8672	6.4700	5.9900	5.3950
1988	January 1	7.0407	7.7650	7.1900	6.4750
1988	March 1	7.2592	8.0000	7.4050	6.6700
1989	January 1	7.8337	8.6400	7.9950	7.2050
1989	July 1	8.3060	9.1600	8.4750	7.6400
1989	December 4	9.1389	10.0800	9.3250	8.4050
1990	November 16	10.7866	11.9000	11.0000	9.9200
1991	November 11	12.0840	13.3300	12.3200	11.1150
1993	January 1	13.0600	14.2700	13.2600	12.0500
1994	January 1	13.9700	15.2700	14.1900	12.8900
1995	January 1	14.9500	16.3400	15.1800	13.7900
1995	April 1	16.7400	18.3000	17.0000	15.4400
1995	December 4	18.4300	20.1500	18.7000	17.0000
1996	April 1	20.6600	22.6000	20.9500	19.0500
1996	December 3	24.3000	26.4500	24.5000	22.5000
1998	January 1	27.9900	30.2000	28.0000	26.0500
1998	December 3	31.9100	34.4500	31.9000	29.7000

Nationwide average weighted by the working populaltion in each geographic region.
 Municipalities and states are grouped into regions in orden to reflect differences in the cost of living. For details on this grouping see "Salarios Mínimos", January 1997 Comisión Nacional de Salarios Mínimos.
 Source: Comisión Nacional de los Salarios Mínimos.

#### Table A 26 National Compensation Measures

		Manufa	cturing indust compensatio	-	Co	ontractual wag	Minimun wages		
Ρ	eriod	Annual percentage change	Employment (thousands)	Establishments	Annual percentage change	Employment (thousands)	Establishm ents	Annual percentage change	Day's work compensatio
1994	Average	10.91	1,394	6,884	5.28	1,526	3,170	6.97	13.97
1995	Average	16.39	1,273	6,810	12.27	1,491	3,633	17.54	16.42
1996	Average	19.98	1,314	6,378	20.97	1,491	3,686	24.16	20.39
1997	Jan	21.20	1,354	6,228	19.38	119	654	31.85	24.30
	Feb	19.58	1,367	6,228	19.06	172	518	31.85	24.30
	Mar	21.54	1,378	6,228	19.38	107	367	31.85	24.30
	Apr	20.49	1,387	6,228	19.07	178	340	17.62	24.30
	May	20.10	1,390	6,228	20.37	64	347	17.62	24.30
	Jun	19.82	1,379	6,228	19.78	84	300	17.62	24.30
	Jul	22.05	1,380	6,228	19.33	175	330	17.62	24.30
	Aug	18.52	1,389	6,228	18.39	40	307	17.62	24.30
	Sep	18.92	1,394	6,228	20.07	47	257	17.62	24.30
	Oct	20.54	1,408	6,228	20.23	425	300	17.62	24.30
	Nov	19.06	1,416	6,228	18.00	51	187	17.62	24.30
	Dec	17.87	1,412	6,228	18.40	32	167	0.98	24.30
	Average	19.87	1,388	6,228	19.53	1,495	4,074	19.20	24.30
1998	Jan	18.90	1,415	6,228	17.72	183	520	15.19	27.99
	Feb	20.26	1,426	6,228	17.60	145	598	15.19	27.99
	Mar	19.15	1,437	6,228	17.61	140	609	15.19	27.99
	Apr	20.40	1,442	6,228	17.51	128	461	15.19	27.99
•	May	17.03	1,447	6,228	17.45	130	368	15.19	27.99
	Jun	18.04	1,442	6,223	18.50	59	442	15.19	27.99
	Jul	17.59	1,436	6,223	17.30	162	263	15.19	27.99
	Aug	17.67	1,437	6,223	18.14	66	292	15.19	27.99
	Sep	18.53	1,440	6,223	17.71	59	253	15.19	27.99
•	Oct	18.24	1,445	6,223	18.00	426	264	15.19	27.99
	Nov	17.64	1,447	6,223	17.80	32	225	15.19	27.99
	Dec	18.67	1,438	6,223	17.80	37	230	30.28	31.66
	Average	18.49	1,438	6,225	17.74	1,568	4,525	16.44	28.30
1999	Jan	18.54	1,441	6,223	17.73	155	568	14.01	31.91
	Feb	17.79	1,445	6,223	17.83	190	611	14.01	31.91
	Mar	19.29	1,453	6,223	17.38	227	624	14.01	31.91
	Apr	18.14	1,454	6,223	17.55	130	479	14.01	31.91
	May	19.28	1,454	5,909	17.29	58	329	14.01	31.91
	Jun	18.42	1,444	5,909	18.46	44	362	14.01	31.91
•	Jul	17.70	1,452	5,909	15.69	175	303	14.01	31.91
	Aug	17.67	1,455	5,909	16.45	40	229	14.01	31.91
	Sep	18.25	1,458	5,909	17.33	54	341	14.01	31.91
•	Oct	16.91	1,463	5,909	14.62	436	300	14.01	31.91
	Nov	17.31	1,472	5,909	15.80	35	268	14.01	31.91
	Dec	18.53	1,471	5,909	16.12	23	257	0.80	31.91
	Average	18.16	1,455	6,014	16.48	1,568	4671	12.77	31.91

Note: Annual figures are averages of monthly figures, except establisments figures in contractual wages, which are sums. Sources: Banco de México, INEGI, Department of labor and minimun wages bureau.

## Table A 27 Average Compensations In Manufacturing Industries

## Annual percentage changes

Division	1994	1995	1996	1997	1998	1999
GENERAL INDEX	10.9	16.4	20.0	19.9	18.5	18.2
Food, geberages and tobacco	12.5	15.7	20.6	20.8	19.7	18.6
Textiles and apparel	10.9	8.0	15.4	17.9	20.3	18.0
Wood and Wood products	5.3	8.5	17.6	19.3	17.7	20.5
Paper and printing	7.4	14.5	21.9	17.0	16.5	18.0
Quemicals, oil, rubber and plastics	11.8	18.1	25.4	22.1	19.7	17.9
Cemente, glass, hardw are and coverings	13.2	24.9	18.3	19.7	15.0	12.8
Basic metals and products	12.5	19.6	19.6	21.5	15.5	16.7
Machinery, equipement and vehicles	9.7	16.5	18.9	19.4	18.7	19.9
Other manufacturing industries	13.0	18.9	17.7	12.1	20.5	21.8

# Money and Finance

Table A 28

# **Selected Monetary and Financial Indicators**

	1996	1997	1998	1999
Monetary Aggregates		Real grow th	rates 1/	
Monetary Base	-1.56	12.04	1.84	27.74
M1	11.89	14.65	0.51	12.15
M4	0.55	8.81	6.13	6.47
	I	Percentage of	f GDP 2/	
Monetary Base	2.50	2.63	2.69	2.83
M1	7.52	8.40	8.55	8.54
M4	38.85	39.16	40.68	41.75
Nominal interest rates		Annual pe	rcent	
28 day TIIE	33.66	21.91	26.89	24.10
28 day Cetes	31.39	19.80	24.76	21.41
CPP	30.71	19.12	21.09	19.73
CCP	30.92	20.04	22.39	20.89
Exchange rate 1/		Pesos per	dollar	
To settle liabilities denominated in				
foreign currency payable in Mexico	7.8509	8.0833	9.865	9.5143
Mexican Stock Exchange	Ba	ase October	1978=100	
				7,130

End of period.
 Average of end of month stocks.
 Source: Banco de México and the Mexican Stock Exchange.

## Table A 29

## Monetary Aggregates

Nominal stocks in thousands of millions of pesos

End of Period	Monetary Base	M1	M2	М3	M4
		Nominal	stocks		
1989	22.2	30.8	190.8	191.6	200.1
1990	30.1	51.0	271.2	277.8	293.7
1991	38.6	113.6	339.1	358.0	386.7
1992	44.0	131.7	380.5	426.9	458.4
1993	47.2	157.0	469.8	540.9	580.4
1994	56.9	163.8	554.9	657.1	724.2
1995	66.8	171.6	754.4	784.5	869.3
1996	84.0	245.3	995.2	1025.8	1116.2
1997	108.9	325.4	1295.1	1325.6	1405.4
1998	131.5	387.9	1656.1	1683.2	1769.0
1999					
Jan	121.6	367.4	1650.1	1677.8	1761.6
Feb	118.8	365.2	1687.8	1717.3	1800.6
Mar	124.6	366.0	1733.8	1762.9	1845.0
Apr	118.3	364.6	1735.7	1762.0	1838.4
May	122.2	382.4	1785.5	1808.9	1888.2
Jun	122.0	383.6	1800.2	1824.3	1901.9
Jul	127.3	389.5	1845.3	1868.2	1947.0
Aug	125.5	393.5	1863.7	1887.2	1963.4
Sep	127.4	398.4	1904.7	1927.7	1999.0
Oct	134.0	411.6	1926.5	1951.9	2026.1
Nov	140.3	425.2	1970.1	1996.1	2071.8
Dec	188.7	488.6	2014.3	2041.9	2115.6
		Percenta	ges of GDP		
1989	3.16	4.00	27.97	28.11	29.34
1990	2.91	4.66	30.73	30.98	32.51
1991	3.10	6.85	31.64	33.32	35.78
1992	3.10	9.85	30.97	33.97	36.46
1993	2.96	10.51	33.12	38.25	41.19
1994	3.17	10.47	35.10	40.80	44.05
1995	2.73	7.52	34.08	37.56	41.41
1996	2.50	7.52	34.49	35.43	38.85
1997	2.63	8.40	35.65	36.62	39.16
1998	2.69	8.55	37.65	38.45	40.68
1999	2.83	8.54	39.51	40.07	41.75

Monetary Base comprises bills and coins not held by Banco de México and demand deposits of commercial and development banks in the Banco de México.

M1 comprises bills and coins not held by the banking system and resident private sector deposits in checking and current accounts, and those that can be withdraw through debit cards, in national and foreign currency in domestic banks.

M2 comprises M1 plus resident private sector demand (other than deposits in checking and current accounts) and time deposits in national and foreign currency in banks, federal government and private sector securities held by the resident private sector, and other instruments held by pension funds. M3 comprises M2 plus non-resident demand and time deposits in banks and federal government securities.

M4 comprises M3 and deposits of residents and nonresidents in domestic banks branches abroad.

#### Table A 30 **Monetary Base**

Nominal stocks in thousands of millions of pesos

	_	Us	ses	Sources				
End of Period	Monetary Base	Currency in Circulation 1/	Bank Deposits at the Central Bank	Net Domestic Credit	Net International Assets 2/			
1989	22.225	19.660	2.564	20.272	1.953			
1990	30.121	27.078	3.044	17.850	12.271			
1991	38.581	36.172	2.409	3.514	35.067			
1992	43.972	42.015	1.957	2.046	41.926			
1993	47.193	47.193	0.000	-17.247	64.440			
1994	56.935	56.920	0.015	41.896	15.040			
1995	66.809	66.809	0.000	55.649	11.160			
1996	83.991	83.991	0.000	34.307	49.684			
1997	108.891	108.736	0.155	-51.049	159.940			
1998								
Jan	99.091	98.998	0.093	-72.204	171.295			
Feb	97.956	97.929	0.027	-73.085	171.041			
Mar	95.629	95.415	0.214	-85.229	180.858			
Apr	98.682	98.682	0.000	-89.899	188.581			
May	101.373	101.307	0.066	-93.574	194.947			
Jun	99.183	99.023	0.160	-96.801	195.984			
Jul	102.711	102.686	0.025	-101.187	203.898			
Aug	101.366	101.366	0.000	-109.884	211.250			
Sep	99.913	99.913	0.000	-109.261	209.174			
Oct	104.994	104.953	0.041	-116.347	221.341			
Nov	109.326	108.650	0.676	-106.545	215.871			
Dec	131.528	131.109	0.419	-100.836	232.364			
1999								
Jan	121.598	121.598	0.000	-116.387	237.985			
Feb	118.781	118.703	0.078	-118.552	237.333			
Mar	124.645	124.616	0.029	-102.727	227.372			
Apr	118.254	118.254	0.000	-106.382	224.636			
May	122.188	122.188	0.000	-120.339	242.527			
Jun	121.964	121.794	0.170	-118.250	240.214			
Jul	127.278	127.278	0.000	-112.963	240.241			
Aug	125.525	125.463	0.062	-124.709	250.234			
Sep	127.434	127.434	0.000	-121.219	248.653			
Oct	134.042	133.979	0.063	-121.162	255.204			
Nov	140.288	140.288	0.000	-115.201	255.489			
Dec	188.718	188.718	0.000	-71.350	260.068			

1/ 2/ Bills and coins not held by Banco de México. Defined as a gross reserve, plus over 6 months maturity credit agreements with cantral banks, minus liabilities with the IMF and liabilities from credit agreements with central banks.

#### Table A 31 Monetary Aggregates M1, M2, M3 y M4

Nominal stocks in thousands of millions of pesos

_			Decer	nber		
	1994	1995	1996	1997	1998	1999
1. M1 1/	163.8	171.6	245.3	325.4	387.9	488.6
2. Resident deposits in domestic						
banks 2/	293.9	443.8	534.0	604.0	761.9	787.0
3. Federal Government securities held by residents (including Siefores)	41.9	68.0	104.9	187.2	297.4	490.8
4. Domestic private sector	+1.5	00.0	104.3	107.2	237.4	+30.0
securities held by residents						
(including Siefores)	26.4	22.4	31.7	57.4	73.0	74.3
5. Retirement savings funds						
(excluding Siefores)	28.8	48.4	79.3	121.2	135.9	173.6
6. M2=(1+2+3+4+5)	554.9	754.4	995.2	1,295.1	1.656.1	2.014.3
- · · ·						
<ol><li>Non-resident deposits in</li></ol>						
domestic banks	2.5	4.7	5.4	5.1	4.3	6.8
8. Federal Government securities						
held by non-residents	99.7	25.4	25.3	25.3	22.8	20.8
<u>9. M3=(6+7+8)</u>	657.1	784.5	1,025.8	1,325.6	1,683.2	2,041.9
10. Resident deposits in branches and agencies of domestic banks						
abroad	16.9	29.1	40.3	41.4	41.6	33.9
11. Non-resident deposits in branches and agencies of	50.0	<b>FF 7</b>	50.0	20.4	44.0	20.0
domestic banks abroad	50.3	55.7	50.0	38.4	44.3	39.8
<u>12. M4=(9+10+11)</u>	724.2	869.3	1,116.2	1,405.4	1,769.0	2,115.6

M1 comprises bills and coins not held by the banking system and resident private sector deposits in checking and current accounts, and those that can be withdraw through debit cards, in national and foreign currency in domestic banks. Other than deposits in checking and current accounts. 1/

2/

#### Table A 32 **Representative Interest Rates**

## **Government Securities**

	_		CETI	ES 1/			BONDES		UDIB	ONOS
		28	91	182	364	1	2	5	5	10
		Days	Days	Days	Days	Year 2/	Years 3/	Years 3/	Years	Years
990		34.76	35.03	29.49	25.35					
991		19.28	19.82	19.78	19.72					
992		15.62	15.89	15.93	16.11					
1993		14.99	15.50	15.56	15.55					
1994		14.10	14.62	14.07	13.83	-0.20	-0.19			
995		48.44	48.24	43.07	38.56	2.54	2.28			
996		31.39	32.91	33.67	34.38	1.37	1.43			
1997		19.80	21.26	21.88	22.44	1.17	1.30	0.57		
998		24.76	26.18	21.55	22.38	1.67		0.97		
999		21.41	22.37	23.31	24.13	1.10	0.93	1.21	7.95	6.93
997										
	Jan	23.55	24.60	24.93	25.94	1.31	1.44			
	Feb	19.80	21.96	22.97	24.14	1.07	1.44		6.30	
	Mar	21.66	22.32	22.79	24.10	1.22	1.30		6.48	
	Apr	21.35	22.37	22.80	24.14	1.19	1.31		6.98	
	May	18.42	20.59	21.72	23.06	1.23	1.30		6.96	
	Jun	20.17	21.40	21.70	22.61	1.33	1.37		6.75	
	Jul	18.80	19.40	20.56	20.73	1.15	1.19		6.11	
-	Aug	18.93	20.15	21.18	21.18	1.15	1.17		6.07	
-	Sep	18.02	20.51	21.41	21.22	1.06			6.12	
	Oct	17.92	19.91	20.35	20.13	0.96		0.52	5.76	
	Nov	20.16	22.01	22.17	22.05			0.67	6.25	
	Dec	18.85	19.88	20.00	20.04			0.52	5.73	
998	200	10.00	10.00	20.00	20.01			0.02	0.10	
_	Jan	17.95	19.37	19.66	19.95			0.54	5.95	
-	Feb	18.74	19.63	20.05	20.47			0.53	6.14	
	Mar	19.85	20.76	20.99	21.43			0.61	6.73	
	Apr	19.03	19.47	19.59	20.52			0.59	6.83	
	May	17.91	18.85	19.83	21.00			0.58	7.07	
_	Jun	19.50	20.99	22.08	23.20			0.66	7.52	
	Jul	20.08	21.82	23.40	24.49			0.79	7.53	
-	Aug	22.64	25.22	26.83	27.99			0.97	7.83	
_	Sep	40.80	41.90			1.92		1.92		
-	Oct	34.86	37.53			1.79		1.74		
	Nov	32.12	34.30			1.70		1.58		
	Dec	33.66	34.35			1.27		1.12		
999	Jan	32.13	32.27	31.88	31.27	1.20		1.24		
	Feb	28.76	28.72	28.29	28.29	1.20		1.24	8.36	
-	Mar	23.47	23.86	23.87	25.10	0.93		1.20	8.05	
-	Apr	20.29	23.00	23.87	23.26		1.03	1.32	7.79	
	May	19.89	21.05	21.82	23.20		1.03	1.32	7.83	
	Jun	21.08	21.02	21.82	22.74		1.07	1.34	8.05	
-	Jul	19.78	21.35	22.40	23.55		0.84	1.35	8.15	
	Aug	20.54	20.78	24.33	25.46		1.06	1.39	8.35	
	Sep	<u>20.54</u> 19.71	21.49	24.33	25.46		1.06	1.39	8.51	
	Oct	19.71	21.34	23.15	24.01		0.84	1.30	8.26	7.14
-	Nov	16.96	18.68	19.92	22.88		0.84	0.87	7.43	7.14
-										
	Dec	16.45	17.65	18.30	18.76		0.68	0.80	6.66	6.63

Primary auction 28, 91, 182 and 364 day interest rate equivalent. Premium in addition to the coupon determined with the primary auction interest rate of 28 day CETES. Premium in addition to the coupon determined with the primary auction interest rate of 91 day CETES.

1/ 2/ 3/ 4/ Inflation indexed securities issued by the Mexican Government denominated in investment units-UDIS.

Source: Banco de Mexico.

# Table A 33Representative Interest Rates<br/>Average Cost of Bank Term Deposits, Interbank, Funding and<br/>Commercial Paper interest rates<br/>Period average, annual percent

		Average Cost of	of Bank Term Deposit	s	Interb	ank interest rates		Weighted aver	age Funding rate	Commercial Paper	
	CPP 1/	CCP 2/	CCP-UDIS 3/	CCP-DOLARES 4/	TIIP	TIIE	TIIE	Bank's 8/	Government 9/	Interest rate 10/	
					28 day 5/	28 day 6/	91 day 7/				
990	37.07									35.71	
991	22.56									23.27	
992	18.78									21.24	
993	18.56				18.29					20.42	
994	15.50				17.84				-	18.68	
995	45.12		6.81		54.05	55.21				56.89	
996	30.71	30.92	7.91	7.19	33.70	33.66				35.19	
997	19.12	20.04	6.59	6.63	21.82	21.91	22.29			22.85	
998	21.09	22.39	5.77	6.41	26.73	26.89	27.14	33.30	31.79	27.00	
999	19.73	20.89	4.07	6.32	24.06	24.10	24.62	22.45	20.79	23.87	
997											
Jan	24.08	25.29	6.61	6.77	25.87	25.96	25.38			27.59	
Feb	21.06	22.09	6.32	6.75	22.24	22.11	23.54			24.07	
Mar	21.10	21.82	6.42	6.72	24.04	23.95	23.73			24.49	
Apr	21.07	21.91	6.55	6.63	23.80	23.98	23.97			24.98	
May	/ 18.73	19.59	6.78	6.65	20.59	20.65	21.73			22.00	
Jun	18.78	19.60	6.90	6.62	22.50	22.53	22.41			24.19	
Jul	18.05	18.97	7.20	6.59	20.48	20.50	20.73			20.50	
Aug	17.34	18.21	7.21	6.63	20.66	20.64	21.27			22.81	
Sep	17.18	18.12	7.05	6.55	20.03	20.23	21.27			20.54	
Oct	16.56	17.36	6.55	6.58	19.38	19.70	20.47		-	20.66	
Nov	17.74	18.63	5.76	6.54	21.82	22.17	22.55			22.37	
Dec	: 17.79	18.87	5.78	6.56	20.41	20.48	20.48			19.98	
998											
Jan	16.98	17.91	5.52	6.51	19.47	19.74	19.95			20.05	
Feb	17.03	17.95	5.54	6.47	20.61	20.52	20.67			20.28	
Mar	17.37	18.36	5.60	6.48	21.71	21.69	21.83			21.33	
Apr	17.66	18.65	5.62	6.43	20.41	20.55	20.44			20.39	
May	/ 16.85	17.72	5.76	6.40	20.17	19.90	20.27			19.58	
Jun	17.24	18.18	5.78	6.41	21.10	21.47	21.79			20.91	
Jul	17.75	18.86	5.72	6.42	21.75	21.88	22.66			20.98	
Aug	19.05	20.07	5.83	6.46	25.33	25.78	27.20			25.49	
Sep	27.54	29.57	5.84	6.44	41.55	42.04	40.35			42.75	
Oct	29.28	31.43	5.94	6.35	37.49	37.65	38.69			39.11	
Nov	27.76	29.45	6.13	6.31	34.64	34.78	35.56	32.46	31.07	34.60	
Dec	28.56	30.47	5.98	6.29	36.60	36.69	36.29	34.15	32.51	38.52	
999											
Jan	28.31	30.01	5.33	6.28	36.27	35.80	35.45	34.11	31.96	37.29	
Feb	26.90	28.64	3.36	6.26	31.97	32.21	31.35	30.26	28.42	32.36	
Mar	22.84	24.21	3.33	6.30	26.46	26.87	26.37	25.86	23.99	34.60	
Apr	19.16	20.31	3.48	6.28	22.49	22.54	22.99	21.10	19.66	22.15	
May	/ 17.82	18.95	3.77	6.25	22.42	22.52	23.26	21.16	19.40	21.95	
Jun	18.62	19.75	3.88	6.23	23.68	23.60	23.77	22.02	20.14	22.48	
Jul	18.08	19.09	3.87	6.24	22.20	22.11	22.98	20.61	18.69	22.10	
Aug	18.17	19.18	4.15	6.28	23.20	23.13	24.36	20.52	18.94	22.41	
Sep		18.96	4.24	6.27	22.05	22.04	23.43	20.24	18.71	20.92	
Oct	17.25	18.11	4.34	6.36	20.40	20.63	22.41	18.28	16.92	19.97	
Nov	16.26	17.10	4.63	6.48	18.94	19.01	20.09	17.96	16.91	18.75	
Dec	15.42	16.34	4.40	6.57	18.67	18.75	19.06	17.24	15.81	18.45	

1/ Commercial Bank's Average Cost of Term Deposits (CPP) covers term deposits, certificate of deposits, other current account deposits (other than demand deposits), banker's acceptances and commercial paper with bank guarantee.

2/ Commercial Bank's Average Cost of Funds (CCP), includes the interest of term deposits denominated in domestic currency. It excludes convertible subordinated debt, guarantees and interbank operations.

Commercial Bank's Average Cost of Funds in investment units (CCP-UDIS) includes the instruments denominated in investment units (UDIS) that are covered in the calculation of the CCP.

4/ Commercial Bank's Average Cost of Funds in Dollars (CCP-Dollars) includes term liabilities and foreign bank loans denominated in U.S. dollars. It excludes convertible subordinated debt, guarantees, interbank operations, and loans granted by Export-Import Banks, Commodity Credit Corporation and other similar institutions.

5/ The 28 day average interbank interest rate (TIIP) was first calculated in January 1993, according to the provissions issued by Banco de México (Circular telefax 1996/93) and will stop being published on December 31, 2001, as stipulated in the Official Gazete of March 23, 1995.

6/ The Interbank Equilibrium Interest Rate (TIIE) is calculated by Banco de Mexico using comercial bank quotes as stipulated in the Official Gazette of March 23rd 1995.

7/ The 91 day Interbank Equilibrium Interest Rate (TIIE 91) is calculated by Banco de Mexico using comercial bank quotes as stipulated in the provissions issued by Banco de México (Circular telefax 4/1997).

8/ Representative interest rate on one day repo and one day outright operations with certificates of deposit, bank notes and banker's acceptances, traded by banks and stockbrokerage firms in the wholesale market settled through the delivery versus payment system in INDEVAL (securities clearing house).

9/ Representative interest rate on one day repo operations on government securities traded by banks and stockbrokerage firms in the wholesale market settled through the delivery versus payment system in INDEVAL (securities clearing house).

10/ Weighted average of different terms of maturity (28-day interest rate equivalent). Interest rate after income tax.

Source: Banco de Mexico and the Mexican Stock Exchange.

## Table A 34

## **Representative Exchange Rates**

Pesos per U.S. dollar

	Exchange Rate U Liabilities Den Foreign Curren Mexic	ominated in cy Payable in	48 Hours Interbank Exchange Rate Closing Cates 2/				
			(B	suy)	(S	ell)	
		Period	End of	Period	End of	Period	
	End of Period	Average	Period	Average	Period	Average	
1995	7.6425	6.4190	7.6700	6.3954	7.7000	6.4258	
1996	7.8509	7.5994	7.8850	7.5827	7.8950	7.6005	
1997	8.0833	7.9185	8.0625	7.9122	8.0650	7.9232	
1998	9.8650	9.1357	9.9030	9.1441	9.9080	9.1527	
1999	9.5143	9.5605	9.4900	9.5516	9.5000	9.5592	
<u>1997</u> _Jar	7.8393	7.8299	7.8110	7.8175	7.8210	7.8275	
Feb		7.7926	7.9360	7.7985	7.9460	7.8085	
Ma		7.9628	7.9050	7.9492	7.9460	7.9597	
<u>Apr</u>		7.9037	7.9050	7.8985	7.9525	7.9085	
Ma		7.9057	7.9425	7.8985	7.9220	7.9085	
Jur		7.9465	7.9120	7.9393	7.9350	7.9493	
Jul	7.8088	7.8857	7.8075	7.8614	7.8175	7.8714	
Aud		7.7843	7.8200	7.7762	7.8300	7.7862	
Ser		7.7792	7.7590	7.7702	7.7690	7.7802	
Oct		7.8114	8.3000	7.8669	8.4000	7.8882	
Nov		8.2837	8.2200	8.2640	8.2260	8.2801	
Dee		8.1360	8.0625	8.1143	8.0650	8.1182	
1998	0.0000	0.1000	0.0020	0.1110	0.0000	0.1102	
Jar	8.3603	8.1798	8.4650	8.2237	8.4750	8.2331	
Feb	8.5832	8.4932	8.5180	8.4940	8.5220	8.5000	
Ma	r 8.5165	8.5689	8.5210	8.5631	8.5240	8.5681	
Apr	8.4818	8.4996	8.4870	8.4911	8.4930	8.4944	
Ma	v 8.8802	8.5612	8.8250	8.5986	8.8350	8.6041	
Jur	9.0407	8.8948	8.9580	8.9077	8.9650	8.9151	
Jul	8.9178	8.9040	8.9080	8.8909	8.9120	8.8952	
Aug	9.9600	9.2596	9.9700	9.3588	9.9900	9.3737	
Ser	0 10.1062	10.2154	10.1800	10.2075	10.2000	10.2278	
Oct		10.1523	10.0670	10.1330	10.0780	10.1459	
Nov	/ 9.9404	9.9874	9.9830	9.9612	9.9900	9.9684	
Dee	9.8650	9.9117	9.9030	9.8990	9.9080	9.9068	
1999	40.4745	10 1104	10 1050	10 1000	10 1700	40 4070	
<u>Jar</u>		10.1104	10.1650	10.1233	10.1730	10.1378	
<u> </u>		<u>10.0150</u> 9.7694	9.9020 9.5160	9.9820 9.7233	<u>9.9100</u> 9.5210	<u>9.9877</u> 9.7301	
		9.7694		9.7233	9.3050	9.7301	
<u>Apr</u> Ma		9.3623	9.2950 9.7300	9.4142	9.3050	9.4207	
Jur		9.5418	9.3600	9.5011	9.3700	9.5096	
Jul	9.4875	9.3671	9.3600	9.3625	9.3700	9.3691	
		9.3671					
Auc		9.3981	9.3600 9.3600	9.3856 9.3303	9.3700 9.3650	9.3926 9.3358	
<u>Set</u> Oct		9.5403	9.6245	9.5719	9.6330	9.5783	
		9.5403		9.3945			
<u>Nov</u> Dec		9.4205	9.4130 9.4900	9.3945	9.4180 9.5000	<u>9.4010</u> 9.4263	

1/ This exchange rate (FIX) is determined by Banco de Mexico as an average of quotes in the wholesale foreign exchange market for operations payable in 48 hours. It is published in the Official Gazette one banking business day after its determination date, and is used to settle liabilities denominated in foreign currency payable in Mexico on the next day.

 currency payable in Mexico on the next day.
 Representative exchange rate of wholesale operations payable in two banking working days between banks, stockbrokerage firms, foreign exchange dealers and other major financial and non financial firms.

Source: Banco de Mexico.

### **Dollar Put Options Auctions Results** Table A 35

## Mililons of U.S. dollars

Auctions		Amount Offered	Average Premium	Excercise Date1/	Amount Excercised		
Date	Excercisable Month	(millions of dollars)	(pesos per dollar)		(millions of dollars)		
30/12/1998*	Jan-99	250	0.02438	4-Jan-99	200		
50/12/1990	Gan 65	230	0.02438	6-Jan-99	15		
				Subtotal	215		
				Subiotal	215		
29/01/1999*	Feb-99	250	0.03663	8-Feb-99	225		
				26-Feb-99	25		
				Subtotal	250		
26/02/1999*	Mar-99	250	0.04662	1-Mar-99	145		
20/02/1333	illar oo	230	0.04002	4-Mar-99	140		
				5-Mar-99	30		
				8-Mar-99	35		
				23-Mar-99	10		
				25-Mar-99	20		
				Subtotal	250		
				Subtotal	200		
31/03/1999*	Apr-99	250	0.03384	5-Apr-99	220		
				19-Apr-99	30		
				Subtotal	250		
30/04/1999*	May-99	250	0.03534	10-May-99	205		
50/04/1999	iviay-99	250	0.03534				
				Subtotal	205		
31/05/1999*	Jun-99	250	0.02001	16-Jun-99	187		
				17-Jun-99	63		
				Subtotal	250		
30-Jun-99	Jul-99	250	0.05089	2-Jul-99	140		
30-Jun-99	Jui-99	250	0.05089		40		
				19-Jul-99 Subtotal	180		
				Subiotal	100		
31-Jul-99	Aug-99	250	0.03125	16-Aug-99	55		
				17-Aug-99	35		
				23-Aug-99	60		
				25-Aug-99	50		
				Subtotal	200		
21 Age 00	Sep-99	050	0.00000	6.0~~ 00	F		
31-Ago-99	Seb-aa	250	0.03693	6-Sep-99	5		
				10-Sep-99	125		
				21-Sep-99	15		
				Subtotal	145		
30-Sep-99	Oct-99	250	0.02636	Subtotal	0		
29-Oct-99	Nov-99	250	0.02959	4-Nov-99	250		
				Subtotal	250		
30-Nov-99	Dec-99	250	0.02344	16-Dec-99	10		
		200	0.02011	17-Dec-99	10		
				21-Dec-99	10		
				Subtotal	30		

48 hours settlement.
 During 1999 the Exchange Comission decided not to issue an additional put option auction in case it was excercised more than 80 percent of that auction before the 16th of the month.
 Source: Banco de México.

# Table A 36 Market Capitalization of the Mexican Stock Exchange

#### Communications General Mining Manufacturing Construction Retail Services Other 1/ and Sector Sector Index Transportation 1995 156,525 117,737 94,928 698,797 36,183 78,163 65,805 149,456 1996 838,682 28,708 216,560 96,385 95,930 163,255 129,342 108,501 1997 1,262,469 36,097 314,139 125,662 199,812 265,354 154,695 166,710 1998 907,366 29,991 246,698 83,441 144,178 220,528 96,653 85,876 1999 1,460,336 41,128 283,474 114,008 202,002 522,492 164,040 133,193 1997 889,550 31,947 99,939 131,205 Jan 225,209 99,236 181,124 120,889 Feb 925,823 33,234 238,234 106,892 107,923 184,284 133,043 122,213 103,209 184,008 122,691 Mar 911,688 34,310 234,620 100,577 132,273 Apr 911,100 34,305 233,840 93,972 109,069 189,524 129,371 121,019 May 955,909 34,856 238,734 99.851 117.587 209,766 129,365 125,750 145,982 Jun 1,048,236 36,497 252,719 114,352 125,794 224,950 147,942 129,709 165.897 Jul 1,179,587 37,028 292,308 138,545 246,661 169,439 160,025 220,517 Aug 1,126,534 35,663 281,784 124,013 138,160 166,372 Sep 1,287,110 165,657 37,465 325,329 132,176 189,837 246,739 189,907 112.316 166,282 Oct 1,130,214 36,005 291,859 165,630 222,724 135,399 1.193.711 35.715 305.220 119,421 175.773 246.596 141.303 169.682 Nov 36,097 125,662 166,710 Dec 1,262,469 314,139 199,812 265,354 154,695 1998 1,123,514 32,485 287,448 109,231 169,618 237,083 140,781 146,869 Jan Feb 1,154,973 35,316 295,541 112.202 174,933 244.482 142.491 150,007 Mar 1.202.540 34.425 309,764 121,030 175,397 267,706 142,896 151,323 1<u>54,576</u> Apr 1,219,839 34,089 308,134 132,625 170,301 267,323 152,791 May 1,123,524 32,042 318,575 117,426 155,167 242,247 136,329 121,739 107,517 Jun 1.066.431 28.621 308,435 109.865 153.659 236.583 121.752 Jul 1,040,434 27,643 294,872 106,538 150,261 229,344 124,141 107,635 Aug 807,526 22,415 254,945 73,343 124,920 167,756 91,928 72,219 Sep 889.935 30,287 273.567 78,031 141,316 202.487 88,452 75,795 Oct 940,028 29,956 278,183 81,908 145,154 233,000 87,377 84,451 Nov 877,825 29,324 248,863 80,837 140,095 208,050 89,859 80,797 907,366 29,991 220,528 96,653 85,876 Dec 246,698 83,441 144,178 <u>19</u>99 905,227 Jan 30,502 249,475 88,659 133,637 231,748 92,507 78,700 949,514 30,380 249,312 95,769 142,619 246,545 99,199 85,690 Feb 125,739 97,831 Mar 1,071,430 33,348 267,932 116,379 157,267 272,934 35,654 135,915 Apr 1,149,118 278,574 98,250 174,615 297,236 128,874 May 1,147,449 31,972 269,009 99,121 168,328 328,920 129,768 120,332 Jun 1,205,854 36,752 286,043 108,778 182,473 330,236 134,899 126,673 Jul 1,110,444 34,516 272,343 92,814 171,436 307,011 116,984 115,338 Aug 1,090,217 36,006 260,662 93,916 162,809 309,888 114,915 112,020 Sep 1,073,630 36,855 252,901 96,867 160,009 302,514 111,898 112,586 Oct 1,146,390 34,641 93,481 163,788 367,786 130,752 111,378 244,564 37,258 104,240 183,229 145,559 123,805 Nov 1,254,367 267,563 392,732 Dec 1,460,336 41,128 283,474 114,008 202,002 522,492 164,040 133,193

## Million pesos, according to the last registered price

1/ Mainly holding companies.

Source: Mexican Stock Exchange.

#### Table A 37 **Mexican Stock Market Index**

# End of period, base october 1978=100

	General lindex	Mining Sector	Manufacturing Sector	Construction	Retail	Communications and Transportation	Services	Other 1/
1995	2,779	7,486	1,722	6,484	4,136	8,058	290	1,880
1996	3,361	6,123	2,330	7,892	5,566	8,260	340	3,017
1997	5,229	7,883	3,492	9,806	11,377	14,343	461	4,362
1998	3,960	6,985	2,874	5,744	7,696	13,875	272	2,752
1999	7,130	9,894	3,281	10,890	11,728	31,176	587	3,847
1997								
Jan	3,647	6,866	2,441	8,170	5,843	9,319	332	3,377
Feb	3,841	7,165	2,560	8,819	6,546	9,611	359	3,443
Mar	3,748	7,413	2,507	8,170	6,151	9,591	346	3,462
Apr	3,757	7,412	2,535	7,539	6,680	9,985	335	3,422
May	3,969	7,720	2,617	8,093	7,193	10,929	333	3,522
Jun	4,458	7,991	2,899	9,306	7,791	11,986	401	4,180
Jul	5,068	8,039	3,307	10,550	8,603	13,238	477	4,830
Aug	4,648	7,766	3,177	10,002	8,570	11,646	447	4,346
Sep	5,322	8,160	3,628	10,586	10,347	13,110	482	5,078
Oct	4,648	7,880	3,225	8,817	9,138	11,780	373	4,354
Nov	4,975	7,807	3,396	9,361	9,721	13,197	396	4,481
Dec	5,229	7,883	3,492	9,806	11,377	14,343	461	4,362
998		,				17		1
Jan	4,569	7,106	3,145	8,605	9,151	12,945	411	3,797
Feb	4,784	7,732	3,262	8,836	9,747	13,442	412	3,934
Mar	5,016	7,479	3,410	9,605	9,558	14,891	427	3,949
Apr	5,099	7,515	3,377	10,585	9,219	15,009	465	4,028
May	4,530	7,262	3,101	9,253	8,082	13,555	399	3,545
Jun	4,283	6,491	2,978	8,674	8,073	13,491	339	3,083
Jul	4,245	6,278	2,912	8,362	8,165	13,582	338	3,124
Aug	2,992	5,090	2,373	5,470	6,305	9,886	196	2,000
Sep	3,570	6,897	2,685	5,788	7,523	12,334	222	2,339
Oct	4,075	6,825	2,789	6,211	8,112	14,474	228	2,698
Nov	3,770	6,686	2,700	6,316	7,539	12,915	242	2,561
Dec	3,960	6,985	2,874	5,744	7,696	13,875	272	2,752
999					,			
Jan	3,958	7.104	2,844	6,227	7,131	14,719	252	2,509
Feb	4,261	7,079	2,872	6,896	7,919	15,896	290	2,761
Mar	4,930	7,779	3,123	8,930	8,968	17,691	396	3,169
Apr	5,414	8,506	3,217	9,657	10,611	19,250	431	3,662
May	5,478	7,688	3,092	9,790	9,969	21,350	402	3,389
Jun	5,830	8,838	3,306	10,494	11,075	21,545	440	3,633
Jul	5,260	8,300	3,104	8,892	10,191	19,932	366	3,199
Aug	5,087	8,658	2,969	8,973	9,483	19,242	354	3,118
Sep	5,050	8,862	2,893	9,243	9,239	19,101	343	3,182
Oct	5,450	8,330	2,774	8,921	9,236	22,807	426	3,160
Nov	6,136	8,959	3,076	9,954	10,881	24,981	512	3,500
Dec	7,130	9,894	3,281	10,890	11,728	31,176	587	3,847

1/ Mainly holding companies. Source: Mexican Stock Exchange.

# **Public Sector**

## Table A 38 Selected Public Finance Indicators: 1990-1999

Percent of GDP

ITEM	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Budgetary Revenues 1/	25.3	23.5	23.7	23.1	22.8	22.8	23.0	23.1	20.4	20.7
Budgetary Expenditures	27.5	23.8	22.2	22.5	23.1	23.0	23.1	23.7	21.6	21.8
Budgetary Balance	-2.2	-0.4	1.4	0.7	-0.3	-0.2	-0.1	-0.6	-1.2	-1.1
Non-Budgetary Balance 2/	-0.4	-0.1	0.0	0.0	0.2	0.2	0.1	-0.1	0.0	0.0
Economic Balance on a Cash Basis	-2.6	-0.5	1.5	0.7	-0.1	0.0	0.0	-0.7	-1.2	-1.1
Primary Balance on a Cash Basis 3/	7.2	4.8	5.2	3.3	2.1	4.7	4.3	3.5	1.7	2.5
Operational Accrued Balance 4/	1.5	6.2	6.2	1.0	-0.1	0.8	-0.4	0.2	-0.8	-1.1
Total Net Public Debt 5/	45.8	35.8	26.7	21.9	21.8	31.2	27.8	21.5	22.1	21.8
Interest Payments 6/	9.1	5.1	3.6	2.7	2.3	4.6	4.4	4.1	2.9	3.5

Data for 1991 and 1992 exclude non-recurrent revenues derived from privatizations, amounting 3.2 and 2.7 of GDP, respectively. 1/ 2/ Includes statistical discrepancy.

3/ It is the result of substracting from the economic balance interest payments of the budgetary and non-budgetary sectors.

4/ It is the result of substracting from the economic balance the amount that the domestic public debt loses in value due to inflation. Measuring by Banco de Mexico.

5/ Includes the Federal Government, public enterprises, development banks and official trust funds. Average balances. Measuring by Banco de Mexico.

6/ Excludes interest payments from non-budgetary enterprises and entities. Figures may not add due to rounding off. Source: SHCP, except when it is mencioned Banco de Mexico.

#### Table A 39 Revenues, Expenditures and Balances of the Public Sector in 1998 and 1999

	19	98		Real			
	A	ctual	Progra	ammed	A	ctual	%
ITEM	Billion Pesos	Percent of GDP	Billion Pesos	Percent of GDP	Billion Pesos	Percent of GDP	Change
	resus	UI GDF	F 6303	UI GDF	F6303	OI GDP	1999-199
Budgetary Revenues	783.0	20.36	949.8	20.43	954.9	20.66	4.6
Federal Government	545.2	14.17	688.5	14.81	671.3	14.52	5.6
Tax revenues	404.2	10.51	525.7	11.31	518.4	11.21	10.0
Income tax (ISR)	169.5	4.41	n.a.	n.a.	213.4	4.62	8.0
Value-Added tax	119.9	3.12	n.a.	n.a.	151.3	3.27	8.2
Excise taxes (IEPS)	76.6	1.99	n.a.	n.a.	105.8	2.29	18.5
Tax on imports	21.5	0.56	n.a.	n.a.	27.7	0.60	10.5
Other	16.8	0.44	n.a.	n.a.	20.2	0.44	3.3
Non-Tax revenues	141.0	3.66	162.8	3.50	153.0	3.31	-6.9
Public enterprises and entities 1/	237.9	6.18	261.3	5.62	283.6	6.13	2.3
Pemex	82.1	2.13	96.7	2.08	101.5	2.19	6.0
Other	155.8	4.05	164.6	3.54	182.1	3.94	0.3
Budgetary Expenditures	830.6	21.59	1,012.8	21.78	1,007.0	21.78	4.0
Programmable expenditures	595.3	15.47	672.4	14.46	696.8	15.07	0.4
Payment differed (-)	0.0	0.00	17.5	0.38	0.0	0.00	n.a.
Programmable accrued	595.3	15.47	689.9	14.84	696.8	15.07	0.4
Wages and salaries	265.7	6.91	n.a.	n.a.	324.8	7.03	4.8
Adquisitions	60.0	1.56	n.a.	n.a.	57.7	1.25	-17.5
Other current expenditures	87.6	2.28	n.a.	n.a.	105.0	2.27	2.8
Capital expenditures	118.9	3.09	n.a.	n.a.	131.3	2.84	-5.2
Fixed investment	112.2	2.92	n.a.	n.a.	113.6	2.46	-13.1
Financial investment	6.6	0.17	n.a.	n.a.	17.7	0.38	128.2
Aids, subsidies and transfers	63.1	1.64	n.a.	n.a.	78.1	1.69	6.1
Aids	5.0	0.13	n.a.	n.a.	5.7	0.12	-1.5
Subsidies	17.2	0.45	n.a.	n.a.	18.1	0.39	-9.7
Transfers	41.0	1.07	n.a.	n.a.	54.3	1.17	13.6
Non-programable expenditures	235.3	6.12	340.4	7.32	310.2	6.71	13.0
Arrears and other	10.4	0.27	13.5	0.29	5.6	0.12	-53.6
Revenue sharing	113.7	2.95	141.0	3.03	140.5	3.04	6.1
Interest payments	111.3	2.89	186.0	4.00	164.0	3.55	26.4
Domestic	57.4	1.49	n.a.	n.a.	101.4	2.19	51.5
Interest on conventional debt	47.3	1.23	n.a.	n.a.	77.6	1.68	40.8
Financial enhancing program	10.1	0.26	n.a.	n.a.	23.8	0.51	101.9
External	53.9	1.40	n.a.	n.a.	62.6	1.35	-0.4
Budgetary Balance	-47.6	-1.24	-63.0	-1.35	-52.0	-1.13	-6.2
Non-budgetary Balance	-0.4	-0.01	4.6	0.10	-0.5	-0.01	12.4
Direct balance	1.5	0.04	4.6	0.10	4.3	0.09	146.4
Statistical discrepancy 2/	-1.8	-0.05	0.0	0.00	-4.7	-0.10	120.5
Economic Balance on a Cash Basis	-47.9	-1.25	-58.3	-1.25	-52.5	-1.14	-6.0
Primary Balance on a Cash Basis 3/	65.7	1.71	128.6	2.77	116.8	2.53	52.5

Excludes contributions to ISSSTE.

1/ 2/ 3/ Corresponds to the difference between income-expenditure and source of financing methodologies for computing the Public Balance. It is the result of substracting from the economic balance interest payments of the budgetary and non-budgetary sectors.

n.a. Not available.

Figures may not add due to rounding off. Source: SHCP.

#### Table A 40 Revenues, Expenditures and Balances of the Public Sector: 1990-1999

ITEM	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Budgetary Revenues	25.3	23.5	23.7	23.1	22.8	22.8	23.0	23.1	20.4	20.7
Federal Government	15.9	15.5	16.0	15.5	15.2	15.2	15.5	15.9	14.2	14.5
Tax revenues	10.7	10.7	11.3	11.4	11.3	9.3	8.9	9.8	10.5	11.2
Non-Tax revenues	5.2	4.8	4.8	4.1	3.9	6.0	6.6	6.0	3.7	3.3
Public enterprises and entities 1/	9.4	7.9	7.6	7.6	7.6	7.6	7.5	7.2	6.2	6.1
Pemex	3.5	2.7	2.3	2.2	2.3	2.7	2.9	2.7	2.1	2.2
Other	5.9	5.3	5.4	5.4	5.4	4.9	4.5	4.5	4.1	3.9
Budgetary Expenditures	27.5	23.8	22.2	22.5	23.1	23.0	23.1	23.7	21.6	21.8
Programmable expenditures	15.3	15.2	15.3	16.1	17.2	15.4	15.7	16.3	15.5	15.1
Current expenditures	11.6	11.5	11.6	13.0	13.5	12.2	12.0	12.8	12.4	12.2
Capital expenditures	3.7	3.7	3.7	3.1	3.7	3.2	3.7	3.5	3.1	2.8
Non-programmable expenditures	12.3	8.7	6.9	6.4	5.9	7.6	7.4	7.4	6.1	6.7
Arrears and other	0.4	0.8	0.4	0.7	0.6	0.3	0.3	0.3	0.3	0.1
Revenue sharing 2/	2.8	2.8	2.9	3.0	2.9	2.7	2.8	3.0	3.0	3.0
Interest payments	9.1	5.1	3.6	2.7	2.3	4.6	4.4	4.1	2.9	3.5
Budgetary Balance	-2.2	-0.4	1.4	0.7	-0.3	-0.2	-0.1	-0.6	-1.2	-1.1
Non-budgetary Balance	-0.4	-0.1	0.0	0.0	0.2	0.2	0.1	-0.1	0.0	0.0
Economic Balance on a Cash Basis	-2.6	-0.5	1.5	0.7	-0.1	0.0	0.0	-0.7	-1.2	-1.1
Primary Balance on a Cash Basis 3/	7.2	4.8	5.2	3.3	2.1	4.7	4.3	3.5	1.7	2.5
Operational Accrued Balance 4/	1.5	6.2	6.2	1.0	-0.1	0.8	-0.4	0.2	-0.8	-1.1

## Percent of GDP

1/ Excludes contributions to ISSSTE.

Excludes contributions to ISSSTE.
 Transfer sto local and state governments according to tax revenue sharing rules.
 It is the result of substracting from the economic balance interest payments of the budgetary and non-budgetary sectors.
 It is the result of substracting from the economic balance the part of interest payments due to inflation. Figures may not add due to rounding off.
 Source: SHCP.

#### Table A 41 **Budgetary Revenues of the Public Sector: 1990-1999**

Percent of GDP

ITEM	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
UDGETARY REVENUES	25.3	23.5	23.7	23.1	22.8	22.8	23.0	23.1	20.4	20.7
CLASSIFICATION I										
FEDERAL GOVERNMENT	15.9	15.5	16.0	15.5	15.2	15.2	15.5	15.9	14.2	14.5
Tax revenues	10.7	10.7	11.3	11.4	11.3	9.3	8.9	9.8	10.5	11.2
Income tax	4.5	4.5	5.1	5.5	5.1	4.0	3.8	4.3	4.4	4.6
Value-Added tax	3.6	3.4	2.7	2.6	2.7	2.8	2.9	3.1	3.1	3.3
Excise taxes	1.5	1.3	1.6	1.5	2.0	1.3	1.2	1.4	2.0	2.3
Other	1.1	1.4	1.8	1.7	1.5	1.1	1.1	1.1	1.0	1.0
Non-Tax revenues	5.2	4.8	4.8	4.1	3.9	6.0	6.6	6.0	3.7	3.3
Fees and charges	4.0	3.7	3.4	3.2	2.5	4.2	4.8	4.4	2.7	2.5
Rents	0.3	0.3	0.3	0.1	0.2	0.5	0.3	0.3	0.3	0.2
Other 1/	0.7	0.6	1.0	0.8	1.1	1.3	1.6	1.4	0.6	0.7
Contributions	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUBLIC ENTERPRISES AND ENTITIES	9.4	7.9	7.6	7.6	7.6	7.6	7.5	7.2	6.2	6.1
Pemex	3.5	2.7	2.3	2.2	2.3	2.7	2.9	2.7	2.1	2.2
Other 2/	5.9	5.3	5.4	5.4	5.4	4.9	4.5	4.5	4.1	3.9
CLASSIFICATION II										
OIL REVENUES	8.2	7.1	6.8	6.4	6.4	8.1	8.7	8.4	6.6	6.7
Pemex	3.5	2.7	2.3	2.2	2.3	2.7	2.9	2.7	2.1	2.2
Exports	3.3	2.4	1.9	1.5	1.4	2.4	2.9	2.2	1.2	1.4
Domestic sales 3/	3.7	3.6	3.5	3.6	3.1	4.3	4.5	4.6	3.3	3.0
(-) Tax 4/	3.6	3.3	3.1	2.9	2.2	4.0	4.6	4.1	2.4	2.2
Federal Government	4.7	4.5	4.5	4.2	4.1	5.4	5.8	5.7	4.4	4.5
Tax revenues	1.2	1.2	1.5	1.4	1.9	1.5	1.4	1.6	2.1	2.4
Value-Added tax	0.5	0.5	0.3	0.3	0.4	0.5	0.6	0.5	0.5	0.5
Excise taxes	0.7	0.7	1.1	1.1	1.5	0.9	0.8	1.1	1.6	1.9
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-tax revenues 5/	3.5	3.3	3.0	2.8	2.2	3.9	4.5	4.1	2.3	2.1
NON-OIL REVENUES	17.1	16.4	16.9	16.7	16.4	14.7	14.2	14.7	13.8	13.9
Federal Government	11.2	11.1	11.5	11.3	11.0	9.8	9.7	10.1	9.7	10.0
Tax revenues	9.5	9.5	9.8	10.0	9.3	7.8	7.6	8.2	8.4	8.8
Income tax	4.5	4.5	5.1	5.5	5.1	4.0	3.8	4.3	4.4	4.6
Value-Added tax	3.1	3.0	2.4	2.3	2.3	2.3	2.3	2.5	2.6	2.7
Excise taxes	0.8	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4
Other 6/	1.1	1.4	1.8	1.7	1.5	1.1	1.1	1.1	1.0	1.0
Non-tax revenues	1.7	1.6	1.7	1.3	1.7	2.0	2.1	1.9	1.3	1.2
Fees and charges	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4
Rents	0.3	0.3	0.3	0.1	0.2	0.5	0.3	0.3	0.3	0.2
Other 1/	0.7	0.6	1.0	0.8	1.1	1.3	1.6	1.4	0.6	0.7
Public enterprises and entities 2/	5.9	5.3	5.4	5.4	5.4	4.9	4.5	4.5	4.1	3.9

Since 1991 includes ordinary revenues derived from privatizations. Excludes contributions to ISSSTE. Includes other revenues. Excludes taxes payed on behalf of third parties (VAT and Excise taxes). Oil extractios duties paid to the Federal Government by Pemex and the surplus over international oil prices. 1/ 2/ 3/ 4/ 5/

6/ Includes taxes on foreign trade and other taxes. Figures may not add due to rounding off.
 Source: SHCP.

#### Table A 42 Budgetary Expenditures of the Public Sector: 1990-1999

Percent of GDP

ITEM	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
BUDGETARY EXPENDITURES	27.5	23.8	22.2	22.5	23.1	23.0	23.1	23.7	21.6	21.8
PROGRAMMABLE EXPENDITURES	15.3	15.2	15.3	16.1	17.2	15.4	15.7	16.3	15.5	15.1
Current expenditures	11.6	11.5	11.6	13.0	13.5	12.2	12.0	12.8	12.4	12.2
Wages and salaries	4.5	4.7	5.0	5.7	6.0	6.4	6.2	6.8	6.9	7.0
Direct	4.5	4.7	3.8	4.0	4.0	3.8	3.6	3.8	3.6	3.7
Indirect 1/	n.d.	n.d.	1.2	1.7	2.0	2.6	2.6	3.0	3.3	3.3
Adquisitions	2.9	2.0	1.8	1.8	1.7	1.6	1.7	1.6	1.6	1.2
General services	2.6	2.6	2.9	2.9	3.1	2.8	2.5	2.6	2.2	2.2
Pensions	n.a.	n.a.	n.a.	n.a.	n.a.	1.0	1.0	1.0	1.2	1.3
Other	n.a.	n.a.	n.a.	n.a.	n.a.	1.7	1.6	1.5	1.0	0.9
Other disbursements 2/	0.2	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1
Aids, subsidies and transfers 3/	1.3	1.8	1.7	2.4	2.6	1.4	1.5	1.7	1.6	1.7
Aids	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.2	0.2	0.1	0.1
Subsidiess	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.5	0.5	0.4	0.4
Transfers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.7	0.9	1.1	1.2
Capital expenditures	3.7	3.7	3.7	3.1	3.7	3.2	3.7	3.5	3.1	2.8
Fixed investment	3.1	3.4	3.4	2.9	3.4	2.8	3.0	3.2	2.9	2.5
Direct	2.6	2.9	2.6	2.5	2.6	2.2	2.3	2.4	1.8	1.5
Indirect 4/	0.4	0.5	0.8	0.4	0.8	0.6	0.7	0.8	1.2	1.0
Financial investment 5/	0.6	0.3	0.4	0.2	0.3	0.4	0.7	0.3	0.2	0.4
NON-PROGRAMMABLE EXPENDITURES	12.3	8.7	6.9	6.4	5.9	7.6	7.4	7.4	6.1	6.7
Arrears and other 6/	0.4	0.8	0.4	0.7	0.6	0.3	0.3	0.3	0.3	0.1
Revenue sharing	2.8	2.8	2.9	3.0	2.9	2.7	2.8	3.0	3.0	3.0
Interest payments	9.1	5.1	3.6	2.7	2.3	4.6	4.4	4.1	2.9	3.5
Domestic	6.8	3.1	2.2	1.5	1.1	2.6	2.3	2.5	1.5	2.2
Interest on conventional debt	6.6	3.1	2.1	1.4	1.1	1.8	1.4	1.3	1.2	1.7
Financial enhancing program	0.2	0.1	0.1	0.0	0.0	0.9	0.9	1.3	0.3	0.5
External	2.3	1.9	1.5	1.2	1.2	2.0	2.1	1.6	1.4	1.4

1/ Includes transfers for wages and salaries to State Governments for basic education and health, as well as to non-budgetary enterprises.

2/ Expenditures by public enterprises and entities on behalf of third parties

3/ Concept adopted in 1996 with the so-called "Classification by Expenditure Objective". It basically includes aids, subsidies and transfers different from those to pay for wages and salaries and capital expenditure, as these are included in their corresponding concept (see notes 1, 4 and 5). Includes transfers for non-budgetary enterprises' capital expenditures. Includes recoverable expenditures and transfers for non-budgetary enterprises' debt amortization and financial investment.

4/

5/ 6/

Includes other net flows of the Federal Government. n.a.Not available.

Figures may not add due to rounding off.

Source: SHCP.

#### Table A 43 Total Net Debt of the Public Sector 1/

# Average level

			Public Sect	or Debt <sup>2</sup>		Debt	Consolidated with	n Banco de México	13
Year		Domestic	Ex	ternal	Total	Domestic	Ex	ternal	Total
		Billion	Million	Billion	%	Billion	Million	Billion	%
		pesos	dollars	pesos	GDP	pesos	dollars	pesos	GDP
1980		0.4	33,460	0.8	26.5	0.5	28,977	0.7	25.4
1981		0.7	44,044	1.1	29.2	0.8	39,529	1.0	28.4
1982		1.6	61,303	3.5	51.7	1.6	59,623	3.4	50.6
1983		3.0	64,753	7.9	59.9	3.0	62,358	7.6	58.1
1984		5.0	71,530	12.2	56.6	5.6	65,135	11.1	54.9
1985		7.6	75,239	19.9	56.4	8.0	70,443	18.7	54.7
1986		15.0	77,619	49.0	77.4	14.6	75,447	47.7	75.3
1987		29.5	83,304	118.6	73.0	37.7	74,880	106.2	70.9
1988		66.6	83,593	191.0	61.9	74.1	76,410	173.9	59.6
1989		99.4	81,967	202.8	55.1	89.3	80,089	198.2	52.4
1990		128.1	74,598	210.5	45.8	115.5	73,235	206.6	43.6
1991		131.3	68,915	208.3	35.8	136.5	59,888	180.9	33.4
1992		89.7	68,072	211.0	26.7	104.8	55,198	171.1	24.5
1993		61.5	68,522	213.1	21.9	88.7	50,914	158.3	19.7
1994		54.2	73,091	256.5	21.8	74.8	58,469	207.6	19.8
1995		40.9	81,864	533.1	31.2	-8.1	84,101	547.1	29.3
1996		55.9	85,376	648.3	27.8	31.5	82,289	624.6	25.9
1997		67.4	77,569	614.6	21.5	133.0	62,596	495.7	19.8
1998	January	109.8	77,872	651.0	0.0	227.6	57,378	479.7	0.0
	February	112.8	77,885	659.8	0.0	233.0	57,596	488.0	0.0
	March	114.7	77,810	660.3	21.5	236.9	57,175	485.2	20.0
	April	112.9	77,873	660.8	0.0	238.8	56,813	482.1	0.0
	May	112.7	77,756	665.9	0.0	241.2	56,497	483.8	0.0
	June	113.8	77,576	670.4	21.1	243.8	56,244	486.0	19.7
	July	116.8	77,417	672.1	0.0	249.7	55,876	484.9	0.0
	August	117.5	77,170	682.0	0.0	250.1	55,670	491.8	0.0
	September	121.3	77,098	692.1	21.9	253.4	55,692	499.9	20.3
	October	123.3	77,407	704.4	0.0	256.7	55,963	509.2	0.0
	November	126.2	77,563	711.8	0.0	260.5	56,101	514.9	0.0
	December	131.3	77,805	718.7	22.1	267.5	56,173	518.8	20.4
999 p/	January	173.3	79,817	812.1	0.0	334.5	56,462	574.5	0.0
	February	187.3	79,640	800.8	0.0	351.3	56,047	563.6	0.0
	March	199.7	79,199	782.3	22.6	365.8	55,517	548.5	21.0
	April	205.7	78,873	767.6	0.0	376.0	55,069	536.1	0.0
	May	207.4	78,737	766.5	0.0	381.8	54,735	533.0	0.0
	June	212.1	78,634	762.3	21.5	390.0	54,423	527.8	20.2
	July	220.4	78,667	759.1	0.0	401.1	54,268	523.9	0.0
	August	224.7	78,743	757.2	0.0	409.3	54,076	520.2	0.0
	September	231.4	78,839	755.8	21.6	418.8	53,973	517.7	20.5
	October	238.1	78,913	757.0	0.0	427.7	53,899	517.3	0.0
	November	244.7	78,946	755.6	0.0	436.8	53,735	514.6	0.0
	December	251.1	78,964	755.4	21.8	445.6	53,571	512.7	20.7

The present data do not match with those previosly published due to a methodological revision. 1/

Balances are defined in net terms: financial assets of the public sector are substracted from the gross debt. The Public Sector comprises the Federal Government, public enterprises and official financial intermediaries (development banks and official trust 2/ funds).

The Debt Consolidated with Banco de México includes, in addition to the entities of the Public Sector Debt, the net indebtedness of the central bank with commercial banks and with the external and private sectors. Preliminary figures. 3/

p/

#### Table A 44 Total Net Debt of the Public Sector 1/

## Stocks outstanding at the end of the period

	_		Public Sector	Debt 2/		Debt Cons	olidated with B	d with Banco de México 3	
Year		Domestic	Extern	al	Total	Domestic	Extern	al	Total
		Billion	Million	Billion	%	Billion	Million	Billion	%
		pesos	dollars	pesos	GDP	pesos	dollars	pesos	GDP
1980		0.6	36,178	0.8	31.5	0.6	30,933	0.7	30.3
1981		0.9	55,987	1.5	38.0	1.0	50,857	1.3	37.1
1982		2.6	63,171	6.1	87.4	2.4	62,558	6.0	84.7
1983		4.1	67,166	9.6	75.0	4.3	62,733	9.0	73.1
1984		5.7	74,214	14.2	66.0	6.6	66,871	12.8	64.2
1985		9.7	76,283	28.1	77.4	10.1	72,695	26.8	75.5
1986		21.5	80,093	73.3	114.8	22.5	76,751	70.2	112.2
1987		42.2	85,391	188.7	113.7	53.2	76,254	168.5	109.2
1988		84.6	84,814	193.5	66.8	78.2	82,643	188.5	64.1
1989		110.5	80,562	212.8	58.9	99.0	79,421	209.7	56.3
1990		138.6	72,629	213.9	47.7	132.2	68,512	201.8	45.2
1991		123.8	69,181	212.5	35.4	137.0	57,494	176.6	33.0
1992		69.2	66,407	206.9	24.5	85.0	53,169	165.6	22.3
1993		59.7	68,515	212.8	21.7	96.3	47,937	148.9	19.5
1994		67.4	75,131	400.1	32.8	67.4	72,086	383.9	31.7
1995		31.1	87,639	669.8	38.1	7.4	87,685	670.1	36.8
1996		89.2	79,849	626.9	28.3	92.9	73,628	578.0	26.5
1997		112.0	76,555	618.8	23.0	228.7	56,739	458.6	21.6
1998	January	109.8	77,872	651.0	0.0	227.6	57,378	479.7	0.0
	February	115.9	77,899	668.6	0.0	238.4	57,814	496.2	0.0
	March	118.3	77,659	661.4	21.6	244.8	56,334	479.8	20.1
	April	107.7	78,062	662.1	0.0	244.5	55,726	472.7	0.0
	May	111.7	77,287	686.3	0.0	250.9	55,232	490.5	0.0
	June	119.7	76,678	693.2	21.9	256.3	54,977	497.0	20.3
	July	134.9	76,465	681.9	0.0	285.6	53,672	478.6	0.0
	August	122.4	75,437	751.4	0.0	252.4	54,226	540.1	0.0
	September	151.2	76,525	773.4	24.9	279.9	55,865	564.6	22.7
	October	141.2	80,183	814.5	0.0	286.8	58,409	593.3	0.0
	November	155.8	79,126	786.5	0.0	297.7	57,477	571.3	0.0
	December	187.4	80,465	793.8	25.5	344.8	56,970	562.0	23.6
999 p/	January	173.3	79,817	812.1	0.0	334.5	56,462	574.5	0.0
	February	201.2	79,464	789.5	0.0	368.1	55,632	552.7	0.0
	March	224.6	78,318	745.3	22.3	394.8	54,458	518.2	21.0
	April	223.7	77,895	723.4	0.0	406.5	53,726	499.0	0.0
	Мау	214.1	78,193	762.4	0.0	404.9	53,395	520.6	0.0
	June	235.7	78,120	741.2	21.5	431.0	52,865	501.6	20.5
	July	269.8	78,862	739.9	0.0	468.3	53,338	500.5	0.0
	August	255.3	79,277	743.8	0.0	466.0	52,732	494.7	0.0
	September	285.1	79,610	745.0	22.6	495.3	53,153	497.4	21.7
	October	298.0	79,572	767.9	0.0	507.9	53,226	513.7	0.0
	November	310.7	79,273	741.6	0.0	527.9	52,100	487.4	0.0
	December	321.3	79,166	753.2	23.2	541.8	51,769	492.5	22.4

1/

The present data do not match with those previosly published due to a methodological revision. Balances are defined in net terms: financial assets of the public sector are substracted from the gross debt. The Public Sector comprises the Federal Government, public enterprises and official financial intermediaries (development banks and official trust funds). 2/

The Debt Consolidated with Banco de México includes, in addition to the entities of the Public Sector Debt, the net indebtedness of the central bank with commercial banks and with the external and private sectors. 3/

p/ Preliminary figures.

# Table A 45 Total Net Debt of the Non Financial Public Sector 1/

## Conventional methodology 2/

## Stocks outstanding at the end of the period

	_			Ion Financial Publi	
		Domestic		xternal	Total Net Debt
		(Billion	(Million	(Billion	%
		Pesos)	dollars)	Pesos)	GDP
1982		4.9	37,830	3.6	81.8
1983		7.7	44,517	6.4	75.0
1984		10.9	46,054	8.8	63.7
1985		20.0	48,155	17.7	75.2
1986		48.5	49,802	45.6	114.3
1987		111.1	52,747	116.6	112.0
1988		156.1	54,341	124.0	67.8
1989		195.3	53,184	140.5	61.6
1990		207.7	48,905	144.0	47.9
1991		205.9	48,368	148.5	37.5
1992		170.0	45,804	142.7	27.8
1993		172.3	41,441	128.7	24.0
1994		257.9	41,033	218.5	33.5
1995		278.2	51,637	394.6	36.6
1996		319.7	53,921	466.7	31.1
1997		328.3	51,372	415.3	23.4
1998	January	332.9	51,194	428.0	
	February	344.5	51,446	441.6	
	March	344.1	52,118	443.9	21.5
	April	340.3	52,597	446.1	
	May	349.0	52,091	462.6	
	June	357.4	52,311	472.9	22.1
	July	367.6	52,739	470.3	
	August	389.9	50,817	506.1	
	September	420.5	50,648	511.9	24.7
	October	416.9	52,779	536.1	
	November	426.4	52,396	520.8	
	December	443.3	52,392	516.8	25.0
1999 n/	January	426.0	54,797	557.5	2010
	February	430.4	55,963	556.0	
	March	431.7	55,429	527.5	22.1
	April	403.6	55,584	516.2	22.1
	May	406.3	56,535	551.2	
	-				21.4
	June	435.1	56,542	536.4	21.4
	July	456.6	56,842	533.3	
	August	449.9	57,086	535.6	
	September	476.3	56,955	533.0	22.1
	October	484.2	57,359	553.5	
	November	497.0	57,308	536.1	
	December	530.8	57,150	543.7	23.2

 Due to methodological revision the historical figures of the total net debt of the non-financial public sector may not match with those presented in previous reports.
 Total net debt of the non-financial public sector is estimated on an accrued basis, with the

2/ Total net debt of the non-financial public sector is estimated on an accrued basis, with the available information of the banking system, the Federal Government domestic securities at market value, and the external debt classified by debtor of the credit. This information differs from that reported by the Ministry of Finance basically because the former considers only preliminary data, which are subject to change. Furthermore, the Ministry of Finance presents government securities at placement value, while Banco de México reports all securities at market value.

p/ Preliminary figures.

## Table A 46 **Total Federal Government Domestic Securities by Instrument 1/** Stocks outstanding at the end of the period at market value 2/ Million of pesos

	Total Securities	Cetes	Bondes	Ajustabonos	Udibonos	Other Instruments <sup>3/</sup>
1986	10,528	8,185	0	0	0	2,343
1987	32,679	28,006	359	0	0	4,315
1988	74,945	42,878	20,186	0	0	11,882
1989	122,127	54,353	55,677	3,225	0	8,872
1990	161,433	72,001	64,513	14,311	0	10,608
1991	171,654	72,658	57,979	38,988	0	2,029
1992	134,755	59,338	36,848	36,271	0	2,298
1993	138,318	81,431	17,036	33,695	0	6,157
1994	228,885	40,689	8,316	29,128	0	150,753
1995	136,000	48,590	44,970	40,087	0	2,353
1996	161,572	62,114	67,849	26,252	5,357	1
1997	272,210	137,813	81,768	15,950	36,678	1
1998						
January	283,402	146,646	80,916	16,278	39,561	1
February	296,066	154,393	82,329	16,551	42,792	1
March	312,171	168,834	81,642	16,691	45,003	1
April	322,516	170,033	86,380	16,852	49,251	1
May	321,789	167,085	86,659	16,956	51,089	1
June	330,671	171,901	87,794	17,177	53,800	1
July	337,555	171,174	92,055	16,955	57,371	1
August	343,951	175,201	93,583	16,304	58,863	1
September	324,716	153,956	96,294	15,845	58,620	1
October	330,956	145,044	111,249	13,924	60,739	1
November	338,891	136,785	128,644	12,473	60,989	1
December	353,240	127,600	151,836	10,970	62,833	1
1999 p/						
January	358,731	111,901	172,544	9,640	64,647	1
February	371,320	99,579	196,690	8,751	66,299	1
March	397,224	97,982	223,869	6,197	69,176	1
April	419,864	97,075	245,394	5,584	71,811	1
May	438,038	96,091	268,041	4,141	69,764	1
June	444,819	91,450	278,034	3,584	71,750	1
July	450,020	94,037	279,500	2,248	74,235	1
August	458,775	94,333	286,853	2,267	75,322	1
September	474,719	101,204	296,704	1,390	75,421	1
October	498,232	107,980	310,817	803	78,631	1
November	516,755	115,566	325,015	204	75,970	1
December	546,324	129,045	337,271	0	80,008	1

1/ Figures consistent with the new methodology of total assets and liabilities of the banking system.

<sup>2/</sup> Includes securities issued by the Federal Government and securities placed by the Central Bank to achieve monetary objectives.

<sup>3/</sup> Includes : Bonos de Deuda Pública, Petrobonos, Bonos de Indemnización Bancaria, Pagafes Bonos de Reconstrucción Urbana and Tesobonos. These securities have been gradually retired from the market.

p/ Preliminary figures.

## Table A 47 Holdings of Federal Government Domestic Securities by Sector 1/ Stocks outstanding at the end of the period at market value2/

Millions of pesos

	Total	Firms and	Non Financial	Bank of	Development	Commercial	Other	Repos
	Securities	Households <sup>3/</sup>	Public	Mexico	Banks	Banks	Financial	
			Sector				Intermediaries	
1986	10,528	3,710	146	6,209	132	331	0	0
1987	32,679	14,347	531	14,131	815	2,856	0	0
1988	74,945	34,687	734	24,096	851	14,562	0	15
1989	122,127	56,317	986	33,746	1,274	27,737	0	2,066
1990	161,433	81,898	1,776	37,990	609	36,517	653	1,989
1991	171,654	75,855	2,602	31,814	808	55,450	931	4,193
1992	134,755	75,593	4,680	26,251	174	21,604	1,229	5,225
1993	138,318	117,005	4,999	4,286	51	2,461	1,231	8,286
1994	228,885	141,603	6,501	2,525	2,232	6,115	0	69,910
1995	136,000	93,455	8,956	13,991	2,886	16,712	0	0
1996	161,572	130,211	14,158	11,301	1,890	4,012	0	0
1997	272,210	212,549	39,560	0	2,505	17,596	0	0
1998								
January	283,402	241,608	36,654	0	624	4,516	0	0
February	296,066	252,857	38,886	0	991	3,332	0	0
March	312,171	262,848	42,133	0	922	6,268	0	0
April	322,516	282,648	36,913	0	273	2,682	0	C
May	321,789	281,100	36,984	0	240	3,466	0	C
June	330,671	291,767	30,532	0	224	8,148	0	C
July	337,555	303,763	24,786	0	209	8,797	0	C
August	343,951	297,175	29,290	0	194	17,291	0	C
September	324,716	281,733	24,605	0	365	18,013	0	C
October	330,956	302,328	19,723	0	386	8,519	0	C
November	338,891	314,890	21,708	0	315	1,979	0	C
December	353,240	320,167	24,630	0	231	8,212	0	C
1999 p/								
January	358,731	323,186	26,530	0	817	8,198	0	0
February	371,320	345,932	16,527	0	239	8,622	0	0
March	397,224	373,152	15,620	0	197	8,254	0	0
April	419,864	392,598	18,013	0	160	9,093	0	0
May	438,038	414,649	21,253	0	178	1,959	0	C
June	444,819	415,587	26,892	0	260	2,079	0	C
July	450,020	425,153	22,654	0	307	1,906	0	C
August	458,775	428,197	26,748	0	387	3,443	0	C
September	474,719	446,420	26,539	0	472	1,287	0	C
October	498,232	462,342	31,263	0	1,179	3,448	0	C
November	516,755	483,215	30,431	0	917	2,193	0	C
December	546,324	511,598	27,080	0	2,677	4,969	0	0

Figures consistent with the new methodology of total assets and liabilities of the banking system.
 Includes securities issued by the Federal Government and securities placed by the Central Bank to achieve monetary objectives.
 Since 1997 includes holdings of securities by the Investment Societies of Retirement Funds (Siefores).
 Preliminary figures.

Table A 48	Mexican Brady Bo	onds
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End of		Bid Prices 1/			Stripped Yield	2/	Yield		Spread 3/	
Period		(Cents per doll	ar)		(Percent)		(Percent)		(Percent)	
	Par	Discount	Global	Par	Discount	Global	30 Year T-Bill	Par	Discount	Globa
December 1991	60.3	77.8		12.6	13.6		7.5	5.1	6.1	
December 1992	65.3	81.1		11.5	12.7		7.4	4.1	5.3	
December 1993	83.4	95.8		8.3	8.6		6.3	2.0	2.3	
December 1994	53.0	77.4		16.3	15.8		7.9	8.4	7.9	
December 1995	65.9	71.7		14.8	14.6		6.0	8.8	8.6	
December 1996	74.0	86.1	105.9	11.9	11.9	10.8	6.5	5.4	5.4	4.3
December 1997	83.3	92.4	118.0	10.4	10.3	9.6	5.9	4.5	4.4	3.7
December 1998	77.9	81.5	106.6	11.7	14.2	10.7	5.1	6.6	9.1	5.6
1997	,									
January	75.4	91.0	108.9	10.9	10.6	10.5	6.8	4.1	3.8	3.7
February	76.8	91.6	111.6	10.4	10.5	10.2	6.8	3.6	3.7	3.4
March	71.6	87.1	106.0	11.7	12.0	10.8	7.1	4.6	4.9	3.7
April	72.1	88.5	106.0	11.9	11.5	10.8	7.0	5.0	4.6	3.8
May	75.2	92.1	110.4	10.9	10.7	10.3	6.9	4.0	3.7	3.4
June	77.5	92.9	114.1	10.5	10.4	10.0	6.8	3.7	3.6	3.2
July	82.5	94.7	121.7	9.8	9.6	9.3	6.3	3.5	3.3	3.0
August	79.9	94.2	118.7	10.0	10.0	9.6	6.6	3.4	3.4	2.9
September	82.8	95.3	121.1	9.6	9.6	9.4	6.4	3.2	3.2	2.9
October	77.1	88.4	106.8	11.1	11.4	10.7	6.2	5.0	5.3	4.6
November	81.1	91.0	115.7	10.9	10.8	9.8	6.0	4.9	4.7	3.8
December	83.3	92.4	118.0	10.4	10.3	9.6	5.9	4.5	4.4	3.7
1998	3									
January	84.7	92.8	121.0	11.3	10.0	9.4	5.8	5.3	4.1	3.4
February	84.2	93.2	122.4	11.3	10.1	9.2	5.9	5.3	4.1	3.3
March	84.6	94.1	121.6	11.3	9.9	9.3	5.9	5.5	4.1	3.5
April	84.1	93.4	120.6	11.3	10.1	9.4	6.0	5.7	4.5	3.8
Мау	83.2	91.2	116.2	11.4	10.7	9.8	5.8	5.6	5.0	4.1
June	82.6	89.5	113.4	11.4	11.4	10.0	5.6	6.1	6.1	4.7
July	82.7	90.1	116.7	11.4	11.2	9.7	5.7	6.5	6.2	4.7
August	72.1	77.4	84.9	11.5	17.2	13.6	5.3	6.4	12.1	8.4
September	74.6	77.3	98.6	11.7	16.2	11.6	5.0	6.6	11.1	6.6
October	74.8	78.0	103.0	11.7	15.4	11.1	5.2	6.6	10.3	6.0
November	77.8	81.5	107.3	11.7	14.4	10.6	5.1	6.6	9.3	5.6
December	77.9	81.5	106.6	11.7	14.2	10.7	5.1	6.2	8.6	5.1
1999	)									
January	75.9	79.5	106.6	11.8	15.3	10.7	5.1	5.9	9.5	4.9
February	74.6	80.6	105.1	11.7	14.9	10.9	5.6	5.7	8.9	4.9
March	78.4	84.8	111.4	11.7	13.0	10.2	5.6	5.6	6.9	4.1
April	79.8	86.2	118.9	11.7	12.8	9.5	5.7	5.7	6.8	3.5
May	74.2	82.6	110.1	11.7	14.8	10.3	5.8	5.6	8.7	4.3
June	73.6	83.3	110.9	15.0	15.3	10.3	6.0	8.9	9.1	4.1
July	70.9	81.4	107.3	16.5	16.9	10.6	6.1	10.2	10.6	4.4
August	71.5	82.8	108.8	16.1	16.6	10.5	6.1	9.7	10.1	4.0
September	73.5	84.9	109.9	15.2	15.3	10.4	6.1	15.2	15.3	10.4
October	74.9	87.5	111.7	12.9	13.1	10.2	6.2	12.9	13.1	10.2
November	77.4	90.5	116.0	11.7	12.2	9.8	6.3	11.7	12.2	9.8
December	78.9	93.5	119.2	10.8	11.3	9.5	6.5	10.8	11.3	9.5

Indicative prices quoted in the secondary market for the Brady Bonds Par W-A and Discount A , as well as for the 30-year UMS.
 Yield attributable to the uncovered, or pure, country risk. This measure "strips out" the effect of the credit enhancement incorporated in the bond.
 Stripped yield minus 30-year T-Bill yield.

# **External Sector**

#### Table A 49 **External Sector Selected Indicators**

	1994	1995	1996	1997	1998	1999 p
ALANCE OF PAYMENTS						
	(Billions	of dollars)				
Current account	-29.7	-1.6	-2.3	-7.4	-15.7	-14.0
Trade balance 1/	-18.5	7.1	6.5	0.6	-7.9	-5.4
Capital account	14.6	15.4	4.1	15.8	17.5	14.1
Foreign direct investment	11.0	9.5	9.2	12.8	11.3	11.6
Change in net international reserves	-18.4	9.6	1.8	10.5	2.1	0.6
Net international reserves (stock at the end of	of period) 6.1	15.7	17.5	28.0	30.1	30.7
	(Percen	t of GDP)				
Current account	-7.1	-0.6	-0.7	-1.8	-3.7	-2.9
Capital account	3.5	5.4	1.2	3.9	4.2	2.9
DREIGN TRADE						
	(Annual chang	les in percer	nt)			
Exports	17.3	30.6	20.7	15.0	6.4	16.4
Oil	0.4	13.1	38.4	-2.8	-37.0	39.1
Non oil	20.2	33.1	18.6	17.5	11.3	14.9
Manufacturing	20.9	32.1	20.7	18.1	11.9	15.2
Other	9.1	50.3	-11.4	6.5	-1.0	7.8
Imports	21.4	-8.7	23.5	22.7	14.2	13.3
Consumption goods	21.3	-43.9	24.8	40.1	19.1	9.6

## **GROSS EXTERNAL DEBT AND** INTEREST PAYMENTS

Intermediate goods

Capital goods

(Percent of current account revenues)											
Gross external debt	181.3	174.8	141.7	116.2	115.4	102.1					
Public sector 2/	113.9	121.8	96.6	74.0	71.7	60.5					
Private sector	67.4	53.0	45.0	42.1	43.7	41.6					
Interest payments 3/	15.1	14.0	11.6	9.4	8.9	8.1					
	(Percen	t of GDP)									
Gross external debt	(Percen 33.8	t of GDP) 59.3	49.2	38.1	38.5	33.8					
Gross external debt Public sector 2/	· · · · · · · · · · · · · · · · · · ·	,	49.2 33.6	38.1 24.3	38.5 23.9	33.8 20.0					
	33.8	59.3									

21.6

20.5

3.4

-34.7

23.1

25.6

18.7

38.4

13.6

14.6

12.8

18.5

1/ 2/ 3/

Includes in-bond industry. Includes Banco de México. Includes public and private sectors.

p/ Preliminary figures.
 Note: Totals may not add up due to rounding off.
 Source: Banco de México and SHCP.

#### **Balance of Payments** Table A 50

## Traditional format

Millions of U.S. dollars

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999 p/
urrent Account	-7,451.0	-14,646.7	-24,438.5	-23,399.2	-29,662.0	-1,576.7	-2,330.3	-7,448.4	-15,726.4	-14,012.8
Revenues	56,070.9	58,087.3	61,668.9	67,752.1	78,371.8	97,029.3	115,493.5	131,534.8	140,473.0	159,893.0
Merchandise Exports	40,710.9	42,687.5	46,195.6	51,886.0	60,882.2	79,541.6	95,999.7	110,431.4	117,459.6	136,703.4
Non-Factor Services	8,021.0	8,790.1	9,191.8	9,419.2	10,301.4	9,665.1	10,779.0	11,270.1	11,926.9	11,897.6
Tourists	3,933.8	4,339.3	4,471.1	4,564.1	4,854.5	4,688.0	5,287.5	5,747.6	6,037.6	5,869.4
One-day visitors	1,592.6	1,619.8	1,613.7	1,602.9	1,508.9	1,490.8	1,646.0	1,845.0	1,859.8	1,717.2
Other	2,494.7	2,831.0	3,107.0	3,252.2	3,937.9	3,486.3	3,845.4	3,677.5	4,029.5	4,311.1
Factor Services	3,346.6	3,599.6	2,876.0	2,790.0	3,366.5	3,827.7	4,153.7	4,560.4	5,047.1	4,951.9
Interest	2,667.0	2,905.9	2,159.6	2,048.0	2,699.6	3,017.9	3,306.7	3,749.6	4,034.3	4,149.3
Other	679.6	693.7	716.4	742.0	666.9	809.8	847.0	810.8	1,012.8	802.7
Transfers	3,992.3	3,010.2	3,405.5	3,656.9	3,821.7	3,994.9	4,561.1	5,272.9	6,039.5	6,340.
Expenditures	63,521.9	72,734.0	86,107.4	91,151.3	108,033.7	98,606.0	117,823.8	138,983.2	156,199.4	173,905.8
Merchandise Imports	41,593.3	49,966.6	62,129.4	65,366.5	79,345.9	72,453.1	89,468.8	109,807.8	125,373.1	142,063.8
Non-Factor Services	9,942.2	10,541.0	11,488.1	11,549.1	12,269.7	9,000.6	10,230.9	11,800.0	12,486.3	13,516.8
Insurance and Freight	1,530.8	1,758.0	2,084.0	2,180.7	2,639.8	1,974.5	2,510.0	3,312.4	3,699.1	4,109.2
Tourists	2,171.5	2,149.8	2,541.7	2,416.6	2,444.2	1,240.4	1,536.4	1,821.2	2,060.6	1,946.1
One-day visitors	3,347.2	3,663.1	3,565.8	3,145.2	2,893.5	1,930.1	1,850.8	2,070.7	2,207.2	2,590.9
Other	2,892.6	2,970.1	3,296.6	3,806.7	4,292.2	3,855.5	4,333.8	4,595.7	4,519.3	4,870.6
Factor Services	11,972.5	12,207.6	12,470.8	14,219.1	16,378.3	17,117.3	18,094.0	17,349.9	18,313.0	18,300.1
Interest	9,222.0	9,215.2	9,610.6	10,934.4	11,806.9	13,575.4	13,360.9	12,436.2	12,481.9	12,977.0
Other	2,750.5	2,992.4	2,860.2	3,284.7	4,571.4	3,542.0	4,733.1	4,913.7	5,831.1	5,323.2
Transfers	14.0	18.9	19.2	16.5	39.8	35.0	30.1	25.5	27.1	25.1
pital Account	8,297.2	24,507.5	26,418.8	32,482.3	14,584.2	15,405.6	4,069.2	15,762.7	17,464.5	14,141.8
Liabilities	16,996.7	25,507.1	20,866.9	36,084.8	20,254.2	22,763.3	10,410.4	9,046.9	17,033.0	16,781.5
Indebtedness	12,369.0	11,007.2	3,544.1	13,573.7	7,423.3	26,577.4	-2,483.1	-7,582.7	6,173.7	1,312.8
Development Banks	4,995.1	2,340.7	1,730.2	3,834.4	4,381.9	55.2	-2,148.8	-2,191.6	-724.9	-1,774.5
Commercial Banks	4,384.0	5,608.9	915.9	4,673.0	1,570.7	-4,108.0	-1,655.0	-1,869.4	-927.8	-1,720.5
Banco de México	-365.1	-220.0	-460.0	-1,174.9	-1,203.2	13,332.9	-3,523.8	-3,486.8	-1,071.6	-3,684.7
Non-Banking Public Sector	1,859.0	-586.4	-3,708.5	-1,170.9	-763.1	14,390.3	2,140.5	-5,523.9	2,433.0	1,707.1
Non-Banking Private Sector	1,496.0	3,864.0	5,066.5	7,412.1	3,437.0	2,907.0	2,704.0	5,489.0	6,465.0	6,785.4
Foreign Direct Investment	2,633.2	4,761.5	4,392.8	4,388.8	10,972.5	9,526.3	9,185.5	12,829.6	11,310.7	11,568.1
Equity	1,994.5	6,332.0	4,783.1	10,716.6	4,083.7	519.2	2,800.6	3,215.3	-665.6	3,769.2
Money Market	0.0	3,406.4	8,146.9	7,405.7	-2,225.3	-13,859.6	907.5	584.8	214.1	131.4
Assets	-8,699.5	-999.6	5,551.9	-3,602.5	-5,670.0	-7,357.7	-6,341.2	6,715.8	431.5	-2,639.7
In Foreign Banks	760.7	921.2	2,185.9	-1,280.4	-3,713.5	-3,163.5	-6,054.7	4,859.6	155.4	-1,672.0
Credits Granted Abroad	-529.5	18.6	62.5	-281.1	-40.8	-276.4	-624.7	-113.6	329.8	425.0
Exernal Debt Guarrantees	-7,354.0	-604.3	1,165.2	-564.3	-615.1	-662.2	543.7	-707.7	-768.7	-835.8
Other	-1,576.7	-1,335.0	2,138.3	-1,476.8	-1,300.6	-3,255.6	-205.5	2,677.4	715.0	-556.9
rors and Omissions	2,520.4	-2,166.7	-960.8	-3,142.4	-3,313.6	-4,238.2	34.6	2,197.2	400.4	463.1
hange in Net International Reserves	3,547.9	7,378.3	1,007.6	5,983.3	-18,389.3	9,592.8	1,768.2	10,493.7	2,136.9	593.6
aluation Adjustments	-181.4	315.7	11.9	-42.6	-2.0	-2.1	5.4	17.8	1.5	-1.4

p/ Preliminary figures.Note: Totals may not add up due to rounding-off.

#### Table A 51 **Balance of Payments**

## Format beginning in 1994

Millions of U.S. dollars

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999 p/
Current Account	-7,451.0	-14,646.7	-24,438.5	-23,399.2	-29,662.0	-1,576.7	-2,330.3	-7,448.4	-15,726.4	-14,012.8
Revenues	56,070.9	58,087.3	61,668.9	67,752.1	78,371.8	97,029.3	115,493.5	131,534.8	140,473.0	159,893.0
Merchandise Exports	40,710.9	42,687.5	46,195.6	51,886.0	60,882.2	79,541.6	95,999.7	110,431.4	117,459.6	136,703.4
Non-Factor Services	8,021.0	8,790.1	9,191.8	9,419.2	10,301.4	9,665.1	10,779.0	11,270.1	11,926.9	11,897.6
Tourists	3,933.8	4,339.3	4,471.1	4,564.1	4,854.5	4,688.0	5,287.5	5,747.6	6,037.6	5,869.4
One-day visitors	1,592.6	1,619.8	1,613.7	1,602.9	1,508.9	1,490.8	1,646.0	1,845.0	1,859.8	1,717.2
Other	2,494.7	2,831.0	3,107.0	3,252.2	3,937.9	3,486.3	3,845.4	3,677.5	4,029.5	4,311.1
Factor Services	3,346.6	3,599.6	2,876.0	2,790.0	3,366.5	3,827.7	4,153.7	4,560.4	5,047.1	4,951.9
Interest	2,667.0	2,905.9	2,159.6	2,048.0	2,699.6	3,017.9	3,306.7	3,749.6	4,034.3	4,149.3
Other	679.6	693.7	716.4	742.0	666.9	809.8	847.0	810.8	1,012.8	802.7
Transfers	3,992.3	3,010.2	3,405.5	3,656.9	3,821.7	3,994.9	4,561.1	5,272.9	6,039.5	6,340.1
Expenditures	63,521.9	72,734.0	86,107.4	,	108,033.7	98,606.0			156,199.4	,
Merchandise Imports	41,593.3	49,966.6	62,129.4	65,366.5	79,345.9	72,453.1		109,807.8		142,063.8
Non-Factor Services	9,942.2	10,541.0	11,488.1	11,549.1	12,269.7	9,000.6	10,230.9	11,800.0	12,486.3	13,516.8
Insurance and Freight	1,530.8	1,758.0	2,084.0	2,180.7	2,639.8	1,974.5	2,510.0	3,312.4	3,699.1	4,109.2
Tourists	2,171.5	2,149.8	2,541.7	2,416.6	2,444.2	1,240.4	1,536.4	1,821.2	2,060.6	1,946.1
One-day visitors	3,347.2	3,663.1	3,565.8	3,145.2	2,893.5	1,930.1	1,850.8	2,070.7	2,207.2	2,590.9
Other	2,892.6	2,970.1	3,296.6	3,806.7	4,292.2	3,855.5	4,333.8	4,595.7	4,519.3	4,870.6
Factor Services	11,972.5	12,207.6	12,470.8	14,219.1	16,378.3	17,117.3	18,094.0	17,349.9	18,313.0	18,300.1
Interest	9,222.0	9,215.2	9,610.6	10,934.4	11,806.9	13,575.4	13,360.9	12,436.2	12,481.9	12,977.0
Other	2,750.5	2,992.4	2,860.2	3,284.7	4,571.4	3,542.0	4,733.1	4,913.7	5,831.1	5,323.2
Transfers	14.0	18.9	19.2	16.5	39.8	35.0	30.1	25.5	27.1	25.1
Capital Account	8,297.2	24,507.5	26,418.8	32,482.3	14,584.2	15,405.6	4,069.2	,	17,464.5	14,141.8
Liabilities	16,996.7	25,507.1	20,866.9	36,084.8	20,254.2	22,763.3	10,410.4	9,046.9	17,033.0	16,781.5
Loans and Deposits Development Banks	<b>10,993.0</b> 4,809.9	7,992.4 1,650.5	-1,567.0 1.174.8	2,776.7 193.6	1,099.5 1,329.3	22,951.7 958.6	-12,193.5 -1.246.0	-8,819.7 -1.020.9	6,301.4 239.6	<b>-5,576.6</b> -765.4
·		,	294.9		,	-4,982.0	1	1		
Commercial Banks	4,384.0	5,751.9 -220.0	-460.0	3,328.0	1,470.7	-4,982.0	-1,720.0	-1,978.4	-142.8	-1,368.5
Banco de México	-365.1	-220.0	-460.0	-1,174.9	-1,203.2	13,332.9	-3,523.8	-3,486.8	1,270.2	-3,684.7
Non-Banking Public Sector	397.0	2,381.0	2,128.5	2,832.1	1,193.0	3,149.0	1,968.0	· · · ·	6,006.0	4,269.4
Non-Banking Private Sector Foreign Investment	6.003.7	17,514.7	2,120.5 22,433.9	33,308.1	19,193.0 19,154.7	-188.4	22.603.9	,	10.731.6	4,269.4 22,358.1
Direct	2,633.2	4,761.5	4,392.8	4,388.8	10,972.5	9,526.3	9,185.5	,	11,310.7	11,568.1
Portfolio	3,370.5	12,753.2	4,392.8	28,919.3	8,182.2	-9,714.7	13,418.5	5,037.1	-579.2	10,790.0
Equity	1.994.5	6,332.0	4,783.1	10,716.6	4,083.7	519.2	2,800.6	3,215.3	-665.6	3,769.2
Money Market	0.0	3,406.4	8,146.9	7,405.7	-2,225.3	-13,859.6	907.5	584.8	214.1	131.4
Public Sector	0.0	3,406.4	8,146.9	7,012.7	-1,942.3	-13,790.6	948.5	490.1	290.2	106.4
Private Sector	0.0	0.0	0.0	393.0	-283.0	-69.0	-41.0	94.7	-76.1	25.0
Foreign Currency securities	1,376.0	3.014.8	5,111.1	10.797.0	6,323.8	3,625.7	9.710.4	1,237.0	-127.7	6,889.4
Public Sector	277.0	1,674.8	1,552.1	4,872.0	3,979.8	2,993.7	8,909.4	,	198.3	4,725.4
Private Sector	1,099.0	1.340.0	3.559.0	5.925.0	2.344.0	632.0	801.0	2,896.0	-326.0	2,164.0
Assets	-8,699.5	-999.6	5,551.9	-3,602.5	-5,670.0	-7,357.7	-6,341.2	6,715.8	431.5	-2,639.7
In Foreign Banks	760.7	921.2	2,185.9	-1,280.4	-3,713.5	-3,163.5	-6,054.7	4,859.6	155.4	-1,672.0
Credits Granted Abroad	-529.5	18.6	62.5	-281.1	-40.8	-276.4	-624.7	-113.6	329.8	425.0
External Debt Guarantees	-7,354.0	-604.3	1,165.2	-564.3	-615.1	-662.2	543.7	-707.7	-768.7	-835.8
Other	-1,576.7	-1,335.0	2,138.3	-1,476.8	-1,300.6	-3,255.6	-205.5	2,677.4	715.0	-556.9
Errors y Omissions	2,520.4	-2,166.7	-960.8	-3,142.4	-3,313.6	-4,238.2	34.6	2,197.2	400.4	463.1
	3,547.9	7,378.3	1,007.6	5 092 2	-18,389.3	9,592.8	1,768.2	,	2,136.9	593.6
Change in Net International Reserves	3,347.9	1,570.5	1,007.0	5,905.5	-10,309.3	3,332.0	1,700.2	10,433.7	2,100.0	

This balance of payments format differs from the traditional one (table A49) in the classification criteria used for transactions involving the issuance of bonds and notes placed abroad.

In the traditional format those transactions are classified as external indebtedness, whereas in this format they are recorded undeer portfolio investment. This format is consistent with the balance of payments methodology recommended by the International Monetary Fund, in use in Mexico since 1994.

p/ Preliminary figures.
 Note: Totals may not add up due to rounding off.

#### Table A 52 **Trade Balance**

## Millions of U.S. dollars

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999 p/
Exports	40,710.9	42,687.5	46,195.6	51,886.0	60,882.2	79,541.6	95,999.7	110,431.4	117,459.6	136,703.4
In-bond industry Other	13,872.5 26,838.4	15,833.1 26,854.5	18,680.1 27,515.6	21,853.0 30,032.9	26,269.2 34,613.0	31,103.3 48,438.3	36,920.3 59,079.4	45,165.6 65,265.8	53,083.1 64,376.4	63,749. 72,954.
	20,00014	20,004.0	21,01010	00,002.0	04,01010	-10,-10010	00,01014	00,200.0	04,01014	12,004
Oil	10,103.7	8,166.4	8,306.6	7,418.4	7,445.0	8,422.6	11,653.7	11,323.2	7,134.3	9,920.
Crude oil	8,920.7	7,264.8	7,419.5	6,485.3	6,624.1	7,419.6	10,705.3	10,333.8	6,367.9	8,851
Other	1,183.0	901.6	887.1	933.1	820.9	1,003.0	948.4	989.4	766.4	1,069
Non oil	30,607.3	34,521.1	37,889.0	44,467.6	53,437.2	71,119.0	84,346.0	99,108.2	110,325.2	126,783
Agriculture	2,162.4	2,372.5	2,112.4	2,504.2	2,678.4	4,016.2	3,592.3	3,828.1	3,796.7	4,144
Extractive	616.9	546.8	356.2	278.2	356.7	545.0	449.2	477.9	466.2	452
Manufacturing	27,827.9	31,601.8	35,420.5	41,685.1	50,402.1	66,557.9	80,304.6	94,802.2	106,062.3	122,185
In-bond industry	13,872.5	15,833.1	18,680.1	21,853.0	26,269.2	31,103.3	36,920.3	45,165.6	53,083.1	63,749
Other	13,955.4	15,768.8	16,740.4	19,832.1	24,132.8	35,454.6	43,384.3	49,636.6	52,979.2	58,436
mports	41,593.3	49,966.6	62,129.4	65,366.5	79,345.9	72,453.1	89,468.8	109,807.8	125,373.1	142,063
In-bond industry	10,321.4	11,782.4	13,936.7	16,443.0	20,466.2	26,178.8	30,504.7	36,332.1	42,556.7	50,409
Other	31,271.9	38,184.1	48,192.6	48,923.6	58,879.7	46,274.3	58,964.1	73,475.7	82,816.3	91,654
Consumption goods	5,098.6	5,834.3	7,744.1	7,842.4	9,510.4	5,334.7	6,656.8	9,326.0	11,108.5	12,175
Intermediate goods	29,705.1	35,544.7	42,829.6	46,468.3	56,513.7	58,421.1	71,889.6	85,365.7	96,935.2	109,358
In-bond industry	10,321.4	11,782.4	13,936.7	16,443.0	20,466.2	26,178.8	30,504.7	36,332.1	42,556.7	50,409
Other	19,383.8	23,762.3	28,892.8	30,025.3	36,047.6	32,242.3	41,384.9	49,033.6	54,378.5	58,949
Capital goods	6,789.6	8,587.5	11,555.7	11,055.9	13,321.7	8,697.3	10,922.4	15,116.1	17,329.4	20,530
rade balance	-882.3	-7,279.0	-15,933.7	-13,480.6	-18,463.7	7,088.5	6,531.0	623.6	-7,913.5	-5,360
In-bond industry	3,551.2	4,050.6	4,743.3	5,410.1	5,803.1	4,924.5	6,415.6	8,833.5	10,526.4	13,339
Other	-4.433.5	-11,329.7	-20,677.1	-18,890.6	-24,266.8	2,164.0	115.4	-8,209.9	-18,439.9	-18,700

p/Preliminary figures.Note:Totals may not add up due to rounding.

#### Exports by Sector of Origin Table A 53

# Millions of U.S. dollars

lte m	In-B	ond Indus	stry	Non In	-Bond Ind	ustry	Total			
	1997	1998	1999 p/	1997	1998	1999 p/	1997	1998	1999 p/	
Total	45,165.6	53,083.1	63,749.1	65,265.8	64,376.4	72,954.2	110,431.4	117,459.5	136,703.4	
I. Agriculture and Forestry	0.0	0.0	0.0	3,408.4	3,435.8	3,663.1	3,408.4	3,435.8	3,663.1	
II. Livestock and Fisheries	0.0	0.0	0.0	419.8	360.9	481.7	419.8	360.9	481.7	
III. Extractive Industries	0.0	0.0	0.0	10,840.2	6,865.2	9,393.8	10,840.2	6,865.2	9,393.8	
Crude oil	0.0	0.0	0.0	10,333.8	6,367.9	8,851.0	10,333.8	6,367.9	8,851.0	
Other	0.0	0.0	0.0	506.4	497.3	542.8	506.4	497.3	542.8	
IV. Manufacturing Industries	45,118.9	53,082.8	63,697.5	50,446.5	53,467.6	59,222.9	95,565.4	106,550.4	122,920.4	
A. Food, Beverages and Tobacco	297.5	380.7	491.9	3,027.3	3,126.8	3,352.9	3,324.8	3,507.5	3,844.8	
B. Textiles and leather products	5,188.3	5,944.9	6,980.9	3,626.3	3,899.4	4,226.0	8,814.6	9,844.3	11,206.9	
C. Timber products	402.2	481.1	523.0	645.1	576.0	589.5	1,047.3	1,057.1	1,112.5	
D. Paper and printing	538.1	563.1	724.0	525.0	600.8	610.4	1,063.1	1,163.9	1,334.4	
E. Oil derivatives	0.0	0.0	0.0	683.0	561.1	800.0	683.0	561.1	800.0	
F. Petrochemical products	0.0	0.0	0.0	277.8	174.3	179.1	277.8	174.3	179.1	
G.Chemistry	552.7	688.6	802.8	3,850.5	3,920.9	4,115.1	4,403.2	4,609.5	4,917.9	
H. Plastic and rubber products	1,000.8	1,083.8	1,249.9	706.2	716.8	885.1	1,707.0	1,800.6	2,135.0	
I. Non-metallic mineral products	609.9	821.0	962.7	1,415.6	1,468.6	1,621.6	2,025.5	2,289.6	2,584.3	
J. Iron and Steel	598.2	634.0	700.5	3,056.2	2,648.4	2,084.3	3,654.4	3,282.4	2,784.8	
K. Mining and metallurgy	127.2	132.0	179.5	1,575.8	1,524.6	1,377.3	1,703.0	1,656.6	1,556.8	
L. Metalic products, machinery and equipment	34,514.3	40,966.6	49,853.5	30,651.6	33,815.9	38,952.2	65,165.9	74,782.5	88,805.7	
1. For agriculture and livestock	106.8	121.7	116.8	38.8	34.4	27.3	145.6	156.1	144.1	
2. For railroads	2.2	72.8	297.8	57.1	172.8	235.8	59.3	245.6	533.6	
3. For other transport and communications	2,876.8	3,907.9	3,740.9	17,955.2	19,782.8	23,879.8	20,832.0	23,690.7	27,620.7	
Automotive Industry	2,335.0	2,479.8	2,933.8	17,378.6	18,810.6	21,586.9	19,713.6	21,290.4	24,520.7	
4. Machinery and special equipment										
for industry	5,641.5	7,166.2	10,265.7	7,278.4	7,795.0	8,132.6	12,919.9	14,961.2	18,398.3	
5. Professional and scientific equipment	1,217.6	1,464.2	1,707.3	92.5	107.7	145.1	1,310.1	1,571.9	1,852.4	
6. Electric and electronic equipment	24,460.4	28,001.5	33,503.4	4,802.7	5,348.9	5,968.7	29,263.1	33,350.4	39,472.1	
7. Photographic and optical equipment	209.0	232.4	221.5	427.0	574.3	562.8	636.0	806.7	784.3	
M. Other industries	1,289.6	1,387.1	1,228.7	406.1	434.1	429.5	1,695.7	1,821.2	1,658.2	
V. Other	46.7	0.3	51.6	150.9	246.9	192.8	197.6	247.2	244.4	

p/ Preliminary figures.Note: Totals may not add up due to rounding-off.

#### Imports by Sector of Origin Table A 54

## Millions of U.S. dollars

ltem	In-B	ond Indus	stry	Non In	-Bond Ind	ustry	Total			
	1997	1998	1999 p/	1997	1998	1999 p/	1997	1998	1999 p/	
TOTAL	36,332	42,557	50,409	73,476	82,816	91,655	109,807.8	125,373.1	142,063.8	
I. Agriculture and Forestry	59.7	79.8	80.7	3,599.8	4,200.9	3,945.8	3,659.5	4,280.7	4,026.5	
II. Livestock and Fisheries	10.4	10.8	11.5	502.8	481.5	441.6	513.2	492.3	453.1	
III. Extractive industries	53.1	54.7	85.8	801.3	861.4	808.1	854.4	916.1	893.9	
IV. Manufacturing industries	33,866.8	40,154.7	48,016.5	67,720.1	76,276.6	85,225.8	101,586.9	116,431.3	133,242.3	
A. Food, Beverages and Tobacco	42.7	48.2	57.1	3,544.3	3,882.8	4,109.5	3,587.0	3,931.0	4,166.6	
B. Textiles and leather products	3,705.4	4,294.6	5,131.9	2,440.6	3,146.8	3,597.1	6,146.0	7,441.4	8,729.0	
C. Timber products	212.8	245.7	279.0	248.0	298.5	391.2	460.8	544.2	670.2	
D. Paper and printing	1,186.0	1,305.8	1,485.7	2,094.1	2,230.3	2,432.5	3,280.1	3,536.1	3,918.2	
E. Oil derivatives	33.3	37.1	27.6	2,481.6	2,281.6	2,601.0	2,514.9	2,318.7	2,628.6	
F. Petrochemical products	33.3	35.9	38.5	1,183.8	1,152.0	1,398.7	1,217.1	1,187.9	1,437.2	
G.Chemistry	1,134.6	1,352.8	1,674.9	7,091.4	7,804.3	8,298.1	8,226.0	9,157.1	9,973.0	
H. Plastic and rubber products	3,682.3	3,884.6	4,625.8	2,787.7	3,185.0	3,503.4	6,470.0	7,069.6	8,129.2	
I. Non-metallic mineral products	576.0	592.1	690.0	886.2	946.3	1,009.2	1,462.2	1,538.4	1,699.2	
J. Iron and Steel	1,933.7	2,122.1	2,563.1	3,535.7	4,112.6	3,762.8	5,469.4	6,234.7	6,325.9	
K. Mining and metallurgy	685.8	820.1	879.7	1,127.4	1,461.7	1,588.9	1,813.2	2,281.8	2,468.6	
L. Metalic products, machinery and y equipment	20,126.0	24,847.7	30,075.7	39,666.0	44,841.7	51,413.3	59,792.0	69,689.4	81,489.0	
1. For agriculture and livestock	3.3	5.5	2.1	286.1	327.2	326.9	289.4	332.7	329.0	
2. For railroads	6.7	40.5	143.1	114.0	277.8	385.1	120.7	318.3	528.2	
3. For other transport and communications	1,013.3	1,776.0	1,465.8	12,359.6	13,694.6	15,863.0	13,372.9	15,470.6	17,328.8	
4. Machinery and special equipment										
for industry	2,893.4	3,560.0	4,845.6	16,570.8	18,665.2	20,446.6	19,464.2	22,225.2	25,292.2	
5. Professional and scientific equipment	351.5	392.1	506.2	1,770.1	2,076.4	2,288.4	2,121.6	2,468.5	2,794.6	
6. Electric and electronic equipment	15,764.2	18,913.0	22,899.7	7,868.4	9,039.8	11,255.1	23,632.6	27,952.8	34,154.8	
7. Photografic and optical equipment	93.6	160.6	213.1	697.0	760.6	848.3	790.6	921.2	1,061.4	
M. Othera industries	515.0	568.2	487.5	633.5	932.9	1,120.1	1,148.5	1,501.1	1,607.6	
V. Other	2,340.9	2,256.7	2,214.3	847.6	991.1	1,229.5	3,188.5	3,247.8	3,443.8	
VI. Non-classified products	1.1	0.2	0.5	4.1	4.8	3.7	5.2	5.0	4.2	

p/ Preliminary figures.Note: Totals may not add up due to rounding off.

#### **Regional Trade Balance 1/** Table A 55

## Millions of U.S. dollars

Country		Ex	ports		Imports					
Country	1996	1997	1998	1999 p/	1996	1997	1998	1999 p/		
TOTAL	96,000	110,431	117,460	136,703	89,469	109,808	125,373	142,064		
AMERICA	89,067	103,281	110,665	128,404	71,481	86,770	98,626	111,778		
North America	82,746	96,458	104,612	122,921	69,280	83,969	95,549	108,305		
United States	80,574	94,302	103,093	120,610	67,536	82,001	93,258	105,356		
Canada	2,172	2,157	1,519	2,311	1,744	1,968	2,290	2,949		
Central America	1,180	1,494	1,673	1,598	179	221	238	342		
South America	3,499	3,813	3,024	2,194	1,734	2,273	2,561	2,835		
Argentina	520	498	384	256	300	236	264	212		
Brazil	879	703	536	400	690	869	1,038	1,129		
Colombia	438	513	449	368	97	124	151	220		
Chile	689	842	625	366	171	372	552	683		
Peru	211	238	196	178	117	142	143	181		
Venezuela	424	675	546	436	234	421	303	297		
Other	338	344	288	190	125	109	110	113		
Antilles	1,642	1,516	1,356	1,691	289	307	279	295		
EUROPE	3,995	4,462	4,305	5,930	8,335	10,732	12,589	13,751		
European Union	3,507	3,985	3,883	5,299	7,732	9,901	11,683	12,733		
Germany	641	719	1,152	2,073	3,174	3,902	4,543	5,032		
Spain	907	939	714	944	629	978	1,257	1,322		
France	426	430	401	289	1,019	1,182	1,430	1,394		
Italy	140	273	181	171	999	1,326	1,581	1,649		
United Kingdom	532	664	639	747	679	915	1,056	1,135		
Other	861	960	796	1,075	1,232	1,598	1,815	2,201		
Other	488	477	422	631	603	831	906	1,018		
ASIA	2,757	2,420	2,221	2,135	9,061	11,526	13,123	15,227		
Korea	198	68	73	154	1,178	1,831	1,951	2,964		
Taiw an	42	43	50	91	891	1,137	1,527	1,557		
Japan	1,393	1,156	851	777	4,132	4,334	4,537	5,083		
People's Rep. Of China	38	46	106	126	760	1,247	1,617	1,921		
Other	1,086	1,107	1,141	986	2,100	2,977	3,491	3,702		
REST OF THE WORLD	181	268	269	235	592	780	1,036	1,308		

Includes in-bond industry.
 Preliminary figures.
 Note: Totals may not add up due to rounding off.

## Table A 56

## Main Products Traded by Mexico 1/

		E	Exports						mports		
	1985	1990	1993	1998 <i>'</i>	1999 p/		1985	1990	1993	1998	1999 p/
Total (Millions of Dollars)	21 664	26 838	30,033	64 376	72 954	Total (Millions of Dollars)	14 533	31,272	48 924	82 816	91 655
			tage of		12,334		14,000		ntage of	,	31,000
Automobiles (for persons)	0.5	9.3	14.2	17.3	17.5	Spare parts for automobiles and trucks	2.0	2.0	2.3	8.6	9.3
Crude oil	61.4	33.2	21.6	9.9	12.1						
Trucks	0.1	0.1	2.2	5.6	5.7	Computers and spare parts	2.2	2.8	3.4	6.5	6.2
Computers and spare parts	0.3	1.3	2.0	3.5	3.6	Motors and spare parts for automobiles	1.0	0.6	0.7	2.8	3.0
Spare parts for machinery	0.3	1.1	1.7	3.8	3.5	Automobiles (for persons)	0.3	0.9	0.8	2.6	2.8
Automobile motors	4.8	5.6	4.3	3.2	3.0	Spare parts for electricity	2.1	2.1	2.7	2.6	2.6
Spare parts for automobiles	1.1	1.6	1.7	2.3	2.6	Radio and telegraphic equipment	1.4	1.9	1.4	1.5	2.0
Insulated cables for electricity	0.1	0.6	2.0	2.3	2.3	Measurement instruments	1.6	0.9	1.1	1.5	1.5
Textile products made out of cotton											
and vegetable fibers	0.1	0.4	0.4	2.2	2.2	Spare parts for machinery	0.8	0.9	0.9	1.5	1.5
Fresh vegetables	0.7	1.6	2.2	1.7	1.8	Machinery for w orking w ith metals	1.4	1.1	1.3	1.4	1.5
Other electric instruments	0.1	1.0	1.3	1.6	1.6	Radio and TV devices	0.9	1.8	1.8	1.5	1.4
Iron in bars and pigs	0.2	1.2	1.6	1.9	1.4	Products of synthetic resin paste	0.6	0.7	1.0	1.3	1.4
Textile products made out of silk, w ool						Lamps of electric valves and					
and artificial fibers	0.1	0.3	0.4	0.9	1.0	spare parts	0.6	0.5	0.5	1.1	1.3
Spare parts for motors	0.2	0.4	0.6	0.8	1.0	Fresh and refrigerated meat	0.7	1.0	1.1	1.1	1.1
Beer	0.3	0.6	0.7	1.0	1.0	Natural and synthetic resins	0.7	0.8	0.7	1.1	1.1
						Pumps	1.7	0.9	0.9	1.0	1.0
Iron and steel manufactures	0.4	0.9	0.8	1.1	0.9	Mixtures and preparations for industrial use	1.6	1.3	1.1	1.1	1.0
Glass and glassw are	0.7	1.0	1.5	0.9	0.9	Prepared paper and cardboard	0.6	0.9	1.0	0.9	0.9
						Soya seeds	1.9	0.7	1.1	1.0	0.9
Plastic manufactures	0.3	0.9	0.8	1.0	0.9	Gasoline	0.0	1.3	1.3	1.0	0.8
Coffee (in grain)	2.3	1.2	0.8	1.0	0.8	Hand tools	0.6	0.5	0.5	0.6	0.8
Tomatoes	1.0	1.6	1.3	0.9	0.7	Electrical generators, transformers and					
Other pharmaceutical products	0.1	0.1	0.3	0.7	0.7	motors	1.0	0.5	0.6	0.8	0.7
Other fresh fruits	0.2	0.5	1.1	0.7	0.7	Threads of artificial and synthetic fibers	0.3	0.8	0.9	0.6	0.7
						Pulleys and ball bearings	0.9	0.9	0.7	0.7	0.7
Plastic materials and synthetic resins	0.1	0.3	0.5	0.6	0.7	Iron and steel plates	0.9	1.3	1.0	1.0	0.7
Artificial or synthetic textile fibers	0.4	0.6	1.0	0.8	0.6	Wheels	0.2	0.5	0.5	0.7	0.7
Frozen shrimp	1.5	0.8	0.9	0.6	0.6						
Silver bars	1.2	1.1	0.6	0.7	0.5	Machinery for loading and unloading	0.7	0.7	0.7	0.7	0.7
Spare parts for electricity	0.1	0.2	0.3	0.6	0.5						
Wooden furniture and articles	0.1	0.2	0.3	0.6	0.5	Machinery for rubber industry	0.7	0.6	0.6	0.8	0.7
Refrigerators and spare parts	0.0	0.1	0.4	0.6	0.5	Trucks	0.4	0.1	0.1	0.9	0.7
Chassis including motor for all kinds						Corn	1.8	1.4	0.1	0.8	0.7
of vehicles	0.0	0.1	0.4	0.4	0.5	Machinery for textiles and spare parts	0.9	1.2	0.5	0.8	0.6
Other	21.0	32.0	32.2	30.7	29.8	Other	69.8	68.4	68.5	51.6	51.0

Excludes in-bond industry.
 Preliminary figures.
 Note: Totals may not add up due to rounding off.

#### Table A 57 **International Travelers**

l t e m	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999 p/
alance (millions of dollars)	7.6	146.2	-22.6	605.2	1,025.8	3,008.3	3,546.4	3,700.7	3,629.5	3,049.
			INCO	MING						
Revenues (millions of dollars)	5,526.3	5,959.1	6,084.9	6,167.0	6,363.5	6,178.8	6,933.5	7,592.6	7,897.4	7,586.
Tourists	3,933.8	4,339.3	4,471.1	4,564.1	4,854.5	4,688.0	5,287.5	5,747.6	6,037.6	5,869.
In-bound	3,400.9	3,783.7	3,867.8	4,019.3	4,254.4	4,051.0	4,647.4	5,302.6	5,538.8	5,425.
In the border area	532.9	555.6	603.3	544.8	600.1	636.9	640.2	445.0	498.8	444
One day visitors	1,592.6	1,619.8	1,613.7	1,602.9	1,508.9	1,490.8	1,646.0	1,845.0	1,859.8	1,717
In the border area	1,533.2	1,543.4	1,525.6	1,514.4	1,424.6	1,383.4	1,532.6	1,722.5	1,737.8	1,551.
Cruises	59.4	76.3	88.1	88.5	84.3	107.4	113.4	122.5	121.9	165.
Number of travelers (thousands)	82,101	80,139	84,060	83,016	83,144	85,446	90,394	92,915	95,632	100,06
Tourists	17,172	16,067	17,146	16,440	17,182	20,241	21,395	19,351	19,810	19,23
In-bound	6,393	6,372	6,352	6,625	7,135	7,784	8,982	9,794	10,193	10,40
In the border area	10,779	9,695	10,794	9,815	10,047	12,457	12,413	9,557	9,617	8,82
One day visitors	64,929	64,072	66,914	66,576	65,962	65,205	68,999	73,564	75,822	80,82
In the border area	64,038	62,878	65,511	65,089	64,392	63,508	66,857	71,311	73,576	77,77
Cruises	891	1,194	1,403	1,487	1,570	1,697	2,142	2,253	2,246	3,04
Average expenditure (dollars)	67.3	74.4	72.4	74.3	76.5	72.3	76.7	81.7	82.6	75
Tourists	229.1	270.1	260.8	277.6	282.5	231.6	247.1	297.0	304.8	305
In-bound	532.0	593.8	608.9	606.7	596.3	520.4	517.4	541.4	543.4	521.
In the border area	49.4	57.3	55.9	55.5	59.7	51.1	51.6	46.6	51.9	50.
One day visitors	24.5	25.3	24.1	24.1	22.9	22.9	23.9	25.1	24.5	21.
In the border area	23.9	24.5	23.3	23.3	22.1	21.8	22.9	24.2	23.6	20.
Cruises	66.7	63.9	62.8	59.5	53.7	63.3	52.9	54.4	54.3	54
			OUTG	OING						
Expenditures (millions of dollars)	5,518.7	5,812.9	6,107.5	5,561.8	5,337.7	3,170.5	3,387.2	3,891.9	4,267.8	4,537
Tourists	2,171.5	2,149.8	2,541.7	2,416.6	2,444.2	1,240.4	1,536.4	1,821.2	2,060.6	1,946
Out-bound	1,936.5	1,878.5	2,079.4	2,071.9	1,949.6	1,023.3	1,320.1	1,592.8	1,779.3	1,686
In the border area	235.0	271.3	462.2	344.7	494.6	217.1	216.3	228.4	281.4	259.
One day visitors	3,347.2	3,663.1	3,565.8	3,145.2	2,893.5	1,930.1	1,850.8	2,070.7	2,207.2	2,590
In the border area	3,347.2	3,663.1	3,565.8	3,145.2	2,893.5	1,930.1	1,850.8	2,070.7	2,207.2	2,590
Number of travelers (thousands)	98,851	100,025	114,033	115,179	114,097	103,161	103,442	107,242	108,093	117,50
Tourists	7,357	7,713	11,226	10,185	12,029	8,451	9,001	8,910	9,803	10,47
Out-bound	4,321	4,173	4,678	4,778	5,047	3,703	4,437	4,838	5,343	5,66
In the border area	3,036	3,540	6,548	5,407	6,982	4,748	4,564	4,072	4,460	4,80
One day visitors	91,494	92,312	102,807	104,994	102,068	94,710	94,441	98,332	98,290	107,03
In the border area	91,494	92,312	102,807	104,994	102,068	94,710	94,441	98,332	98,290	107,03
Cruises										
Average expenditure (dollars)	55.8	58.1	53.6	48.3	46.8	30.7	32.7	36.3	39.5	38
Tourists	295.1	278.7	226.4	237.3	203.2	146.8	170.7	204.4	210.2	185
Out-bound	448.1	450.2	444.5	433.6	386.3	276.3	297.5	329.2	333.0	297.
In the border area	77.4	76.6	70.6	63.8	70.8	45.7	47.4	56.1	63.1	54
One day visitors	36.6	39.7	34.7	30.0	28.3	20.4	19.6	21.1	22.5	24
One day visitors	36.6	39.7	34.7	30.0	28.3	20.4	19.6	21.1	22.5	24

p/ Preliminary figures.Note: Totals may not add up due to rounding-off.

#### Table A 58 **Family Remittances Revenues**

	1995	1996	1997	1998	1999 p
Total Remittances (Millions of dollars)	3,672.7	4,223.7	4,864.8	5,626.8	5,909.0
Money orders	1,456.3	1,519.7	1,728.8	1,870.7	1,448.4
Checks	26.2	74.8	78.3	61.5	51.
Electronic transfers	1,891.2	2,221.8	2,637.9	3,250.2	3,935.
Cash and Kind	299.0	407.3	419.9	444.4	475.
Number of remittances (thousands)	11,263.2	13,208.1	15,368.6	19,419.5	20,937.
Money orders	4,420.9	4,226.9	4,865.2	5,656.2	3,679.
Checks	60.5	110.2	79.5	81.7	58.
Electronic transfers	6,144.6	8,162.5	9,636.2	13,060.2	16,578.
Cash and Kind	637.1	708.5	787.7	621.5	620.
Average remittance (dollars)	326	320	317	290	282
Money orders	329	360	355	331	394
Checks	433	679	984	753	870
Electronic transfers	308	272	274	249	237
Cash and Kind	469	575	533	715	766

p/ Preliminary figures.Note: Totals may not add up due to rounding off.

## Table A 59

## **Foreign Investment Flows**

Millions of U.S. dollars

	1993	1994	1995	1996	1997	1998	1999 p/
TOTAL	22,511.1	12,830.9	-3,814.1	12,893.6	16,629.7	10,859.2	15,468.7
Direct Investment	4,388.8	10,972.5	9,526.3	9,185.5	12,829.6	11,310.7	11,568.1
New Investment	3,041.0	5,672.3	6,838.4	5,529.4	9,115.3	5,157.6	4,448.4
Reinvested Earnings	1,399.2	2,366.6	1,572.0	2,589.7	2,150.0	2,864.0	2,886.7
InterCompany Accounts	-51.4	2,933.6	1,115.9	1,066.4	1,564.3	3,289.1	4,233.0
Portfolio Investment	18,122.3	1,858.4	-13,340.4	3,708.1	3,800.1	-451.5	3,900.6
Equity	10,716.6	4,083.7	519.2	2,800.6	3,215.3	-665.6	3,769.2
Money Market	7,405.7	-2,225.3	-13,859.6	907.5	584.8	214.1	131.4

p/ Preliminary figures.Note: Totals may not add up due to rounding off.

#### **Foreign Investment in Government Securities** Table A 60

Stocks outstanding at face value at the end of period

Billions of U.S. dollars

	Cet	es	Bon	des	Tesob	onos	Ajusta	bonos	Tota	l 1/
	Stock	%	Stock	%	Stock	%	Stock	%	Stock	%
Dec 1992	9.2	64.3	1.2	8.7	0.2	1.4	3.6	25.6	14.2	100.0
Dec 1993	15.4	70.2	0.8	3.9	1.3	5.9	4.4	20.1	21.9	100.0
Dec 1994	2.5	12.3	*	0.1	17.4	85.0	0.5	2.6	20.5	100.0
Dec 1995	2.8	82.0	0.1	3.3	0.2	5.6	0.3	9.1	3.4	100.0
Dec 1996	3.0	89.2	0.3	9.6	0.0	0.0	*	1.1	3.4	100.0
Dec 1997	3.0	90.3	0.3	7.7	0.0	0.0	*	0.2	3.3	100.0
Dec 1998	2.2	88.8	0.2	9.9	0.0	0.0	*	0.0	2.4	100.0
Dec 1999	1.2	53.1	1.0	44.1	0.0	0.0	*	0.0	2.2	100.0
1999										
Jan	1.9	90.0	0.2	9.3	0.0	0.0	*	0.0	2.2	100.0
Feb	1.9	84.3	0.3	12.5	0.0	0.0	*	0.0	2.3	100.0
Mar	2.0	75.4	0.6	20.7	0.0	0.0	*	0.2	2.7	100.0
Apr	1.7	73.5	0.5	20.5	0.0	0.0	*	0.1	2.3	100.0
May	1.3	66.7	0.4	23.0	0.0	0.0	*	0.1	1.9	100.0
Jun	1.3	63.6	0.5	27.0	0.0	0.0	*	0.1	2.0	100.0
Jul	1.3	66.1	0.7	33.6	0.0	0.0	*	0.0	2.0	100.0
Aug	1.3	64.2	0.7	35.3	0.0	0.0	*	0.0	2.0	100.0
Sep	1.2	62.4	0.6	30.9	0.0	0.0	*	0.0	2.0	100.0
Oct	1.2	58.4	0.8	40.7	0.0	0.0	*	0.0	2.1	100.0
Nov	1.2	55.5	0.8	37.8	0.0	0.0	*	0.0	2.2	100.0
Dec	1.2	53.1	1.0	44.1	0.0	0.0	*	0.0	2.2	100.0

Includes UDIBONOS since August 1996. Less than 50 millions of dollars. 1/ \*/

#### Table A 61 Foreign Investment in the Stock Market

# Stocks outstanding at market value at the end of period

Billions of U.S. dollars

			Fre	e	Neu	tral	Mexi	ico		
	ADR'	's 1/	Subscr	ription	Fu	nd	Fur	nd	Tota	al 2/
	Stock	%	Stock	%	Stock	%	Stock	%	Stock	%
Dec 1991	13.7	73.9	3.0	16.2	1.3	7.2	0.5	2.6	18.6	100.0
Dec 1992	21.2	73.8	5.1	17.8	1.8	6.2	0.6	2.2	28.7	100.0
Dec 1993	34.0	62.2	12.9	23.6	6.4	11.7	1.4	2.5	54.6	100.0
Dec 1994	21.2	61.6	8.1	23.6	4.3	12.6	0.8	2.2	34.4	100.0
Dec 1995	15.2	62.1	5.9	24.0	2.6	10.7	0.8	3.1	24.5	100.0
Dec 1996	15.1	48.8	11.4	36.9	3.5	11.3	0.9	3.0	31.0	100.0
Dec 1997	23.1	47.2	19.5	39.8	4.9	10.0	1.3	2.7	49.0	100.0
Dec 1998	18.6	57.1	10.2	31.3	2.9	8.9	0.8	2.4	32.6	100.0
Dec 1999	41.5	62.3	19.7	29.5	4.5	6.7	0.9	1.4	66.7	100.0
1999										
Jan	18.6	58.6	9.6	30.2	2.7	8.5	0.8	2.5	31.8	100.0
Feb	20.2	58.1	10.7	30.8	3.0	8.5	0.8	2.3	34.8	100.0
Mar	23.8	56.8	13.4	32.0	3.7	8.9	1.0	2.4	41.9	100.0
Apr	28.7	57.3	16.1	32.1	4.2	8.3	1.1	2.2	50.1	100.0
May	28.5	59.1	14.9	30.9	3.8	7.9	1.0	2.1	48.3	100.0
Jun	29.4	57.4	16.4	32.0	4.4	8.5	1.1	2.2	51.2	100.0
Jul	27.4	58.3	14.7	31.3	3.9	8.2	1.0	2.1	47.0	100.0
Aug	26.4	57.2	15.1	32.7	3.7	8.0	1.0	2.2	46.2	100.0
Sep	27.5	59.2	14.2	30.5	3.7	8.1	1.0	2.2	46.5	100.0
Oct	30.6	61.3	14.8	29.6	3.6	7.3	0.9	1.8	50.0	100.0
Nov	34.0	60.5	17.1	30.4	4.2	7.5	0.9	1.6	56.3	100.0
Dec	41.5	62.3	19.7	29.5	4.5	6.7	0.9	1.4	66.7	100.0

Includes Global Depository Receipts (GDR's).
 Since 1993, total includes warrants and investment in the intermediate market. Source: Comisión Nacional Bancaria y de Valores.

#### Table A 62 **Gross External Debt and Debt Service**

Billions of U.S. dollars at the end of period

	1991	1992	1993	1994	1995	1996	1997	1998	1999 p/
GROSS EXTERNAL DEBT OUTSTANDING	116.6	117.6	131.5	142.1	169.6	163.6	152.8	162.1	163.3
Public debt	80.0	75.8	78.7	85.4	100.9	98.3	88.3	92.3	92.3
Federal Government	65.8	58.7	59.0	60.6	77.8	75.6	67.4	70.1	70.3
Public entities and enterprises	8.6	9.4	9.5	12.0	11.7	12.9	12.3	13.1	13.8
Development banks	5.6	7.7	10.3	12.8	11.4	9.8	8.6	9.1	8.1
Commercial banks 1/,2/	17.8	18.7	23.4	25.0	20.6	18.5	16.7	15.8	14.1
Banco de México	6.8	6.0	4.8	3.9	17.3	13.3	9.1	8.4	4.5
Non-Banking private sector 1/	12.0	17.1	24.6	27.8	30.7	33.5	38.7	45.6	52.4
EXTERNAL DEBT SERVICE 3/	16.1	20.8	17.0	20.8	23.0	33.8	34.3	24.2	24.1
Amortizations	6.9	11.2	6.1	9.0	9.4	20.4	21.9	11.7	11.1
Current amortizations 4/	5.9	5.5	6.1	9.0	9.4	10.6	12.4	11.7	11.1
Other amortizations 5/	1.0	5.7	0.0	0.0	0.0	9.8	9.5	0.0	0.0
Interests payments	9.2	9.6	10.9	11.8	13.6	13.4	12.4	12.5	13.0
Public sector	6.8	7.2	7.9	7.8	8.6	8.0	7.0	6.7	6.9
Commercial banks	1.0	0.9	1.1	1.6	1.7	1.7	1.5	1.5	1.3
Banco de México	0.5	0.5	0.4	0.2	0.7	0.7	0.5	0.4	0.3
Non-Banking private sector	0.9	1.1	1.5	2.2	2.7	3.0	3.5	3.9	4.5

1/ Banco de México data.

2/ 3/

Includes mexican banks, agencies and branches abroad. Excludes domestic currency securities issued abroad. Current amortizations plus interest payments. It refers to long term amortizations of the public sector and excludes amortizations of Tesobonos and payments to the 4/ International Monetary Fund.

5/ Includes amortizations resulting from debt-equity swaps, federal Government debt cancellations, letter of credit amortizations, debt-bond swap operations and long term debt rescheduling. These operations do not imply cash flows.
 p/ Preliminary figures.
 Source: Banco de México and SHCP.

# Table A 63 Mexican Residents' Claims on U.S. Financial Institutions

Billions of U.S. dollars at the end of the period

	TOTAL	Ofiicial Institutions and Banks	All Other Residents
1988	15.1	1.7	13.4
1989	15.4	2.4	13.0
1990	16.7	6.0	10.6
1991	20.0	11.0	8.9
1992	19.5	11.1	8.4
1993	28.0	20.2	7.8
1994	12.2	3.9	8.3
1995	24.6	15.5	9.0
1996	31.2	21.0	10.3
1997	34.0	21.7	12.3
1998	37.2	23.8	13.3
1999	30.7	15.3	15.4
1997			
Mar	27.5	17.2	10.3
Jun	33.1	21.9	11.2
Sep	32.6	20.9	11.7
Dec	34.0	21.7	12.3
1998			
Mar	35.7	23.6	12.1
Jun	38.0	25.4	12.7
Sep	35.7	22.6	13.1
Dec	37.2	23.8	13.3
1999			
Mar	36.6	22.7	13.9
Jun	37.9	24.0	13.9
Sep	35.0	21.0	14.0
Dec	30.7	15.3	15.4

Source: Board of Governors of the Federal Reserve System of the United States.