# Inflation Report

September de 2000

Banco de la República

# Presentation, summary and conclusions

## Monetary-policy strategy

✠ On October 13, 2000 the Board of Directors of the Banco de la República revised the strategy for conducting monetary policy. The Board introduced a number of changes in the parameters of the major variables used in monetary-policy decision-making and deemed it appropriate to make a public statement specifying the criteria guiding the decision-making process.

✠ The aim of monetary policy will continue to be attainment of inflation rates consistent with the constitutional mandate of ensuring price stability, in coordination with an overall macrocoeconomic policy designed to stimulate growth in output and employment. This aim is expected to be achieved by defining gradually decreasing inflation targets.

✠ To this end, the Board has to date drawn up a monetary program by defining a monetary-base path considered consistent with attaining present and future inflation targets, and with the rest of the government's macroeconomic program. The Board has regularly analyzed the monetary and inflation situation on the following basis:

- Monitoring the behavior of the monetary bases's 20-month daily moving average relative to a +/- 3.0% corridor around the initially defined path.
- Identifying significant changes in the level and composition of the monetary base.
- Evaluating a set of indicators and forecasts of inflation and economic activity.

✠ On the basis of this analysis, decisions have been taken on making changes considered necessary in monetary-policy stance. An explanation of these decisions, together with a description of the analysis process and presentation of relevant analysis data, has been published in quarterly inflation reports, the Board's reports to Congress, and in monthly press releases.

✠ It should be pointed out that the Board's decisions on monetary-policy stance have not responded mechanically or exclusively to deviations of the monetary-base average from its corridor. In fact, in recent months the Board has allowed such deviations because it has identified changes in the monetary base's velocity of circulation that call for greater growth of the base, without jeopardizing attainment of the inflation targets. These changes are connected with the impact of the financial-transaction levy on the public's demand for cash and current accounts, as mentioned in the July Report to Congress and in previous press releases.

Moreover, inflation projections, and indicators of real activity have suggested that recent monetary- policy stance was compatible with the inflation target.

✠ The Board has revised its monetary strategy in order, first, to make its decision-making on policy clear to the public, by pointing out that evaluating the indicators and forecasts of inflation and other economic variables is as important as monitoring the monetary-base's behavior with respect to its reference path. In this way, advance is made in incorporating the elements of an Objective Inflation scheme into the Board's monetary strategy. Second, the revision introduces some changes in the level and moving average of the monetary-base's reference path.

✠ The main elements of the monetary-policy strategy defined by the Bank are described below:

✠ Decisions will continue to be made on the basis of the following elements:

- Setting an inflation target;

- Assessing the general status of the economy, inflation trends and outlook, and the unemployment situation; and

- Monitoring the behavior of the money supply with respect to reference values previously defined to be conducive to meeting the inflation target.

✠ To guide the formation of inflation expectations, bearing in mind the lagged effect of monetary policy on prices, the Board will set multiannual inflation targets. It now confirms the targets for 2001 and 2002, set at 8.0% and 6.0% respectively.

✠ In its internal decision-making the Board shall continue to make a detailed monthly evaluation of inflationary pressures and the outlook for inflation. The evaluation will be based on a report by the Bank's technical team. A quarterly Inflation Report shall continue to be published to let markets know how the Board perceives the chances of meeting the inflation target and enable them to assess how consistent the Board's action is with the technical analysis. If the Board's evaluation suggests that under prevailing monetary-policy conditions inflation in the current or following year will deviate from the target, the Board shall modify its policy stance.

✠ The behavior of money, particularly the monetary base and its composition, plays an important part in the Board's decision-making. A reference value shall therefore be set for the monetary base and built in such a way as to be compatible with the inflation target, projected real-GDP growth, and predictable changes in the velocity of circulation. The Board shall evaluate inflationary pressures and analyze the monetary base's behavior with respect to its reference value. Under normal conditions, significant deviations of the monetary base from its reference value point to risks of not meeting the inflation targets.

✠ As in the past, the setting of a reference value for the monetary base does not mean that the Bank will automatically correct any short-term deviation of the monetary base from this value. Bearing in mind the increased demand for cash and checking accounts, the Board has for some weeks considered that the monetary base's reference line for the rest of 2000 should be about 7.0% above the midpoint of monetary-base corridor defined at the end of last year. Should the monetary base deviate significantly for several weeks from the reference values, the Board shall either take policy measures or publicly explain why it will not do so. The latter case may occur where inflation and other economic-variable indicators and forecasts provide strong evidence about meeting the inflation targets. For easy monitoring of the monetary base relative to the reference line, the Bank shall publish weekly figures of the actual base, its 45- and 20-day moving averages, and the reference value. The Board shall routinely revise the monetary base's reference values and may modify them if there are solid technical reasons for doing so, provided attainment of the inflation targets will not be jeopardized.

✠ The strategy changes are intended to make the Board's decision-making more transparent and monetary policy more readily understandable.

## Assessment of inflation in september 2000

✠ On October 13, 2000 the Board of Directors also analyzed how inflation stood in September. The main findings are as follows:

✠ In September the annual change in the Consumer Price Index (CPI) was 9.2%, down by 0.5 percentage points on June and by 0.l percentage points on a year earlier. This was the smallest CPI growth for any September since 1971, and made this the 17th month in a row with inflation equal to or under 10.0%

✠ For the year to September consumer inflation was 7.7%, down by 0.1 percentage points on the same period in 1999. The items most responsible for third-quarter inflation--accounting for about 62.0% of it-- were vehicles, water supply, sewerage and waste collection, taxi fares, and fuel. As in the first half of the year, the greatest upward pressure on third-quarter prices came from higher gasoline prices, devaluation, and the dismantling of utilities subsidies. Third-quarter food prices, in contrast to their behavior over much of the first half, stopped pushing inflation up and in fact helped to reduce it with negative or zero monthly variations.

✠ The 12-month price growth was above average for transport (17.2%), diverse expenditures (15.0%), health care (10.0%), and education (9.4%). It was below average for clothing (2.9%), housing (5.8%), and food (8.2%).

✠ Under the alternate classification (tradables and nontradables), the most notable development was a drop in the nontradables' annual price variation, from 10.4% in June to 9.6% in September. This drop came mostly from a slower price change (13.3% as against 25.5%) in flexible goods (root crops, fruits and vegetables), caused by an abundant supply of farm produce over the third quarter. For tradables, the annual price variation edged up from 9.4% in June to 9.9% in September, showing the effect of devaluation on consumer prices.

✠ Core inflation, measured as the average of annual growth in four indicators determined by the Bank, ran at 8.5% at the end of the third quarter, down by 0.5 percentage points on June, owing to slower growth in the trimmed mean and the asymmetric mean. The inflation nucleus increased slightly, while the CPI excluding food remained stable. If the asymmetric mean is left out of the average because of its high volatility in recent months (as discussed in Chapter I), core inflation at the end of September would stand at 9.0%, up by 0.1 percentage points on the June level.

✠ Producer inflation, measured as annual change in the Producer Price Index (PPI), was 12.9% at the end of September, two percentage points higher than a year earlier and 2.7 points lower than in June. The drop in producer inflation since June resulted mostly from a slower price variation in industrial goods and farm produce, in spite of a large increase in mining prices caused by rising fuel prices.

✠ Core inflation, calculated as the average of all the four indicators, is presently projected to be 8.2% by December, 0.3 percentage points below the June forecast; leaving out the asymmetric mean, it would be 8.7%, much as it was in June.

✠ At the end of the third quarter, the monetary base's 20-month moving average stood 2.8% above the corridor ceiling. This was because of faster growth in the average cash balance than is implicitly envisaged in the corridor's upper limit. As pointed out appropriately in the June Report and confirmed in this one, the faster growth being shown by the more liquid monetary aggregates (monetary base and M1) has been due to an increase in demand for cash caused by various factors, notably low interest rates and extension of the two-per-thousand levy on financial transactions. This increase should not therefore affect prices by raising aggregate demand by more than originally forecast.

✠ The financial system's nominal and real loan portfolios continued to shrink in the third quarter at much the same rates as in the second. The exception was the portfolio of the private financial institutions, excluding the savings and loan corporations (CAVs) and mortgage banks; it continued to grow, by about 3.5%. The portfolio indicator, obtained by adding to the gross portfolio the loans removed by financial intermediaries from their balances in the past 18 months) showed a 3.5% annual growth in August for the financial system as a whole. Lastly, nominal and real interest rates were higher at the end of the third quarter than in June. In September the nominal deposit rate averaged 12.9% and the nominal lending rate 28.9%, up by 0.9 and 5.0 percentage points respectively on the June levels. Over the same period, the real deposit rate rose by 0.8 percentage points to 3.4%, remaining below the historical average, while the real lending rate rose by 3.4 percentage points to 18.1%, exceeding the historical average.

✠ Economic expansion continued at much the same pace as in the second quarter, as evidenced by the different indicators of the real sector. The fastest growth was in the industrial sector and non-traditional exports, with significant signs of recovery being shown also by such other sectors as commerce and services. Likewise, the recent behavior of industrial orders and stocks, and businessmen's favorable expectations allow of optimism about economic growth in the following months. This perception is further supported by current interest-rates levels and the promising outlook for international growth. Economic recovery has brought with it a pick-up in the various indicators of installed capacity, which now stand close to their historical averages.  Yet, production levels in most sectors are still lower than they were before the recession, so that no major inflationary pressures are expected to arise from demand in the next few months

✠ Slower devaluation in recent weeks has been reflected in lower inflation forecasts for December of this year and next, making it more likely in principle that the 8.0% target for 2001 will be met.  All the same, exchange-rate volatility, and the highly uncertain nature of inflation forecasts made more than a year ahead, call for great prudence in weighing existing risks.  These risks are still associated with a possible pick-up in food prices owing to cyclical factors and, to a lesser extent, with further increases in fuel prices.  Moreover, though stability may reasonably be expected on the exchange front for the rest of this year, there is still a high degree of uncertainty in this regard for next year.  Similarly, a possible surprise in housing rents for 2001 cannot be ruled out, especially since the crisis in the construction sector may have considerably reduced the availability of housing for rent.  Lastly, empirical domestic and international evidence suggests that reforming the structure of the value-added tax tends to have a favorable effect on inflation in the long run, by contributing to fiscal equilibrium, but can produce adverse effects on prices in the short run.

✠ Given the satisfactory behavior of prices in September, consistent with the 10.0% inflation target for this year, the stability shown by core inflation, and the lowering of several inflation and core-inflation forecasts for 2000 and 2001, the Board has decided to maintain its policy stance unchanged.

The Board of Directors,

Chairman
Juan Manuel Santos Calderón
Minister of Finance and Public Credit

Directors
Sergio Clavijo Vergara
Luis Bernardo Flórez Enciso
Antonio Hernández Gamarra
Salomón Kalmanovitz Krauter
Leonardo Villar Gómez

Governor of the Bank
Miguel Urrutia Montoya

# Inflation Report

## September de 2000

Prepared by the:
**Programming and Inflation Unit**
**Economic Studies Division**

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# I

# Price Indexes

## A. Consumer price index

### 1. Overall Performance

In September, inflation measured as annual change in the Consumer Price Index ran at 9.2%, down by 0.5 percentage points on June (9.7%) and by 0.1 percentage points on a year earlier (9.3%) (Figure 1 and Table 1).

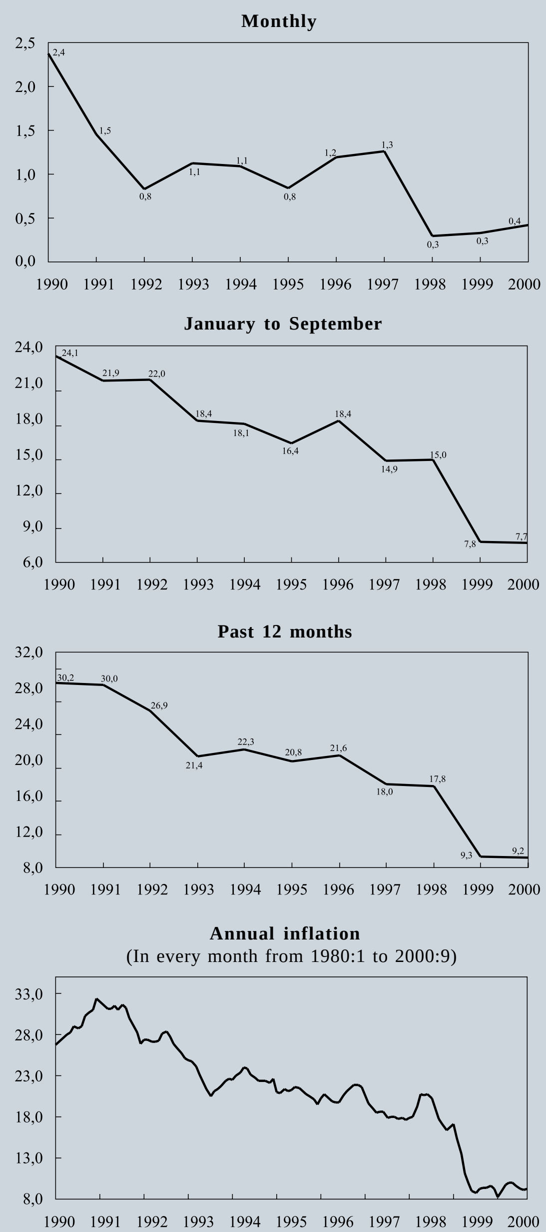
This was the 17 months in a row with inflation not exceeding 10%. In the first nine months of 2000 consumer prices rose by 7.7%, similar to the increase over the same period last year (7.8%).

For September, monthly consumer inflation was 0.4%, slightly higher than the 0.3% registered for the same month in both 1999 and 1998 but still the third lowest September rise since 1978.

Monthly inflation was negative for two months in a row this year -June (-0.02%) and July (-0.04%)-, for the first time since May and June 1986. This satisfactory performance, together with a low monthly CPI growth in both August (0.3%) and September (0.4%), meant that inflation in the third quarter was low (0.7%), lower than in both the second (1.5%) and first (5.4%) quarters.

It is noteworthy that the first quarter produced 70% of the inflation accumulated over the first nine months of the year. This reflects the seasonal nature of the CPI, which tends to rise faster early in the year and then slow down.

**Figure 1**
**Consumer price index**
(Percentage change to September)




Sources: DANE; calculations by Banco de la República.

**Table 1**
**Inflation indicators**
(Percentage change to March 2000)

| | | Monthly | | | Year to September | | | Annual | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1998 | 1999 | 2000 | 1998 | 1999 | 2000 | 1998 | 1999 | 2000 |
| **I.** | **CPI** | 0,3 | 0,3 | 0,4 | 15,0 | 7,8 | 7,7 | 17,8 | 9,3 | 9,2 |
| | Food | (1,5) | 0,1 | 0,3 | 17,6 | 6,0 | 6,7 | 20,3 | 4,2 | 8,2 |
| | Housing | 1,2 | 0,2 | 0,4 | 12,4 | 4,7 | 4,7 | 15,6 | 8,6 | 5,8 |
| | Clothing | 0,4 | 0,2 | 0,2 | 6,1 | 2,7 | 2,5 | 8,3 | 4,4 | 2,9 |
| | Health care | 0,7 | 1,3 | 0,5 | 18,8 | 13,9 | 8,9 | 20,4 | 15,7 | 10,0 |
| | Education **1/** | 1,7 | 0,0 | 0,8 | 16,4 | 9,7 | 8,8 | 18,4 | 8,9 | 9,4 |
| | Transport | 0,3 | 1,6 | 0,6 | 17,0 | 15,7 | 14,2 | 21,0 | 18,9 | 17,2 |
| | Diverse expenditures | 1,3 | 0,5 | 0,4 | 15,7 | 14,4 | 13,3 | 19,9 | 18,9 | 15,0 |
| **II.** | **Core Inflation 2/** | 1,1 | 0,4 | 0,5 | 13,9 | 8,5 | 8,2 | 17,4 | 10,0 | 8,5 |
| | CPI excluding food **3/** | 1,1 | 0,4 | 0,5 | 13,9 | 8,5 | 8,2 | 16,7 | 11,6 | 9,6 |
| | Nucleus **4/** | | | | | | | 17,2 | 10,5 | 9,1 |
| | Trimmed mean **5/** | | | | | | | 17,9 | 9,1 | 8,3 |
| | Asymmetric mean **6/** | | | | | | | 17,7 | 8,7 | 7,3 |
| **III.** | **PPI** | 0,0 | 1,5 | 0,8 | 12,5 | 10,0 | 10,2 | 16,5 | 10,9 | 12,9 |
| | By economic use or destination | | | | | | | | | |
| | Intermediate consumption | 0,1 | 1,3 | 1,1 | 10,5 | 8,9 | 9,4 | 14,9 | 10,6 | 12,8 |
| | Final consumption | (0,5) | 1,1 | 0,7 | 15,8 | 9,7 | 10,6 | 18,9 | 9,1 | 13,3 |
| | Capital goods | 1,8 | 3,7 | 0,1 | 10,9 | 16,2 | 12,2 | 16,0 | 20,1 | 11,7 |
| | Building materials | 2,3 | 1,2 | 0,7 | 9,1 | 10,9 | 9,9 | 13,4 | 14,3 | 13,3 |
| | By origin | | | | | | | | | |
| | Domestically produced and consumed | (0,3) | 0,7 | 0,8 | 13,1 | 7,8 | 9,2 | 16,7 | 8,3 | 13,1 |
| | Imported | 2,9 | 3,7 | 0,6 | 8,5 | 16,7 | 13,1 | 14,7 | 21,2 | 12,4 |
| | Exported **7/** | 3,8 | 2,7 | 2,5 | (2,9) | 21,0 | 15,3 | 5,9 | 30,0 | 20,7 |
| | By industrial origin (ISIC) | | | | | | | | | |
| | Farming, forestry & fishing | (1,9) | (0,4) | 1,1 | 14,2 | 6,4 | 7,2 | 16,1 | 2,5 | 12,6 |
| | Mining | (6,8) | 0,3 | 5,4 | (17,5) | 28,6 | 29,7 | (8,9) | 43,1 | 32,2 |
| | Manufacturing | 1,0 | 0,2 | 0,6 | 12,8 | 10,6 | 10,4 | 17,3 | 13,2 | 12,5 |

**1/** Starting in January 1999 a new CPI methodology divided this group into education, and culture and recreation. For purposes of price monitoring, it was decided to leave them together as a single group.
**2/** The average of the four core-inflation measures calculated by the Banco de la República.
**3/** CPI excluding all items of the food group.
**4/** CPI excluding 20% of the weight of the items that showed the greatest price volatility between January 1990 and April 1999.
**5/** The weighted mean trimmed by 5% in each tail, calculated by the CPI-60 methodology. In this connection, see Luis Fernando Melo et al. Un análisis de las medidas de inflación básica para Colombia, mimeo 1997, Banco de la República.
**6/** The asymmetric mean trimmed by 15% in the left tail and 13% in the right tail, calculated by the CPI-60 methodology.
**7/** The total PPI dos not include exported goods. It is calculated from the weighted sum of domestically produced and consumed goods and imported goods.

Sources: Banco de la República-SGEE, and DANE's PPI and CPI lists.

Two measures of core inflation,[1] CPI excluding food and the inflation nucleus, remained relatively flat over the third quarter, as they done had since the beginning of the year. In September, the trimmed mean was down from its June level, back to what it had been earlier in the year. Lastly, the asymmetric mean remained highly volatile in the past few months, because of statistical problems connected with the erratic inclusion of housing rents in its calculation[2] (Figure 2).

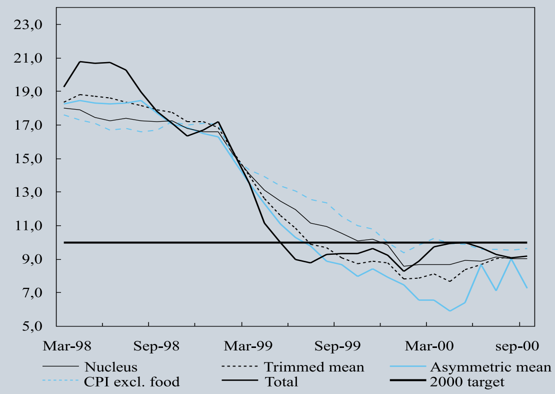
Core inflation measured as the average of all the four indicators mentioned above, was 8.5% in September, down from 9.0% in June (Table 1). Excluding the asymmetric mean from the calculation would flatten the average core inflation over the third quarter, leaving it in September at the same level as it was in June (9.0%). In September, only the CPI excluding food exceeded the level of observed inflation, but none of the indicators exceeded the inflation target for 2000.

The cities with the highest inflation were Cúcuta and Montería (11.3% in both), followed by Bucaramanga (10.3%) and Barranquilla (10.0%); those with the lowest were Neiva (7.9%) and Cali (8.0%) (Table 2).

## 2. Performance of main CPI components

Inflation in the long term is a reflection of sustained excess aggregate demand, which may be induced by rapid growth of the money supply in the economy. The monetary authority will therefore need to control excess liquidity in the economy, as a condition for bringing about price stability.

**Figure 2**
Total and core inflation
1998:3 - 2000:9
(Annual percentage change)




Source: DANE; calculations by Banco de la República.

In the short term, however, adjustments in relative prices tend to cause transitory changes in the dynamics of inflation. A description follows of the main adjustments in relative prices of the CPI.

Accumulated inflation over the third quarter was low (0.7%) largely because of a 1.2% drop in food prices, thanks to harvests of a good number of agricultural products.Moreover, lower food prices partly counteracted higher prices for vehicles, water supply, air fares, taxi fares and fuel, which together accounted for 60% of third-quarter inflation. To judge by these results, the greatest upward pressure on inflation in the third quarter came from the continued rise in world fuel prices, devaluation, and the phasing out of utilities subsidies.

A breakdown of consumer inflation by the main groups of items making up the CPI basket reveals highly diverse performances. While annual price increases in clothing (2.9%) and housing (5.8%) were well below observed inflation, in transport (17.2%) and diverse expenditures (15.0%) they drove up inflation significantly (Table 1).

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1 The criteria for selecting these core-inflation indicators are described in detail in "Evaluación de indicadores de inflación básica en Colombia: 1989-1998" by the Economic Studies Division, in the review Ensayos sobre política económica, No. 34, December 1998, Banco de la República.

2 This indicator's basket changes every month in response to higher or lower volatility of items. This feature of the asymmetric mean creates a problem when an item such as housing rents with a heavy weight in the basket is included or not in the final calculation of core inflation.

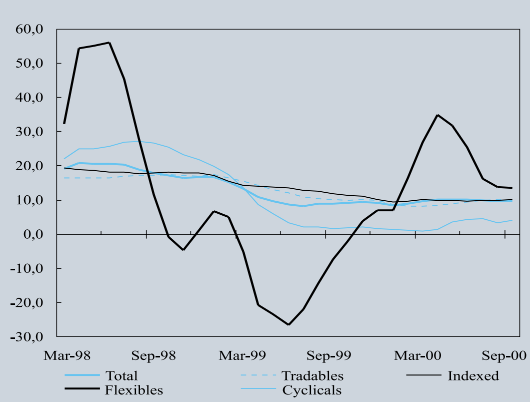
**Table 2**
**Consumer price index, total and by city**
(Percentage change to September)

| | Monthly | | | Year to September | | | Annual | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1998 | 1999 | 2000 | 1998 | 1999 | 2000 | 1998 | 1999 | 2000 |
| Total | 0,3 | 0,3 | 0,4 | 15,0 | 7,8 | 7,7 | 17,8 | 9,3 | 9,2 |
| Bogotá | 0,2 | 0,0 | 0,4 | 14,3 | 7,9 | 7,9 | 17,2 | 10,4 | 9,2 |
| Medellín | 0,1 | 0,4 | 0,5 | 15,4 | 8,0 | 7,2 | 19,2 | 9,7 | 9,2 |
| Cali | 1,7 | 0,7 | 0,6 | 13,6 | 6,4 | 6,9 | 15,9 | 7,2 | 8,0 |
| Barranquilla | 0,2 | 0,5 | 0,6 | 15,7 | 7,2 | 7,5 | 18,1 | 8,4 | 10,0 |
| Bucaramanga | (0,0) | 0,6 | 0,3 | 14,3 | 8,6 | 8,8 | 17,0 | 9,3 | 10,3 |
| Manizales | 0,4 | 0,7 | 0,3 | 15,2 | 8,3 | 7,3 | 18,4 | 8,9 | 9,2 |
| Pasto | 1,4 | 1,4 | 0,6 | 16,7 | 10,6 | 9,3 | 19,8 | 11,9 | 9,5 |
| Pereira | 0,2 | 1,1 | 0,3 | 15,1 | 9,0 | 7,5 | 17,8 | 10,0 | 8,8 |
| Cúcuta | 0,3 | 0,0 | 0,3 | 18,4 | 8,2 | 9,5 | 21,3 | 10,0 | 11,3 |
| Montería | (0,3) | 0,3 | 0,7 | 17,4 | 6,7 | 9,4 | 18,7 | 8,1 | 11,3 |
| Neiva | 1,4 | 0,7 | 0,1 | 13,6 | 8,5 | 7,4 | 17,0 | 8,6 | 7,9 |
| Cartagena | (0,5) | (0,3) | 0,2 | 17,4 | 6,4 | 8,2 | 19,5 | 6,9 | 9,8 |
| Villavicencio | 0,0 | 0,3 | 0,2 | 16,0 | 6,7 | 7,2 | 19,2 | 6,5 | 8,5 |

Source: DANE's lists; calculations by Banco de la República-SGEE.

Transport and diverse expenditures have been affected this year by continually rising domestic prices for gasoline, by devaluation, and also by a marked increase (over 20%) in financial-service charges in the past 12 months. Annual price changes in the other groups were closer to observed inflation: food (8.2%), health care (10.0%), and education (9.4%).

**Figure 3**
**Inflation in tradables and nontradables**
1998:3-2000:9
(Annual percentage change)




Source: DANE; calculations by Banco de la República.

### 3. Alternate classification: tradables and nontradables

Figure 3 shows the evolution of annual price changes under an alternate classification that divides the CPI basket into tradables[3] and nontradables, the latter consisting of indexed,[4] flexible,[5] and cyclical[6] items. The most notable

3 Tradables include textiles, footwear, tobacco, beverages, cereals, dairy produce, cooking fats, drugs, vehicles, electrical appliances, etc.

4 Indexed items include rent, fuel and utilities, education, transport, and other items.

5 Flexible items are root crops, plantains, vegetables, legumes, and fruit.

6 Cyclical items include meat and its by-products.

**Table 3**
**Consumer price index, 1999-2000**
**(To september)**

| Description | Change | | Contribution to change | | Contribution infln. reducn. 1/ |
|---|---|---|---|---|---|
| | 1999 | 2000 | 1999 | 2000 | 2000-1999 Points % |
| Total | 9,0 | 9,7 | 9,0 | 9,7 **2/** | 0,7 |
| Tradables | 10,2 | 9,9 | 3,9 | 3,8 | (0,1) |
| Nontradables | 8,2 | 9,6 | 5,1 | 5,9 | 0,8 |
| Indexed | 11,7 | 10,1 | 5,5 | 4,8 | (0,7) |
| Flexibles | (7,3) | 13,4 | (0,5) | 0,8 | 1,3 |
| Cyclicals | 1,6 | 3,9 | 0,1 | 0,3 | 0,2 |

**1/** The contribution to reducing inflation is the difference between each item's contributions to inflation in 1999 and 2000. The apparent lack of consistency between figures is caused by rounding.
**2/** The total inflation does not necessarily correspond to DANE's observed figure, because in building this classification a connection had to be made between the old CPI basket (CPI-60) and the new one (CPI-98), with some loss of information.
Source: DANE's lists; calculations by Banco de la República-SGEE.

third-quarter development under this classification was that annual inflation in tradable goods accelerated from 9.4% in June to 9.9% in September, driven largely by rising fuel prices and by devaluation. Over the past 12 months, however, tradables had a neutral effect on overall inflation, neither accelerating nor decelerating it. Nontradables helped to slow down inflation in the third quarter by dropping from 10.4% in June to 9.6% in September and counteracting the tradables' faster price growth.

The drop came largely from flexibles (root crops, vegetables and fruit), whose price rise plummeted from 25.5% in June to 13.4% in September for the reasons explained above.

Cyclicals, too, contributed to the drop in nontradables inflation, their slower price rise combining with that of the flexibles to counteract the indexed items' pick-up in price growth from 9.6% in June to 10.1% in September.

In the past 12 months, however, the prices of indexed goods helped to slow inflation by 0.7 percentage points, while those of cyclical and flexible goods helped to accelerate it by 0.2 and 1.3 percentage points respectively (Table 3).

In the case of flexibles this resulted from their having dropped very low in price in the second half of 1999.[7]

## B. Producer price index

Producer inflation measured as annual variation in the Producer Price Index (PPI) stood at 12.9% in September, up by 2 percentage points on a year earlier (Table 1). Nevertheless, producer inflation showed a clear downward trend over the third quarter, as evidenced by

[7] In determining in which groups the slowdown in inflation is concentrated, it should be borne in mind that a group with lower-than-average inflation in a given period does not necessarily help to reduce inflation in that period: it would do so only if its contribution to inflation were smaller in that period than in the previous one.

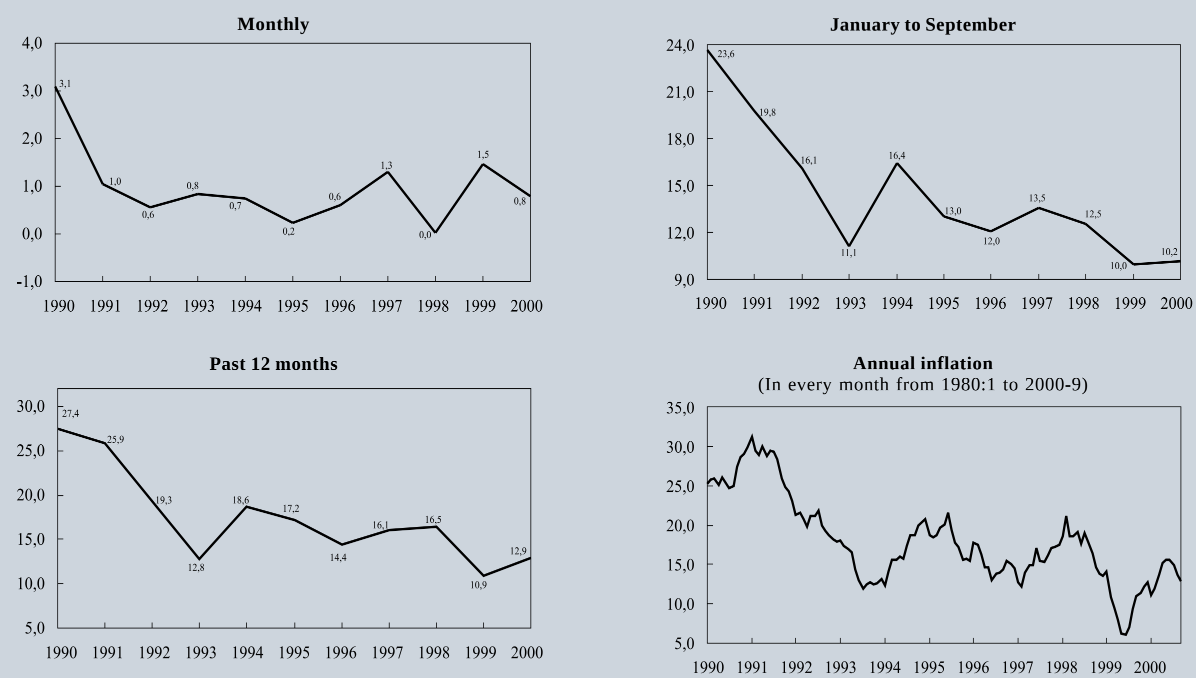
the fact that in September it was 2.7 percentage points lower than in June. This was a direct result of slower price growth in manufacturing and farm products. In the year to September the PPI grew by 10.2%, much as it had over the same period last year (10.0%) (Figure 4).

The PPI's monthly growth, however, was 0.8% in September, down by 0.7 points porcentage on less a year earlier.

Classification by origin shows imports registering a sharp fall in annual producer inflation, from 21.4% in June to 12.4% in September. This was largely a statistical outcome of a large price increase in imports in the third quarter of 1999. In fact, in 2000 imports have strongly fuelled producer inflation, registering a 13.1% price growth in the year to September, far above the overall PPI rise of 10.2% over the same period in 1999.

Domestically produced and consumed goods continued to grow at an even pace in the past months, ending the third quarter with a 13.1% producer inflation. Classification of the Producer Price Index by ISIC industrial origin shows mining prices rising by 22.0% at the end of the second quarter. In the third quarter, substantial monthly increases (for instance, 5.4% in September) raised annual growth in mining prices to 32.2% by the end of the quarter. In contrast to this, producer inflation in both farming, forestry, hunting and fishing (12.6%) and manufacturing (12.5%) was under - but close to-overall PPI inflation.

**Figure 4**
**Producer price index**
(Percentage change to september)




Source: Banco de la República, SGEE.

# Determinants of inflation

## A. Monetary aggregates, interest rates, and exchange rate

### 1. Monetary aggregates

The monetary aggregates' behavior is analyzed by examining the evolution of the monetary base, M1 money supply, the broader measure M3-plus-bonds, and the financial system's loan balance.

### Monetary base

On September 29th the monetary base amounted to 7,873 billion pesos, with a 12-month growth rate of 5.0%. Its 20-month daily moving average stood 2.8% above the ceiling of the corridor established by the Bank's Board of Directors (Figure 5).

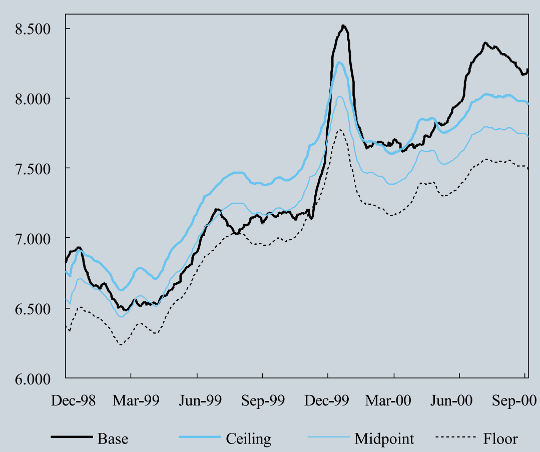
This resulted from the average cash balance growing at a faster annual rate (25.4%) than was implicitly envisaged (13.6%) in the monetary base's corridor ceiling. As mentioned in the June Report, the rate of cash growth has been characteristically high in recent times, particularly since mid-1999 (Figure 6).

In these circumstances, the monetary base's accelerated growth is not a source of inflationary pressure.

### M1 money supply

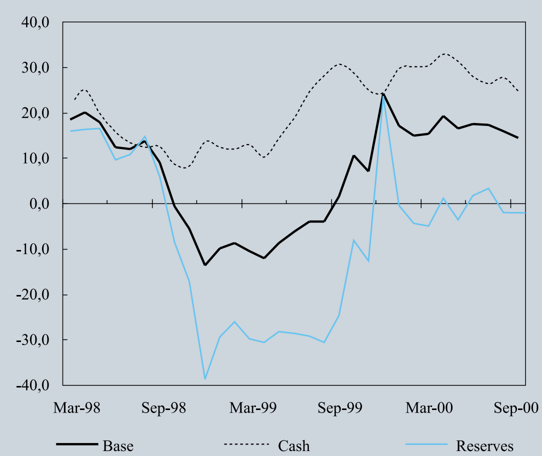
The M1 balance on September 29th was 12,656 billion pesos, with a 12-month variation of 34.4% and a year-to-date variation of -1.6%. Annual

**Figure 5**
**Monetary base**
**20-month daily moving average**
(Billions of pesos)




Source: Banco de la República-SGEE.

**Figure 6**
**Monetary base and its uses**
(Annual percentage change in monthly average)




Source: Banco de la República-SGEE.

growth in the M1's average balance fell from 35.6% in June to 34.7% in September.

This fall resulted exclusively from slower cash growth (25.4% in September, down from 27.9% in June) and occurred despite faster expansion in checking accounts (43.1% in September, up from 42.2% in June) (Figure 7).

## M3-plus-bonds

The broader monetary aggregate, M3-plus-bonds, amounted to 58,593 billion pesos on September 29th (Figure 8), with a 3.1% annual growth rate. Annual growth in its average balance was slightly lower in September (2.5%) than in June (2.6%), because of slower expansion in cash and in liabilities subject to reserve requirements (LSR) (Figure 9).

Between June and September, LSR growth dropped from 3.1% to 2.7%, mostly because of weaker growth in savings accounts (from 3.2% to -1.0%) and greater contraction in CDs (from -1.8% to -3.1%), and in spite of the faster expansion in checking accounts referred to above (Figure 10).

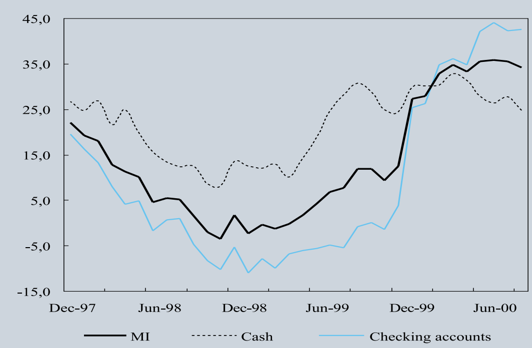
The average M3+bonds multiplier decreased between June and September, from 7.221 to 7.089. This behavior was associated with a higher cash ratio (from 0.100 to 0.103). In contrast, the reserve ratio edged down from 0.053 to 0.052 (Figure 11).

## Credit

On September 29th the overall net balance of local- and foreign-currency loans held by the financial system excluding FEN amounted to 46.288 billion pesos, with an annual variation of -9.8% and a year-to-date variation of -8.2%. The annual variation for domestic-currency loans was -7.6%, for foreign-currency loans -28.6%, and for the dollar equivalent of foreign-currency loans -35.2%.

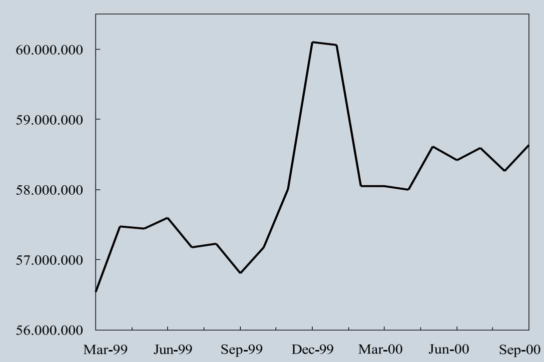
The average gross nominal balance of local-currency portfolio held by the whole system of

**Figure 7**
**M1 and its components**
(Annual percentage change in monthly average)



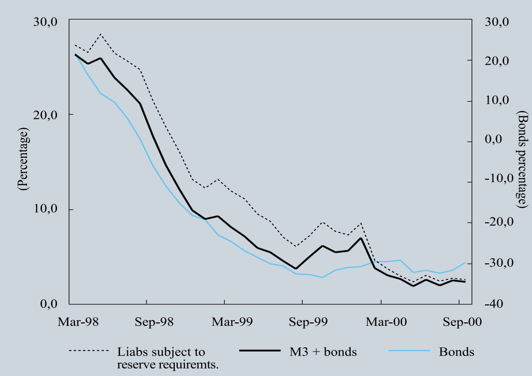

Source: Banco de la República-SGEE..

**Figure 8**
**M3-plus-bonds**
(Monthly balance in billions of pesos)




Source: Banco de la República-SGEE.

**Figure 9**
**M3-plus-bonds and its components**
(Annual percentage change in monthly average)




Source: Banco de la República-SGEE.

financial intermediaries showed a slightly larger annual contraction in September (-4.1%) than in June (-4.0%). Leaving out the savings and loans corporations (CAVs), the contraction for the rest of the system fell from -2.5% to -2.4%. For the CAVs it grew from -11.5% to -13.0%. (Figure 12).

In real terms, there was a smaller contraction in September than in June in the gross local-currency portfolio of the financial system (-12.2%, down from -12.4%) and in that of the system excluding the CAVs (-10.6%, down from -11.0%). (Figure 13).

A breakdown by groups of financial intermediaries shows a considerable improvement in the non-mortgage public institutions' annual portfolio growth, from -14.1% in June to 3.8% in September.

In contrast, the non-mortgage private banks' portfolio growth fell from 4.2% to 3.3% over the same period. Lastly, the loan portfolio of state and private mortgage banks continued to shrink at an increasing pace, as it had been for several quarters. (Figure 14)

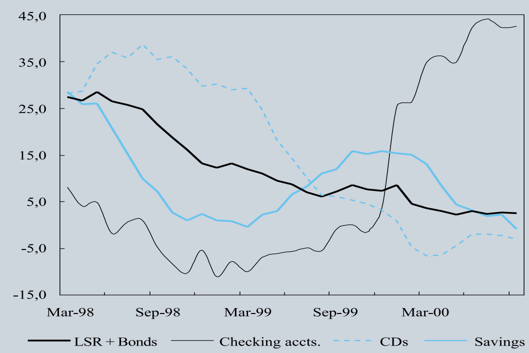
It should be noted that the portfolio behavior described above is partly explained by the statistical effect of loan removals from the financial intermediaries' balances.

These removals were brought about by the liquidation of some financial entities, the writing-down of unproductive assets, reductions by reason of property received in payment, portfolio securitizations and sales to institutions outside the system, and the restructuring of mortgage loans.

Table 4 gives an estimation[8] of the portfolio's behavior if such removals had not taken place. In

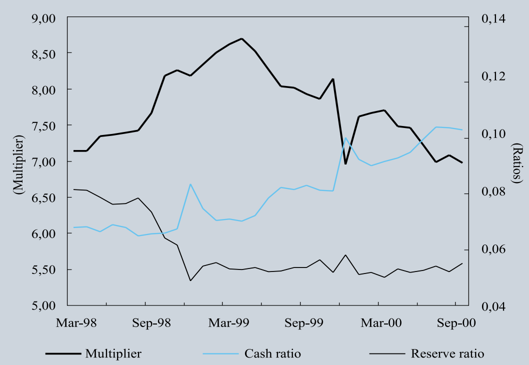
[8] Estimates based on monthly balance figures.

**FIGURE 10**
**LIABILITIES SUBJECT TO RESERVE REQUIREMENTS (LSR) AND THEIR COMPONENTS**
(ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)



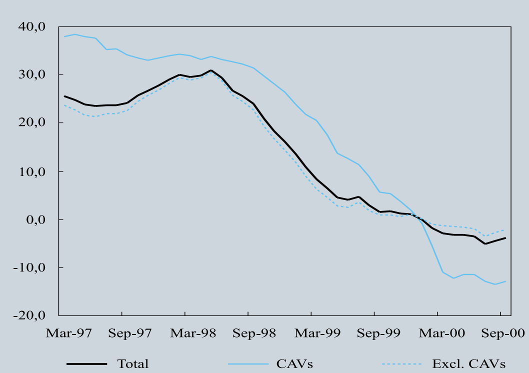

Source: Banco de la República-SGEE.

**FIGURE 11**
**M3-PLUS-BONDS MULTIPLIER**



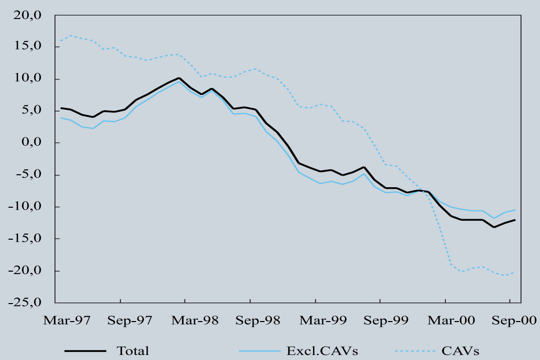

Source: Banco de la República-SGEE.

**FIGURE 12**
**GROSS NOMINAL LOCAL-CURRENCY PORTFOLIO FINANCIAL SYSTEM EXCLUDING FEN**
(ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)



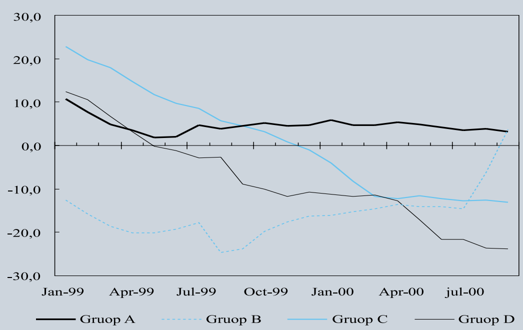

Sources: Banco de la República and Banking Superintendency.

**Figure 13**
**Gross real local-currency portfolio financial system excluding FEN**
(Annual percentage change in monthly average)



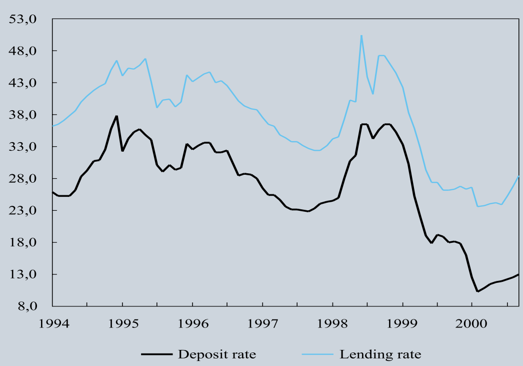

Sources: Banco de la República and Banking Superintendency.

**Figure 14**
**Total local-currency portfolio**
(Annual percentage change in monthly average)




**A:** Private-sector non-mortgage banks (excluding Davivienda and Colpatria). **B:** Public-sector non-mortgage banks. **C:** Private-sector mortgage banks (plus Davivienda and Colpatria). **D:** Public-sector mortgage banks.
Sources: Banco de la República and Banking Superintendency.

**Figure 15**
**Lending and deposit rates**
(Annual effective rate)




Sources: Banco de la República and Banking Superintendency.

contrast to the gross portfolio, the corrected portfolio expanded nominally throughout the year, at annual rates ranging between 3.0% and 7.0%. According to these figures, the gross local-currency portfolio would have shown a 3.5% annual growth in August. Clearing the loan portfolio in this way gives a better idea of the performance of fresh credit in the financial system (Table 4).

## 2. Interest rates

At the end of September the average deposit rate, as measured by the DTF, stood at 12.9% and the average lending rate at 29.0%. The difference between the two was 16.0 percentage points, the largest since 1986, and larger than the previous quarter's by 3.6 points (Figures 15 and 16). The interbank rate averaged 12.2% in September (Figure 17).

In real (ex-post) terms, the deposit rate rose from 2.1% to 3.4% between June and September and the lending rate from 13.0% to 18.1% (Figure 18).

(Figure 19) shows how the yield curve measured by the Banking Superintendency's TBS[9] rate has evolved over the past nine months.

Up until February of this year interest rates fell for all maturities. Since March they have risen by about two percentage points, running at around 10.0% for the shortest maturities (30 days) and around 14.0% for the longest. The slope of the yield curve in September was not significantly different from what it had been in the previous quarter.

The spot and forward curves for the past 12 months are presented in Figure 20. The spot curve (thick line) shows that the 90-day rate has

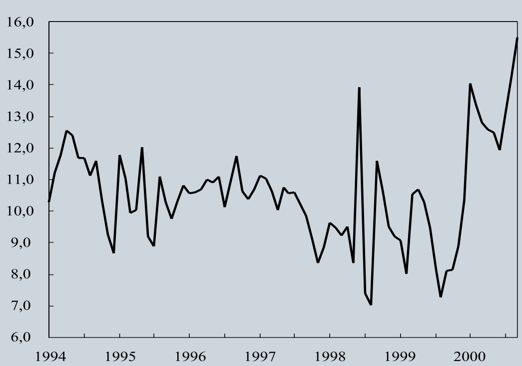
[9] The TBS (Banking Superintendency Basic Rate) is the average deposit rate for term certificates of deposit and term savings certificates with different maturities in the whole financial system, as determined by the Banking Superintendency.

## TABLE 4
## FINANCIAL SYSTEM'S GROSS ADJUSTED PORTFOLIO 1/
(BILLIONS OF PESOS)

| Períod | | Gross portfolio 2/ (a) | Change % | Loans removed 3/ (b) | Change % | Law 546 Treasury paper (c) | Gross corrected portfolio (d) | Change % |
|---|---|---|---|---|---|---|---|---|
| **1998** | Dec. | 46.734.905 | | 4.169.482 | | | 50.904.387 | |
| **1999** | Jan. | 46.739.081 | | 4.573.703 | | | 51.312.784 | |
| | Feb. | 46.710.313 | | 4.734.359 | | | 51.444.672 | |
| | Mar. | 46.931.283 | | 5.024.443 | | | 51.955.725 | |
| | Apr. | 46.511.564 | | 5.028.112 | | | 51.539.676 | |
| | May. | 46.625.671 | | 5.243.263 | | | 51.868.934 | |
| | Jun. | 47.106.731 | | 5.454.880 | | | 52.561.611 | |
| | Jul. | 46.496.683 | | 6.055.746 | | | 52.552.429 | |
| | Aug. | 45.900.959 | | 6.220.077 | | | 52.121.036 | |
| | Sep. | 46.814.400 | | 6.358.948 | | | 53.173.348 | |
| | Oct. | 46.343.487 | | 6.453.982 | | | 52.797.468 | |
| | Nov. | 47.190.023 | | 6.491.439 | | | 53.681.462 | |
| | Dec. | 47.230.673 | 1,1 | 7.231.853 | 73,4 | | 54.462.526 | 7,0 |
| **2000** | Jan. | 46.107.279 | (1,4) | 7.324.666 | 60,1 | | 53.431.945 | 4,1 |
| | Feb. | 45.444.189 | (2,7) | 7.402.887 | 56,4 | 188.984 | 53.036.060 | 3,1 |
| | Mar. | 44.908.963 | (4,3) | 7.750.279 | 54,3 | 1.009.811 | 53.669.053 | 3,3 |
| | Apr. | 45.045.524 | (3,2) | 7.645.202 | 52,0 | 1.424.182 | 54.114.908 | 5,0 |
| | May. | 44.330.299 | (4,9) | 8.471.145 | 61,6 | 1.554.655 | 54.356.099 | 4,8 |
| | Jun. | 44.405.167 | (5,7) | 8.560.088 | 56,9 | 1.606.548 | 54.571.803 | 3,8 |
| | Jul. | 44.396.256 | (4,5) | 8.152.700 | 34,6 | 1.888.354 | 54.437.309 | 3,6 |
| | Aug. | 43.866.250 | (4,4) | 8.206.494 | 31,9 | 1.875.198 | 53.947.942 | 3,5 |

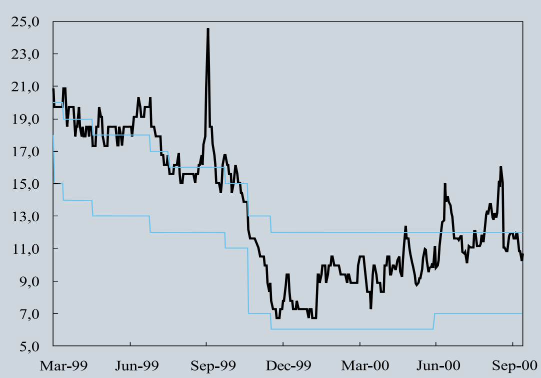
**(d) = (a) + (b) + (c).**
**1/** This information is provisional because some items have been calculated on estimates and also because financial intermediaries are modifying their financial statements.
**2/** From March 2000 the gross portfolio includes the liquidation balances of the Banco Central Hipotecario (state mortgage bank) provided by the Banking Superintendency.
**3/** Portfolio adjustments were made on the following criteria:
-Mortgage-loan relief does not include the financial system's accounts receivable from the government.
-Fogafin's 1999 administration portfolio is not included, because the Banking Superintendency opened account 821905 at the end of 1999 and it has not been reprocessed backward in time.
-The portfolio of entities in liquidation is included from the gross portfolio calculated by SGEE. [sic]
-The writing-down of property received in payment is not included.
Source: Calculations by Banco de la República-SGEE on the basis of balances provided by the Banking Superintendency and obtained through telephone surveys.

## FIGURE 16
## LENDING AND DEPOSIT RATE DIFFERENTIAL FINANCIAL SYSTEM
(PERCENTAGE)




Sources: Banco de la República and Banking Superintendency.

## FIGURE 17
## INTERVENTION BAND AND INTERBANK RATE 1998:12 - 2000:9
(PERCENTAGE)




Sources: Banco de la República and Banking Superintendency.

risen by about two percentage points over the past five months, as predicted in previous Reports.

The points on the forward curves (thin lines) represent agents' expectations about the 90-day rate at the present time (the first point), in 30 days (second point), and so on up to 360 days. The forward curves indicate that the market expects the 90-day rate to pick up strongly in the next 12 months.

### 3. Yield differentials

This section deals with the differential between external and domestic yields. The external yield is defined as the yield that local investors expect to obtain on dollar-denominated investments. It is calculated by adding devaluation expectations to the external interest rate of reference.

For this purpose, devaluation expectations are the implicit devaluations contained in the financial system's forward (80 to 100 days) dollar sales contracts. The external rate of reference is the 90-day Libor, and the domestic rate of reference is the DTF rate.

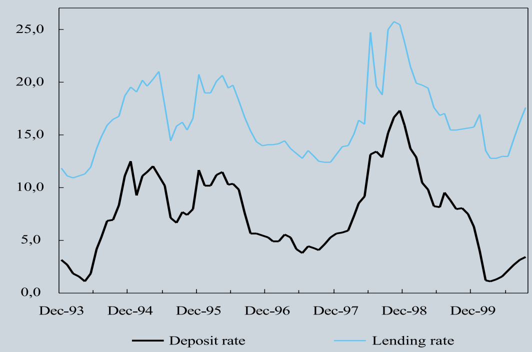
Figure 21 compares expected external yield, the return on domestic investments (as measured by the DTF rate), and actual external yield (with a three-month lag). In September, expected external yield continued to run slightly above internal yield (Figure 21).

Although the DTF rate rose in the past few months, the rise was not enough to compensate for the combined effect of expected devaluation and the external interest rate.

### 4. Nominal and real exchange rates

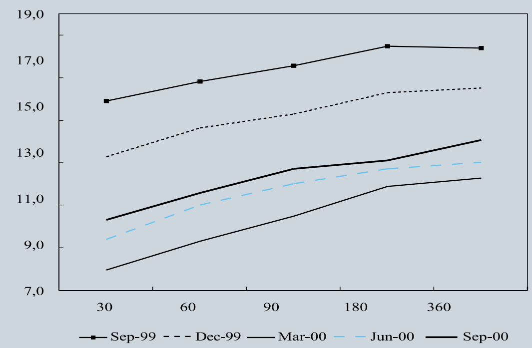
The nominal exchange rate stood at 2,212 pesos to the dollar at the end of September, compared with 2,139 pesos at the end of the

FIGURE 18
REAL DEPOSIT AND LENDING RATES, FINANCIAL SYSTEM
(PERCENTAGE)



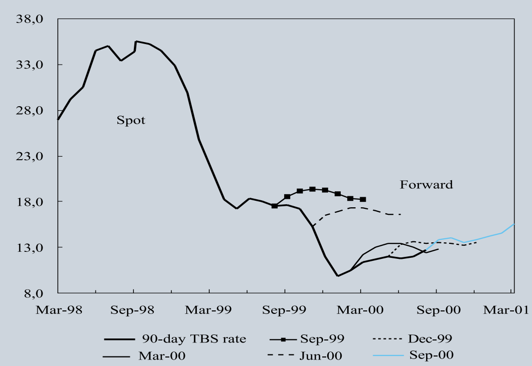

Sources: Banco de la República and Banking Superintendency.

FIGURE 19
TBS DEPOSIT RATE FOR DIFFERENT MATURITIES, AS DETERMINED BY BANKING SUPERINTENDENCY
(PERCENTAGE)



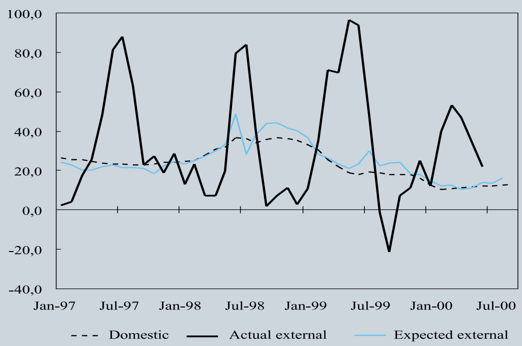

Source: Banking Superintendency.Fuente: Superintendencia Bancaria.

FIGURE 20
90-DAY TBS PROJECTIONS
(PERCENTAGE)



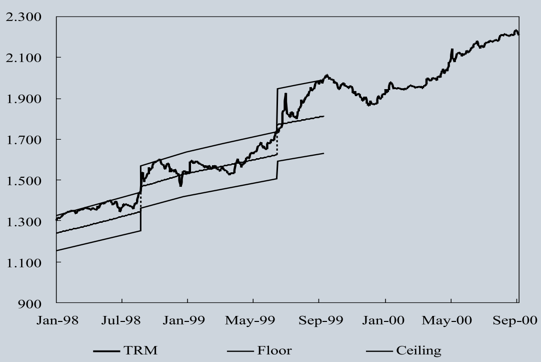

Source: Banking Superintendency.

**FIGURE 21**
**EXTERNAL AND DOMESTIC ANNUAL YIELDS: ACTUAL V. EXPECTED**
(PERCENTAGE)



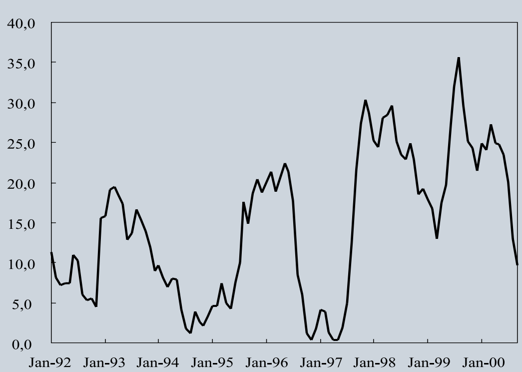

Source: Banco de la República.

**FIGURE 22**
**MARKET EXCHANGE RATE (TRM)**
**1998:1 - 2000:9**
(PESOS TO THE DOLLAR)




Sources: Banco de la República and Banking Superintendency.

**FIGURE 23**
**ANUAL NOMINAL DEVALUATION**
**1992:1 - 2000:9**
(PERCENTAGE)




Sources: Banco de la República and Banking Superintendency.

second quarter (Figure 22). Annual devaluation was 9.7% at the end of September and 18.1% for the year to September (Figure 23).

The real exchange rate, as measured by the RERI-1 index (1994 = 100), which is based on Colombia's producer price index and those of its 20 trading partners, averaged 119.6 in September.

It showed an annual revaluation of 0.5% and a devaluation of 7.8% for the year to September. Using the RERI-3 index (1994 = 100), which is based on consumer price indices, gives an annual real devaluation of 1.2% in September and of 8.6% in the year to September (Figures 24 and 25).

## 5. Asset prices

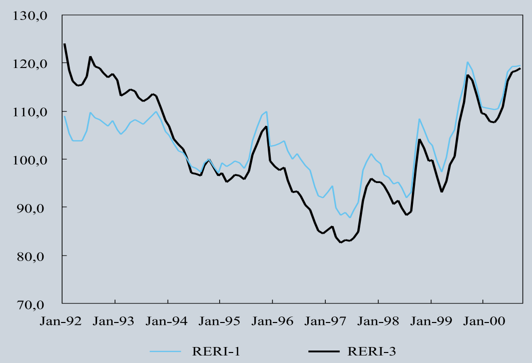
A number of variables are discussed here that may be helpful in describing the behavior of asset prices. First is the Bogotá Stock Exchange Index (IBB), which is a weighted index of the price of the 20 Colombian companies' shares that have registered the largest trading by volume and value on the Bogotá Stock Exchange in the past 48 fortnights.

The weighting of each of the 20 shares making up the Index depends on the volume and value of its trading and is recalculated every fortnight.

The Index, which was fairly variable over 1999, has shown a sharply declining trend since January, ending September at 749, down from 763 at the end of June (Figure 26).

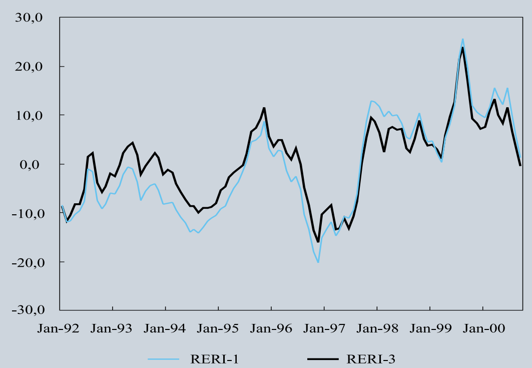
The IBB share price fell by 24.0% in the 12 months to September and by 50% so far this year. It should be pointed out that the IBB may show great volatility (as, for instance, between July 1998 and January 2000) because some volatile share prices may come to weigh very heavily in the Index.

**FIGURE 24**
**REAL EXCHANGE RATE INDICES**
**RERI-1 AND RERI-3 (1944 = 100)**
**1992:1 - 2000:9**



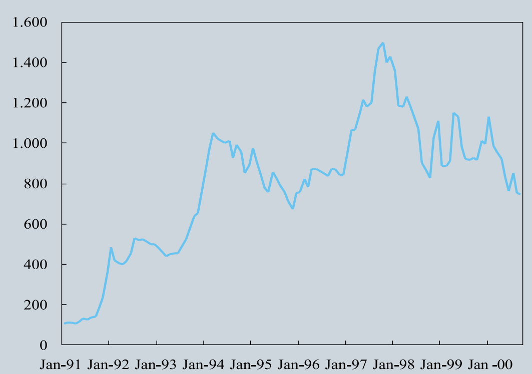

Source: Banco de la República-SGEE.

**FIGURE 25**
**ANUAL REAL DEVALUATION**
**RERI-1 AND RERI-3 (1994 = 100)**
**1992:1-2000:9**
**(PERCENTAGE)**



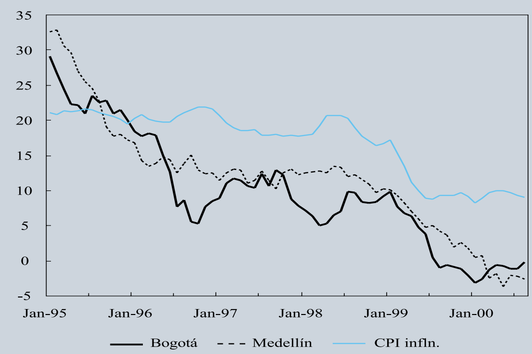

Source: Banco de la República-SGEE.

**FIGURE 26**
**BOGOTA STOCK EXCHANGE INDEX**
**(JANUARY 1991 = 100)**
**1992:1-2000:9**
**(PERCENTAGE)**




Source: Bogotá Stock Exchanges.

**FIGURE 27**
**HOUSING-PRICE INFLATION IN BOGOTA AND MEDELLINAND CPI INFLATION**
**1995:1 - 2000:9**
**(ANNUAL PERCENTAGE CHANGE)**




Source: National Planning Department.

Another variable that provides information on asset-price behavior is the National Planning Department's housing-price index for Bogotá and Medellín. Figure 27 shows annual variations in housing prices for Bogotá and Medellín, together with CPI inflation. From the second half of 1995 housing-price variations in the two cities ran below consumer inflation as measured by the CPI basket. This implies that the real value of housing in Colombia began to fall continually from then on, the fall being greater in Bogotá than in Medellín.

This year, however, housing prices have stopped falling in Bogotá but continue to do so in Medellín.

## B. SUPPLY AND DEMAND

### 1. General considerations

In the first half of 2000 the Colombian economy began to show positive growth again, the pace of growth accelerating over the year. It is now possible to predict a third-quarter growth at least similar to that registered in June. And the expected behavior of a number of variables crucial to economic stability suggests a similar economic performance to the end of the year.

According to the National Statistics Agency (DANE), the economy grew at an annual rate of 3.5% in the second quarter, significantly faster than in the first (2.2%).

This result bears out the previous Inflation Report's perception that growth in the second quarter should not be lower than in the first three months of the year. The economy has thus registered positive annual growth for two quarters in a row and has therefore technically come out of recession (Figure 28).

In the second quarter, faster growth was observed in most branches of production, including manufacturing. Unlike growth in the first quarter, expansion in the second was driven not only by satisfactory performance in manufacturing but also by acceptable rates of growth in farming, commerce and, to a lesser extent, transport.

Growth was also shown for the first time by such sectors as construction (1.3%) and financial institutions (0.3%) that had registered contractions earlier in the year (Table 5).

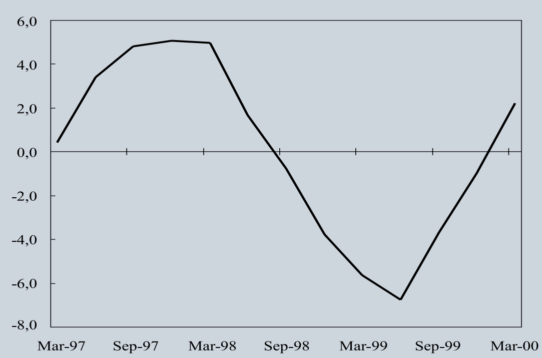
This was the construction sector's first positive annual growth since the last quarter of 1997. Its recovery however has come from public-works projects, notably those undertaken by municipal authorities in Bogotá, rather than from an upturn in the housing sector.

The only sectors showing slower growth in June compared with March were mining and quarrying, and social and community services. In the mining sector this was mostly attributable to a fall in oil production, caused both by an expected decline in wells and by various problems connected with public order.

The recent behavior of some indicators of economic activity suggests that the economy continued to grew in the third quarter at least at much the same rate as in the first half of the year. Consumption of electricity and of gas-plus-electricity continued to grow with respect to a year earlier. Electricity consumption between July and September was up by 1.7% on the same period the year before, and by 1.0% on the second quarter of this year.

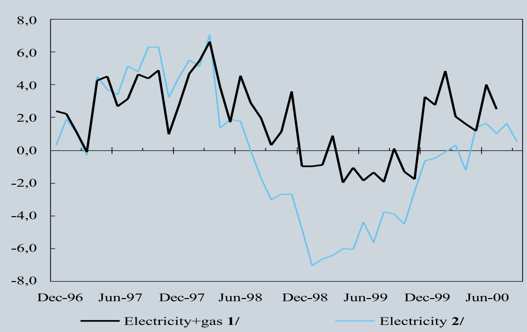
Consumption of gas-plus-electricity showed an annual growth of 2.5% in July and 2.3% in the second quarter (Figure 29).

FIGURE 28
QUARTERLY GDP
(ANNUAL PERCENTAGE CHANGE)




Source: DANE.

FIGURE 29
ELECTRICITY AND ELECTRICITY + GAS CONSUMPTION
(ANNUAL PERCENTAGE CHANGE IN MONTHLY CONSUMPTION)




1/ To July 2000. Gas consumption in MBTU/day.
2/ To September 2000.

Sources: ISA and Ecopetrol.

**Table 5**
**Gross domestic product, by sector**
(Annual percentage change)

| | 1999 | 2000 | |
|---|---|---|---|
| | | I | II |
| **GDP** | (4,3) | 2,2 | 3,5 |
| Farming, forestry, hunting & fishing | (0,2) | 1,9 | 6,6 |
| Mining and quarrying | 4,9 | 2,5 | (6,4) |
| Electricity, gas and & water | (3,5) | 4,3 | 2,5 |
| Manufacturing | (12,4) | 8,8 | 11,7 |
| Construction | (24,3) | (9,4) | 1,3 |
| Commerce, repairs, restaurants & hotels | (8,9) | 2,7 | 6,2 |
| Transport, warehousing & communications | (2,9) | 3,2 | 3,9 |
| Financial, insurance, real-estate & bus.-serv. entities | (6,1) | (2,2) | 0,3 |
| Social, community & personal services | 4,0 | 1,1 | (1,2) |
| Servicios bancarios imputados | (23,3) | (13,9) | (8,9) |

Source: DANE.

Other sectoral indicators such as retail sales and industrial production were positive early in the third quarter. The real retail index excluding fuel showed a positive growth rate in July, similar to the second-quarter rate (4.0%) (Figure 30).

According to both DANE and the National Industrialists' Association (ANDI), there has been a strong upturn in industrial production in recent months. For the year to August, annual industrial growth is estimated at 9.4% by ANDI's indicator and at 11.6% by DANE's.

DANE's figures even show a faster growth in August compared with the second quarter, which may be due to a better performance by small businesses because these, as mentioned in previous reports, are not captured by ANDI's surveys (Figure 31).

Exports maintained their growth trend in August. Annual growth in exports accumulated between January and August was 19.5% and continued to be driven mainly by a large increase in oil exports (47.0%), but also by the satisfactory performance of nontraditional exports (14.3%), particularly manufactured ones (20.5%) (Figure 32).

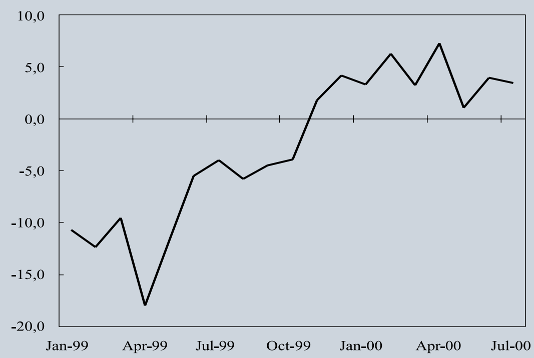
Throughout the year buoyancy in external rather than domestic demand has been the driving force behind the industrial sector's growth, and there is a close link today between the production behavior of different branches of industry and exports.

This has been particularly evident in such sectors as textiles, clothing, and transport materials. Exports of transport materials between January and July were higher this year than in the past six years, making this one of the sectors with the highest production growths, and compensating for poor performance in the domestic market, where sales for the year to May were only slightly higher than a year earlier.

Lastly, other, narrower indicators such as credit-card sales (discussed below in greater detail) and overtime in manufacturing continued to show positive results. According to DANE's figures to July, overtime continued to increase at a good pace, registering a 25.0% year-to-date expansion in July, higher than that reported in the June Report (Figure 33).

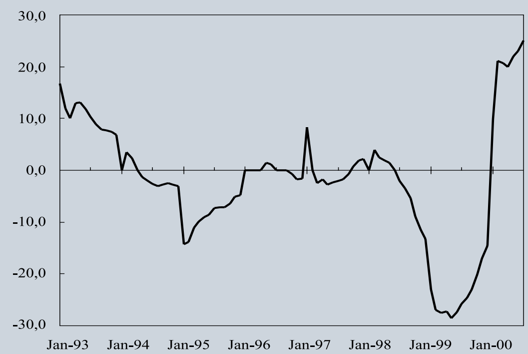
Growth prospects for the rest of the year continue to be good, so that one may venture to

**Figure 30**
**Monthly retail sales excluding fuel to July 2000**
(Annual real percentage change)



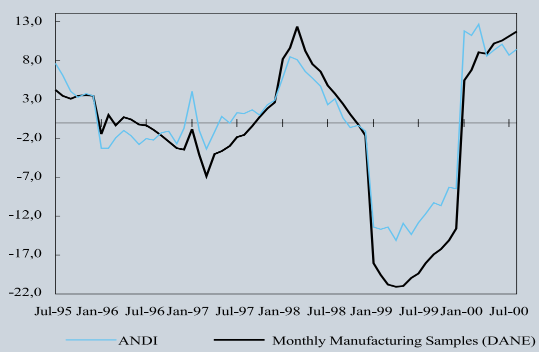

Source: DANE..

**Figure 33**
**Overtime in manufacturing to July 2000**
(Annual percentage change year to date)



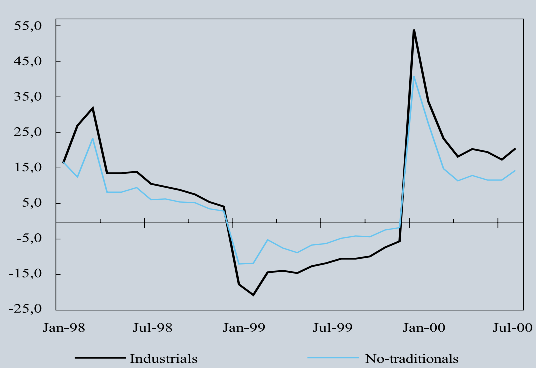

Source: DANE, Monthly Manufacturing Samples.

**Figure 31**
**Real industrial production index to August 2000**
(Annual percentage change year to date)




Sources: ANDI and DANE.

**Figure 32**
**Exports**
**1998:8 - 2000:8**
(Annual percentage change year to date)




Source: DANE.

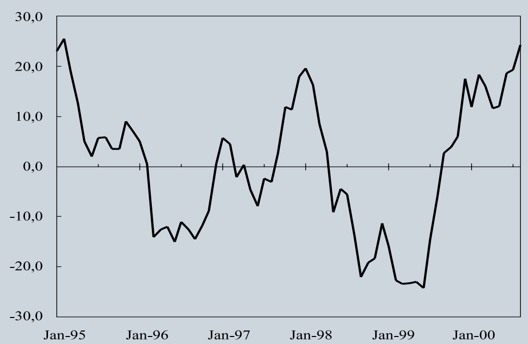
predict that the government's 3.0% growth target for 2000 may be met. These growth prospects are supported by present levels of business expectations and manufacturing stocks and orders. On the latest information from Fedesarrollo's Business Opinion Survey, stocks remained low in August, even lower than in the previous months. Hence the likelihood that the usual rise in year-end demand will largely be met by fresh supplies to be produced in the next few months. According to business opinion, orders continued to rise both in export companies and in firms supplying the domestic market. In fact, this indicator's monthly increase in August was one of the highest registered by it in recent years (Figure 34).

Business expectations regarding the economic situation today and in six months' time continued to be favorable, as evidenced by the business-climate indicator, which synthesizes developments in such variables. The business-climate indicator continued to rise in August, to its highest peak in several years (Figure 35).
Besides satisfactory performance by the industrial indicators mentioned above, another factor justifying optimism about medium-term growth is the status of the so-called "economic fundamentals." As discussed in detail in the chapter on the international context, growth among our main trading partners and expected

**Figure 34**
**Business opinion survey**
(Balances - to August 2000)

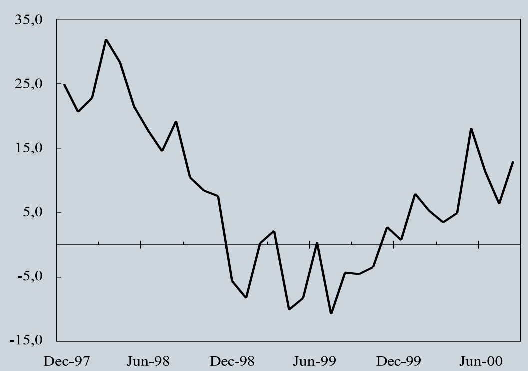

Sources: Fedesarrollo's Business Opinion Surveys.

**Figure 35**
**Business climate**
(To August 2000)




Sources: Banco de la República-SGEE, on figures from Fedesarrollo's Business Opinion Surveys.

**Figure 36**
**Credit-card sales, entire system to August 2000**
(Annual (nominal % change in monthly sales)




Source: Red Multicolor.

price movements in our main exports lead us to expect further expansion in export earnings in the medium run. Hence, the external sector should continue to boost growth in the following months as it has been doing so far this year. It will be helped in this by the current competitive level of real exchange rate, which is not expected to change substantially in the medium term. Lastly, interest rates continue to be highly favorable to domestic consumption and investment.

## 2. Consumption

According to DANE, final consumption grew at an annual rate of 2.3% in the second quarter, similar to its first-quarter growth but lower than overall GDP expansion. As stated in the June Report, slow growth in this demand is caused among other things by high unemployment and falling family incomes. Official statistics show little change in unemployment in recent months. No major breaks should therefore be expected in the growth trend of final consumption.

Recovery in consumer credit is an essential condition for faster spending growth in the medium term. Consumption financed through cards has been recovering slowly. Figure 36 shows that in real terms monthly credit-card sales grew slightly in recent months, compared with a year earlier, after shrinking during several quarters. From July to August their nominal annual growth averaged 10.0%, giving a real growth of about 1.0%.

Besides credit-card sales, another indicator corroborating recent months' recovery in consumption is imports of consumer goods. The dollar value of consumer-goods imports between January and July was up by 6.4% on the same period last year; by volume, their annual growth was even higher (31.0%), with both durable and nondurable consumer goods expanding.

## 3. Investment

Among the different components of spending, the highest rates of growth are shown by investment. DANE reports an annual growth of 19.8% in investment over the second quarter, up by 7.6% on the first quarter. It seems therefore that economic agents' investment decisions were not affected by the fact that half-way through the second quarter there was greater uncertainty in markets, from political developments. In any case, although investment has recovered substantially, its level is still 30.0% lower than it used to be before the recession.

Everything points to investment continuing on its present recovery trend in the next few months. This is suggested by the satisfactory performance of capital-goods production, which shows higher growth rates than the industrial sector as a whole.

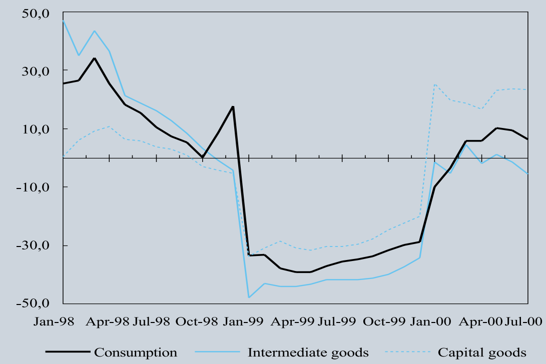
Year-to-date growth in the production of electrical and non-electrical machinery and transport materials is running at annual rates close to or higher than 20.0%.

Similarly, the performance of intermediate- and capital-goods imports suggests that investment buoyancy may be sustained in the following months. The value of accumulated intermediate-goods imports in the first seven months of the year showed a healthy annual growth of 23.0% in July. And though capital-goods imports shrank in value over this same period, they expanded in volume, at an annual rate of 12.0% for the year to July, with growth occurring in all types of goods, including goods for the construction sector. (Figures 37 and 38)

## C. Wages and employment

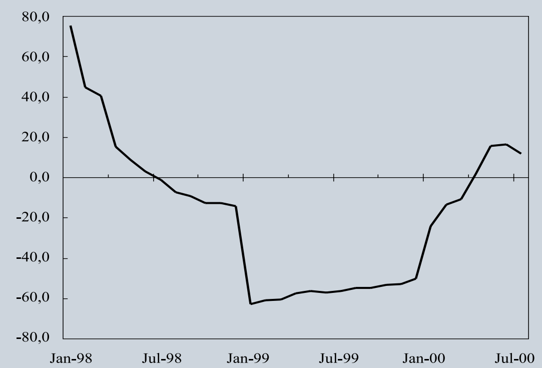
Average nominal industrial wages and salaries in the 12 months to July 2000 rose by 14.9% with respect to a year earlier. This rise was slightly lower than the figure for May (15.2%) given in the second-quarter Report. The July figure thus maintained the declining trend in

FIGURE 37
ANNUAL IMPORT GROWTH, BY VALUE
YEAR TO DATE
(TO JULY 2000)



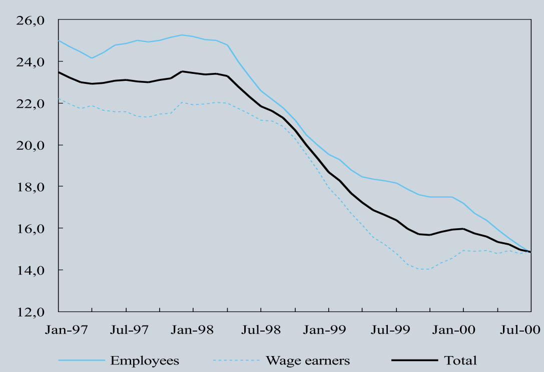

Source: DIAN Manifests.

FIGURE 38
ANNUAL GROWTH IN CAPITAL-GOODS IMPORTS,
BY VOLUME YEAR TO DATE
(TO JULY 2000)




Source: DANE, Monthly Manufacturing Sample.

FIGURE 39
NOMINAL MANUFACTURING PAY
TO JULY 2000
(AVERAGE ANNUAL % CHANGE, LATEST 12-MONTHS)




SOURCE: DANE, Monthly Manufacturing Sample.

nominal industrial pay adjustments that has lasted for almost two years (Figure 39).

Lower nominal adjustments also meant a smaller rise in real pay between May and July of this year. Average real wages and salaries in the 12 months to July rose at an annual rate of 5.1%, down from the 5.6% rate for May given in the previous Report (Figure 40).

Since labor productivity, measured as the ratio of production to the number of workers employed, continued to improve in the second quarter and beginning of the third, higher real pay did not translate into a significant rise in unit labor costs. Estimated unit labor costs in July were similar to the previous months' levels and quite lower than in the period before the recession (Figure 41).

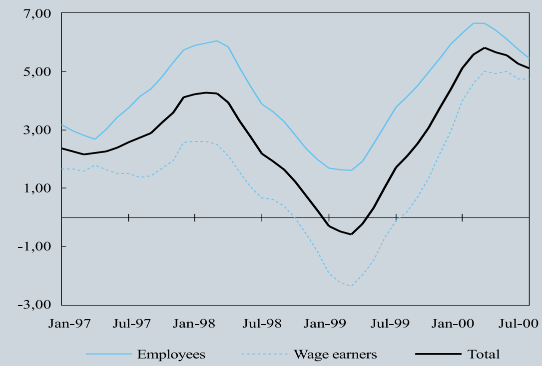
## 2. Employment

In July, overall industrial employment, as measured by DANE's Monthly Manufacturing Sample, did not contract for the first time in several years. It rose by 1.0% with respect to the same month last year, confirming a trend toward recovery in employment that began in the final quarter of 1999.

The increase in industrial employment relative to last year's levels stemmed from slower contraction in permanent employment and particularly from a considerable pick-up in temporary employment. The expansion in temporary employment began at the end of last year and continued apace in the past few months, resulting in an annual growth of 19.0% in July (Figure 42).

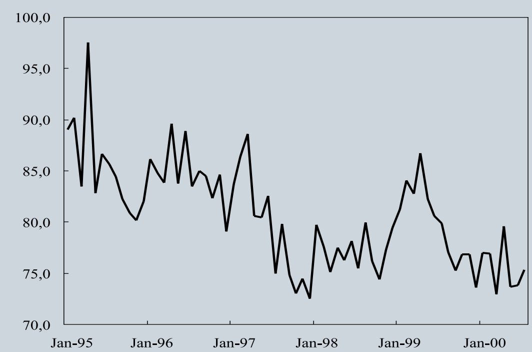
Over much of the year the recovery in temporary employment was driven by workers, but in July employees, too, showed a substantial increase (17%).

FIGURE 40
REAL MANUFACTURING PAY
(AVERAGE ANNUAL % CHANGE, LATEST 12-MONTHS)



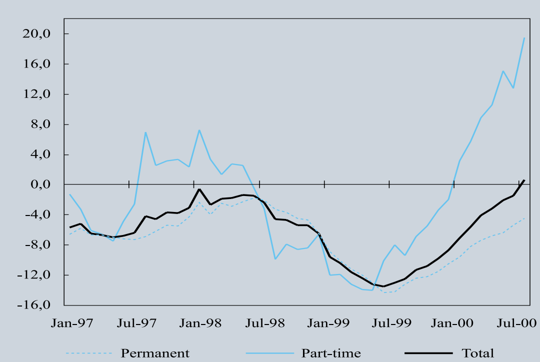

SOURCE: DANE, Monthly Manufacturing Sample.

FIGURE 41
REAL UNIT LABOR COST INDEX
INDUSTRIAL WAGE EARNERS
(TO JULY 2000)




SOURCE: DANE, Monthly Manufacturing Sample.

FIGURE 42
MONTHLY INDUSTRIAL EMPLOYMENT INDEX
TO JULY 2000
(ANNUAL PERCENTAGE CHANGE)




Source: DANE, National Household Surveys.

The latest information on employment in other sectors than industry comes from DANE and pertains to retail commerce. In July, employment in retail commerce contracted at an annual rate of 4.5%. This rate of contraction, however, was lower than that observed in the second quarter (-7.3%).

Although in June DANE reported an increase in employment relative to 1999 for the seven major cities, for the third quarter in a row, unemployment still continued to be very high (20.4% in June). This is because growth in labor supply has far outpaced expansion in demand in the past few quarters. Hence, no strong inflationary pressures should be expected from this front.

### 3. Negotiated pay rises

Tables 6 and 7 present figures on one-year and two-year pay rises contained in collective bargaining agreements reported to the Ministry of Labor and Social Security. The top half of the tables shows the percentages of workers covered by different ranges of one-year pay settlements reached between January and September (Table 6) and between January and June (Table 7) of this year.

According to Table 6, the pay rise for a large proportion (31.2%) of these workers has been set at last year's inflation (9.23%), while for another large proportion (36.3%) it ranges between 9.25% and 11%; for 19.6% of the workers the pay rise is over 12.0%, and for 12.9% of them under 9.23%. Compared with second-quarter figures (Table 7), the percentages of workers receiving different ranges of one-year pay rises did not change substantially in September: there was a decrease in workers receiving more than 12.0%, and a small increase in those receiving less than 9.23%.

The bottom half of the tables shows the percentages of workers covered by different two-year pay settlements in collective bargaining agreements made between January and September (Table 6) and between January and June (Table 7) of this year. A large majority (57.4%) of these workers have obtained pay increases equal to CPI inflation. For another 31.4% of the workers the pay rise ranges between CPI and CPI-plus-three-points, while for 10.6% of them the increase is less than 12%. As in the case of one-year settlements, information available in the third quarter did not substantially alter the figures on two-year pay rises negotiated in collective bargaining agreements.

**Table 6**
**Percentages of beneficiaries by pay-rise levels negotiated in January-September 2000**

One-year negotiated rises

| <9,23 | 9,23 | [9,23-11,0] | >11 |
|---|---|---|---|
| 12,9 | 31,2 | 36,2 | 19,6 |

Two-year negotiated rises

| <12 | CPI | CPI to CPI+3 | LMW to LMW+3 |
|---|---|---|---|
| 10,6 | 57,4 | 31,4 | 0,5 |

**LMW** = Legal minimum wage
Source: Ministry of Labor and Social Security.

**Table 7**
**Percentages of beneficiaries by pay-rise levels negotiated in January-June 2000**

One-year negotiated rises

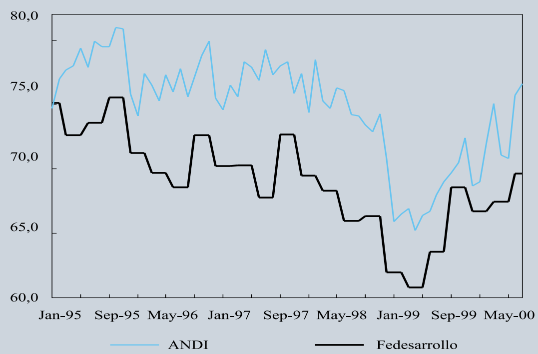
| <9,23 | 9,23 | [9,23-11,0] | >11 |
|---|---|---|---|
| 11,1 | 31,9 | 34,9 | 22,1 |

Two-year negotiated rises

| <11 | CPI | CPI to CPI+3 | LMW to LMW+3 |
|---|---|---|---|
| 8,2 | 56 | 30,9 | 3,4 |

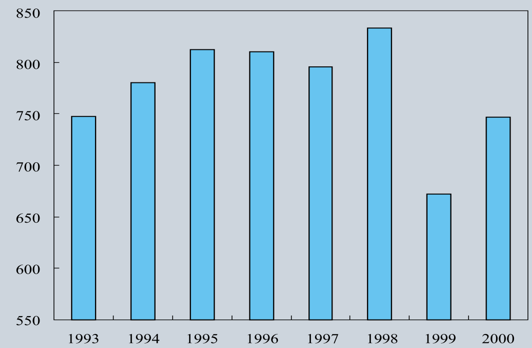
**LMW** = Legal minimum wage
Source: Ministry of Labor and Social Security.

FIGURE 43
CAPACITY UTILIZATION
(TO FEBRUARY 2000)




Sources: ANDI and Fedesarrollo.

FIGURE 44
REAL MANUFACTURING PRODUCTION
FIRST FOUR MONTHS OF EVERY YEAR




Source: DANE, Monthly Manufacturing Sample.

## D. CAPACITY UTILIZATION

Capacity utilization indicators continued to show a rising trend in the second quarter and the beginning of the third. Fedesarrollo's indicator was still running below the historical average for the nineties in August, whereas ANDI's indicator rose above its historical average for the past six years in July (Figure 43). In both cases, industria-capacity utilization is still lower than it used to be before the recession. ANDI's figures, however, show it to be at historically normal levels in some specific sectors such as textiles and the garment industry.

At all events, industrial production and most sectors making up GDP are still below their 1997 and 1998 levels. In manufacturing, for example, accumulated production in the first half of this year was 90% of what it was in 1998.

This means that the economy still has ample unused production potential, which will reduce the risk of inflationary demand pressure in the next few months.

## E. THE FISCAL SITUATION

At the end of June the consolidated public-sector deficit amounted to 330 billion pesos, equivalent to 0.2% of annual GDP. Relative to the half-yearly target of 4,150 billion pesos set in the International Monetary Fund agreement, this result represented over-fulfillment by an amount of 3,820 billion pesos (2.2% of GDP). It was the outcome of satisfactory behavior in nonfinancial public-sector finances, whose deficit ran lower than the agreement's target by 2.3% of GDP. This behavior of nonfinancial public-sector finances during the year has been largely connected with favorable developments in the oil industry, and with the seasonal nature of payments from some state companies and entities. Such payments tend to be concentrated in the latter part of the year and were low in the first six months (Table 8).

The central government's finances registered a deficit of 3,024 billion pesos in the first half of the year, equivalent to 1.7% of annual GDP. Income grew by 29.8% and expenditures by 12.4% relative to the same period last year. Among income items, tax receipts surged by

## Table 8
## Consolidated public-sector fiscal balance to June 2000

| | | Billions of pesos | | | Percentage of GDP | | |
|---|---|---|---|---|---|---|---|
| | | IMF agreement | Provisional result | Difference | IMF agreement | Provisional result | Difference |
| I. | Nonfinancial public sector | (4.060) | (153) | 3.907 | (2,34) | (0,09) | 2,25 |
| II. | Banco de la República's quasi-fiscal balance | 485 | 423 | (62) | 0,28 | 0,24 | (0,04) |
| III. | Fogafin balance | (452) | (178) | 274 | (0,26) | (0,10) | 0,16 |
| IV. | Financial restructuring costs | (111) | (321) | (210) | (0,06) | (0,19) | (0,12) |
| V. | Adjustments | (12) | (101) | (89) | (0,01) | (0,06) | (0,05) |
| VI. | Consolidated public-sector deficit or surplus (I+II+III+IV+V) | (4.150) | (330) | 3.820 | (2,39) | (0,19) | 2,20 |

Source: Fiscal Policy Council (CONFIS).

## Table 9
## Central government
(billions of pesos)

| | | January-June | | June % change | |
|---|---|---|---|---|---|
| | | 1999 | 2000 | 2000 / 1999 | |
| **I.** | **Total revenues (A+B)** | 8.785,0 | 11.407,0 | 29,8 | |
| | A. Tax revenues | 7.919,0 | 10.288,0 | 29,9 | |
| | Income tax & internal VAT | 5.713,0 | 7.406,0 | 29,6 | |
| | Customs & external VAT | 1.472,0 | 1.956,0 | 32,9 | |
| | Gasoline | 346,0 | 404,0 | 16,8 | |
| | Other | 388,0 | 522,0 | 34,5 | |
| | B. Nontax and other revenues | 866,0 | 1.119,0 | 29,2 | |
| **II.** | **Total expenditures (A+B+C+D) 1/** | 13.988,0 | 15.722,0 | 12,4 | |
| | A. Interest payments | 2.871,0 | 3.687,0 | 28,4 | |
| | B. Operating costs | 9.795,0 | 10.632,0 | 8,5 | |
| | C. Investment | 871,0 | 985,0 | 13,1 | |
| | D. Net loans | 451,0 | 418,0 | (7,3) | |
| **III.** | **Cash deficit or surplus (I-II)** | (5.203,0) | (4.315,0) | (17,1) | |
| **IV.** | **Adjustments** | | (794,0) | 1.291,0 | (262,6) |
| **V.** | **Total deficit or surplus (III+IV)** | (5.997,0) | (3.024,0) | (49,6) | |
| **VI.** | **Financing (A+B+C)** | 5.997,0 | 3.024,0 | (49,6) | |
| | A. Net external credit | 1.563,0 | 1.974,0 | 26,3 | |
| | B. Net domestic credit | 2.157,0 | 2.677,0 | 24,1 | |
| | C. Privatizations and other | 2.277,0 | (1.627,0) | (171,5) | |
| **VII.** | **Deficit as percentage of GDP** | (3,9) | (1,7) | (55,8) | |

1/ Does not include financial restructuring costs.
Source: CONFIS.

almost 30.0%, thanks to surges in income tax and domestic VAT (29.6%) and import taxes (32.9%).

Buoyancy in tax revenues reflected both recovery in economic activity and the oil boom that began in 1999,[10] and to a lesser extent modification of the tax calendar. In addition, it is worth noting that tax-revenue behavior has been influenced by a reduction in the number of days allowed banks for transferring tax payments received by them to the Treasury's account (Table 9).

With regard to expenditures, interest payments on debt grew by 28.4%, operating costs by 8.5%, and investment by 13.1%. Among operating costs, transfers expanded by 9.0%, and personal services and general expenditures by 7.0%. About 55.0% of transfer payments were for statutory revenue allocations to departments and districts (situado fiscal) and municipalities. Transfers to an Education Credit Fund will not be made until the second half of the year, according to the timetable set by the government. Regarding net loan movements, amounting to 418 billion pesos, notable items were 262 billion pesos to the Special Foreign-Debt Account (CEDE), 174 billion pesos in debt-guarantee operations, 18 billion pesos in investment loans, and 38 billion pesos from loan recoveries. The government's floating debt decreased by 1,295 billion pesos, thanks to liquidity made available by the Treasury early in the year, which made it possible to cancel a good part of the carryover from 1999. In terms of accounting, this made the government's overall deficit about 1,300 billion pesos less than the cash deficit.

The government's deficit was essentially financed from foreign and domestic loans, with net drawdowns of 1,974 billion pesos and 2,677 billion respectively. Gross foreign borrowing amounted to 2,463 billion pesos, of which 2,224 billion came from sales of bond issues and 239 billion pesos from disbursements by multilateral banks and other sources. Gross domestic borrowing totalled 5,834 billion pesos, of which 5,653 billion came from sales of Treasury paper and 167 billion from subscriptions of Debt Reducing Certificates (TRD).

Lastly, the transfer of profits from operations of the Banco de la República amounted to 516 billion pesos.

[10] This boom translated into higher income-tax revenues from big taxpayers.

## WHAT'S THE REASON FOR SLOW GROWTH IN M3-PLUS-BONDS?

Annual growth in the monetary-base's average monthly balance was 24.2% in December 1999 and 17.4% in July of this year. This is in contrast to stagnation in the monetary aggregate M3-plus-bonds, whose average annual growth was 5.6% in 1999 and only 2.6% in July. The considerable difference between the monetary base's pace of growth and that of M3-plus-bonds makes it clear that transmission channels from the monetary base to the M3+bonds aggregate have become disrupted. This leads to the conclusion that the slow growth in M3-plus-bonds has not been caused by tight monetary policy, for the monetary base's annual growth rate in July was twice the rate of inflation (9.3% to July).

Yet, the difference in performance between the base and m3-plus-bonds is worrying. Hence the need to understand why a generous policy for providing primary liquidity, such as has been pursued, is not reflected in greater growth of the broad money aggregate.

To this end, a description follows of an attempt to separate each one of the factors that are impeding transmission from the base to M3-plus-bonds, by breaking down the factors that have affected the broad monetary multiplier. The composition of the portfolio of financial assets held by the nonfinancial public and private sectors is also analyzed to help explain the low growth in M3-plus-bonds.

### Breakdown of the multiplier

Columns (1) to (4) of Table 1 show the behavior of the broad monetary multiplier and those of its determining factors at the end of every quarter since December 1996 on the latest available data to July 2000.[1] The multiplier showed a rising trend up to March 1999, when it reached 8.229. Since then it has been decreasing gradually, down to 6.860 in July 2000 (Figure 1). This behavior has resulted from changes in the required-reserve ratio (rr), excess-reserve ratio (re), and the cash ratio (e), which have had opposite effects on the multiplier. On the one hand the required-reserve ratio, as a factor with a positive effect on the multiplier, fell from 0.0891 in December 1996 to 0.0519 in July 2000. On the other hand the cash ratio, as a factor that reduces the multiplier, after showing a downward trend up to September 1998, when it was down to 0.0656, started then to register a sharply rising trend, peaking at 0.1038 in July (Figure 2). A similar behavior was shown by the excess-reserve ratio, another reducing factor, which first kept falling, becoming negative in September 1998, then began to fluctuate and since the beginning of the year has shown an upward trend, reaching 0.0023 in July.

A more detailed assessment of the origins of the changes observed in the monetary multiplier is presented in columns (5) to (7). These show the contributions made to the multiplier's variation by each of its component variables, on an accumulated basis from December 1996.[2] Thus column (5) shows that required reserves made positive contributions to the multiplier's size, their accumulated value being 2.308 in July 2000. Although this value is positive, it does not accurately reflect the government's firm policy to reduce reserve requirements: between December 1996 and September 2000, the rate for checking accounts was reduced from 21.% to 13.0%, for savings accounts from 8.0% to 6.0%, and for term deposits from 5.0% to 2.5%. The reason is that in the course of this year, as shown in Table 2, users of the financial system have been changing the composition of their deposits in favor of accounts with relatively high reserve requirements, such as checking accounts, sight deposits, and fiduciary deposits, with the result that the effect of lower reserve requirements has been counteracted to a certain extent.

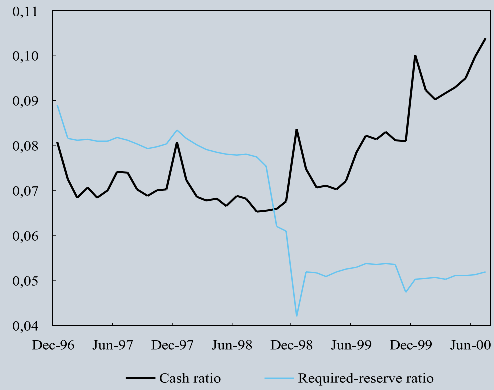
Column (6) of Table 1 presents the accumulated contributions of the cash ratio. When the cash ratio rises, it reduces the multiplier's value. From June 1999 the constant rise in the cash ratio clearly caused the monetary multiplier to fall gradually, the accumulated value of the fall standing at -1.5605 in July 2000. Before December 1998, however, the cash ratio made positive contributions to the multiplier's size.

The accumulated effect of the excess reserve's contributions, shown in Column (7), was to cause a reduction of -0.0610 in the multiplier by July 2000. This means that the financial system has been gradually keeping larger excess reserves, to the detriment of greater intermediation.

#### Figure 1
#### Monetary multiplier


Source: Banco de la República.

#### Figure 2
#### Cash ratio and required-reserve ratio




Source: Banco de la República.

#### Table 1
#### Breakdown of broad monetary multiplier

| | | Multiplier and its components | | | | Accumulated contributions to monetary multiplier | | | | Accumulated change in observed multiplier |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Observed | | | | Reserves and composition of LSR* | Cash | Excess reserves | Net | |
| | | m 1/ | e 2/ | rr 3/ | re 4/ | | | | | |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| **1996** | Dec. | 6,2995 | 0,0808 | 0,0891 | 0,0018 | | | | | |
| **1997** | Mar. | 6,6988 | 0,0706 | 0,0813 | 0,0079 | 0,2969 | 0,3610 | (0,2586) | 0,3993 | 0,3993 |
| | Jun. | 6,6902 | 0,0741 | 0,0819 | 0,0045 | 0,2718 | 0,2327 | (0,1137) | 0,3907 | 0,3907 |
| | Sep. | 7,0946 | 0,0688 | 0,0794 | 0,0025 | 0,3815 | 0,4364 | (0,0228) | 0,7952 | 0,7952 |
| | Dec. | 6,4329 | 0,0807 | 0,0835 | 0,0037 | 0,1948 | 0,0149 | (0,0763) | 0,1334 | 0,1334 |
| **1998** | Mar. | 7,1451 | 0,0679 | 0,0792 | 0,0024 | 0,3819 | 0,4863 | (0,0226) | 0,8456 | 0,8456 |
| | Jun. | 7,3671 | 0,0689 | 0,0779 | (0,0017) | 0,4455 | 0,4393 | 0,1828 | 1,0676 | 1,0676 |
| | Sep. | 7,6668 | 0,0656 | 0,0755 | (0,0021) | 0,5703 | 0,5896 | 0,2075 | 1,3673 | 1,3673 |
| | Dec. | 8,1776 | 0,0836 | 0,0422 | 0,0067 | 2,8657 | (0,6237) | (0,3639) | 1,8782 | 1,8782 |
| **1999** | Mar. | 8,6229 | 0,0711 | 0,0509 | 0,0022 | 2,3732 | 0,0334 | (0,0832) | 2,3234 | 2,3234 |
| | Jun. | 8,2698 | 0,0784 | 0,0530 | (0,0011) | 2,2264 | (0,3857) | 0,1296 | 1,9703 | 1,9703 |
| | Sep. | 7,9328 | 0,0830 | 0,0538 | (0,0003) | 2,1786 | (0,6268) | 0,0816 | 1,6334 | 1,6334 |
| | Dec. | 6,9561 | 0,1000 | 0,0502 | 0,0079 | 2,3914 | (1,3840) | (0,3507) | 0,6566 | 0,6566 |
| **2000** | Mar. | 7,7079 | 0,0917 | 0,0504 | (0,0004) | 2,3879 | (1,0481) | 0,0686 | 1,4084 | 1,4084 |
| | Jun. | 7,2212 | 0,0997 | 0,0513 | 0,0013 | 2,3377 | (1,3973) | (0,0188) | 0,9217 | 0,9217 |
| | Sep. | 6,9860 | 0,1038 | 0,0519 | 0,0023 | 2,3080 | (1,5605) | (0,0610) | 0,6865 | 0,6865 |

**1/** Multiplier.
**2/** Cash ratio.
**3/** Required-reserve ratio.
**4/** Excess-reserve ratio.
* Liabilities subject to reserve requirement
Source: Calculations by Banco de la República, SGEE.

Column (8) is the sum of the individual contributions made to changes in the multiplier by each one of its component variables. And, as a check, column (9) shows accumulated change in the observed banking multiplier since December 1996, which is naturally equal to the sum of the individual contributions.

As can be appreciated, the positive effect of the government's reserve-requirement policy on the monetary multiplier has been diluted by three factors: 1) a greater preference for cash; 2) recomposition of financial assets in favor of deposits subject to high reserve requirements, mainly checking accounts; and 3) a tendency among financial intermediaries to keep large excess reserves. The first two factors have been partly induced by the financial-transactions levy and by lower interest rates. In effect, use of cash is not subject to the levy, nor does it involve any great sacrifice of yield, because of the fall in its opportunity cost. Keeping larger excess reserves has also been motivated by the fall in interest rates, which reduces their opportunity cost, as well as by higher credit risks, which make the banks more cautious in lending. In addition, some entities may consider lower reserves requirements inadequate as a safety measure, which leads them to require excess reserves.

### Portfolio performance

Another reason for stagnation in M3+bonds despite rapid expansion in the monetary base emerges from a review of the recent behavior of the financial portfolio of the nonfinancial public and private sectors. This information is presented in Table 3. As can be observed, the financial portfolio is divided into its domestic and external parts. In the domestic part, the component of M3+bonds currently shows an annual growth of less than 3.0%, which is in contrast to its rapid growth up until mid-1998. Unlike M3+bonds, the component of government securities registers annual growth rates of 35.0% or more. Thus, the overall domestic portfolio has been growing at a rate between 10.0% and 11.0% as a result of growing demand for government securities.

The external portfolio, too, registers a high rate of annual growth, in some cases higher than 50.0%. Although high growth in the external portfolio is partly caused by faster devaluation, it also results from increased foreign-currency investment, which registered an annual growth of

**Table 2**
**Composition of M3+bonds and liabilities subject to reserve requirements (LSR)**
(Percentages)

| Average composition observed | M3+bonds | Cash | LSR | By size of reserve requirement | | | |
|---|---|---|---|---|---|---|---|
| | | | | LSR | High 1/ | Medium 2/ | Low 3/ |
| **Dec. 1996 - Jul. 1997** | 100,0 | 6,8 | 93,2 | 100,0 | 17,2 | 30,8 | 51,9 |
| **Dec. 1997 - Jul. 1998** | 100,0 | 6,4 | 93,6 | 100,0 | 14,8 | 31,7 | 53,5 |
| **Dec. 1998 - Jul. 1999** | 100,0 | 6,9 | 93,1 | 100,0 | 14,0 | 30,5 | 55,5 |
| **Dec. 1999 - Jul. 2000** | 100,0 | 8,7 | 91,3 | 100,0 | 17,1 | 32,9 | 50,0 |

**1/** Includes checking accounts, sight deposits, and fiduciary deposits.
**2/** Includes savings accounts and Repos.
**3/** Includes CDs, mortgage certificates, and bonds.
Source: Calculations by Banco de la República-SGEE.

19.1% at the end of March and 15.3% at the end of June. The sum of demand for M3+bonds, debt instruments and external assets shows that the financial portfolio as a whole grew at an annual rate of 14.4% in March 2000 and 13.5% in June. This shows that low growth in the M3+bonds aggregate is due to the fact that a large part of the financial investment that used to constitute M3+bonds has been transferred to investments in public-debt instruments and external financial investment.

**Table 3**
**Financial portfolio of nonfinancial public and private sectors**
**(billions of pesos)**

| | | Average M3+bands (a) | Annual growth % | Gov. securities (b) | Annual growth % | Total domestic portfolio (a) + (b) | Annual growth % | External financial assets 1/ (c) | Annual growth % | Total financial portfolio (a) + (b) + (c) | Growth rate of financial portfolio % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1996** | Dec. | 40.439 | | n.d. | | | | 3.548 | | | |
| **1997** | Mar. | 41.339 | | n.d. | | | | 4.532 | | | |
| | Jun. | 43.898 | | n.d. | | | | 4.954 | | | |
| | Sep. | 46.105 | | n.d. | | | | 5.326 | | | |
| | Dec. | 51.291 | 26,8 | n.d. | | | | 6.408 | 80,6 | | |
| **1998** | Mar. | 52.242 | 26,4 | 11.764 | | 64.006 | | 6.311 | 39,3 | 70.317 | |
| | Jun. | 54.378 | 23,9 | 12.714 | | 67.092 | | 7.676 | 55,0 | 74.768 | |
| | Sep. | 54.297 | 17,8 | 13.471 | | 67.769 | | 8.372 | 57,2 | 76.140 | |
| | Dec. | 56.382 | 9,9 | 14.669 | | 71.051 | | 7.014 | 9,5 | 78.065 | |
| **1999** | Mar. | 56.514 | 8,2 | 16.112 | 37,0 | 72.625 | 13,5 | 7.442 | 17,9 | 80.067 | 13,9 |
| | Jun. | 57.370 | 5,5 | 17.323 | 36,2 | 74.693 | 11,3 | 8.792 | 14,5 | 83.485 | 11,7 |
| | Sep. | 57.016 | 5,0 | 18.829 | 39,8 | 75.845 | 11,9 | 9.846 | 17,6 | 85.691 | 12,5 |
| | Dec. | 59.563 | 5,6 | 19.539 | 33,2 | 79.102 | 11,3 | 10.658 | 52,0 | 89.760 | 15,0 |
| **2000** | Mar. | 58.240 | 3,1 | 22.095 | 37,1 | 80.335 | 10,6 | 11.276 | 51,5 | 91.611 | 14,4 |
| | Jun. | 58.848 | 2,6 | 23.380 | 35,0 | 82.228 | 10,1 | 12.518 | 42,4 | 94.746 | 13,5 |

**n.a.** Not available.
**1/** Includes portfolio investments, currency, and deposits, valued at the representative market exchange rate (TRM)
Source: Banco de la República, SGEE.

1 The broad multiplier (m) is the ratio M3+bonds/base, which can be calculated from the following formula: (e+1)/(e+rr+re), where e = (cash)/(liabilities subject to reserve); rr = (required bank reserves)/(liabilities subject to reserve); and re = (excess bank reserves)/(liabilities subject to reserve).

2 The contribution made to the observed multiplier month by month by each one of its three components is calculated from the estimation of three adjusted multipliers, according to each component. For this purpose, one of the components varies relative to the level observed in the previous months while the other two components remain constant. The difference between the adjusted multiplier and the observed multiplier of the immediately preceding month is the variable component's marginal contribution. The sum of the three contributions--from cash, required reserves, and excess reserves--is equal to the variation in the observed multiplier. For the sake of brevity, only contributions accumulated since the initial date (December 1996) are presented

III

# EXPECTATIONS SURVEY: MAIN FINDINGS

The main findings of the Expectations Survey conducted in July by the Bank's Economic Studies Division are presented in this chapter. They strictly reflect the respondents' opinions and do not represent the opinion or position of the Bank or its Board of Directors on the performance or prospects of the variables discussed. Respondents were provided with information on the exchange rate, inflation, interest rates, monetary data, and GDP growth available to the first half of the year.

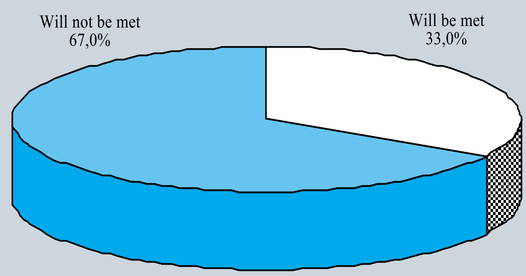
## A. Main findings

### 1. Inflation

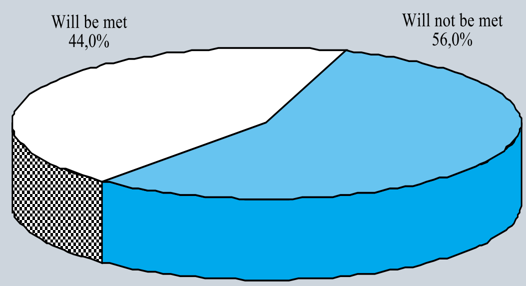
The survey's first question concerned the credibility of the 10.0% inflation target for this year. In the April survey 33.0% of respondents believed that the target would be met and 67.0% that it would not (Figure 45 A). The corresponding answers in July were 44.0% and 56.0% (Figure 45 B). Thus, the target has become more credible, most probably thanks to inflation behavior in June and July.

Figure 45
Credibility of Inflation Target For 2000

(A)
Survey conducted in April 2000




(B)
Survey conducted in July 2000




Those polled in July expected inflation to pick-up by December, then begin to drop. Inflation was expected to average 10.7% by December, within a range of 11.2% to 10.2% (Figure 46). It is to be noted that, at 9.2%, observed inflation in September was lower than the 9.7% rate expected for September by respondents in July.

In July, inflation expectations were revised down from April's figures: by 0.6 percentage points for expected inflation in December, most likely because inflation was observed to have come down in the previous months (Figure 47).

Figure 48 shows the inflation expectations of those who in July believed that this year's target would be met and those who did not, the latter predicting a year-end inflation of 11.3% and the former 10.0% Figure 48 also shows that

**Figure 46**
**Actual inflation and inflationary expectations (for 3, 6, 9 and 12 months ahead) July 2000 survey (Inflación anual)**

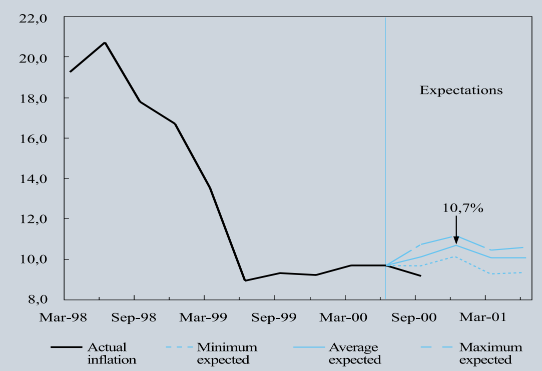



**Figure 47**
**Actual inflation and inflationary expectations (for 3, 6, 9 and 12 months ahead) July/April 2000 surveys (Inflación anual)**

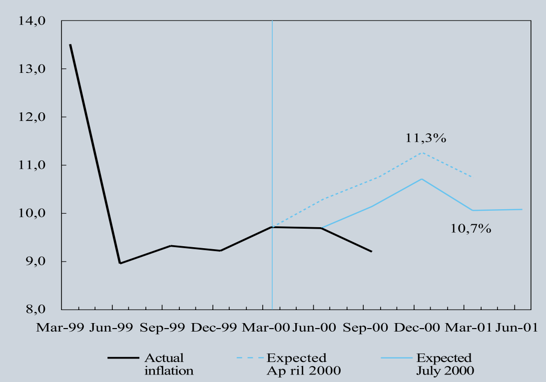
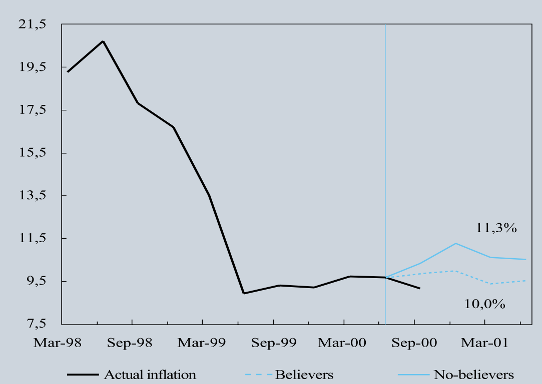



**Figure 48**
**Breakdown of inflationary expectations by believers and non-believers in target's attainment**




September's observed inflation was lower even than the level expected for it by respondents who thought the target would be reached.

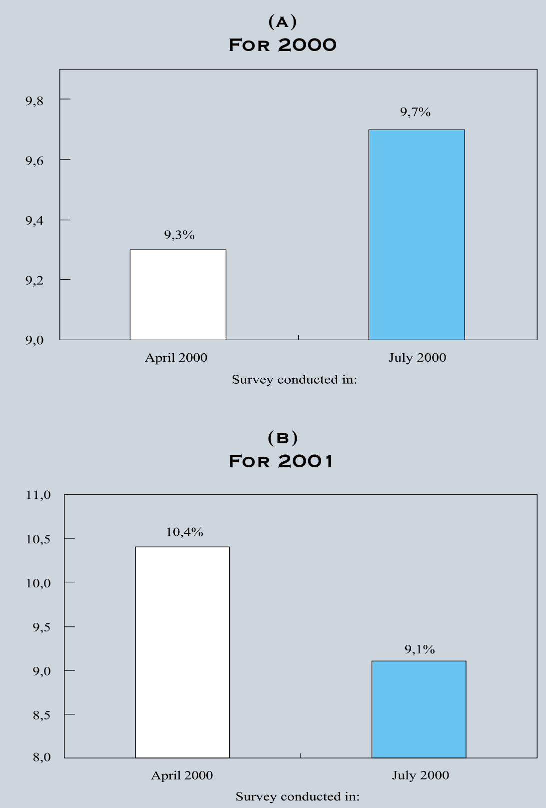
## 2. Pay rises

Figures 49 A and B display expected pay rises for this year and next year, according to the surveys conducted in April and July of this year. In July the expected average pay rise for 2000 was 9.7%, up from 9.3% predicted in April. In contrast, the average pay rise expected in July for 2001 was 9.1%, down from 10.4% predicted in April.

## 3. Perceptions regarding liquidity and availability of credit

In July the level of liquidity in the economy was considered high by 48% of respondents, and low by 42% (Figure 50 A). Some 58% of those

**Figure 49**
**Pay-rise expectations (percentage)**



polled expected liquidity to remain unchanged in the following six months from its level in July, while 24% thought it would fall, and only 18% saw it as rising (Figure 50 B). The level of credit available in July was considered low by 62% of respondents, and high by 36% (Figure 51 A). Credit availability in the following six months was expected by 62% of respondents to remain as it was in July, while 22% saw it as rising, and only 16% believed it would fall (Figure 52 B).

There were no significant differences between the April and July survey findings on perceptions and expectations regarding liquidity and credit availability.

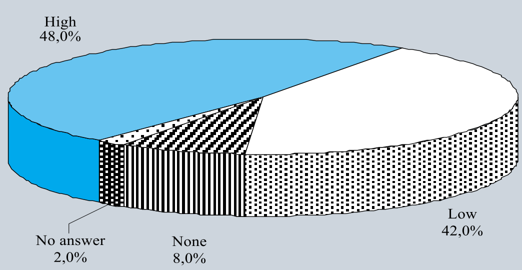
### 4. Interest and exchange rates

In July respondents expected interest rates to rise only very slightly over the following 12 months. They predicted an average DTF (deposit) rate of 13.3% for December, very similar to the average predicted in April (Figure 52). At the end of September the DTF stood at 12.9%, much the same level (12.6%) as was expected in the July survey.

In July the exchange rate was expected to average 2,219 pesos to the dollar by the end of the year, involving an annual nominal devaluation of about 18.5% (Figure 53). Respondents were led by the nominal devaluation of the previous three months to revise December's expected exchange rate from the level of 2,127 pesos to the dollar predicted in April. What appears to have occurred in exchange-rate expectations for the following 12 months is a shift in level rather than a higher rate of expected devaluation (Figure 54). At the end of September the nominal exchange rate was 2,212 pesos to the dollar, higher than the average expected in July (2,182 pesos to the dollar).

**FIGURE 50**

(A)
CURRENT PERCEPTION OF LIQUIDITY




(B)
PERCEPTION OF LIQUIDITY IN 6 MONTHS' TIME, RELATIVE TO CURRENT PERCEPTION

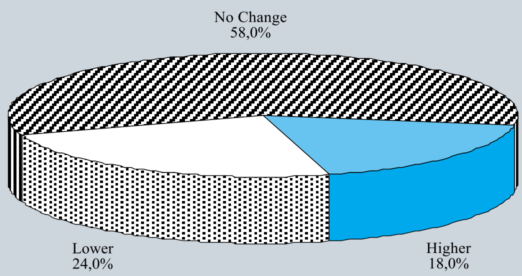
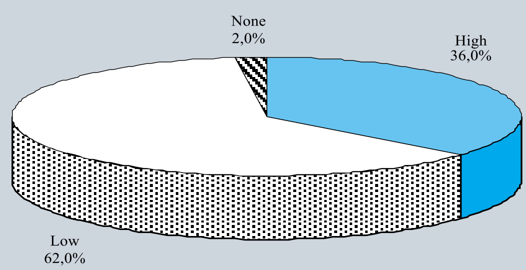



**FIGURE 51**

(A)
CURRENT PERCEPTION OF CREDIT AVAILABILITY




(B)
PERCEPTION OF CREDIT AVAILABILITY IN 6 MONTHS' TIME,
RELATIVE TO CURRENT PERCEPTION

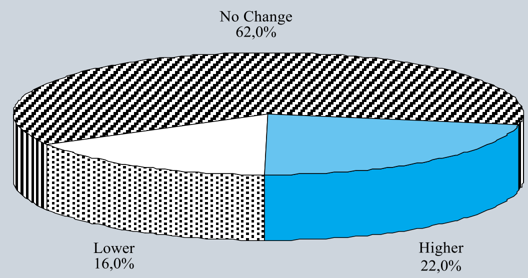


**Figure 52**
**Actual and expected deposit rates (DTF) (in 3, 6, 9 and 12 months) July 2000 survey**
**(annual effective rate)**

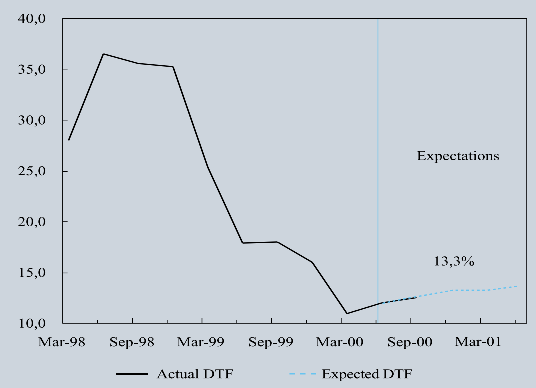



**Figure 53**
**Actual and expected nominal exchange rates (TRM) (in 3, 6, 9 and 12 months) July 2000 survey**
**(pesos to the dollar)**

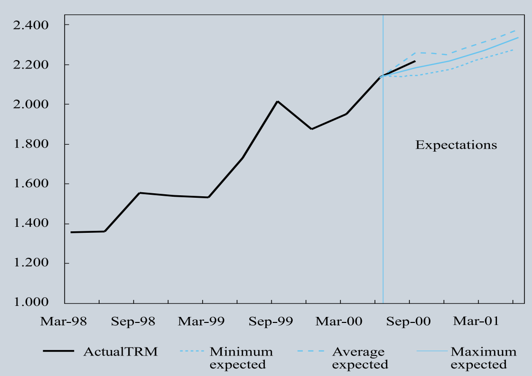
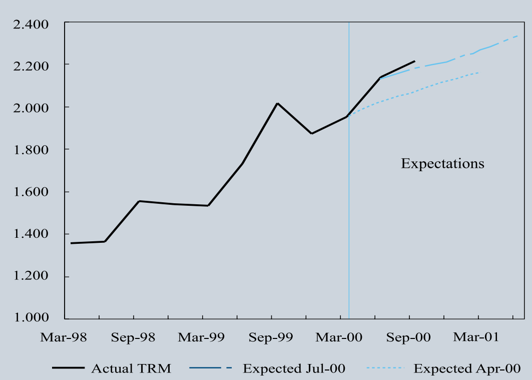



**Figure 54**
**Actual and expected nominal exchange rates (TRM) (in 3, 6, 9 and 12 months) April/July 2000 surveys**
**(pesos to the dollar)**



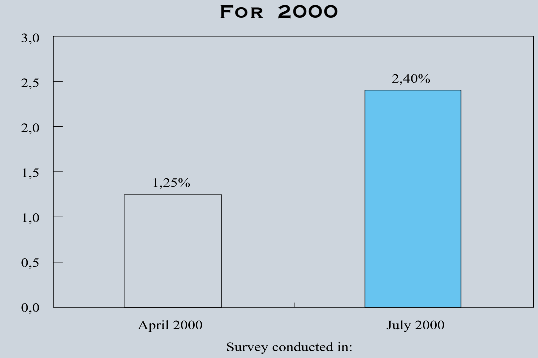

## 5. Growth and employment

Expectations of economic growth were more optimistic in July than in April. In July, GDP growth for 2000 was expected to average 2.4%, within a range of 1.9% to 3.0%, up from the 1.3% average predicted in April. Growth expectations for 2001 were also higher: in April the average was put at 2.6%, whereas in July it was raised to 3.3% within a range of 2.6% to 3.8% (Figures 55 A and B).

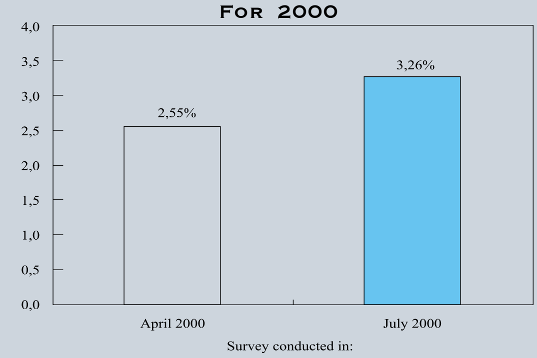
There was less optimism about workforce expansion. Some 51% of the sample responded that the number of employees in their companies would remain unchanged over the following six months, while 27.5% thought it would drop, and only 13.7% said it would increase. The figures for a somewhat longer horizon (a year) are more optimistic, with 49% answering that the workforce would remain unchanged, 17.6% that it would decrease, and 23.5% that it would expand (Figure 56).

**Figure 55**
**Expected GDP growth rate**

**(A)**
**For 2000**



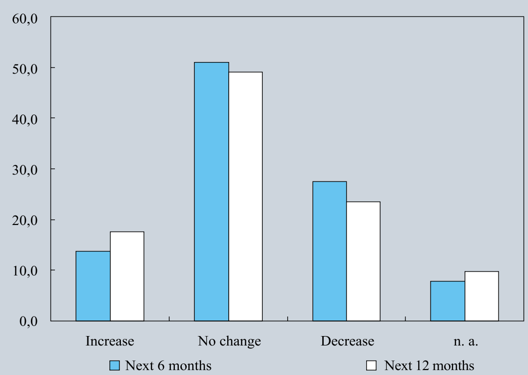

**(B)**
**For 2000**



## B. Forecasts by investment banks and risk-rating firms

Table 10 presents some inflation and growth forecasts for 2000 and 2001 made by a number of investment banks, risk-rating firms, and local analysts. According to the overall averages of forecasts by the entire group of local and foreign analysts, inflation is expected to be 9.9% for both 2000 and 2001, while economic growth is expected to be 2.9% this year and 3.1% next year.

**Figure 56**
**Companies' workforce plans for next 6 and 12 months**
**(percentage)**




Compared with the second-quarter forecasts, inflation is now expected to be lower and growth slightly higher this year, and both to be higher next year.

**Table 10**
**Forecasts by investment banks, risk-rating firms and local analysts**

| | Inflation 2000 | Growth 2000 | Inflation 2001 | Growth 2001 |
|---|---|---|---|---|
| Deutsche Bank | 9,4 | 3,1 | 9,4 | 2,5 |
| ING Barings | 9,5 | 2,8 | 8,5 | 3,2 |
| Goldman Sachs | 9,9 | 2,7 | - | - |
| WEFA | 12,0 | 3,1 | - | - |
| Salomón Smith Barney | 10,0 | 3,0 | 8,6 | 4,5 |
| J. P. Morgan | 9,3 | 3,1 | 8,6 | 3,0 |
| Banco Santander | 10,5 | 1,9 | 11,0 | 2,2 |
| **External average** | 10,1 | 2,8 | 9,2 | 3,1 |
| ANIF | 9,8 | 2,8 | 8,5 | 2,5 |
| Fedesarrollo | 10,0 | 3,0 | 12,0 | 3,0 |
| Fabio Sánchez | 9,5 | 3,3 | 9,0 | 4,0 |
| Hugo López | 9,5 | 3,0 | 8,8 | 3,8 |
| Javier Fernández | 9,7 | 2,5 | 11,1 | 2,5 (*) |
| Steiner & Carrasquilla | 10,0 | 3,0 | 15,0 | 3,5 |
| **Local average** | 9,8 | 2,9 | 10,7 | 3,2 |
| **Overall average** | 9,9 | 2,9 | 9,9 | 3,1 |

(*) Average figure.
Sources: Risk-rating firms, investment banks and Diners magazine.

# IV

# International context

## A. General aspects

World GDP is currently forecast by the IMF to grow by 4.7% this year and 4.2% next year. Most regions of the world are expected to show a good pace of growth, driven in particular by continued economic expansion in the United States and consolidated recovery in the European Union and Japan (Table 11). Despite these encouraging forecasts, there are a number of latent risks. First is a rise in oil prices, with its adverse effects on both world inflation and economic activity. Equally important are economic and financial imbalances in the United States, Japan and other major regions, which may eventually lead to instability in financial markets.

The latest forecasts for the US economy indicate that it will grow by 5.2% this year. Compared with GDP growth rates of 5.3% and 6.1% in the first two quarters (Figure 57), this would suggest slower growth in the second half of the year. These predictions are backed by the recent behavior of several indicators of economic activity. Thus, manufacturing production slowed in August, and jobless claims has risen marginally in recent weeks.

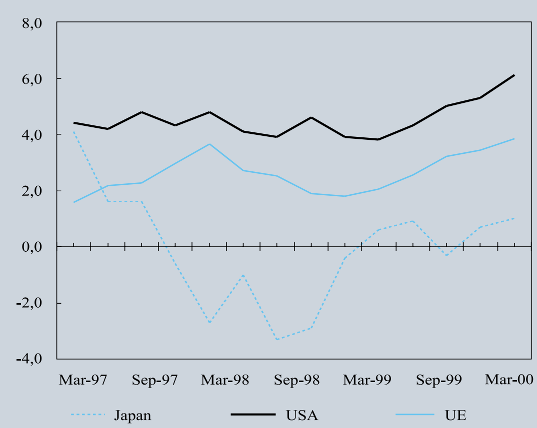
US inflation was 3.4% in August, significantly higher than a year earlier (2.3%) and is expected to run at 3.2% by the end of this year. Annual core inflation has also risen, from 1.9% in August 1999 to 2.5% a year later (Figure 58).

**Table 11**
**Actual and forecast growth for Colombia's main trading partners**

| | 1999 | 2000(*) | 2001(*) |
|---|---|---|---|
| United States | 4,1 | 5,2 | 3,2 |
| Japan | (0,3) | 1,4 | 1,8 |
| European Union | 2,3 | 3,5 | 3,4 |
| Argentina | (3,0) | 1,7 | 3,7 |
| Brazil | 1,0 | 4,0 | 4,5 |
| Chile | 0,0 | 6,0 | 6,8 |
| Ecuador | (9,4) | 0,5 | 3,5 |
| México | 3,6 | 6,5 | 4,8 |
| Perú | 1,9 | 4,0 | 6,0 |
| Venezuela | (7,5) | 2,5 | 3,0 |

(*) Forecasts to December.
Sources: ECLA, The Economist, and IMF.

**Figure 57**
**Annual growth rates of Japan, USA and European Union 1997:3 - 2000:6**
**(Percentage)**




Source: Bloomberg.

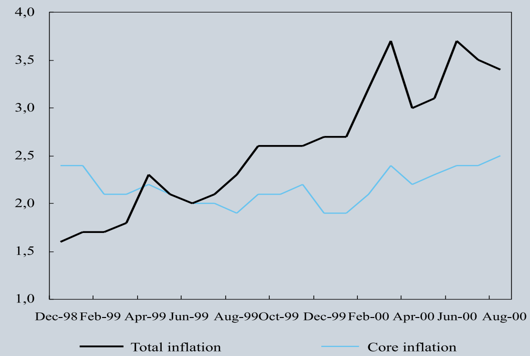
Despite the foregoing, intervention by the Federal Reserve Board in the next few months to check a possible pick-up in inflation does not seem feasible, for several reasons. First, because there were signs of a slowdown in the economy in the third quarter; second, because higher labor costs continue to be offset by higher productivity growth; and last because of uncertainty in the run-up to November's presidential election, which has traditionally discouraged intervention by the Fed. The latest statements by the US monetary authority appear to bear this out, for they do not made a point of inflationary pressures, concentrating rather on the nature of the recent economic slowdown and the major role that productivity growth continues to play in price stability.

The European Union grew at an annual rate of 3.8% in the second quarter, completing a year of positive quarterly growths ranging from 0.9% to 1.0%. The second-quarter growth was essentially driven by private consumption, which expanded at an annual rate of 4.2%, faster than in the previous quarters. Investment spending was stagnant in the second quarter, while international trade shrank by 3.1%

The region's inflation outlook is not very clear. EU inflation dropped to 2.3% in August, as expected, thanks to the fact that rising oil prices were offset by falling food prices, while core inflation remained stable at an annual rate of 1.3%. In September, however, CPI inflation and core inflation are expected to pick up as a result of both the euro's devaluation and higher oil prices (Figure 59).

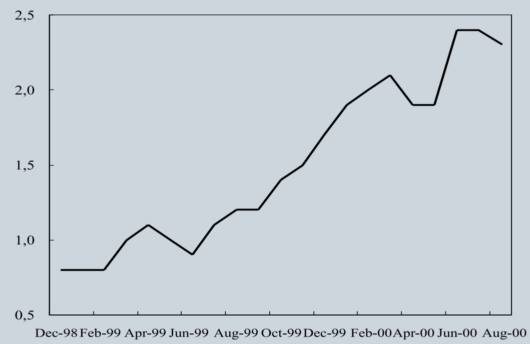
Much of the uncertainty about the EU's inflation outlook stems from the behavior of the euro. As shown by Figure 60, the European currency suffered a strong devaluation in the past quarter, falling to its lowest level since January 1999 ($0.84). Yet, most economic authorities and analysts in the region are agreed that the

**Figure 58**
**CPI and core inflation rates of the United States**
**1998:12 - 2000:8**
(Percentage)



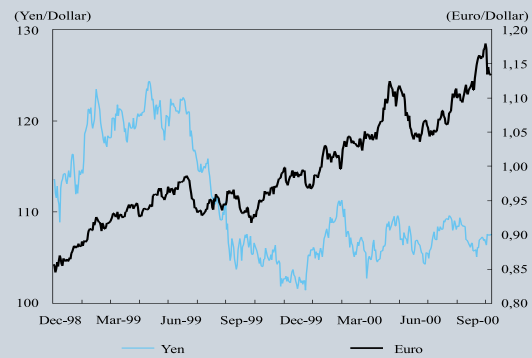

Source: Bloomberg.

**Figure 59**
**CPI and core inflation rates of the European Union 1998:12 - 2000:8**
(Percentage)




Source: Bloomberg.

**Figure 60**
**Evolution of yen and euro against dollar**
**1998:12 - 2000:9**




Source: Bloomberg.

euro's recent behavior results from a temporary over-reaction by the market, rather than from economic fundamentals.

To curb future inflationary pressures, particularly those arising from higher devaluation, the European Central Bank (ECB) raised the interest on August 31st by 25 basis points, to 4.5%. As this measure failed to check the euro's decline, the ECB decided at the end of September in coordination with the G-7's monetary authorities to intervene directly in the exchange market. Thanks to this joint action, the euro's value rose by about 5.0%.

Various analysts consider that the ECB faces a dilemma. On the one hand, the effectiveness of intervention in the currency market may become questionable in the medium term if it is not accompanied by an interest-rate rise. On the other hand, given the present economic environment, in which the greater dynamism of America's economy makes it more attractive to investors than Europe, an interest-rate rise would affect the market's confidence in the European economy and weaken the euro even more.

What is more, Europe's economy appears now to be more vulnerable than other economies to the rise in oil prices. This is both because of the incipient nature of its current economic upturn, and because of the euro's devaluation and the higher interest rate it has involved. This vulnerability has begun to be reflected in the behavior of some indicators that measure the level of uncertainty in the market. For instance, is the consumer-confidence index, which registered a fall in August as wellas car sales and retail sales.

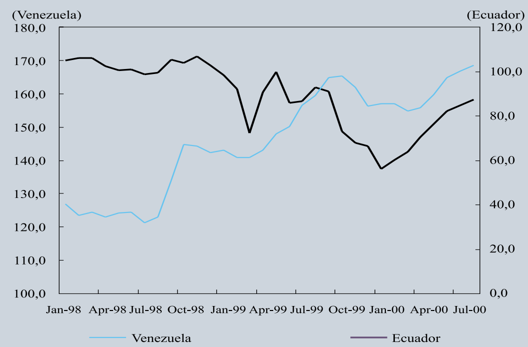
Japan's GDP grew at an annual rate of about 4.0% in the first half of the year, driven mainly by great buoyancy in public investment, and to a lesser extent by private consumption and international trade. Satisfactory behavior by private consumption and international trade easily offset the fall in private and residential investment. The most notable news from Japan in recent months has been the decision by the Bank of Japan to depart from its controversial zero-interest policy by raising the rate to 0.25%. But this move has produced scant effect on other interest rates, for it was anticipated by the market.

Continued recovery in Latin America has led the IMF to revise up its estimate for average growth in the region from 4.0% to 4.3% by the end of the year. The IMF expects the region's annual inflation to average 10.0%. Growth in the second quarter was produced by exports and renewed consumer confidence in the future of the economy.

These favorable results for Latin America as whole, however, call for some clarification about fundamental differences between countries. Thus, Mexico, Brazil and Chile show a stronger upturn than the other countries. This is explained by the lower levels of political uncertainty that they currently exhibit, and by their having adopted prudent macroeconomic policies in good time, including setting inflation targets and correcting fiscal and external imbalances. Mexico is expected to show an annual growth of 6.5% this year, Brazil 4.0%, and Chile 6.0%. Mexico's fast pace of growth continues to result from the dynamic performance of the US economy.

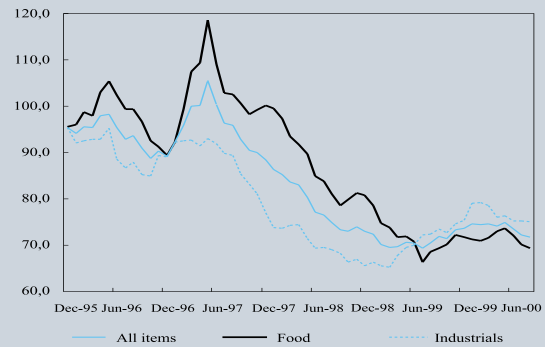
Though Argentina continues to make progress in adjusting its fiscal accounts, its annual growth rate in the second quarter was barely 0.8%, which shows that the country has not yet recovered fully from last year's recession. Thus, Argentina's exports of goods and services rose by only 2.4%, a particularly low rate considering the upturn in global demand. To judge by confidence indicators, which continue on a recessive trend, economic agents do not show sufficient confidence to help to reactivate the economy.

**Figure 61**
**Real exchange rate indices**
**Colombia-Venezuela, Colombia-Ecuador**
**1998:1 - 2000:8**




Source: Bloomberg.

**Figure 62**
**Colombia's monthly commodity export index**
**(1995 = 100)**




Source: World Bank.

The political uncertainty that to a greater or lesser extent is besetting all the Andean countries casts doubt on their chances of long-term growth. In recent months, however, significant signs of recovery continued to be observed. Thus, in Ecuador, one of Colombia's major trading partners, good results seem to be coming from the government's efforts to promote monetary stability by dollarizing the currency and strengthening the fiscal accounts, besides restructuring the financial system. Ecuador's GDP is expected to grow at an annual rate of 0.5% in the second half of this year, compared with a 9.4% contraction in 1999. In Venezuela, output is forecast to expand at an annual rate between 2.0% and 3.0%, and the main indicators of growth seems to be indicating an upturn in the economy. Besides, the rise in oil prices is providing Venezuela with extraordinary fiscal benefits.

Given these countries' progress and the developed economies' performance, overall growth in Colombia's volume-weighted foreign trade is expected to be 4.2% by the end of 2000, marginally higher than the 4.0% forecast in the June Report, but well up on the 1999 rate of 1.3%. These developments, added to the peso's real devaluation against the currencies of Venezuela and Ecuador, augur well for expansion in Colombian exports, at least in the short term (Figure 61).

## B. Commodity prices

World commodity prices affect Colombian consumer prices directly when the imported commodities are for consumption (for example, beans), or indirectly when they are inputs (grains and oil) for the production of final goods. Moreover, world prices for some commodities exported by Colombia, such as oil and coffee, have a significant effect on the country's external and fiscal balances. To the extent that world commodity prices affect Colombia's consumer prices and macroeconomic balances, their behavior is a major determinant of inflation, exchange stability, and economic growth in the short term.

The prices of commodities other than oil fell sharply from mid-1997 to mid-1999 (Figure 62), helping to reduce inflationary pressures in Colombia and other countries. In the second half of last year world commodity prices rose a little (6.2%) but have been declining again since then. In effect, The Economist's commodity price index fell by 3.7% from March to August of this year. Yet, despite this fall, the index was 1.8% higher in August than a year earlier.

The decline in world commodity prices since March has occurred mostly in products for industrial use (non-food agriculturals and industrials). The Economist's index shows industrials falling by 2.1% from March to the first week of September, and by 2.8% in the 12-months to September. The food price index rose by 4.0% from February to May but has been falling again since then, to below its level at the beginning of the year. If world commodity prices remain at their current level for the rest of the year, they will register a 2.5% fall relative to last year.

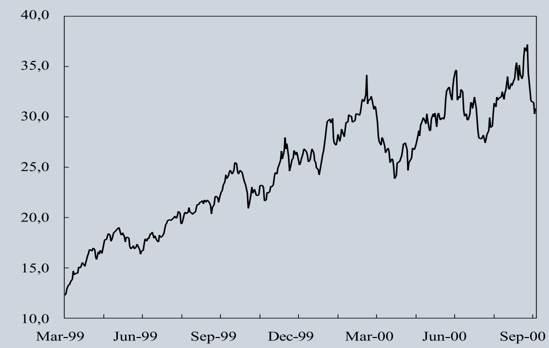
## 1. Oil

In March the Organization of Oil Exporting Countries (OPEC) devised a scheme for stabilizing the international price of oil, whereby OPEC would increase daily production by 500,000 barrels if the average crude price remained above $28 a barrel for over 20 days, and would reduce it by the same volume if the price remained below $22. This notwithstanding, the price of oil continued on a rising trend and by the beginning of September stood at $37 a barrel, its highest level since the Gulf war in 1990 (Figure 63).

The latest oil-price rise has been attributed to fears of a possible crude shortage arising from Iraq's threats to suspend oil exports[11] and new verbal confrontations between the authorities of Iraq and Kuwait. It is further considered that the current supply of heating fuel in European countries and the United States is insufficient to meet growing demand as winter approaches.

According to some analysts (for example, *The Economist*), the present world oil-price rise will very likely have a smaller impact on crude-importing industrialized countries than was the case in the 1970s and during the Gulf war. In effect, for a large number of countries, especially the Unite States, oil's share in economic activity has been reduced by the use of other fuels and

**FIGURE 63**
**WTI OIL PRICES**
**NEW YORK STOCK EXCHANGE**
**1991:2 - 2000:9**
**(DOLLARS/BARREL)**




Source: Bloomberg.

by a larger share of services in overall GDP. In contrast, in oil-importing emerging countries output and prices may be seriously affected by oil-intensive industrial development.

In Latin America, the countries likely to be adversely affected are Brazil and Chile, both highly dependent on crude imports. In contrast, the region's oil-exporting economies such as Colombia, Venezuela, Mexico and Ecuador will benefit as their fiscal revenues increase and their external accounts improve.

In response to international pressure to reduce the risk of inflation and recession in the world economy, OPEC agreed on September 10th to increase daily oil production by 800,000 barrels from October 1st. Since it takes at least 10 weeks for fuel to be transported from the Middle East to the United States and refined, the world oil price's speed of response to this measure may be slow, and in fact it could hardly avert a further price increase in heating fuel and gasoline in the absence of additional measures. Foreseeing this, the United States decided on September 22nd to release 30 million barrels from its strategic reserves over a period of 30 days. This measure was expected to lower the price of oil a little in the fourth quarter, down toward $30 a barrel. Actually, the price dropped to this level within a week of the measure's adoption.

[11] Iraq is estimated to have a production capacity of 2.8 million barrels a day, or about 4.0% of world oil production.

The current pressures on the price of oil are likely to decrease in the first months of 2001 as winter draws to a close and the measures adopted by OPEC and the United States become fully effective. Hence, the price of oil in 2001 is expected to average $25 a barrel.

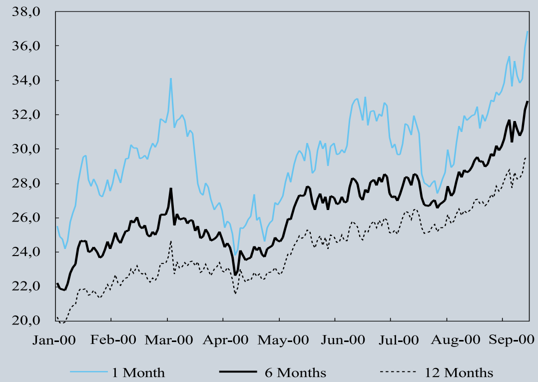
The rise in oil prices during most of the third quarter and their sharp fall in the last week of September were reflected in the price behavior of forward sales contracts on the New York Stock Exchange (Figure 64). Forward sales prices had registered a significant increase up to September, suggesting great uncertainty among economic agents about the availability of crude during the rest of the year. The US announcement, however, seems to have improved the chances of keeping the market supplied. Thus, one-, six- and twelve-month forward contracts, which had closed high on September 18th ($36.8, $32.8 and $29.5 a barrel respectively), were significantly lower a week later, ending the quarter at $30.8, $29.8 and $27.9 respectively. At all events, the six- and twelve-month contracts suggest that the market expects lower prices next year than those prevailing for much of this year.

## 2. Coffee

The international price of coffee has plummeted this year, compared with the average in December 1999. In September, Colombian coffee fetched $0.90 a pound, down from $1.40 in December 1999 (Figure 65). The same trend has been shown by forward sales prices (Figure 66). The fall in price in the third quarter is mainly ascribed to larger coffee stocks in consumer countries, particularly the United States, and to lower demand in the summer season.

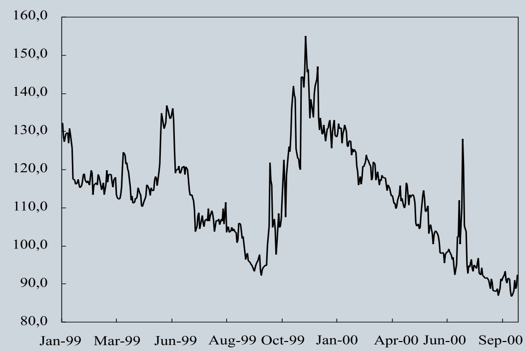
To raise coffee prices to a range of $0.95-$1.05 a pound, the Association of Coffee Producing Countries set on foot in June of this year a "Coffee Retention Plan," under which exports will be reduced by 20% if the price drops below $0.95. Consequently, Brazil has decided to retain six million bags between July 2000 and July

**Figure 64**
**WTI Oil Forward Sales Prices**
**New York Stock Exchange**
**(Dollars/Barrel)**



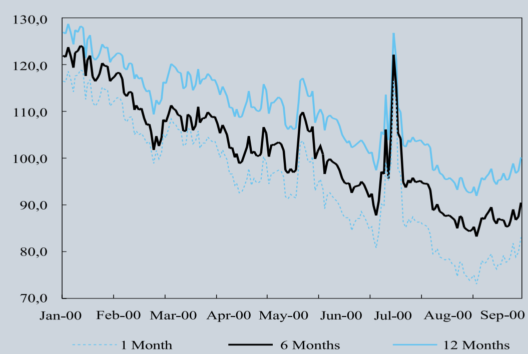

Source: Bloomberg.

**Figure 65**
**Colombian-Arabica Coffee Price**
**New York Stock Exchange**
**(Cents/Pound)**




Source: Bloomberg.

**Figure 66**
**Arabica Coffee Forward Sales Prices**
**New York Stock Exchange**
**(Cents/Pound)**




Source: Bloomberg.

2001¾three million more than originally planned¾, while Colombia will withhold a million bags by the end of the year. It is to be noted that Colombia's third-quarter coffee exports are projected at 3.1 million bags. These retention policies are expected to reduce coffee stocks in consumer countries, which stand at considerably higher levels than last year. An upturn in coffee prices will depend on reducing these stocks, which means that the results of the Retention Plan will not be seen until January or February 2001. Hence, the price of coffee is likely to remain below $0.95 a pound over the fourth quarter.

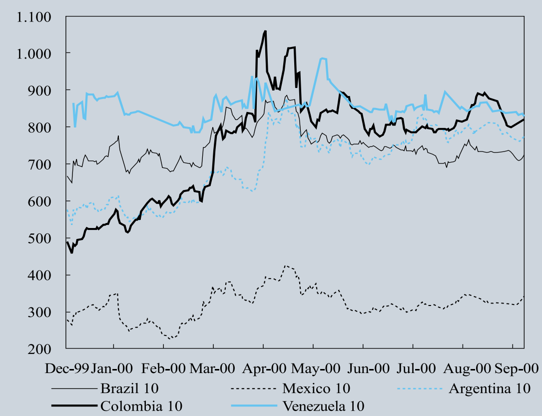
## C. Financial developments

Financial developments in the third quarter continued to be strongly influenced by expectations about international economic behavior, particularly the economic performance of the United States. The US economy appeared finally to be growing within its possibilities, which helped to lower expectations of an interest-rate rise by the Fed. This in turn tended to stabilize spreads on 10- and 30-year Latin American sovereign debt over much of the third quarter. Two other factors that contributed to a more stable trend in spreads were greater confidence among investors that economic measures would be carried out, and the promising results shown over the year by most Latin American countries.

However, the euro's behavior and oil prices (discussed above) increased uncertainty about global economic growth. This fact, together with investors' great sensitivity to any event that might impair political stability in Latin America, produced a slight rise in August in sovereign-debt spreads for several countries of the region. But by the end of the quarter this rise was beginning to reverse (Figures 67 and 68).

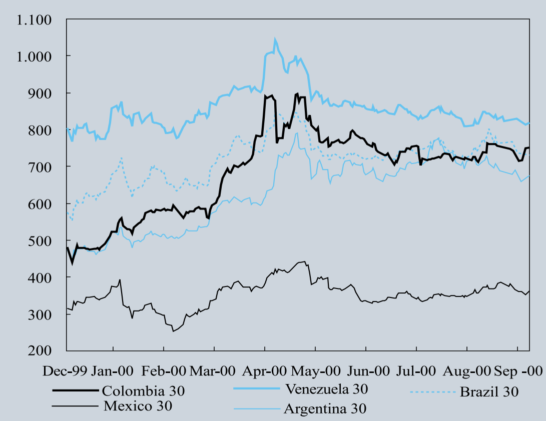
In Colombia's case, besides the factors described above, cancellation of the privatization of Bogotá's Telecommunications Company led to a short-lived rise in 10- and 30-year sovereign debt in the last weeks of September.12 Even so, average spreads were lower in the third quarter than in the second: on 10-year debt spreads averaged 780.9 basis points in September, 44 points down on June; on 30-year debt they averaged 736.4 basis points, 41 points down[12] on June.

Figure 67
*Spreads* on 10-year Latin American debt
(basis points over 10-year US Treasury bonds)




Source: Bloomberg.

Figure 68
*Spreads* on 30-year Latin American debt
(basis points over 30-year US Treasury bonds)




Source: Bloomberg.

[12] The IMF's and World Bank's support of the Colombian government at Prague, and confidence in the sale of Carbocol were key factors in making the rise in spreads relatively small and short-lived.

# V

# Inflation forecasts

## A. Forecasts for 2000 and 2001 using various models

Current inflation forecasts for 2000 and 2001 are based on price information available in September. Compared with forecasts in the June Report, the current ones contemplate some changes in various assumptions used in the Bank's forecasting models. These changes include, notably, a greater stability expected in the exchange market in the last months of 2000 and in 2001, resulting from the balance-of-payments improvement and the current level of accumulated international reserves. Likewise, food prices are expected to improve during the rest of the year, having risen little in recent months, which indicates satisfactory behavior in agricultural supply. The assumption regarding monetary-base growth has also been modified for this Report to introduce a reference line for the base, as contemplated in the new monetary-policy strategy. The reference line turns out to be about 7.0% higher than the midpoint of the monetary-base corridor defined at the end of last year. In any case, the growth in monetary aggregates envisaged in the models, continues to be consistent with the Bank's inflation targets for 2000 and 2001. The various statistical models used by the Bank assume that the economy will go into an upturn in 2000 with a 3.0% growth rate and accelerate its expansion in 2001 (to 3.8%). This growth implies that during the last quarter of 2000 and much of 2001 unused installed capacity in several sectors of production will remain at high levels. Lastly, the price behavior of imported goods will be in line with this year's and next year's expected devaluation and with expected external inflation.

On the basis of these assumption, the time-series and structural models continue to show that by the end of 2000 inflation would be in the range of 8.5% to 10.0%, though its likelihood of being closer to the midpoint than the ceiling of this range has increased relative to the forecasts made three months ago. For next year the models, of course, show a wider dispersion, placing inflation in December within a range of 7.0% to 9.5%, which is lower than the range forecast in June. Combining the different models' projections, which has proved a good method of predicting inflation for periods longer than a year, gives an 8.1% inflation for 2001. In any case, it should be borne in mind that these econometric-type models tend to overestimate inflation over long horizons, because they fail to incorporate properly last year's sharp break in Colombian inflation and so tend to replicate levels observed before the break.

## B. Risks for 2001

Several inflation risks are presently discernible for 2001. The first relates to uncertainty about future trends in world oil prices. Although fuel prices have no big direct effect on consumer inflation, their indirect effects are significant because they affect major segments of the CPI basket such as transport, and also because they have a bearing on inflation expectations. Oil prices are expected to fall next year, and if they do they may help to reduce inflation. As shown by developments in recent weeks, however, the market for crude is subject to different kinds of shock that involve the likelihood of prices in 2001 being similar or even higher prices than those currently observed. In this event, a further increase is to be expected in consumer prices relative to the predicted rise.

Another risk factor concerns the potential behavior of food prices. Given their weight in the CPI, food prices are a variable that largely determines short-term inflation trends in Colombia. They are also highly volatile and hence difficult to forecast with any degree of reliability, so it is necessary to be constantly on the alert for possible surprises on this front, whether favorable or unfavorable to inflation.

A third risk has to do with the inflationary impact of the tax reform currently before Congress. The reform's effects on inflation will be favorable in the long run, for they will contribute to fiscal equilibrium. In the short term, however, certain aspects of the reform, such as extension of the VAT's tax base, could have negative effects on prices, to judge from international and Colombian experience.

Lastly, although the risk posed by devaluation has diminished in recent weeks, uncertainty about the behavior of this variable next year has not vanished completely, so it cannot be disregarded as a future risk factor.

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in October 2000.