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# INFLATION REPORT

DECEMBER 1999

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BANCO DE LA REPÚBLICA

## PRESENTATION, SUMMARY AND CONCLUSIONS

⊠ Inflation for 1999 as measured by the Consumer Price Index (CPI) stood at 9.2% in December, 0.1 percentage points lower than at the end of the third quarter. This reduction was produced after annual consumer inflation had risen in November by 0.4 percentage points. The annual inflation rate in December is the lowest since 1970, when it was 6.6%. It is also 7.5 percentage points lower than inflation for 1998 and 5.8 percentage points under the target for 1999. Producer inflation as measured by the Producer Price Index (PPI) was 12.7%, down by 0.8 percentage points on 1998. The annual change in PPI increased substantially between June (6.1%) and December (12.7%), largely because of the price behavior in farming, forestry and fishing, which burgeoned from a 6.0% shrinkage in July to an 11.7% expansion in December.

⊠ December 1999 was the eighth month running with single-digit consumer inflation. Inflation decreased across the whole basket of goods and services, notably in housing (from 16.6% in December 1998 to 5.8% a year later), education (from 17.3% to 10.2%), and food (from 15.7% to 7.5%).

⊠ Consumer price growth in 1999 was higher than average in transport (18.7%), sundry expenditures (16.1%), and health care (15.1%). Higher gasoline prices, the application of VAT to toiletries, and devaluation account for the price increases in these groups. Inflation was lower than average for clothing (3.1%), housing (5.8%), and food (7.5%), in the case of food thanks to an abundant supply of farm produce, especially in the first half of 1999. Under the alternate CPI classification, price increases were higher than average for tradables (10.0%) because of devaluation, and for indexed nontradables (10.2%) partly because of the gradual phasing out of public-service subsidies.

⊠ The different measures of core inflation slowed in annual growth throughout the year except in November. In December their average (9.1%) fell by 0.9 percentage points relative to the third semester and by 0.5 percentage points relative to November. Two of the measures, CPI excluding food (10.0%) and the nucleus (9.8%), continued to run higher than observed inflation, as they had been doing since March.

⌘ Data available to date on the various indicators of the real sector of the economy suggest that output continued to contract in the fourth quarter relative to the same period in 1998. However several developments point to its expansion relative to the third quarter of 1999, notably: increased power consumption and slightly higher credit-card sales in December, slower contraction in fourth-quarter imports, and growth of total and non-traditional exports in November. Satisfactory performance of industrial orders in the second half of 1999 through to November, and gradual reduction of inventories over the same period suggest an upturn in output in 2000. Given the magnitude of last year's accumulated contraction and the low levels of installed-capacity utilization, no inflationary pressures are expected to arise this year from excess demand.

⌘ The 20-month moving average of the monetary base was above the indicative corridor's ceiling at the end of December because of increased demand for cash and reserves, caused by people's fears about the Y2K problem. It should be pointed out however that this large increase in the monetary base at the end of last year was quickly reversed in the first weeks of this year. The real value of outstanding debt continued to shrink during the fourth quarter at much the same rate as at the end of the third. Lastly, fourth-quarter nominal and real deposit rates were, on average, lower than the third quarter's, while nominal and real lending rates remained relatively stable.

⌘ Structural and time-series models suggest that inflation will be running between 8% and 10% by the end of 2000 and may continue to fall in 2001, ending the year about 2 percentage points lower relative to that range. Forecasting by the item-projection methodology bears out the results obtained by statistical models for the year 2000. This suggests that the 10% target is very likely to be met and even that, barring negative supply shocks, the likelihood of reaching lower-than-target rates is not negligible.

⌘ Higher unemployment during 1999 has prevented public opinion from fully appreciating the potential benefits of the successfully achieved one-digit inflation. The reduction in inflation will mean fewer distortions in the economy, greater efficiency in resource allocation, and a decrease in unjustified revenue transfers. This is expected to result in faster long-term growth of the economy and in improvement of the population's welfare. The country should understand the importance of gains of this kind and parlay the inflation decrease of 1999 into a low future inflation that remains steady at around developed-country levels.

✚ In view of the foregoing and considering interest-rate trends in the market, the Board of Directors of Banco de la República has decided not to alter the current levels and structure of the Bank's intervention rates of interest.

The Board of Directors,

Chairman

Juan Camilo Restrepo Salazar

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  
DECEMBER 1999

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

ECONOMIC STUDIES DIVISION

Hernando Vargas Herrera

**Manager**

PROGRAMMING AND INFLATION UNIT

Jorge Hernán Toro Córdoba

**Director**

Oscar Bautista Montero

Edgar Caicedo García

Adolfo León Cobo Serna

Andrés González Gómez

Munir Andrés Jalil Barney

Daniel Mejía Londoño

Luis Fernando Melo Velandia

Jorge Enrique Ramos Forero

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## PRICE INDICES

### A. CONSUMER PRICE INDEX

#### Overall performance

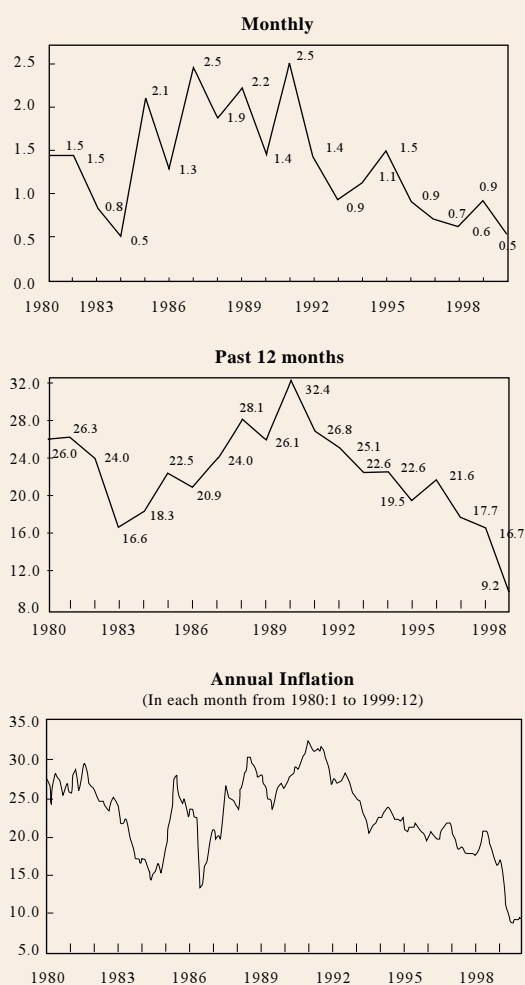
Inflation for 1999 measured as the annual change in the Consumer Price Index (CPI) was 9.2%, similar to the third-quarter figure (9.3%) but 7.5 percentage points lower than the rate for 1998 (Figure 1 and Table 1). The last time Colombia registered a single-digit annual CPI change was in 1970 (6.6%). At 9.2%, inflation for 1999 was 5.8 percentage points lower than the target set for the year. In December consumer prices rose by 0.5%, the lowest December rate for 16 years.

The breakdown by CPI groups shows that annual price growths in clothing (3.1%), housing (5.8%) and food (7.5%), being lower than the observed rate, helped to bring down inflation, while annual growths in transport (18.7%), sundry expenditures (16.1%), health care (15.1%) and education (10.2%), being higher than the observed rate, pushed inflation up.

The groups that helped to reduce inflation were affected not only by lower demand but also, in the case of food, by an abundant supply of farm produce; in the case of housing, by crises in the construction sector and the property market; and, in the case of clothing, by smaller input-price rises, resulting from a heavy flow of imports.

The CPI groups that put greater upward pressure on prices were affected by several factors: first, constant monthly adjustments in the price of gasoline during the first ten months of 1999, which considerably

FIGURE 1  
CONSUMER PRICE INDEX  
(PERCENTAJE CHANGE TO DECEMBER)



Sources: National Statistics Agency, calculations by Banco de la República.

raised public-transport and air fares; second, application of the value-added tax (VAT) to toiletries, which pushed up prices in sundry expenditures; third, devaluation, which further increased drug prices in the health-care group; and last, the phasing out of



TABLE 1  
INFLATION INDICATORS  
(PERCENTAGE CHANGE TO DECEMBER 1999)

	Monthly			Annual		
	1997	1998	1999	1997	1998	1999
<b>I. CPI</b>	0.6	0.9	0.5	17.7	16.7	9.2
Food	(0.3)	0.5	1.0	16.4	15.7	7.5
Housing	1.1	1.6	0.3	17.6	16.6	5.8
Clothing	0.8	0.5	0.2	9.4	7.8	3.1
Health care	0.4	0.6	0.2	21.5	20.6	15.1
Education 1/	0.1	0.1	0.0	22.8	17.3	10.2
Transport	2.4	1.2	0.9	21.3	20.2	18.7
Sundry expenditures	1.2	1.0	0.3	18.2	20.2	16.1
<b>II. Core Inflation 2/</b>	1.0	1.1	0.4	17.4	16.9	9.1
CPI excluding food 3/	1.0	1.1	0.4	18.2	17.1	10.0
Core 4/				17.3	16.6	9.8
Trimmed mean 5/				17.2	17.2	8.8
Asymmetric mean 6/				17.0	16.5	7.9
<b>III. PPI</b>	0.5	0.2	0.6	17.5	13.5	12.7
By economic use or destination						
Final consumption	1.1	(0.1)	0.9	16.6	12.2	12.4
Intermediate consumption	(0.5)	0.4	0.9	19.3	15.2	12.4
Capital goods	0.9	0.2	(1.0)	13.3	14.5	15.8
Building materials	1.3	0.7	0.1	17.5	12.4	14.3
By provenance						
Domestically produced and consumed goods	0.4	0.2	1.1	17.7	13.6	11.6
Imports	1.3	(0.3)	(0.9)	15.9	12.6	16.1
Exports 7/	1.8	(0.7)	0.9	36.5	4.3	26.7
By industrial origin						
Farming, forestry & fishing	(1.1)	(0.4)	2.6	23.3	10.0	11.7
Mining	3.1	(2.4)	0.5	5.5	(8.2)	31.1
Manufacturing	1.0	0.4	0.1	15.8	15.5	12.7
<b>IV. Other core inflation indicators</b>						
CPI excl. food, services and transport 8/	0.7	0.7	0.1	17.2	15.5	7.8
Median 9/				18.0	14.5	5.0

1/ Starting in January 1999, application of 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 in a single group.

2/ This is the average of the four core-inflation indicators calculated by the Banco de la República.

3/ CPI excluding all items of the food group.

4/ CPI excluding 20% of the weighting with those 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 does not include exported goods. It is calculated from the weighted sum of domestically produced and consumed goods and imported goods.

8/ The total CPI does not include primary foodstuffs, state services (utilities in general), and transport.

9/ The weighted median of the entire CPI basket, calculated by the CPI-60 methodology. In this connection, see Melo (1997).

Sources: Banco de la República, Economic Studies Division, PPI and CPI Listings, and National Statistics Agency.

public-service subsidies, which raised telephone and water charges by more than 21%.

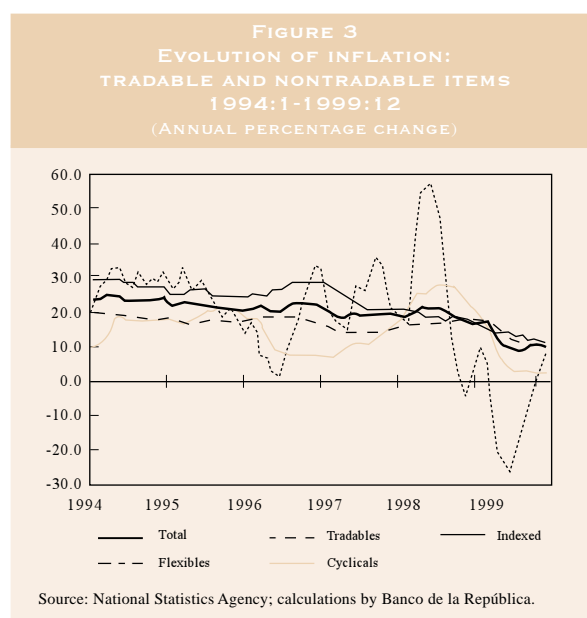
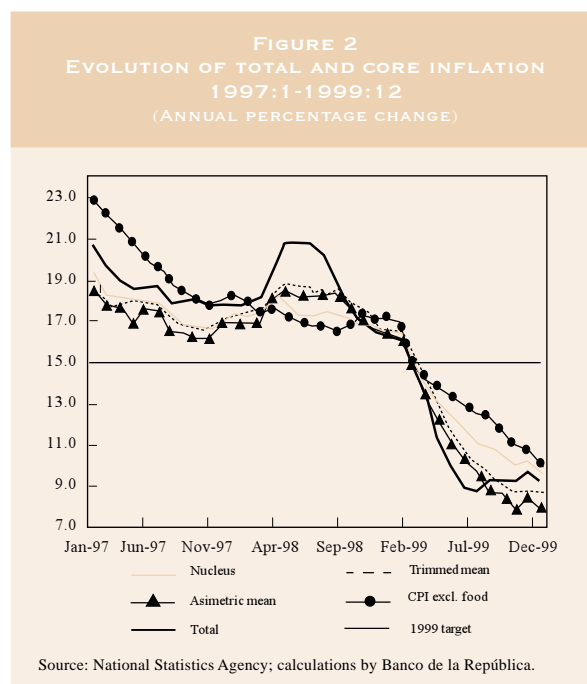
Figure 2 shows the satisfactory behavior of all measures of *core inflation* during 1999. This positive behavior is reflected by the fact that three of the four measures (nucleus, asymmetric mean, and trimmed mean) showed only one break, in November, in their downward trend of annual change. Even so, two of the measures ran higher than observed inflation during 1999: nucleus (9.8%), and CPI excluding food (10.0%) (Table 1). At the end of the fourth quarter, core inflation, as the average of the four measures, was 9.1%, down by 0.9 percentage points on the third quarter.

### Alternate classification: inflation speeding or slowing groups

Figure 3 shows annual price evolution under an alternate classification that divides the CPI basket into tradables<sup>1</sup>, and nontradables (indexed<sup>2</sup>, flexible<sup>3</sup>, and cyclical<sup>4</sup> items). Three patterns of behavior can be discerned in this Figure. One is the behavior of flexible items (unprocessed farm produce), which fell sharply in the first half of the year but rose equally sharply in the second, ending up with a 6.9% annual change for 1999.

Another is the downward trend in indexed good during 1999, which lowered their annual variation from 17.9% in December 1998 to 10.2% a year later. The third is the behavior shown by tradable and cyclical goods: a fall in annual price changes during the first half of 1999, followed by relative stability in the second half, resulting in an annual change of 10.0% and 1.6%, respectively, for 1999.

<sup>1</sup> Tradables: textiles, footwear, tobacco, beverages, cereals, dairy produce, cooking fats, drugs, vehicles, electrical appliances, etc.  
<sup>2</sup> Indexed items: rent, fuel and utilities, education, transport, and other items.  
<sup>3</sup> Flexible items: root crops, plantains, vegetables, legumes, and fruit.  
<sup>4</sup> Cyclical items: meat and its by-products.



## B. PRODUCER PRICE INDEX

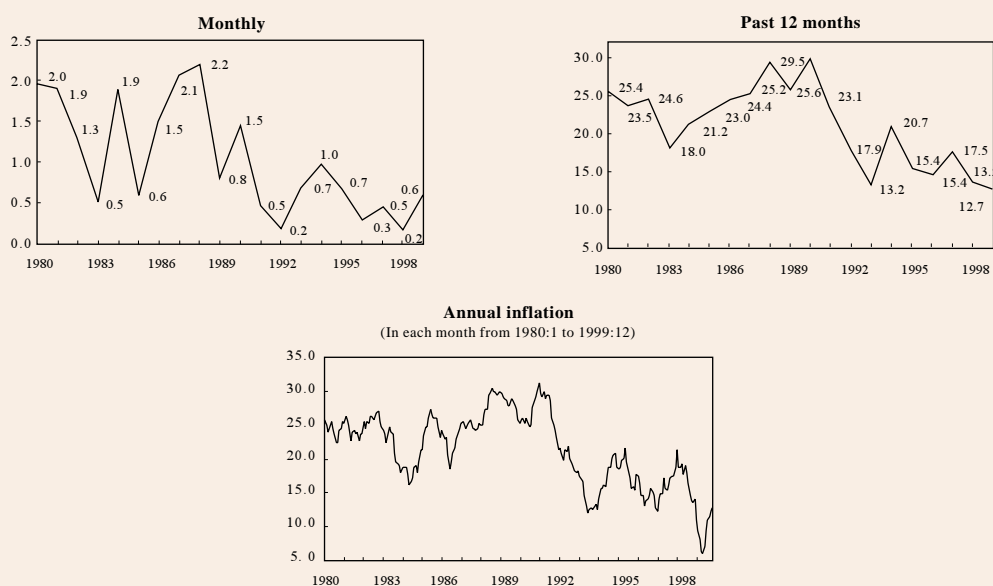
### Overall performance

*Annual producer inflation* for 1999 was 12.7%, down by 0.8 percentage points on a year earlier (Table 1). At 0.6%, the *monthly change* in the Producer Price Index (PPI) was higher than in December 1998 (0.2%) or December 1997 (0.5%) (Figure 4).

Classification by *provenance* shows imports to have undergone a 16.1% price adjustment, higher than the PPI growth. By contrast, the price rise for domestically produced and consumed goods (11.6%) remained lower than PPI growth, despite a strong upward trend starting in July from a mere 5.3%.

Classified by industrial origin, the annual price increase was at its largest (31.1%) for mining, because of a strong pick-up in fuel prices. Manufacturing registered a 12.7% price rise, while farming was the group with the smallest price variation (11.7%). Farming prices grew apace during the second half of 1999 after their 6.0% shrinkage in June.

FIGURE 4  
PRODUCER PRICE INDEX  
(PERCENTAGE CHANGE TO DECEMBER)



Source: Banco de la República, Economic Studies Division.

## II

# DETERMINANTS OF INFLATION

### A. MONETARY AGGREGATES, INTEREST RATES, AND EXCHANGE RATE

This section discusses developments regarding the economy's monetary and exchange variables and supply and demand situation.

#### 1. Monetary aggregates

The behavior of the monetary aggregates 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.

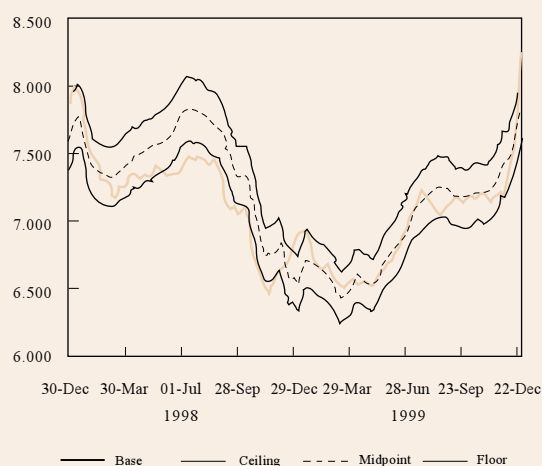
#### Monetary base

On December 31st the monetary base amounted to 9,740 billion pesos, with a growth rate of 40.7% for the year. Its 20-month daily moving average exceeded the indicative corridor's ceiling by 1.9% (Figure 5).

In December the monetary base's average balance showed an annual growth rate of 24.2%, up by 22.7 percentage points with respect to September. This behavior, analyzed according to the uses of the monetary base, is explained by the increase in the annual growth rate of reserves (from -24.7% to 23.7%), which was not offset by the decline in the growth rate of cash (from 30.8% to 24.5%) (Figure 6).

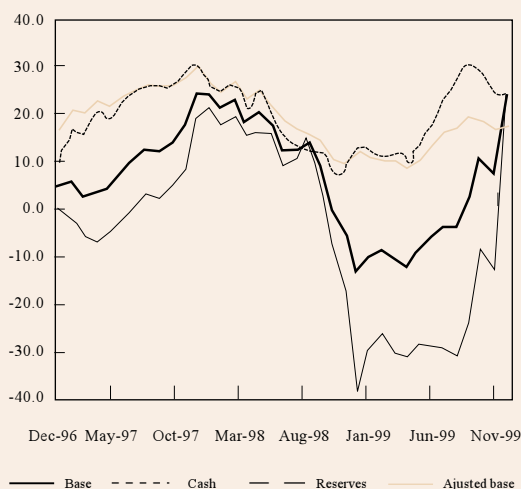
At the end of December the average annual growth of the *adjusted* monetary base was 17.2%, up by 2.2 percentage points on the rate at the end of September. This annual change results from correcting reserve demand by applying the current average rate of reserve requirement (4.6%) to liabilities subject to such requirements.

FIGURE 5  
MONETARY BASE  
20-MONTH DAILY MOVING AVERAGE  
(BILLIONS OF PESOS)



Source: Banco de la República, Economic Studies Division.

FIGURE 6  
MONETARY BASE AND ITS USES  
(ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)



Source: Banco de la República, Economic Studies Division.

## M1 money supply

The M1 balance on December 31st was 12,857 billion pesos, with a 22.1% variation for the year. Its average annual growth in December stood at 12.5%, up from 11.9% in September. This behavior is accounted for by faster growth in checking accounts, from a shrinkage of 0.8% to an expansion of 3.9% (Figure 7).

## M3-plus-bonds

The broader monetary aggregate of liquidity, M3-plus-bonds, amounted to 60,002 billion pesos on December 31st, 15.2% below the floor of the indicative corridor; its annual growth rate was 6.3% (Figure 8).

The average balance of M3-plus-bonds registered a higher annual growth in December (5.6%) than in September (5.0%). This increase resulted from a slower contraction in bonds and a slightly faster growth in liabilities subject to reserve requirements (Figure 9).

Annual growth in the average balance of liabilities subject to reserve requirements edged up from 7.2% in September to 7.3% in December. This is largely explained by stronger growth both in checking accounts (as indicated above) and in savings accounts (from 12.0% to 15.8%) (Figure 10).

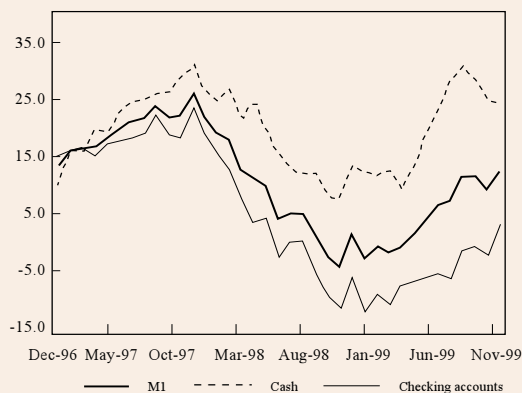
The average monetary multiplier declined between September and December, from 7.933 to 6.953. This behavior was exclusively associated with a rise in the cash ratio (from 0.083 to 0.100), while the reserve ratio remained steady. (Figure 11).

The average monetary multiplier of the *adjusted* monetary base also decreased between September and December, from 8.397 to 7.530.

## Credit

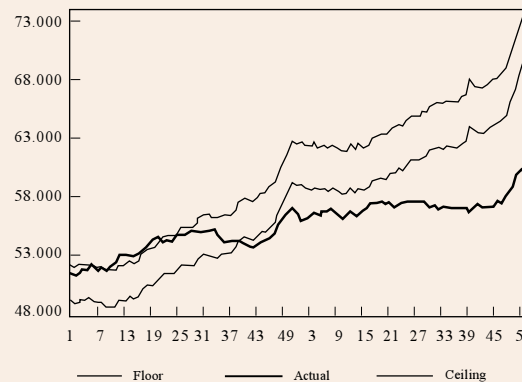
The financial system's overall balance of local and foreign currency loans amounted to 48,609 billion pesos at December 31st, with an annual growth of

**FIGURE 7**  
M1 AND ITS COMPONENTS  
(ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)



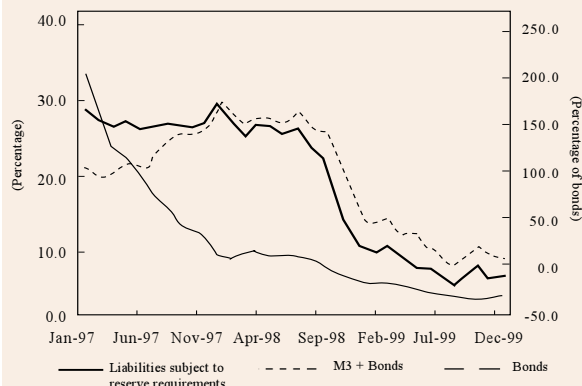
Source: Banco de la República, Economic Studies Division.

**FIGURE 8**  
M3-PLUS-BONDS  
WEEKLY MONETARY CORRIDOR  
(BILLIONS OF PESOS)



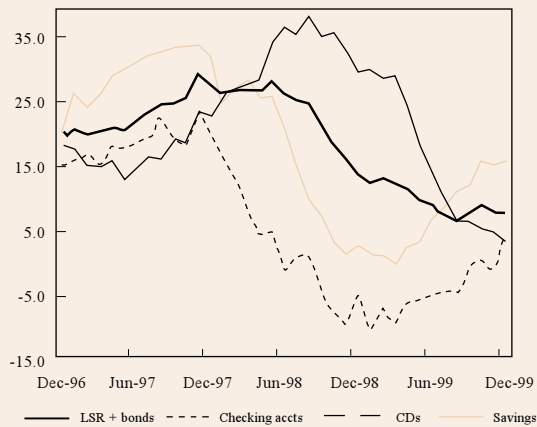
Source: Banco de la República, Economic Studies Division.

**FIGURE 9**  
M3-PLUS-BONDS AND ITS COMPONENTS  
(ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)



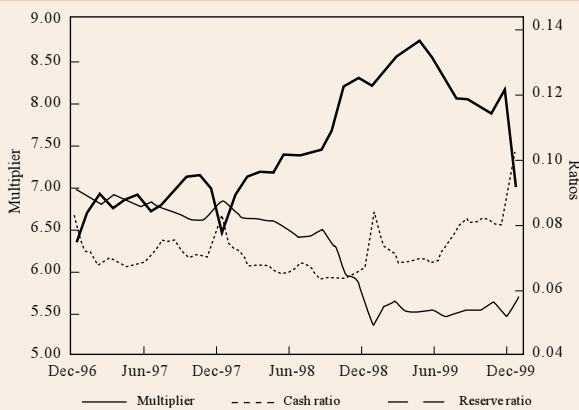
Source: Banco de la República, Economic Studies Division.

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



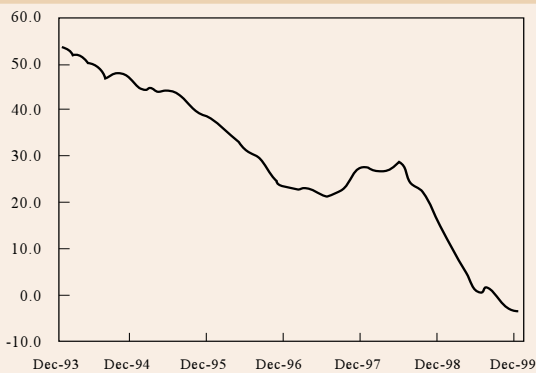
Source: Banco de la República, Economic Studies Division.

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



Source: Banco de la República, Economic Studies Division.

**FIGURE 12**  
TOTAL LOAN PORTFOLIO OF FINANCIAL SYSTEM  
EXCLUDING FEN<sup>1</sup>  
(ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)



<sup>1</sup> National Energy Financing Corporation  
Sources: Banco de la República and Superintendency of Banks.

-3.6%. In domestic currency the annual growth rate was -0.4%, in foreign currency -27.8%, and in the latter's dollar equivalent -41.8%.

Annual growth in the portfolio's average balance fell from -1.4% in September to -4.1% in December (Figure 12).

The growth rate for the financial system's gross *real* balance of local-currency loans also declined in December relative to September, falling from -6.5% to -7.2% (Figure 13).

The net real portfolio, that is, the gross portfolio less provisions for overdue loans, registered an annual growth of -12.2% in December, down from -10.4% at the end of the third quarter. The contraction was particularly strong in the case of financial public entities, which showed an annual of decrease of -21.6%, compared with -9.2% for private financial institutions (Figure 14).

## 2. Interest rates

The average deposit rate, as measured by the DTF (fixed-term deposit) rate, stood at 16.1% at the end of December 1999, and the average lending rate at 26.3%. At the end of the third quarter, the nominal deposit and lending rates had been 18.1% and 26.2%, respectively.

**FIGURE 13**  
GROSS REAL LOCAL-CURRENCY PORTFOLIO  
OF FINANCIAL SYSTEM EXCLUDING FEN<sup>1</sup>  
(ANNUAL PERCENTAGE CHANGE)



<sup>1</sup> National Energy Financing Corporation  
Sources: Banco de la República, Superintendency of Banks.

The intermediation spread, measured as the difference between the lending and deposit rates, was 10.3 percentage points, up by 2.2 points on the previous quarter (Figures 15 and 16). The interbank rate averaged 8.3% at the end of the fourth quarter (Figure 17).

In real (*ex-post*) terms, the deposit rate fell from 8.0% at the end of September to 6.2% at the end of December, while the lending rate edged up from 15.4% to 15.7% (Figure 18).

Figure 19 shows how the curve of the TBS interest rate for different maturities has evolved over the past nine months. Its downward trend since November 1998 for all maturities was interrupted from June to October 1999, but continued again during November and December. In December rates ranged between 13% for the short term and 16% for longer maturities.

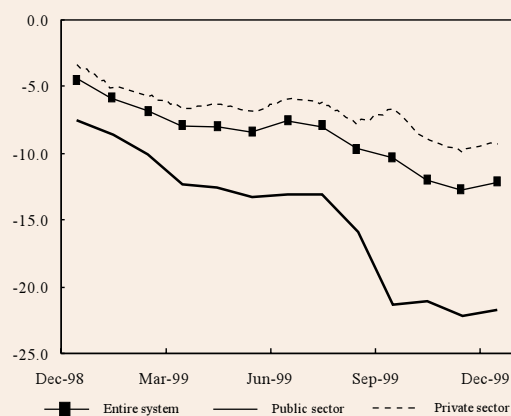
The behavior of spot and forward curves over the past eight months can be seen from Figure 20. The spot curve (thick line) shows that the downward trend followed by 90-day interest rates since the beginning of 1999 was interrupted from May to October but, as in the previous case, continued once more during November and December.

Each one of the points on the forward curves (thin lines) shows 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. From June to October the forward curves flattened out, implying that agents expected no big changes in CD yields over the different periods. But in November these curves began to display an upward trend over the longer run, signifying that the market expected 90-day CDs to have higher yields in the longer run.

### 3. Yield differentials

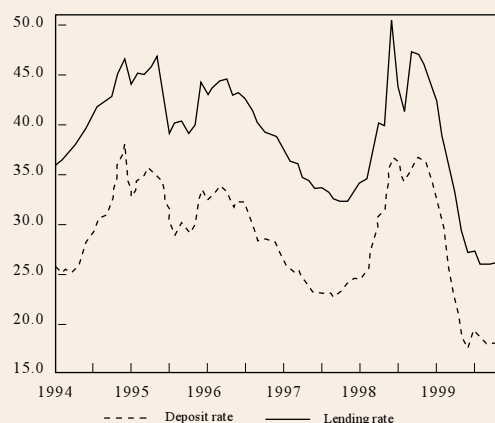
The external-yield indicator is built on the basis of the implicit devaluations contained in the financial system's forward (80 to 100 days) dollar sales contracts. The external rate of reference is the 90-day Libor rate, and the DTF rate is the domestic rate of reference.

FIGURE 14  
TOTAL NET REAL LOCAL-CURRENCY PORTFOLIO  
(ANNUAL PERCENTAGE CHANGE)



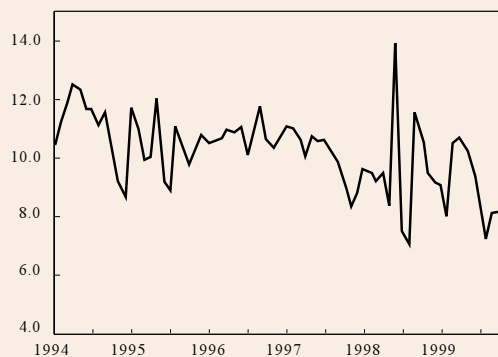
Sources: Banco de la República, Superintendency of Banks.

FIGURE 15  
LENDING AND DEPOSIT RATES  
(ANNUAL EFFECTIVE RATE)



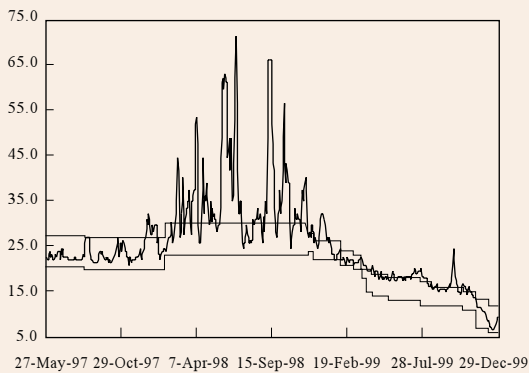
Sources: Banco de la República and Superintendency of Banks.

FIGURE 16  
LENDING AND DEPOSIT RATE DIFFERENTIAL  
(PERCENTAGE)



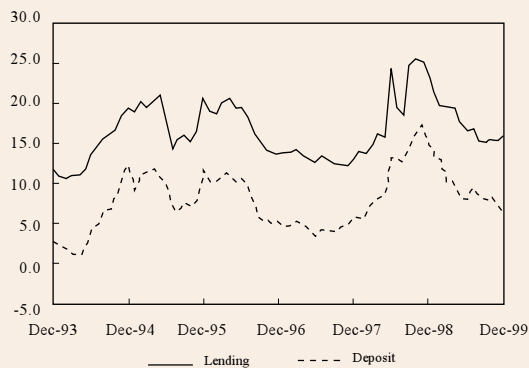
Sources: Banco de la República and Superintendency of Banks.

**FIGURE 17**  
INTERVENTION BAND AND INTERBANK  
INTEREST RATE  
1997:5-1999:12  
(PERCENTAGE)



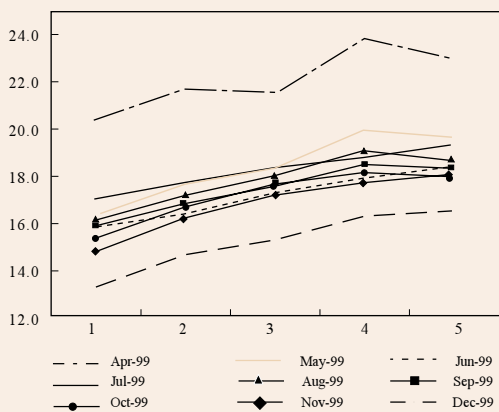
Sources: Banco de la República and Superintendency of Banks.

**FIGURE 18**  
REAL DEPOSIT AND LENDING RATES  
(PERCENTAGE)



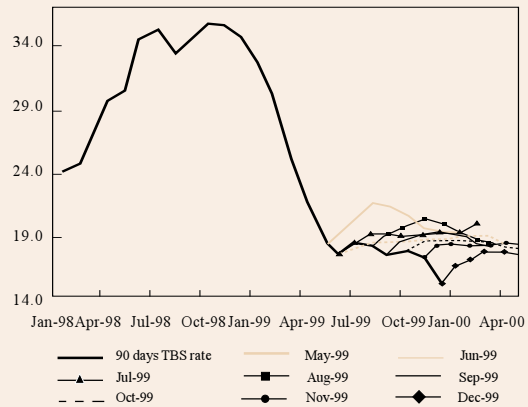
Source: Banco de la República and Superintendency of Banks.

**FIGURE 19**  
TBS INTEREST RATE FOR DIFFERENT MATURITIES  
(PERCENTAGE)



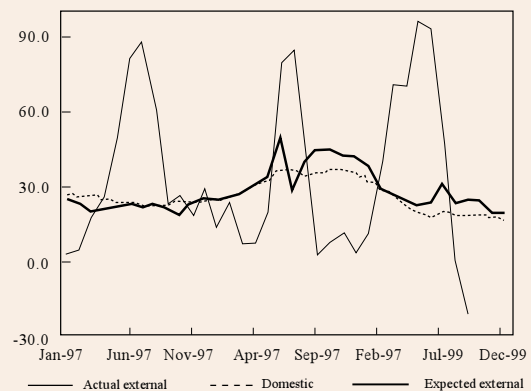
Source: Superintendency of Banks.

**FIGURE 20**  
90-DAY TBS RATE PROJECTION  
(PERCENTAGE)



Source: Superintendency of Banks.

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



Sources: Banco de la República.

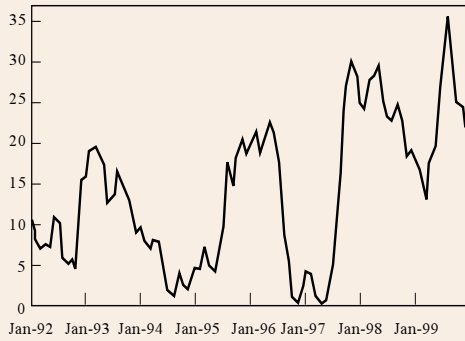
Figure 21 compares expected external yield, the return on domestic investments (as measured by the DTF rate), and actual external yield (with a three-month lag). Expected external yield ran above internal yield all through 1999 but the difference decreased in the last months of the year. As can be seen from Figure 21, actual foreign yield became negative from August-September on, largely because of the peso's nominal revaluation in the last months of 1999.

#### 4. Exchange rate

The nominal exchange rate at the end of December was 1,874 pesos to the dollar, with an annual devaluation of 21.5% (Figures 22).

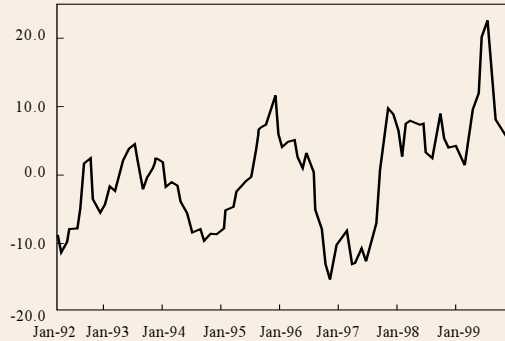


**FIGURE 22**  
ANNUAL DEVALUATION  
(PERCENTAGE)



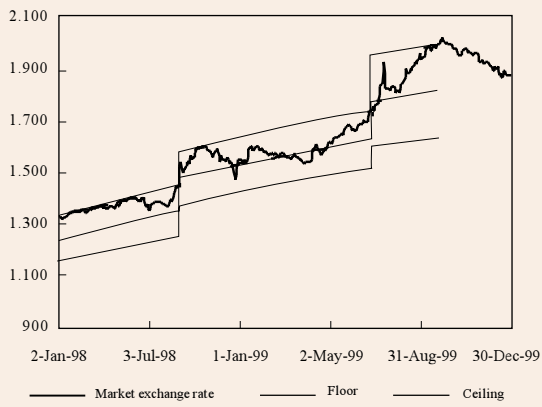
Sources: Banco de la República and Superintendency of Banks.

**FIGURE 25**  
ANNUAL REAL DEVALUATION, RERI-1 (1994=100)  
1992:1-1999:12  
(PERCENTAGE)



Source: Banco de la República, Economic Studies Division.

**FIGURE 23**  
REPRESENTATIVE MARKET EXCHANGE RATE  
1998:1-1999:12  
(PESOS TO THE DOLLAR)



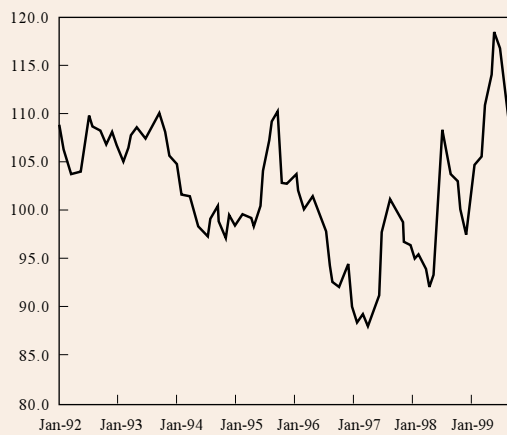
Source: Banco de la República and Superintendency of Banks.

**FIGURE 26**  
ANNUAL REAL DEVALUATION, RERI-3 (1994=100)  
1992:1-1999:12  
(PERCENTAGE)



Source: Banco de la República, Economic Studies Division.

**FIGURE 24**  
REAL EXCHANGE RATE, MEASURED BY RERI-1  
1994=100  
1992:1-1999:12



Source: Banco de la República, Economic Studies Division.

**FIGURE 27**  
QUARTERLY GROSS DOMESTIC PRODUCT



Source: National Statistics Agency.

As can be appreciated from Figure 23, the peso registered a nominal revaluation of 7.1% in the last quarter of 1999.

### 5. Real exchange rate

As measured by the RERI-1 index (1994 = 100), which uses Colombia's producer-price index and those of its 20 trading partners, the pesos's real exchange rate averaged 108.7 in December, with an annual real devaluation of 4.9% (Figures 24 and 25).

But if the real exchange rate is measured by the RERI-3 index (1994 = 100), which uses consumer price indices, the annual real devaluation for 1999 was 9.7% (Figure 26).

The difference between the two real exchange-rate measures arises from the fact that, as stated above, PPI inflation for 1999 was 12.7%, whereas CPI inflation was 9.2%.

### B. SUPPLY AND DEMAND

Annual growths of quarterly GDP show clearly that Colombia's economy continued to contract in the second half of 1999, albeit more slowly than in the first. The National Statistics Agency estimates that the economy shrank at an annual rate of 4.6% in the third quarter, as compared with 5.7% and 7.2% in the first and second quarters, respectively. If the National Planning Department's prediction of a GDP shrinkage of about 5% in 1999 proves true, the economy must have contracted by 2.3% in the fourth quarter.

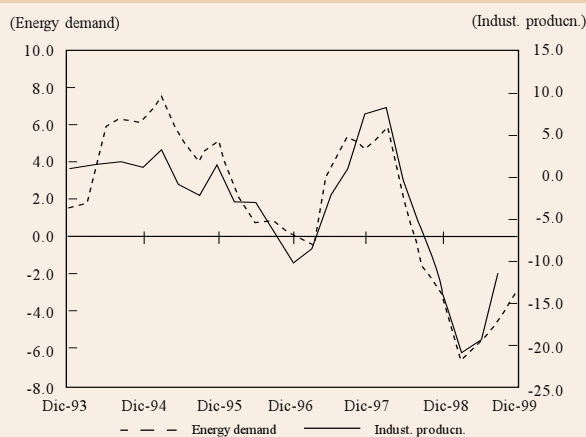
The quarterly evolution of GDP's seasonally adjusted series also shows a break in downturn trends from mid-1999 on. What is more, this variable grew by 0.8% in the third quarter with respect to the second. This was the first positive quarterly growth since the fourth quarter of 1997 (Figure 27).

The foregoing is borne out by several indicators available at the end of 1999 regarding the performance of the real sector of the economy. Energy

consumption, a key indicator of urban economic performance, contracted more slowly in the fourth quarter (2.7%) than in the third (4.4%) (Figure 28). Moreover, energy consumption during the month of December was merely 0.9% lower than a year earlier, and second largest in 1999 to the level in March.

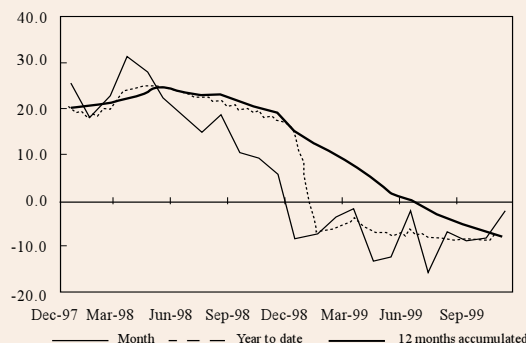
Another poor-performing indicator that showed some pick-up towards the end of the year was credit-card spending. In October and November the annual decrease in credit-card sales and cash advances averaged 4.9%, an improvement on the 10.3% decrease in the third quarter. More significantly, credit-card sales (excluding cash advances) registered a 1.9% growth in November relative to the same month the year before, this being their first positive development in all of 1999 (Figure 29).

FIGURE 28  
ENERGY DEMAND VS INDUSTRIAL PRODUCTION  
ANNUAL PERCENTAGE CHANGE



Source: Interconexión Eléctrica S. A. and National Statistics Agency.

FIGURE 29  
CREDIT-CARD SALES AND CASH ADVANCES  
(ANNUAL PERCENTAGE CHANGE)



Note: Nominal growth rates.  
Source: VISA Colombia.

Likewise, key industrial indicators such as orders, inventories and utilization of installed capacity, reviewed below, also point to a slower contraction of the economy over the fourth quarter.

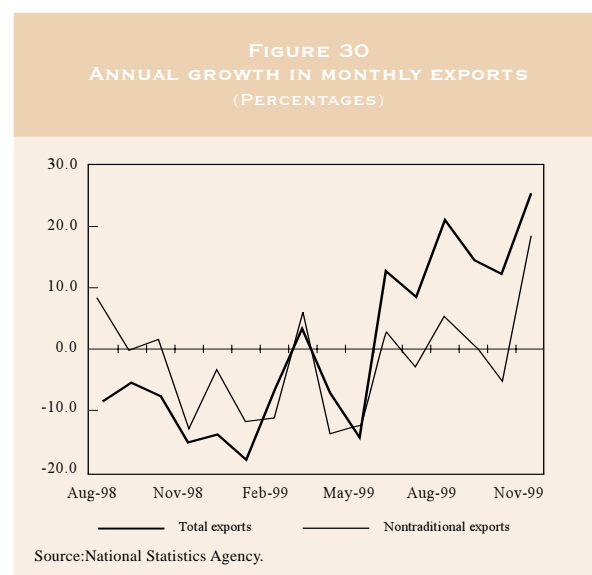
It is now clear that credit behavior is at the root of a good many of the problems delaying the economy's recovery. Despite a greater availability of money in the last months of 1999 and the steady fall in interest rates over the year, credit did not pick up and in fact contracted more from October on.

As suggested by several studies, the credit paralysis is caused not only by decreased demand for funds because of the recession, but also by the fact that the financial intermediaries themselves are voluntarily restricting the supply of lendable funds. There are various reasons for this 'credit crunch'. The most important one is that the financial intermediaries perceive their potential debtors to be unusually high risks, with deteriorating levels of solvency. Such factors can lead financial intermediaries to ration credit voluntarily by amount, rather than price, and invest their excess liquidity in very low-risk assets, such as public-debt papers<sup>5</sup>.

At all events, by the end of 1999 a number of developments highly favorable to economic reactivation were still in effect. First, exchange-rate uncertainty, besetting the economy since early 1998 and affecting investment decisions, was substantially removed during the fourth quarter. Second, the lessening of exchange-rate uncertainty allowed Banco de la República to ease monetary policy, which in turn led to further reductions in real interest rates for both loans and deposits. These rates are currently close to their historical averages. Lastly, as described below in International Context, foreign conditions took a turn for the better, with a pick-up in prices for some of our main exports in the last months of 1999, and greater growth prospects for 2000 for several of our trading partners.

<sup>5</sup> A more detailed analysis is given in *Balance macroeconómico y perspectivas para el año 2000*, Documento CONPES, 23 December 1999.

Fourth-quarter improvements in the country's economic prospects began to be reflected in a better export performance. Total exports grew by 3.9% in the year to November, thanks largely to the behavior of oil exports. And although non-traditional exports still registered a shrinkage for the year to November, they did so at a slower pace (-2.9%) than at the end of the third quarter; in fact, their average monthly growth was positive during the third quarter (1.0%) and the first two months of the fourth quarter (7.0%) (Figure 30).



## 1. Gross Domestic Product (GDP)

In the final quarter of 1999 the National Planning Department (Departamento Nacional de Planeación-DNP) revised down its growth estimates for the year, predicting that GDP would contract by 5.0% rather than 3.5%. This is in line with the most recent estimates made by independent analysts such as Fedesarrollo (a research institution) and ANIF (a financial association), which predict a contraction of 4.7% and 5.0%, respectively. For 2000, DNP forecasts a positive growth of 3.0%, similar to ANIF's forecast, whereas Fedesarrollo expects a growth of 2.1%

DNP estimates based on the latest third-quarter data indicate that exports and public-administration consumption were the only two expenditure categories to grow during 1999. All the rest shrank considerably, particularly private investment, which is estimated by DNP to have contracted by 65.4%. Even household

consumption, which does not usually register protracted contractions during recessions, is estimated to have declined by 7.4% (Table 2).

By sector, all the major sectors of output contracted in the third quarter, except for mining and quarrying, and communal, social and personal services (Table 3). The same had occurred in the second quarter. The expansion in mining and quarrying was essentially due to greater oil production, while the growth in communal services was partly caused by an increase in public-administration services.

Among the sectors that shrank in the third quarter, the contraction was largest in construction and manufacturing, but even in these two sectors, as in the rest, the decline was smaller than in the June quarter.

For the year as a whole, DNP does not expect this pattern to have changed substantially: construction

TABLE 2  
GROSS DOMESTIC PRODUCT, DISTRIBUTION  
OF EXPENDITURE  
(ANNUAL REAL PERCENTAGE GROWTH)

	1999 (e)	2000 (p)
Total consumption	(4.9)	4.1
Household consumption	(7.4)	6.2
Public-administration consumption	4.3	(2.7)
Gross fixed capital formation	(36.6)	2.6
Private sector	(65.4)	33.3
Public sector	(3.3)	(10.1)
Change in inventories	(75.0)	13.0
<b>DOMESTIC DEMAND</b>	(11.4)	3.9
Exports	6.5	8.0
Imports	(26.0)	14.0
<b>GROSS DOMESTIC PRODUCT</b>	(5.0)	3.0

(e) Estimated

(p) Projected

Sources: National Planning Department.

TABLE 3  
REAL GROSS DOMESTIC PRODUCT, BY SECTOR SEASONALLY ADJUSTED SERIES  
(ANNUAL REAL PERCENTAGE CHANGE)

	1999		
	I	II	III
<b>GDP</b>	(5.73)	(7.25)	(4.61)
Farming, forestry, hunting & fishing	0.98	(5.37)	(3.10)
Non-decaffeinated green coffee	3.66	(28.05)	(21.72)
Mining and quarrying	12.21	8.42	3.86
Electricity, gas & water	(5.55)	(5.12)	(2.77)
Manufacturing	(18.32)	(17.28)	(12.45)
Construction	(19.65)	(27.54)	(19.53)
Construction work and buildings	(33.84)	(44.87)	(34.01)
Civil-engineering work and projects	(5.67)	(7.12)	(4.84)
Commerce, repairs, restaurants & hotels	(9.04)	(10.72)	(7.83)
Transport, warehousing & communication	(3.79)	(3.73)	(1.55)
Financial, insurance, real-estate & bus. serv. entities	(7.78)	(7.88)	(7.58)
Communal, social and personal services	1.59	2.80	2.94
Public-administration services	2.39	3.88	4.09

Source: National Planning Department

must have shrank by 20% and manufacturing by 14.6%, with expansion occurring only in the sectors of mining and quarrying, and communal services.

## 2. Industry

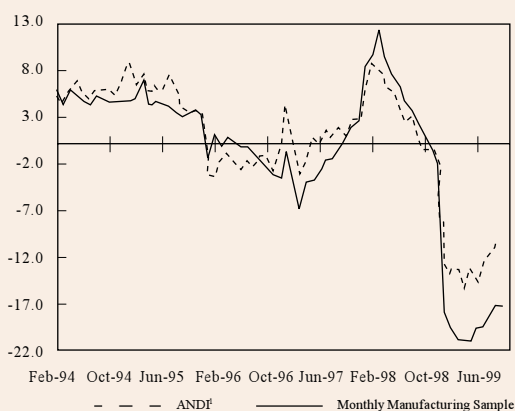
According to the latest information available (up to October), industrial production continued to contract at considerable rates in the second half of 1999, much as it had in the first half. The National Statistics Agency's Monthly Manufacturing Sample shows that real industrial output in the year to October fell by 17.2% [with respect to the same period the year before]. This contraction was very similar to the figures for August and September and slightly lower than the sector's 19.8% decline at the end of the first six months. The trends revealed by the National Statistical Agency's data are borne out by data from ANDI's Industrial Opinion Survey (Figure 31).

Considering that production to meet year-end demand had already been largely carried out by October, no significant upturn can be expected to have occurred in this variable during November and December. It is therefore reasonable to expect the sector to have contracted strongly over 1999 as a whole. All the same, to judge by trends in power consumption, described above, industrial output in November and December may have contracted somewhat more slowly than in the third quarter.

As regards the outlook for 2000, the continued reduction in inventories since the second quarter of 1999, as indicated by Fedesarrollo's Business Opinion Survey, provides scope for the sector's recovery. A similar conclusion can be drawn from Fedesarrollo's industrial-orders indicator, which has been rising almost without interruption over the past six months (Figure 32).

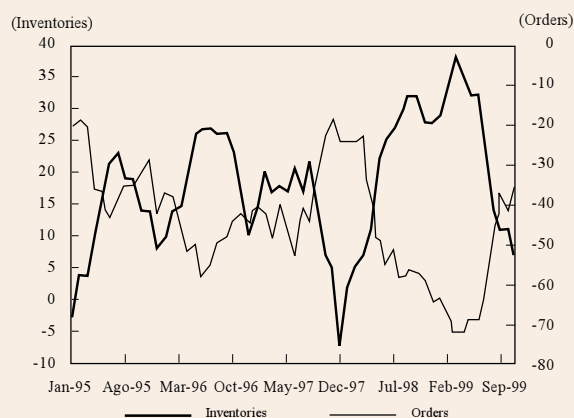
According to Fedesarrollo's Survey, business expectations have also been favorable to an upturn in the sector, as suggested by evolution of the business climate, which improved steadily in this period (Figure 33). Nevertheless, data from Fedesarrollo

FIGURE 31  
REAL INDUSTRIAL OUTPUT INDEX  
(ANNUAL CHANGE YEAR TO DATE)



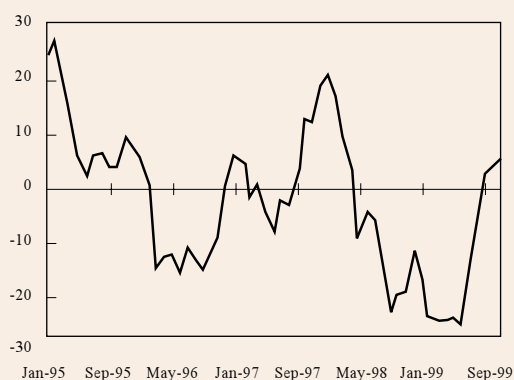
<sup>1</sup> Asociación Nacional de Industriales  
Sources: ANDI and National Statistics Agency.

FIGURE 32  
BUSINESS OPINION SURVEY  
(TO NOVEMBER 1999)



Source: Economic Studies Division, using figures from Fedesarrollo's Business Opinion Survey.

FIGURE 33  
BUSINESS CLIMATE  
(TO NOVEMBER 1999)



Source: Economic Studies Division, using figures from Fedesarrollo's Business Opinion Survey.

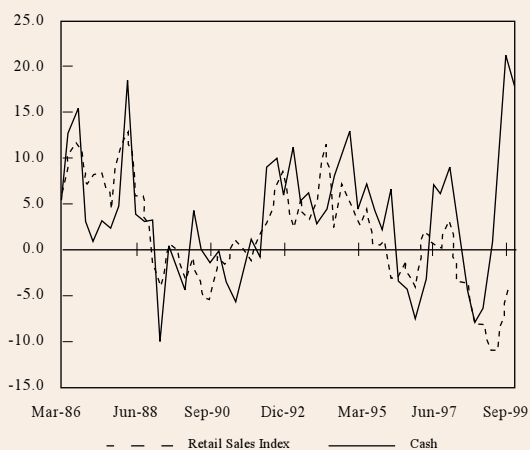
show that businessmen's expectations regarding the economic situation six months ahead worsened somewhat in October and November.

### 3. Consumption

As anticipated in the September Inflation Report, consumption declined again in the third quarter of 1999, for the fourth quarter running. Data from the National Statistics Agency's indicate that final consumption (public and private) in the third quarter decreased by 1.7%, which, however, was less than its contraction in either of the previous two.

The situation is unlikely to have altered significantly in the fourth quarter. The real retail sales index in October declined by 3.9% relative to the same month the year before, this decline being only slightly less than the contraction in the third quarter. Although the cash indicator—traditionally an important measure of retail sales and consumption—grew considerably in the fourth quarter, this does not necessarily signify a corresponding pick-up in sales and consumption. The cash growth may have come from a change in the composition of the public's liquid assets portfolio, induced by a growing process of informal commercial activity and financial disintermediation, and also by people's fears about the Y2K problem (Figure 34).

**FIGURE 34**  
CASH VS RETAIL SALES INDEX  
QUARTERLY AVERAGES  
(ANNUAL REAL PERCENTAGE CHANGE)



Sources: National Statistics Agency and Banco de la República.

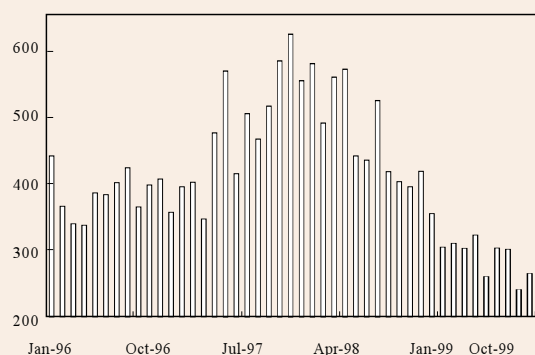
In any case, a smaller contraction may reasonably be expected for the fourth quarter, in view of November's improvement in credit-card sales, as indicated above.

### 4. Investment

Gross domestic capital formation decreased by 41% in the third quarter of 1999 compared with the same period in 1998. This contraction is similar in size to those registered in the first two quarters, and may be expected also for the fourth quarter, in view of the behavior of major variables such as capital goods imports.

For October, the last month for which data are available, capital goods imports showed a 40% annual contraction, year to date. This big contraction was only slightly smaller than shrinkage in the previous months thanks to small increases in the dollar value of imports from August on (Figure 35).

**FIGURE 35**  
CAPITAL GOODS IMPORTS  
(MONTHLY TO OCTOBER 1999)



Source: Tax and Customs Administration - Manifests.

## C. WAGES AND EMPLOYMENT

### 1. Industrial wages

On the latest information available, adjustments to nominal industrial pay can be said to have continued falling over the second half of 1999, albeit slightly more slowly than at the beginning of the year. In the 12 months to October, average nominal pay in the industrial sector rose by 15.7% for workers as a whole,

with wage earners receiving a much smaller increase (14.1%) than employees (17.5%) (Figure 36).

The smaller increase in wage earners' pay was in line with a greater fall in employment for them than for employees in the year to October. While employment for wage earners decreased by 12.7% on average in the 12 months to October, jobs for employees declined by 7.2%. This development signifies, among other things, a greater flexibility in the labor market for wage earners than for employees.

In October the decreasing adjustments to nominal pay in industry were still not being reflected in decreasing adjustments to real pay. On the contrary, since inflation was falling even faster, all workers were enjoying additional real gains in pay. Thus, for industrial workers as a whole, real pay in the 12 months to October 1999 was readjusted at an annual rate of 3.1%, up from 1.1% at the end of the second quarter (Figure 37).

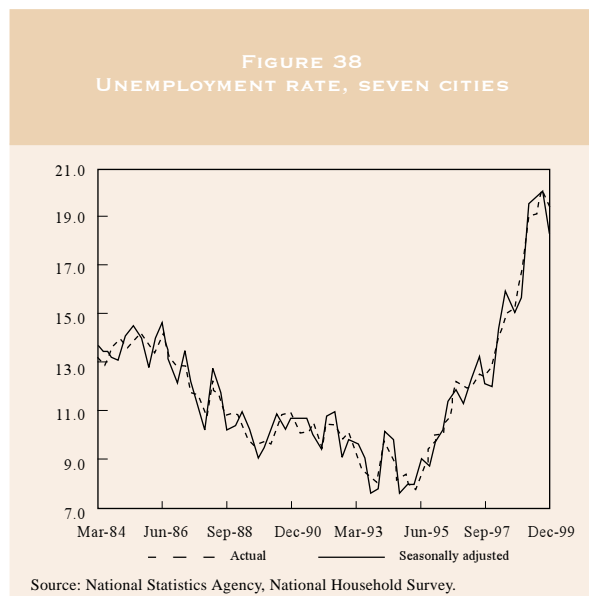
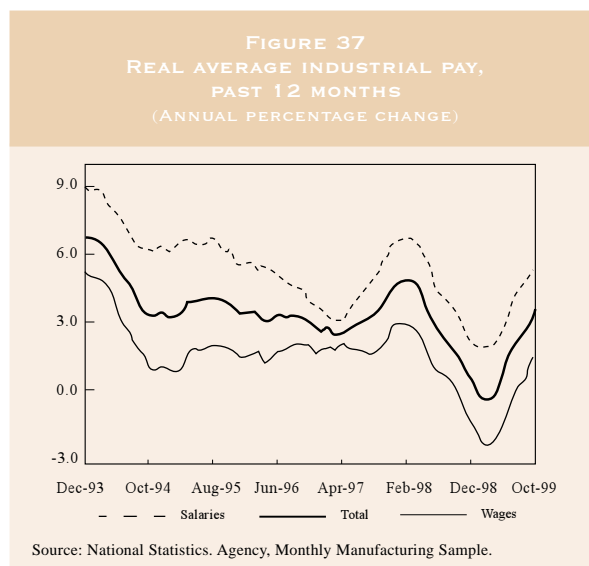
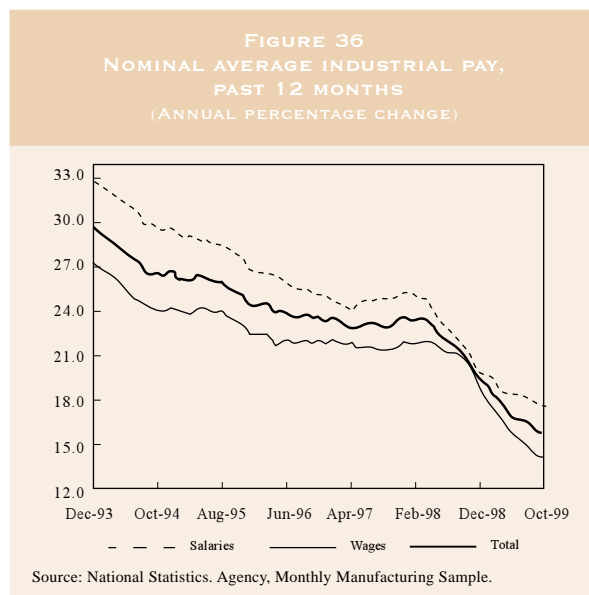
Moreover, in the second half of 1999 the gains in real pay were received by both employees and wage earners, whereas during most of the first half they had been exclusively concentrated in the employee class.

## 2. Employment

From September to December 1999 the unemployment rate for the country's seven major metropolitan areas fell from 20.1% to 18.1% (Figure 38). Some economic analysts and union leaders skeptically attributed this fall to seasonal factors rather than to the onset of a sustained upturn in the economy.

The unemployment rate is determined simultaneously by labor supply and demand factors and therefore depends both on the employment rate (number of people with jobs / the working-age population) and on the overall participation rate (economically active population / working-age population)<sup>6</sup>. A rise in the employment rate reduces unemployment, whereas a rise in the overall participation rate tends to increase it.

<sup>6</sup> Specifically, the relation is as follows: Unemployment rate = 1 - (employment rate/overall participation rate).





Figures that have not been seasonally adjusted show that from September to December 1999 the employment rate for the seven major metropolitan areas went up from 50.5% to 52.2%, the highest level for the year (Figure 39). This rise in the employment rate was produced by 214,101 new jobs, created partly in response to the typical fourth-quarter expansion in economic activity. During the same period the overall participation rate for the seven major metropolitan areas continued to rise, edging up from 63.2% to 63.7%, owing to an increase of 93,940 individuals in the economically active population (Figure 40). Hence, labor demand exceeded supply in the last quarter, causing the fall in unemployment indicated above.

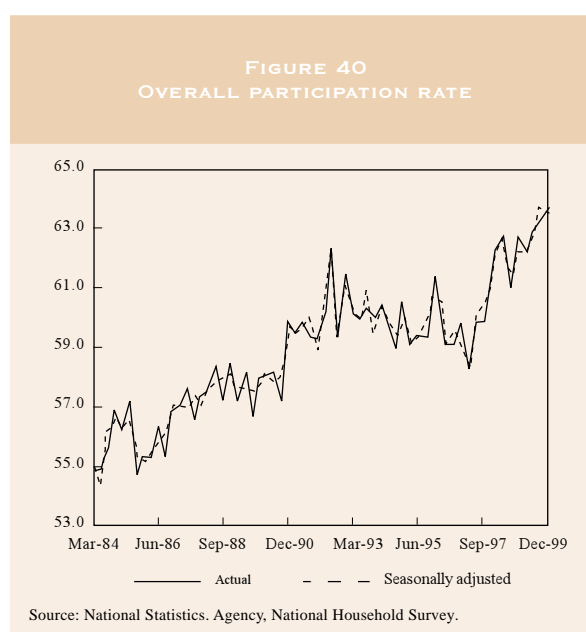
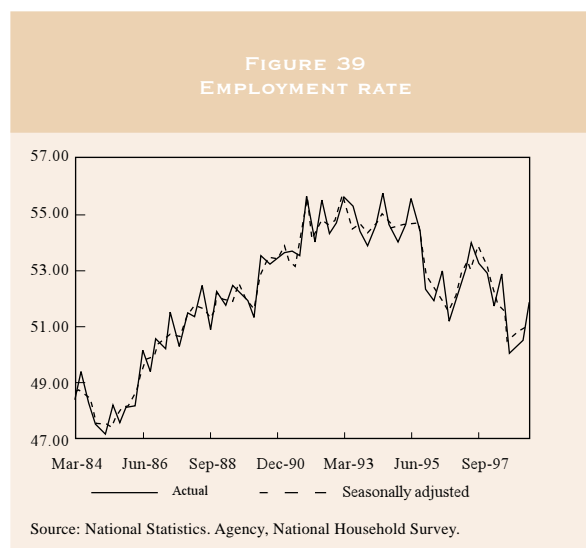
The question then arises whether this reduction in the unemployment rate was strictly produced by seasonal factors, as suggested by some observers, or whether any part of it would remain once such factors were eliminated. The answer was obtained by using seasonally adjusted figures<sup>7</sup>. These showed that between September and December unemployment in the seven major metropolitan areas fell from 20.3% to 19.2% (Figure 38), proving that, seasonal activity aside, the economy did improve a little in terms of lowering unemployment. This trend could become stronger if the economic growth predicted for 2000 is achieved. In seasonally adjusted terms, the decrease in unemployment was produced by the employment rate rising from 50.9% to 51.1% at the same time as the overall participation rate fell from 63.8% to 63.4%. By this measure, then, a combination of higher labor demand and lower labor supply lowered the seasonally adjusted unemployment rate by 1.1 percentage points.

### 3. Negotiated pay rises

Table 4 presents data from the Ministry of Labor and Social Security on one-year and two-year negotiated pay rises.

The top half of the table shows the percentages of workers covered by one-year pay rise

<sup>7</sup> The series were seasonally adjusted by Banco de la República.



**TABLE 4  
PERCENTAGE OF NEGOTIATED  
PAY-RISE BENEFICIARIES  
(JANUARY - DECEMBER 1999)**

<b>One-year negotiated rise</b>				
< 12	[12-15]	[15-17]	[17-21.5]	
9.6	20.5	46.4	23.5	
<b>Two-year negotiated rise</b>				
< 12	[12-17]	[12-17]	[CPI to CPI+3]	[LMW to LMW+2]
22.3	18.5	2.8	54.2	2.2

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



settlements between January and December 1999. For 9.6% of these workers the pay increase was under 12%, for 20.5% between 12% and 15%, for 46.4% between 15% and 17%, and for 23.5% between 17% and 21.5%. Thus, one-year pay rises were under 17% for 76.5% of workers, a higher proportion of workers than at the end of the third quarter, when 59% of them were in this range.

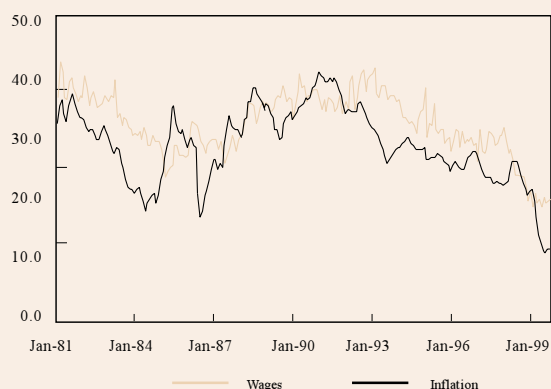
The bottom half of Table 4 shows the percentages of workers covered by pay rises negotiated in 1999, up to 2001. During 1999 most of these workers (54.2%) obtained pay increases ranging from CPI inflation to CPI plus three points. It is noteworthy that two-year pay rises were under 12% for 22.3% of the workers and that only 2.8% obtained rises over 17%. In December, as in September, two-year pay rises for most workers were linked to CPI inflation.

### RELATION BETWEEN WAGES AND INFLATION

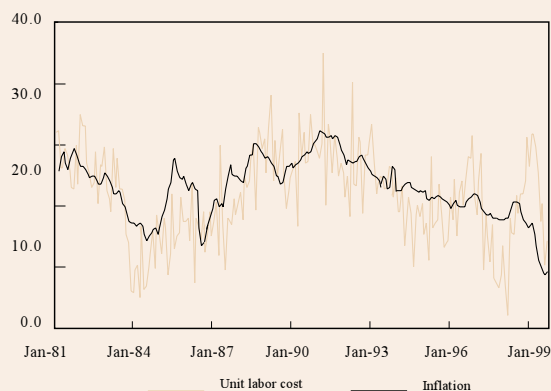
- Policies to reduce inflation usually have to cope with the inflationary inertia implicit in the way pay settlements are reached. Most labor agreements provide for pay adjustments over several years on the basis of past inflation. To the extent that pay adjustments are transferred to prices through costs, pay settlements of this kind can make inflation reduction an extremely slow process and, worse still, a highly costly one in terms of economic growth in the short run.
- An important job, therefore, for the economic authorities is to determine what type of empirical relation exists between wages and inflation. For this will help them choose an inflation-reducing program entailing the smallest sacrifice of growth.
- Economic literature offers two basic approaches to the relation between wages and inflation. The first is the Keynesian approach, which assumes that changes in wages induce changes in prices. In effect, once the pay level is established, firms set their prices by applying a mark-up to their costs, a system known as «mark-up pricing». In this model, any increases in nominal pay that exceed productivity gains are translated into higher prices. Thus, changes in the rate of increase of wages produce changes in the rate of inflation.
- Now, a rise in interest rates induces lower spending by consumers and companies. Lower spending, under this approach, causes the companies' inventories to expand beyond expected levels, thereby reducing their production. Lower production makes firms reduce their labor demand, thereby increasing unemployment and hence reducing the rate of pay rises. Thus, changes in the rate of increase of wages come before changes in the rate of inflation.
- The second approach is the «classical» or «monetarist» approach, which assumes that when demand varies prices are adjusted more quickly than wages. In this case, a rise in the interest rate will, by its effect on aggregate demand, first reduce the rate of inflation. This will subsequently subdue wage increases. Thus, the decline in the wage-adjustment rate reflects a decline in the rate of inflation.
- Since economic theory provides arguments in favor of either type of relation between wages and inflation, an empirical study will be necessary to determine which approach is most suitable for a given economy. There are numerous studies of this kind on the low-inflation economies of developed countries such the United States. Although some of these studies show that changes in pay (adjusted by increases in productivity) come before changes in inflation<sup>1</sup>, recent empirical evidence mostly suggests that the reverse relation obtains and that wages provide very little information on the future course of inflation<sup>2</sup>.

- The different theoretical approaches clearly indicate that productivity must be taken into account in any relation between these two variables. Accordingly, an increase in nominal wages that is accompanied by gains of the same magnitude in labor productivity will not cause any price changes. To make a proper analysis, the nominal-wage variable should be replaced by the unit-labor-cost variable, which corresponds to the relation between nominal wages and productivity, with productivity being defined as the relation between real output and employment. Figure 1 shows the relation between the Consumer Price Index and nominal industrial wages, and Figure 2 the relation between the CPI and the unit labor cost in industry, in terms of annual growth rates.
- Banco de la República has recently reviewed this relation in industry. Quarterly series of unit labor cost, inflation, and demand and supply-shock indicators were used in this exercise. All variables were treated as quarterly averages for the period 1980-1999. Both series were seasonally adjusted. By applying Granger's statistical-causality method, evidence was found of causality from prices to wages. Empirical evidence from Colombia would therefore seem to suggest that wage adjustments in a given period do not provide information on future inflation. This may mean that besides wages there are other highly significant factors that help to account for inflation.

**FIGURE 1**  
**CONSUMER INFLATION AND NOMINAL INDUSTRIAL WAGE**  
 (ANNUAL PERCENTAGE CHANGE)



**FIGURE 2**  
**CONSUMER INFLATION AND UNIT INDUSTRIAL LABOR COST**  
 (ANNUAL PERCENTAGE CHANGE)

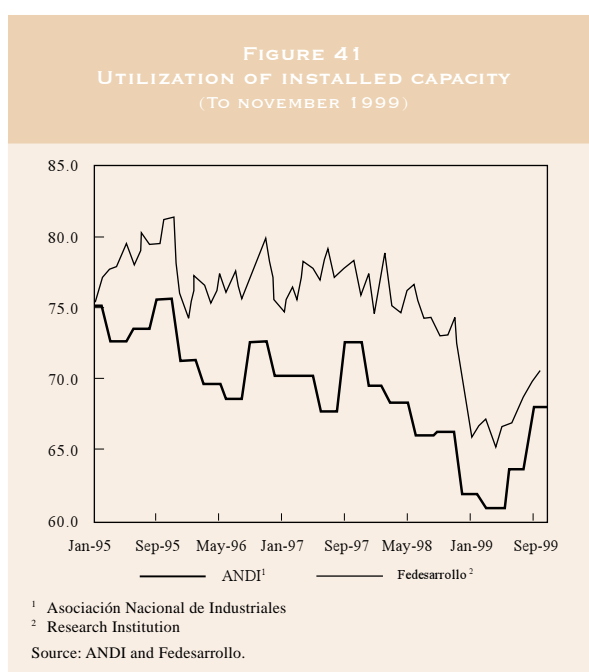


<sup>1</sup> Such findings are given in R. Shannon and M. Wallace (1986) «Wages and Inflation: An Investigation into Causality», in *Journal of Post-Keynesian Economics*, Vol. VIII, No. 2, Winter 1985-1986.

<sup>2</sup> Evidence to this effect is given in Gordon (1988) and in K. Emery and Ch. Chang (1996) «Do Wages Help Predict Inflation?», in *Federal Reserve Bank of Dallas Economic Review*, First Quarter 1996.

## D. UTILIZATION OF INSTALLED CAPACITY

In the second half of 1999 utilization of installed capacity rose continuously according to both Fedesarrollo's and ANDI's indicators. Fedesarrollo's figures to November show the largest rise in this indicator during 1999, approximately up to early-1998 levels. Even so, the level at the end of 1999 was still quite a lot lower than the historical average as measured by either Fedesarrollo's or ANDI's indicators (Figure 41).



## E. THE FISCAL SITUATION

Preliminary data from CONFIS (Fiscal Policy Council) show that the non-financial public-sector deficit in 1999 amounted to 4.7% of GDP, very similar to the figure predicted in the September Inflation Report.

The country's consolidated deficit widened by 1.4% of GDP relative to 1998. This greater deficit resulted from a worsening in the finances of both the central administration and the rest of the public sector. In

particular, from 1998 to 1999 the surplus recorded by the rest of the public sector shrank from 1.5% to 1.0% of GDP, while the government's deficit grew from 4.9% to 5.8% of GDP. Nevertheless, it is important to point out that the fiscal balance for 1999 is within the limits defined in the agreement with the International Monetary Fund at the end of the year (Table 5)<sup>8</sup>.

As regards the central government's finances, official estimates indicate that revenues from effective operations showed a 19.2% growth at the end of 1999. Among revenue items, non-tax income

**TABLE 5**  
NON-FINANCIAL PUBLIC-SECTOR DEFICIT 1999  
(PERCENTAGE OF GDP)

Entities	1988	1999 (*)	2000 (Proj.)	Difference	
				1999/1998	2000/1999
Electricity	(0.6)	(0.4)	(0.0)	0.1	0.4
CARBONOL (coal)	0.1	0.1	0.1	0.0	(0.0)
F.A.E.P. (oil stabilization fund)	0.1	0.3	0.4	0.2	0.1
ECOPETROL	0.1	0.7	0.6	0.6	(0.1)
TELECOM	0.1	0.0	0.1	(0.1)	0.1
Metro de Medellín	0.1	0.1	0.1	(0.0)	0.0
Other entities	(0.1)	0.1	0.1	0.2	0.1
Social Security	1.6	0.6	0.9	(0.9)	0.3
Regional and local entities	(0.0)	0.2	(0.7)	0.2	(0.9)
Entities not included	0.1	(0.6)	0.1	(0.7)	0.6
Fondo Nacional del Café	(0.0)	(0.1)	(0.0)	(0.1)	0.1
Central government	(4.9)	(5.8)	(5.4)	(0.9)	0.4
Total	(3.4)	(4.7)	(3.8)	(1.4)	0.9
Total including privatizations	(2.9)	(4.7)	(0.5)	(1.9)	4.2

(\*): Preliminary estimates.  
(Proj.): Projections

Source: CONFIS (Fiscal Policy Council).

<sup>8</sup> The deficit of 4.7% of GDP estimated by CONFIS is equivalent to a deficit of 6.2% of GDP calculated by IMF methodology. The agreement with the IMF stipulates that the consolidated public sector deficit for 1999 should not exceed 9,700 billion pesos, that is, 6.4% of GDP.

registered the greatest expansion, produced by the transfer of profits amounting to 1.2 billion pesos from operations of Banco de la República and the transfer of financial surpluses amounting to 0.9 billion pesos from some public entities. In contrast to non-tax income, tax revenues showed an annual increase of barely 8.2%, despite implementation of the tax

reform adopted at the end of 1998 and additional revenue from the imposition of a levy on financial transactions (Table 6).

Tax revenues were generally affected by the economic downturn, which had an impact on both domestic and import taxes. Income tax and the domestic VAT

TABLE 6  
CENTRAL GOVERNMENT  
(BILLIONS OF PESOS)

	1998	1999 (*)	2000 (Proj.)	Percentage change	
				1999/1998	2000/1999
<b>I. Revenues (A+B)</b>	16,880.1	20,119.9	22,953.4	19.2	14.1
A. Tax revenues	14,825.4	16,037.0	19,465.9	8.2	21.4
Income tax & domestic VAT	10,142.2	10,848.1	11,996.7	6.9	10.6
Customs & external VAT	4,015.1	3,227.4	4,725.6	(19.6)	46.4
Gasoline	641.8	707.9	918.1	10.3	29.7
Other 1/	21.3	1,253.6	1,825.5	5,785.4	45.6
B. Non-tax and other revenues 2/	2,054.7	4,082.9	3,487.5	98.7	(14.6)
<b>II. Total expenditures (A + B + C + D)</b>	23,820.0	28,868.9	32,301.4	21.2	11.9
A. Interest payments	4,089.7	4,952.6	6,961.4	21.1	40.6
B. Operating costs	17,121.1	21,165.2	22,110.1	23.6	4.5
Personal services	3,547.0	4,134.3	4,453.8	16.6	7.7
General expenditures	1,315.3	1,221.6	1,155.9	(7.1)	(5.4)
Transfers	12,258.8	15,809.3	16,500.4	29.0	4.4
To departments	3,300.7	4,660.2	3,982.9	41.2	(14.5)
To municipalities	2,480.3	3,216.8	3,374.8	29.7	4.9
Other	6,477.8	7,932.3	9,142.7	22.5	15.3
C. Investment	2,280.4	2,042.1	2,525.8	(10.4)	23.7
D. Net loans	328.8	709.0	704.1	115.6	(0.7)
<b>III. Deficit or surplus (I - II)</b>	(6,939.9)	(8,749.0)	(9,348.0)	26.1	6.8
<b>IV. Financing</b>	6,939.9	8,749.0	9,348.0	26.1	6.8
A. Net external credit	2,701.3	3,116.6	3,040.4	15.4	(2.4)
Disbursements	3,699.9	4,711.1	4,832.6	27.3	2.6
Servicing	998.6	1,594.5	1,792.2	59.7	12.4
B. Net domestic credit	3,997.0	4,802.4	2,974.7	20.2	(38.1)
Disbursements	7,709.2	11,395.0	9,141.0	47.8	(19.8)
Servicing	3,712.2	6,592.6	6,166.3	77.6	(6.5)
C. Privatizations and other	241.6	830.0	3,332.9	243.5	301.6
<b>V. Deficit as percentage of GDP</b>	(4.9)	(5.8)	(5.4)		

(\*): Preliminary estimates.

(Proj.): Projections.

1/ Includes the 2/1000 withdrawal levy.

2/ Includes profit transfers from the Banco de la República.

Source: CONFIS.

registered a nominal growth of only 6.9%, while customs taxes and the external VAT together declined by 19.6%. The decline in external taxes was associated with a 30% drop in imports over the year.

With regard to expenditures, figures from CONFIS reveal a 10.4% fall in investment, a 21.1% growth in interest payments, and a 23.6% rise in operating costs. Among operating costs, outlays for personal services and transfer payments increased notably: by 16.6% and 29.0% respectively. The increase in transfer payments was connected with transfers to the departments and districts (*situado fiscal*) to municipalities, which grew by 41.2% and 29.7% respectively<sup>9</sup>. Net loans, including among other items a sum of 150 billion pesos for capitalization of the Caja Agraria, expanded by about 115% over the year.

The deficit was financed from domestic and foreign credit. The outstanding balance of foreign credit rose by 3,116.6 billion pesos and that of domestic credit by 4,802.4 billion pesos. It should be pointed out that domestic-credit disbursements amounted to 11,395 billion pesos: 11,198 billion in Treasury bonds (TES) and 196 billion in Security and Peace Bonds.

With regard to other sectors and entities, mention should be made of an upswing in Ecopetrol's finances and a weakening in the social-security sector. The improvement in Ecopetrol's financial situation was associated with better world prices for crude oil during the year. However, falling domestic demand for fuel, caused by the economic downturn, prevented the company from obtaining better financial results. The social-security sector, for its part, was affected by loss of members to private funds, by the legal impossibility for the Social Security Institute to sign up new members for health care, and by the transfer to the government of some 800 billion pesos from the Cajanal (social-security entity for public servants).

Lastly, for 2000 the consolidated deficit excluding privatizations is projected by CONFIS to run at 3.8% of GDP. If the proceeds of privatizations are included in revenue, the financial public-sector deficit will drop to 0.5% of GDP. Relative to 1999, these estimates imply that the size of the consolidated deficit will decline by 0.9% of GDP, with 0.4% of the decline being accounted for by the central government and 0.5% by the rest of the public sector.

<sup>9</sup> The expansion in transfers to the departments and districts (*situado fiscal*) arose from the government's initial optimistic expectations of tax revenues, and from the legal impossibility of adjusting expenditures of this kind on the basis of the evolution of current income during the year. This means that overestimation of revenues in early 1999 can only be corrected by means of a negative reassessment of *situado* transfers in 2000.

<sup>10</sup> Privatizations are estimated to amount to 3.2% of GDP; they include the sale of ISA and ISAGEN (power sector) and Carbocol (coal), among others.

<sup>11</sup> The 3.8% deficit projected by CONFIS methodology is equivalent to a 3.7% deficit by IMF methodology. The difference between the IMF figure and the 3.6% deficit established in the IMF agreement is explained by the fact the nominal GDP projected for 2000 was revised after the agreement had been signed. The 3.7% deficit, however, does not signify noncompliance with the agreement, since the 1999 deficit was less than the target set with the IMF by 356 billion pesos; this amount offsets the larger deficit expected for 2000, because the IMF target for 2000 includes accumulation of the deficits for 1999 and 2000.

### III

## MEASURES OF EXPECTATIONS

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### INFLATION EXPECTATIONS SURVEY

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#### Findings

Banco de la República's expectations survey reveals a decline in expected inflation over 1999. In particular, the fourth-quarter survey shows that annual inflation was expected to run at 9.9% by December 1999, 2.3 percentage points lower than the expected rate in third-quarter survey (Figure 42).

It also shows a downward trend in *long-term inflation* expectations during the fourth quarter (Figure 43). In December 1999 inflation was expected to stand at 10.4% by December 2000, compared with expectations of 11.3% in September.

The *devaluation rate* was expected by agents to average 22.6% by the end of 1999, down by 4.7 percentage points on the average expected in the third-quarter (Figure 44).

GDP for 1999 was predicted to shrink by 3.5%, a worsening of 1.9 percentage points relative to the figure expected in September (Figure 45).

Figures 46 to 49 present agents' answers to survey questions about their opinion of *credit* and liquidity conditions in the economy.

Liquidity is considered to be very low by 9% of respondents and low by 27%, while 22% regard it as neutral and 35% think it is very high. But there does seem to be some agreement about the future behavior of liquidity in the economy, with 59% of respondents

FIGURE 42  
INFLATION EXPECTED BY END OF YEAR  
(PERCENTAGE)

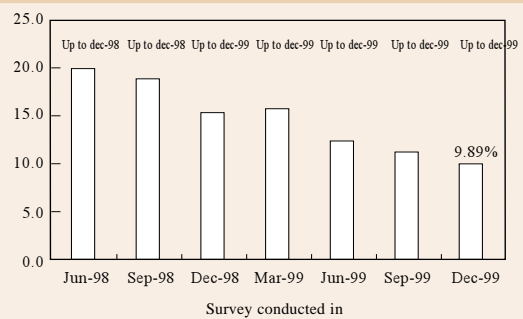


FIGURE 43  
INFLATION EXPECTED BY END OF FOLLOWING YEAR  
(PERCENTAGE)

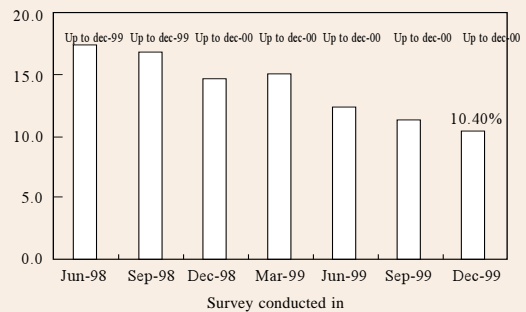
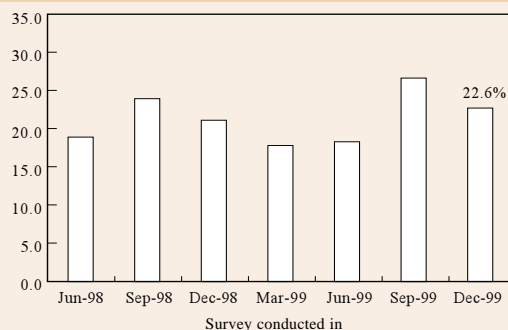
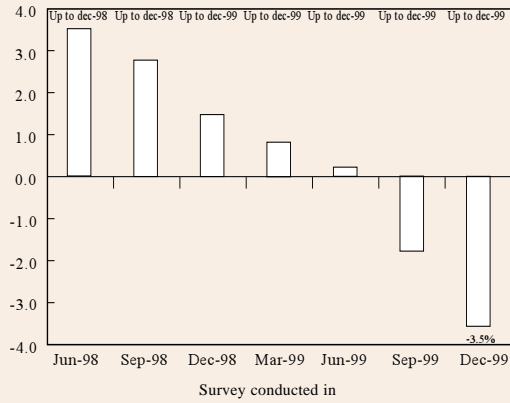


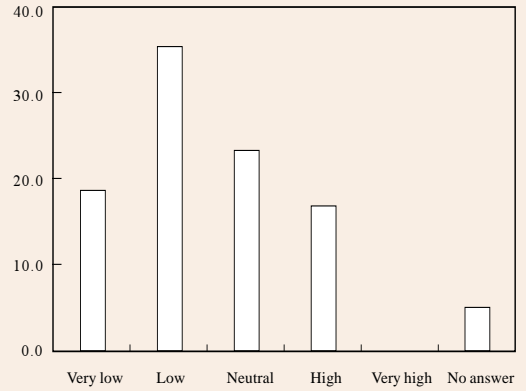
FIGURE 44  
DEVALUATION EXPECTED BY END OF YEAR  
(PERCENTAGE)



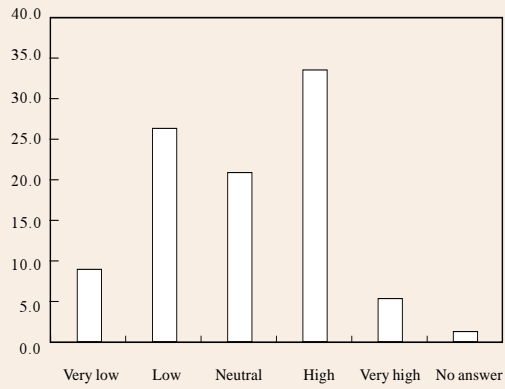
**FIGURE 45**  
**EXPECTED GDP GROWTH**  
 (PERCENTAGE)



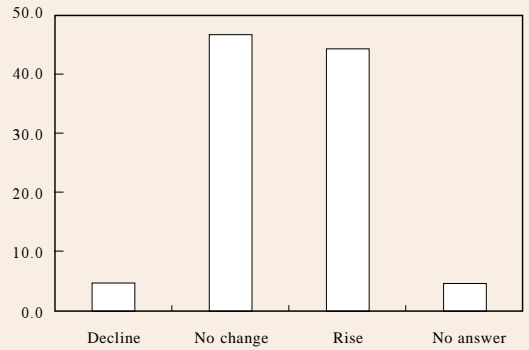
**FIGURE 48**  
**WHAT IS YOUR CURRENT PERCEPTION OF CREDIT AVAILABILITY**  
 (PERCENTAGE)



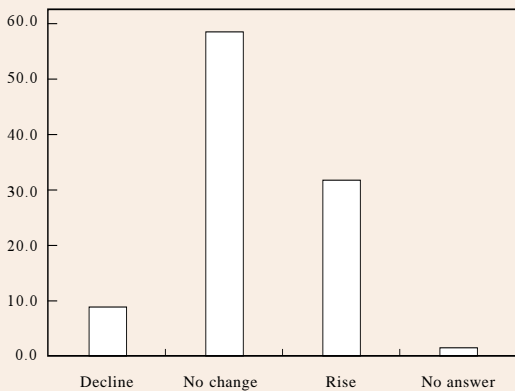
**FIGURE 46**  
**WHAT IS YOUR CURRENT PERCEPTION OF LIQUIDITY IN THE ECONOMY?**  
 (PERCENTAGE)



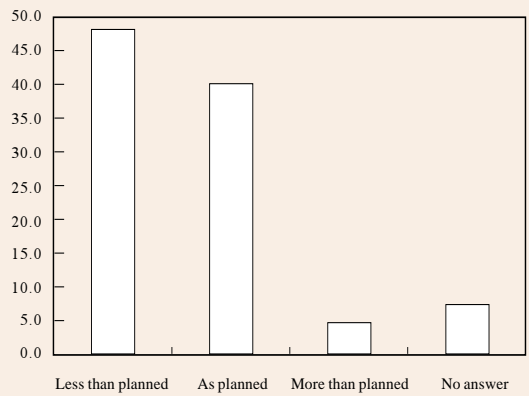
**FIGURE 49**  
**HOW WILL CREDIT AVAILABILITY EVOLVE IN THE NEXT 6 MONTHS?**  
 (PERCENTAGE)



**FIGURE 47**  
**HOW WILL LIQUIDITY EVOLVE IN THE ECONOMY IN THE NEXT 6 MONTHS?**  
 (PERCENTAGE)



**FIGURE 50**  
**PROJECT EXECUTION IN PAST 12 MONTHS**  
 (PERCENTAGE)



expecting it to remain at its present level, 31% expecting it to rise, and only 9% predicting that it will fall. Credit availability in the economy is considered low by 35% of agents, neutral by 24%, and high by only 18%. Opinion is divided as to whether credit availability will increase or decrease in future: 47% of agents think it will remain the same, while 45% see it as increasing, and only 4% think it will decrease.

The survey's section on *economic activity* (Figures 50 and 51) shows that in the past 12 months 48% of respondents carried out fewer projects than planned, while 41% accomplished all their planned projects, and only 4% implemented more than planned. For the next 12 months, 52% of respondents plan to operate with the same installed capacity, whereas 25% intend to invest in expanding it, and only 15% mean to reduce it.

Lastly, questions about *employment* (Figures 52 and 53) revealed that, for the next quarter, 44% of

respondents will keep the same number of employees, 42% will reduce their workforce, and only 6% are thinking of increasing it. For next year, 48% of respondents plan to keep their workforce unchanged, 30% are thinking of reducing theirs, and only 13% intend to hire more people.

FIGURE 52  
WORKFORCE PLANS FOR NEXT QUARTER  
(PERCENTAGE)

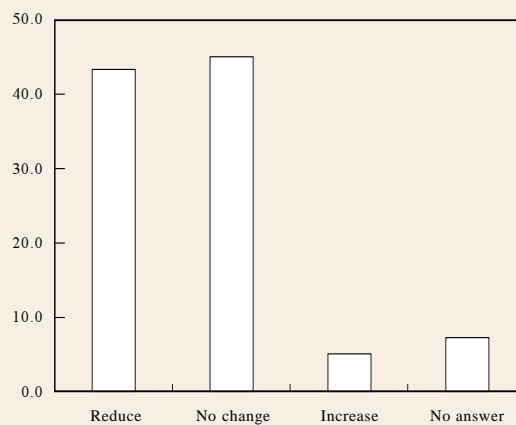


FIGURE 51  
INVESTMENT PLANS FOR NEXT 12 MONTHS:  
INSTALLED CAPACITY  
(PERCENTAGE)

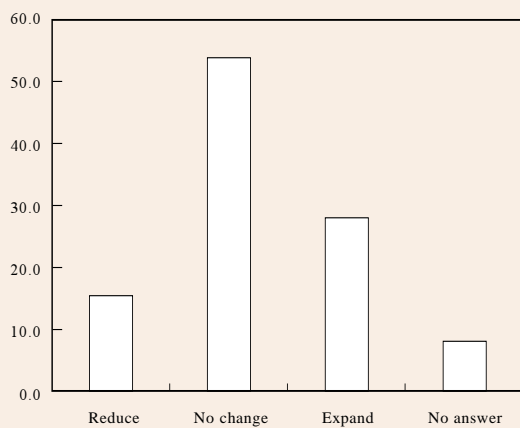
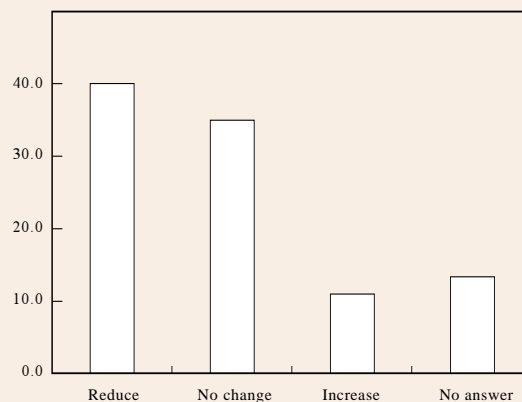


FIGURE 53  
WORKFORCE PLANS FOR NEXT YEAR  
(PERCENTAGE)





## IV

### INTERNATIONAL CONTEXT

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#### A. GENERAL ASPECTS

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World economic conditions improved over the final quarter of 1999. After November's interest-rate rise in both the United States (25 basis points) and Europe (50 basis points), and the international financial system's positive reaction to these rises, fears of an overheated US economy and faster world inflation diminished. Signs of recovery appeared in the European Union, largely driven by the euro's devaluation against the dollar and the European Central Bank's expansionary monetary policies. Asia continued to show a surprising recovery. However, opinions differ about the stability of Japan's economic upturn, chiefly because of the yen's recent appreciation against the dollar and the lack of structural reforms to the financial system. In Latin America there have been mixed signs of economic reactivation, but the prospects are good mainly because of improvements in commodity prices, a growing world demand, greater global liquidity, and potential agreements between the different economies and the IMF.

The developed countries' economic performance in the second half of 1999 may be considered successful. The United States, Japan and the European Union made economic-policy changes designed to reactivate the economy or ensure the sustainability of recent economic activity or accomplish both these aims.

The economic boom in the United States, as evidenced by greater pressures on the labor market, an atypical increase in private credit, and a reduction in private saving, has caused debate about the possibility of a

sharp fall in output for 2000. However, the international financial system's positive response to the raising of interest rates by the US Federal Reserve suggests that the demand for credit will return to normal, ensuring the US economy's stability over the coming year. In fact, the American economy was expected to grow by 3.8% in 1999, a high rate by developed-economy standards, and is projected to continue to perform very satisfactorily in 2000, achieving a growth of 3.1% (Table 7).

If the American economy shows no signs of cooling in early 2000, the FED will have to raise its interest

**TABLE 7**  
ECONOMIC GROWTH, 1999 AND 2000  
(PERCENTAGE CHANGE)

	Quarterly			Annual	
	I	II	III	1999	2000
<b>Developed countries 1/</b>					
United States	3.7	1.9	5.7	3.8	3.1
Germany	2.5	0.5	2.9	2.3	2.7
Japan	6.3	3.9	(3.8)	0.9	0.3
<b>Emerging Latin American countries 2/</b>					
				(0.4)	4.0
Argentina	(3.0)	(4.9)	n.a.	(2.7)	5.2
Brazil				(0.5)	3.2
Chile	(2.7)	(3.7)	(1.5)	(0.7)	5.5
Ecuador	(4.4)	(6.6)	(7.1)	(9.0)	2.0
Mexico	1.9	3.2	4.6	3.4	4.5
Peru				2.3	4.0
Venezuela	(9.4)	(9.6)	n.a.	(7.0)	3.0

n. a. Not available

1/ Growth in the quarter compared with the previous quarter, annualized.

2/ Growth in the quarter compared with the same quarter the year before.

Sources: Bloomberg, WEFA, and Goldman Sachs..

rates again. Leading international analysts agree that the evolution of household spending is the main variable to be analyzed in making a decision about future rises in interest rates. Household spending has outpaced household income, causing both a historical drop in the saving rate, and an increase in credit largely financed from appreciation in the households' financial assets.

The European Union, adjusted its monetary policy to improve the region's economic performance. The European Central Bank was able to raise the German REPO rate by 50 basis points in November 1999 on the basis of a strong growth in credit and high confidence in recovery. There is, however, growing concern within the European region over the euro's decline against the dollar. Yet, although this decline has increasingly caused investors to turn from Europe to Japan and even England, it has in fact driven the growth in the region's exports and the upturn in some of its economies. This upturn is the reason used to explain the European Central Bank's reluctance to raise interest rates by any large amounts likely to check the euro's fall.

The European Union's economic performance in 2000 is therefore expected to be satisfactory, with a net GDP growth of 2.9%, up by 0.9 percentage points on 1999. Inflation is expected to run at 1.5% by the end of 2000, 0.5 percentage points higher than in 1999 mainly because of higher oil prices and expected wage settlements. Since the inflation rate is not expected to exceed the 2% target, no increases should be expected in the region's interest rate.

The Japanese economy has registered positive developments, largely produced by the growth in exports to Asia, particularly South Korea and Malaysia, despite the yen's revaluation against the dollar in the final quarter of 1999 (Figure 54). Nevertheless, Japan is not expected to keep up this positive performance, mainly because of its high current-account surplus, Japanese investors' tendency to prefer Europe for their investments, and capital inflows betting on the recovery of the world's second



largest economy. These factors are all pushing the yen up, so that, despite the government's efforts to apply more aggressive fiscal policies, the upturn in Japan's economy is unlikely to continue at the same pace as in 1999. The country's gross national product is expected to grow by 0.9% in 1999, and by 0.3% in 2000 (Table 7).

Exchange-rate behavior during this period is regarded by some analysts<sup>12</sup> as crucial in evaluating different performance scenarios for developed economies. The overall situation suggests a narrow yield differential among the different economies, with a very strong yen and a very weak euro relative to the dollar. A recomposition of currency values is not presently foreseeable over the medium term, which means that the yen will remain strong against the yen while the euro will tend to be weak.

Latin America presents a mixed picture as regards economic upturn and financial improvement. But the region is expected to return to the path of economic growth in 2000, essentially because of a stronger external demand, better international commodity prices, and more competitive exchange rates.

<sup>12</sup> *Business Week*, December 13, 1999.

The pick-up in international demand is therefore expected to boost economic growth in all the region, particularly in Mexico, Argentina and Chile, which have close commercial ties, respectively, with the United States, Europe and Japan, and to a lesser extent in Colombia, Ecuador and Venezuela, which depend more on intra-regional trade.

Likewise, better commodity prices are expected to continue to stimulate economic recovery strongly in the region, especially in Chile and Peru, where minerals are the major export items. In Venezuela and Colombia higher oil prices will be the main force behind an upturn in exports.

The region's economy is expected by different international analysts to register a contraction of 0.4% for 1999, and an expansion of about 4.0% for 2000. The major contributors to this expansion will be Chile (5.5%), Argentina (5.2%), Mexico (4.5%) and Peru (4.0%), followed by Brazil (3.2%) and Venezuela (3.0%) with lower rates (Table 7).

On the basis of the foregoing, overall growth in Colombia's volume-weighted foreign trade is projected to be 3% in 2000, up from 1% in 1999. This growth is considered sufficient to sustain the 12% expansion in nontraditional exports predicted by official projections.

With regard to inflation, the larger Latin-American economies, except for Venezuela and Ecuador, may conceivably register one-digit inflation in 2000. In 1999 inflation decreased in most countries of the region largely because of a slowdown in domestic demand, but went up in Brazil (from 1.7% in 1998 to 9.1% in 1999) and in Ecuador (from 44% to 64%). Brazil's inflation rise was caused by devaluation and by exogenous shocks resulting from adverse climatic conditions. Although this inflation performance is expected to be transitory, the Brazilian economy exhibits features of latent inflation. In particular, devaluation, which did not pass through to inflation in 1999, is expected to do so as the economy recovers.

Nor can the possibility be excluded of the pass-through effect being intensified by new climatic and external shocks.

Ecuador's high inflation was caused by exchange-rate behavior and the evolution of the monetary aggregates. In 1999 Ecuador saw its currency devalue by 145.7%, the biggest devaluation in its history.

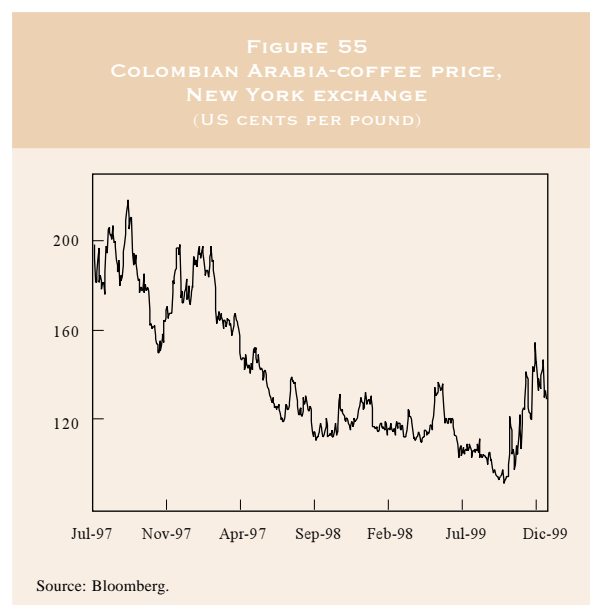
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## B. COMMODITY PRICES

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Coffee and oil prices, crucial to Colombia's economic recovery, have been rising over the past months. Coffee went up from \$0.93 a pound in September to \$1.28 in December (Figure 55). The World Bank's forecasts an average external price of \$1.04 a pound for 2000, much the same as the average for 1999. But the World Bank's projections do not take into account the potential effect on international prices of the reduction in Brazil's export supply caused by the drought there at the end of 1999. These developments might keep international prices around the levels recorded at the end of 1999 and beginning of 2000.

The price of oil picked up over the second half of 1999, driven by OPEC's quota agreement. The world



price of a barrel of WTI oil climbed from \$17.9 in June to \$26.1 in December (Figure 56). Different analysts agree that in 2000, if the quota agreement is maintained, the price could stabilize around \$18.5 a barrel. However, this forecast for 2000 might have to be revised upward to more than \$21 a barrel on account of actual production by countries in the pact and outside it, depletion of existing stocks, and the evolution of international demand<sup>13</sup>.

In the last quarter of 1999 Colombia's commodity exports registered a rising trend relative to both the previous quarter and the same quarter of 1998. On the basis of data available up to September 1999, the World Bank has forecast an upturn in most of Colombia's major commodity exports for 2000, driven essentially by growing international demand (Figure 57).

### C. FINANCIAL OUTLOOK

Although most Latin-American countries have been going through economic downturns, with some degree of macroeconomic instability, the markets' perception of the region has improved. The improvement is evidenced by resumption of capital flows to some countries, upturns in stock markets, and lower spreads on sovereign-debt bonds.

Spreads on 10- and 30-year Latin-American debt declined over the last quarter, mainly because of the confidence inspired by the economic measures implemented by most countries of the region. The Brazilian economy's positive results, improvements in Mexico's inflation and growth rates, together with Argentina's negotiations with the IMF, have raised expectations of growth in the region, so that capital has begun to flow once more to some countries. Except for Venezuela, whose debt spread has remained constant, all the region's economies have

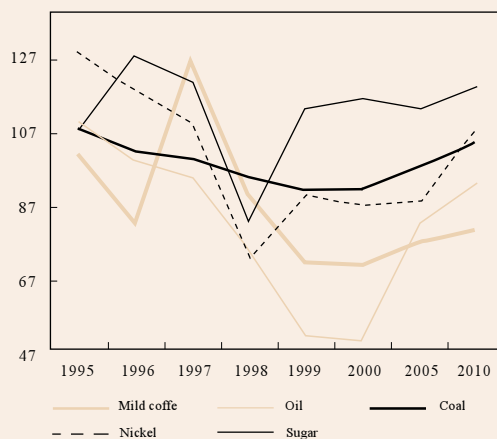
<sup>13</sup> The figure is estimated from the average of forecasts by different international entities such as Goldman Sachs and Salomon Smith Barney.

FIGURE 56  
WTI OIL PRICE, NEW YORK WXCHANGE  
(DOLLARS PER BARREL)



Source: Bloomberg.

FIGURE 57  
PRICE INDEX OF COLOMBIA'S MAJOR  
COMMODITY EXPORTS  
(CURRENT DOLLARS)

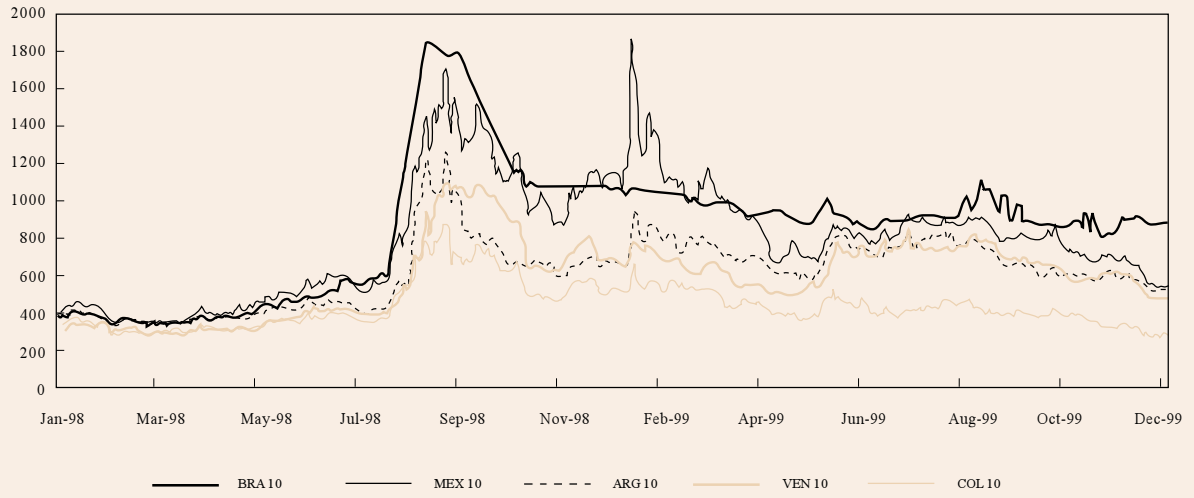


Source: World Bank.

seen a lowering of spreads on both their 10- and 30-year debt. The average 10-year spread currently runs at 460 basis points, and the 30-year spread at 530 basis points (Figures 58 and 59).

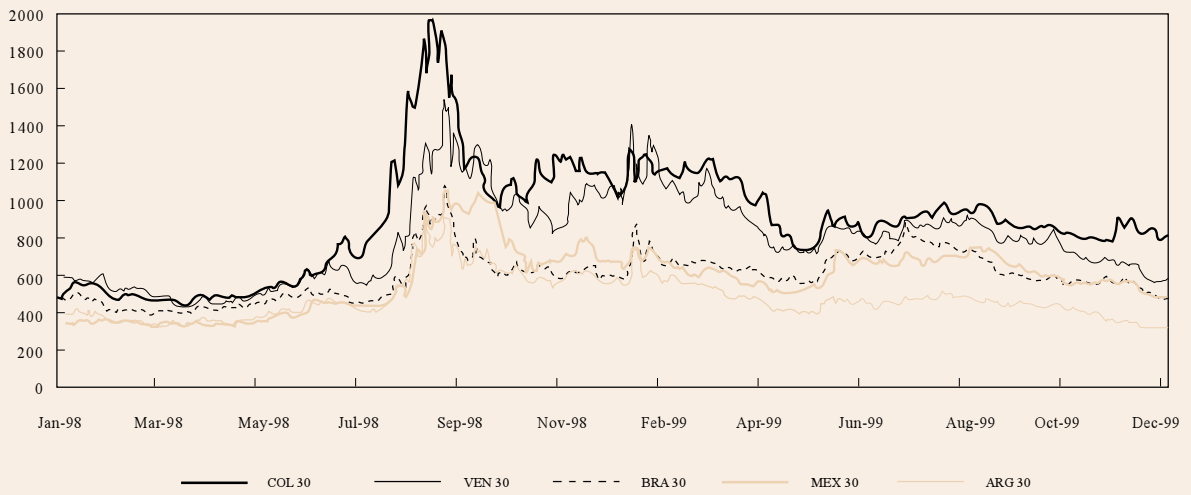
These improvements in the region's prospects are taking place at a time when interest rates are expected to rise in the developed world. In the final quarter of 1999 interest rates on US Treasury bonds went up by 0.5 percentage points and are expected to continue on this upward trend because of fears that the predicted growth in US domestic demand over 2000

FIGURE 58  
SPREADS ON 10-YEAR LATIN-AMERICAN DEBT  
(BASIS POINTS OVER 10-YEAR US TREASURY BONDS)



Source: Bloomberg.

FIGURE 59  
SPREADS ON 30-YEAR LATIN-AMERICAN DEBT  
(BASIS POINTS OVER 30-YEAR US TREASURY BONDS)



Source: Bloomberg.

will generate undesirable inflationary pressures. The growth in demand has so far been easily met by an ample supply due to major productivity gains, but this situation is unlikely to continue for much longer.

In Europe, the expected upswing in the region's economies over 2000 could lead to inflationary pressures that may eventually be translated into higher interest rates.

At all events, the evolution of spreads over the past quarter seems to bear out the fact that credit conditions

for Latin-American countries are affected not so much by interest-rate movements in the United States and Europe as by each country's internal circumstances. This is further confirmed by the fact that at the time of Russian crisis a distinction seems to have been made between spreads for Latin-American debt and those for other emerging economies. This has proved beneficial to the region, by allowing markets to be better informed about the quality and vulnerability of each country's sovereign credit<sup>14</sup>.

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<sup>14</sup> Stanley Fischer, *Learning the Lessons of Financial Crises: The Roles of the Public and Private Sectors*.

## INFLATION FORECASTS

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### A. FORECASTS FOR 2000 AND 2001 BASED ON DIFFERENT MODELS

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Banco de la República's inflation forecasts for 2000 and 2001 are based on estimations from different statistical models: ARIMA and structural models. The underlying assumptions of these estimations are that the economy will begin to recover in 2000, with a moderate growth that will speed up in 2001. It is further assumed that the monetary aggregates' growth rates will be consistent with the Bank's 10% inflation target for 2000, and with financial programming as defined in the context of the IMF agreement. As regards devaluation, the real exchange rate is assumed to remain steady in 2000 at the level recorded at the end of 1999, and to improve slightly in 2001.

Inflation is thus predicted by these models to range between 8% and 10% by the end of 2000 and to continue to fall over the following year, ending up about 2 percentage points lower relative to that range.

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### B. PRICE-GROWTH SCENARIOS

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In addition to statistical models, an analytical methodology was used to predict the inflation rate for 2000. This methodology considers several possible price-growth scenarios for the major groups

of items in the CPI basket of goods and services currently used by the National Statistics Agency. The exercise took into account the recent movement in prices for each such group, and their possible evolution in 2000 under certain assumptions. The assumptions included, notably, a return to the usual pattern of seasonal food prices in 2000 and hence an increase in relative food prices. Two situations were considered for the increase in relative food prices: in one they were assumed to rise by an amount equal to the average annual increase over the past 25 years, and in the other by the highest increase registered in those years. Likewise, world oil prices in 2000 were assumed to remain at about the same levels as in December 1999, so that domestic fuel prices should vary in line with devaluation. Lastly, it was taken into account that the effect produced by the introduction of VAT in 1999 for several products in the CPI basket would not come into play in 2000.

Three general scenarios were obtained: a pessimistic, high-increase scenario, an optimistic one, and a middling one. The findings of these exercises lead to the conclusion that inflation for 2000 may range between 7% and 10.8%. If the middling scenario is taken to be the most realistic, inflation may stand at 8.2% by the end of 2000. It should be pointed out that this scenario is not supported by a totally consistent macroeconomic model, nor is it sensitive to changes in monetary policy.

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