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# INFLATION REPORT

MARCH 2000

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BANCO DE LA REPÚBLICA

## PRESENTATION, SUMMARY AND CONCLUSIONS

⊠ Annual consumer inflation stood at 9.7% in March, down by 3.8 percentage points on a year earlier. This was the eleventh month in a row with one-digit inflation. The fall came from slower price rises in all groups of the Consumer Price Index, except transport. Housing showed the biggest drop in price growth (from 14.0% in March 1999 to 5.9% this year), followed by health care (from 18.6% to 12.9%), and clothing (from 7.1% to 2.5%). Nevertheless, annual inflation rose in March for the second month in a row, standing 0.5 percentage points higher than in December 1999 (9.2%).

⊠ In the twelve months to March, price growth was higher than average in sundry expenditures (19.5%), transport (19.2%), and health care (12.9%), largely owing to the surge in the cost of, respectively, financial services (30.1%), fuel (39.9%), and drugs (18.9%). Prices rose by less than average inflation in clothing (2.5%), housing (5.9%), education (8.3%), and food (8.5%).

⊠ Accumulated consumer inflation over the first quarter was 5.4%, up by 0.5 percentage points on the same period in 1999, mostly because of price rises in a few highly weighted goods and services in the CPI basket: potatoes (101.6%), banking services (20.5%), vehicles (7.4%), primary and secondary education fees (6.9%) and gas (21.1%).

⊠ Annual producer inflation in March was 13.7%, one percentage point higher than at the end of 1999, having picked up in February and March. The main cause of this pick-up was a sharp price acceleration in farm produce, from an annual growth of 11.7% in December 1999 to 18.4% in March. Accumulated producer inflation in the first quarter ran to 4.7%, as against 3.8% over the same period in 1999.

⊠ Analysis of the CPI by an alternate classification shows both tradables and nontradables to have contributed to the fall in annual consumer inflation. Within nontradables, however, flexible items (fruit, vegetables and root crops) have pushed prices up, accounting for an inflation increase of two percentage points over the past 12 months. As mentioned in previous reports, the behavior of flexibles is associated with the normal seasonal pattern of food prices.

⊠ The core-inflation indicators calculated by the Banco de la República averaged 8.4% in March, 0.7 percentage points lower than in December 1999. On data to March they are

projected to average 7.9% by December 2000, up by 0.3 percentage points on the average projected on February data.

✠ At the end of March the monetary base's 20-month moving average stood at the corridor ceiling. Growth in the financial system's nominal and real loan portfolio slowed further in March. However, private financial institutions as a whole, excluding the savings and loan corporations (CAVs) and mortgage banks, have seen their nominal portfolio become stabilized, with a positive annual growth of about 6%. The nominal deposit rate edged up from 10.2% to 10.9%, while the lending rate remained steady at 23.6% in the last month of the quarter. The real lending rate fell from 13.5% in February to 12.6% in March, and the real deposit rate from 1.2% to 1.1%.

✠ The latest figures from the National Statistics Agency (DANE) on industrial production lead to the conclusion that economic recovery was under way by the end of 1999. First-quarter data available so far on real activity confirm that the upturn has continued this year, with particular dynamism in certain branches of industrial production, propelled by mounting exports. It is feasible to expect industrial growth in February and March to have been at least as satisfactory as in January. There are also signs of a similar pick-up in commerce over the first quarter. Recovery has not been widespread, though, with depression or a very poor performance persisting in some sectors such as construction and the financial sector. January figures suggest that use of installed capacity remains low, even compared with levels in other downturns. Consequently, no great demand pressure is expected in the short run, except perhaps for certain specific goods and sectors associated with exports.

✠ The rise in inflation over the first quarter stemmed largely from supply problems. This development had been anticipated in previous Reports and may continue throughout the first half of the year. It is clear now, however, that supply shocks have been stronger than originally expected, which accounts in part for higher inflation forecasts for the end of 2000 and 2001. Nevertheless, rising potato prices, alone responsible for 20% of inflation in the first quarter, should encourage greater production, with a consequent falling back in prices during the second half of the year. Moreover, increases in school fees and banking and gas charges tend to be specific to the beginning of the year and therefore not expected to put pressure on the price index in the coming months.

✠ In view of the above, and bearing in mind particularly that the monetary base's moving average is running within the corridor, that the average core-inflation indicator was below the target at the end of March, and that inflation is still projected to undershoot the target in December, the Board has decided not to alter the level and structure of the Banco de la República's interest rates and reaffirms its commitment to a 10% inflation target for 2000.

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# **I N F L A T I O N   R E P O R T**

**MARCH 2000**

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## PRICE INDICES

### A. CONSUMER PRICE INDEX

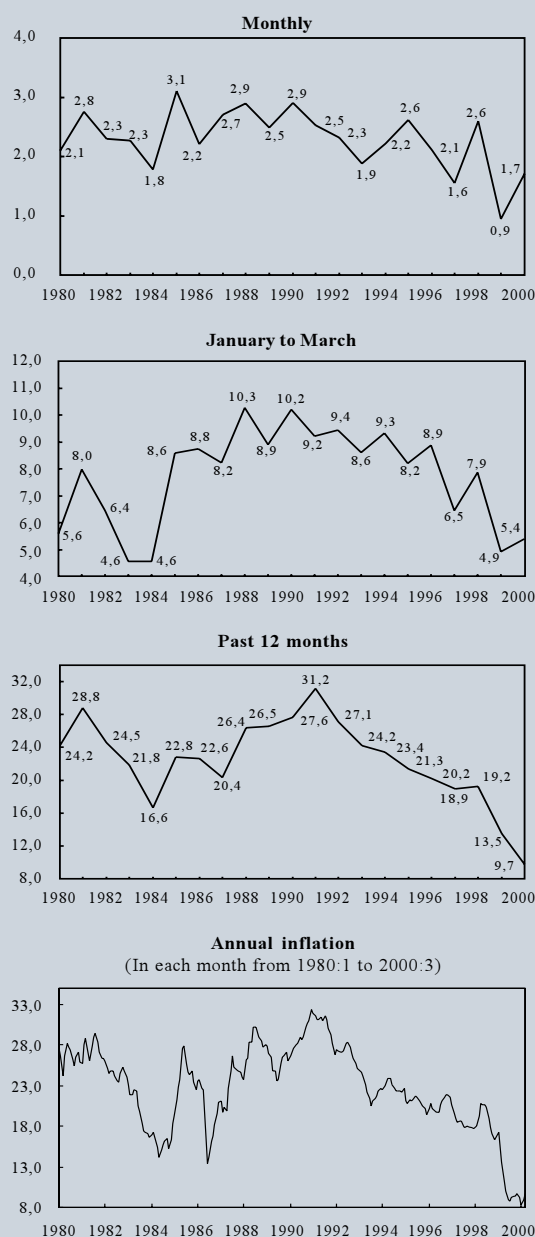
#### Overall performance

Inflation measured as annual change in the Consumer Price Index (CPI) was 9.7% in March 2000, down by 3.8 percentage points on a year earlier (13.5%), and the lowest March rate since 1972 (Table 1 and Figure 1). Accumulated first-quarter CPI growth was 5.4%, half a percentage point higher than a year earlier (4.9%), while monthly consumer-price growth in March was 1.7%, up by 0.8 percentage points on a year earlier (0.9%).

The measures of core inflation (CPI excluding food, inflation nucleus, trimmed mean and asymmetric mean)<sup>1</sup> averaged 8.4% in March, 0.7 percentage points lower than in December 1999. Two of these measures (the nucleus and asymmetric mean) remained stable between February and March, while the trimmed mean grew by only 0.2 percentage points and the CPI excluding food by 0.4 points. The relative stability of the core inflation measures indicates that the pick-up in annual CPI variation in the first quarter stemmed largely from supply problems, not from demand pressures caused by excessive money issuing. According to data up to March, CPI excluding food (10.2%) was the only measure higher than both actual inflation (9.7%) and the 10% target set for 2000 (Table 1 and Figure 2).

<sup>1</sup> For a more detailed description of these core-inflation measures, see Notes 3-6 to Table 1.

**FIGURE 1**  
**CONSUMER PRICE INDEX**  
(PERCENTAGE CHANGE TO MARCH)



Sources: DANE; calculations by Banco de la República.



**TABLE 1**  
**INFLATION INDICATORS**  
(PERCENTAGE CHANGE TO MARCH 2000)

	Monthly			Year to March			Annual		
	1998	1999	2000	1998	1999	2000	1998	1999	2000
<b>I. CPI</b>	2,6	0,9	1,7	7,9	4,9	5,4	19,2	13,5	9,7
Food	4,3	0,3	2,0	10,2	6,4	7,4	23,1	11,7	8,5
Housing	2,1	0,9	1,0	4,5	2,2	2,2	17,2	14,0	5,9
Clothing	0,6	0,3	0,2	2,1	1,4	0,7	8,8	7,1	2,5
Health care	3,6	3,4	2,0	8,1	6,3	4,2	20,5	18,6	12,9
Education 1/	0,7	0,7	1,8	14,9	8,9	7,0	18,8	11,2	8,3
Transport	1,9	1,0	1,9	11,7	6,1	6,6	21,6	14,2	19,2
Sundry expenditures	1,9	2,8	3,8	6,1	7,4	10,4	19,6	21,7	19,5
<b>II. Core Inflation 2/</b>	1,9	1,2	1,6	6,9	4,3	4,6	18,1	14,0	8,4
CPI excluding food 3/	1,9	1,2	1,6	6,9	4,3	4,6	17,6	14,3	10,2
Nucleus 4/							18,0	14,1	8,7
Trimmed mean 5/							18,4	14,0	8,1
Asymmetric mean 6/							18,2	13,5	6,6
<b>III. PPI</b>	1,1	(0,2)	1,4	7,7	3,8	4,7	18,6	9,4	13,7
By economic use or destination									
Intermediate consumption	0,3	(0,5)	1,0	7,3	2,0	2,7	17,2	6,6	13,1
Final consumption	2,0	(0,4)	2,0	8,6	5,9	7,5	21,4	12,3	14,0
Capital goods	1,0	1,3	0,9	5,7	3,2	4,0	13,8	11,9	16,7
Building materials	1,4	1,7	1,1	5,7	5,8	2,9	16,8	12,6	11,1
By origin									
Domestically produced and consumed	1,1	(0,2)	1,5	8,1	4,2	5,1	19,0	9,5	12,6
Imported	1,1	(0,4)	0,7	4,0	1,0	3,3	15,8	9,3	18,7
Exported 7/	(0,1)	(1,6)	0,5	3,3	(5,1)	5,5	17,4	(4,3)	40,9
By industrial origin (ISIC)									
Farming, forestry & fishing	0,0	(2,9)	3,5	10,8	3,2	9,3	23,2	2,5	18,4
Mining	0,1	1,5	0,0	1,1	3,3	4,4	8,7	(6,2)	32,6
Manufacturing	1,5	0,7	0,8	6,7	4,0	3,5	17,2	12,6	12,1
<b>IV. Other core inflation indicators</b>									
CPI excl. food, services and transport 8/	1,6	1,3	1,3	6,3	3,9	3,7	16,2	12,9	7,6
Median 9/							16,5	11,5	3,9

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/ This is 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 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 basket, calculated by the CPI-60 methodology. In this connection, see Melo (1997).

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

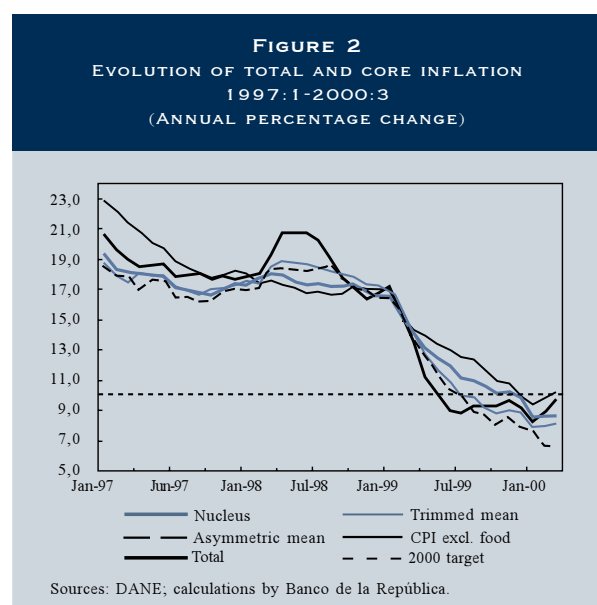
The city with the highest price growth in the 12 months to March was Pasto (12.4%), followed by Bucaramanga (11.8%) and Cúcuta (11.7%), while those with the lowest inflation were Cartagena

(7.8%), Villavicencio (8.4%) and Cali (8.5%) (Table 2).

### Behavior of the main components

Accumulated first-quarter inflation was accounted for by price rises of 19.4% in potatoes, 12.2% in banking services, 5.6% in residential telephone charges, 4.7% in milk, and 4.1% in vehicles.

In the 12 months to March, price growth was higher than overall inflation in sundry expenditures, transport, and health care. The highest growth was in sundry expenditures (19.5%) and resulted from faster price rises in banking services (30.3%), cigarettes (27.1%), rings (21.0%) and other financial services (18.6%). Fuel (39.9%) and residential telephone charges (33.4%) accounted for the big price variation in the transport and communications group (19.2%). In health care the 12.9% increase



**TABLE 2**  
CONSUMER PRICE INDEX, TOTAL AND BY CITY  
(PERCENTAGE CHANGE TO MARCH)

	Monthly			Year to March			Annual		
	1998	1999	2000	1998	1999	2000	1998	1999	2000
Total	2,6	0,9	1,7	7,9	4,9	5,4	19,2	13,5	9,7
Bogotá	2,2	0,9	1,9	8,5	5,4	5,7	19,7	13,6	9,5
Medellín	3,0	0,9	1,7	8,3	5,2	5,6	19,9	13,8	10,4
Cali	2,0	1,0	1,3	5,0	3,6	4,5	14,5	12,9	8,5
Barranquilla	2,6	0,3	1,0	8,6	4,2	4,2	20,3	12,2	9,7
Bucaramanga	2,5	0,9	2,6	7,9	4,9	6,5	19,4	11,7	11,8
Manizales	2,0	1,2	1,6	6,6	5,2	5,0	17,8	14,3	10,1
Pasto	2,8	1,9	2,7	5,3	4,9	6,3	21,0	17,5	12,4
Pereira	2,9	1,3	1,4	7,7	4,6	4,4	17,5	12,8	10,2
Cúcuta	4,6	0,9	1,3	10,8	4,4	6,0	21,6	13,4	11,7
Montería	3,4	1,5	1,5	10,0	5,5	5,5	21,3	14,1	8,7
Neiva	2,5	1,2	1,2	6,4	4,7	5,2	18,5	12,0	9,4
Cartagena	3,8	1,1	1,2	9,5	5,5	5,4	19,4	13,7	7,8
Villavicencio	3,4	1,2	1,8	9,7	5,2	5,6	22,9	11,0	8,4

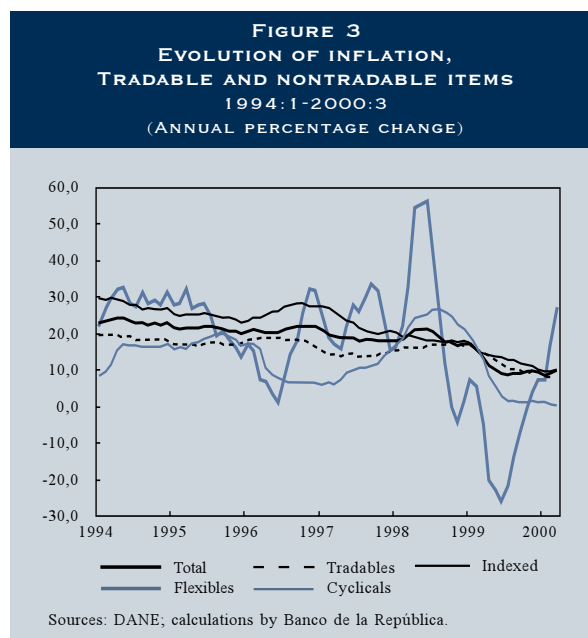
Sources: DANE's lists; calculations by Banco de la República - SGEE.

largely reflected higher price rises in drugs (18.9%) and private health insurance (18.2%). The slowest annual price adjustments were in clothing (2.5%), housing (5.9%), education (8.3%), and food (8.5%).

### Alternate classification: inflation speeding or slowing groups

Table 3 and Figure 3 present an alternate classification for identifying factors that accelerated or slowed down inflation<sup>2</sup>. This classification divides the contents of the CPI basket into tradables<sup>3</sup> and nontradables<sup>4</sup>, with the latter further divided into indexed<sup>4</sup>, flexible<sup>5</sup> and cyclical<sup>6</sup> items. Three patterns of behavior were observed in the groups of this classification. First, tradable and indexed items showed first-quarter annual price changes close to average inflation. Second, such changes in cyclical items did not go above 2%; and, third, they were higher than average inflation in flexible items, especially in February and March (Figure 3).

Reduction of inflation by 3.7 percentage points over the 12 months to March was above all attributable to tradable goods, which contributed 73% of the reduction (2.7 percentage points), while nontradables contributed the remaining 27% (one percentage



<sup>2</sup> In constructing this alternate classification, it was necessary to fit the old CPI basket (CPI-60) into the new one (CPI-98). This involved some loss of information and gave a variation in observed CPI somewhat different from DANE'S official figure given by DANE.

<sup>3</sup> Tradables: textiles, footwear, tobacco, beverages, cereals, dairy produce, cooking fats, drugs, vehicles, electrical appliances, etc.

<sup>4</sup> Indexed items: rent, fuel and utilities, education, transport, and other items.

<sup>5</sup> Flexible items: root crops, plantains, vegetables, legumes, and fruit.

<sup>6</sup> Cyclical items: meat and its by-products.

**TABLE 3**  
**CONSUMER PRICE INDEX, 1999-2000**  
**(TO MARCH)**

Items	12-month change		Contribution to change		Contribn. to infln. reduc. (*) 2000-1999 % points
	1999	2000	1999	2000	
Total	13,3	9,7	13,3	9,7	(3,7)
Tradables	15,6	8,3	5,9	3,2	(2,7)
Non-tradables	12,0	10,5	7,5	6,5	(1,0)
Indexed	14,3	10,1	6,7	4,8	(1,9)
Flexibles	(5,1)	27,0	(0,4)	1,6	2,0
Cyclical	13,4	1,0	1,1	0,1	(1,0)

(\*) 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.  
Sources: DANE's lists; calculations by Banco de la República - SGEE.

point). Among nontradables, the flexibles stand out as having helped to raise inflation by two percentage points, but their effect was counteracted by the indexed and cyclical items' lowering of inflation by 1.9 and 1.0 percentage points respectively.

The large drop in inflation produced by tradable goods came partly from falling world prices for most commodities. In contrast, inflationary pressure from flexible goods reflected their recent fall in supply, caused by three factors. First, lower relative prices in 1999 for some farm products discouraged greater cultivation, producing the typical response in their cyclical price behavior. Second, heavy rainfalls affected the supply of some crops, by causing both continual landslides on some roads and excessive humidity in crops requiring little water. Third, agricultural supply was also affected by a shortage of credit, resulting in part from the crisis in public-sector banks.

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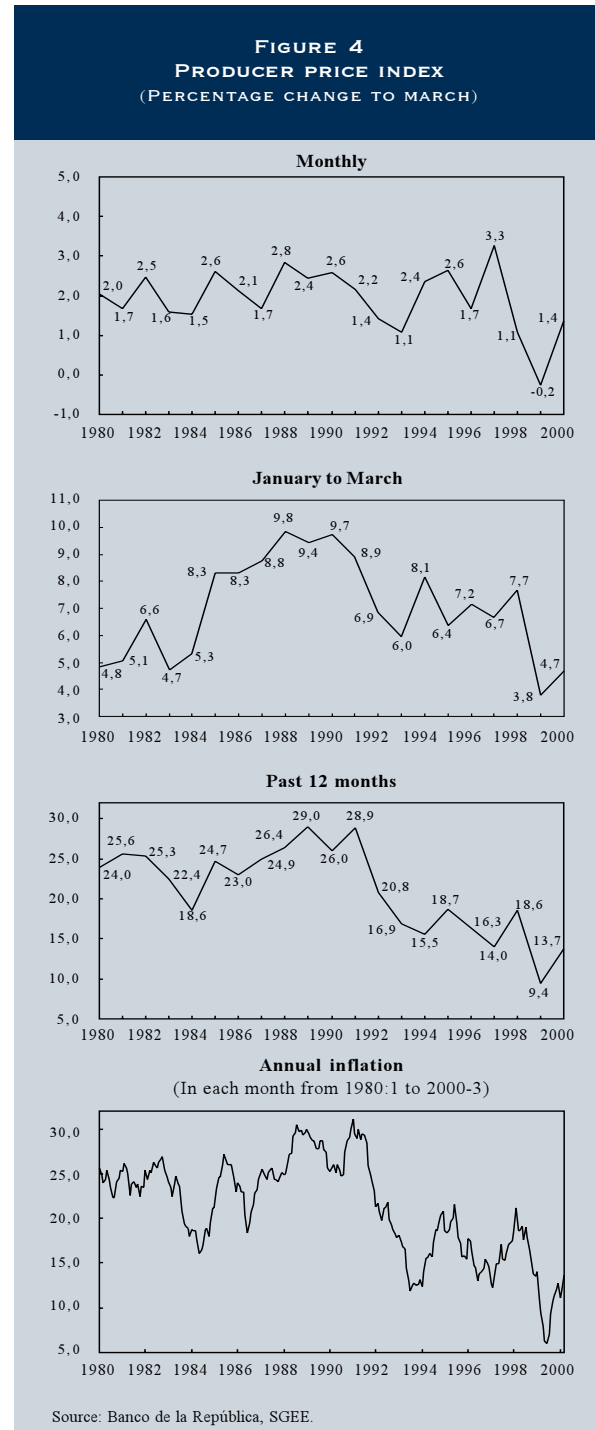
## B. PRODUCER PRICE INDEX

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### Overall performance

The Producer Price Index (PPI) rose by 13.7% in the 12 months to March, up by 4.3 percentage points on a year earlier but still the second lowest March rate since 1972. Producer prices expanded by 4.7% over the first quarter, 0.9 percentage points more than over the same period last year (3.8%). Their growth over the month of March was 1.4%, up from -0.2% in March 1999 (Table 1 and Figure 4).

Classification by origin shows imports registering the biggest 12-month rise (18.7%), with domestically produced and consumed goods growing by 12.6% (Table 1). Classification by ISIC industrial origin



reveals a 32.6% surge in mining prices, followed by an 18.4% growth in farming, with manufacturing recording the lowest price rise (12.1%).

## HOW DIFFERENT ARE THE CPI AND PPI?

The Producer Price Index is often said to anticipate the future evolution of the Consumer Price Index. As we shall see below, this asseveration may prove hasty and groundless, for there are obvious methodological differences between the CPI and the PPI. Only when the two have been stripped to make them comparable can a strong relationship be found between them, according to the findings of a recent study<sup>1</sup>.

### Methodological and conceptual differences between the CPI and PPI

The major methodological and conceptual differences that make it difficult to compare the CPI and PPI are as follows:

- The Consumer Price Index quantifies the individual prices of goods and services of mass consumption and determines the overall evolution of the price of a fixed consumer basket. The different goods and services making up the current consumer basket (base December 1998 = 100) were obtained from DANE's 1994-1995 Income and Expenditure Survey. In contrast, the Producer Price Index computes the prices, at the first level of sale, of a basket of goods forming part of overall domestic supply in the economy (domestically produced and consumed goods and imports). The present PPI basket (base June 1999 = 100) and its weighting structure were selected on the basis of the country's national accounts for 1994.
- Geographically, both indices cover the whole country. The CPI, however, is calculated on price information gathered in 13 cities, for which an overall national CPI is constructed. The PPI uses a number of sources located in different parts of the country (covering up to 18 cities, depending on the product). Hence the difficulty of constructing a PPI by city or region, since production of certain goods is concentrated in a few areas of the country.
- In the CPI the price of a specific good or service is the weighted sum of its price in the 13 cities, whereas in the PPI the price of a product is the simple unweighted average of the prices reported in various cities<sup>2</sup>.
- The CPI basket includes services in general (utilities, hospital, education, technical, professional, financial services, etc.), which are not incorporated in the PPI basket. The PPI has a strong industrial and even mining component (for example timber, chemicals in general, raw textiles, raw metals, and coal, gas and oil mining), which form no part of the CPI basket.
- There is a significant difference in size between the two baskets. The PPI universe (domestically produced and consumed goods, and imports) is made up of 730 descriptions, while that of the CPI consists of 405 goods and services.
- The weighting system is another major difference between the two indices. While the CPI has one weight per item, the PPI may have up to five weights per item. For example, plastic products have one overall weight for domestically produced and consumed goods and another for imports. Adding up the two gives the overall weight of the product in the basket. Similarly,

for each origin (domestically produced and consumed goods and imports) plastic products have one weight for intermediate consumption, final consumption, capital goods and building materials.

- Lastly, the relative importance of the same item may be different in one basket from what it is in the other. Coffee, for example, has a high weight in the PPI but a low one in the CPI, whereas meat weighs heavily in the CPI but lightly in the PPI.

#### Differences in PPI and CPI profiles

Calculation of the PPI started in 1990. Before that the Banco de la República used to prepare a Wholesale Price Index (WPI). The WPI gathered information from producers and wholesale distributors, with the different channels of distribution and marketing being mixed and resulting in a heterogeneous source of information. The PPI, by contrast, provides a clearer conceptual definition by estimating producer prices at their first level of marketing. As illustrated in the left side of the Figure below, while the WPI existed, it used to move more or less in line with the CPI. Since the birth of the PPI in January 1991, however, the paths of the producer and consumer indices have no longer been so similar, with the PPI showing, on average, smaller changes than the CPI.

What accounts for the differences between the consumer and producer indices? The introduction of the PPI in 1991 in place of the WPI widened the gap between the consumer and producer indices. The PPI is at a further remove than the WPI to the concept of a "consumer basket" in terms of marketing chains. There are fewer intermediaries between a wholesale price (as in the WPI) and a retail price (as in the CPI), than between the producer price (PPI) and the consumer price (CPI). This greater number of intermediaries involved in marketing the products makes the PPI and the CPI appear less alike, as can be seen in the left side of the Figure below.

Why did the PPI run below the CPI for the better part of the nineties? The evolution of services was essentially accountable for this. Before 1991 services, which are a CPI group, showed moderate price increases, producing a slower pace of growth in the CPI (Figure). From 1991, however, utility charges began to rise faster than the prices of other CPI items, partly because of a program to update charges and dismantle subsidies, with the consequent acceleration of CPI growth.

How can a valid comparison be made between the CPI and the PPI? To illustrate this point, consider the right side of the Figure. It presents the profiles of variation in stripped CPI and PPI. The CPI is stripped of services, which do not figure in the PPI. And the PPI is pared down to final consumption, that is, goods not used as raw materials. Comparing annual growth in the CPI excluding services with annual growth in the PPI final consumption reveals a convergence between the two indicators. Their dynamics are very similar and neither becomes permanently higher or lower than the other. This conceptually more valid comparison between the CPI and PPI leads to the conclusion that the two baskets are different and that in comparing them the CPI should be stripped of services and the PPI of everything not meant for final consumption.

How may devaluation affect the CPI and PPI? As shown by the Table below, the CPI is less tradable now than formerly, with services representing a higher proportion of the consumer basket. In December 1988 services accounted for 35.9% of household consumer expenditures,

in 1998 47.2%. This greater weight of services in the consumer basket reflects both the inclusion of new services not considered before (for example financial services, now weighing 3% in the basket), and major readjustments in previous weightings (for example in personal services, education and transport). Since the economy's service sector is essentially nontradable and becoming increasingly important, the transmission of price rises from higher devaluation of the peso may be said to have weakened in the case of the CPI.

**TABLE**  
**CONSUMER PRICE INDEX**

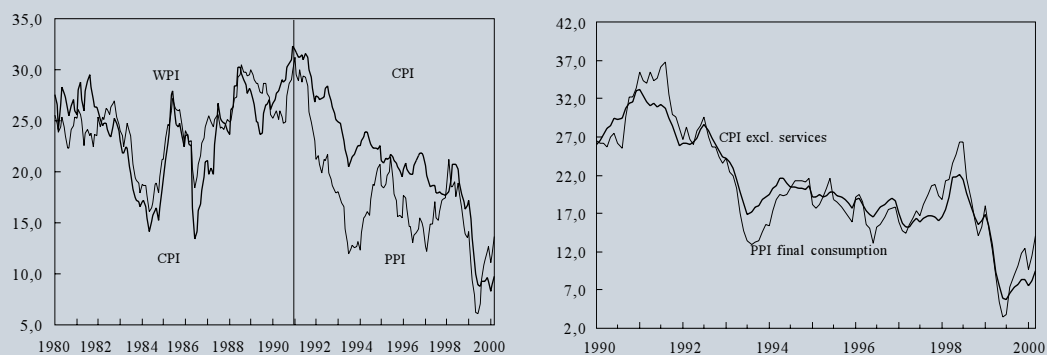
Items	CPI-60	CPI-98
<b>Total</b>	<b>100,0</b>	<b>100,0</b>
CPI excl. services	64,1	52,8
CPI services	35,9	47,2
State services	5,5	5,9
Personal services	3,5	6,7
Education	3,3	5,4
Transport	3,4	5,3
Parking	0,0	0,1
House rents	20,1	20,7
Financial services	0,0	3,0

In contrast, the PPI basket is mostly tradable, having become increasingly more so as a result of the country's economic liberalization. This trend is illustrated by the weight of imports, which has risen from 16.1% (PPI base December 1990 = 100) to 23.7% (PPI base June 1999 = 100). Consequently, as a good many PPI items are directly linked to world prices, the practical possibility exists of a greater pass-through of devaluation to producer inflation.

The relation between the two baskets and devaluation is discernible in the Figure. With devaluation reaching 27.3% over the past 12 months, PPI prices began to rise faster than CPI prices in the second half of 1999. The greater effect of devaluation on the PPI in the past 12 months has caused producer inflation to run above consumer inflation for the first time since 1990<sup>3</sup>.

What kind of causal relationship is there between the CPI and PPI? A recent study by the Banco de la República using econometric cointegration techniques has found common, direct (same-direction), long-term tendencies in annual change between the CPI excluding services and final-consumption PPI. A further test involved identifying which of the two series causes the other, that is, which series foreshadows the behavior of the other (see Note 1). The results reveal causality in both directions, that is, variations in the PPI cause changes in the CPI and vice versa. Lastly, the two price indicators were tested to see whether there existed a one-to-one long-term relationship between them, that is, whether a 1% change in one generated an equal change in the other. The 91% non-rejection findings of this test suggest that the two series are very likely to tend in the long term to present changes of the same size, short-term factors being what accounts for differences in their variations in some periods.

**FIGURE**  
**PRICE PROFILES**  
(ANNUAL CHANGES)



<sup>1</sup> Miguel Urrutia Montoya (1999), "Relación entre el índice de precios del Productor (IPP) y el índice de precios al consumidor (IPC)", leading article in *Revista del Banco de la República*, No. 865, November.

<sup>2</sup> For some primary foodstuffs included in the PPI, the price is the weighted sum of their prices in various parts of the country. The difference in calculation between the CPI and PPI at this level is important, because a variation in the price of a CPI good in a city with low weighting does not significantly raise the national average price. In contrast, a strong pick-up in the national PPI may be accounted for by a significant increase in the price of a good in a small city, which is arithmetically averaged with the other cities.

<sup>3</sup> In a recent study, Hernán Rincón (1999) "Devaluación de precios agregados en Colombia", mimeo, Banco de la República, has found that in 1980-1998 the long-term elasticity of nominal exchange rate variations to import and export prices was 0.84 and 0.64 respectively, while the long-term elasticity of import prices over the general price level was 0.12. Import and export prices were obtained from the PPI, whereas general price levels in the economy came from the CPI.



## THE PRICE OF POTATOES AND INFLATION FOR 2000

In Colombia many transitory inflation movements are attributable to price fluctuations in food staples. Potatoes stand out in this respect because of their highly variable prices and relatively heavy weight in the CPI basket (1%).

### Seasonal pattern

Potato supply, like supply of most primary products, is markedly seasonal and determines the product's price profile over the year. In March, April and May potatoes tend to be temporarily in short supply, because of reduced sowings in October, November and December<sup>1</sup>. The main harvest is in August and September, potatoes being extensively sown in March, April and May, when higher and better-distributed rainfall provides a suitable climate for growing them. On average, 35% of the year's total production is harvested in the first half of the year and 65% in the second. Average potato prices, reflecting the product's sowing and harvesting seasons, follow a seasonal pattern of rising in the first half of the year and falling back in the second half (Figure 1).

### Price behavior in 2000

Figure 2 shows how the seasonal price pattern of potatoes so far this year has been more than averagely accentuated, with an annual price increase in March 2000 of 138% and a first-quarter price rise of 102%. Potatoes contributed 1.0 percentage point to inflation in the past 12 months, accounting for 10.7% of the price rise in that period. In the first quarter, their contribution was 1.3 percentage points, or 23.2% of the quarter's inflation. If the price of potatoes is left out of the CPI calculation, annual inflation in March comes to 8.6%, not 9.7%, and first-quarter inflation to 4.4%, not 5.4%.

Certain developments last year affected potato production, helping to generate larger price rises in early 2000 than would normally have been expected. Shortage of financing sources and a considerable erosion in potato prices led to a 20% reduction in crop area during the second half of 1999, according to the Federation of Potato Growers.

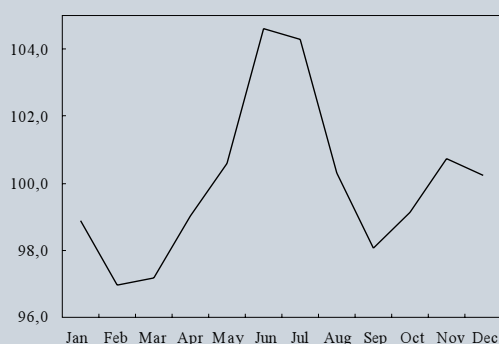
Less credit was available partly because the Caja Agraria (the main source of farm credit) was purged and transformed into the Banco Agrario. This process involved the closure of 151 branches and created temporary difficulties in irrigating credit during the second half of 1999, particularly to small farmers, like the average potato grower. In addition, falling potato prices in the second half of 1998 and throughout 1999 (Figure 2) discouraged further cultivation, causing some growers to turn to other rural activities.

### Outlook for the rest of 2000

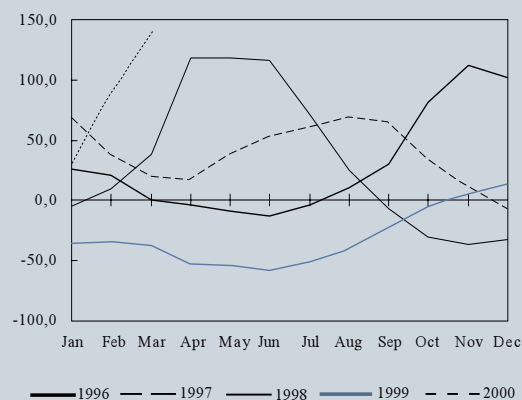
Judging by the seasonal production pattern of potatoes and their high prices in early 2000, their supply in the second half of the year can be expected to be abundant, with a declining price trend and hence a moderate effect on inflation for the year. A steep seasonal rise in potato prices

in the first half of the year is usually followed by an equally steep price fall in the second half. This typical behavior is explained by the fact that the growers' immediate reaction to substantially higher prices is to expand the crop area, which increases supply and brings down prices in the following six months when the harvest is gathered. Besides this typical behavior, allocation of credit by the Banco Agrario is expected to return to normal in the first six months of 2000, resulting in greater supply. The price behavior of potatoes in 1998 illustrates what may occur this year. In the first half of 1998 the annual price growth of potatoes surged by more than 100%, only to plunge in the second half, ending up with negatives rates of about 40%.

**FIGURE 1**  
**SEASONAL INDEX OF POTATO CPI**  
(SEASONAL FACTOR)



**FIGURE 2**  
**POTATO CPI**  
(ANNUAL PERCENTAGE CHANGE)



<sup>1</sup> Potatoes have a short vegetative cycle. Harvesting begins five or six months after sowing.

## 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.

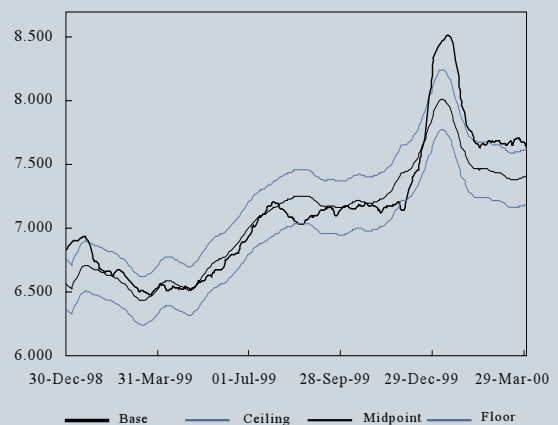
#### Monetary base

On March 31st the monetary base amounted to 7,132 billion pesos, with a 12-month growth rate of 3.6%, and with the 20-month daily moving average just within corridor's ceiling (Figure 5).

In March the monetary base's average balance showed an annual growth rate of 15.3%, down by 8.9 percentage points with respect to December 1999. Analyzed by use of the monetary base, this behavior was accounted for by declining annual growth in reserves (from 23.7% to -4.9%), which was not offset by stronger growth in cash (from 24.5% to 30.4%) (Figure 6).

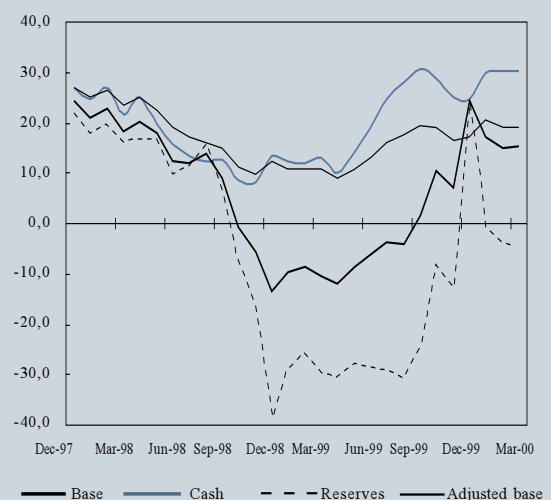
Annual growth in the adjusted monetary base averaged 18.9% in March, down by 1.7 percentage points on the rate in December 1999. The adjusted base is the base corrected for reserve requirements by applying

**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.

the current average reserve rate (4.6%) to liabilities subject to such requirements.

### M1 money supply

The M1 balance on March 31st was 11,793 billion pesos, with a 12-month variation of 35.4%. The annual growth rate of the average balance was higher in March (32.9%) than in December 1999 (12.5%). This behavior reflected faster growth both in cash holdings (as indicated above), and in checking accounts (from 3.9% in December to 34.9% in March) (Figure 7).

### M3-plus-bonds

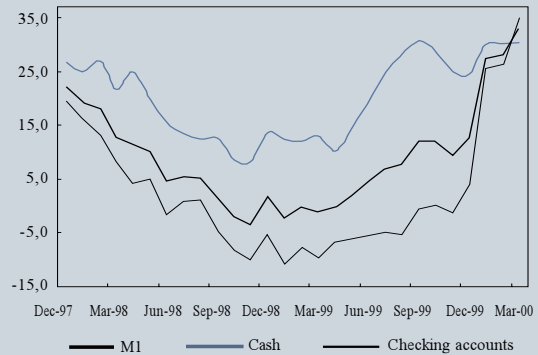
The broader monetary aggregate, M3-plus-bonds, amounted to 58,049 billion pesos on March 31st, with a 2.7% annual growth rate (Figure 8). Annual growth in the average balance was lower in March (3.1%) than in December (5.6%), largely because of slower expansion in liabilities subject to reserve requirements: 3.7% in March compared with 7.3% in December (Figure 9). This slower expansion was in turn caused by reduced growth in CDs (-6.5%, down from 3.2%) and in savings accounts (15.8%, down from 13.1%) (Figure 10).

The average M3+ bonds multiplier increased between December and March, from 6.954 to 7.708. This behavior was associated with a fall in both the cash ratio (from 0.100 to 0.092) and the reserve ratio (from 0.058 to 0.050) (Figure 11). It should be noted, however, that the multiplier was low in December compared with its levels over the past 18 months, mainly because of the year-end surge in the unadjusted monetary base as people took precautions against a Y2K collapse.

### Credit

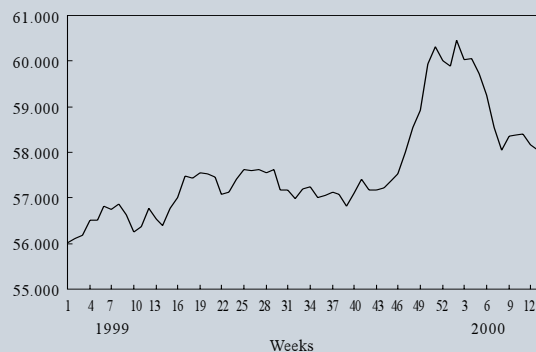
The financial system's overall net balance of local- and foreign- currency loans amounted to 48,101 billion pesos on March 31st, with an annual variation of -6.6% and a first-quarter variation of -4.6%. In domestic currency the annual variation was -4.2%,

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



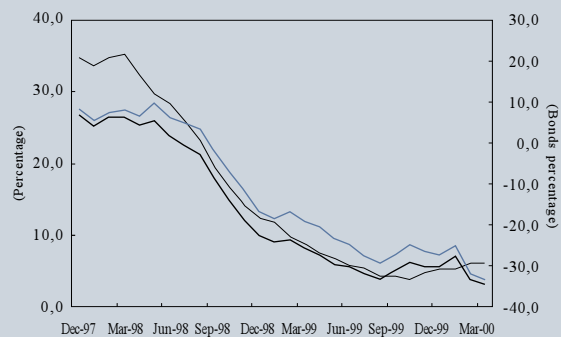
Source: Banco de la República, SGEE.

**FIGURE 8**  
**M3-PLUS-BONDS**  
(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.

in foreign currency -26.4%, and in the latter's dollar equivalent -42.2%.

The gross nominal local-currency balance for the whole financial system showed an annual variation of -2.9% in March, down from 1.1% in December 1999. Leaving out the savings and loans corporations (CAVs), the gross local-currency portfolio (rest of the system) registered an annual nominal variation of -1.3%, down from 1.0% in December. The CAVs' gross local-currency loans declined in growth, from 1.8% in December to -11.1% in March (Figure 12).

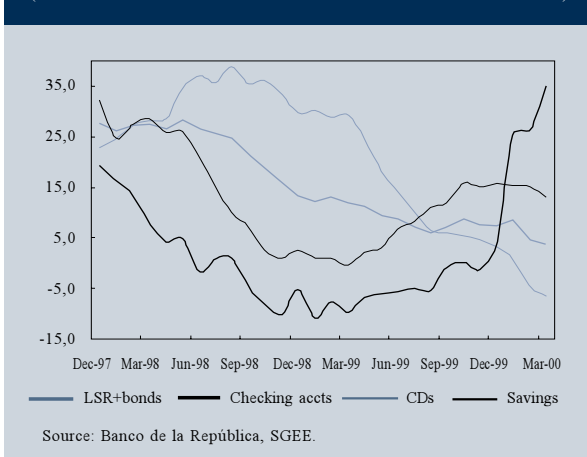
In real terms, the growth of average balance of financial system's gross local-currency loans declined, from -7.4% in December to -11.5% in March. Leaving out the CAVs, the rate of change in the remaining portfolio fell from -7.6% to -10.0% (Figure 13).

The behavior of the financial system's portfolio was also analyzed by type of intermediary. The net portfolio's aggregates were classified in four groups. The first consisted of the total portfolio of the private financial system excluding Davivienda, Colpatria and the private CAVs. The second group contained the portfolio of the public financial system excluding the state mortgage banks (Bancafé, BCH and Granahorrar). The third group was that of the private CAVs plus Davivienda and Colpatria, and the fourth the state mortgage banks.

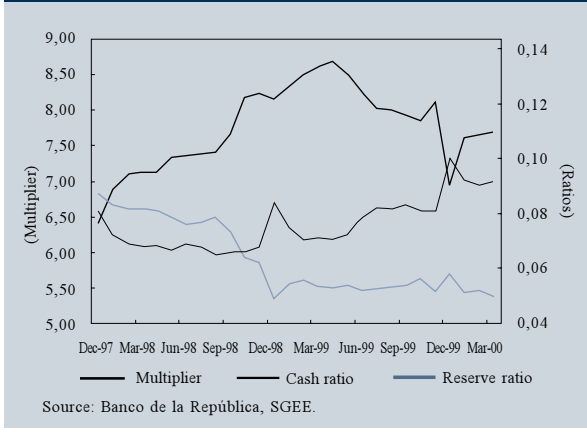
Figure 14 shows annual change in the average balance of the nominal local- and foreign-currency portfolio of each of the four groups. All four groups declined in growth over 1999 and early 2000, with the smallest decline being displayed by the private financial system excluding the private CAVs, Davivienda and Colpatria.

Figure 15 presents annual growth in each group's nominal local-currency portfolio. For the private financial system excluding the private CAVs, Davivienda and Colpatria, annual growth stabilized at around 5.2%, without showing any clearly rising

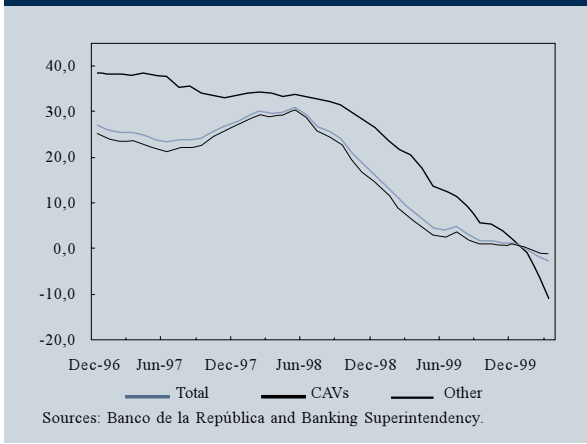
**FIGURE 10**  
**LIABILITIES SUBJECT TO RESERVE REQUIREMENTS (LSR) AND THEIR COMPONENTS**  
(ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)



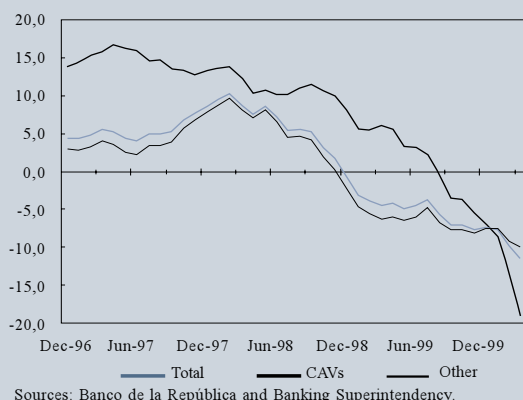
**FIGURE 11**  
**M3-PLUS-BONDS MULTIPLIER**



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



**FIGURE 13**  
**GROSS REAL LOCAL-CURRENCY PORTFOLIO**  
**FINANCIAL SYSTEM EXCLUDING FEN**  
 (ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)

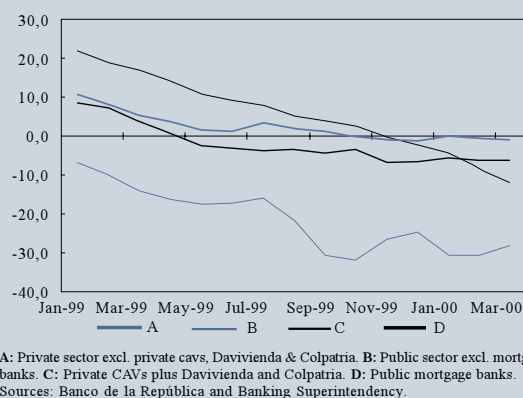


or falling tendency over the past three months. In the same period, the real portfolio of the other groups continued to contract, at an even faster pace in the case of the private CAVs plus Davivienda and Colpatría.

## 2. Interest rates

At the end of March, the deposit rate measured by the DTF<sup>7</sup> stood at 10.9%, and the average lending rate at 23.6%. The difference between the two was 12.7 percentage points, up by 2.3 points on the previous quarter (Figures 16 and 17). The interbank rate averaged 9.4% in March (Figure 18).

**FIGURE 14**  
**TOTAL LOCAL AND FOREIGN-CURRENCY PORTFOLIO**  
 (ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)



In February, the (ex-post) financial spread, defined as the difference between financial income and expenditure on average assets, was 6.4%, up from 5.8% in December and 4.8% in February 1999.

In real (ex-post) terms, the deposit rate fell from 6.2% at the end of December to 1.1% at the end of March, and the lending rate from 15.7% to 12.6% (Figure 19). Both rates remain below their historical average levels.

**FIGURE 15**  
**TOTAL LOCAL-CURRENCY PORTFOLIO**  
 (ANNUAL PERCENTAGE CHANGE IN MONTHLY AVERAGE)

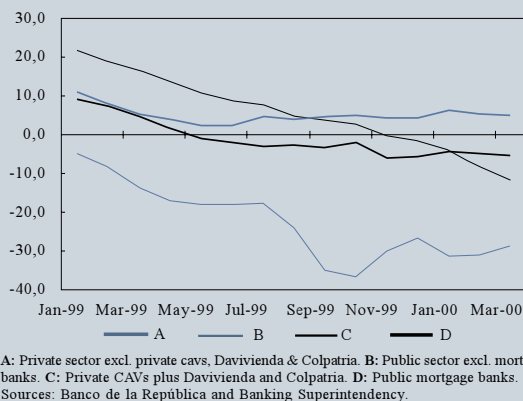
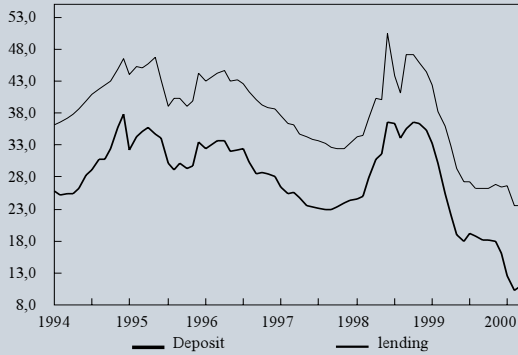


Figure 20 shows how the yield curve measured by the TBS<sup>8</sup> rate for different maturities has evolved over the past nine months. Between July and November 1999 the yield curve remained steady between 15% and 17% for short maturities and between 18% and 20% for longer ones. But from December 1999 to February 2000, the yield curve fell sharply, down to 8% for the short term and 11% for longer maturities. This downward trend was interrupted in March and some signs appeared of a possible rebound. In effect, the slope of the yield curve became considerably

<sup>7</sup> The DTF rate is the weekly average of the financial system's deposit rates for 90-day certificates of deposit. This indicator is calculated by the Banco de la República.

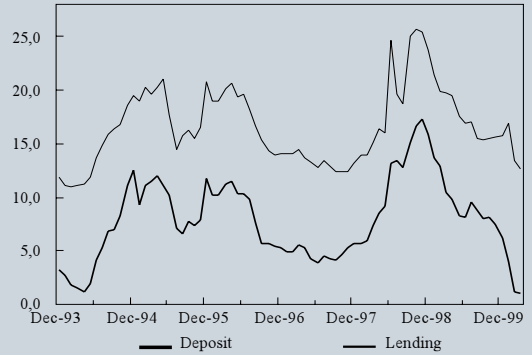
<sup>8</sup> The TBS (Banking Superintendency Basic Rate) is the average deposit rate for term certificates of deposit and term savings certificates, of different maturities, in the whole financial system, as reported by the Banking Superintendency.

**FIGURE 16**  
**LENDING AND DEPOSIT RATES**  
 (ANNUAL EFFECTIVE RATE)



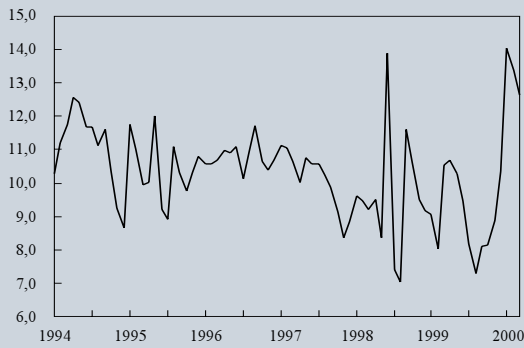
Sources: Banco de la República and Banking Superintendency.

**FIGURE 19**  
**REAL DEPOSIT AND LENDING RATES,**  
**FINANCIAL SYSTEM**  
 (PERCENTAGE)



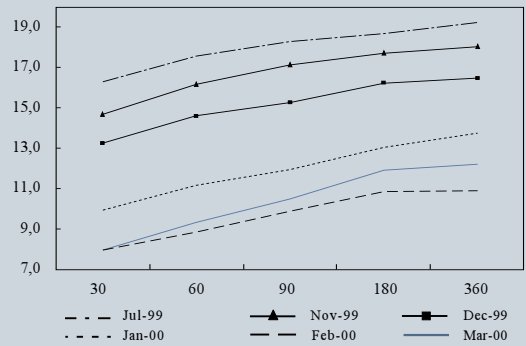
Fuente: Sources: Banco de la República and Banking Superintendency.

**FIGURE 17**  
**LENDING AND DEPOSIT RATE DIFFERENTIAL**  
**FINANCIAL SYSTEM**  
 (PERCENTAGE)



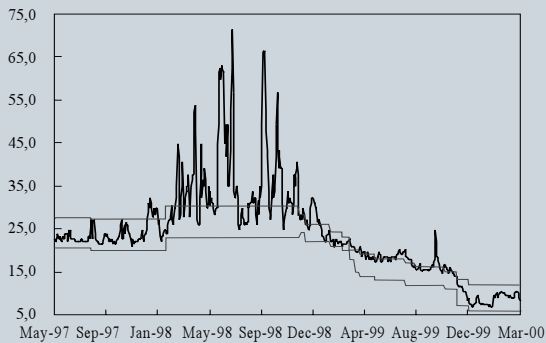
Sources: Banco de la República and Banking Superintendency.

**FIGURE 20**  
**TBS INTEREST RATE FOR DIFFERENT MATURITIES**  
 (PERCENTAGE)



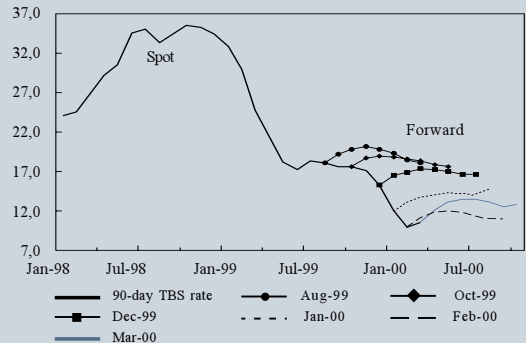
Source: Banking Superintendency.

**FIGURE 18**  
**INTERVENTION BAND AND INTERBANK RATE**  
**1997:5-2000:3**  
 (PERCENTAGE)



Sources: Banco de la República and Banking Superintendency.

**FIGURE 21**  
**90-DAY TBS RATE PROJECTIONS**  
 (PERCENTAGE)



Source: Banking Superintendency.

steeper in March, which might be broadly interpreted as indicating expectations of a rise in the 90-day rate within 60 to 180 days.

The spot and forward curves over the past nine months are presented in Figure 21. The spot curve (thick line) shows that the declining trend followed by the 90-day interest rate since the end of last year was interrupted in March by a slight upturn.

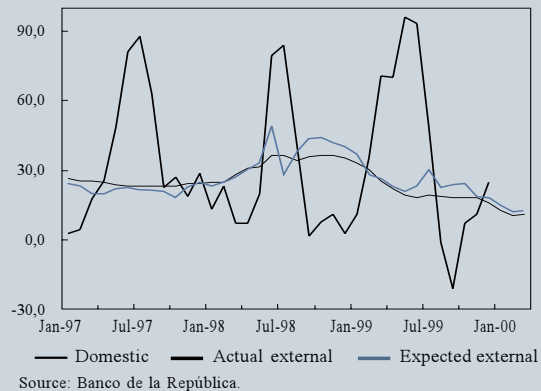
Each one of the points on the forward curves (thin lines) shows agents' expectations about the 90-day rate at the present time (the first point), in 30 days (second point), and so on up to 360 days. In the past few months the forward curves have either sloped up or become an inverted U, implying that at least within 30 to 180 days the 90-day TBS rate is expected by the market to rise.

### Yield differentials

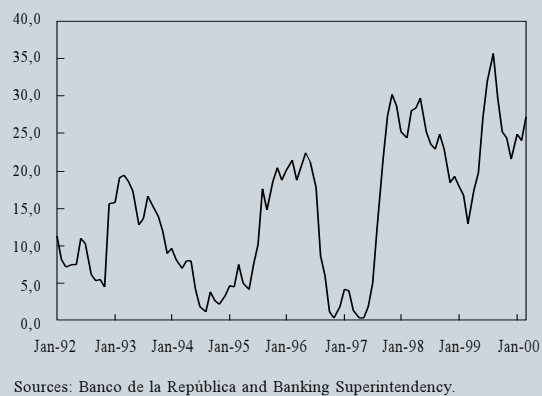
This section presents the difference between external and domestic yield. The external yield is defined as the yield that local investors expect to obtain on dollar-denominated investments. It is calculated by adding devaluation expectations to the external interest rate of reference. For this purpose, 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 22 compares the expected external yield, return on domestic investments (as measured by the DTF rate), and actual external yield (with a three-month lag). Expected external yield has ran above internal yield over the past 12 months, though the differential began to decrease last November. As can be seen from Figure 22 actual foreign yield picked up over the first quarter, owing to the peso's nominal revaluation during the quarter.

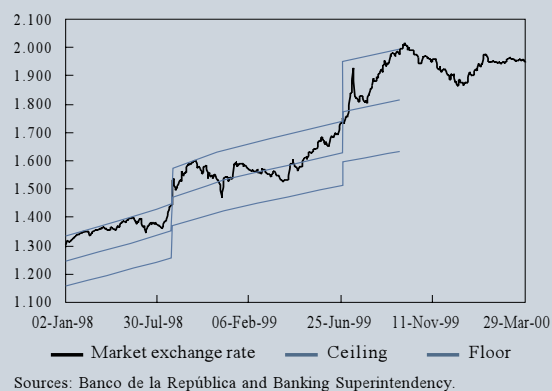
**FIGURE 22**  
EXTERNAL AND DOMESTIC ANNUAL YIELDS:  
ACTUAL V. EXPECTED  
(PERCENTAGE)



**FIGURE 23**  
NOMINAL ANNUAL DEVALUATION  
(PERCENTAGE)

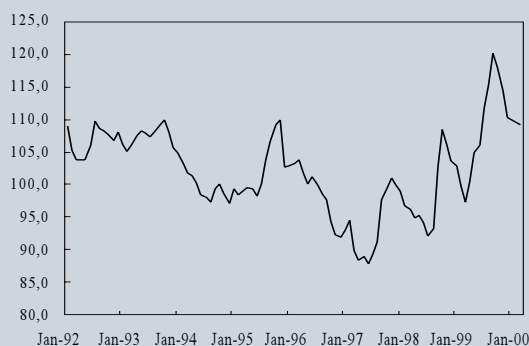


**FIGURE 24**  
REPRESENTATIVE MARKET EXCHANGE RATE  
1998:1-2000:3  
(PESOS TO THE DOLLAR)





**FIGURE 25**  
**REAL EXCHANGE RATE INDEX**  
**RERI-1 (1994 = 100)**  
**1992:1-2000:3**



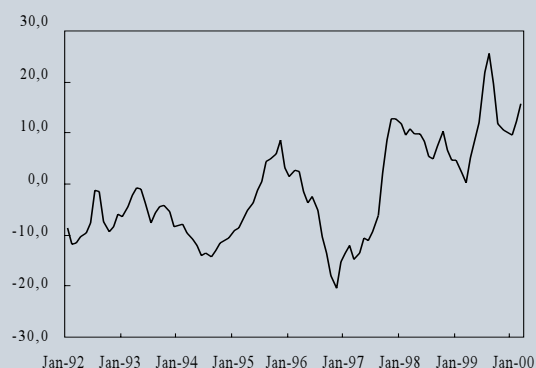
Source: Banco de la República, SGEE.

**FIGURE 26**  
**REAL ANNUAL DEVALUATION, RERI-1 (1994 = 100)**  
**1992:1-2000:3**  
**(PERCENTAGE)**



Source: Banco de la República, SGEE.

**FIGURE 27**  
**REAL ANNUAL DEVALUATION, RERI-3 (1994 = 100)**  
**1992:1-2000:3**  
**(PERCENTAGE)**



Source: Banco de la República, SGEE.

### 3. Exchange rate

The exchange rate stood at 1,873.8 pesos to the dollar at the end of December 1999 but started the new year with a strong tendency towards devaluation, which raised the dollar to 1,976.7 pesos by the end of January, much the same level as in October 1999. However, this tendency disappeared in February and the exchange rate levelled out, ending the first quarter at 1.951 pesos to the dollar. At the end of March annual devaluation was 27.3% and devaluation for the first three months 4.2% (Figures 23 and 24).

### 4. Real exchange rate

As measured by the RERI-1 (1994 = 100), an index built by using Colombia's producer price index and those of its 20 trading partners, the pesos's real exchange rate averaged 109.2 in March, with an annual devaluation of 12.2% and a first-quarter devaluation of 1% (Figures 25 and 26).

But if the real exchange rate is measured by the RERI-3 index (1994 = 100), built by using consumer price indices, the annual devaluation in March was 15.7% and the first-quarter devaluation 1.8% (Figure 27).

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## B. SUPPLY AND DEMAND

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The signs of economic recovery that began to appear in the third quarter of 1999 became stronger over the first quarter of this year. On information available so far, the upturn is not yet widespread across the economy, for there are still signs of recession in some sectors, particularly in construction. However, DANE's latest data on industrial activity show clearly that recovery had set in by the end of last year and became consolidated over this year's first quarter in several key sectors, especially in commerce and industry.

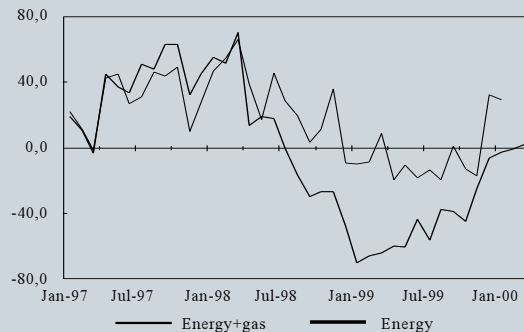
Indicators such as power consumption continued to show promising signs in this quarter, with monthly consumption reaching positive growth rates in March, after a lengthy period of contraction that began in mid-1998 (Figure 28).

The recovery becomes even more evident if industrial and household consumption of natural gas is added to electricity consumption. This combined measure is particularly appropriate since electricity has been widely replaced by natural gas over the past two years thanks to expansion of gaspipe networks in several inland cities, including Bogota. In effect, residential and industrial natural-gas consumption rose by 8% in 1999 relative to 1998, with residential consumption registering the more dynamic annual growth, of 22%. This is probably the reason why electricity demand tended to underestimate total energy demand last year, becoming a less representative indicator of urban economic activity, especially activities connected with household consumption. Figures to January show positive annual growth in the aggregate monthly consumption of electricity plus gas (measured in BTUs) since December, the contraction stage for this aggregate having been shallower and shorter than for electricity alone.

Other economic variables besides energy consumption displayed signs of recovery over the first quarter. The most important being, undoubtedly, real industrial production, which registered positive growth in January according to information from several sources. Similarly, credit-card sales and car sales began to show positive growth again in the first months of 2000, after a year and a half of continuous contraction (Figures 29 and 30). There is also evidence of a considerable pick-up in the first-quarter sales of several leading companies in different markets.

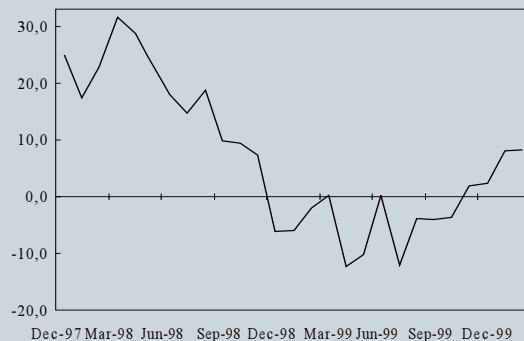
External variables, too, clearly point to recovery. In January total monthly imports registered a positive growth rate (8.5%) for the first time since July 1998 (Figure 31), though their levels are still much lower

**FIGURE 28**  
**ENERGY 1/ AND ENERGY+GAS 2/ CONSUMPTION**  
 (ANNUAL PERCENTAGE CHANGE IN MONTHLY CONSUMP)



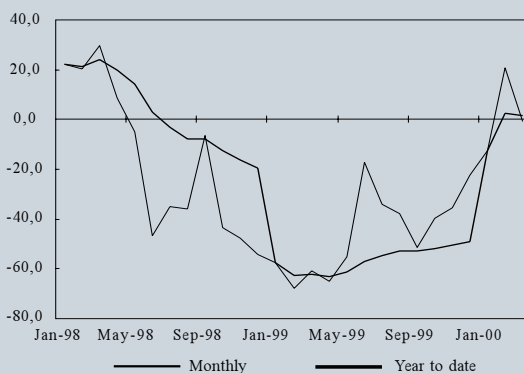
1/ Electricity figures to March 2000.  
 2/ Industrial and residential. Gas consumption in MBTU/day.  
 Sources: ISA and Ecopetrol.

**FIGURE 29**  
**CREDIT-CARD SALES, ENTIRE SYSTEM**  
 (NOMINAL ANNUAL PERCENTAGE CHANGE)



Source: VISA Colombia.

**FIGURE 30**  
**TOTAL AUTOMOBILE SALES, 1998:1-2000:3**  
 (ANNUAL CHANGE)



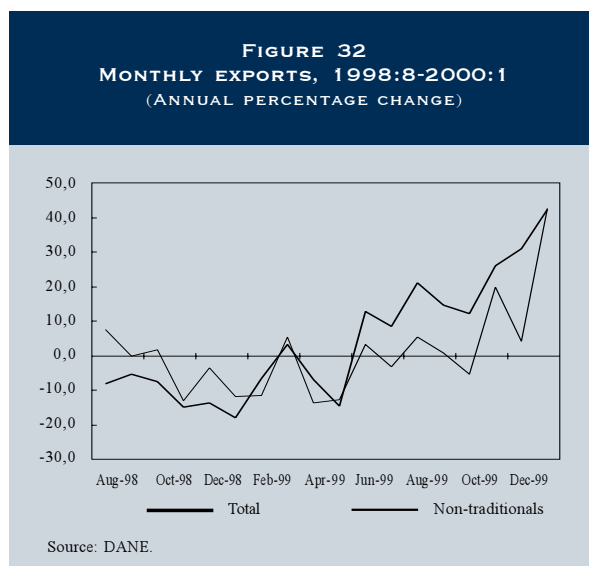
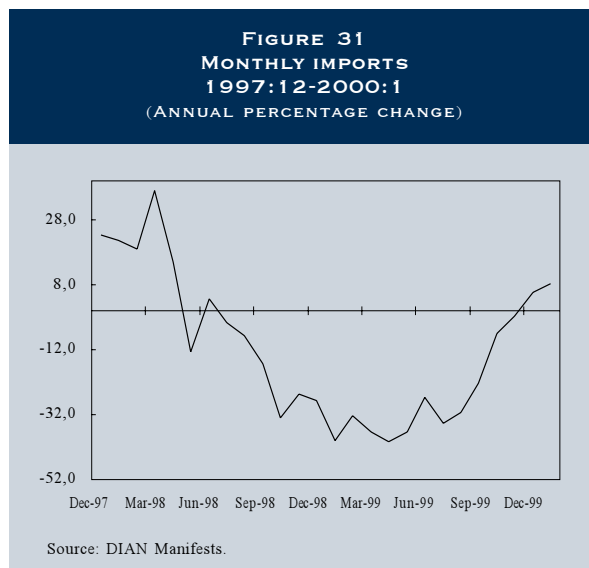
Sources: DNP and Colmotores.

than they used to be in 1995-1998. Similarly, the strong upturn shown by exports in the last months of 1999 was reinforced in January by a 42% annual growth in total monthly exports, compared with 23.3% in the final quarter of 1999.

This export performance is even more significant considering that it was produced not only by recovery in oil exports, which surged 63% last year thanks to higher crude prices, but also by the highly satisfactory behavior of non-traditional exports (Figure 32). In effect, annual growth in monthly non-traditional exports soared from 5.6% in the fourth quarter of 1999 to 43.% in January. Most sectors of industrial production have contributed to the surge in non-traditionals, though in the past few months the greatest dynamism has been shown by chemicals, graphic arts, the food industry (mainly sugar and candies), plastics, and to a lesser extent by textiles and clothing.

It is expected that favorable external and internal conditions allowing consolidation of the current economic reactivation will be maintained in the coming months. In the first place external demand may be expected to continue to drive growth, since total exports and more particularly industrial non-traditionals should stay on their present path of recovery. This is because the exchange rate is now more competitive and should remain so for a good while, and also because our export markets will be expanding this year at a satisfactory or at least faster pace than last year. It is important to point out, however, that January's high export growth rates are unlikely to be maintained, because they resulted from comparing export levels in January with their atypically low levels in the same month a year ago.

In the second place, the upturn in domestic demand looks set to continue at least over the first half of 2000, thanks to the first quarter's low interest rates. In any case, the validity of this scenario will ultimately also depend on political factors, because inappropriate uncertainty on this front may tend to defer investment



or consumption decisions crucial to satisfactory economic growth.

## 1. Gross Domestic Product

DANE's recent upward revision of industry figures has delayed release of the new data on 1999 year-end quarterly GDP, and the official figures available are still those indicating a 4.5% contraction in 1999.

The National Planning Department (DNP) maintains its 3% growth forecast for 2000. This was originally a little higher than average predictions made by several independent analysts. However, in view of the revision

of January's industrial figures, forecasts by private entities have tended to get increasingly closer to official projections.

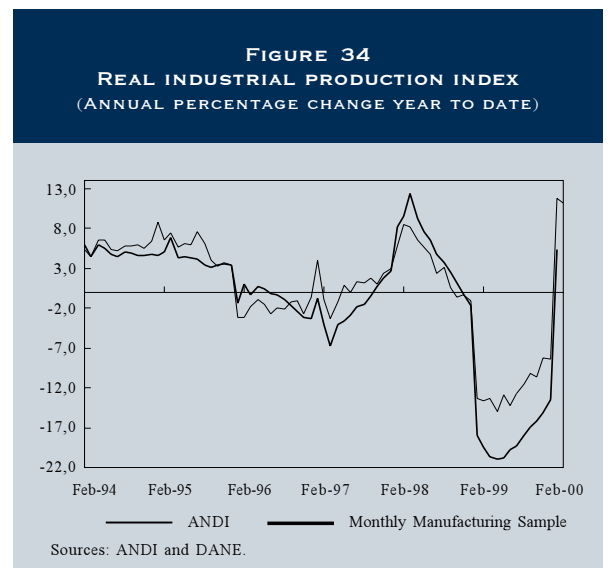
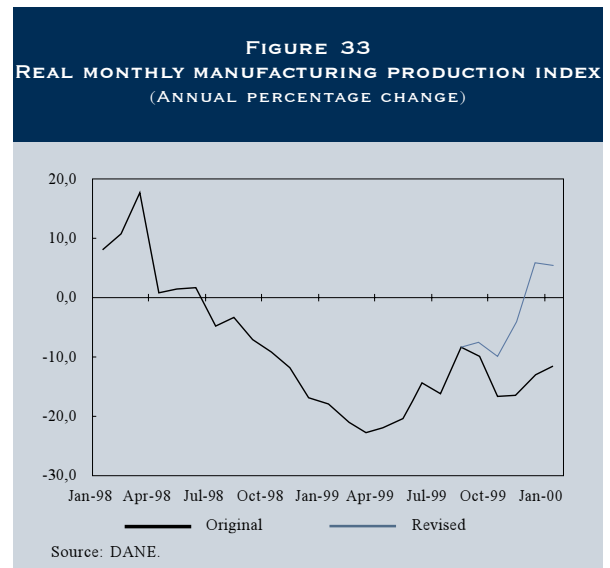
## 2. Industry

DANE has recently made a major correction to industrial growth figures based on the Monthly Manufacturing Sample. Disparities between the corrected figures and those originally published by DANE are significant from October on. The new figures show clearly that an upturn in industry had already set in during the final quarter of 1999. Thus, industrial production registered a considerably smaller contraction in November, and by December it was displaying a positive annual growth for the first time since June 1998. This growth trend continued into the first quarter of 2000, with monthly production expanding by 5.4% in January relative to the same month in 1999. Figure 33 presents annual growth in monthly production, distinguishing the series originally published by DANE from the corrected series. For the year as a whole, DANE's revised figures show that production varied by -13.6%, not -16.7% as initially reported.

Industrial recovery in the past few months is corroborated by ANDI's Joint Opinion Survey. According to this source, industrial production contracted by 8.4% in 1999 as a whole; this is lower than the 10.2% contraction reported for the year to September, indicating that there was some recovery in the final quarter. ANDI's figures show that in the year to February annual growth in production was 11.2%, the second highest growth reported by ANDI since 1994, after January's rate. As mentioned in previous Reports, disparities between ANDI's and DANE's figures may arise from differences between the samples they use. ANDI's sample is centered on large companies, whereas DANE's is broader and represents small and medium-sized companies as well as big firms. From this perspective, then, reports by ANDI of a smaller industrial contraction in 1999 and greater recovery in January 2000, as compared with DANE's findings, may be indicating that the recession

has hit small and medium-sized companies harder and that the present recovery is essentially being led by large corporations (Figure 34).

Data from both ANDI and DANE suggest that positive growth in production early this year occurred in many sectors. According to DANE, growth in January was particularly strong in the sectors of iron and steel and non-ferrous metals, paper products and printing, chemicals, rubber products, electrical machinery, and textiles. In many of these industries strong growth has gone hand in hand with buoyancy in exports, which shows that industrial recovery has been largely driven by external demand.

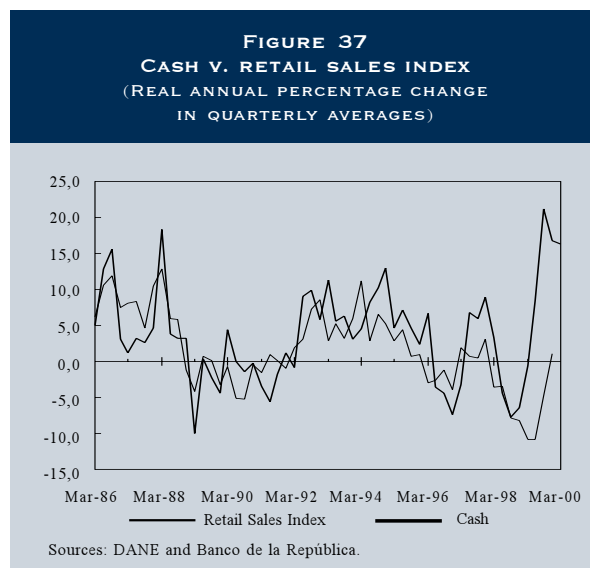
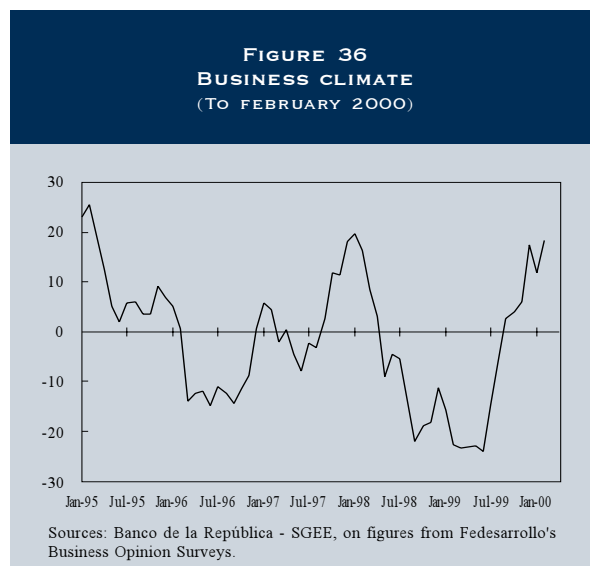
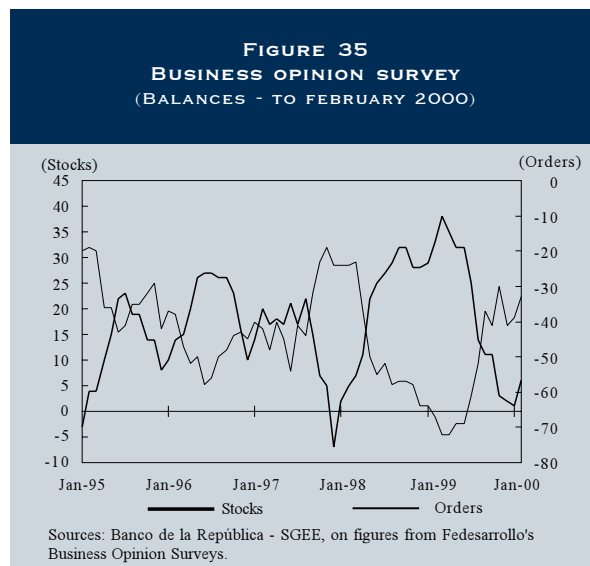


Prospects for the coming months seem to be good, judging by the fact that in January and February orders continued to expand and stocks remained low, according Fedesarrollo's Business Opinion Survey. Data to February show further improvement in expectations among businessmen. The business climate, a measure indicating expectations about the economy in six months' time, picked up in March after a small unwinding in January that was probably caused by seasonal factors. Similarly, expectations of production in three months' time have risen sharply in recent months. All these developments suggest that favorable conditions exist for industrial growth to continue at least over the first half of the year.

### 3. Consumption

Little information is available so far on consumption at the end of 1999 and in the first quarter of this year. Judging by DANE's Retail Sales Index (excluding fuel), the third-quarter upturn in consumption demand seems to have continued to the end of the year. Monthly retail sales registered real positive growth in November after 17 months of consecutive contraction. They strengthened further in December, with real sales (excluding fuel) expanding at an annual rate of 4.2%.

This rising trend may be expected to have continued in the first months of this year, in view of further recovery in real sales registered by several large companies. A somewhat similar conclusion may be drawn from cash behavior, which is usually a good indicator of retail sales and consumption. Over the past few months this monetary aggregate has expanded at an average real rate of 16%. As mentioned in previous Reports, this strong growth in cash holdings may be largely accounted for by the public's portfolio shift to liquid assets, unconnected with greater demand for goods. Yet the sharp rebound in sales at the end of last year suggests that the pick-up in cash holdings continues to be partly associated with higher spending on consumption, and that this development may recur in the first half of the year (Figure 37).



#### 4. Investment

Indications of investment-demand behavior suggest that it may have stopped shrinking in the fourth quarter of 1999 and early 2000. In effect, such variables as imports of capital goods and intermediate goods reduced their pace of contraction over the last months of the year and even registered positive growth in December and January. Recovery has been particularly strong in imports of intermediate goods, with monthly balances surging by 13.7% and 25.5% in December and January respectively (Figure 38).

### C. WAGES AND EMPLOYMENT

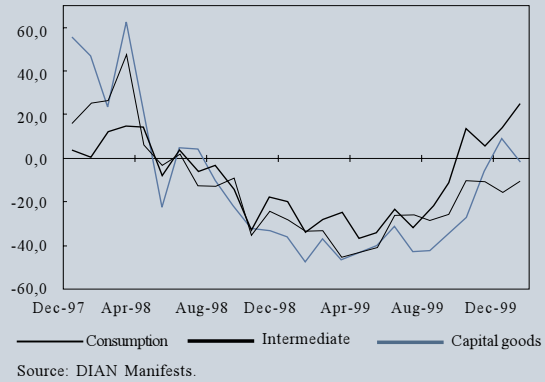
#### 1. Industrial pay

On information to January, average nominal industrial pay in the 12 months to January grew at a similar rate to that of year-end 1999, thus breaking the more-than-yearlong declining trend in pay rises. The increase for employees was 17.6% and for wage earners 15.0% (Figure 39).

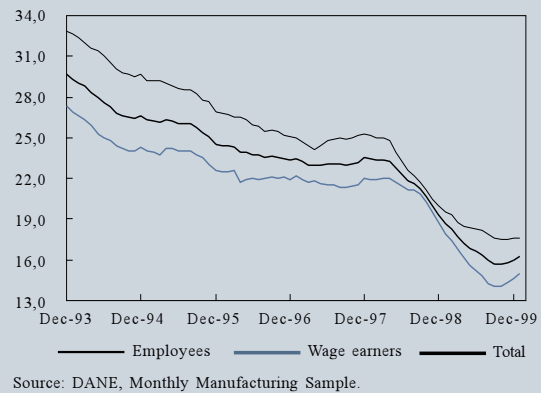
The nominal-pay adjustment in January was big considering that unemployment was high at the end of the year, that economic recovery had barely begun in the last months of 1999, and that the public's inflation expectations were around the 10% inflation target set by the Banco de la República. However, the adjustment was small if benefits as well as pay are taken into account. Thus for permanent workers, pay-plus-benefits (total remuneration) was adjusted in nominal terms in January by only 14.4%, which is lower than the rate at the end of 1999, but is more in line with present labor-market conditions (Figure 40).

The fall in total nominal remuneration growth was bigger for temporary workers than for others, probably because the hiring and pay-settlement system is more flexible in the case of temporary workers. In effect, nominal remuneration growth in

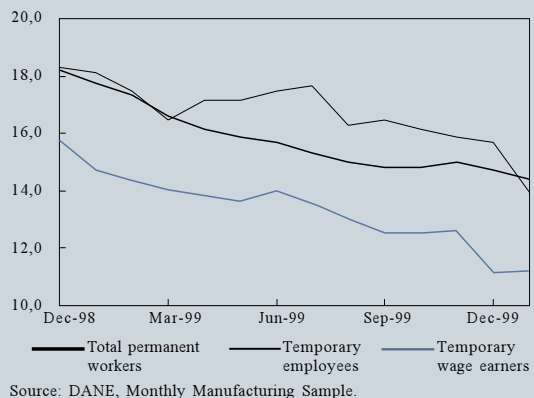
**FIGURE 38**  
ANNUAL GROWTH IN MONTHLY IMPORTS  
(TO JANUARY 2000)



**FIGURE 39**  
NOMINAL INDUSTRIAL PAY  
(PERCENTAGE CHANGE OVER WHOLE YEAR)



**FIGURE 40**  
NOMINAL INDUSTRIAL REMUNERATION,  
PERMANENT/TEMPORARY WORKERS  
(PERCENTAGE CHANGE OVER WHOLE YEAR)





the 12 months to January averaged 11.2% for temporary wage earners, and 13.9% for temporary employees. What is more, in January itself, temporary wage earners' remunerations rose by only 5.5% compared with the same month last year.

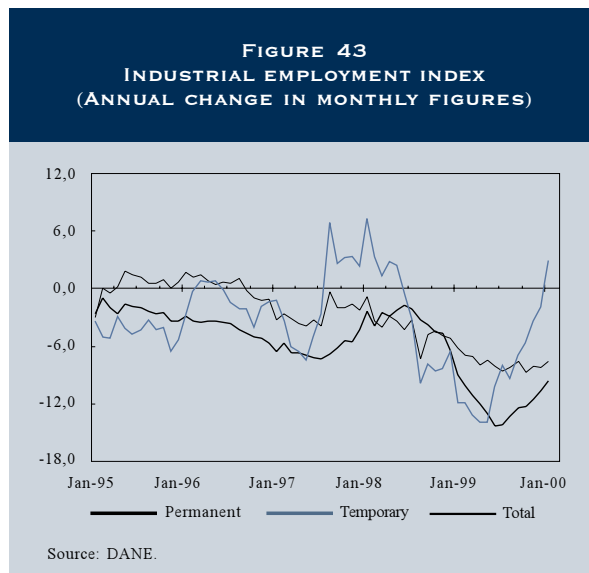
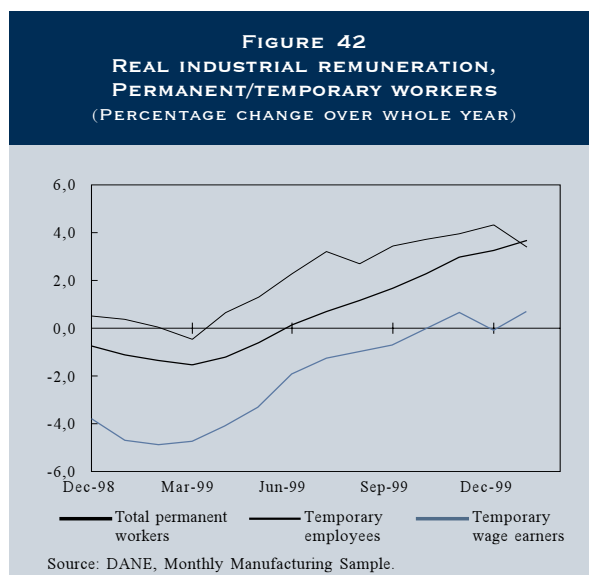
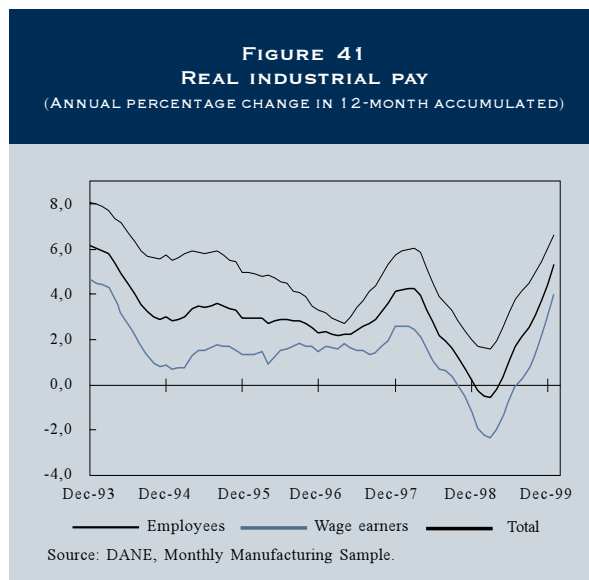
As regards real adjustments, lower annual inflation in January meant real pay gains for all groups of workers, as shown in Figure 41. Real pay growth was 5.3% for workers as a whole body. In terms of total remuneration, however, real growth was only 3.7% for temporary workers as a group, with temporary employees receiving a 3.4% rise and temporary wage earners 0.7% (Figure 42). Both real pay and real remunerations have been gaining ground since mid-1999.

## 2. Employment

The only employment information available so far for the first months of 2000 pertains to the manufacturing sector. In January overall manufacturing employment was still shrinking fast, at rates of around 10%, which were, however, lower than in mid-1999, this lower shrinkage coinciding with the signs of economic recovery. In effect, temporary employment has expanded with economic upturn in recent months, registering a 3% annual growth in the monthly index in January. As on previous occasions of initial recovery, businessmen have tended to employ temporary workers, since hiring permanent workers can prove very costly when the future performance of their companies is uncertain. Overall manufacturing employment will probably continue to be driven by temporary employment in the coming months. Only when the upturn becomes fully established can employers be expected to start hiring permanent workers again (Figure 43).

## 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 different ranges of one-year pay settlements reached between January



**TABLE 4**  
**PERCENTAGE OF NEGOTIATED PAY-RISE**  
**BENEFICIARIES**  
(JANUARY-MARCH, 2000)

One-year negotiated rises			
<9,23	9,23	[9,23-11.0]	>11
4,2	56,9	24,4	14,5
Two-year negotiated rises			
<12	CPI	[CPI + 0,5 to CPI + 3]	[LMW]
6,5	63,9	29,2	0,4

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

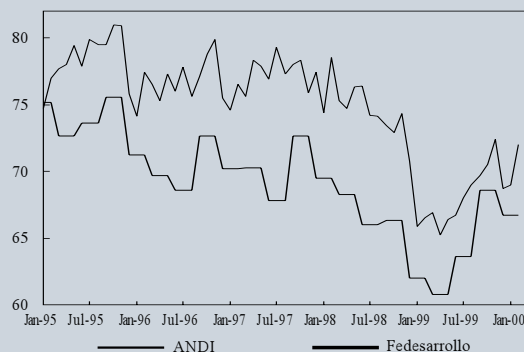
and March 2000. The pay rise for the majority (56.9%) of these workers has been set equal to inflation at the end of 1999 (9.23%), while for 24.4% of them it goes up from 9.23% to 11%, with only 14.5% getting a pay rise of over 11%. Compared with figures in the December 1999 Report, pay-rise ranges for most workers covered by one-year settlements had fallen steeply by March, suggesting that the indexation processes of previous years have begun to weaken.

The bottom half of Table 4 shows the percentages of workers covered by different ranges of two-year pay rises negotiated between January and March 2000. Most of these workers (64%) have obtained pay increases equal to CPI inflation. For 29.2% of them the pay rise ranges between CPI plus half a point and CPI plus three points, with only 6.5% receiving an increase less than 12%.

#### D. CAPACITY UTILIZATION

The two available indicators of capacity utilization (from Fedesarrollo and ANDI) continued to show a pick-up over the final quarter of 1999. In particular, ANDI's indicator to February reports a 72% utilization, up from 66.5% in February 1999. Yet,

**FIGURE 44**  
**CAPACITY UTILIZATION**  
( TO FEBRUARY 2000)



Sources: ANDI and Fedesarrollo.

despite pick-ups, capacity utilization has for some months run far below usual historical levels for Colombian industry. According to ANDI's indicator, the level of capacity utilization consistent with a moderate pace of economic growth has usually been at least 75% (Figure 44).

#### E. THE FISCAL SITUATION

As discussed in the Board's March Report to Congress, the non-financial public sector deficit in 1999 was 6% of GDP<sup>9</sup>. According to official estimates, the fiscal imbalance in 2000 is expected to be 3.6% of GDP, involving a reduction of 2.4% of GDP in the size of the consolidated deficit. The projected fiscal adjustment for 2000 is largely associated with improvement in the finances of Ecopetrol and the central government.

At the end of March, the central government's finances showed a cash-basis deficit of 1.2% of GDP. Compared with first-quarter figures for 1999, income grew by 15.6% and expenditures by 24.4%. Among

<sup>9</sup> The deficit has been calculated by IMF methodology. At 6%, the non-financial public sector deficit is compatible with meeting the 6.1% deficit target set in the IMF agreement for the consolidated public sector (including, Fogafin and the Bank, among others).



income items, tax receipts surged by 49.7%, while non-tax revenues plunged by 55.1%. The tax items showing particularly strong growth were domestic VAT (53.2%) and import taxes (23.3%). The surge in tax receipts was caused both by higher sales and higher imports, and by the fact that the tax calendar was brought forward and a shorter period established for the financial system to hand over taxes collected by it to the Treasury. The fall in non-tax income was associated with the decline in the Bank's profits transferred in March: from 1,244 billion pesos in 1999 to 350 billion pesos in 2000 (Table 5).

With regard to expenditures, official first-quarter data show a 29.0% growth in interest payments, a 26.1%

rise in operating costs, and a 19.9% fall in investments. The rise in operating costs came from transfers, which expanded by more than 34% in the first quarter. Personal services and general expenditures, the other operating-cost items, barely increased by 4.1% and 0.1% respectively, reflecting the government's spending-austerity policy for this year.

To finance the deficit, net foreign credit amounting to 1,568.5 billion pesos and net domestic credit amounting to 2,184.8 billion pesos were used in the first quarter of this year. Sale of Treasury paper TES amounted to 3,945.9 billion pesos, with 2,724.9 billion pesos of this amount by way of agreed and mandatory investment, and 1,221 billion pesos by auction.

**TABLE 5**  
**CENTRAL GOVERNMENT**  
(BILLIONS OF PESOS)

	January - March			% change	
	1998	1999	2000	1999 / 1998	2000 / 1999
<b>I. Revenues (A+B)</b>	3.898,4	5.211,5	6.024,8	33,7	15,6
A. Tax revenues	3.524,4	3.516,6	5.263,6	(0,2)	49,7
Income tax & domestic VAT	2.388,6	2.544,8	3.898,9	6,5	53,2
Customs & external VAT	988,7	746,0	919,8	(24,5)	23,3
Gasoline	141,5	153,9	185,5	8,8	20,5
Other	5,6	71,9	259,4	1.183,9	260,8
B. Non-tax and other revenues	374,0	1.694,9	761,2	353,2	(55,1)
<b>II. Total expenditures (A + B + C + D)</b>	5.968,9	6.434,2	8.003,8	7,8	24,4
A. Interest payments	1.511,1	1.461,4	1.884,8	(3,3)	29,0
B. Operating costs	3.757,2	4.411,8	5.561,6	17,4	26,1
C. Investment	621,7	472,4	378,4	(24,0)	(19,9)
D. Net loans	78,9	88,6	179,0	12,3	102,1
<b>III. Deficit or surplus (I - II)</b>	(2.070,5)	(1.222,7)	(1.979,1)	(40,9)	61,9
<b>IV. Financing</b>	2.070,5	1.222,7	1.979,1		
A. Net external credit	472,0	12,3	1.568,5		
B. Net domestic credit	1.304,1	1.054,9	2.184,8		
C. Privatizations and other	294,4	155,5	(1.774,3)		
<b>V. Deficit as percentage of GDP</b>	(1,5)	(0,8)	(1,2)	(44,3)	41,8

Source: Fiscal Policy Council (CONFIS).

## INTEREST-RATE MATURITY STRUCTURE

Changes in a financial asset's yield caused by difference in its possible maturities form what is known as an interest-rate maturity structure. This structure can be analyzed by considering the relationship between the financial asset's maturity and its yield (always expressed in annual terms for purposes of comparison); the resulting graph is called the yield curve.

Were investors to be quite certain that the short-term interest rate would remain steady in future, the market would take care to equalize yields on financial assets at different maturities to ensure their co-existence in the market, thereby making the yield curve flat. In other words, there would be no risk premium for investing at longer maturities. But since investors face a certain degree of uncertainty over future interest-rate movements connected with changes in the real rate or in inflation, the yield curve usually slopes up. Thus the maturity structure can reveal investors' expectations about future interest-rate movements, which makes it a useful tool for abstracting information about the behavior of the credit market.

Now if we suppose that investors are risk averse, the expected profile of the yield curve, in the absence of any expected interest-rate changes, will have a slightly upward slope, otherwise investors would not be rewarded with higher yields for the greater risk of investing at longer maturities.

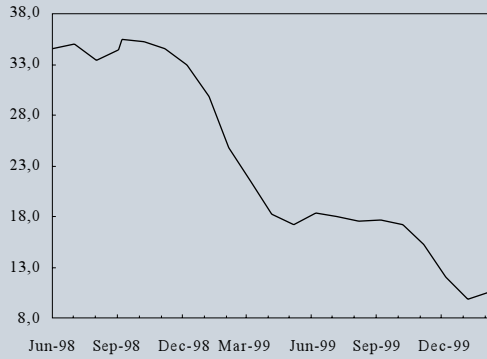
It is to be noted however that the yield curve does not necessarily have to slope upward, for its slope direction will depend not only on the risk premium but also on credit-market expectations about future movements in inflation and the real rate. For example, if inflation is expected to fall sharply, the yield curve may have a downward slope. In other cases, there may be breaks in the yield curve slope at certain maturities. In particular, if the yield curve is an inverted U, investors could expect the interest rate to start to weaken only in the medium term but to tend to remain steady in the short term.

Yield-curve evolution has been presented in previous Reports and will be used here as follows to explain the recent behavior of interest rates. Figure 1 shows the evolution of the 90-day basic interest rate calculated by the Banking Superintendency (the TBS rate): this is the financial system's average spot 90-day deposit rate, at annual rate. Figure 2 shows the yield curve for each end of quarter since June 1998, which portrays the return on CDs of different maturities at a given point in time.

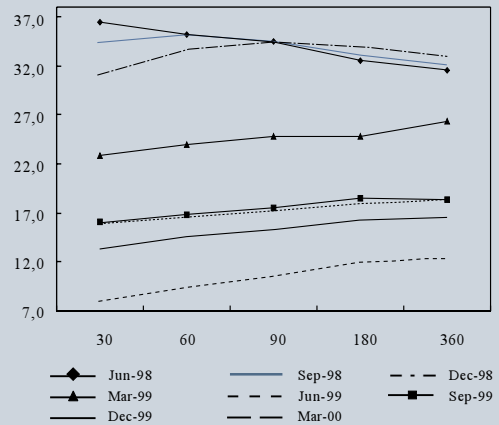
The fall in interest rates during most of the first half of 1999 was foreseen by investors, as indicated by the downward slope of the yield curves of June and September 1998 (Figure 2). In addition, though the yield curve of March 1999 may not have predicted a rise in the interest rate, it did give some sign that interest rates would stop falling at least in the second half of 1999, as did actually happen as can be seen in Figure 2. In addition, the yield curve observed in March 2000 may be indicating that market expectations about the 90-day interest

rate over the next six months have changed and are pointing either to their remaining at their present levels or rising slightly. Lastly, for maturities over 180 days, the signs may be that agents expect interest rates to fall.

**FIGURE 1**  
**90-DAY BASIC DEPOSIT RATE CALCULATED**  
**BY THE BANKING SUPERINTENDENCY (TBS)**  
 (ANNUAL EFFECTIVE RATE)



**FIGURE 2**  
**TBS YIELD CURVE**



### III

## MEASURES OF EXPECTATIONS

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### INFLATION EXPECTATIONS SURVEY FINDINGS

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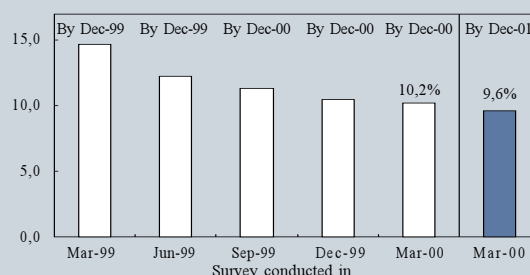
To upgrade the quality of information available on expectations about the main economic variables and improve coverage of the sample used, the Bank is presently working on a new expectations survey, whose findings will be released in the coming months. This Report provides the findings of the old survey.

The March 2000 Inflation Expectations Survey reveals that agents expect a 10.2% inflation by the end of the year (down by 0.2 percentage points on expectations expressed in December 1999), and a 9.6% inflation by the end of 2001 (Figure 45).

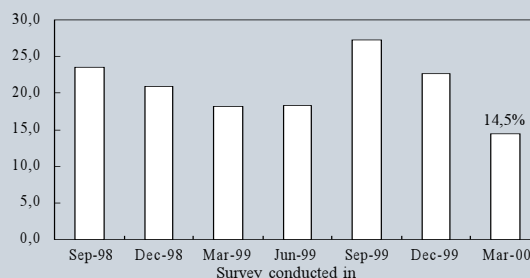
Devaluation is expected to average 14.5% by the end of 2000 (Figure 46) and GDP growth to be 1.3% (Figure 47).

Figures 48 to 51 present agents' answers to survey questions about their perceptions of credit and liquidity conditions in the economy. Perceptions of current (March) liquidity were mixed, with 10% of respondents considering it to be very low, 29% low, 23% neutral, and 39% high. But there seem to be some agreement about liquidity in the next six months: 63% of respondents think it will remain at its current level, 24% see it rising, and only 14% believe it will fall. Credit availability is perceived to be very low by 20% of agents, low by 49%, neutral by 11%, and high by only 18%. Credit availability in the next six months is expected by most respondents (48%) to remain as it is now, but 45% see it rising, and barely 8% think it will decline.

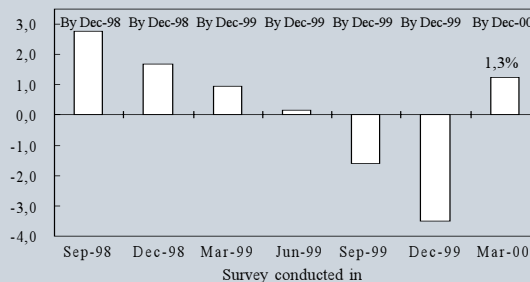
**FIGURE 45**  
EXPECTED INFLATION  
(PERCENTAGE)



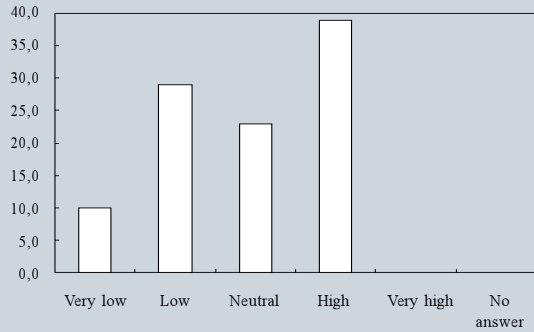
**FIGURE 46**  
EXPECTED YEAR-END DEVALUATION  
(PERCENTAGE)



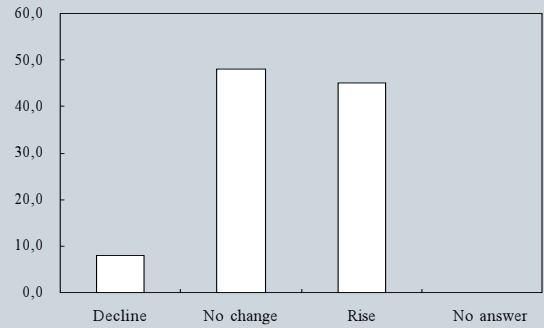
**FIGURE 47**  
EXPECTED GDP GROWTH  
(PERCENTAGE)



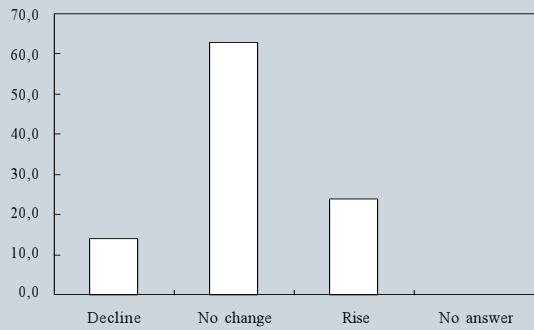
**FIGURE 48**  
**HOW DO YOU PERCEIVE THE LIQUIDITY SITUATION TODAY?**  
 (PERCENTAGE)



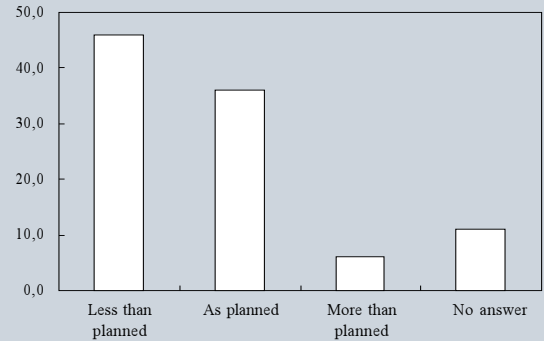
**FIGURE 51**  
**HOW DO YOU PERCEIVE CREDIT AVAILABILITY IN 6 MONTHS' TIME?**  
 (PERCENTAGE)



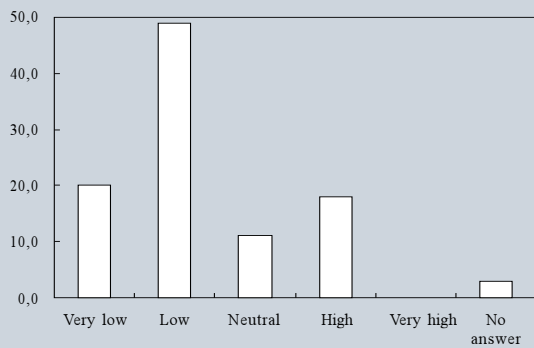
**FIGURE 49**  
**HOW DO YOU PERCEIVE THE LIQUIDITY SITUATION IN 6 MONTHS' TIME?**  
 (PERCENTAGE)



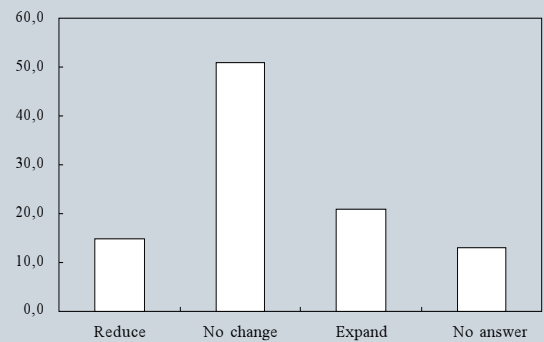
**FIGURE 52**  
**PROJECT EXECUTION IN PAST 12 MONTHS**  
 (PERCENTAGE)



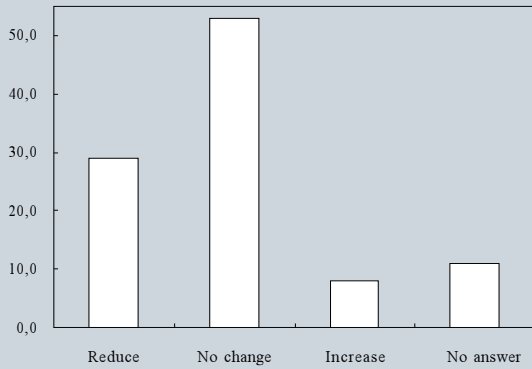
**FIGURE 50**  
**HOW DO YOU PERCEIVE CREDIT AVAILABILITY TODAY?**  
 (PERCENTAGE)



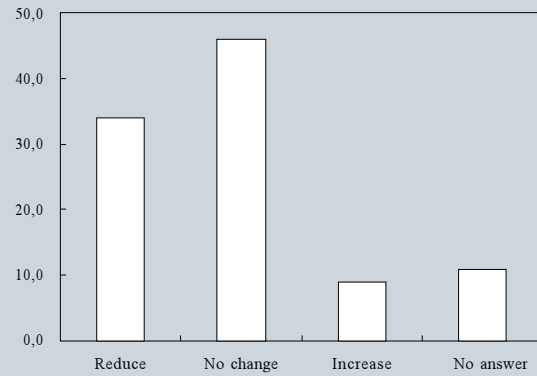
**FIGURE 53**  
**INVESTMENT PLANS FOR NEXT 12 MONTHS: INSTALLED CAPACITY**  
 (PERCENTAGE)



**FIGURE 54**  
**WORKFORCE PLANS FOR NEXT 6 MONTHS**  
 (PERCENTAGE)



**FIGURE 55**  
**WORKFORCE PLANS FOR NEXT YEAR**  
 (PERCENTAGE)



Survey data on economic activity (Figures 52 and 53) show that in the past 12 months 46% of respondents carried out fewer projects than planned, whereas 36% accomplished what they had planned, and only 6% exceeded their plans. In the next 12 months, 51% of respondents will leave their installed capacity unchanged, 21% plan to invest in expansions, and just 15% expect to reduce theirs.

Lastly, questions about employment (Figures 54 and 55) revealed that 53% of the sample would keep the same number of employees, 29% would reduce their workforce, and a scant 8% were thinking of hiring more people. For next year, the proportion of respondents keeping the same workforce dropped to 46%, while those reducing theirs went up to 34%, and only 9% planned to expand their staff.

## IV

### INTERNATIONAL CONTEXT

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#### A. GENERAL ASPECTS

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World economic conditions improved further in the first quarter of 2000, as evidenced by the positive performance of the three major economies: United States, European Union and Japan. The US economy is expected to grow more slowly over the rest of the year, as predicted signs of overheating appear and move the Federal Reserve Bank to take corrective measures. Even so, various international analysts believe that a soft landing of the US economy should not affect the performance of other economies unduly since this is mainly driven by domestic factors.

Latin American economies performed well in the fourth quarter of 1999 and first of this year. Their main problems currently have to do with financing high current-account deficits, maintaining a current-account balance compatible with macroeconomic equilibrium, and reducing public deficits. However, agreements with the IMF, capital inflows and economic recovery provide an optimistic outlook for the region's economies this year.

The US economy's dynamic growth in recent years has begun to show the limits of the growth-inflation relationship, which has been modified principally by productivity gains. In the past two quarters the US economy grew by 4.3% and 4.2%. As a result, unemployment fell from 4.1% to 3.7%, putting further pressure on the labor market and hence on nominal pay and inflation, as indicated by the marked rise in the implicit GDP deflator in the final quarter of 1999. The different inflation indicators have begun

to pick-up, reflecting not only transmission of the rise in world oil prices to internal prices, but also domestic developments such as higher services prices and housing costs. The increase in inflation caused by these developments is unlikely to be transitory.

This state of affairs has prompted the FED to adopt a policy of raising its interest rate gradually over the first half of this year, so as to slow the US economy's growth by the end of the year and curb imbalances between supply and demand that can affect inflation. The effectiveness of this policy, however, is the subject of controversy today. One argument supporting its effectiveness is that the US economy's 6% growth in the second half of last year was transitory, having stemmed from high inventory accumulations motivated by Y2k uncertainty. Those who consider the FED's adjustment policy ineffective for ensuring a soft landing to the US economy base their case on the financial system's and consumers' responses to previous rate increases and on the behavior of foreign economies. In effect, bank credit has expanded despite the FED's rates having been raised by 75 basis points over the second half of last year. And economic recovery in the European Union and some Latin American countries suggests that external demand may put pressure on production.

On balance, the US economy's quarterly growth rates are expected to be somewhat lower this year than in the past four years, when they were about 4%. Inflation is forecast to rise in the first months of the year, because of the behavior of oil prices since the second quarter of 1999 and the internal pressures referred to above. However, in view of an expected

decline in oil prices and an easing of internal pressures, overall inflation is forecast to go up from 2.7% in December 1999 to only 2.9% by the end of this year.

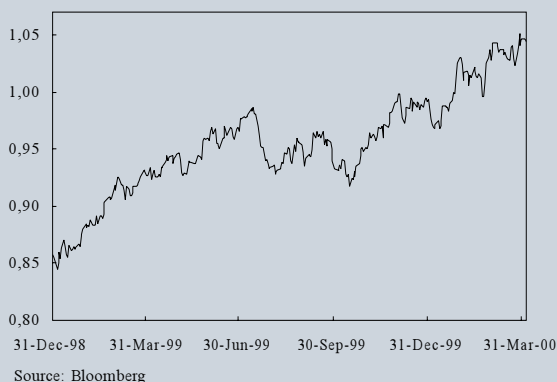
The European Union is showing strong signs of economic recovery, with a 3.1% growth rate in the last quarter of 1999. Several factors have contributed to this upturn, notably stabilization of the euro against the dollar at a lower level than a year ago (Figure 56), lower unemployment, and growing external demand. Economic growth has allowed fiscal deficits to be sharply reduced in countries of the region, so much so that Germany and France are seeking legislative approval to reduce income and corporate taxes by about 50% over the next five years. On the strength of the foregoing, international analysts predict that the region's growth this year will be in the range of 3.5%-4%.

Inflation in the European Union has picked up in recent months, from 1.1% in December to 1.9% in January and 2.0% in February. External factors, such as oil prices, have been partially responsible for this rise, although core inflation--CPI excluding food and energy--also increased over the same period. Core inflation in the European Union is expected to run to 1.7% by the end of this year, up from 1.1% in December 1999, but if those variables continue on the same trend as earlier this year, it may rise to 2.0%.

In view of the core-inflation forecast, monetary policy is expected to be tighter this year, but that should not affect economic recovery. Different analysts therefore estimate that the European Central Bank's REPO rate need only be raised from 3.25% to 4% or 4.0% by the end of this year.

The Japanese economy showed signs of recovery in the fourth quarter of 1999. Growth was driven by the public sector and by exports to neighboring countries. The latest monthly data on the real sector suggest that the recovery may have continued over the first quarter of this year. The all-sector activity index, used as an approximation to real Gross National

**FIGURE 56**  
**EUROS / DOLLAR EXCHANGE RATE**



**FIGURE 57**  
**YEN / DOLLAR EXCHANGE RATE**



Product (GNP), grew by 0.5% in early 2000. Expansion was particularly strong in industry and the tertiary sector (communications, transport, etc.), counteracting the decline in construction. The different indicators of Japan's economic upturn co-exist, however, with adverse factors such as higher unemployment (4.7% in March 2000)<sup>10</sup> and appreciation of the yen against the dollar (Figure 57).

Consequently, economic growth in Japan is expected to be in the range of 1.0%-1.6% this year

<sup>10</sup> The recent trend in Japan's unemployment rate is said to be a consequence of productive-sector recovery and adaptation, not an indicator averse to recovery.



and 1.8%-2.7% in 2001. Inflation is forecast to break the negative trend observed in 1999 (-0.3% in December) and go up to about 0.5% a year over the next two years.

Latin America, too, is showing signs of economic reactivation, mainly driven by exports to developed countries, higher world commodity prices (oil and certain minerals), and lower real domestic interest rates. Besides improvement in output indicators, there are other favorable developments, such as implementation of fiscal reforms in several countries of the region. These reforms may give a more stable character to current growth, which moreover is centered in the private sector. Argentina expects to bring its deficit down from US\$7.1 billion to US\$4.7 billion in the course of the year. Brazil and Ecuador, too, plan to reduce their fiscal imbalances substantially.

Sustainable recovery in the region will depend on both external and internal factors. Adverse external factors include tighter monetary policy in the United States, lower appreciation of the euro against the dollar, and less favorable commodity prices. Internal factors likely to reduce the region's pace of recovery include insufficient reductions in real interest rates and low domestic saving rates. If saving rates are low, the region will need considerable foreign investment, which is usually subject to strong fluctuations and is currently limited by the US economy's growing demand for financial resources.

In any event, the region is expected to show positive growth in 2000, with the pace quickening in 2001 once producer and consumer confidence in the upturn has become strong. The region's biggest economies-Argentina, Brazil and Mexico-are forecast to grow by 2.1%, 2.8% and 4.8% respectively this year, while the economies of Chile, Ecuador and Venezuela are forecast to expand by 6.1%, 1.1% and 3.5% respectively (Table 6). Given these growth rates and the behavior of developed economies, overall growth in Colombia's volume-weighted foreign trade

**TABLE 6**  
**ANNUAL GROWTH OF MAJOR ECONOMIES**

	1999	2000
United States	4,2	4,0
Japan	0,0	1,0
European Union	2,2	3,8
Argentina	(3,4)	2,1
Brazil	0,8	2,8
Chile	(1,1)	6,2
Ecuador	(7,9)	1,1
Mexico	3,7	4,8
Venezuela	(7,2)	3,5

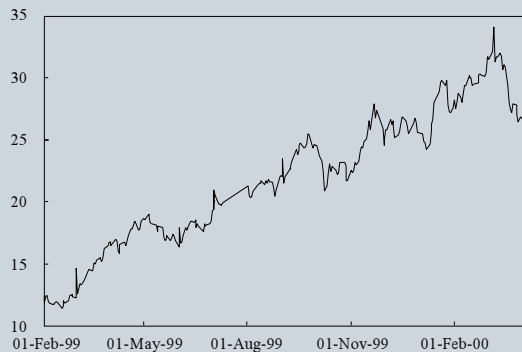
Sources: Bloomberg, JP Morgan Forecasts, and WEFA.

is expected to be 3.7% in 2000, up from 1.5% in 1999. This growth is consistent with the 12% expansion in non-traditional exports forecast by official projections.

## B. COMMODITY PRICES

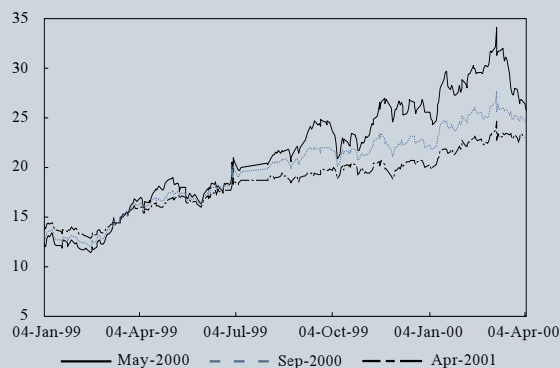
World commodity prices are fundamental to economic recovery in Colombia, and in Latin America in general. Oil and coffee prices play a dominant role in Colombia's economy. Earlier this year oil prices soared but have since stabilized at much the same levels as in the fourth quarter of 1999 (US\$26 a barrel). OPEC, at its meeting in Vienna on March 27, fixed a new quota plan for this year, which raises supply from member countries and provides for an automatic stabilizing mechanism should the price deviate from the defined range of US\$22-US\$28 a barrel. Thus, world oil prices are expected to average US\$26 in 2000, slightly lower than the current price of US\$27. Ecopetrol, Colombia's state oil company, expects the price of Colombian oil to average US\$24. This implies a gradual reduction in crude prices in

**FIGURE 58**  
WTI OIL PRICE  
NEW YORK STOCK EXCHANGE  
(DOLLARS/BARREL)



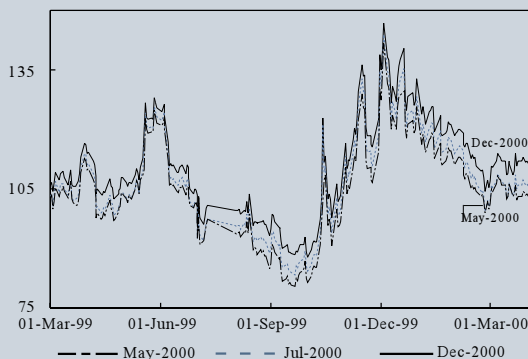
Source: Bloomberg.

**FIGURE 59**  
WTI OIL FUTURES PRICE  
NEW YORK STOCK EXCHANGE  
(DOLLARS/BARREL)



Source: World Bank.

**FIGURE 60**  
ARABICA COFFEE FUTURES  
NEW YORK STOCK EXCHANGE  
(CENTS/POUND)



Source: Bloomberg.

2000, from US\$27 in January to US\$23 in December (Figure 58). Forecasts of oil-price trends are corroborated by the price profile of futures on the New York Stock Exchange. This profile shows a large decline, indicating that the supply of crude is expected to increase over the year. The May 2000 contract made in March has a price of US\$26.90 a barrel, while the price of three and four months' contracts is US\$25.19 and US\$23.39 a barrel (Figure 59).

The average Colombian coffee price on the New York Stock Exchange fell sharply in the first quarter, from US\$1.40 a pound in December 1999 to US\$1.19 in March 2000. However, compared with last year's fourth-quarter average, the average for this first quarter was stable at around US\$1.23 a pound. The fall in world coffee prices relative to the December average may be explained by higher exports in January from Brazil, Vietnam, Mexico and Guatemala, which expanded world inventories. These lower prices may continue for several months, given that Arabica coffee prices in futures markets (Figure 60) are below December-1999 levels. The price of contracts made in March 2000 for delivery in May is US\$1.03 a pound, reflecting agents' high expectations about availability. But in futures contracts with longer delivery periods the prices are higher, reflecting the financial and maintenance costs implicit in such contracts rather than expectations of rising prices.

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### C. FINANCIAL OUTLOOK

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Although a good many Latin American countries have begun to report some signs of recovery, markets have shown a prudent behavior toward the region. This is evidenced by a marked stability in sovereign-debt rates for most countries except Colombia, which saw an increase during the first quarter in the rates applied to its debt.

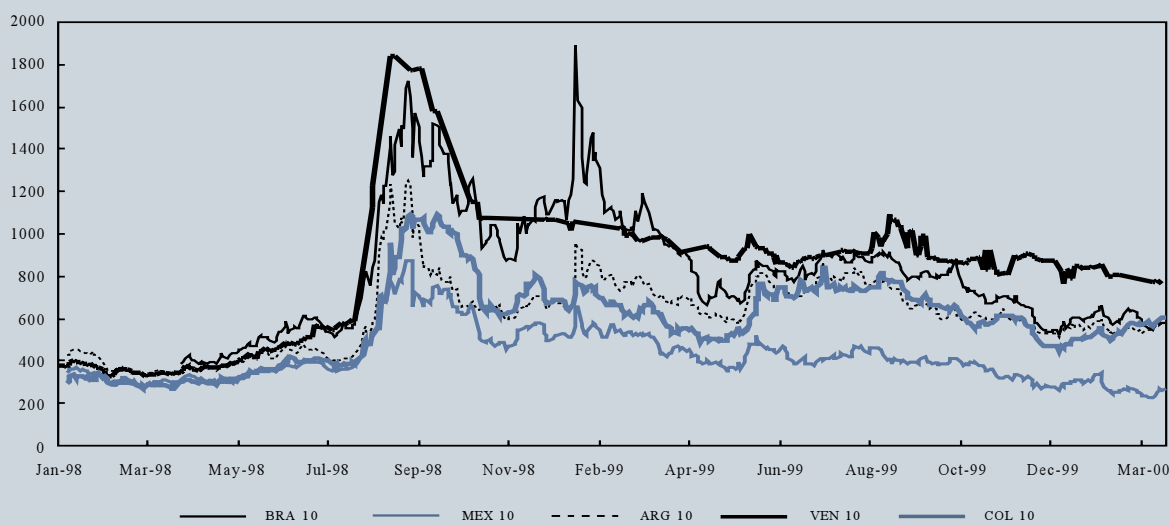
Interest rates on US Treasury and European bonds rose in the first quarter of 2000. As stated above,

this rise was to be expected from the continued growth in demand, which has caused some inflationary imbalances in both regions. The second quarter is expected to bring an even stronger FED policy and higher interest-rate rises.

Financial developments in Europe are closely linked to inflationary wage and fiscal pressures in the region's countries. In recent weeks the European Central Bank has had to revise up its inflation forecast by 0.5 percentage points, from 1.5% to 2%. In addition, the surge in oil prices may influence pay growth. Lastly, in some countries of the region (mainly France) there have been large increases in fiscal budgets. The combination of the above developments will create upward pressure on interest rates, which are expected to rise by about 100 basis points over the rest of year, with rate rises occurring especially in May, July, September and November.

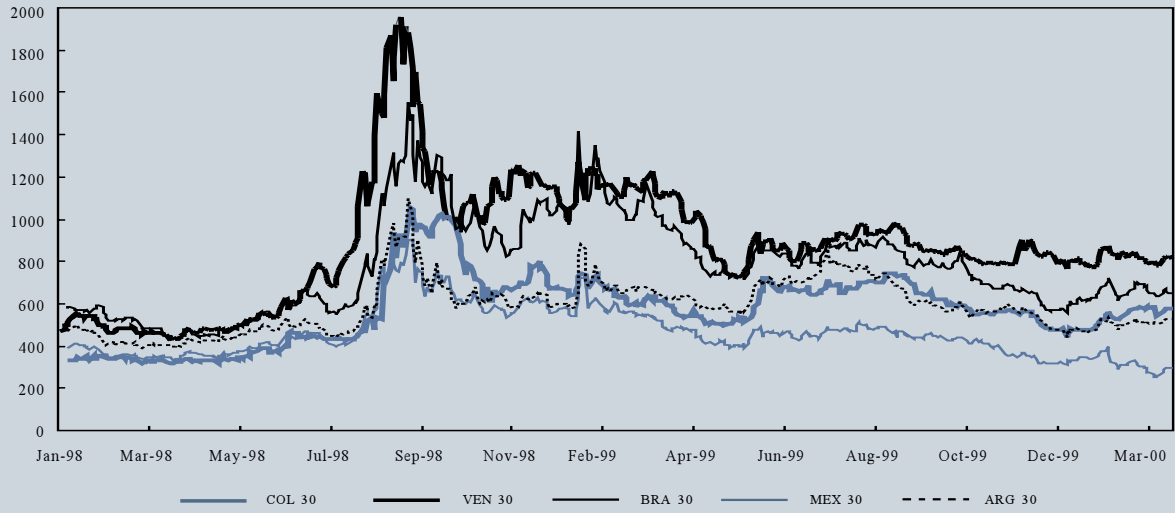
Spreads on 10- and 30-year Latin American debt increased in the first quarter of this year, mainly because of higher interest rates on US and European bonds. The increase was not too large thanks to satisfactory fiscal results in Brazil, the continuation of good economic performance in Mexico, and recoveries in Argentina and Chile. The average spread on 10-year debt was 506 basis points at the end of the first quarter, up by 46 points on three months earlier (460 basis points). The corresponding increase in the 30-year spread was very similar: 44 points, bringing the average to 574 basis points by the end of the first quarter (Figures 61 and 62). In contrast, the steadily widening spread on 10-year Colombian debt has resulted in a first-quarter rise of about 200 basis points. The behavior of this spread during the coming quarters will depend to a great extent on the market's reaction to the announcement of delay in implementation of some economic reforms included in the IMF agreement.

**FIGURE 61**  
**SPREADS ON 10-YEAR LATIN AMERICAN DEBT**  
**(BASIS POINTS OVER 10-YEAR US TREASURY BONDS)**



Source: Bloomberg.

**FIGURE 62**  
**SPREADS ON 30-YEAR LATIN AMERICAN DEBT**  
(BASIS POINTS OVER 30-YEAR US TREASURY BONDS)



Source: Bloomberg.

## V

### INFLATION FORECASTS

The inflation forecasts for 2000 and 2001 presented here have been obtained by using different statistical models: ARIMA-type and structural models. It is assumed that the incipient recovery shown by the economy in the second half of 1999 will be consolidated this year, producing a GDP growth that is positive but moderate in 2000 and stronger in 2001.

It is further assumed that the monetary aggregates will continue to be consistent with the Bank's 10% inflation target for 2000, and with financial programming for 2001 under the IMF agreement. Both the time-series and structural models forecast an inflation range of 9%-11% for 2000 and 7.5%-10% for 2001.

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