



# INFLATION REPORT

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BANCO DE LA REPÚBLICA

CENTRAL BANK OF COLOMBIA

BOGOTÁ. D,C,. COLOMBIA

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# INFLATION STRATEGY AND OBJECTIVES IN COLOMBIA

## OBJECTIVES

Monetary policy in Colombia is based on inflation targeting, which is intended primarily to keep inflation low and to ensure stable long-term growth in output. Accordingly, monetary policy objectives combine the goal of price stability with maximum sustainable growth in output and employment. In this way, monetary policy complies with the country's constitution and contributes to the well being of the Colombian population.

## HORIZON AND IMPLEMENTATION

The Board of Directors of Banco de la República (BDBR) defines quantitative inflation targets for the current year and the next. BDBR policy initiatives are designed to meet each year's target and to provide for long-term inflation at around 3%. The annual variation in the consumer price index (CPI) is the inflation measurement used.

## THE DECISION-MAKING PROCESS

Monetary policy decisions are based on an analysis of the current state of the economy and its prospects for the future and on an assessment of the inflation forecast compared to the inflation targets. If the assessment suggests, with enough certainty, that inflation will deviate from its target under current monetary-policy conditions, and that said deviation would not be due to temporary shocks, the BDBR modifies its policy stance. It does so primarily by changing

the intervention interest rate (charged by Banco de la República on short-term liquidity operations).

## COMMUNICATION AND TRANSPARENCY

Decisions on monetary policy are made at meetings of the Board of Directors and announced immediately thereafter, in a press bulletin posted on the Bank's website ([www.banrep.gov.co](http://www.banrep.gov.co)). The inflation reports are published quarterly and lend transparency to the Board's decisions. They also contribute to a better understanding of monetary policy and add to its credibility. Specifically, they i) let the public know how the Board of Directors and the Technical Governor of the Bank view recent and anticipated changes in inflation and its short and medium-term determinants; ii) explain the implications of those determinants for monetary-policy management, within the scope of inflation targeting; iii) describe the context and analysis justifying monetary-policy decisions taken during the quarter; and iv) provide information that helps economic agents to form their own expectations about prospects for inflation and growth in output.

# CONTENTS

GRAPHS AND TABLES	6
ASSESSMENT OF INFLATION AND POLICY DECISIONS	9
I. RECENT DEVELOPMENTS IN INFLATION	17
A. RECENT TREND IN INFLATION	17
B. FACTORS THAT DETERMINE INFLATION	22
BOX 1: WHAT IS HAPPENING TO FOOD INFLATION?	30
II. FINANCIAL MARKETS	34
A. EXTERNAL CONTEXT	34
B. FINANCIAL MARKETS	35
III. THE MACROECONOMIC OUTLOOK	41
A. THE INTERNATIONAL CONTEXT	41
B. DOMESTIC GROWTH	45
C. BALANCE OF PAYMENTS	47
D. INFLATION FORECASTS	48
ATTACHMENT: MACROECONOMIC FORECASTS BY DOMESTIC AND FOREIGN ANALYSTS	53

# GRAPHS AND TABLES

## I. RECENT DEVELOPMENTS IN INFLATION

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Graph 1	Annual Consumer Inflation	18
Graph 2	Core Inflation Indicators	19
Graph 3	Regulated CPI	21
Graph 4	Tradable CPI Excluding Food and Regulated Prices	21
Graph 5	Non-tradable CPI Excluding Food and Regulated Prices	21
Graph 6	Food Inflation Breakdown	22
Graph 7	Total Investment as a Percentage of GDP	24
Graph 8	Annual GDP Growth in Tradables and Non-tradables	26
Graph 9	Output Gap	27
Graph 10	Expected Demand Versus Installed Capacity	27
Graph 11	A. Heavy Construction Wage Index	28
	B. Nominal Retail and Industrial Wage	28
Graph 12	A. Is your company having problems finding employees or workers?	28
	B. Will the wage hikes anticipated for the next 12 months affect your profits?	28
Graph 13	Annual Growth in the Cost of Domestic Raw Materials	29
Graph 14	Annual Growth in the Cost of Imported Raw Materials and Annual Devaluation	29
Graph 15	Actual and Expected Inflation at Three, Six, Nine and Twelve Months	30
Table 1	Current Inflation and Inflation Forecast for March 2007	18
Table 2	Consumer Price Index: March 2007	20
Table 3	GDP Growth by Type of Expenditure	24
Table 4	GDP Growth by Supply	26

## II. FINANCIAL MARKETS

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Graph 16	Monetary Policy Rate in the United States, the Euro Zone and Japan	35
Graph 17	EMBI+ Emerging Economies Country-risk Premium	35
Graph 18	Nominal Exchange Rate for Different Latin American Currencies against the Dollar	35
Graph 19	Annual Growth in Monetary Aggregates	36
Graph 20	Cash	36
Graph 21	Liabilities Subject to Reserve Requirements	36
Graph 22	Savings, CDs and other Liabilities Subject to Reserve Requirements	37
Graph 23	Total Gross Portfolio	37
Graph 24	Portfolio and Liabilities Subject to Reserve Requirements	37
Graph 25	Consumer Loan Portfolio Risk Indicator	37
Graph 26	CD Distribution	39
Graph 27	Monthly Average Interest Rates	40
Graph 28	TES Trading Rate, by Quarters	40
Table 5	Deposit Rates	38
Table 6	Lending Rates	39

## III. THE MACROECONOMIC OUTLOOK

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Graph 29	Price of Oil (WTI) on the New York Exchange	44
Graph 30	Total Commodity Price Index, without Oil (WFC)	44
Graph 31	Real Annual Growth in Household Consumption and Fedesarrollo Consumer Index	46
Graph 32	Real Annual GDP Growth	46
Graph 33	Probability Distribution of the Inflation Forecast ( <i>Fan Chart</i> )	52
Table 7	Growth Forecasts for Colombia's Major Trading Partners	42
Table 8	International Prices	45
Table 9	GDP Growth by Type of Expenditure	47
Table 10	Central Model Forecasts (TMM)	50

# ASSESSMENT OF INFLATION AND POLICY DECISIONS

The rate of growth in domestic demand remained high during the first quarter, similar to what it was at the end of 2006. The external context continued to favor good external demand, capital inflows and high terms of trade. These factors point to good growth in gross domestic product (GDP) during 2007 and additional pressure on the economy's productive capacity.

The Board of Directors of Banco de la República (BDBR) has raised its intervention interest rate by 250 basis points (bp) since April 2006, as precaution against the emergence of inflationary pressure on demand. A partial pass-through of the Bank's interest rate hike to the deposit rate and to several lending rates in the financial system was evident at the end of the first quarter. The pace of loan portfolio growth remained high, but has slowed somewhat in recent months. The impact of the cumulative intervention interest rate hikes on credit, growth in aggregate demand and inflation, particularly inflation in non-tradable goods and services, is expected to be more evident during the second half of the year.

The rise in consumer inflation during the first quarter was more than expected, mainly because of changes in the price of food and certain regulated goods and services. Although part of the recent increase in food prices should abate during the second half of the year, the inflation forecasts for 2007 are up and the likelihood of meeting the inflation target for this year is less than the estimate published in the January edition of this report. However, non-food inflation should be near the center of the target range (between 3.5% and 4.5%) by the end of the year.

## SUMMARY OF THE INFLATION SITUATION

Annual consumer inflation was 5.8% in March, which is more than at the end of 2006 (4.5%). The market was surprised by the outcome for inflation in recent months, which surpassed the estimates published in previous reports. As to the Bank's projections, most of the forecast errors dealt with food. Non-food inflation behaved as expected.

The rise in inflation is explained mainly by the trend in food and regulated prices:

- The main inflation shock so far this year originated with El Niño weather and its effect on food prices. Nearly 45% of the build-up in total inflation during the first quarter and 80% of the increase in March are related to the impact of El Niño.
- The escalation in international prices for agricultural products was propelled by the rise in oil and fuel prices, given the increased demand for bio-fuels. This exerted upward pressure on domestic prices as of mid-2006, particularly in the case of processed foods, which saw an increase in inflation from 5.8% at December to 8.5% at March.
- Food prices, particularly for meat, have been seriously affected by the boom in legal and illegal sales to Venezuela. They began to rise at the beginning of the year, coinciding with sharp price increases and the reports of food shortages in Venezuela.
- The increase in inflation in regulated prices so far this year is related to the rise in fuel prices throughout 2006 (10.4%) and the impact this had on transport prices, which experienced an increase in inflation rise from 6.6% in December to 7.7% in March.

The rise in non-food inflation from 3.9% in December to 4.4% in March was due primarily to regulated price inflation. Non-food inflation, excluding regulated prices, went from 3.4% to 3.8% during that period. However, other core inflation indicators were up as well, and the average of the three most commonly used indicators (nucleus 20, non-food CPI, and CPI excluding staple foods, transportation and public utilities) was 5.1% in March, having been 4.5% in December.

As part of non-food inflation, excluding regulated prices, inflation in non-tradable goods and services went from 4.7% in December to 4.9% in March. The rise in non-tradable inflation since September 2006 (when it reached 4.2%) and its deviation from the inflation targets is probably associated with the strong growth in demand and the decline in the economy's surplus productive capacity.

The following is predicted with respect to the emergence of shocks and how they might affect inflation in the future:

- Inflation pressure on food, as a result of El Niño weather, is temporary and should disappear during the second half of the year. However, the inflation pressure generated by exports to Venezuela is expected to continue throughout 2007. The pressure associated with international oil and bio-fuel prices will depend on how world demand responds to the high prices for products such as corn, sugar and vegetable oil, among others. As a whole, the food inflation forecast for the end of the year has increased from 5.8% in the last quarterly report to 6.5% in this report.
- Inflation in regulated prices is expected to decline during the second half of the year to 6% by December, which is similar to the forecast published in the last edition of this report.



- Given the sharp rise in food prices so far this year, annual food inflation is expected to decline substantially during 2008, at least during the first six months and provided no major shocks occur.

Tradable and non-tradable inflation (excluding food and regulated prices) during the next four to eight quarters will depend primarily on: i) the momentum in aggregate demand and changes in surplus productive capacity; ii) the way inflation expectations develop; iii) how the exchange rate behaves; and iv) wage hikes compared to labor productivity gains:

- In 2006, domestic demand (including inventory changes) was up by 9.9%, bolstered principally by investment in machinery and equipment. Growth in household consumption accelerated during the last six months of the year, going from 5.5% to 8.0%. The GDP growth forecasts for 2007 are between 5% and 6.5%, with an increase in domestic demand of about 8%, in the middle of the GDP growth range (5.8%). Household consumption, as part of domestic demand, should increase even more.
- Despite a considerable rise in investment, the various measurements of productive capacity showed historically high levels for the second half of 2006 and for the year to date. Based on the way a number of indicators have behaved, it is estimated that demand-pulled inflationary pressure on productive capacity has increased and should continue to do so for the remainder of the year. Nonetheless, the impact of previous interest rate hikes on demand is expected to be more evident during the second half of the year.
- According to various indicators, inflation expectations rose during the first quarter, along with the surge in inflation. Moreover, the survey of expectations conducted quarterly by Banco de la República shows the credibility of the inflation target for 2007 is low (26%), much less than at the start of the year (85%).
- There is a great deal of uncertainty surrounding the exchange rate forecast. However, trends in the balance of payments show higher international prices for commodities and larger private capital flows, primarily foreign direct investment (FDI), compared to the forecasts in the December quarterly report. These factors, as a whole, would result in a lower average rate of exchange than the one predicted in the December report. Consequently, by the end of the year, tradable inflation would be somewhat less than it is now.
- Available figures on wages and productivity suggest that, up to now, the increases in these variables have been aligned, which means little probability of inflationary pressure on wage costs. Nonetheless, this outcome should be viewed with caution, inasmuch as productivity has an important cyclical component and there are no indicators available for economic activities other than industry and commerce. For the remainder of the year and given the projected

growth in GDP and its impact on the demand for work, the labor market could tighten, without ruling out the appearance of mid-term inflation pressure on labor costs.

How core inflation behaves in the coming quarters also will depend on the impact of the policies adopted in April 2006, which occasioned a cumulative hike of 250 bp in the intervention interest rate by April 2007. These increases have passed through, in part, to other interest rates in the economy. Since March 2006, the term deposit rate (DTF in Spanish) has increased by 156 bp, the average CD rate, by 178 bp, and the rates on CDs over 360 days, by 230 bp or more. Rates for short-term credit such as treasury or preferred loans are up by 200 bp or more.

Even so, there is evidence that the extent to which monetary intervention interest rate hikes have passed through to other rates in the economy and to the demand for credit has been affected by a shift in bank portfolios from TES to loans and by a growing preference for deposits with the financial system. The latter tends to raise the amount of funds available for bank loans. This is happening in an economy that continues to grow quickly and sustains agents' confidence to loan and borrow money.

## POLICY DECISIONS

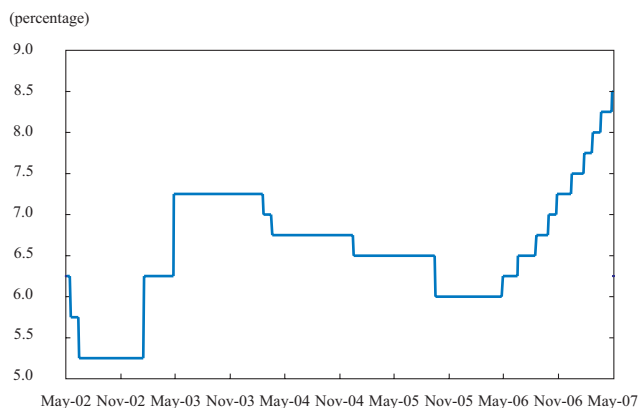
Macroeconomic data available for the first quarter confirmed the acceleration in economic activity and aggregate demand as of the last quarter of 2006. It also raised prospects for economic growth in 2007, above what was anticipated at the start of the year, and showed unexpected increases in inflation.

Although the build-up in inflation is explained primarily by supply factors and exogenous shocks to monetary policy, those shocks could translate into added inflation expectations and further pressure on prices and wages. The more prolonged the shocks over the course of time, the more likely this is to occur, as is anticipated in the case of inflation pressures derived from exports to Venezuela and possibly from international prices for certain agricultural products associated with bio-fuel production. If inflation expectations increase, more effort will be required in terms of monetary policy to maintain convergence towards the long-term target for inflation.

Another current risk to monetary policy is the possibility of excessive growth in demand compared to the increase in productive capacity. In this case, non-tradable inflation could swell even more, jeopardizing price stability and causing problems with respect to convergence towards the long-term target for inflation. Furthermore, the external deficit might grow to levels that threaten future macroeconomic stability.

Considering these elements and the foregoing assessment of the macroeconomic context, the BDBR decided to continue to reduce the monetary stimulus by increasing the Bank's intervention interest

**INTERVENTION INTEREST RATE  
REPO AUCTIONS**



Source: Banco de la República.

rates. As a result of that decision, those rates were increased by 25 bp at each BDBR meeting in February, March and April 2007 (Graph), bringing the base interest rate for repo auctions to 8.5% by the end of April.

The BDBR continued its discretionary intervention in the exchange market during the first four months of the year to curb peso appreciation and its impact on the productive sector and macroeconomic stability. In pursuit of that policy, Banco de la República purchased US\$4,527.4 million (m) in foreign currency by April (Table).

On April 2, 2007, the BDBR activated auctions for interest-bearing non-reserve deposits at 7 and 14

**BANCO DE LA REPÚBLICA FOREIGN CURRENCY PURCHASE/SALE OPERATIONS  
(MILLIONS OF DOLLARS)**

Item	2006		2007			
	Acumulado Jan-Dic	January	February	March	April	Accumulated Jan-Apr
<b>Purchases</b>	<b>1,780.5</b>	<b>1,001.6</b>	<b>1,022.9</b>	<b>1,836.7</b>	<b>666.2</b>	<b>4,527.4</b>
<b>Put options</b>	<b>583.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
To accumulate international reserves	0.0	0.0	0.0	0.0	0.0	0.0
To control volatility	583.8	0.0	0.0	0.0	0.0	0.0
<b>Discretionary Intervention</b>	<b>1,196.7</b>	<b>1,001.6</b>	<b>1,022.9</b>	<b>1,836.7</b>	<b>666.2</b>	<b>4,527.4</b>
<b>Sales</b>	<b>1,944.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Call options</b>	<b>944.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
To control volatility	944.3	0.0	0.0	0.0	0.0	0.0
<b>National Government</b>	<b>1,000.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Net Purchases</b>	<b>(163.8)</b>	<b>1,001.6</b>	<b>1,022.9</b>	<b>1,836.7</b>	<b>666.2</b>	<b>4,527.4</b>

Source: Banco de la República.

days to increase the Bank's capacity to offset the effects of monetary intervention. Later, it activated deposit auctions at 30, 60 and 90 days. The amount of these auctions will be defined in a way intended to keep the market's short-term interest rates in line with the Bank's intervention interest rate. The base rate for reverse repo auctions was set 10 bp below the one-day repo rate.

Moreover, unlimited seven-day deposits, in the form of interest-bearing deposits that do not constitute reserves held by the Bank, will be authorized at a Lombard contraction rate equivalent to the base rate for interest-bearing deposit auctions, minus 100 basis points. The Lombard contraction rate is now 7.40%.

To supplement its interest rate hikes, the BDBR introduced other measures to curb the growth in credit and aggregate demand. At a meeting on May 6, 2007, it imposed a non-remunerative marginal reserve requirement for domestic currency liabilities that exceed the level registered on May 7. The following percentages apply:

- 27% for checking accounts and other checkable deposits
- 12.5% for savings accounts and similar deposits
- 5% for certificates of deposit under 18 months and similar time deposits.

The foreign debt deposit stipulated in External Resolution 08/ 2000 was reinstated to prevent the interest rate hikes and the new reserve requirements from leading to an influx of short-term capital. The deposit is held for six months and equals 40% of the disbursed amount, calculated at the representative market rate of exchange (TRM in Spanish) on the date the loan is furnished.

Finally, the leveraged position of derivative operations carried out by foreign exchange market intermediaries was limited to 500% of their technical capital. In this case, the goal is to reduce the risk to foreign exchange brokers by restricting their possibilities to hedge positions via leveraging. It also supplements the requirement calling for an external debt deposit.

Board of Directors, Banco de la República



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# I. RECENT DEVELOPMENTS IN INFLATION

**During the first quarter, consumer inflation** increased more than expected, mainly because of changes in prices for food and certain regulated goods and services. Food inflation has been affected largely by El Niño weather, the increase in exports to Venezuela, and higher international prices for foodstuffs associated with bio-fuel production.

**Non-food inflation, excluding regulated prices,** went from 3.4% to 3.8% during the period from December 2006 to March 2007. Within this group, inflation in non-tradable goods and services has been on the rise, probably in response to greater demand and less surplus productive capacity in the economy.

**Domestic demand continued to swell during the first quarter, as was the case at the end of 2006.** New information suggests that surplus productive capacity continued to decline and the economy would have faced more surplus demand in recent quarters than was estimated initially.

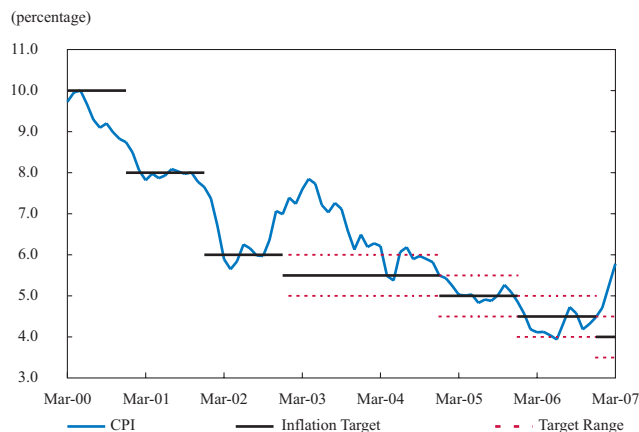
**Inflation expectations** rose during the first quarter, according to the results of various surveys.

## A. RECENT DEVELOPMENTS IN INFLATION

Annual consumer inflation gained speed during the first quarter of 2007 and was 5.8% by March. This is 110 basis points (bp) more than in December 2006 and tops the range set for 2007 (between 3.5% and 4.5%) (Graph 1). The upward trend in annual consumer inflation is now almost one year old and is due largely to the behavior of prices for food and regulated goods/services. However, prices for certain tradable and non-tradable goods and services are also a contributing factor.

GRAPH 1

ANNUAL CONSUMER INFLATION



Source: DANE, Banco de la República calculations.

The rise in inflation during the first quarter surprised the markets and exceeded the baseline scenario forecasts in the inflation reports for previous quarters. However, those forecasts did not include the impact of supply shocks, which were highly uncertain at the time, such as an additional increase in international food prices and El Niño weather. These effects, particularly El Niño weather, are taken into account for the risk balances in the September and December reports, which indicate they could generate upward inflation pressures.

With respect to the baseline scenario for the December report, the forecast errors dealt primarily with foods and, to a lesser extent, with regulated prices. On the contrary, by March, tradable and non-tradable inflation had behaved similarly to what the models predicted. In fact, the tradable and non-tradable inflation increase reflected in the Bank’s forecasts for several quarters is very much in line with what has occurred (Table 1).<sup>1</sup>

Higher inflation so far this year is due to several factors, some of which originate with temporary supply shocks caused by the weather (El Niño). In addition to these pressures, there are others that originate outside monetary policy. They have a more persistent impact and were present throughout 2006. High oil

<sup>1</sup> For example, in the March 2006 edition of the *Inflation Report*, the forecast for non-tradable inflation at March 2007, excluding food and regulated prices, was 5% (as opposed to an actual rate of 4.93%). The forecast for tradable inflation, excluding food and regulated prices, was 2.55% (compared to 1.97%). Naturally, this last forecast was based on a higher exchange rate than the one registered since the third quarter of 2006.

TABLE 1

ACTUAL AND FORECAST INFLATION FOR MARCH 2007

	Forecast in December 2006	Actual Rate	Forecast Minus Actual Rate
Total inflation	4.60	5.78	(1.18)
Non-food inflation	4.10	4.38	(0.28)
Non-tradables	4.80	4.93	(0.13)
Tradables	1.70	1.97	(0.27)
Regulated prices	6.80	7.48	(0.68)
Food inflation	5.90	8.90	(3.00)

Source: DANE, Banco de la República calculations.



prices on the international market and their impact on a wide array of domestic prices, ranging from transport to food, are one example. Added to this is the growth in domestic demand and the sharp increase in external demand, particularly in Venezuela.

As in past years, exchange-rate appreciation during 2007 continued to offset some of the upward pressures originating on other fronts. Consequently, inflation in tradable goods and services stayed well below average inflation during the early months of the year, despite some increases compared to the minimum levels registered in 2006.

## 1. Core Inflation

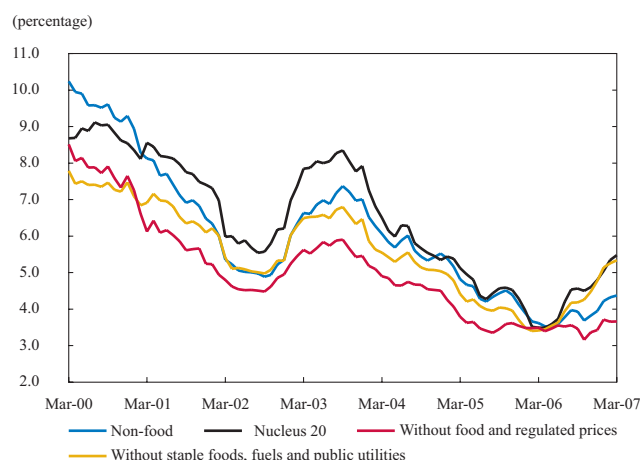
Annual core inflation rose during the first quarter, although not as much as total inflation. The average of the three core inflation indicators monitored by Banco de la República (the non-food consumer price index (CPI), nucleus 20 and the CPI without staple foods, fuel and public utilities) went from 4.5% in December 2006 to 5.1% in March 2007. Non-food inflation was 4.4% by March, which is 43 bp more than in December (Graph 2). As was the case with total inflation, core inflation has risen almost continuously since mid-2006.

Despite the upward trend in all the core inflation indicators, uncertainty about the actual level of this variable has increased in recent quarters and is now particularly high. This conclusion is based on the broad dispersion in the various indicators used to estimate core inflation (Graph 2). For example, an alternative indicator that excludes all foods and regulated prices from the CPI shows a far more moderate surge during the last two quarters, compared to the traditional measurements, and was 3.6% in March, which is still below the center of the target range for 2007. In contrast, nucleus 20 was 5.5%.<sup>2</sup>

For the purpose of this report, non-food inflation is broken down into three sub-baskets: tradables, non-tradables and regulated prices. According to that

GRAPH 2

CORE INFLATION INDICATORS  
ANNUAL CHANGE



Source: DANE, Banco de la República calculations.

<sup>2</sup> Banco de la República is conducting a study to update and replace the core inflation indicators. The goal, in this respect, is to improve its capacity to identify demand-pulled inflationary pressures and/or those originating with a build-up in inflation expectations.

classification, 60% of the rise in non-food inflation during the first quarter is explained by higher inflation in regulated prices. The same group also contributed to nearly 14% of the build-up in consumer inflation during that period (Table 2 and Graph 3). Regulated prices during the first quarter were affected by shocks related to high oil prices and their impact on public transportation fares and gas prices, as well as an increase in annual inflation in public utilities (water) due to a low base of comparison during the same period in 2006.

Annual tradable inflation was up slightly during the first three months of the year (26 bp), despite appreciation in the exchange rate. With inflation well below the total (1.97% at March 2007), this basket (mostly imported) helped to keep inflation on target from early 2004 until last year. Moreover, peso appreciation and sizeable one-time reductions in certain rates (e.g. for long-distance telephone calls) have contributed to less inflation in this group (Graph 4).

The non-tradable group, excluding food and regulated prices, also was responsible for a positive, although small contribution to the slowdown in inflation so far this year (Table 2). However, with the level in March, non-tradable inflation is now above the target range for 2007 (Graph 5). This indicator, which usually performs in line with the status of domestic demand, has been on the rise since the fourth quarter of 2006. The increase coincides with the build-up in private consumption and with a substantial decline in surplus productive capacity, according to different estimates by the Bank.

TABLE 2

CONSUMER PRICE INDEX AT MARCH 2007

Description	Weight	Annual Growth				Share of Build-up for Year to Date (%)
		Dec-06	Jan-07	Feb-07	Mar-07	
<b>Total</b>	<b>100.0</b>	<b>4.5</b>	<b>4.7</b>	<b>5.2</b>	<b>5.8</b>	<b>100.0</b>
<b>Non-food</b>	<b>70.5</b>	<b>3.9</b>	<b>4.2</b>	<b>4.3</b>	<b>4.4</b>	<b>22.6</b>
Tradables	24.7	1.7	2.0	1.9	2.0	4.4
Non-tradables	36.8	4.7	5.0	5.0	4.9	4.5
Regulated prices	9.0	6.1	6.4	7.2	7.5	13.7
<b>Food</b>	<b>29.5</b>	<b>5.7</b>	<b>5.8</b>	<b>7.3</b>	<b>8.9</b>	<b>77.4</b>

Source: DANE, Banco de la República calculations.

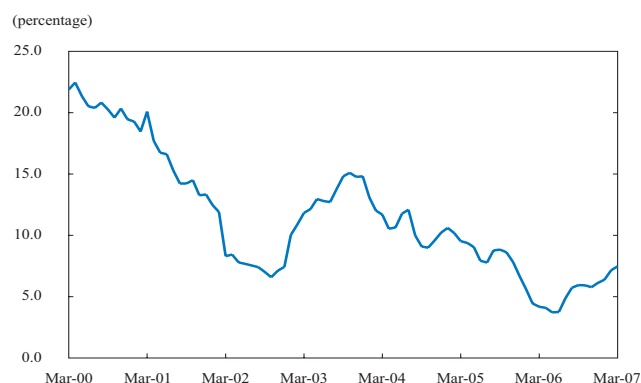
A breakdown of non-tradable inflation into rentals and “others” shows the last two quarters have been particularly important for the second sub-group: prices for services such as education, recreation, culture and entertainment have exerted upward pressure on this sub-basket. However, rentals have performed relatively well, especially at the start of 2007: annual inflation in this item was 3.8% at March, which is less than the annual rate at December. A larger supply of new homes for sale, due to the construction boom, might explain this relatively benign behavior.

## 2. Food Inflation

Nearly 80% of the increase in annual inflation so far this year was concentrated in the food group (Table 2). Annual food inflation rose by more than 300 bp during the last three months, reaching 8.9% in March. A number of pressures have been brought to bear on food prices; some emerged this year and others, the year before. The major pressure originating this year is the decline in rainfall associated with El Niño weather, which dealt a serious blow to agricultural production in January and February, causing major increases in the price of many staple foods (tubers, vegetables and milk, among others). Its impact on production is expected to be temporary, and supply should begin to recover at the end of the second quarter and beginning of the third.

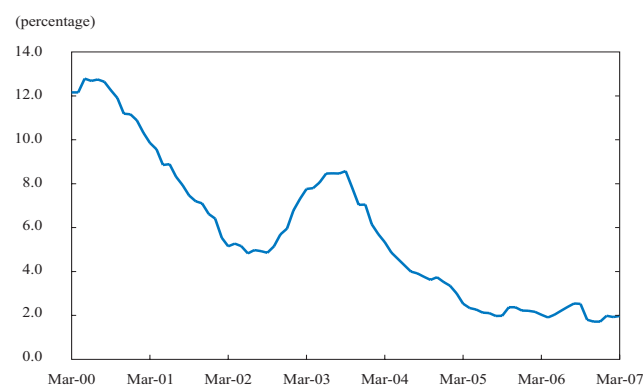
The more permanent pressures originate with the increase in food exports to Venezuela, high external prices, the price of beef, and the strength of domestic demand (Box 1). The growth in sales to Venezuela (both legal and illegal) seems to have had the most impact on prices. Sales to Venezuela would have increased at the start of the year, coinciding with the high price hikes and reports of shortages in Venezuela. Apparently, meat is one of the products affected the most.

**REGULATED CPI ANNUAL CHANGE**



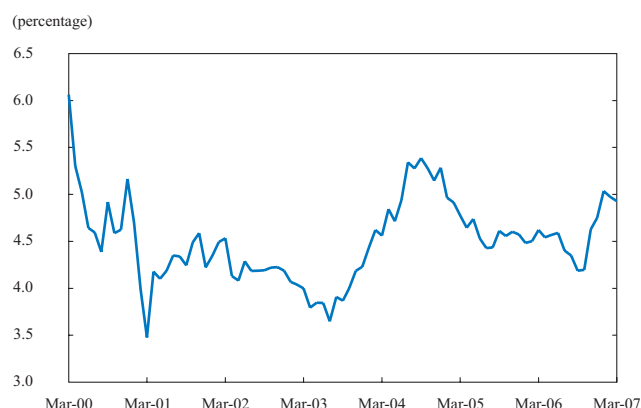
Source: DANE, Banco de la República calculations.

**TRADABLE CPI EXCLUDING FOOD AND REGULATED PRICES, ANNUAL CHANGE**



Source: DANE, Banco de la República calculations.

**NON-TRADABLE CPI EXCLUDING FOOD AND REGULATED PRICES ANNUAL CHANGE**



Source: DANE, Banco de la República calculations.

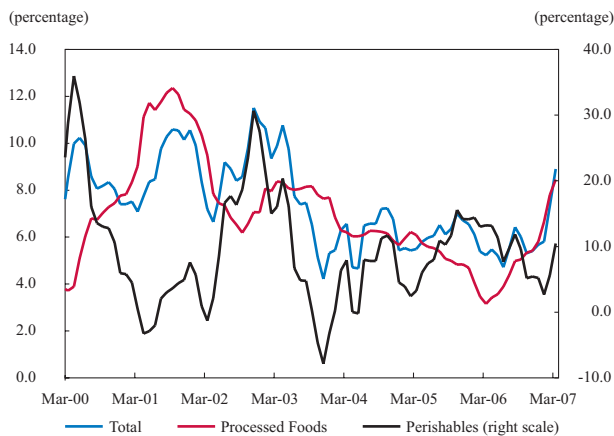
High international food prices also have been an upward factor of importance. These pressures, which are tied in with the surge in bio-fuels, emerged midway through 2006, but intensified during the fourth quarter of that year and at the start of 2007 as a result of sharp hikes in external prices for corn, other cereals and oil seeds. The effect of these increases is complex and usually extends to a wide range of foods that are used as input. This phenomenon is not exclusive

to Colombia and is found in a number of developed and emerging economies. It is the main cause of the upsurge in inflation, together with the high prices for energy and fuel (Box 1).

Processed and perishable foods have contributed to higher inflation in the food group, although the build-up in prices for perishables is recent, coinciding with El Niño weather, which had the most impact in the early months of 2007 (Graph 6). Processed food inflation, on the other hand, has been on the rise since the second quarter of 2006, fueled by the surge in international food prices, particularly for imported goods such as cereals, oils and flour.

GRAPH 6

**FOOD INFLATION BREAKDOWN  
ANNUAL CHANGE**



Source: DANE, Banco de la República calculations.

**B. FACTORS THAT DETERMINE INFLATION**

**1. Shocks: El Niño Weather and Regulated Prices**

The primary shock to inflation so far this year comes from El Niño weather and its impact on food, especially perishables. According to some estimates, nearly 45% of the build-up in total inflation during the first quarter (and 80% of the increase during March) would have been linked to El Niño. The bulk of the shock is regarded as temporary, and its impact is expected to disappear during the second half of the year.

The rise in international prices for oil and fuel since mid-2006 has brought upward pressure to bear on domestic prices. Imported foods (cereals, oils and sugar, among others) have felt the brunt of this pressure, which has continued and was reinforced at the start of 2007. Consequently, it is estimated that nearly 7% of the build-up in total inflation throughout the first quarter can be attributed to this phenomenon. The increase in meat prices associated with the cattle-raising cycle and more exports to Venezuela is another factor and could account for 13% of the gain in inflation during the same period.

The added inflation in regulated prices so far this year might also be related to a shock that was partly anticipated in earlier editions of this report and is associated, to some degree, with higher fuel prices during 2006 (10.4%) and their impact on the price of transport, which registered 6.6% inflation in December and 7.7% in March. Regulated price inflation accounts for 14% of total inflation during the year to date.

## **2. Aggregate Demand**

The latest figures released by the National Bureau of Statistics (DANE) show a current annual increase of 7.8% in GDP during the second half of 2006, following 5.7% GDP growth in the first six months. This build-up raised the growth rate for the entire year to 6.8%, which is at the center of the range forecast by Banco de la República in its last inflation report. The expansion in GDP during 2006 adds to that of the three previous years, when GDP growth rates were near or above 4.0% (the Colombian economy has grown 5.1% a year, on average, during the past four years). Investment continued to fuel GDP growth throughout 2006, particularly investment in machinery and equipment, although home building began to account for a larger share in the second half of the year. During that same period, household consumption picked up speed and increased at an annual rate of 8.0%, following 5.5% growth in the first six months. As a result, household demand became the item that contributed the most to growth in 2006. On the whole, domestic demand (including variations in inventory) was up by 9.9% during 2006, accelerating in the second half of the year, when it rose by 10.3%.

In addition to the surge in domestic demand, the second half of the year also saw a build-up in exports, thanks to coal and coffee production, as well as strong demand from Venezuela, which energized sales of non-traditional products. Real exports were up by 11.0% in the latter half of 2006, compared to an increase of 4.9% in the first half (Table 3). Even so, net external demand remained in negative terrain, given the sharp increase in imports (21.3% during 2006). Net external demand in the fourth quarter showed a deficit equivalent to 8.6% of GDP.

The build-up in household consumption has been a slow process that began in 2003. Concentrated initially in durable goods, it expanded later to include semi-durables. Non-durable consumer goods and services was the last segment to recover. With fourth-quarter figures for 2006, all the items showed substantial growth: non-durables were up by 7.2%, semi-durables 13.7%, services 4.0% and durables 21.9%.

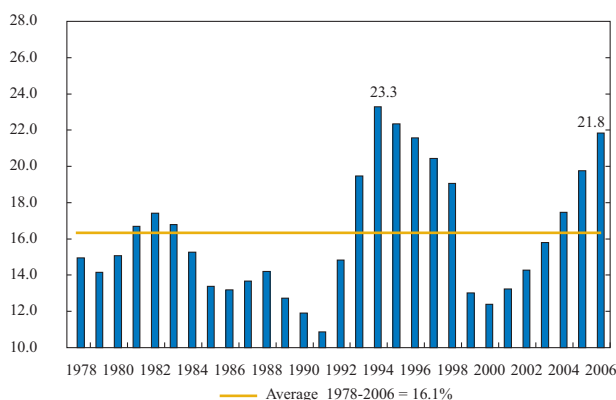
TABLE 3

**GDP GROWTH BY TYPE OF EXPENDITURE  
(PERCENTAGE)**

	2004	2005	2006				Total
			I Qtr.	II Qtr.	III Qtr.	IV Qtr.	
<b>End Consumption</b>	4.8	4.9	4.7	4.7	6.0	7.2	5.6
Household	6.0	5.0	5.3	5.7	7.5	8.3	6.7
Government	1.1	4.3	2.8	1.3	1.2	3.3	2.1
<b>Gross Capital Formation</b>	15.6	18.7	26.0	34.2	24.0	24.2	26.9
Gross fixed capital formation (GFCF)	15.0	18.9	14.8	21.9	19.5	15.8	18.0
GFCF without civil works	22.0	16.7	14.2	19.4	21.0	17.3	18.1
Civil works	(7.9)	28.7	17.2	33.4	13.6	10.0	17.7
Inventory variation	28.0	13.8	(2,614.3)	400.6	73.2	145.9	206.3
Domestic demand	6.6	7.4	8.6	10.3	9.8	10.8	9.9
Domestic demand without inventory variation	6.5	7.3	6.5	7.9	8.7	8.9	8.0
<b>Total Exports</b>	10.0	7.0	8.4	1.4	12.4	9.5	7.8
<b>Total Imports</b>	19.8	19.9	23.3	20.9	20.4	20.7	21.3
<b>GDP</b>	4.9	4.7	5.4	6.1	7.7	8.0	6.8

Source: DANE, Banco de la República calculations.

GRAPH 7

**TOTAL INVESTMENT AS A PERCENTAGE  
OF GDP**


Source: DNP and DANE, Banco de la República's calculations.

Total investment continued to grow at a fast pace throughout 2006 (26.9%). Thanks to that momentum, investment as a share of GDP increased to 21.8%. This exceeds the historic average (16.1%), but is still below the high registered in 1994 (22.3%) (Graph 7).

Investment contributed 5.6 percentage points (pp) to the growth in 2006, with 63.7% of that amount attributed to the increase in gross fixed capital formation (GFCF). GFCF in machinery/equipment and home building, with respective annual increases of 23.7% and 12.3%, were the items that contributed the most to GDP.

On the supply side, the most dynamic sectors in 2006 were industry, construction, commerce, transport and telecommunications. The first half of the year witnessed similar growth between tradables and non-tradables, at an annual rate of 5.7%, on average. The tradable sectors, particu-

## RECENT EXPORTS TO VENEZUELA

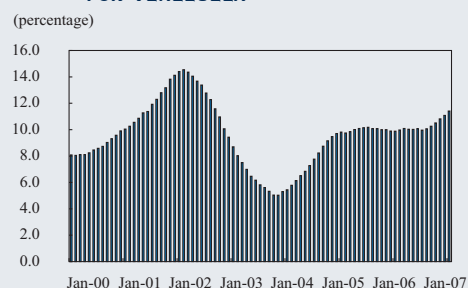
Trade between Venezuela and Colombia is usually subject to shocks that make exports extremely volatile. For example, Venezuela accounted for 14.6% of all Colombian exports in 2002 and barely 5% in October 2003, because the borders were closed. This episode was gradually overcome in late 2003 and exports to Venezuela began to regain a great deal of importance for Colombia. The share of Colombian exports destined for Venezuela stabilized at the end of 2004 and stayed at around 10.4% until late 2006, when it began to increase again. By January 2007, exports to Venezuela accounted for 11.4% and exhibited strong momentum (Graph A).

In dollars, Colombian exports to Venezuela have broken records in recent quarters and are growing faster than exports to other destinations. While total Colombian exports registered a 14.3% increase by January 2007 (in the 12-month accumulated figure), those to Venezuela had increased by 32.5%, offsetting the slowdown in growth in exports to the United States and Ecuador. Most exports to Venezuela are industrial and have increased considerably in recent months (30.5% in the 12-month accumulated figure at January 2007) (Graph B). In the industrial export category, there has been a major increase in processed food exports (20.6% at January), with a large build-up since the beginning of last year (Graph C).

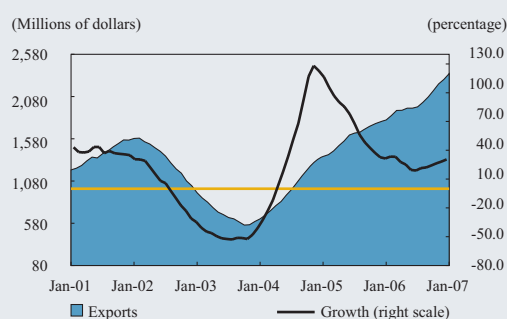
Agricultural exports account for less of a share, but have rebounded sharply in recent months, registering an increase of 46% at January (in the 12-month accumulated figure), following -5% in June 2006 (Graph D). Beef is the most dynamic item in the group, having expanded at a rate of 82.4% by January to the equivalent of US\$38.5 m (12-month accumulated figure). These figures take into account only legal beef exports. However, there are indications that illegal exports of beef and other products have increased as well.

The substantial growth in Venezuelan demand has fueled this surge in Colombian exports, which has been reinforced by shortages of certain foods in Venezuela and major price increases. Because Colombian supply is limited in terms of satisfying both markets, there have begun to be signs of inflationary pressure on certain items in Colombia. The rise in beef prices is one example.

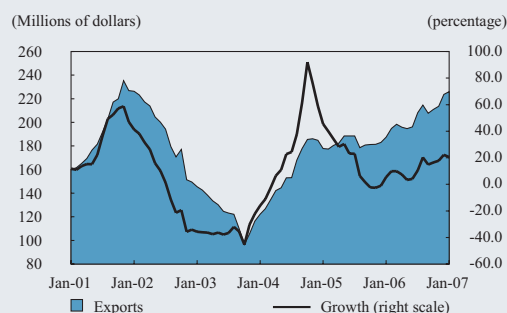
**A. PERCENTAGE OF TOTAL COLOMBIAN EXPORTS DESTINED FOR VENEZUELA**



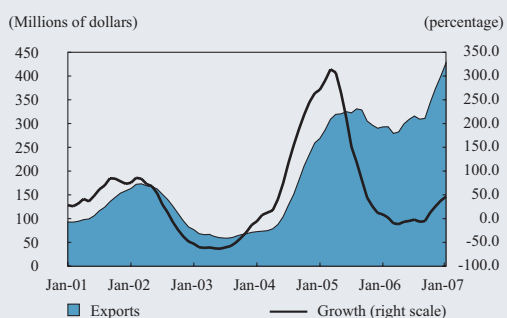
**B. INDUSTRIAL EXPORTS (12-MONTH ACCUMULATED FIGURES)**



**C. EXPORTS OF PROCESSED FOODS**



**D. AGRICULTURAL EXPORTS (12-MONTH ACCUMULATED FIGURES)**



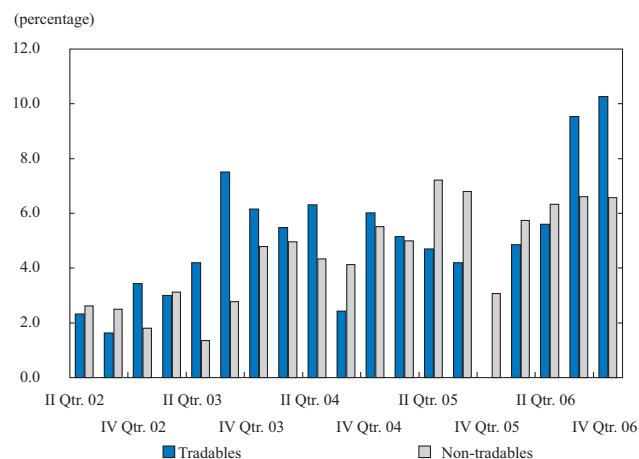
Source: DANE, Banco de la República calculations.



larly industry and agriculture, registered a major build-up from 6.9% to 14.7% and from 1.0% to 5.2%, respectively, in the second half of 2006 (Graph 8).

GRAPH 8

ANNUAL GDP GROWTH IN TRADABLES AND NON-TRADABLES



Source: DANE, Banco de la República calculations.

Performance in the non-tradable sectors was stable, with growth at around 6.3%. The construction sector was one of the driving forces of the economy in 2006, although its annual growth appears to have slowed in the fourth quarter because of a high base of comparison during the same period in 2005 (Table 4).

### 3. Surplus Productive Capacity

Previous reports indicated the economy was operating slightly above its productive capacity. The estimate in the December report placed the average output gap (actual GDP minus potential GDP) for 2006 in the -0.7% to +2.0% range, with +0.6%

TABLE 4

GDP GROWTH BY SUPPLY (PERCENTAGE)

	2004	2005	2006				Total
			I Qtr.	II Qtr.	III Qtr.	IV Qtr.	
Agriculture, forestry, hunting and fishing	2.0	1.9	1.4	0.7	6.5	4.0	3.1
Mining and quarries	2.7	2.1	2.9	(3.1)	1.4	1.2	0.6
Electricity, gas and water	2.8	5.0	2.9	0.8	3.5	4.8	3.0
Industrial manufacturing	7.2	3.9	7.4	6.4	13.1	16.3	10.8
Construction	12.4	11.8	5.5	25.8	17.9	8.9	14.4
Buildings	29.4	3.5	(2.0)	21.5	20.9	8.1	12.1
Civil works	(10.0)	27.3	17.4	33.1	13.5	10.0	17.8
Commerce, repairs, restaurants and hotels	7.6	7.2	8.9	9.2	12.2	12.3	10.7
Transport, storage and communication	6.2	4.7	9.6	9.6	7.5	11.0	9.4
Financial establ. Insurance, real estate and company services	4.8	3.6	6.8	(6.9)	2.5	3.6	1.4
Social, community and personal services	1.4	3.9	2.6	1.8	1.5	3.0	2.2
Financial brokerage measured indirectly	10.3	8.4	14.7	(39.1)	(0.9)	7.8	(6.7)
Subtotal: aggregate value	4.5	4.2	5.1	5.6	7.3	7.4	6.3
<b>GDP</b>	<b>4.9</b>	<b>4.7</b>	<b>5.4</b>	<b>6.1</b>	<b>7.7</b>	<b>8.0</b>	<b>6.8</b>
Taxes minus subsidies	10.6	11.5	10.0	11.3	12.9	15.5	12.5
Net financial brokerage services measured indirectly	3.1	2.1	4.6	5.9	3.7	2.3	4.1
Tradables	5.0	3.5	4.9	5.6	9.5	10.3	7.6
Non-tradables	4.8	5.5	5.8	6.3	6.6	6.6	6.3

Source: DANE, Banco de la República calculations.



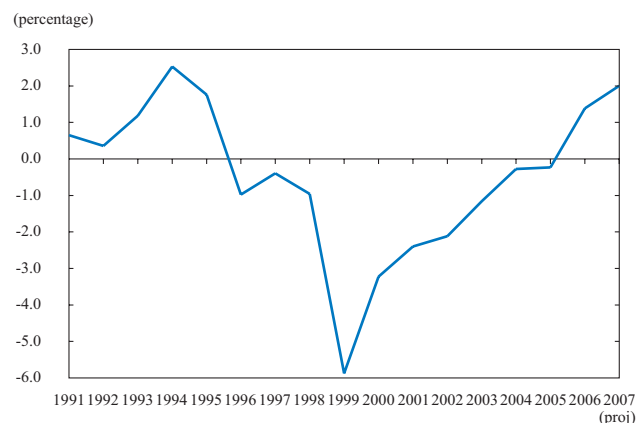
being the most probable level (Graph 9). New figures available for late 2006 and early 2007 suggest that surplus productive capacity continued to decline and the economy would have faced demand surpluses slightly above those estimated initially. For example, the Fedesarrollo survey in February continued to show that expected demand was high in relation to installed capacity (Graph 10). The same survey again reported historically high levels with respect to use of installed capacity, once the seasonal component was excluded.

With the figures that are available, it is possible to conclude that factor utilization is increasing, which means demand-pulled pressure on prices could build if the current trend in growth continues. This is consistent with the surge in non-tradable inflation witnessed as of October 2006 and with the increase in the various core inflation indicators. According to those trends, demand-pulled pressure is no longer as easily contained by expectations and productivity gains, as was the case in years past. However, labor productivity in industry and commerce continues to improve significantly. Other indicators also show growth in urban labor productivity for four years in a row.

#### 4. Wage Costs and Productivity

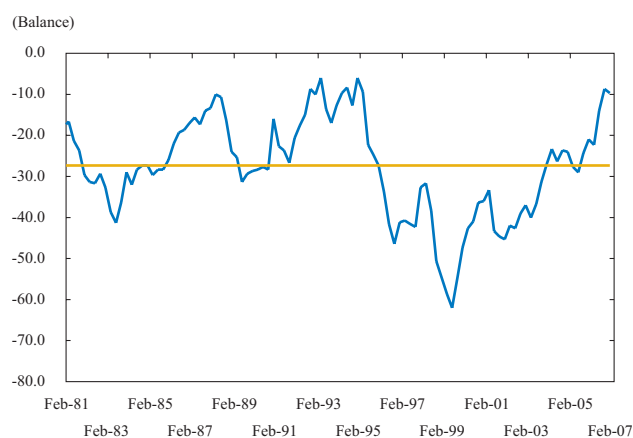
So far this year, the wage hikes in commerce, industry and construction have been similar or less than those throughout 2006 (Graph 11). The productivity indicators available for industry (output per worker and output per hour worked, including an adjustment for use of installed capacity) and for commerce (sales per employee and sales per square meter) have increased throughout the year. Accordingly, the wage hikes would have been offset by the gains in productivity, thus avoiding inflationary pressures originating with wage costs. Nevertheless, these results must be interpreted with caution, as the figures for wages and productivity have their shortcomings and there are no indicators for economic activities other than industry and commerce.

OUTPUT GAP



(proj) Projected.  
Source: Banco de la República.

EXPECTED DEMAND VERSUS INSTALLED CAPACITY

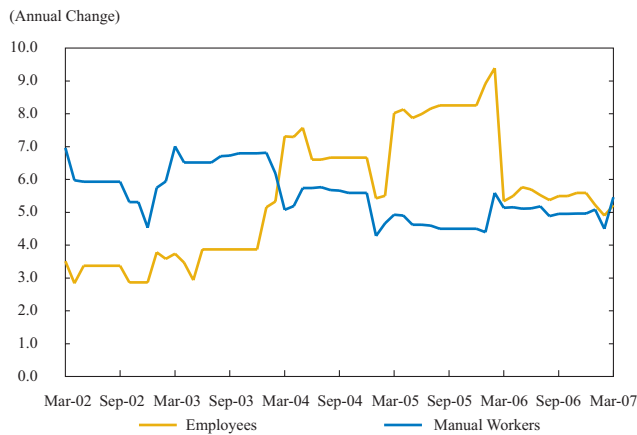


Source: Fedesarrollo.

Surveys conducted by the National Association of Industrialists (ANDI) and Banco de la República show the business community, in general, has yet to encounter problems in hiring new employees, nor does it expect its profits to suffer in the coming months because of foreseen wage hikes (Graph 12). This suggests the labor market remains loose. However, relative labor shortages could have occurred in specific areas of activity or in certain segments of the job market, as was the case in the coffee sector, which reported problems in hiring workers to harvest the crop at the start of the year.

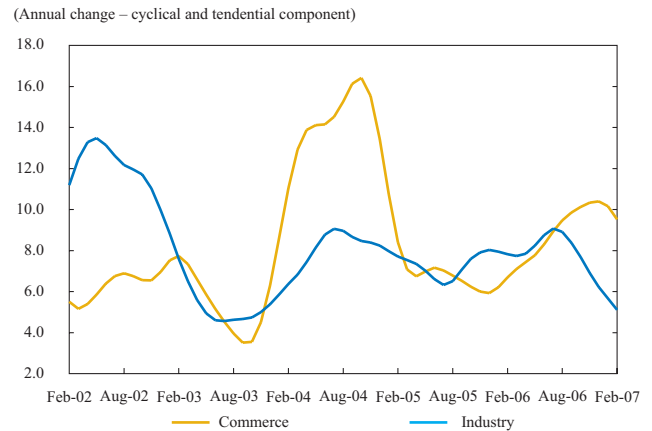
GRAPH 11

**A. HEAVY CONSTRUCTION WAGE INDEX**



Source: ICCP-DANE Workers: foreman, manual worker, journeyman and operator. Employees: chief engineer, assistant engineer, warehouse personnel, accountant and watchman.

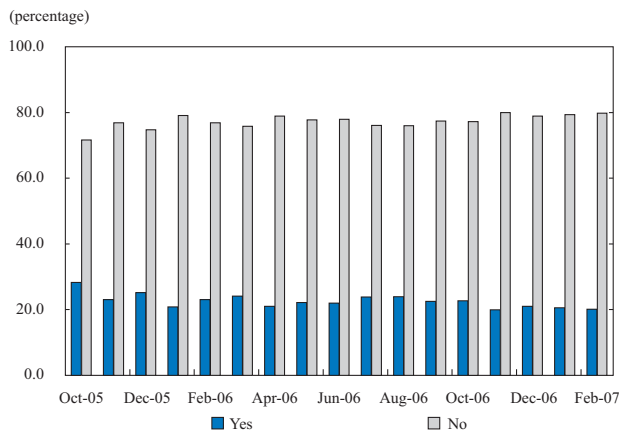
**B. NOMINAL RETAIL WAGE AND INDUSTRIAL WAGE**



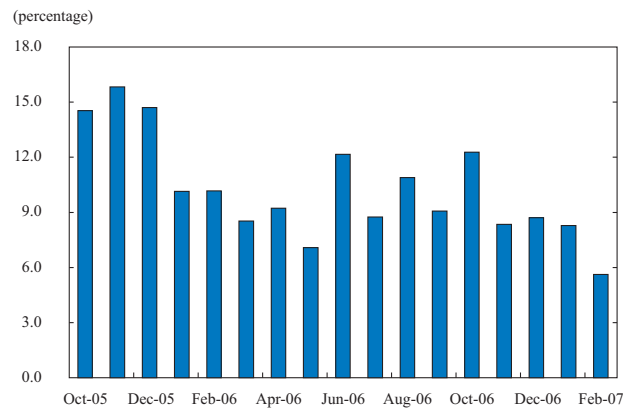
Source: DANE-MMCP.

GRAPH 12

**A. DOES YOUR COMPANY HAVE PROBLEMS FINDING EMPLOYEES OR MANUAL LABORERS?**



**B. WILL THE WAGE HIKES ANTICIPATED FOR THE NEXT 12 MONTHS AFFECT YOUR PROFITS? (BALANCE <sup>a/</sup>)**



a/ Those who replied: more than in the last 12 months, minus those who replied: less than in the last 12 months.  
Source: Banco de la República Expectation Survey.

ANNUAL GROWTH IN THE COST OF DOMESTIC RAW MATERIALS



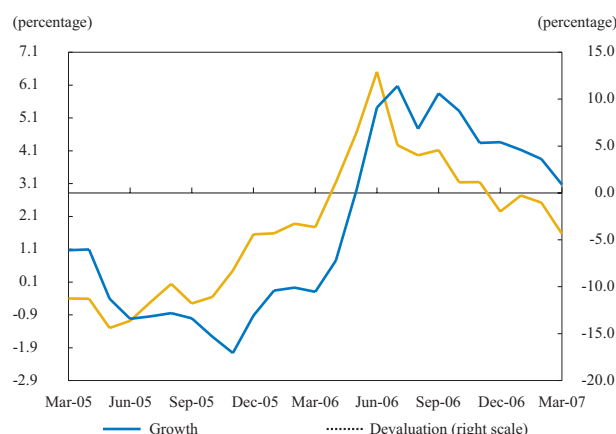
Source: Banco de la República.

For the rest of the year, and considering projected GDP growth and its impact on the demand for labor, one can expect the labor market to tighten gradually, without ruling out the appearance of mid-term inflationary pressure due to wage costs.

### 5. Other Costs

Within the production chain, the increase in costs associated with imported and domestic raw materials was less in 2007 than in 2006. Affected by depreciation during the second quarter of 2006 and by higher international prices, these costs began to exhibit a slight downward trend as of the second half of the year. The annual rate of growth in the cost indicator for domestic raw materials was 5.4% at March, having been 7.2% in July 2006 (Graph 13). The annual cost indicator for imported raw materials declined even more; it was 3.1% in March, as opposed to 6.1% in June 2006 (Graph 14). This phenomenon is linked to recent appreciation of the exchange rate and the stabilization of various international prices. However, the increase in prices for domestic raw materials remains high and exceeds the target range set by the Bank for the CPI. Moreover, cost pressures brought to bear in certain sectors by raw materials cannot be ruled out.

ANNUAL GROWTH IN THE COST OF IMPORTED RAW MATERIALS AND ANNUAL DEVALUATION

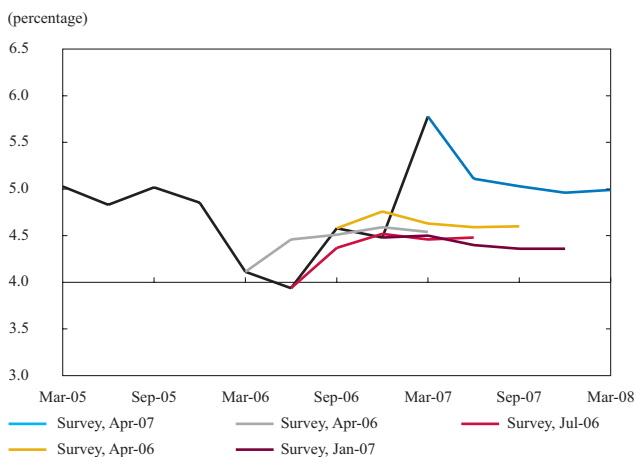


Source: Banco de la República.

The performance of cost indicators for raw materials largely reflects what happened with the PPI, which peaked in mid-2006, then began to decline slightly. At March 2007, total PPI was 4.85%, following 5.97% at September 2006.<sup>3</sup> In January 2007, Banco de la República stopped estimating the producer price index (IPP); DANE now calculates it monthly, does a series of updates on the sample and gathers information (see DANE for more information on the changes in methodology).

<sup>3</sup> Banco de la República and DANE agreed the latter would take charge of calculating and collecting PPI data as of January 2007. As part of this process, DANE updated and enlarged the sample, and made several improvements and necessary adjustments.

**ACTUAL AND EXPECTED INFLATION AT THREE, SIX, NINE AND TWELVE MONTHS (ANNUAL INFLATION)**



Source: DANE, Banco de la República calculations.

## 6. Inflation Expectations

The range of inflation expectation indicators rose during the first quarter, in both the monthly and quarterly surveys. According to those interviewed, the likelihood of the inflation target being met in 2007 is only 26%. This is well below their expectations at the start of the year (85%). Inflation expectations at one and ten years, measured on the basis of break-even inflation (BI),<sup>4</sup> rose by nearly 80 bp during the first quarter of the year<sup>5</sup> (Graph 15).

<sup>4</sup> The BI is the difference between the zero-coupon curve for fixed-rate TES and UVR-TES at a specific maturity.

<sup>5</sup> The BI at one year is up by 91 bp so far this year.

### Box 1

#### WHAT IS HAPPENING TO FOOD INFLATION?

By: Edgar Caicedo G.\*

Annual food inflation was the biggest surprise in terms of consumer prices at the end of the first quarter of 2007. It went from 5.7% in December to 8.9% in March, reaching levels not seen since the second quarter of 2003.

A variety of factors related to supply and demand contributed to the build-up in food inflation during the last few months. On the demand side, the most important ones include an unusual increase in food exports to Venezuela, more domestic demand, and higher international prices for a variety of foods associated with bio-fuel production. On the supply side, the most important factors are El Niño weather and beef prices.

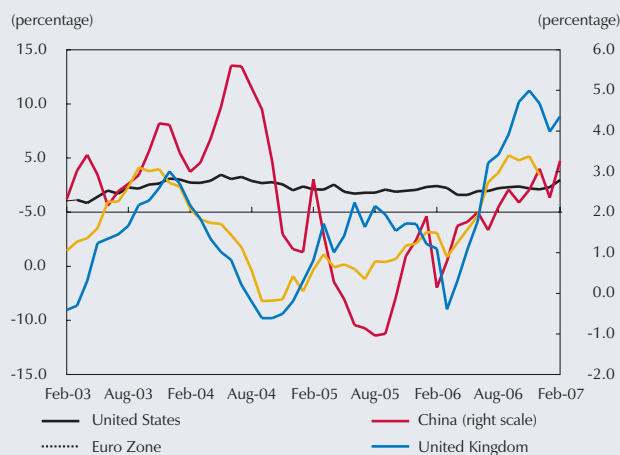
Legal and illegal exports to Venezuela have exerted a great deal of pressure on agricultural prices in Colombia. The controversial agrarian reform in Venezuela (intended to replace

\* The author is an inflation expert with the Inflation Section of the Programming and Inflation Department. The opinions expressed in this article are solely his responsibility and imply no commitment on the part of Banco de la República or its Board of Directors.

imports with goods produced by farm cooperatives), the lack of agricultural investment incentives, as well as price controls, and the delay in obtaining foreign currency for imports<sup>1</sup> has led to a food shortage that is unprecedented in recent Venezuelan history.<sup>2</sup> As a result of that shortage, Colombian food exports to Venezuela have soared (38% in 2006 y 137% in January 2007, in annual terms). At the same time, demand in Colombia is up, registering 10% average growth in the last five quarters.

Considerable local and world demand for so-called energy farming is another source of pressure on agricultural prices. The upward trend in food prices is not exclusive to Colombia; a number of countries have been affected by derivative demands for bio-fuel production.<sup>3, 4</sup> (Graph B1). In Colombia, prices for foods used to produce bio-fuel have grown sharply. Sugar is one example; inflation in its consumer price has been high in the last 15 months (25%). In the future, the direct impact of energy farming on

**GRAPH B1**  
**FOOD INFLATION WORLDWIDE**



Source: Datastream.

<sup>1</sup> The Foreign Currency Management Board (CADIVI) was created by the Venezuelan government at the start of 2003 to exercise fiscal control over foreign exchange. CADIVI supplies dollars, at the official exchange rate, to importers or others who need them and comply with a range of tax and labor requirements, among others.

<sup>2</sup> A survey conducted in March 2007 by the Venezuelan firm Datanálisis shows a shortage of at least nine foods: sugar, meat, powdered milk, chicken, eggs, rice, corn meal, sardines and legumes.

<sup>3</sup> The best known bio-fuels are sugarcane, corn, manioc and beets, which are used to produce ethanol, and palm oil, soybeans and sunflower, used to produce bio-diesel.

<sup>4</sup> For example, world ethanol production would have increased by 15% in 2006 and by more than 100% in the last decade. Colombia produced 27 million liters of ethanol in 2006 and 266 million in 2006. See Carolina Gil, "Biocombustibles: ¿Oportunidad en el agro?" *Revista Carta Financiera*, No.137, March/April 2007, ANIF, Colombia.

consumer inflation and the effect it could have on food supply will have to be taken into account.

The Institute for Environmental and Meteorological Studies (IDEAM) and the National Oceanic and Atmospheric Administration (NOAA) say El Niño weather continued during the last two quarters, peaking in January and February of this year. Its negative impact on farming could lead to a 5% reduction in agricultural output, according to a recent study by the Ministry of Agriculture.<sup>5</sup> In all, the effects of El Niño on food inflation are expected to reverse during the second half of 2007, without influencing the outcome for the year.

Beef poses another supply factor. Up to now, the recent increase in the liquidation of cattle has prevented meat prices from going even higher.<sup>6</sup> The significant growth in exports of cattle on the hoof and sides of beef to Venezuela, both legal and illegal,<sup>7</sup> has fueled meat prices in Colombia's domestic market for several months. In fact, the annual increase in these prices went from 6.3% at December 2006 to 10.5% at March 2007. However, the coming months could feasibly see the start of a repopulation of females in the Colombian cattle industry, initiating a retention phase, which usually lasts two years, on average.<sup>8</sup> In this case, because Venezuelan demand is not expected to decline in the short term, meat prices could become an important inflation factor, at least for the remainder of 2007. Moreover, the cattle retention phase could begin early, if the Ministry of Agriculture's ban on the slaughter of female cattle proves to be effective.<sup>9</sup>

### **What is the most important factor in food inflation?**

Estimates developed by the Programming and Inflation Department at Banco de la República suggest El Niño weather was responsible for nearly half of the rise in total inflation during the year to date (44.2%). The other factors—international prices,

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<sup>5</sup> See "Plan de prevención y mitigación de efectos del Fenómeno de El Niño en el sector agropecuario," Ministry of Agriculture, Bogotá, Colombia, 2006.

<sup>6</sup> Ranchers believe that indications of the start of a new cattle retention phase last year were mistaken. On the contrary, a high number of females have been liquidated since the second half of 2006. See Fedegán, *Revista Carta de Fedegan*, no. 98, pg. 108, Bogotá, Colombia, 2006.

<sup>7</sup> Given the volume of exports and smuggling to Venezuela, the Colombian government limited exports of cattle on the hoof by setting an annual quota of 20,000 head of male cattle and 7,000 head of female cattle. See Commerce Ministry Decree 357 of February 9, 2007 and Decree 4464 of December 15, 2006.

<sup>8</sup> See Carlos Felipe Jaramillo and Edgar Caicedo, "La dinámica del ciclo ganadero colombiano," *Boletín de Estadística del DANE*, no. 529, April 1997, Bogotá, Colombia.

<sup>9</sup> Due to the increase in the number of female cattle slaughtered during the last three years, the Colombian government implemented a nationwide ban on the slaughter of female cattle that are suitable for breeding (Ministry of Agriculture Decree 00031 of February 6, 2007).

Venezuelan demand, domestic demand and meat prices— account for 33.2% of the increase. The difference (22.6%) is attributed to non-food prices. Foods, as a whole, explain more than 80% of the growth in inflation during the first three months of the year, with El Niño being the prime factor (Table B1).

### What can we expect during the remainder of the year and what are the risks?

According to the forecast models used by the Bank, the price increases for the different variables that explain the build-up in food inflation should slow substantially in the second half of the year. Meat would be the only exception. Most of the impact on inflation from El Niño is expected to reverse in the second half of the year. However, the effect of domestic and external demand and international prices could continue a bit longer, although some relief cannot be ruled out on account of external prices in the second half of the year.

Finally, the main risk to monetary policy objectives is that these shocks will translate into more inflation expectations and added price and wage pressures. Obviously, the longer the shocks last, the more likely this is to happen, as could be the case with inflation pressures derived from Venezuelan demand and high international prices because of bio-fuel production. The more inflation expectations increase, the more monetary policy must try to keep inflation converging towards its long-term target.

**TABLE B1**  
**BREAKDOWN OF THE CHANGE IN THE CONSUMER PRICE INDEX**

Description	Weight	Annual Growth				Share of the Build-up to date (%)
		Dec-06	Jan-07	Feb-07	Mar-07	
Total	100.0	4.5	4.7	5.2	5.8	100.0
Without food	70.5	3.9	4.2	4.3	4.4	22.6
Food	29.5	5.7	5.8	7.3	8.9	77.4
Because of El Niño	7.2	2.8	1.6	4.6	9.4	44.2
Because of other factors (international prices, demand and meat prices)	22.4	6.8	7.4	8.4	8.7	33.2

Source: DANE, Banco de la República calculations.

## II. FINANCIAL MARKETS

**The trend in international interest rates** has helped to sustain broad external liquidity and low risk aversion among foreign investors, who have contributed to historically low country-risk premiums.

**The first quarter of the year continued to see a great deal of credit activity**, especially consumer loans and micro-credit, favored by fewer TES holdings in bank portfolios and more private-sector savings and certificates of deposit.

**The end of the first quarter** witnessed a partial pass-through of the Bank's interest rate hikes to deposit rates and to some lending rates in the financial system. This pass-through picked up speed in the first quarter, compared to previous quarters.

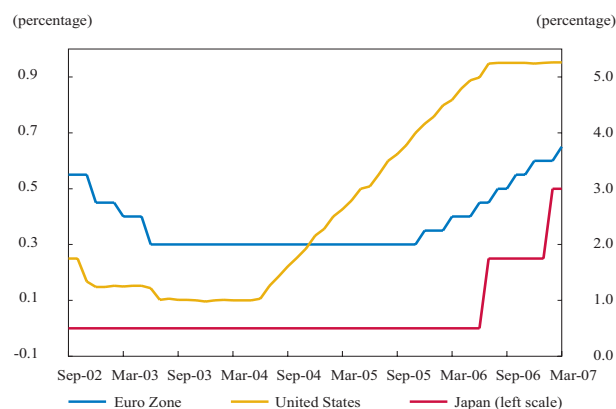
**In the second half of the year**, the effects of the cumulative increase in intervention interest rates on credit, growth in aggregate demand, and inflation are expected to be more evident.

### A. THE EXTERNAL CONTEXT

The interest rate hikes in the major developed economies have been gradual, despite the upswing in world inflation due to pressure from fuel prices and international prices for a number of farm products. In the case of the US economy, the monetary policy rate has not changed since the second half of 2006, while the euro zone and Japan increased their reference rates by 25 bp to 3.75 % and 0.5%, respectively (Graph 16).

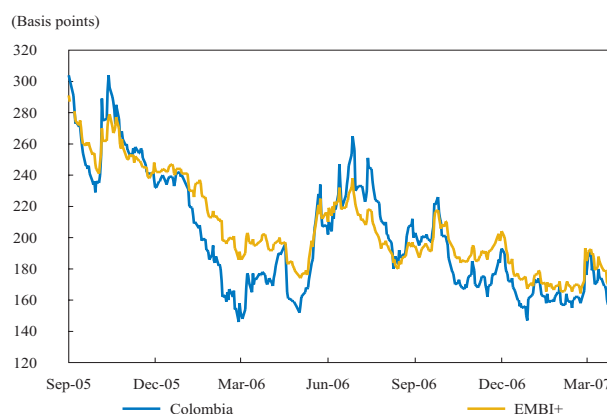


**MONETARY POLICY RATE IN THE UNITED STATES, THE EURO ZONE AND JAPAN**



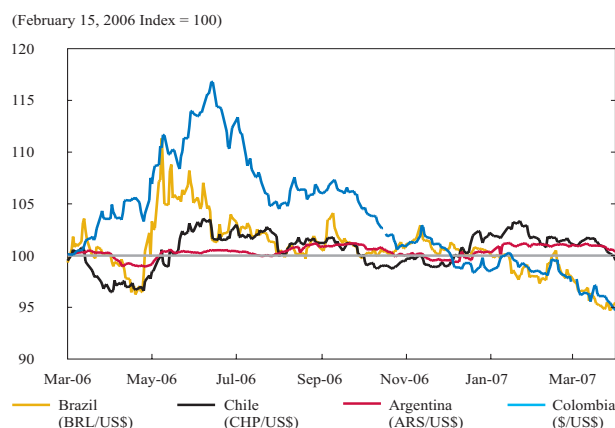
Source: European Central Bank and Datastream.

**EMBI+ EMERGING ECONOMIES COUNTRY-RISK PREMIUM**



Source: Bloomberg.

**NOMINAL EXCHANGE RATE FOR DIFFERENT LATIN AMERICAN CURRENCIES AGAINST THE DOLLAR**



Source: Datastream.

The trend in international interest rates has helped to sustain broad international liquidity and to keep down risk aversion among international investors. Although February and March saw an increase in volatility and risk premiums in various markets, the situation has reversed and country-risk premiums have returned to historically low levels (Graph 17).

In this context, there is a continued tendency for Latin American currencies to appreciate. Brazil and Colombia are the ones with the greatest tendency towards appreciation. At March, annual appreciation in their currencies was 3.0% and 2.7%, respectively (Graph 18). These also were the two currencies that devaluated the most as a result of the temporary deterioration in international financial markets at mid-2006.

## B. FINANCIAL MARKETS

The first quarter of 2007 continued to see a great deal of credit activity in the financial system, especially with respect to consumer loans and micro-credit. The funds for credit originate with the shift in bank assets (fewer TES holdings in bank portfolios) and increased savings and certificates of deposit in the private sector.

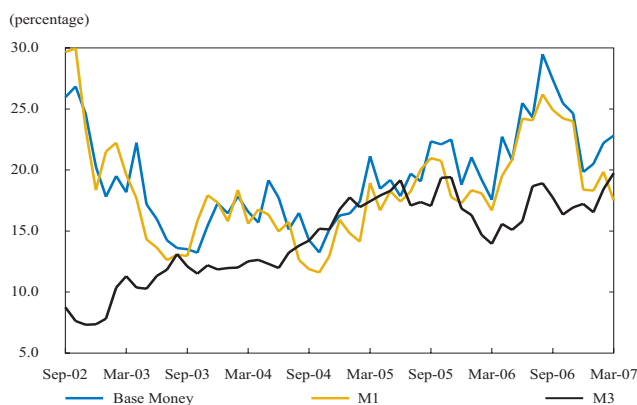
Pass-through of the policy interest rate to rates charged by credit institutions increased during this period. Consumer loans, credit card loans and overdrafts were the only exceptions. Having been affected by the change in the usury rate, they would tend to increase during the second half of the year, given the rise in that rate in April.

### 1. Monetary Aggregates

The momentum in base money and M3 broad aggregate rose in the first quarter, and their annual variation at March was 22.8% and 19.7%, respectively (Graph 19).

GRAPH 19

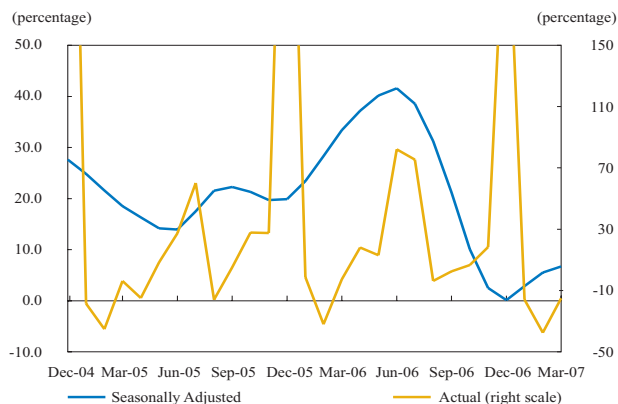
ANNUAL GROWTH  
IN MONETARY AGGREGATES



Source: Banco de la República.

GRAPH 20

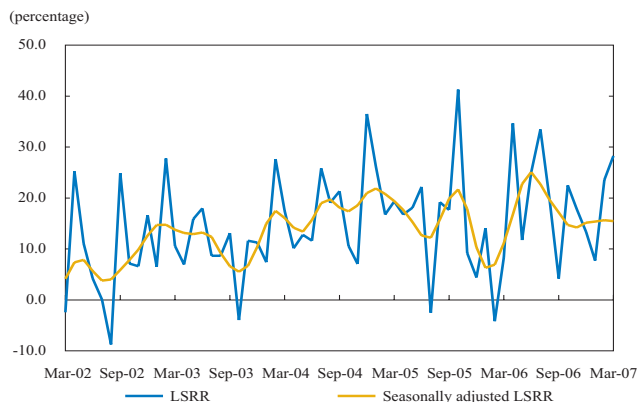
CASH  
ANNUALIZED MONTHLY VARIATION



Source: Banco de la República.

GRAPH 21

LIABILITIES SUBJECT TO RESERVE REQUIREMENTS  
(LSRR)



Source: Banco de la República.

The build-up in base money during the quarter is due to the demand for bank reserves, and is considered temporary. It is related to the increase in deposits with Banco de la República, as part of the commitments assumed by credit institutions in the purchase of government-owned institutions (particularly Bancafé). The annualized (and seasonally adjusted) monthly increase in the cash demand slowed dramatically during the second half of 2006, from 40% at June to almost 0% at December. Currently, its annual variation is 6.7% (Graph 20). In view of the foregoing, it is feasible to expect less of an increase in base money during the coming months.<sup>6</sup>

Given the trend in cash, the build-up in M3 comes from liabilities subject to reserve requirements (LSRR), which registered an annualized monthly rate of more than 28% at March. However, with the seasonally adjusted series, the growth has stabilized at around 15% since October of last year, which is 10 pp less than at June 2006 (Graph 21).

Ordinary savings deposits have been the determinants of LSRR during the last two quarters, contributing 63.5%, followed by CDs (22.4%) and other deposits<sup>7</sup> (11.1%). Moreover, deposits from the private sector, as a share of LSRR, are becoming more important and, so far this year, account for 80% of the total.

The trend in the seasonally-adjusted monthly series for the different types of deposits indicates they have slowed in recent months and that ordinary savings deposits should continue to account for a growing share of deposits from institutions. Their average annualized variation during the quarter is 25%, compared to 6.5% for CDs and 7.2% for other deposits (Graph 22).

<sup>6</sup> In the exchange market, the impact Banco de la República's purchase of foreign currency has on base money is sterilized through a variety of means, the last of which (interest-bearing deposit auctions) was initiated on April 2.

<sup>7</sup> Checking accounts, demand deposits, fixed-term savings deposit certificates, bonds, fiduciary deposits and others.

## 2. Credit

A large amount of loans continue to be placed, especially consumer loans and micro-credit, which were up by an annual rate of 47.0% at March, contributing to an increase of 31.3% in the total loan portfolio (Graph 23). As mentioned earlier, an important part of this development is due to the policy adopted by credit institutions, which are restructuring the composition of their holdings by reducing investments, principally in government bonds (TES).

The importance of freeing resources from TES as a way to expand loan portfolios has been concentrated in maturity spells. For example, the drop in TES investment in March was equivalent to half the variation in the loan portfolio and, that month, the government decided not to roll over on approximately \$4.3 trillion (t) pesos in those securities.

Provided there are no surprise events that might prompt agents to substitute TES, until November one can expect increases in the loan portfolio to be more in line with the behavior of LSRR. November is a month with another concentration of bond maturities (Graph 24 shows the relationship between the annualized monthly growth in these variables).

Finally, although loan portfolio quality<sup>8</sup> remains low, the risk indicator for the consumer loan portfolio<sup>9</sup> shows somewhat of an upward trend with respect to the level reached at the end of 2005 (Graph 25).

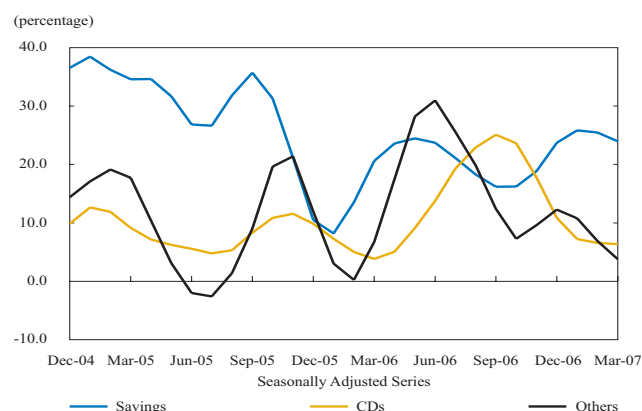
## 3. Interest Rates

The cumulative policy rate increase between April 2006 and March 2007 was 225 bp, a change reflected with equal intensity in the interbank rate (TIB). The

<sup>8</sup> Non-performing loans/loan portfolio.

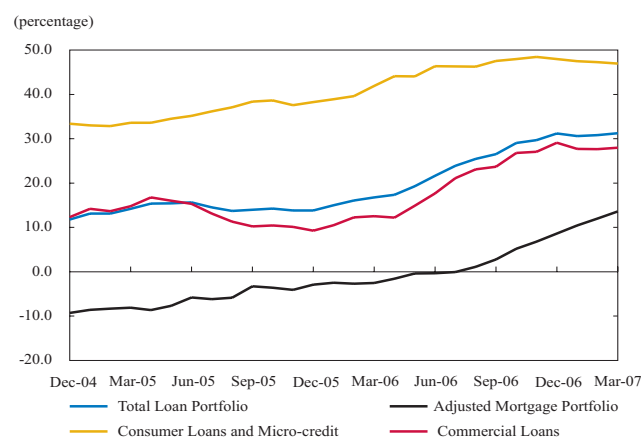
<sup>9</sup> Portfolio B + C + D + E /Loan portfolio

SAVINGS, CDs AND OTHER LSRR  
ANNUALIZED MONTHLY VARIATION



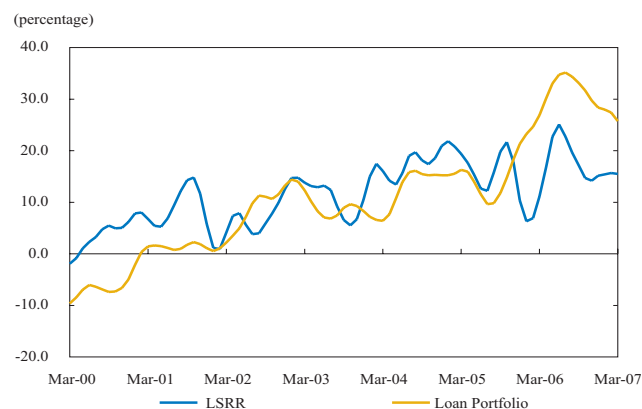
Source: Banco de la República.

TOTAL GROSS PORTFOLIO



Source: Banco de la República.

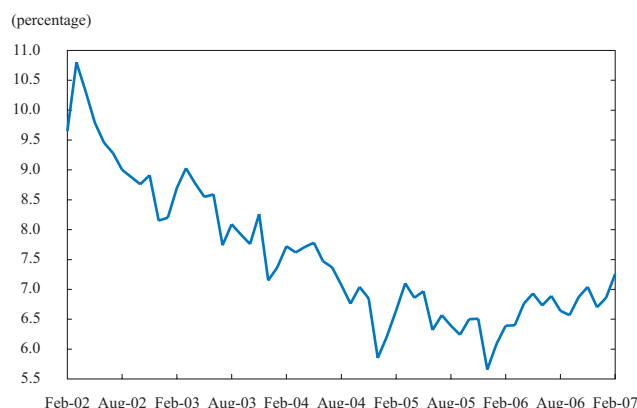
LOAN PORTFOLIO AND LIABILITIES SUBJECT TO RESERVE REQUIREMENTS, ANNUALIZED MONTHLY VARIATION



Source: Banco de la República.

GRAPH 25

CONSUMER LOAN PORTFOLIO RISK INDICATOR



Source: Banco de la República.

effect on deposit and lending rates reported by credit institutions has been less and varied.

All deposit rates have reacted to the short-term rate hikes (Table 5). In the case of ordinary savings deposits, the increase is 78 bp. However, it probably does not reflect the real change, as it refers to the rates being offered by brokers and not those actually negotiated with clients.

As to certificates of deposit (CDs), the total weighted rate was up by 178 bp, thanks to a more uniform increase with fewer lags for maturities above 60 days, and the increased share of deposits at more than one year (Graph 26). The treasuries of institutions

also are known to be more involved in acquiring CDs and, according to recent figures, they now account for almost 50% of all new CDs

The response by lending rates has been slower and less consistent. It began in the treasury loan portfolio and in preferred loans one quarter after the reference

TABLE 5

DEPOSIT RATES

	Mar-06	Jun-06	Sep-06	Dec-06	Feb-07	Mar-07	Variation: Mar-07-Mar-06
Ordinary savings <sup>a/</sup>	3.64	3.73	3.95	3.92	4.08	4.42	0.78
Total CD	6.15	6.29	6.91	7.07	7.17	7.93	1.78
At 30 days	2.99	3.65	3.49	3.50	3.48	3.62	0.63
From 31 to 44 days	3.89	3.72	6.13	4.00	5.78	4.38	0.49
At 45 days	3.01	3.89	6.36	5.30	5.41	4.35	1.34
From 46 to 59 days	4.80	4.10	5.72	4.10	4.14	5.88	1.08
At 60 days	4.10	3.97	3.89	4.16	5.21	4.58	0.49
From 61 to 89 days	5.69	6.72	6.76	6.87	7.72	7.97	2.28
At 90 days DTF	5.98	6.22	6.41	6.74	6.81	7.54	1.56
From 91 to 119 days	6.30	6.75	7.09	7.32	7.65	8.13	1.83
At 120 days	6.31	6.37	7.09	7.22	7.18	7.31	1.00
From 121 to 179 days	6.67	7.01	7.38	7.45	8.04	8.25	1.58
At 180 days <sup>a/</sup>	6.51	6.65	6.91	7.18	7.10	7.44	0.93
From 181 to 359 days	6.83	6.94	7.41	7.68	7.84	8.19	1.36
At 360 days <sup>a/</sup>	7.00	6.10	7.42	7.64	7.95	8.20	1.19
Beyond 360 days	7.20	4.78	8.88	8.47	8.63	9.53	2.33
CD deposits through office network	6.08	6.04	6.28	6.63	6.76	7.02	0.95
CD deposits through treasury network	6.34	6.87	7.78	7.87	8.34	8.93	2.60

<sup>a/</sup> The rate offered by institutions as opposed to the rates reported for CDs, which are negotiated.  
Source: Banco de la República.

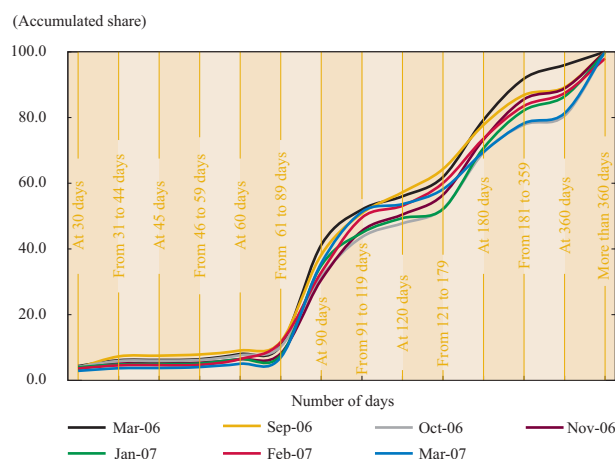
rate hike, in respective amounts of 245 bp and 231 bp for the entire period. The rate on ordinary loans continued to decline until December 2006, but is now up by 113 bp. As to the mortgage loan portfolio, the rate for the construction line declined up to September and has increased by 184 bp since then. The rate for the purchase line declined up to December and has risen slightly (38 bp) this year (Table 6).

The increase in deposit and lending rates was particularly strong during March, despite the volume of resources institutions had at their disposal, given the reduction in TES investments and the increase in liabilities subject to reserve requirements. This might suggest a quicker policy-rate pass through. However, interest on deposits, in real terms, remains low with respect to historic averages.

Interest rates on credit card loans, as with those on consumer loans and overdrafts, show a permanent decline associated with the reduction in the usury rate (Graph 27). Accordingly, the usury rate hike ruled by Superintendent of Financial Institutions in the second quarter of 2007 is expected to pass through to interest rates on these loans.<sup>10</sup> The outcome for interest rates could confirm the speed up in policy rate pass-through.

<sup>10</sup> The usury rate on consumer loans changed from 20.75% to 25.12%.

CD DISTRIBUTION



Source: Banco de la República.

TABLE 6

LENDING RATES

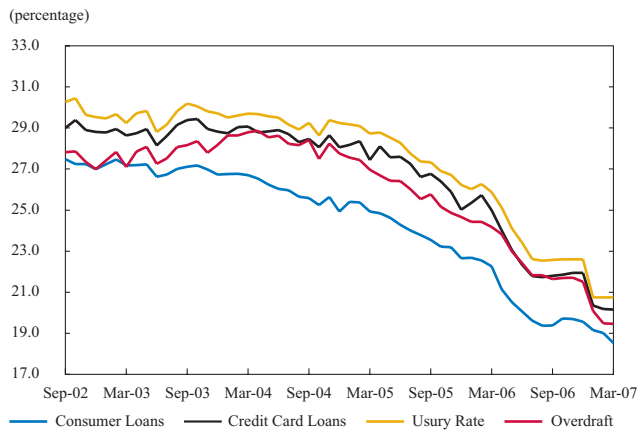
	Mar-06	Jun-06	Sep-06	Dec-06	Feb-07	Mar-07	Variation: Mar-07-Mar-06
Consumer	22.25	20.07	19.38	19.57	19.02	18.52	(3.73)
Preferred	8.91	8.86	9.60	10.22	10.52	11.22	2.31
Ordinary	15.63	14.47	15.49	14.24	14.44	15.37	(0.27)
Treasury	8.09	8.03	8.72	9.58	10.21	10.54	2.45
Overdraft	24.18	22.42	21.64	21.52	19.48	19.46	(4.72)
Credit Card	25.00	22.33	21.80	21.94	20.18	20.15	(4.84)
Housing							
Construction	12.52	11.11	10.84	11.25	12.00	12.71	0.19
Purchase	16.36	14.67	14.00	13.90	14.00	14.28	(2.09)
<b>Interbank Rate (TIB)</b>	<b>5.99</b>	<b>6.34</b>	<b>6.72</b>	<b>7.36</b>	<b>7.78</b>	<b>8.00</b>	<b>2.01</b>
<b>Repo Auction</b>	<b>6.00</b>	<b>6.34</b>	<b>6.75</b>	<b>7.36</b>	<b>7.79</b>	<b>8.06</b>	<b>2.06</b>

Source: Banco de la República.

As to the public debt, the secondary trading rates for fixed-rate TES of all maturities reflect a shift similar to the policy rate change (Graph 28). It is important to bear in mind the major adjustments in TES trading rates during the second quarter of 2006, which were due to the uncertainty reigning on international markets with respect to monetary policy decisions in the United States. After that, they adjusted downward and, since December, have moved along with the rate hikes ruled by the Board of Directors of Banco de la República (BDBR).

GRAPH 27

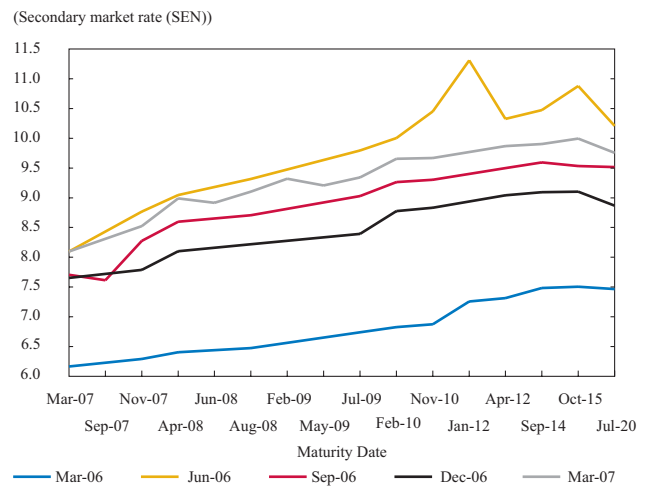
**MONTHLY AVERAGE INTEREST RATES**



Source: Banco de la República.

GRAPH 28

**TES TRADING RATE, BY QUARTERS**



Source: Banco de la República.

# III. THE MACROECONOMIC OUTLOOK

**The conditions favoring world economic growth are expected to continue.**

Once again, the expansion will be led by euro zone, along with Japan and emerging economies such as China and India. The primary risk in 2007, although not considered likely up to now, is a more pronounced slowdown in economic growth in the United States.

**The external context continued to benefit** from the positive performance of external demand, capital inflows and high terms of trade. All these factors, coupled with household and corporate confidence, point to good GDP growth in 2007.

**The central scenario forecast for inflation** shows an additional, but temporary increase in total inflation up to mid-2007. As of the third quarter, inflation will, once again, adopt a downward trend that would be sustained throughout 2008 and allow for convergence toward the long-term target for inflation (3%).

**According to the forecasts, annual non-tradable inflation** would tend to increase gradually during the next two quarters, primarily because of soaring demand and less surplus productive capacity. In the fourth quarter and thereafter, demand-pulled inflationary pressures are expected to ease gradually in response to the policy measures adopted by the BDBR.

## A. THE INTERNATIONAL CONTEXT

The baseline scenario of the forecast still envisages favorable conditions for world economic growth. The euro zone is expected to continue to lead the expansion, along with Japan and emerging economies such as China and India, as was the case in 2006. Slightly less growth is anticipated for the United States economy, compared to the forecast in the December edition of this report and with respect to 2006. However, fears about more of a slowdown in that economy have increased, added to the risk of higher inflation.

United States economic growth slowed towards the end of 2006 and was 2.5% by the fourth quarter of that year (annualized quarterly), as opposed to an annual rate of 3.3%. The latest indicators show the downward trend in US growth continued during the first quarter of 2007.<sup>11</sup> However, a recovery is expected by the end of the year and would continue during 2008. This being the case, the estimate is for 2.0% to 2.5% growth (2.4% according to *ConsensusForecast*) for 2007 and 3.0% in 2008 (Table 7).

Positive performance with respect to household income in the United States would maintain the growth in consumption. Moreover, non-residential investment is expected to continue to respond to the strong corporate gains and to favorable domestic and external demand. However, it is important to remember that the slowdown in the housing market does not appear to be over. On the contrary,

<sup>11</sup> The preliminary figure for US economic growth in the first quarter of the year was known at the time this report was written. It was 1.3%, which is less than the market's estimate (1.8%). Residential investment continued to act as a strong deterrent to growth, coupled with less momentum in public spending and a drop in exports. Nonetheless, the pace of household consumption remained high (3.8%).

TABLE 7

**GROWTH FORECASTS FOR COLOMBIA'S MAJOR TRADING PARTNERS A/ (PERCENTAGE)**

	Actual 2006	Forecasts for			
		2007. at:		2008. at:	
		Apr-07	Jan-07	Apr-07	Jan-07
<b>Major Partners</b>					
United States	3.3	2.4	2.5	3.0	3.0
Ecuador	4.5	3.4	3.9	3.2	3.3
Venezuela	10.3	6.8	6.9	3.5	4.6
<b>Other Partners</b>					
Euro Zone	2.7	2.3	2.2	2.1	2.1
Japan	2.4	2.1	2.0	2.2	2.3
China	10.5	9.7	9.5	9.6	9.4
Peru	7.2	6.6	5.9	5.7	5.3
Mexico	4.7	3.4	3.9	3.7	3.7
Chile	4.3	5.1	5.2	5.0	5.0
Argentina	8.4	7.5	7.2	5.6	5.6
Brazil	2.8	3.6	3.4	3.7	3.6
Bolivia	4.1	4.6	3.8	4.1	3.8
Developed countries	3.2	2.4	2.3	2.8	2.8
Developing countries	7.3	5.4	5.5	3.9	4.3
Total Trading Partners <sup>a/</sup>	4.7	4.1	4.1	3.9	3.7

<sup>a/</sup> Balance of payments calculated according to non-traditional exports.  
Source: Datastream-Consensus.



news has come to light of further defaults on sub-prime mortgages,<sup>12</sup> which would increase fears of further deterioration in that sector, with major implications for growth in the other sectors of the US economy.

There is promising news about the euro zone and Japan. The pace of growth in the fourth quarter of 2006 was good (3.6% and 5.5%, respectively), and would have continued during the year to date. The forecasts for the two years have improved as a result, compared to what was expected three months ago (Table 7). Investment, which rose sharply during 2006 in both these economies, should maintain its momentum in 2007 and 2008. Even so, household consumption is expected to play more of a leading role in both years. The role of net external demand could be less, given appreciation of the euro against the US dollar, coupled with less growth in the United States economy.

The risk of higher world inflation has increased, particularly because of what might happen in the United States economy. Core inflation in that country during January and February was more than what the market expected, but showed some restraint in March (2.5%). In February, it was 2.7%. For our central scenario, we continue to estimate a reduction in US core inflation, although at a slower pace than was projected three months ago. Therefore, we expect the monetary authority to make no changes in its interest rates during the better part of this year. Although the financial market is ruling out a drop in interest rates for the end of the year, this will depend on how inflation and growth behave in the coming months.

In the case of the euro zone and Japan, the markets expect their interest rates to climb gradually. The respective estimates for the end of the year are 4.25% and 1.0%.

In the baseline scenario of this report, the emerging economies, especially those in Asia, are expected to experience more growth during 2007 compared to the forecast in the last edition of this report. China is a case in point, with 11.1% growth during the first quarter of 2007, which is more than in earlier quarters. The Chinese economy is expected to grow by 9.7% in 2007 and 9.6% in 2008. This expansion will continue to be led by good performance in investment and the upward momentum in exports.

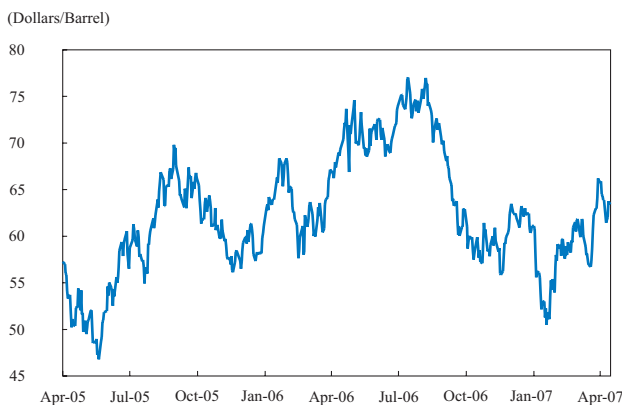
With respect to the Latin American economies and particularly Colombia's major trading partners, the projections show no significant change compared to what was forecast three months ago. The Venezuelan economy is expected to grow by 6.8% in 2007 and 3.5% in 2008; the projections for Ecuador were lowered a

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<sup>12</sup> The sub-prime market is for high-risk mortgage loans, which account for nearly 10% of all mortgages in the United States economy.

**GRAPH 29**

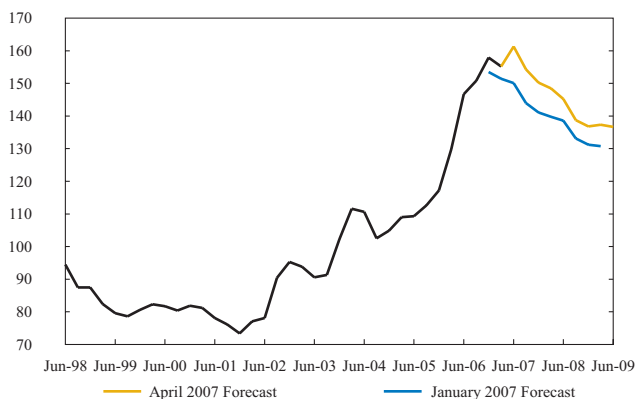
**PRICE OF OIL (WTI)  
ON THE NEW YORK EXCHANGE**



Source: Bloomberg.

**GRAPH 30**

**TOTAL COMMODITY PRICE INDEX,  
WITHOUT OIL (WCF)**



Source: The Economist Intelligence Unit.

bit, given the slowdown registered in the final quarter of 2006.<sup>13</sup> Nevertheless, its growth will remain favorable: 3.4% this year and 3.2% in 2008.

Good growth in the world economy so far this year, coupled with weather factors and several geopolitical problems curbed the drop in commodity prices witnessed since the start of the year. In fact, they have rebounded. This was particularly evident in the case of oil, which was US\$66 a barrel at the end of March, well above the price at the end of January (US\$55) and equal to the average for 2006 (Graph 29). As a result, the projections for oil are slightly higher in this report compared to what was anticipated three months ago. The estimate in our baseline scenario is US\$60 dollars a barrel for 2007, on average. The production cuts ordered by the Organization of Petroleum Exporting Countries (OPEC), coupled with these factors, have raised the risk of higher prices.

The projections on commodity prices, excluding energy, also improved compared to those last quarter. In addition to the increase in world demand, production problems for certain items (copper, zinc, tin and lead) will keep prices high until at least the middle of the year. According to The Economist Intelligence Unit (EIU), commodity prices, without energy, will be up by 6.1% this year, which exceeds the prediction in the December report (1.2%).

However, a drop in prices (8.3%) is expected during 2008 as a result of more world supply (Graph 30).

In view of the foregoing, the prediction is that prices for Colombia's major exports will be high during 2007, slightly above those forecast in the December report. In the case of oil and coal, the forecasts were 5% and 6% higher (Table 8).

The baseline scenario described above faces risks that could have increased during the course of 2007. The main one, which is not considered especially probable, is a

<sup>13</sup> The slowdown in growth was the result of a drop in oil production, due to strikes and sagging investment in the petroleum sector.

## INTERNATIONAL PRICES

	2005	2006	Current Projection <sup>a/</sup>		Previous Projection <sup>b/</sup>	
			2007	2008	2007	2008
Coffee (ex dock) (dollars/pound)	1.2	1.2	1.2	1.2	1.2	1.2
Oil (dollars/barrel)	49.8	58.3	51.3	51.9	48.9	51.9
Coal (dollars/ton)	47.8	48.0	48.8	42.1	46.1	42.1
Ferronickel (dollars/pound)	2.4	3.6	6.1	2.1	2.6	2.1
Gold (dollars/troy ounce)	445.0	604.6	690.3	705.3	670.3	705.3

a/ Balance of payments estimated at April 2007.

b/ Balance of payments estimated at January 2007.

Source: Banco de la República.

sharper slowdown in US economic growth during 2007. It would imply a more rapid reduction in the benchmark interest rate set by the United States Federal Reserve Bank (the Fed) than what is contemplated in the baseline scenario, which also would mean lower prices for Colombian commodity exports. Nevertheless, the price reductions would be slight, since less growth in the US economy would be offset by growth in the euro zone and Japan and by the growth of other emerging economies. In short, global demand would not suffer to any great extent.

Consequently, the end result should mean no substantial change in terms of trade for Colombia or in the growth of its trading partners as a whole. Although, Colombian exports to the United States obviously would be affected.

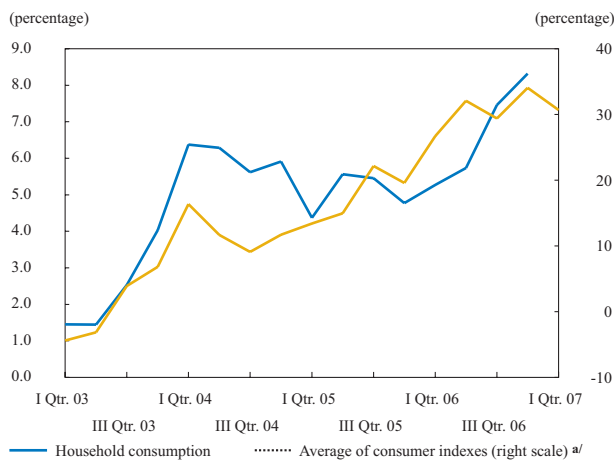
A second risk, also not considered very likely, is that of a slowdown in the United States, coupled with a higher core inflation rate, which would assume potential GDP growth in that country equal to 2.5% or less compared to a current estimate on the order of 3%. In that case the monetary authority could postpone a rate reduction until 2008 or even raise rates slightly, increasing the country-risk premiums of the emerging economies. However, high commodity prices could offset some of that occurrence.

## B. DOMESTIC GROWTH

Given the figure for inflation at March, the baseline scenario for this report anticipates no change in the growth trends for the first quarter of 2007. In the case of private consumption, the sharp increase in credit and the way the consumer confidence indicator have behaved suggest the pace of growth observed during the second half of 2006 will continue during the first six months of 2007.

GRAPH 31

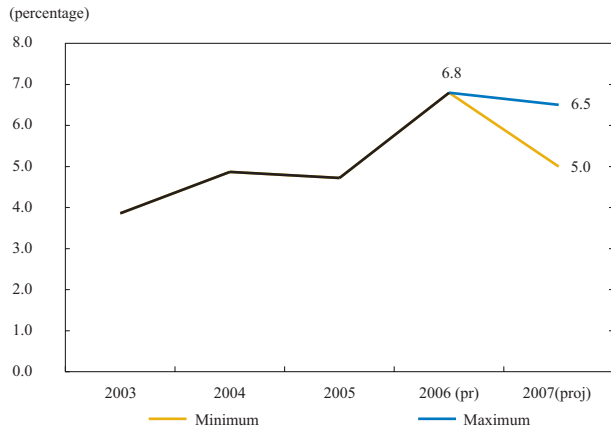
**REAL ANNUAL GROWTH IN HOUSEHOLD CONSUMPTION AND THE FEDESARROLLO CONSUMER INDEX**



a/ Average of the Consumer Confidence Index (CCI), the Consumption Expectation Index (CEI) and the Index of Economic Conditions (IEC).  
Source: Fedesarrollo. Banco de la República's calculations

GRAPH 32

**REAL ANNUAL GDP GROWTH**



(pr) Preliminary.  
(proj) Projected.  
Source: DANE, Banco de la República calculations.

Available information also points to a strong momentum in private investment during the first half of the year, similar to what it was last year. The performance of capital goods imports at February, which were up by an annual rate of more than 30%, is an indication of this, as is the performance of raw materials. The increase in building permits by February and the trend in mortgage loan disbursements also point in that direction and foresee sharp growth in residential investment.

Moreover, the baseline scenario contemplates considerable growth in total exports in dollars, spearheaded by traditional exports. The increase in non-traditional exports will be less than it was in the recent past, due to the slowdown witnessed in the first two months of the year, especially in exports to the United States and Ecuador. However, exports to Venezuela and other destinations would continue to grow significantly, as was the case up to February.

In view of the foregoing, the GDP growth projection in the baseline scenario is between 6.2% and 7.3% for the first half of the year, fueled largely by household consumption, investment in machinery and equipment, and home and building construction. Projected GDP growth for the year is between 5.0% and 6.5%; the forecast in the last quarterly edition of this report was between 4.5% and 6.5% (Graph 32).

Specifically, for the mid-point of the range (5.8%), household consumption and gross capital formation in construction are expected to pick up speed compared to 2006 (Table 9). At the same time, gross capital formation in machinery and equipment is expected to be less dynamic. Domestic demand, on the whole, should be up by 8.2% in 2007, which is a slowdown compared to 2006 (9.9%). On the supply side, private construction, commerce and industry are likely to be the most dynamic sectors.

As these figure indicate, the forecasts in the base scenario assume growth will be more moderate as of the second half of the year. This would be due to the

**GDP GROWTH, BY TYPE OF EXPENDITURE  
(PERCENTAGE)**

	2004	2005	2006	2007 (proj)
<b>End consumption</b>	4.8	4.9	5.6	6.3
Household	6.0	5.0	6.7	7.5
Government	1.1	4.3	2.1	2.5
<b>Gross capital formation</b>	15.6	18.7	26.9	14.6
Gross fixed capital formation (GFCF)	15.0	18.9	18.0	13.9
GFCF without civil works	22.0	16.7	18.1	14.8
Civil works	(7.9)	28.7	17.7	10.0
Variation in inventory	28.0	13.8	206.3	20.5
Domestic demand	6.6	7.4	9.9	8.2
Domestic demand without inventory variation	6.5	7.3	8.0	7.9
<b>Total exports</b>	10.0	7.0	7.8	6.7
<b>Total imports</b>	19.8	19.9	21.3	16.2
<b>GDP</b>	4.9	4.7	6.8	5.8

(proj) Projected.

Source: DANE, Banco de la República calculations.

effect of the various measures adopted by the BDBR since April 2006, which are intended to ensure the long-term target for inflation is met.

### C. BALANCE OF PAYMENTS

A comparison between the inflation forecasts in January and those in this report, particularly for international commodity prices, shows macroeconomic prospects in the external context have improved for Colombia, as have the forecasts for the country's economic growth in 2007. Both these factors influence the projections for the main items in Colombia's balance of payments.

Better terms of trade, coupled with growing Venezuelan demand for Colombian products, are pushing Colombian exports beyond what was projected in January. At the same time, the increased vitality of the Colombian economy, particularly the extremely positive trend in private investment, suggest a considerable rise in imports this year. As to the capital account, international investor confidence with respect to good economic performance in Colombia allows us to assume that the influx of foreign resources in the form of direct investment to finance projects or to acquire companies could exceed last year's figure and could continue to be the country's primary source of external funding.

International prices for crude oil could pose a risk to the country's current account. The latest price quotes for oil futures suggest they would tend to increase in the years ahead.

## D. INFLATION FORECASTS

### 1. Forecasts

Banco de la República's projection for inflation within an eight-quarter horizon is presented in this section. The forecasts assume an active monetary policy that allows inflation to converge towards its long-term target (at around 3%).

The new inflation forecasts are affected primarily by four factors: 1) solid growth in domestic and external demand, which will keep pressure on prices, particularly for non-tradable goods and services; 2) various supply shocks, which will continue to exert upward pressure on inflation in food and regulated prices; 3) the downward pressure that could emerge from recent appreciation in the exchange rate; and 4) increased inflation expectations.

The growth in demand foreseen in the baseline scenario raised the output gap estimates for 2007. In this report, the gap is estimated between 0.7% and 3.3%, with high probability. This implies a specific average estimate of +2% for the year, which is more than was predicted in the previous edition of this report (1.0%). That increase takes into account the sizeable accumulation of capital in recent years and the build-up in labor and total productivity. Although both these phenomena translate into more of an increase in the economy's potential GDP, the growth forecast for demand is higher, raising the likelihood of inflation pressure during the year.

The supply shocks associated with El Niño will tend to disappear as of June and in the second half of the year. By the end of 2007, prices for perishables, which are affected the most by El Niño weather, are expected to return to levels similar to those registered during the fourth quarter of 2006. That reduction would make it possible to reverse the approximate 55 percentage point increase in total annual inflation observed at the beginning of the year for this item.

Other supply shocks, such as rising international food prices and the effect of high fuel prices on regulated goods and services (transportation, gas, energy) will have a more persistent impact on food inflation and total inflation. Given the assumption in the baseline scenario, with no additional hikes in external

prices for food and fuel, the impact of these shocks should extend up to the first or second quarter of 2008.

Moreover, the rest of 2007 and the next few years should see pressure associated with the upcoming cattle retention phase in Colombia. During that period, which usually lasts for more than 12 months, there is less of an increase in the supply of meat and meat by-products. The result is upward pressure on inflation. This is an important factor, given the weight of meat and meat by-products in the consumer basket of goods and services.

Food prices and perhaps those of other goods and services will be affected by strong demand from Venezuela. Our analysis of the external context indicates the Venezuelan economy will continue to grow at a fast pace during 2007, maintaining a solid demand for Colombian output, particularly considering the supply problems that exist in Venezuela, which are not likely to be resolved this year. The effects of that strong demand should continue to exert pressure on prices in Colombia during the remainder of 2007.

The recent appreciation in the exchange rate will exert deflationary pressure during the rest of 2007. It will be felt primarily by tradable inflation, which is expected to decline throughout much of the period remaining in 2007. Considering a broader horizon, the baseline scenario forecasts a slight increase, since the exchange rate is not expected to continue to appreciate in the coming quarters. However, the baseline scenario also rules out a sharp tendency towards depreciation in 2007 and 2008. Moreover, appreciation to date could offset part of the upward pressure from higher food prices. That possibility has not been contemplated fully in the baseline scenario forecasts.

Finally, in addition to demand-pulled pressures, the rise in expectations is another upward factor for inflation that causes the most concern with respect to achieving and consolidating long-term price stability. The increase in expectations during the first three months of the year, coupled with those expected in the second quarter, would help to raise inflation during the rest of 2007 in the various CPI sub-baskets, but particularly in non-tradables. However, considering a broader horizon, expectations should return to levels that are compatible with the long-term targets, once the effects of the shocks reverse and the measures adopted by the monetary authority have an impact on inflation.

In view of the above, the forecast in the central scenario shows an additional, but temporary increase in total inflation up to mid-2007. As of the third quarter, inflation will again adopt a downward path, which will be maintained in 2008 and allow for inflation to converge towards the long-term target (3%) (Table 10).

TABLE 10

**CENTRAL MODEL FORECASTS (TMM) <sup>a/</sup>**  
**(PERCENTAGE)**

	Total Inflation	Food Inflation	Non-food Inflation			Output Gap	
			Total	Non-tradable	Tradable		Regulated
Mar-07	5.8	8.9	4.4	4.9	2.0	7.5	2.0
Jun-07	6.0	10.0	4.3	5.2	1.5	7.8	2.0
Sep-07	5.3	8.5	4.0	5.3	1.2	5.6	2.0
Dec-07	4.9	7.0	4.0	4.9	1.6	6.0	1.8
Mar-08	4.1	4.8	3.8	5.0	1.6	5.2	1.4
Jun-08	3.6	2.4	4.0	5.0	2.3	4.6	0.9
Sep-08	3.6	2.5	4.1	5.1	2.6	4.1	0.4
Dec-08	3.7	3.1	4.0	4.8	3.0	3.5	(0.1)
Mar-09	3.7	2.8	4.0	4.5	3.4	3.9	(0.4)

<sup>a/</sup> These forecasts are constructed on a monetary policy designed to ensure the long-term targets for inflation are met.  
Source: Banco de la República.

The performance of food inflation, now that staple food prices have returned to normal after the effects of El Niño weather have subsided, would explain the downturn in total inflation as of June. This also would help to lower annual inflation in regulated prices, due to a high statistical basis of comparison in 2006 and because the effects of higher fuel prices on transportation and public utilities (gas) should ease.

The forecasts point to a gradual increase in annual non-tradable inflation during the next two quarters, associated primarily with the high growth forecast for demand and with less surplus productive capacity. The forecast for a broader horizon is one where demand-pulled inflationary pressure would gradually lessen as a result of the policy measures adopted by the BDBR, allowing inflation in that sub-basket to stabilize initially at around 5.0% and to converge later toward the long-term target (end of 2008 and in 2009). The convergence process is slow, given the time it takes for changes in intervention rates and other measures to pass through to market and credit rates. The downturn in non-tradable inflation also is adversely affected by the recent increase in expectations and by the very inertia that characterizes its behavior.

Finally, non-food inflation would tend to increase slightly by mid-year, bolstered by the aforementioned changes in regulated prices and non-tradables. However, it should decline again as of the second half of 2007, ending the year near the middle of the target range. Towards 2008, non-food inflation would stay at around 4% and would begin to decline and converge towards the long-term targets.



This being the case, the reduction in total inflation and the stability in core inflation predicted for the coming quarters and for 2008 indicates that much of the recent rise in inflation would be temporary and would reverse during the next four quarters. This is because of the very nature of the shocks to inflation, as well as the impact of BDBR measures on demand-pulled inflationary pressures.

Implicit in the central forecast is the assumption that growth in demand will ease as of the second half of the year, along with the increase in credit. As a result, surplus productive capacity would cease to decline and the output gap would not increase. The forecast also assumes that inflation expectations would not continue to rise during the latter half of the year, which would mean no major repercussions on the wage-setting process at the start of 2008.

## **2. Risks**

The central scenario faces risks in both directions:

Upwards risks:

- Perhaps the major risk is that domestic growth would be more than anticipated, which might happen if the BDBR's interest rate hikes fail to have the anticipated impact on credit and consumption. In that case, domestic demand could increase by around 10% during the second half of 2007, as it has since mid-2006. The result would be more pressure on productive capacity and increased inflationary pressures, particularly more non-tradable inflation than is forecast in the baseline scenario.
- The recent rise in expectations could have a more permanent effect on inflation than is foreseen in the baseline scenario, if it affects wage negotiations. This becomes more feasible in a context of strong growth, like the one at present, when bottlenecks in the labor market could emerge.
- The inflationary effect of certain supply-side and external-demand shocks might be underestimated. One example is the impact on food prices in Colombia due to growth in Venezuelan demand; another is the role of the cattle retention phase on prices for meat and meat by-products.
- In the forecast, regulated prices quickly converge towards the long-term targets. Given the traditional performance of this series and recent trends, there is a great deal of uncertainty surrounding this forecast.

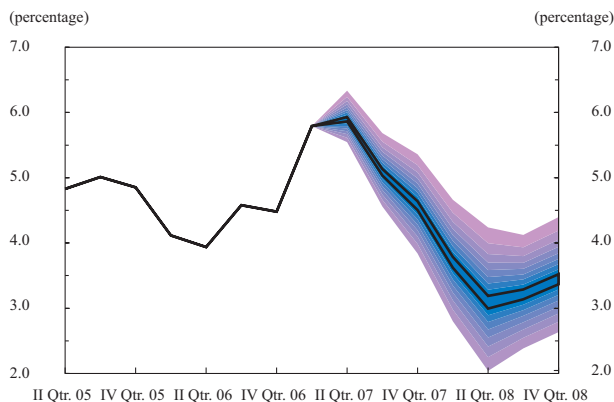
Downward risks:

- The second half of 2007 could see more of a reduction in staple food prices than is contemplated in the baseline scenario, give the sharp surge in those prices at the start of the year. Episodes prior to El Niño weather have shown a correlation between the extent of price hikes and their reductions in subsequent months, inasmuch as the staple food supply tends to respond more when price hikes are more pronounced.
- The baseline scenario assumes that external prices for bio-fuels and foods will remain high throughout the rest of 2007 and in 2008. However, world supply could react in a way that prompts a drop in these prices. This would alleviate pressure on domestic inflation during the next year and a half.
- The external conditions forecast for Colombia in the next two years are good. This could attract more capital than is contemplated in the baseline scenario, which would result in more pressure for the exchange rate to appreciate.

The condensed risk balance in the *Fan Chart* is shown in Graph 33, together with the probability table. As always, it is important to remember that these results, like those of the central forecast, assume an active monetary policy that is adjusted to ensure compliance with the long-term targets for inflation.

GRAPH 33

PROBABILITY DISTRIBUTION OF THE INFLATION FORECAST (FAN CHART) <sup>a/</sup>



ACCUMULATED PROBABILITY OF CONSUMER INFLATION WITHIN THE INDICATED RANGE

Inflation Ranges (%)	Probability (%)	
	December 2007	December 2008
Above 5.5	7.0	0.1
Below 5.5	93.0	99.9
Below 5.0	65.7	98.9
Below 4.5	30.0	92.1
Below 4.0	8.5	70.6
Below 3.5	1.4	38.7
Below 3.0	0.1	14.0

a/ These forecasts are constructed on a monetary policy designed to make sure the long-term targets for inflation are met. Source: Banco de la República's calculations.

## MACROECONOMIC PROJECTS BY DOMESTIC AND FOREIGN ANALYSTS

The following are the latest projections by domestic and foreign analysts concerning the principal variables for the Colombian economy in 2007 and 2008. When consulted, the contributing analysts had access to data at March 2007.

### I. Projections for 2007

The forecasts for 2007 are shown in Table A1. On average, the domestic analysts expect 5.5% economic growth, which is 22 bp more than the forecast last quarter. The foreign analysts anticipate 5.7% (66 bp more). As in the previous report, expectations have improved, reflecting the positive situation described by the economic indicators for supply and demand, the strong increase in credit, and the fact that Fedesarrollo's

**TABLE A1  
PROJECTIONS FOR 2007**

	Real GDP Growth (%)	CPI Inflation (%)	Nominal Exchange Rate (ending at)	Nominal DTF (%)	Fiscal Deficit (% of GDP)	Unemployment Rate (% for 13 cities)
<b>Domestic Analysts</b>						
BBVA Ganadero	5.9	4.4	2,134	8.8	0.9	10.9
Bancolombia-Suvalor	5.7	4.7	2,194	8.5	0.7	10.7
Corficolombiana-Corfivalle	6.0	4.5	2,330	n.a.	n.a.	n.a.
Banco de Bogotá	5.0	4.8	2,132	7.7	1.4	12.8
Correval	5.3	5.1	2,250	7.5	1.0	12.7
Alianza Valores	5.2	4.8	2,069	8.0	0.5	11.5
Banco Santander	5.7	4.5	2,225	8.3	0.9	11.8
<b>Average</b>	<b>5.5</b>	<b>4.7</b>	<b>2,191</b>	<b>8.1</b>	<b>0.9</b>	<b>11.7</b>
<b>Foreign Analysts</b>						
CS First Boston	6.0	4.5	2,280	n.a.	1.7	n.a.
J. P. Morgan Chase	6.0	4.7	2,300	n.a.	1.7	n.a.
Goldman Sachs	5.0	4.5	2,380	n.a.	1.0	n.a.
Deutsche Bank	5.4	4.3	2,342	n.a.	1.2	n.a.
Citi	5.7	4.7	2,200	n.a.	1.3	n.a.
Bear Stearns	6.3	5.0	2,250	8.8	0.3	10.0
<b>Average</b>	<b>5.7</b>	<b>4.6</b>	<b>2,292</b>	<b>n.a.</b>	<b>1.2</b>	<b>n.a.</b>

n.a. Not available

Source: Banco de la República, based on data collected through electronic and telephone surveys.

consumer confidence index remains near an all-time high. This means we can expect healthy growth in private consumption.

In terms of inflation, the domestic analysts raised their forecast by 62 bp to 4.7%; the foreign analysts increased theirs by 29 bp to 4.6%. Both figures exceed the target range for the year (3.5% to 4.5%), which has not been the case since mid-2005.

As in the last two years, the exchange-rate forecasts were revised downward once again. The domestic analysts lowered their average forecast by Col\$84 (to Col\$2,191); the foreign analysis reduced theirs by Col\$95 (to Col\$2,292). In other words, the domestic analysts expect foreign exchange to appreciate by 2.2%, on average, and the foreign analysts, by 2.3%, compared to the exchange rate at the end of 2006. Maximum expected depreciation is 5.9% (Col\$2,380); the minimum is -8.2% (Col\$2,069 per dollar).

With respect to interest on term deposits (DTF in Spanish), the domestic analysts raised their forecast by 84 bp and expect it to be 8.1% by the end of the year, which is nearly 60 bp above the current rate. They expect the consolidated fiscal deficit to be around 1% of GDP, which is slightly below the latest CONFIS projection (1.3% for the consolidated public sector). The forecast for unemployment in 13 cities is 11.7%, which could suggest analysts do not expect the recent increases in DANE's measurements to continue in the future (although they raised their forecasts by 100 bp compared to last quarter).

## **II. Projections for 2008**

The domestic analysts expect 4.8% growth in 2008 and the foreign analysts, 4.9% (Table A2). Both anticipate 3.9% inflation. This is in the upper part of the range (3% to 4%) for the 2008 target. As to the exchange rate, the domestic analysts anticipate 2.8% annual devaluation, compared to the forecasts for the end of 2007; the foreign analysts expect to see 4.3% devaluation. This would place the representative market rate (TRM in Spanish) at Col\$2,254 by the end of 2008 according to the domestic analysts, and at Col\$2,392 according to the foreign analysts. Compared to the end of 2006, this implies 0.7% accumulated peso devaluation between 2007 and 2008 according to the domestic analysts, and 6.4% devaluation according to the foreign analysts.

**TABLE A2**  
**PROJECTIONS FOR 2008**

	<b>Real GDP Growth (%)</b>	<b>CPI Inflation (%)</b>	<b>Nominal Exchange Rate (end of 2008)</b>
<b>Analistas locales</b>			
BBVA Ganadero	4.7	3.6	2,168
Bancolombia-Suvalor	5.0	3.8	2,228
Corficolombiana-Corfivalle	5.0	4.2	2,400
Banco de Bogotá	4.5	3.5	2,150
Correval	4.5	4.2	2,300
Alianza Valores	n,d,	n,d,	n,d,
Banco Santander	5.1	4.0	2,280
<b>Average</b>	<b>4.8</b>	<b>3.9</b>	<b>2,254</b>
<b>Analistas externos</b>			
CS First Boston	5.0	4.0	2,306
J, P, Morgan Chase	5.5	4.2	2,350
Goldman Sachs	4.0	3.8	2,500
Deutsche Bank	5.4	3.6	2,464
Citi	4.5	3.8	2,443
Bear Stearns	5.0	4.2	2,290
<b>Average</b>	<b>4.9</b>	<b>3.9</b>	<b>2,392</b>

n.a. Not available

Sources: Banco de la República, based on data provided by the analysts.