



# INFLATION REPORT

---

DECEMBER DE 2004

BANCO DE LA REPÚBLICA

CENTRAL BANK OF COLOMBIA

BOGOTÁ D. C., COLOMBIA

ISSN - 1657 - 7973

# CONTENTS

GRAPHS AND TABLES	4
SUMMARY: INFLATION IN DECEMBER AND THE OUTLOOK	7
I. THE CURRENT ECONOMIC SITUATION	13
A. THE EXTERNAL CONTEXT	13
B. THE EXCHANGE RATE AND BALANCE OF PAYMENTS	16
C. TRADABLES PRODUCTION	20
D. DOMESTIC DEMAND AND NON-TRADABLES PRODUCTION	21
E. MONETARY AGGREGATES, CREDIT AND INTEREST RATES	24
F. THE OUTPUT GAP	26
G. INFLATION	28
BOX 1: SOME DETERMINANTS OF RENTAL INFLATION IN RECENT YEARS	33
II. THE MACROECONOMIC OUTLOOK	37
A. INTERNATIONAL GROWTH, PRICES AND INTEREST RATES	37
B. DOMESTIC DEMAND AND ECONOMIC GROWTH	41
C. INFLATION FORECASTS	43
BOX 2: HOW FLEXIBLE ARE PRICES IN COLOMBIA?	52
APPENDIX: PROJECTIONS ON SEVERAL MACROECONOMIC VARIABLES BY DOMESTIC AND EXTERNAL ANALYSTS	55
MONETARY POLICY DECISIONS IN THE LAST THREE MONTHS	59

# GRAPHS AND TABLES

## I. THE CURRENT ECONOMIC SITUATION

---

Graph 1	Annualized Quarterly GDP Growth in the United States, the Euro Zone and Japan	14
Graph 2	Annual Inflation in the United States - The FED Interest Rate	15
Graph 3	Country Risk Premium EMBI+, Latin American Countries	16
Graph 4	U.S. Current Account Balance	16
Graph 5	Exchange Rate for Other Currencies Against the US. Dollar	17
Graph 6	Real Exchange Rate Index	17
Graph 7	International Oil and Coffee Prices	19
Graph 8	Exports, in Value	20
Graph 9	Non-traditional Exports to Venezuela	20
Graph 10	Total Exports	21
Graph 11	GDP Growth in Agriculture, Forestry, Hunting and Fishing	21
Graph 12	Annual Growth in GDP and the Corrected IPI	21
Graph 13	Indicator of Industrial Orders - Fedesarrollo	22
Graph 14	GDP in Civil Engineering Works	22
Graph 15	Household Consumption	22
Graph 16	Breakdown of Job Creation in 13 Cities	23
Graph 17	Real Annual GDP Growth in Tradables and Non-tradables Sectors	24
Graph 18	Gross Domestic Credit and M3	25
Graph 19	DTF and Inter-bank Interest Rates	26
Graph 20	TES Secondary Market Interest Rate	26
Graph 21	Installed Capacity Utilization	27
Graph 22	Output Gap	29
Graph 23	Annual Consumer Inflation	29

Graph 24	Non-food CPI	29
Graph 25	Tradables CPI, Excluding Food and Regulated Goods and Services	29
Graph 26	Non-food CPI for Regulated Goods and Services	29
Graph 27	Non-tradables CPI, Excluding Food and Regulated Goods and Services	29
Graph 28	CPI for Rentals and Other Non-tradables	30
Graph 29	Core Inflation Indicators	31
Table 1	Real Peso Depreciation Compared with Different Countries	18
Table 2	Balance of Payments	19
Table 3	Real Annual GDP Growth in 2004, by Demand Components	23
Table 4	Sources of Base Money - 2004	24
Table 5	Liabilities of Non-financial Companies Registered in the Superintendence of Securities	25
Table 6	Private Gross Fixed Capital Formation	27

## II. THE MACROECONOMIC OUTLOOK

---

Graph 30	Commodity Price Index (WCF)	43
Graph 31	Consumer Confidence Index	42
Graph 32	Private Investment as a Percentage of GDP	43
Graph 33	Real GDP Growth Forecasts, by Expenditure	43
Graph 34	Observed and Expected Inflation	46
Graph 35	Inflation Expectations at 12 Months	46
Graph 36	Inflation Forecast Probability Distribution (Fan-Chart)	51
Table 7	Growth Forecasts for the Main Trading Partners	38
Table 8	Forecasts on International Prices for Colombia's Main Commodity Exports	40
Table 9	Central Model Forecasts (TMM)	48

## INFLATION IN DECEMBER AND THE OUTLOOK

- ✧ In 2004, the inflation target (5.5%) was met and non-food inflation saw a substantial decline. The downturn in non-food inflation was associated with the following factors:
  - ✧ The exchange rate appreciation and its impact on the reduction in tradables inflation.
  - ✧ The absence of major demand pressures, which halted the acceleration in inflation for non-tradable goods and services during the second half of 2004.
  - ✧ Lower inflation expectations.
  - ✧ An absence of major cost pressures.
- ✧ These factors neutralized the upward effect on non-food inflation originating from the prices of fuel and regulated goods and services. The decline in inflation and the fact that the inflation target was met helped to lower inflation expectations.
- ✧ The period since September 2004 has seen two important macroeconomic changes in comparison with the initial forecast: namely, the exchange rate appreciation and a possibly wider output gap.
- ✧ The increase in nominal appreciation of the peso led to a real peso appreciation, not only against the dollar but also against the various baskets of relevant currencies. The acceleration in peso appreciation during the fourth quarter is explained primarily by capital inflows other than foreign direct investment (FDI). This phenomenon is part of a weakened dollar worldwide and the movement of private capital towards emerging economies.
- ✧ As of the fourth quarter of 2004 and for 2005, the external context has become far more uncertain. Assuming there will be no abrupt corrections in the U.S. external deficit, there might be gradual increases in short-term interest rates in that country, outflows of private capital from the U.S. economy (accompanied by a continued weakening of the dollar) and moderate reductions in world growth and commodity prices.
- ✧ The peso might depreciate in 2005 compared with the levels observed at the end of 2004. However, the behavior of the exchange rate during 2005 is particularly uncertain, given the volatility of the international context.
- ✧ The exchange rate scenario for 2006 and for the mid-term is more difficult to predict. On the one hand, nominal and real peso depreciation is feasible, given the deterioration in the

current account that would result from the drop in oil prices and in oil export volumes. However, there is a lot of uncertainty about how capital flows will behave. In a scenario of capital inflows equal to or higher than in the past year, the current account deficit could exceed that of recent years.

- ✧ The economy grew by 2.4% in the third quarter. This was far less than expected and below the rate of growth since mid-2003 (above 4%). This could be due, in part, to temporary events such as the trucking strike in September (which lasted until October), the decline in coffee supply and in gold and nickel production, and not as many working days. Also, investment in civil works was low. However, the decline in economic growth was accompanied by a slowdown in consumption, which does not rule out the possibility that demand will continue to weaken.
- ✧ The rapid rise in investment in recent years suggests an expansion in potential gross domestic product (GDP). Weakened demand and the likely growth in “potential GDP” indicate the “output gap” might have widened at the end of 2004, easing inflationary pressures.
- ✧ The stabilization in non-tradables inflation during the second half of 2004 (following an increase in the first six months of the year) is coherent with the assumption of a wider output gap. However, it also could be the result of a decline in inflationary expectations.
- ✧ Further exchange rate appreciation in 2004 and the forecast for 2005, the possibility of a wider output gap and the decline in inflationary expectations would be coherent with meeting the inflation target for 2005 (between 4.5% and 5.5%), and with the range announced for 2006 (between 3.5% and 5.5%), in the presence of a lower interest rate path than contemplated in earlier reports.
- ✧ The inflation forecasts confirm this, even with the price shocks that could occur in 2005, such as an increase from 7% to 10% in the value added tax (VAT) on some items in the family market basket, possible above-inflation increases in prices for fuel and regulated goods and services, and the likelihood of moderate El Niño weather.
- ✧ The Board of Directors of the Central Bank (BDCB) has expressed its concern about the trend in real peso appreciation, due to the negative impact it could have on production in some tradables sectors and on developments concerning the balance of payments, specifically the current account. A shortfall in the balance of payments might eventually necessitate abrupt changes in the exchange rate to cope with a setback in capital flows to emerging economies. This would have a perverse effect on inflation and productive activity.
- ✧ Based on these considerations, the BDCB continued to implement policies in the last quarter of 2004 to ease the degree of exchange rate appreciation.
  - ✧ Banco de la República accumulated US\$1,503 million (m) in international reserves during the final quarter of 2004. This was done through discretionary purchases and accounts for 52% of all international reserves accumulated during the year.
  - ✧ On 17 December 2004, the Board of Directors lowered the Bank’s intervention interest rates to 6.5% for expansion auctions and 5.5% for contraction auctions. In all, this comes to a reduction of 25 basis points (bp).

- ✘ The Board of Directors closed its contraction windows (auction and Lombard) on 21 December and ratified its decision to intervene in the exchange market at its discretion.
- ✘ Despite the additional purchase of dollars, monetary expansion has been coherent with the monetary program, thanks to a lower net repo balance and an increase government deposits with Banco de la República.
- ✘ These measures have led to a drop of nearly 50 bp in the inter-bank interest rate (TIB) since the end of the year, with 25 bp of this decline attributed to the Bank's intervention rates.
- ✘ The possibility of maintaining the current stance of monetary policy for the coming quarters will depend fundamentally on the actual and anticipated trend in the exchange rate and aggregate demand.
- ✘ If the inflow of capitals were to continue during 2006, without an accelerated closure of the output gap, it would be feasible to continue the current monetary policy and to meet the inflation targets. However, if high depreciation is forecast for 2006 (due to less capital inflows), it would be difficult to maintain short-term interests rates at their current levels and to comply with the inflation target for 2006.
- ✘ For the time being, the international scene is expected to be characterized by a gradual adjustment in the U.S. external deficit that implies no abrupt changes in world growth, commodity prices or capital flows to emerging markets. In this context, if a fiscal policy conducive to a reduction in the ratio of the debt to GDP is maintained, there should be no sharp reversals in the flow of foreign capital towards Colombia.
- ✘ These figures and observations suggest the possibility of leaving interest rates unaltered during the coming months. Nevertheless, as has been indicated repeatedly, there is considerable uncertainty about several relevant aspects such as the output gap and the international context. This necessitates a frequent macroeconomic review of the situation and the macroeconomic forecast.
- ✘ Major changes in the macroeconomic situation or in the forecast could lead to important changes in the stance of monetary policy.

Board of Directors, Banco de la República



# INFLATION REPORT

Prepared by the  
**Programming and Inflation Department**  
of the **Economic Studies Division**

Translated by  
**Sharon Terry de Navarro**



DIVISION OF ECONOMIC STUDIES

Hernando Vargas Herrera

**Assistant Manager**

PROGRAMMING AND INFLATION DEPARTMENT

Juan Mauricio Ramírez Cortés

**Director**

INFLATION SECTION (\*)

Aldolfo León Cobo Serna

**Head**

Edgar Caicedo García

Luisa Fernanda Charry

Luz Adriana Flórez Flórez

Alejandro Reyes González

José Luis Torres Trespacios

Andrés Mauricio Velasco Martínez

(\*) This report was prepared with the help of Gloria Alonso Másmela, Head of the Macroeconomic Programming Section, Franz Hamann Salcedo, Director of the Macroeconomic Models Department, Martha López, Luis Fernando Melo Velandia, Norberto Rodríguez Niño and Julián Pérez Amaya.

# I. THE CURRENT ECONOMIC SITUATION

*Economic growth slowed in the second half of 2004 amidst an unexpected build-up in the exchange rate brought on by larger inflows of capital. The rate of inflation continued to decline, allowing for compliance with the 5.5% target.*

The fourth quarter saw two circumstances that alter the forecast outlined in the September *Inflation Report*; namely, exchange rate appreciation and a possibly wider output gap. The increase in real and nominal peso appreciation during the fourth quarter is explained primarily by the influx of foreign capital. This phenomenon is part of a weakening dollar the world over, in response to the fiscal and external deficits in the United States economy, which have steered private capital towards other developed and emerging economies.

Economic growth in Colombia slowed unexpectedly in the third quarter, mainly because of supply factors. However, available information does not rule out the possibility of weaker demand for domestic production. This, coupled with the rapid pace at which investment has grown in recent years, suggests the output gap might have widened, thus lowering inflationary pressures. The stability of non-tradables inflation in the second half of 2004 is coherent with this hypothesis. Lower expectations of inflation, thanks to compliance with the 5.5% target and the decline in food inflation, probably played a role as well.

## A. THE EXTERNAL CONTEXT

Previous reports noted the strong growth in the world economy, lead by the United States and China. This is in contrast with economic growth in Japan and the Euro zone, where headway during the second quarter of 2004 was deficient, following strong growth in the first quarter of that year.

*The United States continued to lead world economic growth in the second quarter of the year.*

The information available for this report suggests these tendencies did not change substantially during the second half of the year and the United States continued to lead economic growth worldwide. In fact, the U.S. economy saw 4% real annualized quarterly growth in the third quarter of 2004, compared with 3.3% in the second quarter (Graph 1). This acceleration was backed by strong growth in household consumption and by non-residential fixed capital investment. The impact of net external demand remained negative.

Although indicators in some sectors appear to suggest similar growth for the end of 2004, the preliminary GDP for the fourth quarter (3.1%) does not confirm these expectations entirely. Additional deterioration in the balance of trade apparently had a very negative impact on year-end growth. The trade deficit was US\$60.3 billion (b) in November, the largest in U.S. history. These figures only added to uncertainty about the sustainability of the high current account and fiscal deficits, bringing pressure to bear on the dollar. Yet, the markets seem to feel the U.S. economy grew at a healthy pace during the last two quarters.

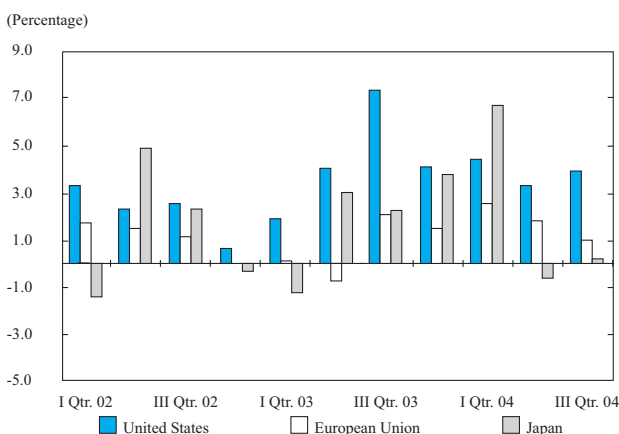
The Japanese economy found itself in a less favorable situation. The significant boost in late 2003 and the first quarter of 2004 ended thereafter. Growth, for example, was only 0.25% (annualized quarterly), suggesting zero growth in productive activity for two quarters in a row (Graph 1). This strained performance is associated with the drop in exports - which were the main source of

growth up until the first quarter - and the reduction in private investment. However, private consumption showed a slight improvement, thanks to developments on the job market.

Economic growth in the Euro zone also slowed during the second half of the year, especially in the third quarter when the real growth rate was 1.1% (annualized quarterly). This was below the increase in the first and second quarters (Graph 1). Growth at September was explained by investment, which had been performing well due to lower costs for financing. In contrast, net exports had a negative impact on the rise in output, given the surge in imports. The increase in private consumption has been moderate.

GRAPH 1

ANNUALIZED QUARTERLY GDP GROWTH IN THE UNITED STATES, THE EURO ZONE AND JAPAN



Source: Datastream.

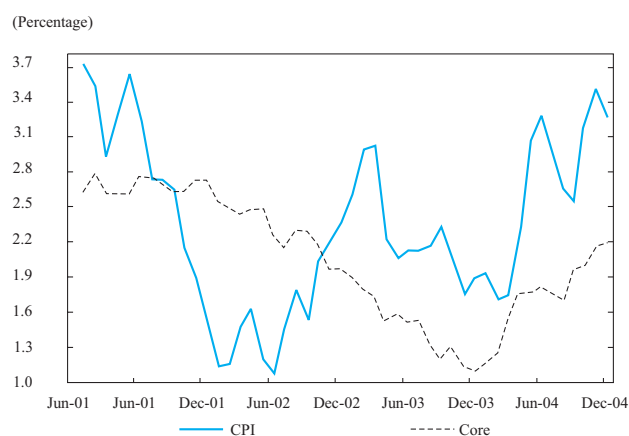
The developed economies saw no inflationary pressure during the second half of the year. In the United States, total inflation went from 3.5% in November to 3.3% in December, while core inflation was around 2.2% for the second month in a row. The slow rise in inflation enabled the U.S. Federal Reserve (Fed) to continue its policy of moderate increases in the interest rate, which was 2.25% at the end of the year, as anticipated by the market (Graph 2).

With respect to the emerging economies, growth was high throughout 2004 and, for the most part, exceeded that of previous years. The Asian economies continued to be propelled by the dynamism in the Chinese economy, which accelerated from 9.1% to 9.5% between the third and fourth quarters, backed by fixed investment (with an increase of 21.3%) and industrial production (14.4% growth). In China, the sharp rise in output has begun to affect inflation. For example, the producer price index (PPI), which reflects possible cost pressures, registered an annual growth rate of 7.1% in December against 6.1% in November.

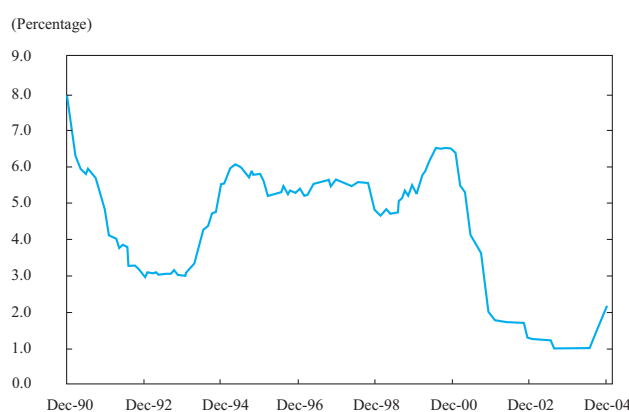
The Latin American economies recovered considerably in 2004 compared with previous years. The increased momentum in the region was aided by the growth in world demand and good terms of trade. Both these factors boosted export growth and improved household income, favoring a recovery in domestic demand. In addition, several Latin American countries saw an improvement in other macroeconomic fundamentals as a result of institutional reforms. This boosted confidence among international investors.

As to Colombia's major trading partners in the region (Venezuela and Ecuador), the third quarter was a period of solid growth due to high oil prices. In Venezuela, third-quarter growth was better than expected (15.8% annual), further enhancing prospects for an increase during the coming year. Even so, the persistence of legal and political uncertainty limits FDI in the Venezuelan economy and reduces the country's growth potential. For its part, the Ecuadorian economy has remained stable, despite several political events that made the market nervous.

ANNUAL INFLATION IN THE UNITED STATES



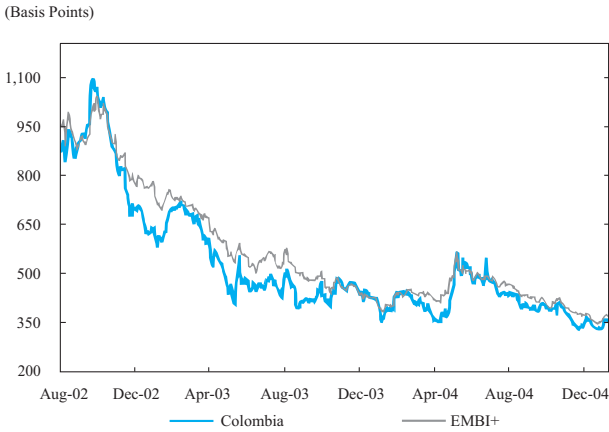
FED INTEREST RATE



Source: Datastream.

**GRAPH 3**

**COUNTRY RISK PREMIUM EMBI+  
LATIN AMERICAN COUNTRIES**



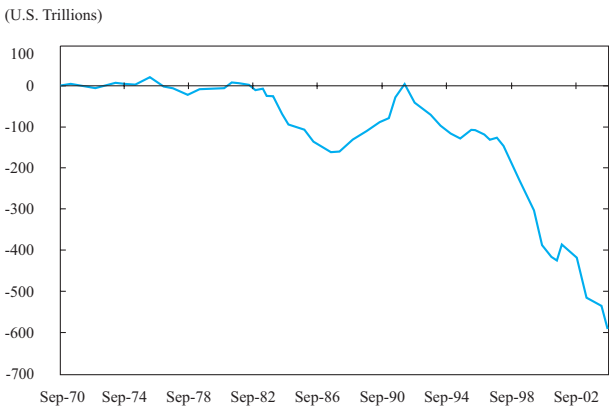
**B. THE EXCHANGE RATE AND BALANCE OF PAYMENTS**

Increased economic growth in the Latin American countries and external interest rates that are still low helped these economies to continue to enjoy broad liquidity on international markets during the second half of 2004. This was evident in a systematic drop in the EMBI (Emerging Market Bond Index), which hit an all-time low (Graph 3).

Capital inflows to emerging economies, including those in Latin America, are part of the situation created by a weaker dollar against the vast majority of currencies worldwide. This weakening is associated with the uncertainty caused by record-high current account and fiscal deficits in the United States (Graph 4).

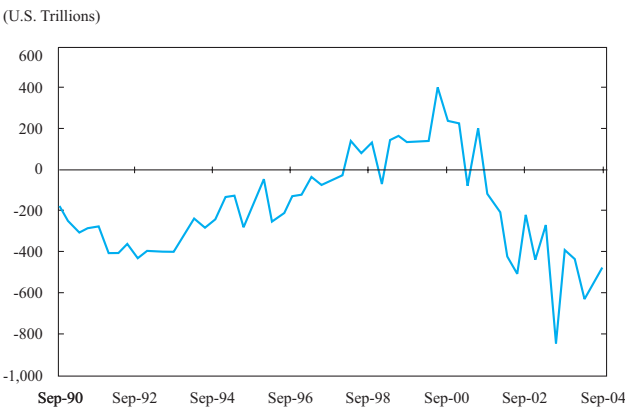
**GRAPH 4**

**U.S. CURRENT ACCOUNT BALANCE**



The developed economies, such as Japan and those in the Euro zone, have seen their currencies appreciate sharply as of 2002. However, most Latin American countries experienced more average appreciation during 2004 (Graph 5). Average nominal appreciation in the Euro zone was 10% in 2004, as opposed to approximately 6.7% in Japan. Between 2003 and 2004, the Latin American countries registering the most nominal appreciation against the dollar were Brazil (5%), Chile (12%) and Colombia (8.7%).

**UNITED STATES PUBLIC SECTOR DEFICIT**



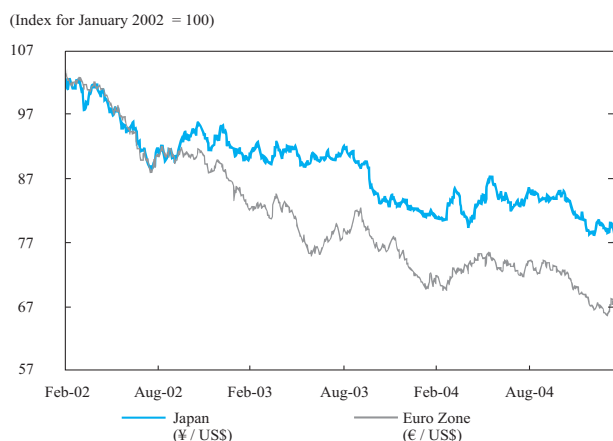
Source: U.S. Department of Commerce.

The Colombian peso has appreciated in real terms, not only against the dollar but also against assorted baskets of relevant currencies (Graph 6). Against the dollar, the Colombian peso averaged 11.5% real appreciation between 2003 and 2004. However, a comparison with 2002 to rule out the effect of depreciation in 2003 associated with temporary events such as the change of government in Brazil and the drop in exports to Venezuela shows real appreciation is only 2.9% (Table 1).

A comparison between the Colombian peso and the currencies of several emerging countries reflects a

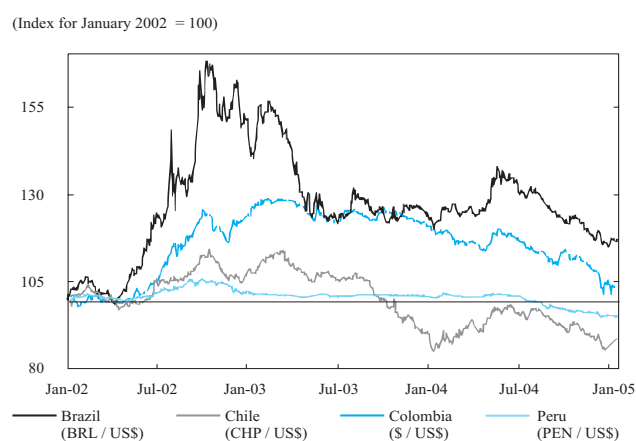
**EXCHANGE RATE FOR OTHER CURRENCIES AGAINST THE US. DOLLAR  
(INDEXES)**

**EURO AND YEN**



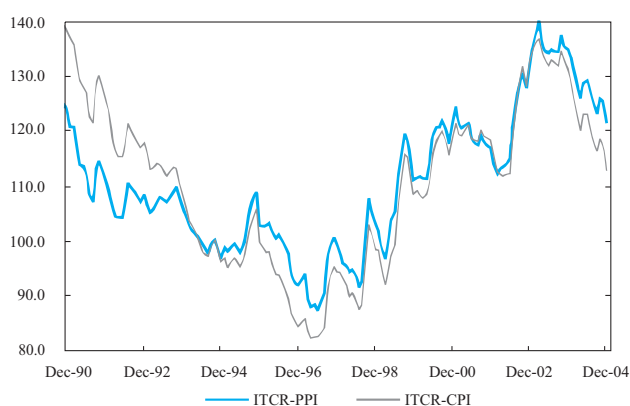
Fuente: Datastream.

**LATIN AMERICAN CURRENCIES**

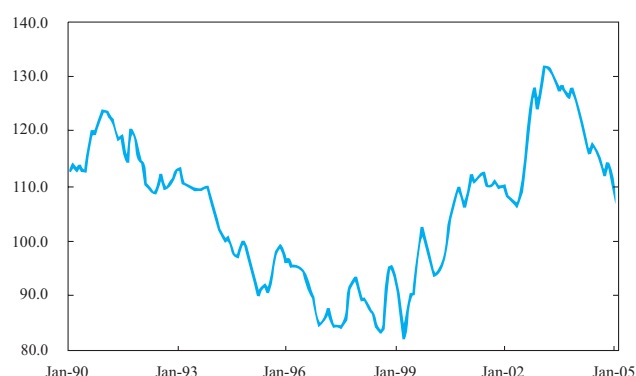


**REAL EXCHANGE RATE INDEX**

**ITCR  
(1994 = 100)**



**WITH THIRD COUNTRIES 1/  
(GEOMETRIC MEASURE 1994 = 100)**



1/ For coffee, bananas, flowers and textiles on the United States market.  
Source: Banco de la República.

similar situation. During 2004, the peso appreciated sharply, in real terms, against the currencies of Mexico (14% annual average), Venezuela (10%), Ecuador (12%), Argentina (10%) and China (10%). Nonetheless, a look at the period between 2002 and 2004 shows real peso appreciation only with respect to Mexico (13%) and Venezuela (11%). In contrast, it depreciated in relation to countries such as Brazil, Chile and Korea.

The acceleration in nominal peso appreciation during the fourth quarter is explained mostly by larger capital inflows. The private sector reported US\$915 m in net capital outflows in 2002 (without FDI) and US\$473 m in 2003. However,

**REAL PESO DEPRECIATION AGAINST DIFFERENT COUNTRIES  
(YEARLY AVERAGE)**

	2001	2002	2003	2004	2002-2004
<b>Developed Countries</b>					
United States	4.9	4.0	9.8	(11.5)	(2.9)
Germany	(10.0)	(1.3)	15.3	(7.7)	6.4
France	1.8	10.0	29.3	(3.8)	24.3
Italy	0.8	10.9	30.6	(3.1)	26.6
Japan	1.9	11.6	31.3	(2.9)	27.4
<b>Developing Countries</b>					
Mexico	10.0	3.6	0.6	(14.0)	(13.4)
Venezuela	7.9	(20.1)	(1.0)	(10.2)	(11.1)
Ecuador	39.8	15.2	15.7	(11.4)	2.6
Peru	3.6	1.9	11.3	(8.8)	1.5
Brazil	(14.3)	(10.3)	15.8	(3.6)	11.5
Chile	(9.7)	(4.0)	10.6	(1.4)	9.0
Argentina	1.0	(56.1)	20.9	(9.9)	9.0
China	2.6	1.5	8.6	(10.4)	(2.7)
Korea	(7.0)	9.0	16.2	(7.1)	7.9

Source: Banco de la República.

the situation changed in the third quarter of 2004, with a capital inflow of US\$501 m (Table 2). The net flow of FDI went from US\$855 m in 2003 to US\$2,002 m, accumulated at September.

It is important to point out that capital inflow in 2004 was far less than, for example, between 1993 and 1998. This is illustrated by the current account deficit anticipated for 2004 (1.2% of GDP versus 4.8% of GDP, on average, between 1993 and 1998) and the financial and capital account surplus (2.9% of GDP versus 5.03% of GDP between 1992 and 1998). In fact, the current account deficit fell during 2004, while the increase in domestic absorption remained high<sup>1</sup>. This suggests that some appreciation came from exogenous movements in the current account; namely, better terms of trade, transfers and the increase in external demand for Colombian products.

The prices of Colombia's major exports continued to benefit from the external situation and remained high throughout the fourth quarter of 2004. Prices for coffee and gold even exceeded those in previous quarters (Graph 7). External demand for Colombian goods continued to grow at a vigorous pace, especially demand in Venezuela.

<sup>1</sup> In 2003, the current account deficit was 1.7% of GDP and domestic absorption rose by 5%. In 2004, the current account deficit is expected to be 1.2% of GDP and average (annual) growth in domestic absorption during the first nine months was estimated at 4.7%.

**BALANCE OF PAYMENTS**  
**CAPITAL AND FINANCIAL ACCOUNT (YEARLY AND QUARTERLY FLOWS)**  
 (U.S. MILLIONS)

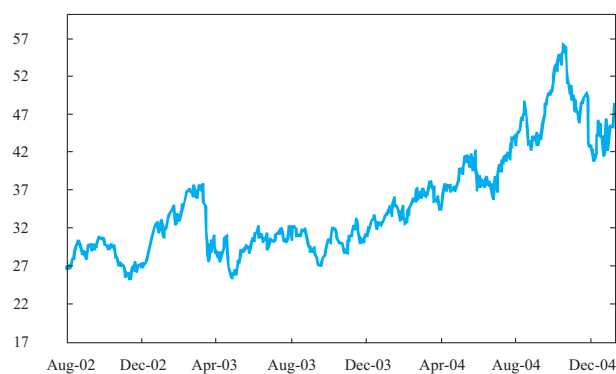
	2003					2004			
	I	II	III	IV	Accumulated	I	II	III	Accumulated at september
<b>Net foreign investment in Colombia</b>	<b>276</b>	<b>494</b>	<b>579</b>	<b>(493)</b>	<b>855</b>	<b>534</b>	<b>749</b>	<b>740</b>	<b>2,022</b>
Foreign in Colombia	325	529	588	352	1,793	582	769	765	2,117
Colombian abroad	(49)	(35)	(9)	(845)	(938)	(49)	(21)	(25)	(95)
<b>Total Public Sector</b>	<b>102</b>	<b>(33)</b>	<b>305</b>	<b>88</b>	<b>463</b>	<b>47</b>	<b>(274)</b>	<b>(280)</b>	<b>(506)</b>
<b>Financial Public Sector</b>	<b>(136)</b>	<b>(113)</b>	<b>50</b>	<b>(88)</b>	<b>(287)</b>	<b>(131)</b>	<b>(108)</b>	<b>(75)</b>	<b>(314)</b>
<b>Non-financial Public Sector</b>	<b>239</b>	<b>80</b>	<b>256</b>	<b>176</b>	<b>750</b>	<b>179</b>	<b>(166)</b>	<b>(205)</b>	<b>(192)</b>
Long-term	617	52	395	393	1,457	(195)	180	295	279
Disbursements	1,352	1,249	1,173	1,141	4,915	643	500	637	1,780
Amortization	735	1,197	778	748	3,459	838	320	342	1,500
Short-term	(379)	28	(139)	(217)	(707)	373	(345)	(499)	(471)
<b>Private Sector without FDI</b>									
<b>Total</b>	<b>69</b>	<b>(557)</b>	<b>(559)</b>	<b>574</b>	<b>(473)</b>	<b>359</b>	<b>19</b>	<b>124</b>	<b>501</b>
Non-financial	217	(306)	(475)	531	(32)	335	(31)	(208)	96
Financial	(149)	(251)	(84)	43	(441)	24	50	331	405
<b>Non-financial Private Sector</b>	<b>217</b>	<b>(306)</b>	<b>(475)</b>	<b>531</b>	<b>(32)</b>	<b>335</b>	<b>(31)</b>	<b>(208)</b>	<b>96</b>
Leasing	123	(55)	(381)	(5)	(319)	(50)	(69)	(19)	(138)
Long-term	(363)	(156)	(259)	53	(726)	(159)	(325)	(371)	(855)
Outlays	134	303	222	729	1,387	364	198	231	793
Amortization	497	458	481	676	2,112	523	523	602	1,648
Short-term	457	(95)	166	484	1,012	545	363	181	1,089
Portfolio investment (active)	3	(351)	(386)	(400)	(1,135)	(109)	(365)	(260)	(734)
Debts and others	455	256	552	884	2,147	653	729	442	1,824
<b>Financial Private Sector</b>	<b>(149)</b>	<b>(251)</b>	<b>(84)</b>	<b>43</b>	<b>(441)</b>	<b>24</b>	<b>50</b>	<b>331</b>	<b>405</b>
Long-term	(76)	9	(10)	27	(51)	36	(16)	(23)	(3)
Short-term	(72)	(259)	(74)	15	(390)	(12)	66	355	408
Private capital flows without adjusted FDI					(1,285)				

Source: Banco de la República.

## INTERNATIONAL OIL AND COFFEE PRICES

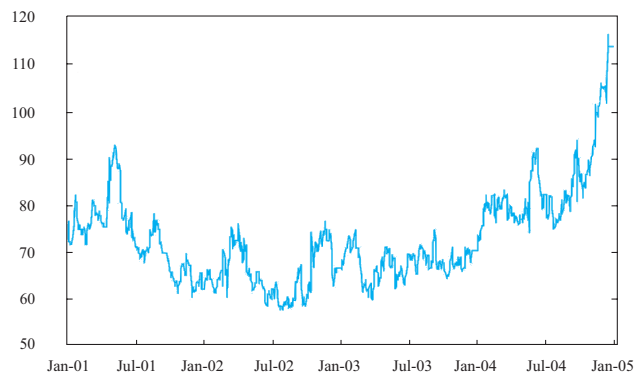
OIL - WTI

(Dollars / Barrel)



COLOMBIAN ARABIC COFFEE

(U. S. cents per pound)

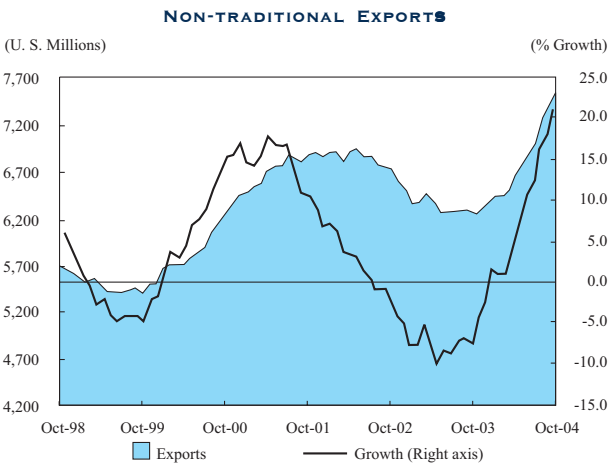
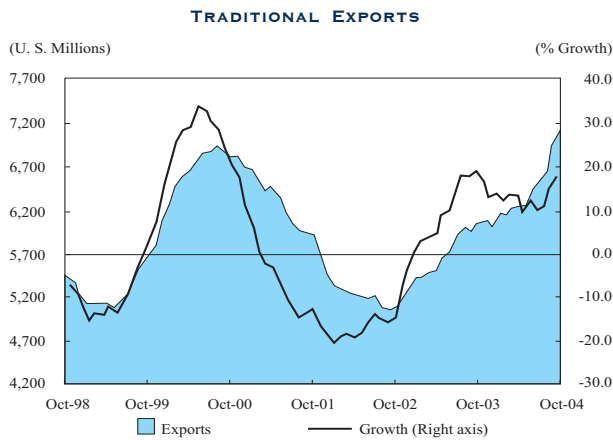


Source: Bloomberg.



**GRAPH 8**

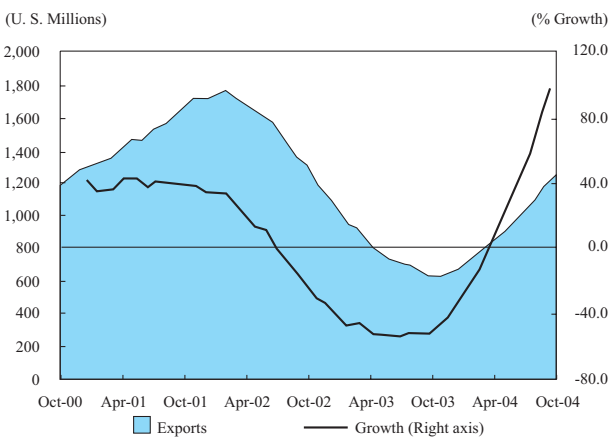
**EXPORTS, IN VALUE  
(ACCUMULATED OVER 12 MONTHS)**



Source: National Bureau of Statistics (DANE), calculations by Banco de la República.

**GRAPH 9**

**NON-TRADITIONAL EXPORTS TO VENEZUELA  
(ACCUMULATED OVER 12 MONTHS)**



Source: DANE, calculations by Banco de la República.

At October, traditional exports in dollars had increased by 26.0% (12-month accumulated variation) and non-traditional exports by 20.6% (Graph 8). As to the former, October trade information showed a decline in the volume of coffee exports (annual variation of -3.0%), while the anticipated reduction in oil exports continued as a result of dwindling reserves. The dynamic growth in oil exports remains due to high prices for crude (12-month accumulated variation: 18%). At October, coal exports showed no change in the tendency of previous months and had increased by almost 15%, in dollars, although there was a decline in volume (5.9%).

On the other hand, non-traditional exports remained strong. Since mid-year, their 12-month accumulated variation exceeds the record highs in 2002, thanks to a surge in exports to all destinations, but particularly to the Venezuelan market. However, exports to Venezuela are still below the peak levels seen in early 2002 (Graph 9).

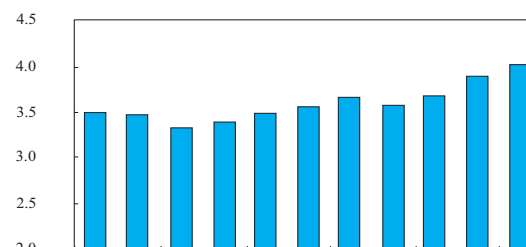
In real terms, the quarterly GDP figures at September showed total exports continued to grow at annual rates near 10% (Graph 10). Despite less volume in coffee exports (at October), the last quarter began to see a recovery in production that is consistent with the forecast in the September report. Figures announced by the National Federation of Colombian Coffee Growers show 6.9% accumulated growth in October and November. Given the influence this sector has on the rest of the economy, household income could improve if international coffee prices stay at the levels observed in recent months.

**C. TRADABLES PRODUCTION**

The momentum in exports throughout 2004 propelled the growth in sectors producing tradables, such as industry and agriculture. This was especially true

**TOTAL EXPORTS  
(SEASONALLY ADJUSTED)**

(Trillions of constant pesos)



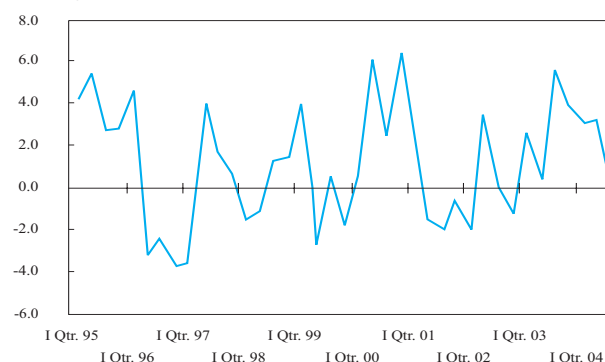
Annualized Qtr. Variation %	(17.2)	(3.6)	(15.1)	7.8	11.6	8.5	12.2	(10.0)	11.8	27.5	11.5
Annual Variation %	(3.4)	(3.9)	(9.5)	(7.6)	(0.4)	2.6	10.0	5.1	5.2	9.5	9.3

I Qtr. 02 III Qtr. 02 I Qtr. 03 III Qtr. 03 I Qtr. 04 III Qtr. 04

Source: National Bureau of Statistics (DANE), calculations by Banco de la República.

**GDP GROWTH IN AGRICULTURE, FORESTRY,  
HUNTING AND FISHING  
(REAL ANNUAL GROWTH)**

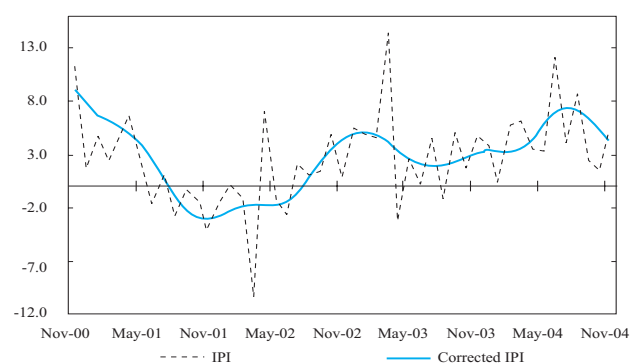
(Percentage)



Source: DANE, calculations by Banco de la República.

**ANNUAL GROWTH IN IPI AND THE CORRECTED IPI  
(TENDENCY COMPONENT AND REVISED BY WORKING DAYS)**

(Percentage)



Source: DANE, calculations by Banco de la República.

during the first half of the year. Yet, farm production slowed in the third quarter, mainly because of supply problems. This was the case of coffee, milk and pork production. Other farm products, particularly tradables, saw growth at around 3% during the same period (Graph 11).

The manufacturing industry also slowed to some extent during the third quarter. In this case, most of the slack in growth was associated with supply or discretionary shocks and those of a temporary nature, such as the trucking strike (September-October) and fewer working days. However, the results of the monthly manufacturing sample in November (after the supply shocks had ceased) were less than satisfactory. In effect, the figures for industrial production reflect a slowdown when evaluating the tendency component of the Industrial Production Index (Graph 12).

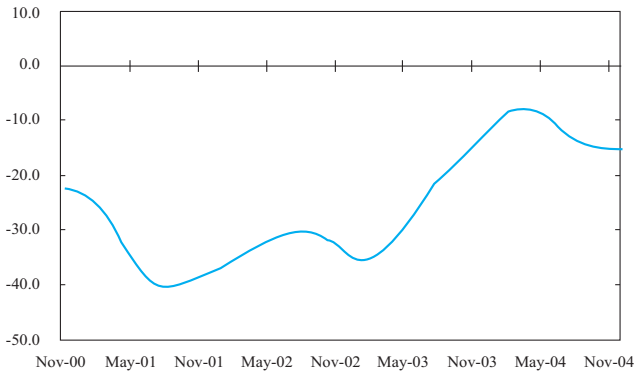
In this sense, the sector may have continued to grow, but not as fast as in previous quarters. The tendency component of the order indicator in the Fedesarrollo business opinion survey for November corroborates this analysis (Graph 13).

**D. DOMESTIC DEMAND AND NON-TRADABLES PRODUCTION**

Annual growth in the third quarter came to just 2.4%, which is well below the forecast in the September report and the predictions of different analysts. As in the tradables sectors, supply or discretionary shocks affected non-tradables production. These explain the slowdown observed during the period.

**GRAPH 13**

**INDICATOR OF INDUSTRIAL ORDERS - FEDESARROLLO  
(TENDENCY COMPONENT - BALANCE)**

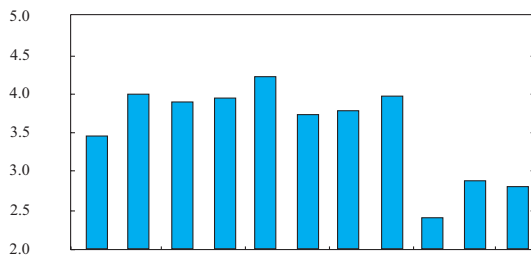


Source: Fedesarrollo and Banco de la República.

**GRAPH 14**

**GDP IN CIVIL ENGINEERING WORKS  
(SEASONALLY ADJUSTED)**

(Trillions of constant pesos)



Annualized Qtr. Variation %	(52.6)	79.8	(12.2)	6.6	31.6	(40.1)	9.0	18.6	(86.0)	100.3	(6.5)
Annual Variation %	(10.6)	1.8	(5.5)	(5.5)	22.0	(7.3)	(2.2)	0.5	(42.7)	(22.4)	(25.4)

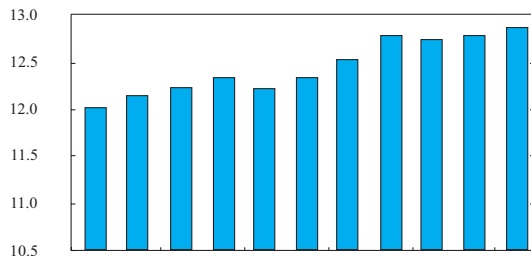
I Qtr. 02    III Qtr. 02    I Qtr. 03    III Qtr. 03    I Qtr. 04    III Qtr. 04

Source: DANE, calculations by Banco de la República.

**GRAPH 15**

**HOUSEHOLD CONSUMPTION  
(SEASONALLY ADJUSTED)**

(Trillions of constant pesos)



Annualized Qtr. Variation %	2.8	4.9	2.6	3.2	(4.3)	4.1	6.8	7.7	(1.2)	1.5	3.4
Annual Variation %	2.6	2.9	3.2	3.4	1.6	1.4	2.4	3.5	4.3	3.7	2.8

I Qtr. 02    III Qtr. 02    I Qtr. 03    III Qtr. 03    I Qtr. 04    III Qtr. 04

Source: DANE, calculations by Banco de la República.

This is particularly evident in the annual growth figures. Much of the slowdown can be attributed to the decline in civil works. During the third quarter, GDP growth in civil works was lower than in the first half of the year, contradicting the forecasts for recovery based on more public investment (Graph 14). GDP growth in civil works was -30.2% during the course of the year to September, which is one of the lowest annual growth rates on record for this aggregate.

The decline in third-quarter economic growth also was accompanied by a slowdown in consumption (in terms of annual growth), which does not rule out a more prolonged weakening of demand (Graph 15). A breakdown of consumption shows the drop was primarily the result of less growth in non-durables and services, as opposed to a satisfactory rise in durables and semi-durables. This is evidence that a slowdown in household consumption does not constitute general behavior. In fact, identification of the tendencies in this variable is not clear and depends on how the information is interpreted. For example, the annualized quarterly variations show acceleration as of the first quarter in 2004 (Graph 15). This being the case, the best approach would be to wait for the final data on 2004 before confirming the tendency.

Events on the job market have a direct bearing on the pace of household consumption, which is why it is important to evaluate job market indicators. In this respect, the tendency is towards more formal employment (that is, a reduction in underemployment as a share of total employment) (Graph 16) and a drop in unemployment due to the onset of slower growth in the supply of labor.

However, there was no vigorous rise in overall employment, which increased by 1.5%, on average, during 2004. Based on the 2004 Continuous Household Survey (CHS) for the third quarter, an analysis of the change in the number of employed in the 13 leading metropolitan areas shows the decline in employment in recent quarters is concentrated in the 12-to-17 age group and among people over age 56 who live in the country's largest cities and consider their work to be poorly paid and/or in a sector not attuned to their skills, or generally of poor quality. The number of employed declined in the production sectors where informal employment is more likely, such as community and personal services and commerce. These are sectors with a number of self-employed, unpaid family workers and/or domestic employees.

Besides household consumption, other components of demand also slowed in annual terms during the third quarter of 2004. These include government consumption and gross capital formation (in this case, due to investment in civil works and variations in inventories or holdings) (Table 3). However, the private component of gross fixed capital formation continued to grow substantially.

GRAPH 16

BREAKDOWN OF JOB CREATION IN 13 CITIES

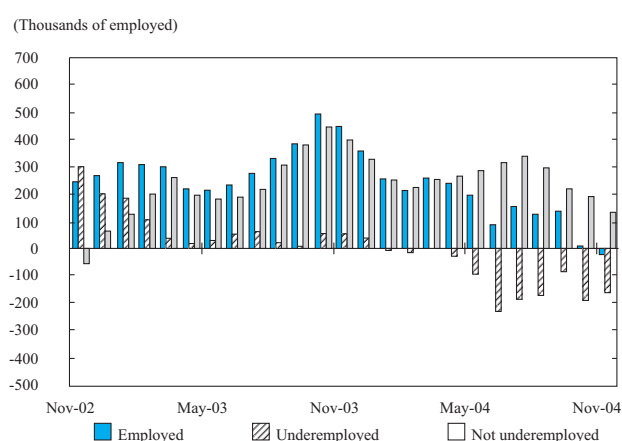


TABLE 3

REAL ANNUAL GDP GROWTH IN 2004,  
BY DEMAND COMPONENTS  
(PERCENTAGES)

	I Qtr. 2004	II Qtr. 2004	III Qtr. 2004
Final Consumption	3.8	3.8	2.9
Household	4.3	3.7	2.8
Government	2.5	4.4	3.1
Gross capital formation	6.4	16.6	7.6
Gross fixed capital formation	9.7	13.3	10.6
Gross Fixed capital formation, without civil works	26.7	23.3	20.0
Agriculture, forestry, hunting and fishing	8.6	16.3	3.2
Machinery and equipment	12.9	17.7	13.6
Transport equipment	(5.5)	33.4	8.1
Construction and buildings	154.2	34.3	53.1
Civil works	(42.0)	(22.3)	(25.4)
Variation in inventories	(14.5)	52.7	(12.2)
<b>Domestic Demand</b>	<b>4.3</b>	<b>5.9</b>	<b>3.7</b>
Total exports	5.2	9.5	9.3
Total imports	7.4	17.1	15.8
<b>GDP</b>	<b>3.9</b>	<b>4.6</b>	<b>2.5</b>

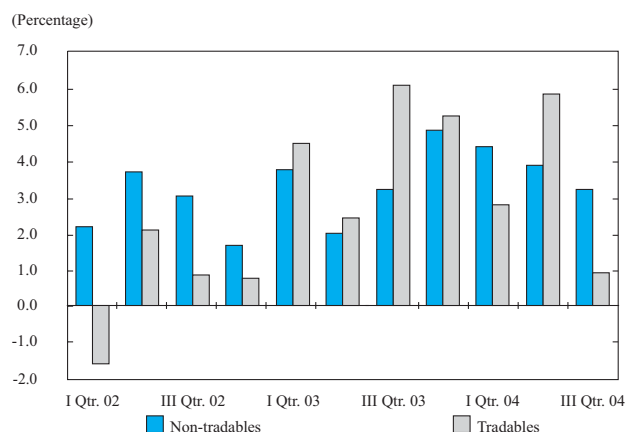
Source: DANE, calculations by Banco de la República.

*The job market exhibits more formal employment and a drop in the unemployment rate.*

From the standpoint of supply, the biggest slowdown during the third quarter was in GDP growth in tradables, especially in the mining and agricultural sectors (Graph 17). The slowdown in GDP growth in non-tradables was concentrated in two sub-sectors: civil works and government services, which experienced a decline of 0.2% in annual rates. The other non-tradables sub-sectors grew by 5.5%.

GRAPH 17

**REAL ANNUAL GDP GROWTH IN TRADABLES AND NON-TRADABLES SECTORS**



Source: DANE, calculations by Banco de la República.

**E. MONETARY AGGREGATES, CREDIT AND INTEREST RATES**

During 2004, the most liquid monetary aggregates (M1 and base money) increased at rates in excess of the growth in nominal GDP, with no acceleration during the last part of the year. Although 60% of year-end liquidity came from net purchases of international reserves (Table 4), monetary expansion has been coherent with the monetary program, thanks to a decline in the net repo balance and an increase in government deposits with the Central Bank.

TABLE 4

**SOURCES OF BASE MONEY - 2004  
(FLOW IN BILLIONS OF PESOS)**

Item	IV Qtr. 2004	Total 2004
Government	1,502	(2,842)
Profits transferred in pesos	0	803
Profits transferred in dollars		
Investments in TES 1/	1,502	(3,645)
Expansion repos 2/	235	(1,086)
Contraction OMAS	62	28
Net foreign currency purchases	3,058	6,299
Others	6	248
<b>Total Sources</b>	<b>4,863</b>	<b>2,647</b>
Base money balance	19,262	19,262
Base money at 30 September 2004	14,399	
Base money at 31 December 2004		16,615

1/ Includes purchases, sales, maturates and deposits with the National Treasury.

2/ Includes mid-term repos for Col\$1,300 at 60 days (/Col\$800 billion) and 90 days (Col\$500 billion).

Source: DANE, calculations by Banco de la República.

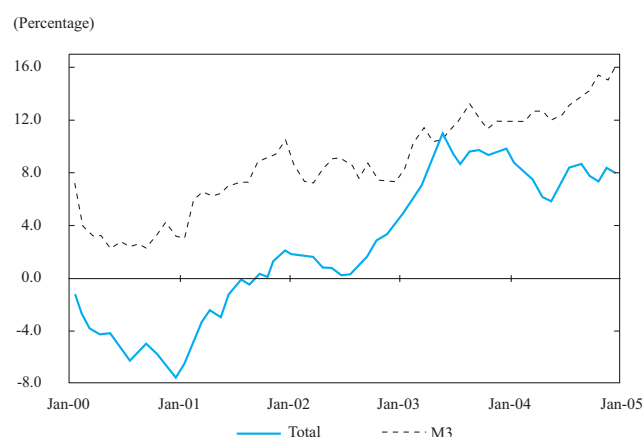
The growth in financial savings (M3) accelerated in December (Graph 18). A high point in this respect was the increase in public savings, which expanded at an average rate of 31.5% (accumulated at November) compared with the same period the year before (versus 9.4% growth in private M3).

Although total gross portfolio growth, without FEN, declined slightly (from 8.5% annual at November to 8% in December), the slowdown is explained by the trend in mortgage loans and particularly by mortgage portfolio securitizations in December (the portfolio revised by securitizations and others increased by 10.5% in December)<sup>2</sup>. In contrast, consumer and commercial credit continued to grow.

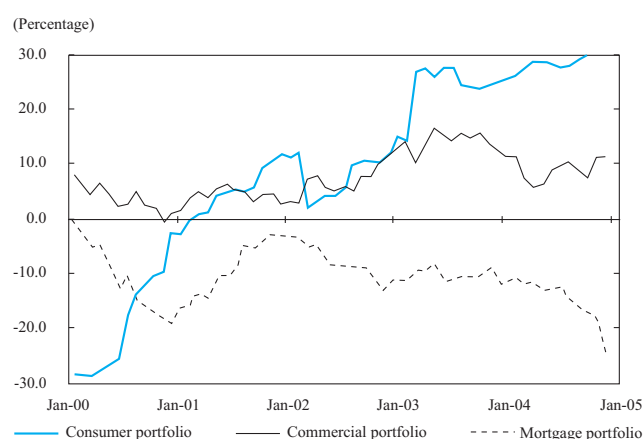
In 2004, lending terms for the private sector benefited from the issue of bonds and other commercial paper, which continued to gain a share as sources of business funding (Table 5).

Broad liquidity in the economy has allowed for an almost 50 bp decline in the inter-bank interest rate (TIB) since the end of the year. Half of this amount; that is, 25 bp, pertains to the reduction in intervention rates charged by the Central Bank (see the chapter

**NOMINAL DOMESTIC CREDIT (\*) AND M3  
(ANNUAL GROWTH)**



**GROSS PORTFOLIO BY TYPE OF CREDIT  
(ANNUAL GROWTH)**



(\*) In COP, excluding FEN.  
Source: Banking Superintendent, calculations by Banco de la República.

<sup>2</sup> Provisional figure.

TABLE 5

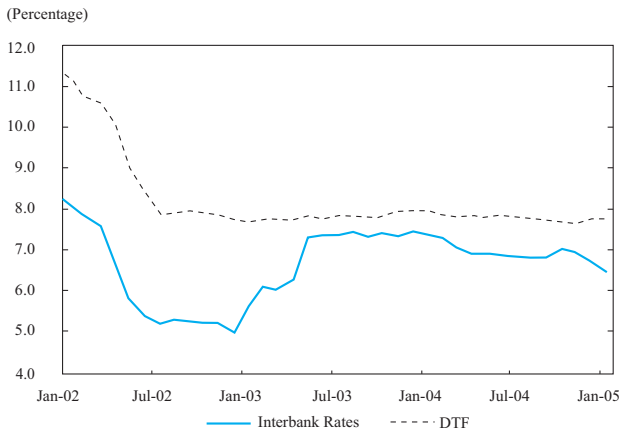
**LIABILITIES OF NON-FINANCIAL COMPANIES REGISTERED IN THE SUPERINTENDENCE OF SECURITIES  
(BILLIONS OF PESOS)**

Description	2001	2002	2003	2004		
				I Qtr.	II Qtr.	III Qtr.
<b>Levels</b>						
Total financial liabilities	6,673	8,516	7,686	7,537	7,650	6,972
Total bonds and commercial paper	1,107	2,305	3,804	3,717	3,967	4,375
Commercial portfolio	24,876	27,816	31,296	30,873	32,337	33,010
Bonds plus the commercial portfolio	25,983	30,122	35,101	34,591	36,305	37,385
<b>As a percentage of liabilities</b>						
Total financial liabilities	49.0	50.0	42.0	40.2	40.3	36.9
Total bonds and commercial paper	8.1	13.5	20.8	19.8	20.9	23.1
<b>As a percentage of the commercial portfolio</b>						
Total bonds and commercial paper	4.4	8.3	12.2	12.0	12.3	13.3

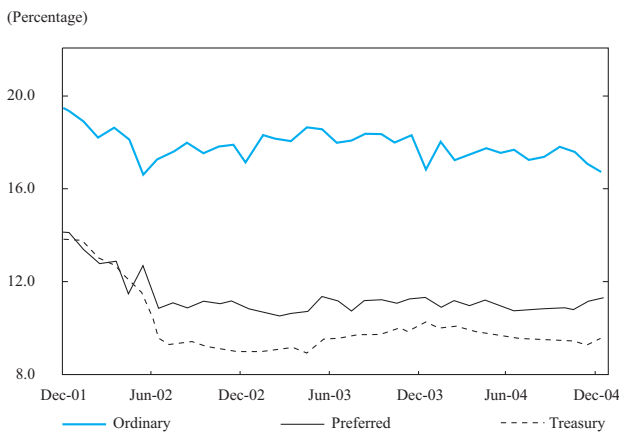
Source: Superintendent of Securities, calculations by Banco de la República.

**GRAPH 19**

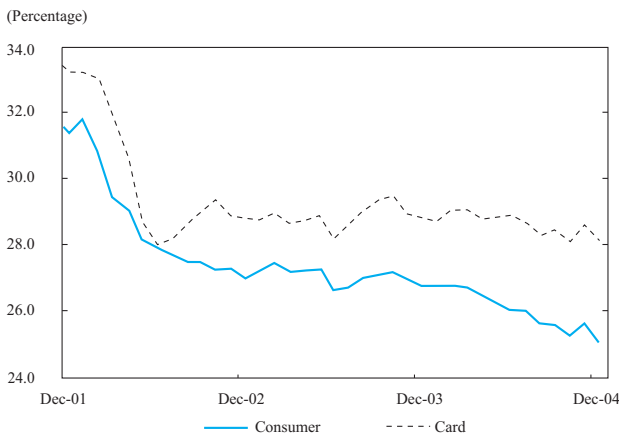
**DTF AND INTER-BANK INTEREST RATES**



**NOMINAL INTEREST RATE BY TYPE OF CREDIT**



**NOMINAL INTEREST RATE BY TYPE OF CREDIT**



Source: Banco de la República.

on monetary policy decisions in the last three months). At the same time, the term deposit rate (DTF) remained relatively stable, while nominal lending rates dropped or stayed constant during the quarter (Graph 19).

TES rates continued to fall in December and throughout January to date, especially in the short segment of the yield curve. The rates on securities maturing in March 2005 and 2012 were the lowest on record since October 2002 (Graph 20).

**F. THE OUTPUT GAP**

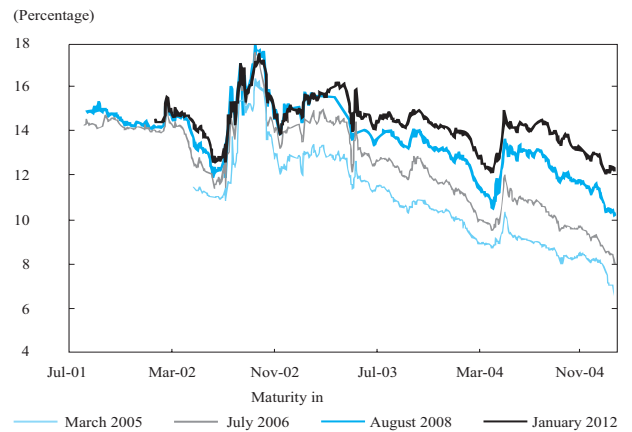
The stability in non-tradables core inflation since July 2004 appears to indicate the output gap closed slower last year than the forecast in previous reports<sup>3</sup>.

Given the information on GDP growth in the third quarter, growth projections for the entire year were lowered from 4.0% to 3.6%. Lower projected growth had an effect on measurements of the output gap: a variable about which there is considerable uncertainty. Evaluating possible changes in this gap

<sup>3</sup> This also can be explained by a decline in inflation expectations, without major changes in the output gap.

**GRAPH 20**

**TES INTEREST RATE (\*) ON THE SECONDARY MARKET**



(\*) Information at 26 January 2005.  
Source: Banco de la República.



necessitates analyzing the variables that determine it, such as changes in the labor supply, use of capacity, investment, and growth in productivity.

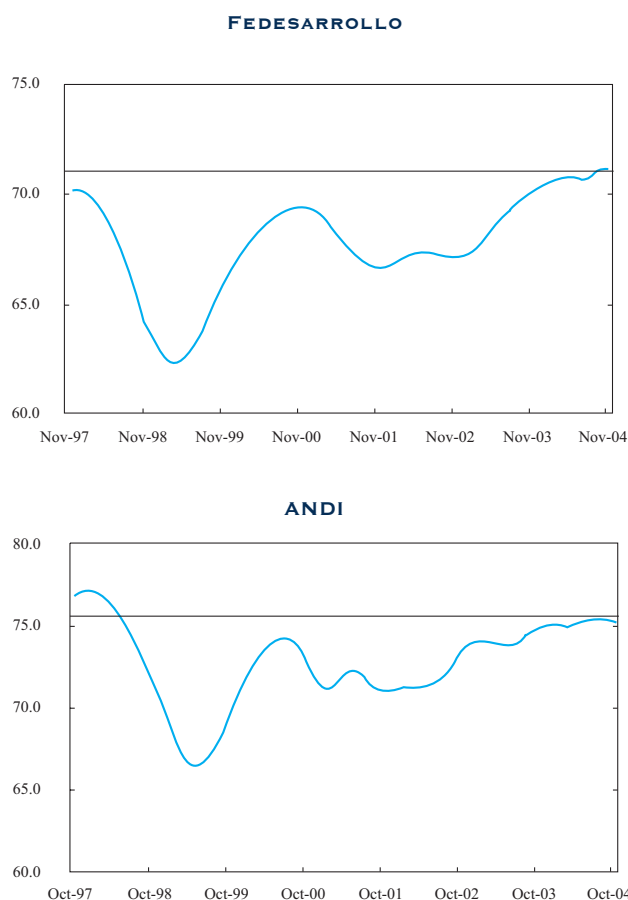
Job market Information from the National Bureau of Statistics (DANE) seems to indicate that unemployment is gradually approaching the NAIRU<sup>4</sup>. On the other hand, the installed capacity utilization indicators developed by the National Association of Industrialists (ANDI) and Fedesarrollo are approaching historic levels and the NAIRU<sup>5</sup> (Graph 21).

Another factor to consider is the decline in the labor force participation rate (or global participation rate) throughout 2004. This would indicate a reduction in the labor supply that could have a negative impact on growth in “potential output”. However, as mentioned earlier, this reduction comes mainly from a decline in the number of people who work on the informal job market and youths between 12 and 17 years of age who stop working. Given the low productivity levels characterizing these segments, we do not believe the lower TGP will have a negative impact on “potential GDP” growth<sup>6</sup>.

On the other hand, although much of the slowdown in the third quarter of 2004 could be due to supply factors, a more permanent slowdown in domestic demand cannot be ruled out, as mentioned earlier.

Investment has grown considerably since 2003 (Table 6), especially investment in construction (with growth averaging 37%) and in machinery and

INSTALLED CAPACITY UTILIZATION  
(TENDENCY COMPONENT)



Source: Fedesarrollo and ANDI. calculations Banco de la República.

PRIVATE GROSS FIXED CAPITAL FORMATION  
(AVERAGE ANNUAL GROWTH  
BETWEEN MARCH 2003 AND SEPTEMBER 2004)

Agriculture, forestry, hunting and fishing	6.3
Machinery and equipment	18.6
Transport equipment	10.7
Construction and buildings	36.8

Source: DANE, calculations by Banco de la República.

<sup>4</sup> This is the English acronym for the Non-Accelerating Inflation Rate of Unemployment. It refers to the unemployment rate as of which additional reductions could be inflationary. As to Colombia, recent studies estimate a NAIRU of 13.6% for 2004. See Julio, J. M. (2001) “How Uncertain are Nairu Estimates in Colombia?” in *Borradores de Economía*, Banco de la República, No. 184, September.

<sup>5</sup> This is the English acronym for Non-Accelerating Inflation Capacity Utilization. It refers to the threshold of installed capacity utilization above which certain additional increases could be inflationary.

<sup>6</sup> By the same token, the added increase in GPR occurred with the crisis that saw a rise in the number of people involved in activities characterized by extremely low pay and productivity, without this presumably implying more potential growth in the economy.



equipment (19% on average). On the whole, gross private fixed capital formation increased by 19.3%, on average, during the last two years.

The estimated change in the output gap for 2004 and 2005 was based on the foregoing variables and on available productivity indicators. The new estimate indicates closure equal to 0.4% of potential GDP in 2004 (the estimate in September was 0.7%). Estimated closure in 2005 is even lower. For the time being, this would reduce inflationary pressures that originate with demand (Graph 22).

## G. INFLATION

### 1. Inflation in 2004

Annual consumer inflation was 5.5% in 2004. This is in the middle of the 5% to 6% target range set by the Central Bank (Graph 23). Inflation declined by 99 bp compared with the rate in December 2003. The reduction in consumer inflation was due to a sharp drop in non-food consumer inflation, which went from 7.0% in December 2003 to 5.5% in December 2004 (Graph 24). Food inflation remained close to what it was in December 2003 (5.3% as opposed to 5.4% in December 2004).

The decline in non-food inflation was mainly the result of lower inflation in tradables and regulated goods and services. By December 2003, tradables inflation was 7.0%, as opposed to 3.5% at the same month in 2004 (Graph 25). Inflation in regulated goods and services was 10.2% in December 2004, down from 14.8% in December 2003 (Graph 26). Non-food inflation declined despite a rise in non-tradables inflation from 4.2% in December 2003 to 5.3% in December 2004 (Graph 27).

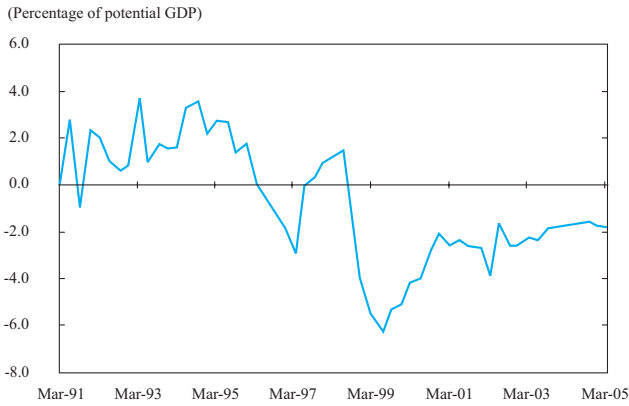
Exchange rate appreciation (14% nominal) had a direct bearing on the reduction in tradables inflation. Vehicles, residential telephone service and medicines were the tradables that declined the most. The reduction in tradables inflation was concentrated in the first half of the year. There was some decline in the second half, but it was less pronounced. However, with the sharp peso appreciation in the fourth quarter, the early months of 2005 are expected to witness major reductions.

The decline in inflation in regulated goods and services was the result of a sharp drop in its three components: fuel, public utilities and public transportation. The biggest reduction was in public utilities, with 14.5% inflation in December 2003 and 6.7% in December 2004. Inflation in the three residential utilities

*Non-food inflation declined in spite of the upswing in non-tradables inflation.*

**GRAPH 22**

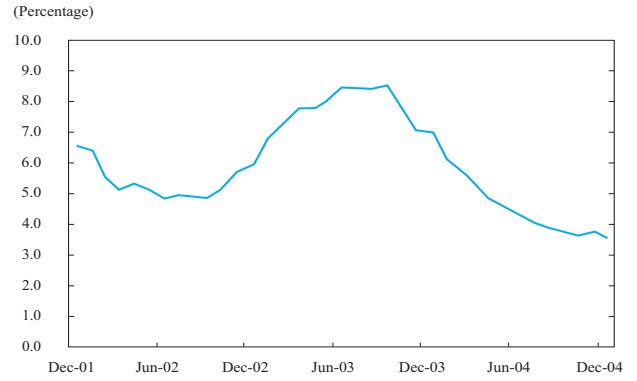
**OUTPUT GAP**



Source: Banco de la República.

**GRAPH 25**

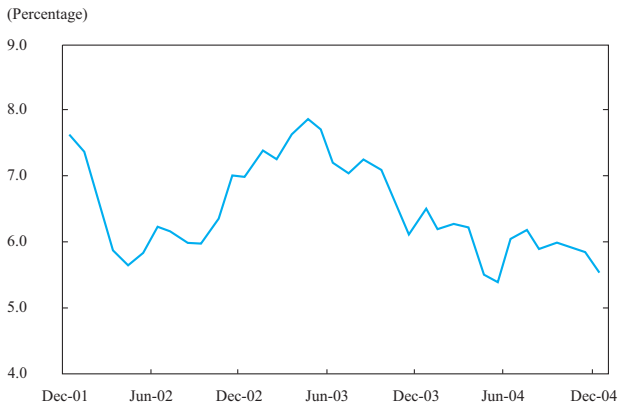
**TRADABLES CPI EXCLUDING FOOD AND REGULATED GOODS AND SERVICES (ANNUAL VARIATION)**



Source: DANE, calculations by Banco de la República.

**GRAPH 23**

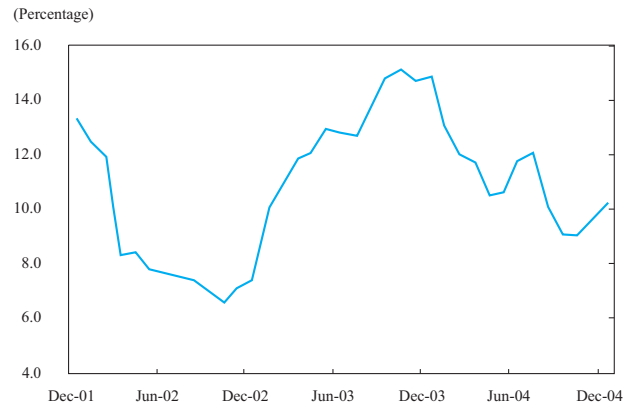
**ANNUAL CONSUMER INFLATION**



Source: DANE.

**GRAPH 26**

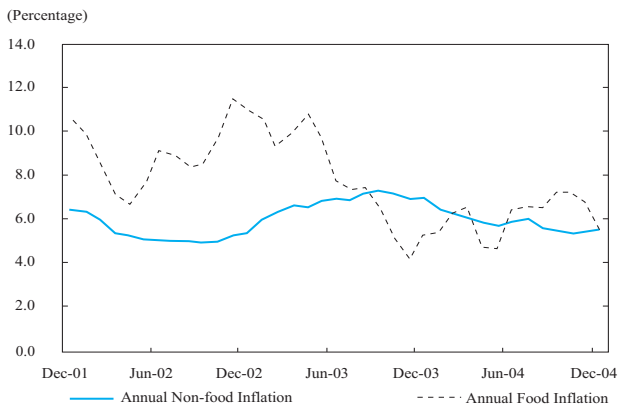
**NON-FOOD CPI FOR REGULATED GOODS AND SERVICES 1/**



1/ Water, sewage, electricity, gas, fuel and public transportation.  
Source: DANE, calculations by Banco de la República.

**GRAPH 24**

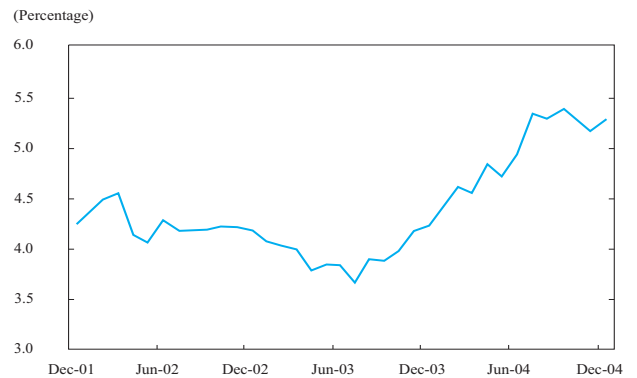
**NON-FOOD CPI (ANNUAL VARIATION)**



Source: DANE, calculations by Banco de la República.

**GRAPH 27**

**NON-TRADABLES CPI, EXCLUDING FOOD AND REGULATED GOODS AND SERVICES (ANNUAL VARIATION)**



Source: DANE, calculations by Banco de la República.

*The stability of non-tradables inflation in the second half of 2004 suggests less pressure from demand.*

(gas, water and electricity) also declined, particularly gas (by 1,360 bp) and water (741 bp). As to fuel, the increase in 2004 was less than in 2003, despite rising international prices. This was due to the peso appreciation. Inflation in public transportation fell by 204 bp between 2004 and 2005.

The two other major components of the consumer price index (CPI): non-tradables and food, did not perform as well. This suggests some inflationary pressure. Non-tradables inflation went from 4.2% in December 2003 to 5.3% in December 2004 (Graph 27). The increase was concentrated in the first half of the year (including July), when annual inflation was 5.3%. However, this indicator was relatively stable as of August.

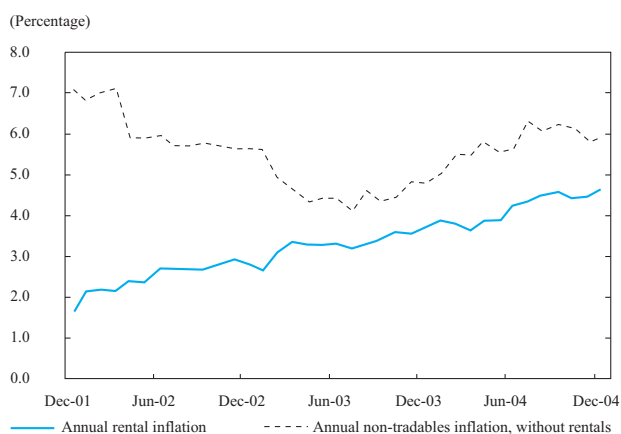
The rise in non-tradables inflation during the first half of the year was primarily due to the increase in rental inflation, which went from 3.7% in December 2003 to 4.4% in July 2004, finishing at 4.6% in December 2004 (Graph 28). The other non-tradables (excluding rentals) also experienced a sharp jump in inflation from 4.8% in December 2003 to the high for 2004 (6.3%), in July, ending the year at 5.9%.

The surge in non-tradables inflation suggested demand pressure, that would have eased during the second half of the year. In addition to rentals, the items that increased the most were laundry and banking services. “Non-tradable housing” was the only sub-group in this category to see lower inflation, which dropped from 5.6% in December 2003 to 3.3% by the same month in 2004 (due to no major increases in domestic service, as was the case in 2003).

Food inflation went from 5.3% in December 2003 to 5.4% in December 2004 (Graph 24), following a minimum of 4.7% in May and a maximum of 7.2% in October. The figure of October reflected a sharp increase in prices for perishables due to a strike by truckers in September and early October. However, the end of the year saw these prices drop significantly. It is important to point out that inflationary pressures on this front centered on processed foods and tradables. Inflation in these items has declined, thanks to marked appreciation and lower international prices.

GRAPH 28

**CPI FOR RENTALS AND OTHER NON-TRADABLES (ANNUAL VARIATION)**



Source: DANE, calculations by Banco de la República.

## 2. Fourth-quarter Inflation

Annual consumer inflation was 5.5% in December, down from the figures in September and June (6% and 6.1%, respectively) (Graph 23). This drop was the result of a sharp adjustment in food inflation, which was high, in part, because of the trucking strike during the third quarter. Food inflation went from 7.2% in September to 5.4% in December (Graph 24), while non-food inflation saw a slight rise in December to 5.5%, following 5.4% in September (Graph 25).

The figures for non-food inflation were 0.1 percentage points (pp) over the Central Bank's forecast in the September report; those for food inflation were 1.2 pp below. On the whole, the Central Bank overestimated total consumer inflation by 0.3 pp.

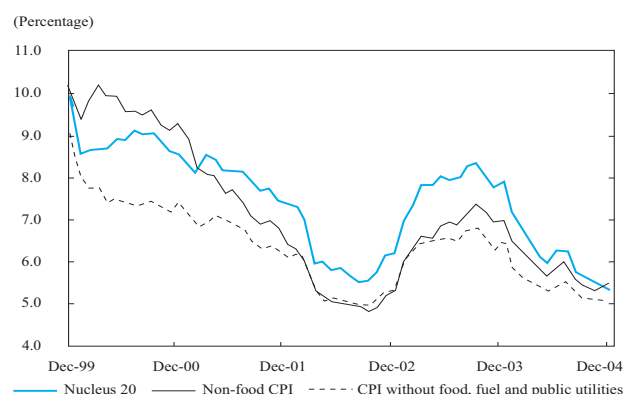
Core inflation remained stable throughout the fourth quarter, declining slightly in October (Graph 29). The average of the three indicators used by the Central Bank (non-food inflation, nucleus 20, and inflation without staple foods, public utilities and fuel) was 5.3%. This is the lowest rate of the year and near the record low in September 2002 (5.14%).

Food inflation declined because of a major drop in inflation for perishables such as vegetables and legumes (down from 15.2% in September to -2.1% in December) and fruits (down from 18.4% in September to 7.9% in December). This lowered inflation for the food group from 8.6% in September to 5.6% in December. On the other hand, processed food inflation continued to fall and was 4.3% in December compared with 7.6% in September. The sharp impact of appreciation and international prices for some processed foods was responsible for the decline in this food group.

Non-food inflation rose slightly in the last quarter, up from 9.1% in September to 10.2% in December, thanks to a sharp increase in prices for regulated goods and services (Graph 26). The surge was due primarily to higher prices for fuel (up from 15.9% in September to 16.9% in December) and public transportation (up from 8.3% in September to 11% in December). A fare hike of major proportions prompted the increase in public transportation, specifically microbus and inter-city transportation fares. Inflation in other public utilities continued to decline in the fourth quarter.

GRAPH 29

CORE INFLATION INDICATORS  
(ANNUAL VARIATION)



Source: DANE, calculations by Banco de la República.

*Because of exchange rate appreciation, tradables inflation continued to decline in the fourth quarter.*

Non-food tradables inflation stayed on a downward course during the fourth quarter and was 3.5% in December compared with 3.8% in October (Graph 25), largely because of the exchange rate appreciation. However, inflation in non-food tradables apparently has not responded to the recent appreciation of the exchange rate, particularly because of price hikes for some of the items in the group such as airfares, which rose from 1.4% in September to 12.7% in December.

Consumer price inflation in non-tradables, without food, went from 5.4% in September to 5.3% in December (Graph 27). This was due mainly to lower inflation in domestic service, down from 5.8% in September to 3.1% in December, and lower inflation in the price of non-tradable entertainment, culture and recreation (8.3% in September followed by 7.4% in December). Yet, the other non-tradable sub-groups averaged slight increases of 20 bp in the last quarter.

### SOME DETERMINANTS OF RENTAL INFLATION IN RECENT YEARS

Rentals are the biggest item in the consumer price index (CPI) (20.7%). Their importance in other cost-of-living measurements is even greater, inasmuch as they account for 56.2% of spending on non-tradable goods and services and 29% of the non-food CPI.

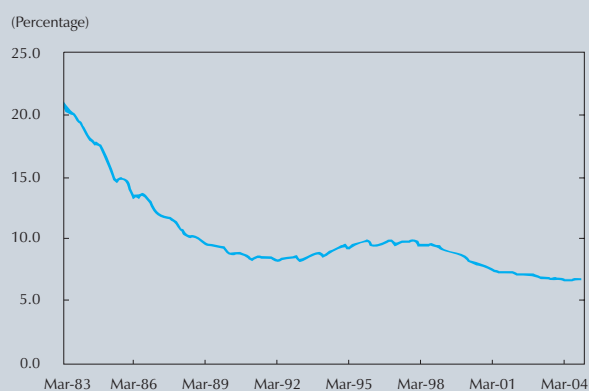
National rental inflation has grown steadily since the first half of 2001, after a prolonged period of decline (1994-2001). At December 2004, rental inflation was 4.7%, which is a hefty increase compared with the same months in 2002 and 2003 (2.8% and 3.7%, respectively). However, this is still below total inflation, which means the relative price of rentals continues to decline (Graphs B1.1 and B1.2).

**GRAPH B1.1**  
ANNUAL RENTAL INFLATION (CPI)



Source: DANE.

**GRAPH B1.2**  
RELATIVE PRICE OF RENTALS



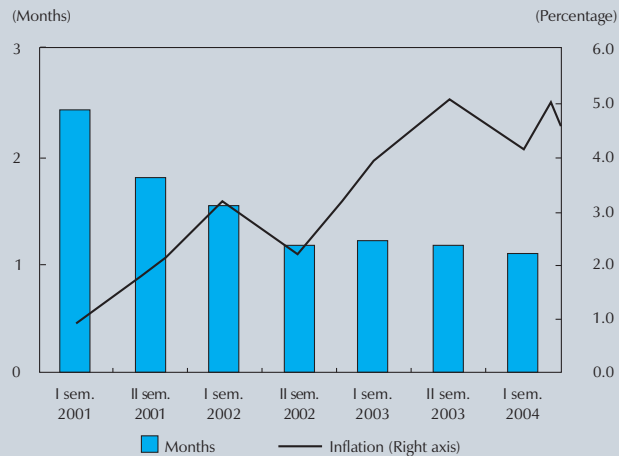
Source: DANE, calculations by Banco de la República.

The rental CPI is based on a permanent survey involving a probabilistic sample in which tenants are asked what they pay in rent. The survey currently includes low, middle and upper income households<sup>1</sup>.

According to economic theory, the high cost of purchasing a home makes for the existence of a large rental market. The price adjustment mechanism on the rental market operates in the typical manner of stocks and flows. In other words, the supply of rental services, at any given moment, is equal to the supply in the previous period, plus new housing made available for rent during the period, minus the rental services removed through demolition or the depreciation of used housing (Graph B1.3).

<sup>1</sup> An analysis of the information shows no significant differences in the trend in inflation according to income levels.

**GRAPH B1.3**  
**AVERAGE TIME TO RENT A PROPERTY**  
**AND RENTAL INFLATION IN BOGOTÁ**



Source: Bogotá Association of Realtors, DANE.

The demand for rental services depends on a number of variables, such as real disposable income, the rental price, the cost of occupying one's own home, the interest rate and the availability of mortgage loans. Demographic variables (the number of families and their make-up) also affect the demand for rental services.

On the other hand, the supply of rental services is determined by the stock of housing available for rent at a given moment and depends on factors such as the cost of capital, the depreciation rate, maintenance costs, and the rate of return on capital. Given the lag between the construction of new homes and their entry into the market, it is reasonable to assume that the supply of rental homes, in the short and medium term, is inelastic to the rental price.

The simplest models assume that rentals and rental vacancy rates (the number of unoccupied homes as a percentage of all homes on the rental market) are derived from their equilibrium values over considerably long periods of time, since the market is characterized by a good many frictions that hamper its adjustment.

When the price of rentals and the rental vacancy rate fall below their equilibrium level, the surplus demand for rented housing, reflected in the low vacancy rate, will push rental prices up. By the same token, if rentals and the rental vacancy rate are above their equilibrium levels, the rental surplus will lower prices.

Therefore, empirical models are intended primarily to explain rental inflation in terms of deviations of the vacancy rate from its equilibrium value (Rosen and Smith, 1983). The more recent models (Hendershott *et. al.* (2000)) include additional variables such as the cost of

capital utilization, the depreciation rate and the rate of operating expenses. They also use dynamic specifications that are much more elaborate, such as error correction models.

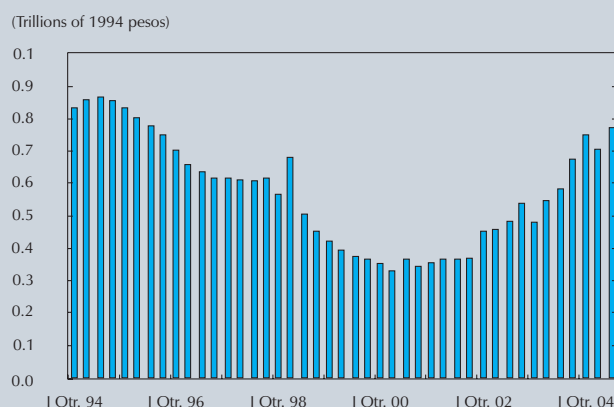
Unfortunately, the estimate derived from a model of this type is not feasible for Colombia, as there are no estimates on the rental vacancy rate in the country. However, a close indicator, and one that could give some indication of the scope of the rental market, is the one calculated by the Bogotá Association of Realtors, based on a monthly survey of its affiliates. The surveys inquires into the amount of time required to rent a property in Bogota (Graph B1.3)<sup>2</sup>

According to this indicator, as of the second half of 2001, the average time required to rent a property declined from 2.5 months in 2001 to 1.2 months in recent years. This means the scope of the rental market has narrowed significantly. The decline in this indicator is accompanied by a surge in rental inflation, which could mean the sector has less excess supply.

Healthier household finances and more household income in recent years are some of the factors that explain the rise in demand for rented housing in Colombia and, consequently, the growth in rental inflation. This might have enabled landlords to pass on higher rent increases to their tenants.

In spite of this, no excessive pressure on rent is expected in the coming quarters, since the supply of real estate has improved steadily for nearly three years in a row. According to figures from DANE on GDP growth in buildings, the supply of new housing in 2004 was still less than in the mid-nineties, but had recovered substantially compared with the low levels observed in 1999-2000 (Graph B1.4).

**GRAPH B1.4**  
**GDP IN CONSTRUCTION AND BUILDINGS**



Source: DANE.

<sup>2</sup> Bogotá accounts for 46% of the CPI.



## References

Rosen, Kenneth T.; Lawrence B. Smith (1983). "The Price -Adjustment Process for Rental Housing and the Natural Vacancy Rate", in *American Economic Review*, Vol. 73, No. 4, pp. 779-786.

Hendershott, Patric H.; Bryan D. MacGregor; Raymond Y. C. Tse (2000). "Estimating the Rental Adjustment Process", in *NBER*, Working Document No. 7912.

## II. THE MACROECONOMIC OUTLOOK

*The forecasts derived from the central model show a decline in inflationary pressures in 2005 and 2006, due to an increase in accumulated appreciation and less observed and forecasted growth.*

The external context will be dominated by uncertainty over how the dollar stands against other currencies. Gradual increases in the Fed's short-term interest rates and moderate reductions in world growth and commodity prices will accompany an atmosphere of gradual adjustment in U.S. macroeconomic imbalances. This being the case, capital inflows to the emerging economies will continue both in the form of FDI and portfolio flows.

The forecast in this report is for a recovery in economic growth during the fourth quarter of 2004, compared with the third quarter. However, in 2005, economic performance probably will be poorer than what it was between the second half of 2003 and the first six months of 2004. With an external scenario of reduced growth and lower terms of trade, growth in 2005 will rest mainly on domestic absorption, with lower external absorption of production.

Increased exchange rate appreciation in 2004, coupled with the exchange rate stability anticipated for 2005, the possibility of a wider output gap and lower inflation expectations, would be coherent with a looser monetary policy than what was foreseen in earlier reports.

### A. INTERNATIONAL GROWTH, PRICES AND INTEREST RATES

Growth prospects for 2005 remain favorable, although moderate with respect to the situation in 2004. The possibility of persistently high oil prices and adjustments in the U.S. economic imbalances are the main risks to world growth in the coming year.

World growth in 2005 will continue to be led by the U.S. economy. The consensus among international analysts is that the U.S. economy will expand at an annual rate of 3.5% during the coming year. This is less than the estimate for 2004 (4.4%), but is satisfactory, given its average historic growth (Table 7). Industrial production is expected to remain solid, as is private investment. However, there could be a slowdown in private consumption due to higher interest rates that go with a tighter monetary policy.

For the Euro zone, the forecasts remain moderate and signal less growth than what analysts expected three months ago. Despite the increase in estimates for 2004 (from 1.6% in the September *Inflation Report* to 1.8% at present), the forecasts for 2005 have been lowered. The present report predicts 1.9% growth, which is well below the earlier forecast of 2.4% (Table 7). According to the European Central Bank, no major recovery in economic activity is expected for the next two years. This is attributed to high oil prices, among other factors. However, the broad availability of financing at very low interest rates should provide some incentive to private investment and consumption.

According to external analysts, the current exchange rate and the possibility of continued appreciation of the euro against the dollar in 2005 pose a major risk to mid-term growth in Europe. This is coupled with the absence of budget reform efforts by the governments and delays in instituting the structural reforms needed to fuel long-term growth.

With respect to Japan, its prospects for 2005 are now much less encouraging than the forecasts outlined in the September report. The Japanese economy is expected to grow by only 1.5% in 2005 (Table 7). Less foreign demand, current pressure towards appreciation of the yen against the dollar, and deflationary pressures are the biggest risk to growth of Japan's economy in the coming quarters. Consequently, growth next year will depend largely on consumption, which has profited from better conditions on the job market, but could be affected by a possible mid-term tax increase.

In a scenario of less global growth and serious macroeconomic imbalances in the United States, the Fed is expected to continue its policy of gradually raising reference interest rates, which could be adjusted by anywhere from 125 to 150 pp in 2005.

TABLE 7

**GROWTH FORECASTS  
FOR THE MAIN TRADING PARTNERS  
(PERCENTAGE)**

	Current 2003	Forecast in January 2005	
		2004	2005
<b>Developed Countries</b>			
United States	3.0	4.4	3.5
Euro Zone	0.5	1.8	1.9
Japan	2.5	3.9	1.5
<b>Developing Countries</b>			
Argentina	8.8	8.1	5.1
Brazil	(0.2)	5.0	3.7
Chile	3.3	5.7	5.4
Mexico	1.3	4.1	3.7
Peru	3.8	4.5	4.2
Ecuador	2.7	5.6	3.4
Venezuela	(7.6)	15.4	4.6
China	9.3	9.5	8.0
<b>Colombia's Main Trading Partners</b>	1.8	4.7	3.3

Source: Datastream.

This would place them somewhere between 3.5% and 3.75% by the end of the year, which is still below their long-term levels (5%). The stability and relatively low level of inflation in the United States in recent months (with the exception of energy and food), coupled with important strides in productivity and limited transmission of depreciation to domestic prices, have reduced the risk of a possible outburst of inflation. Added to this is lower anticipated growth during 2005, all of which would give monetary authorities in the United States plenty of maneuvering room to continue their strategy of gradual adjustments.

*The dollar is expected to weaken against most major currencies, particularly the euro and the yen, but at a much slower rate than in 2004.*

Currently higher interest rates in the United States and the prospect that they will continue to rise for quite some time should bring a marginal reduction in global vulnerability of the dollar. An important contribution to dollar stability in 2005 could come from announcements by the federal government suggesting that corrective measures will be implemented. The present report does not rule out a decision to this effect.

In view of the foregoing, the dollar is expected to weaken against most major currencies, particularly the euro and the yen, but at a much slower rate than in 2004, and might stabilize, on average, at the level observed at the end of 2004. However, the dollar is unlikely to regain the strength it had prior to September 2004.

In contrast to 2004, the dollar in 2005 also could lose ground against the Asian currencies, particularly if the Chinese authorities relax their exchange policy a bit (by widening the band, for example). This appears likely, given China's large and growing trade surplus with the United States. Yet, there is absolutely no certainty as to the extent and speed of any such adjustment.

On the other hand, growth prospects for the emerging economies, although more favorable than for the developed countries, are lower than in 2004. Even so, capital is expected to continue to flow into these economies because of uncertainty about the dollar and the higher nominal profit expected in comparison with interest rates in the United States, which are still low.

Growth in Asia will continue to be led by the Chinese economy, which is expected to expand by 8.0% in 2005. This is up from the forecast three months ago (7.7%) (Table 7). At any rate, with the strong growth in 2004, China's government is expected to adopt policies to control inflationary pressures. One of these could be to encourage appreciation of its currency.

Given the scenario just described, the current account deficit in the United States is still the main risk. Although a sharply weaker dollar in 2005 is not likely, the difficulty in reducing this deficit makes this more feasible in the medium term. Strong dollar depreciation could be accompanied by a much larger increase in U.S. interest rates than what is foreseen in the base case scenario. In this case, although some correction in the external current account deficit would be expected, it would be accompanied by slower growth in the

*Strong dollar depreciation could be accompanied by a much larger increase in U.S. interest rates than what is foreseen in the base case scenario.*

United States and worldwide. Financing terms for emerging economies would suffer as well, since these economies depend heavily on foreign capital flows.

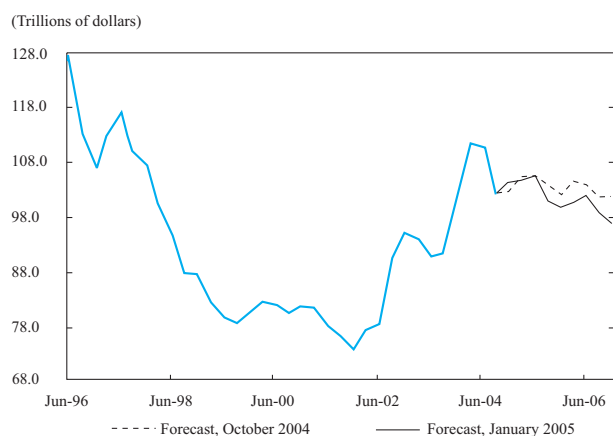
With a base case scenario of moderate dollar depreciation, prospects for growth in Latin America remain favorable, but less than what was estimated in 2004. During 2005, high growth is forecasted primarily for Chile (5.4%), Argentina (5.1%) and Venezuela (4.6%) (Table 7). For the most part, the countries in the sub-region will have ample financing available at low rates, and an influx of foreign direct investment similar to that of 2004. In this report, the gradual rise in U.S. interest rates is considered compatible with these tendencies.

As to the prices of commodities exported by the region, 2005 is expected to see a slight reduction due to less momentum in external demand. Yet, the price level will remain relatively favorable for most of the Latin American countries.

According to 2005 forecasts by *The Economist Intelligence Unit*, the overall commodity index of *World Commodity Forecasts (WCF)* is expected to drop by 4.3% in 2005 and by 2.9% in 2006, following an increase of 13.6% in 2004 (Graph 30).

GRAPH 30

COMMODITY PRICE INDEX (WCF)



Source: The Economist, Intelligence Unit.

A moderate reduction in oil prices is expected during 2005, thanks to less growth in world demand. In this respect, the forecasts contained in the present report are lower than those published in the previous quarter. However, given nervousness over the situation in Iraq and the possibility that the Organization of Oil Exporting Countries (OPEC) will cutback on production during 2005, the decline in prices is uncertain (Table 8).

TABLE 8

FORECASTS ON INTERNATIONAL PRICES FOR COLOMBIA'S MAIN EXPORT COMMODITIES

	Averages		Actual Projection		Previous Projection	
	2002	2003	2004	2005	2004	2005
Coffee (ex-dock) (dollars/pound)	0.7	0.7	0.8	0.8	0.8	0.8
Oil (dollars/barrel)	24.2	29.0	37.4	36.3	38.2	41.9
Coal (dollars/ton)	30.8	28.2	36.5	36.5	34.5	34.5
Nickel (dollars/pound)	1.1	1.4	2.0	1.9	2.0	1.9
Gold (dollars/troy ounce)	310.2	362.6	369.7	410.0	393.5	396.4

Source: Banco de la República.

In this context, two opposite tendencies will determine the country's balance of payments for 2005:

- ✧ On the one hand, the current account deficit is expected to grow as a result of less expansion in traditional exports, thanks to the reduction in the volume of oil exports and because of lower prices forecasted for Colombia's main export commodities. Growth in non-traditional exports is expected to decline as well, due to lower demand worldwide (especially in the United States and Venezuela) and the possible impact of real peso appreciation.
- ✧ On the other hand, the base case scenario outlined in the preceding section anticipates continued availability of foreign capital in 2005. In principle, this would make it possible to finance negative pressure on the current account, without causing a substantial increase in the exchange rate. Accordingly, the prediction for 2005 is moderate peso depreciation compared with the levels observed at the end of 2004.

Nevertheless, it is important to remember that volatility of the international context lends considerable uncertainty to tendencies in the exchange rate during 2005 and thereafter.

## B. DOMESTIC DEMAND AND ECONOMIC GROWTH

As to the outlook in this report, the pace of economic growth is expected to exhibit some recovery in the fourth quarter of 2004, compared with the third quarter. However, economic performance in 2005 probably will be less than what the country experienced between the second half of 2003 and the first half of 2004.

The anticipated increase in growth during the fourth quarter of last year would be based on recovery in the agricultural sector, which would register the largest growth of the year (3.4%), mainly due to the rise in coffee production and the number of cattle slaughtered. The construction sector also is expected to maintain its momentum, particularly the home building sub-sector, which would grow at an annual rate of nearly 17%. The civil works sub-sector should continue to decline in relation to the level registered a year ago, but less so. As indicated in previous sections of this report, the pace of growth in the manufacturing industry is expected to be good during the fourth quarter (nearly 4.0% annual), but less than in the previous quarters (close to 5%).

Growth in 2005 will continue to be favored by a number of factors, besides the positive behavior of external capital flows. The most important factors are low interest rates and broad liquidity in the economy, business and consumer willingness to take on debt, and the recovery in disposable business and consumer income, owing to higher company profits and better jobs. By the same

*The prediction for 2005 is of moderate peso depreciation compared with the levels observed at the end of 2004.*

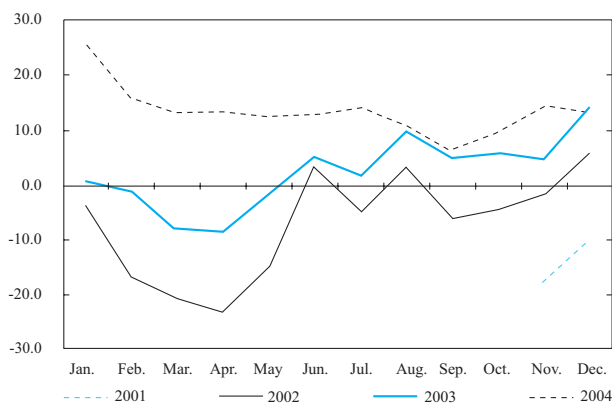
*External capital flows will contribute to growth in 2005.*

token, the latest results of opinion polls taken at the end of the year indicate no major change in producer and consumer confidence levels (Graph 31).

Nevertheless, other factors that had a positive influence on growth in 2004 will play a more discrete role in 2005, or might have a negative impact. Terms of trade and external demand are an example. Uncertainty surrounds the other variables, particularly the momentum in household consumption and the impact the current exchange rate situation might have on the make-up of demand between imported goods and those produced domestically. In this respect, we cannot rule out a continued shift in domestic production towards non-tradables in the near future, as a result of real appreciation. Growth in tradables sectors such as industry, and to some extent agriculture, is expected to be lower in 2005 than in 2004. At the same time, non-tradables associated with services, commerce and construction could be more dynamic.

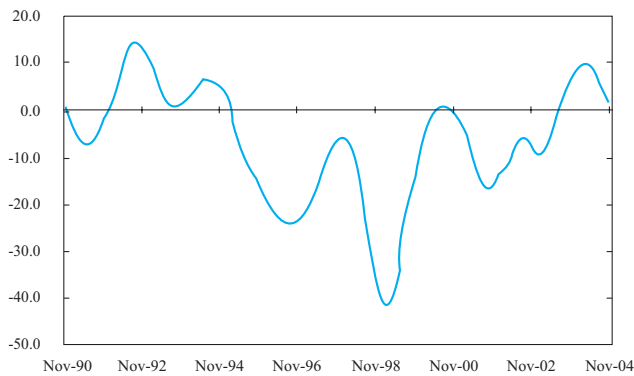
GRAPH 31

**CONSUMER CONFIDENCE INDEX**



Source: Consumption Survey, Fedesarrollo.

**INDUSTRIAL CONFIDENCE INDICATOR (TENDENCY COMPONENT)**



Source: Business Opinion Poll, calculations by Banco de la República.

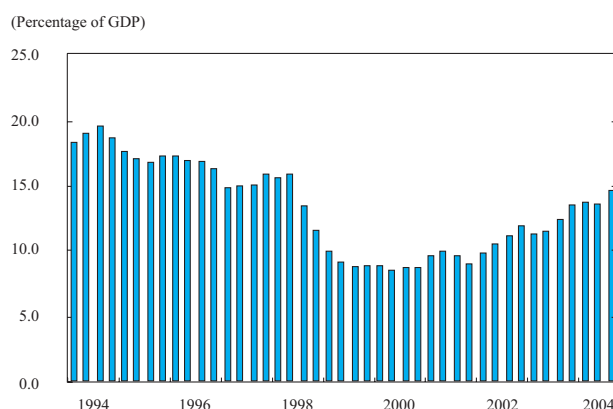
The slow rise in household consumption during 2004 could indicate there are structural reasons curbing the expansion of this aggregate, despite low interest rates and ample conditions for liquidity and credit. Factors such as the unemployment rate, which remains high, and the limited growth in employment (despite better job quality) could be curtailing growth in household consumption, especially in the low-income sectors.

In general, private investment still has enough room to expand at a good pace (Graph 32). Business confidence in the economy and larger capital inflows (including foreign direct investment) should allow for almost 15% more private investment. This would include approximately 10% more investment in agriculture and livestock, transport equipment, and machinery and equipment (an accumulated increase of 12% at September 2004 and 20% more in home construction (80.5% accumulated at September 2004). Large-scale development projects in the mining sector also are anticipated for 2005, particularly with respect to coal and oil.

In short, given the external framework of less growth and lower terms of trade forecast for 2005, growth will rely mainly on domestic absorption, with less external absorption of production. Good performance in public sector consumption and a recovery in public investment are expected at this level. Moderate growth in household consumption also

is considered feasible for 2005, all of which would permit GDP growth similar to the estimate for 2004 (Graph 33).

PRIVATE INVESTMENT AS A PERCENTAGE OF GDP (\*)



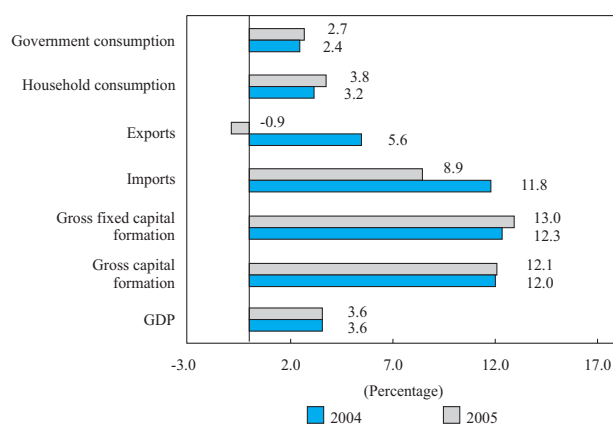
(\*) Fixed capital formation. Does not include civil works.  
Source: DANE. Calculations by Banco de la República.

C. INFLATION FORECASTS

1. The Base Case Scenario

As was the case in 2004, tendencies towards inflation in 2005 will be determined primarily by two factors: economic growth and its impact on the output gap, and the course of the exchange rate. The present report outlines two changes that were not anticipated fully in the September report and will affect mid-term and long-term inflation. The first concerns the increased pressure towards exchange rate appreciation in late 2004. The other is related to the slowdown in economic growth during the third quarter, as reported by DANE.

REAL GDP GROWTH FORECASTS, BY EXPENDITURE (2004-2005)



Source: DANE. Calculations and projections by Banco de la República.

a. The External Context

The position in this report is that the recent exchange rate situation and what is expected for 2005 depends largely on the evolution of external context. In this sense, the dollar could remain exposed to a high degree of uncertainty during 2005, the United States macroeconomic imbalances are not expected to correct significantly. Even so, the gains in competitiveness originating from the dollar depreciation in 2004 should begin to have a positive but limited impact on that country's trade deficit. This fact, coupled with a hike in interest rates, will enable the dollar to stay where it was at the end of 2004 against the euro, the yen and other currencies or, in the worst case, to weaken only slightly.

As to external interest rates, the assumptions made in earlier reports have not changed. Therefore, the Fed still is expected to raise interest rates (by 175 bp during the course of 2005) to near average historic levels. These changes



*The most important change on the international scene deals with the slowdown in growth anticipated for the major export markets.*

should remain gradual, insofar as the U.S. economy is expected to see no major inflationary pressures, aside from inflation in fuel prices.

For Colombia, the most important change on the international scene concerns the slowdown in growth anticipated for the major export markets. Growth weighted by the size of Colombian exports for 2005 would be 3.3%, as opposed to 4.7% in 2004. In turn, less momentum in the world economy would mean less favorable international prices in 2005, compared with those at the end of 2004. The result would be a moderate decline in the country's terms of trade (around 2.5%, according to projections for the balance of payments).

Less demand and lower international prices, plus added appreciation of the peso would reduce export revenue growth in 2005. It also would spell a sizable increase in imports, all of which would add to the current account deficit.

In the central scenario, the assumption is that capital flows to the emerging economies will continue. In this sense, the expectation is that Colombia will continue to register net capital inflows, primarily in the form of FDI and disbursements of debt in amounts similar to those observed in 2004. If so, the larger current account deficit could be financed without exerting strong pressures on the exchange rate. In this context, although the forecast for the exchange rate is particularly uncertain, no sharp trend towards peso depreciation is expected in 2005, although the exchange rate will be higher than it was at the end of 2004.

#### *b. The Internal Context*

The projection for economic growth during 2005 was lowered in view of the third-quarter slowdown in growth reported by DANE, coupled with the changes in the external context mentioned earlier. Three factors will determine growth in 2005: 1) exchange rate appreciation and its impact on net external demand (exports minus imports); 2) investment growth; and 3) growth in private consumption.

As noted earlier, exports' growth will be lower in 2005, owing to a less competitive real exchange rate and lower growth of world demand. At the same time, imports are expected to increase at a rate similar to that observed in the second half of 2004, also as a result of the exchange rate conditions, despite the anticipated rise in production. As a result, net external demand will have a negative impact on growth in 2005.

*Exports' growth will be lower in 2005, owing to a less competitive real exchange rate and lower growth of world demand.*

The availability of broad domestic financing and low interest rates, coupled with the expected flow of FDI and external capital, bodes well for investment in 2005. Also, public investment (in civil works) should recover from the low level observed in 2004. Despite signs of a possible slowdown in construction, a number of large ongoing projects will enable the sector to keep growing at a rate above average. For these reasons, investment probably will continue to be the component of demand that contributes the most for economic growth, as was the case in 2004.

*Investment probably will continue to be the component of demand that contributes the most to economic growth, as was the case in 2004.*

Although the broad supply of liquidity and credit observed in 2004 is expected to continue during 2005, growth in household consumption is not likely to accelerate. Therefore, the growth forecast for 2005 in this report is lower than the prediction presented in September. Previously, it was estimated the economy could grow at a rate of approximately 4% in the second half of 2004 and during 2005. This was similar to the rate observed between June 2003 and the same month in 2004. However, third-quarter figures and partial data on the fourth quarter, especially for industry, point to a lower growth rate for 2004 (close to 3.6%). Consequently, not all of the slowdown in GDP growth at September is considered temporary; a portion is due to more permanent factors. This situation and the reasons mentioned earlier suggest that growth in 2005 will be closer to 3.6%.

In view of the foregoing, the output gap, which measures the surge in demand-pull inflationary pressures, may have stopped closing in the second half of 2004, as it had been doing for a year. With growth under 4% in 2005, the gap is not likely to close next year either. Furthermore, investments made during the last two years guarantee a major expansion of installed capacity that will allow for increased production without generating bottlenecks that have an impact on inflation.

Up until the September report, the inflation forecasts assumed a reduction of the output gap in the second half of 2004 and during 2005. With the new assumptions, inflationary pressures generated by an increase in demand during 2005 would have less of an impact on prices than what was anticipated in previous reports.

### *c. Other Determinants of Inflation*

Other factors that contribute to core inflation should improve in 2005 compared with the forecasts in earlier reports, and their performance will be more favorable for the fulfillment of the inflation target. For example, the increase in wages is not expected to generate cost-push pressures. Although the rise in the minimum wage was above the inflation target (6.5%), it was lower than the increase ruled in 2004 (7.8%). Considering the normal growth in labor

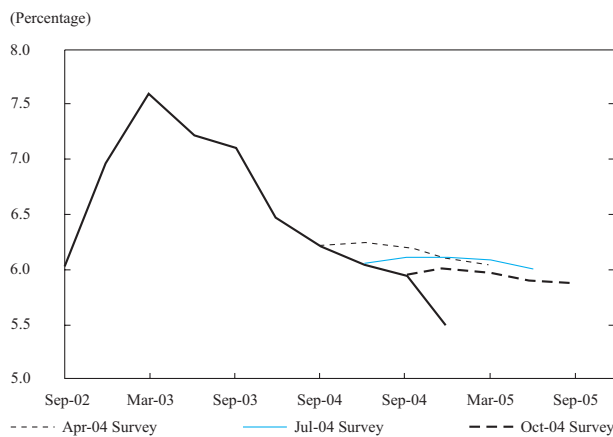
*Investments made during the last two years guarantee a major expansion of installed capacity that will allow for increased production without generating bottlenecks that have an impact on inflation.*

productivity, the wage hike is compatible with the target range established by the Board of Directors (4.5% to 5.5%). Also, conditions on the job market are still too loose to expect major wage pressures in the event of a significant recovery in the demand for labor.

As to inflation expectations, conditions have improved with respect to September. Compliance of the 2004 target has bolstered business and market confidence in the target for 2005. This should encourage price adjustments in line with the target (4.5% to 5.5%), more so than in the previous year. Available indicators of inflation expectations support this view; they all point to decreasing inflation in 2005 (Graphs 34 and 35).

**GRAPH 34**

**OBSERVED AND EXPECTED INFLATION  
QUARTERLY SURVEY**



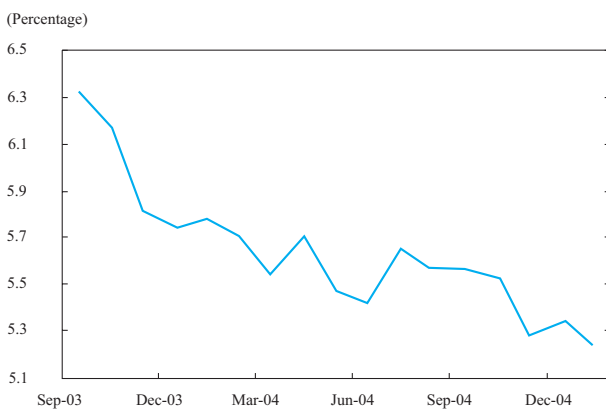
Source: Banco de la República.

Perhaps the only determinants less favorable than in September are those related to agricultural supply, food prices and higher fuel prices. As to the former, international experts now believe 2005 will see moderate El Niño weather. If moderate, its impact on agricultural supply and food prices will be limited. However, the increased probability of bad weather elevates the risk of higher food prices throughout 2005. This factor has been incorporated into the inflation forecasts presented in this report.

With respect to the prices of regulated goods and fuel, the inflation forecasts in the September report did not fully anticipate the rise in oil prices to nearly US\$50 a barrel during the fourth quarter of 2004 and the beginning of 2005. In this report, the forecast takes into account higher increases in fuel prices and transportation rates than those predicted earlier.

**GRAPH 35**

**INFLATION EXPECTATIONS AT 12 MONTHS  
BANKS AND BROKERAGE COMPANIES  
MONTHLY SURVEY**



Source: Banco de la República.

**2. Inflation Forecasts**

As is customary, the inflation forecasts were carried out in two stages. For the first two quarters of 2005, short-term models were estimated for inflation, the output gap and other variables. The findings; that is, the short-term forecasts (STF) for two quarters, were fed into the central or transmission mechanisms model (TMM) to arrive at mid-term and long-term forecasts. These are the most relevant for monetary policy decisions taken by the Central Bank Board of Directors.

a. *The Short-term Forecast (STF)*

The short-term models point to a decline in non-food inflation during the first six months of 2005, largely because of lower tradables inflation. One consequence of the exchange rate appreciation in 2004, particularly at year's end, was a major decline in tradables inflation for 2004, which could continue during the first half of 2005. In fact, prices for these goods might be much lower than in previous periods, given the lower costs for importers and the higher foreign competition faced by domestic producers.

Although non-tradables inflation would have more of an impact than tradables inflation, on this occasion the models also lean towards a slight reduction in short-term forecasts, given the stability of this variable during the second half of 2004. Lower expected growth and good performance by a key item like rentals played a crucial role in lowering the forecasts.

One area that saw no major short-term changes was the inflation of regulated goods and services. During the first two quarters of 2005, this group - headed by fuel - should continue to register inflation well above the average and in excess of the target. High international prices for oil and announced readjustments in public utility rates explain this behaviour.

This being the case, the short-term forecasts for non-food inflation in March and June 2005 are 5.3% and 5.2%, down from those listed in the September report (5.7% and 5.5%) (Table 9). These forecasts partially include the effects of the increase in VAT from 7% to 10%, which took effect in January 2005 and should cover approximately 10% of the basket of consumer goods. The effects of these indirect tax adjustments tend to be concentrated in the first half of the year, as was the case in 2002. However, this time, the impact on prices should be minor, due to the small increase in the tax rate and its limited coverage.

Regarding food inflation, the short-term models anticipate 4.2% in March and 4.5% in June. This STF is down, at least in the first quarter, from the forecasts published for those months in the September issue (5.1% and 4.5%). In general, lower food inflation during the first half of the year hinges on favorable developments in the supply of beef products, thanks to the liquidation phase of the stockbreeding cycle, and fewer pressures on the price of imported raw materials (cereals and oil seed). The latter is due to lower international prices and the accumulated exchange rate appreciation.

However, it is important to point out that food forecasts tend to have a higher margin of error than non-food inflation forecasts. In addition, the short-term

*In 2005, other factors that contribute to core inflation will improve compared with the forecasts in earlier reports and their performance will be more favorable to compliance with the targets.*

*The short-term models point to a decline in non-food inflation during the first six months of 2005, largely due to a reduction in tradables inflation.*

## CENTRAL MODEL FORECASTS (TMM)

	Total inflation	Non-food inflation	Food inflation	Output Gap
Dec-04	5.5	5.5	5.4	(1.7)
Mar-05	5.0	5.3	4.2	(1.7)
Jun-05	5.0	5.2	4.5	(1.8)
Sep-05	5.0	5.1	4.7	(1.8)
Dec-05	5.0	4.8	5.5	(1.7)
Mar-06	5.3	4.9	6.3	(1.5)
Jun-06	4.8	4.5	5.4	(1.3)
Sep-06	4.3	4.3	4.3	(1.1)
Dec-06	4.0	4.1	4.0	(0.9)

Source: Banco de la República.

forecast for non-food inflation at the beginning of the year tends to be less reliable than the forecast in later quarters, since inflation in Colombia tends to be concentrated in the early months of the year.

Therefore, the short-term forecast for total inflation is lower than what it was in the last report. The current projection is 5.0% for both March and June. The forecasts for those months in the september report were 5.5% and 5.2%, respectively

As to the output gap, the present report assumes a wider gap at the end of 2004 and early the beginning of 2005, since third-quarter growth was lower than what was forecasted in earlier reports, considering that part of the slowdown may be somewhat permanent. The sense now is that the gap might have closed by only 0.4% during 2004 and not by 0.7%, as indicated in the last report, and that it is larger at the beginning of 2005 (by 0.3% of potential GDP) than the prediction three months ago.

*The present report assumes a wider output gap at the end of 2004 and early 2005.*

*b. Long-term Forecasts*

In general, the central model predicts lower inflationary pressure in 2005 and 2006, compared with the forecast in the September report. As indicated

already, this is due to higher accumulated appreciation at the end of 2004 and early 2005, and lower observed and predicted growth, which implies a wider output gap and less demand-pull inflationary pressures.

The central-model forecasts for the output gap point to a level in December 2005 that is similar to the gap at the end of 2004, and not much different from the gap in times of lower economic growth, such as 2002 and early 2003, when industrial installed capacity utilization was low (Table 9). If this is the case, these output gap levels would reduce the risk of demand-pull inflationary pressures that might jeopardize the fulfillment of the inflation target in 2005 and its reduction in 2006.

The currently exchange rate lower compared with the forecast in previous reports and its anticipated relative stability, at least in the first half of the year, implies lower pressure on inflation throughout 2005. The lower depreciation should translate into lower production costs and, therefore, lower price increase.

In the central or transmission mechanisms model (TMM), less inflationary pressures due to domestic demand and the exchange rate helps to lower inflation expectations to levels consistent with the inflation target.

Given the foregoing and the short-term forecast outlined in the preceding section, the TMM indicates non-food inflation will decline to 4.8% by the end of 2005. As to food inflation, the model predicts 5.5% at December 2005. Consequently, total consumer inflation is expected to decline in 2005 to 5.0% in December, which is compatible with the target range for the year (4.5% to 5.5%) (Table 9).

In the base case scenario outlined in this report, the lower inflationary pressures forecasted for 2005 are consistent with a more relaxed monetary policy than was anticipated in previous reports. If this proves to be true, more room for maneuverability at the monetary level should spark no inflationary pressures that endangering the target for this year and continuously lower targets in the years ahead.

*The TMM indicates non-food inflation will decline to 4.8% by the end of 2005.*

*Lower inflationary pressures forecasted for 2005 are consistent with a more relaxed monetary policy than was anticipated in previous reports.*

### **3. Balance of Risk**

The following are the risk factors that could alter the base case scenario summarized earlier and steer inflation away from its central path, as outlined in Table 9.

- ✦ The exchange rate is the main element of uncertainty in the inflation forecast. Although the prediction herein is for gradual and moderate

*The forecasts for growth and the output gap also create uncertainty. Less growth in private consumption than what is predicted in the central path of the model cannot be ruled out.*

depreciation in 2005, this will depend largely on how net capital inflows develop. If the markets perceive a long-term reduction in net capital inflows, exchange rate depreciation would exceed the prediction in this report. A larger and faster-than-expected increase in external interest rates and/or a pronounced slowdown in U.S. economic growth could precipitate this situation. Inflationary pressures that are not contemplated in the central path of the inflation forecast could emerge from this scenario.

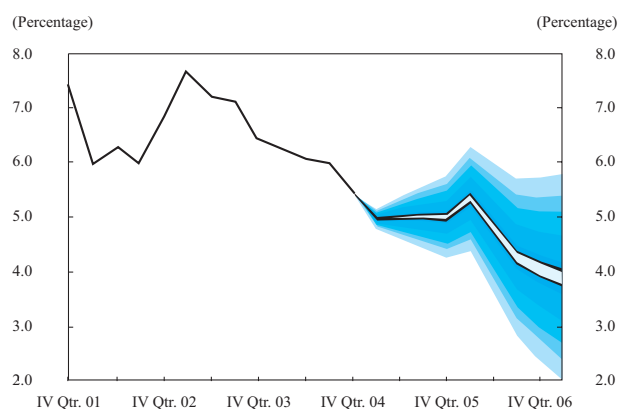
- ⊠ However, an opposite scenario, with broader and less temporary capital inflows, cannot be ruled out. For example, more than US\$2.6 billion in private capital a year, on average, entered Colombia between 1994 and 1997, compared with an estimated influx of US\$1 billion in 2004.
- ⊠ The forecasts for growth and the output gap also a source of uncertainty. The base case scenario assumes that the slowdown in the fourth quarter was largely temporary. It also supposes growth will return to rates between 3.5% and 4.0% as of the fourth quarter of 2004 and in 2005. Yet, lower growth in private consumption than what is predicted in the central path of the model cannot be ruled out, as this variable has performed poorly in recent quarters. On the other hand, the tradables sectors might see less of an increase, due to the exchange rate appreciation, particularly if it is not offset by added growth in non-tradables production and in private investment. In this case, the slowdown in the second half of 2004 would have a more permanent component, increasing the output gap for 2005 and reducing demand-pulled inflationary pressures, compared with the prediction in the central path of the TMM.
- ⊠ The central path of the TMM could be underestimating the extent to which a moderate El Niño and developments in the stockbreeding cycle would affect perishable food inflation. The figures at the beginning of the year are not encouraging, especially with respect to prices for beef products.
- ⊠ A further increase in transportation and fuel prices during 2005 cannot be ruled-out, given recent developments in oil prices worldwide. The forecast for growth in world demand, coupled with limited inventories, could raise oil prices in relation to the base case scenario. It is important to point out that the inflation forecast assumes a slight reduction in the average price of oil during 2005, compared with the average in 2004 and at the end of the year.

*The exchange rate is the main element of uncertainty in the inflation forecast.*



The probability distribution table (fan chart or confidence interval) (Graph 36) shows the risk balance. The distribution of probabilities for total inflation indicates a 72% chance of it being in the 4.5-to-5.5% range at December 2005. This is an increase compared with the September *Inflation Report*, when the probability was 55%. The fan chart shows a confidence interval with a slight upward bias in relation to the central path of the inflation forecast.

**INFLATION FORECAST PROBABILITY DISTRIBUTION  
(FAN CHART)**



Source: DANE. Calculations by Banco de la República.

Inflation Ranges (%)	2005				2006			
	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
>6.5]	0.0	0.0	0.0	0.1	2.3	1.0	0.5	0.8
[6.0-6.5]	0.0	0.0	0.2	1.5	10.4	4.0	1.9	2.0
[5.5-6.0]	0.0	1.4	7.8	12.6	26.3	11.8	5.6	4.9
[5.0-5.5]	39.4	46.8	43.2	36.0	33.0	22.4	12.3	9.8
[4.5-5.0]	60.6	50.1	41.7	35.8	20.6	26.8	19.5	15.3
[4.0-4.5]	0.0	1.7	6.9	12.4	6.4	20.4	22.5	18.9
<4.0]	0.0	0.0	0.2	1.5	1.1	13.6	37.7	48.2



### HOW FLEXIBLE ARE PRICES IN COLOMBIA?

Price flexibility is defined as the possibility of a price going up or down at any given moment. Based on this definition, we will attempt to measure the degree of downward flexibility in the items that make up the consumer price index (CPI), with the exception of staple foods and regulated goods and services. Specifically, the idea is to determine if monthly inflation in these items is negative and, if so, why.

Felipe Jaramillo and Edgar Caicedo developed a series of articles on this topic, trying to identify price rigidity. Based on their analysis of a time series to 1995 and a cross-section evaluation, they concluded that consumer prices in Colombia were downwardly inflexible.

The present article explores the recent trend in price flexibility and offers considerable evidence that contradicts the findings outlined in their previous articles. A sample of 137 CPI items was used for this purpose, including 97 aggregates that can be considered tradables and 40 non-tradables. The sample was taken from December 1998 to December 2004.

The analysis focused on the monthly variation in each item in the two groups. One of the most important findings was the significant degree of downward flexibility (negative monthly inflation) found with many of the prices in question. It is surprising to encounter such flexibility in price indexes, which are aggregates of many individual variations of similar products in different cities and markets where the data is gathered. In this respect, if there is a bias in the information that is collected, it would be towards less downward flexibility. In other words, if access to the source of the data were possible, it would show greater flexibility. Table B2.1 summarizes the findings.

As illustrated, the items declined in price a good percentage of the time. The highest reading for the non-tradables was in 1999, when 20% of the items declined in price from one month

**TABLE B2.1**  
**PERCENTAGE OF ITEMS WITH MONTHLY REDUCTIONS (< 0)**  
**OR INCREASES (> 0) IN PRICE**

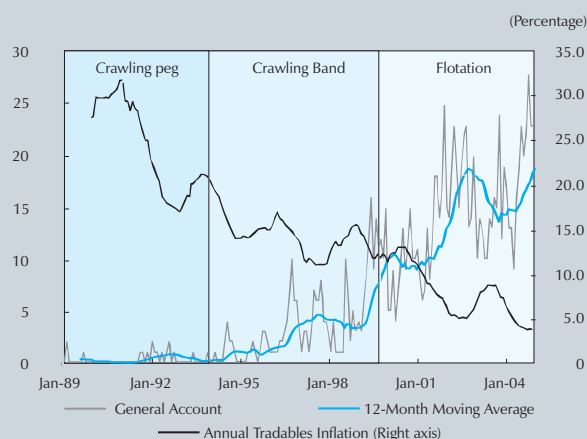
	Adjustment Sign	1999	2000	2001	2002	2003	2004
<b>Non-tradables</b>	> 0	68.0	66.0	69.0	66.0	67.0	66.0
	< 0	20.0	16.0	18.0	18.0	17.0	17.0
	= 0	12.0	18.0	13.0	16.0	16.0	17.0
<b>Tradables</b>	> 0	79.0	80.0	76.0	71.0	75.0	66.0
	< 0	20.0	18.0	22.0	27.0	23.0	32.0
	= 0	1.0	2.0	2.0	2.0	2.0	2.0

Source: DANE, calculations by Banco de la República.

to another. For the tradables, the highest reading is 32% and was observed in 2004. According to these findings, the hypothesis put forth in the previous articles should be reconsidered and there must be some fundamental reasons for this behavior.

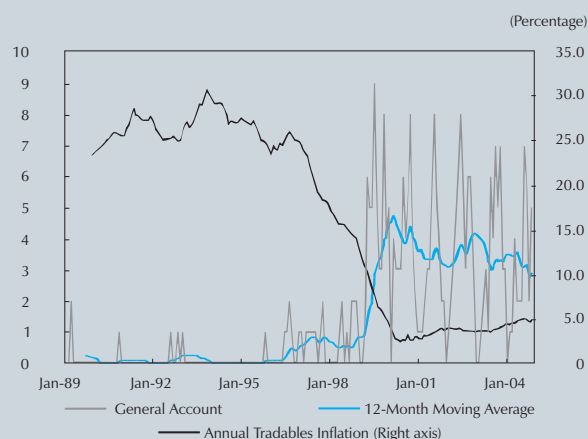
To supplement the analysis, the sample was enlarged to include the period from December 1988 to December 2004, and the CPI baskets for 1988 and 1998 were unified. The following graphs illustrate how price flexibility has grown since 1998. Both tradables (Graph B2.1) and non-tradables (Graph B2.2) show a significant increase in the number of items with monthly price reductions. In both cases, the largest number of reductions is accompanied by a pronounced slowdown in inflation for the group.

**GRAPH B2.1**  
**FLEXIBILITY OF TRADABLES**  
NUMBER OF ITEMS WITH PRICE REDUCTIONS, BY PERIOD (\*)



(\*) On 62 items.  
Source: DANE, calculations by Banco de la República.

**GRAPH B2.2**  
**FLEXIBILIDAD DE NO TRANSABLES**  
NÚMERO DE ÍTEMS QUE REDUCEN PRECIO POR PERÍODO (\*)



(\*) On 62 items.  
Source: DANE, calculations by Banco de la República.

There is a similarity between the cycles in the 12-month moving average for tradables and the exchange rate cycles. In other words, with sharp exchange rate depreciations, the number of items with price reductions declines. The opposite occurs with exchange rate appreciations.

The graph includes a brief summary of the exchange rate arrangements that were in effect during the period under analysis. The crawling peg period, characterized by gradual devaluation, saw no major price reductions, and price increases tended to occur gradually, throughout the year. In part, this might be because devaluation under that arrangement was agreed and companies could be sure of its extent and duration.

During the second period, with the exchange rate band, when the exchange rate was more varied but restricted in its volatility, there was a slight increase in the number of items with

price reductions. Finally, after 1999, with the flotation arrangement, the number of items with price reductions rose sharply. The drop in inflation to the single-digit level could be one reason why. Also, there is the increased likelihood of short and pronounced fluctuations in the exchange rate, which was improbable under the previous arrangements.

The performance of non-tradables responds primarily to demand-pulled pressures. Accordingly, the slowdown in the Colombian economy in 1998 was accompanied by a sharp increase in the number of items that experienced price reductions. The largest concentration was in 1999. As of that year, price reductions have been less frequent. This might have something to do with a partial closure of the output gap. On the other hand, the sequence of adjustments in the non-tradables group appears to be highly seasonal. Apparently, companies lean towards price adjustments the first quarter of the year, when one is least likely to see reductions.

One of the assumptions based on this study is that lower inflation in Colombia was possible thanks to a break in inflation expectations. This is reflected in more of an inclination towards downward price flexibility on the part of those who are responsible for setting prices.

PROJECTIONS ON SEVERAL MACROECONOMIC VARIABLES  
BY DOMESTIC AND EXTERNAL ANALYSTS

The following are the most recent projections for 2005 and 2006 on Colombia's main economic variables. They were developed by a group of domestic and external analysts with information available at December 2004.

### I. Projections for 2005

Table A1 contains the forecasts for 2005. All the analysts, both domestic and foreign, predict 3.7% growth (the former lowered their forecasts by 0.2% and the latter by 0.4% in comparison with their predictions in the previous quarter). This is an indication that poor third-quarter performance in 2004 affected how agents feel about mid-term growth. Eight of the 12 analysts reduced their forecasts and the other four made no changes. There is less and less deviation in the forecasts, and the range between the maximum and minimum forecasts continues to narrow. This suggests a consensus on the year-end figure, which would be between 3.4% and 4%.

TABLE A1  
PROJECTIONS ON THE PRINCIPAL MACROECONOMIC VARIABLES FOR 2005

	Real GDP Growth %	CPI Inflation %	Nominal Exchange Rate (end of)	Nominal DTF 1/ %	Deficit (% of GDP)		Unemployment Rate (13 cities) %
					Fiscal (CPS)	Current Account	
<b>Domestic Analysts</b>							
Revista <i>Dinero</i>	3.4	5.2	2,509	7.7	2.5	n.a.	13.5
BBVA Ganadero	3.5	5.5	2,680	7.9	2.7	1.6	13.5
Citibank Colombia	3.8	5.2	2,465	8.0	2.7	1.5	12.9
Suvalor-Corfinura	3.5	5.3	2,543	8.4	2.6	n.a.	n.a.
Corfivalle	4.0	5.5	2,514	8.1	2.9	1.6	14.0
ANIF	3.8	5.5	2,500	8.0	2.4	n.a.	13.0
Fedesarrollo	4.0	5.0	2,522	8.0	2.5	2.5	12.7
Average	3.7	5.3	2,533	8.0	2.6	1.8	13.3
<b>Foreign Analysts</b>							
Goldman Sachs	3.5	5.3	2,590	8.0	2.5	2.0	13.4
CS First Boston	3.8	5.0	2,411	8.7	2.4	1.5	14.0
IDEA Global	4.0	5.0	2,500	8.0	2.5	0.9	12.5
J. P. Morgan Chase	3.5	5.5	2,625	8.2	2.5	0.9	13.5
Deutsche Bank	3.6	4.9	2,500	7.7	2.1	3.9	12.6
Average	3.7	5.1	2,525	8.1	2.4	1.8	13.2

SPC: Consolidated public sector

n.a. Not available.

1/ Yearly average.

Source: *Dinero* and *Consensus Forecast*, January 2005.

The domestic analysts continue to predict 5.3% inflation and the external analysts, 5.1%. In other words, all of them are confident the target will be met, but their forecasts are in the upper half of the range set by the Central Bank Board of Directors (4.5% to 5.5%). With respect to the exchange rate, the difference between the predictions by domestic and foreign analysts is Col\$8 (as opposed to Col\$91 in the third quarter). As they did last quarter, all the analysts cut their forecasts sharply. The domestic analysts lowered theirs by Col\$292, on average, and the external analysts, by Col\$209. Despite recent jumps in the market, the difference in the forecasts declined to Col\$72, having been Col\$118 last quarter (and Col\$180 six months ago). In general, they all expect foreign exchange to depreciate by 5.6% compared with the price at the end of 2004. The maximum forecast for depreciation is 11% and the minimum is 1%. None of the analysts anticipate exchange rate appreciation for (the end of) 2005.

As to the DTF, the average domestic forecast is 8%, as opposed to 8.1% by foreign analysts (following respective predictions of 8.3% and 8.4% last quarter). This is an average increase of 34 bp in the DTF compared with the end of 2004. Most of the analysts lowered their forecasts. There were no major changes between domestic and foreign analysts with respect to the current account deficit; they place it at 1.8% of GDP, on average. The rate of unemployment in the 13 major cities is expected to be 13.3% (which implies an increase of 0.5% in relation to what the domestic analysts predicted last quarter). Three analysts lowered their forecasts, five raised theirs, and three made no changes.

## **II. Projections for 2006**

Table A2 includes several forecasts for the end of 2006. The domestic analysts anticipate 3.8% growth and the foreign analysts, 3.6%. As to inflation, the domestic analysts predict 4.9% and the foreign analysts, 5.3%. In terms of the exchange rate, the domestic analysts expect the representative market rate to average about Col\$50 more than what the foreign analysts predict. Annual depreciation in 2006 is expected to average 6% in contrast with the forecasts for the end of 2005. Therefore, on average, the analysts anticipate a representative market rate (TRM) of Col\$2,685 per dollar by the end of 2006. This is similar to the TRM in August 2002 and less than the high of Col\$2,958 in March 2003.

Consequently, the analysts expect peso depreciation on the order of 12% between 2005 and 2006 in relation to the rates at the end of 2004. However, there are major differences in the way this depreciation is distributed. Five of the analysts believe it will be distributed equally between both years. Three see a concentration largely in 2005, while the other three believe it will be concentrated mostly in 2006.

**TABLE A2**  
**PROJECTIONS ON THE PRINCIPAL MACROECONOMIC**  
**VARIABLES FOR 2006**

	Real GDP Growth %	CPI Inflation %	Nominal Exchange Rate (end of)
<b>Domestic Analysts</b>			
Revista <i>Dinero</i>	3.6	5.0	2,760
BBVA Ganadero	3.0	5.0	2,814
Citibank Colombia	3.6	4.8	2,687
Suvalor-Corfinura	3.8	5.2	2,733
Corfivalle	4.5	5.0	2,607
ANIF	4.0	n.a.	n.a.
Fedesarrollo	4.1	4.5	2,665
<b>Average</b>	<b>3.8</b>	<b>4.9</b>	<b>2,711</b>
<b>Foreign Analysts</b>			
Goldman Sachs	3.5	4.9	2,630
CS First Boston	4.0	5.4	2,465
IDEA Global	4.0	5.0	2,600
J. P. Morgan Chase	3.3	5.3	2,800
Deutsche Bank	3.3	6.0	2,800
<b>Average</b>	<b>3.6</b>	<b>5.3</b>	<b>2,659</b>

n.a. Not available.

Source: *Dinero* and *Consensus Forecast*, January 2005.



MONETARY  
POLICY  
DECISIONS  
IN THE LAST  
THREE  
MONTHS

# MONETARY POLICY DECISIONS IN THE LAST THREE MONTHS

## **Background Information: *Inflation Report* - September 2004**

Non-food inflation continued to decline during the third quarter, mainly because of the trend in prices for tradable goods. This offset the increase in non-tradables inflation. The persistent rise in non-tradables inflation since the second half of 2003 would suggest the output gap continued to close. It also would indicate an absence of major changes in inflation expectations during the quarter.

According to the September report, the decline in tradables inflation was more moderate in the third quarter than in previous quarters, despite the increase in the exchange rate appreciation. Indications are this could be the effect of inflationary inertia and expected inflation in tradable goods.

As to growth of the Colombian economy, the two trends observed throughout the year continued; that is, good economic growth and exchange rate appreciation. The external context was favorable to exports and GDP in the tradables sectors. At the internal level, GDP growth in non-tradables was propelled by the increase in domestic demand. In fact, more domestic demand seems to indicate a recovery in available private income, thanks to better employment conditions. The unemployment rate continued to decline, mainly due to the reduction in the global participation rate. This was interpreted as an improvement in the level and stability of family income. The increase in school enrollment among the inactive population is one indicator that confirmed this interpretation.

Prospects for the global economy in the short and medium term remained favorable, despite the rise in oil prices and external interest rates. Therefore, the Colombian economy was expected to continue to grow by about 4%. The forecast for 2005 was similar growth, led by private consumption and investment.

It was predicted that non-tradables inflation would continue to grow and the output gap would keep closing. However, inflation expectations were expected to decline. This would help to lower inflation in 2005, given the tendency towards exchange rate appreciation and the likelihood of meeting the 2004 target.

Based on the foregoing, and considering the constantly lower inflation targets in the future, as announced by the country's monetary authorities, meant the economy would require less monetary incentive in the medium and long term. The speed at which a neutral monetary position would be achieved depended primarily on how fast the output gap closed and the size and duration of the appreciation episode affecting the economy. According to the central



forecast model, if the exchange rate experienced no major increase in 2005, monetary policy could maintain its incentive to economic activity for some time, without jeopardizing the target for inflation.

### **Quarter Monetary Policy Decisions the Fourth Quarter of 2004**

The fourth quarter of 2004 witnessed important changes in the macroeconomic situation, as opposed to the predictions in the September report.

- ✘ The inflation target for 2004 (5.5%) was met and non-food inflation declined substantially (the forecast in the September report was 5.8% inflation for the year).
- ✘ In contrast with the first six months of 2004, the increase in non-tradables inflation (excluding food and regulated goods and services) slowed to a stop in the second half of the year.
- ✘ As opposed to the situation before September, inflation expectations declined.
- ✘ There was considerable exchange rate appreciation. Compared with the first three quarters of 2004, the nominal exchange rate in the last quarter fell by 6%, on average.
- ✘ Economic growth slowed in the third quarter and the output gap could have widened.

In this context, the monetary policy stance required to met the inflation target for 2005 (4.5% - 5.5%) and to make sure inflation in 2006 is within the announced range (3% - 5%) depends heavily on mid-term developments in the exchange rate and the trend in the output gap.

As explained in Chapter I, the acceleration in appreciation during the fourth quarter was due basically to external capital inflows in an international scenario characterized by a weaker dollar against most other currencies and the movement of private capital towards emerging economies. Net inflows of foreign direct investment increased in 2004 with respect to previous years, mainly because of more investment in oil and coal. Some of the appreciation in 2004 originated with exogenous movements in the current account, such as the improvement in terms of trade, the surge in external demand due to more growth worldwide, and particularly the recovery in non-traditional exports to Venezuela.

The outlook for the exchange rate is especially uncertain, as it depends on the volatility of the external context. Assuming there are no abrupt changes in the external deficit of the United States, that economy could see a gradual increase in short-term interest rates and private capital outflows (accompanied by a continued weakening of the dollar), coupled with moderate reductions in world growth and commodity prices. If this is the case, the Colombian peso might depreciate in 2005 with respect to the values registered at the end of 2004. This is the central scenario of the inflation forecasts presented in this report.

The exchange rate in 2006 and in the mid-term is more difficult to predict. For one thing, nominal and real peso depreciation is feasible, given the deterioration in the current account that would come from a drop in oil prices and export volumes. However, there is considerable uncertainty about how capital flows will behave.

As mentioned earlier, less economic growth in the third quarter of 2004 could be due, in part, to temporary factors. Nevertheless, the slowdown in consumption does not rule out a more prolonged weakening of domestic demand. There is also the possibility that potential GDP will expand as a result of the rapid pace at which investment has increased in recent years. Together, these two events indicate the “output gap” may have widened at the end of 2004, which would mean less inflationary pressure. Stabilization of non-tradables inflation in the second half of 2004 (after having risen during the first six months) is coherent with this hypothesis, although it also could be the result of fewer inflation expectations.

The added appreciation observed in 2004 and the exchange rate forecast for 2005, plus the possibility of a wider output gap and fewer inflation expectations, will aid the inflation target for 2005 (between 4.5% and 5.5%). They also will help to place inflation in 2006 within the announced range (3% and 5%), based on an interest rate path that is lower than the one contemplated in earlier inflation reports. The targets are compatible with a lower path for interest rates than the one presented in previous inflation reports.

The inflation forecasts confirm this, even with the price shocks that could occur in 2005. These include a change in VAT from 7% to 10% for certain items in the family market basket, the possibility of prices for fuel and regulated goods and services rising above inflation, and the likelihood of a moderate El Niño.

The Board of Directors has expressed concern about the trend in real appreciation, because of the negative impact it could have on production in certain tradables sectors and on the current account. As to the latter, a shortfall in the balance of payments eventually might necessitate abrupt changes in the exchange rate to cope with a setback in capital flows to emerging economies, with a perverse effect on inflation and productive activity.

The country’s monetary authorities believe the following criteria should be considered when analyzing the appropriateness of adopting specific measures to halt or curb peso appreciation.

- ⌘ A distinct priority on the constitutional objective of price stability.
- ⌘ An assessment of the duration of the factors that buffet the exchange rate (nominal and real).
- ⌘ Consideration of the effectiveness of the instruments available to monetary authorities.

As to the predominance of price stability as an objective, a target inflation strategy can accommodate other policy objectives, provided they are subordinate to the inflation target.

For example, monetary authorities can try to curb appreciation, provided this does not jeopardize the inflation target. Also, if the appreciation is accompanied by a wider output gap and situates inflation forecasts below the target, the suggestion for a policy derived from the strategy is to lower interest rates. This tends to stabilize the exchange rate.

Secondly, when the causes of appreciation are identified as permanent or a matter of “long-term equilibrium”, the best policy is to permit nominal peso appreciation. Otherwise, the real exchange rate could reach its new level of equilibrium through a rise in inflation (which would be anything but useful). For example, appreciation originating with a permanent increase in the price of an export product could be curbed temporarily with a policy calling for non-sterilized accumulation of international reserves. However, a policy of this sort eventually leads to monetary expansion, higher inflation and real peso appreciation, due to the increase in domestic prices, regardless of whether it is “successful “ in keeping the nominal exchange rate at the desired level.

As indicated in this report, the Board of Directors believes some of the factors responsible for appreciation are temporary. For example, terms of trade will decline sometime in the future and the volume of oil exports is expected to drop after 2007. A slowdown in world growth and its effect on exports is anticipated as well. Also, the government has announced plans to lower the public deficit and its external financing. In this sense, a second criterion suggests the advisability of curbing appreciation to prevent an abrupt correction from jeopardizing the inflation target in the future, and to ease the adverse effect appreciation could have on the sectors that produce tradable goods.

It was on the basis of these criteria, and in view of the outlook for the exchange rate, that the Board of Directors lowered the Central Bank’s intervention rates by 25 bp in February and March. The Central Bank intervened in the exchange market to purchase US\$1.4 billion between January and September, through an auction of put options to accumulate international reserves. This intervention was partly sterilized by the secondary-market sale of TES belonging to the Central Bank.

Despite the considerable extent of the Central Bank’s intervention in the exchange market and the purchase of approximately US\$400 m by the Treasury, peso appreciation intensified in September. Accordingly, it was felt that intervention could be more effective if done through less predictable mechanisms than the auction of options for the sale of foreign currency to the Central Bank. Part of the effectiveness of discretionary intervention, at least in the short term, lies with the fact that agents are uncertain as to what extent the Central Bank will intervene. For this reason, the Central Bank announced in October that it would be willing to purchase up to US\$1 billion on the market during the remainder of the year, in a *discretionary* way. It was decided that an important part of these purchases would be sterilized; the other would accommodate the constantly increasing demand for base money.

Under this arrangement, the Central Bank accumulated US\$1,503 m in international reserves during the fourth quarter of 2004, through discretionary purchases. This accounts for 52% of all international reserves accumulated during the year (US\$2,905 m) (Table A).

**TABLE A**  
**FOREIGN CURRENCY PURCHASE-SALE OPTIONS**  
**THE CENTRAL BANK (YEAR: 2004)**

	Amount (US Millions)
<b>Purchases</b>	<b>2,905</b>
<b>Put Options</b>	<b>1,580</b>
To accumulate international reserves	1,400
To control volatility	
<b>Discretionary Intervention</b>	<b>1,325</b>
<b>Sales</b>	<b>500</b>
<b>National Government</b>	500
<b>Net Purchases</b>	<b>2,405</b>

Source: Banco de la República.

**TABLE B**  
**LATEST CHANGES IN THE CENTRAL BANK'S INTERVENTION RATES**  
**(PERCENTAGE)**

Date	Contraction		Expansion	
	Lombard	Auction	Auction	Lombard
<b>2001</b> 17 Dec.	6.25	7.50	8.50	12.25
<b>2002</b> 21 Jan.	6.00	7.00	8.00	11.75
18 Mar.	5.25	6.25	7.25	11.00
15 Apr.	4.25	5.25	6.25	10.00
20 May	3.75	4.75	5.75	9.50
17 Jun.	3.25	4.25	5.25	9.00
<b>2003</b> 20 Jan.	4.25	5.25	6.25	10.00
29 Apr.	5.25	6.25	7.25	11.00
<b>2004</b> 23 Feb.	5.00	6.00	7.00	10.75
23 Mar.	4.75	5.75	6.75	10.50
20 Dec.	4.50	5.50	6.50	10.25
22 Dec. (*)	n.a.(*)	n.a.(*)	6.50	10.25

(\*) Not applicable. The Central Bank suspended monetary contraction operations (auction and Lombard) as of 22 December 2004.  
Source: Banco de la República.

As a supplementary measure coherent with the analysis of inflation prospects for 2005 and 2006, the Board of Directors lowered the Central Bank's intervention interest rates on 17 December 2004 to 6.5% for expansion auctions and 5.5% for contraction auctions. In all, this amounts to a reduction of 25 basis points (bp) (Table B). On 21 December, the Board of Directors ratified the decision to intervene in the exchange market at its discretion, without announcing the amount or time of intervention, and decided to close its contraction windows (auction and Lombard).

Despite the additional purchase of dollars, monetary expansion has been coherent with the monetary program, thanks to a lower net repo balance and an increase in government deposits with the Central Bank. As a result of these measures, the inter-bank interest rate (TIB) has dropped by nearly 50 bp since the end of the year, with 25 bp of this decline attributed to the Central Bank's intervention rates.

The possibility of maintaining the current stance of monetary policy in the coming quarters will depend largely on current and anticipated developments in the exchange rate and aggregate demand. The prospect of allowing short-term interest rates to drop below current levels for a period of time, without jeopardizing the inflation targets, depends on how long the peso is expected to appreciate and, more specifically, on the size and duration of capital inflows to Colombia.

As indicated, for the time being, the international scene is expected to see a gradual adjustment in the U.S. external deficit that implies no abrupt changes in world growth, commodity prices or capital flows to emerging markets. In this context, if a fiscal policy conducive to a reduction in the debt/GDP ratio is maintained, there should be no sharp reversals in the flow of foreign capital to Colombia.

These facts and observations suggest the possibility of leaving interest rates untouched during the coming months. Nevertheless, as has been stated repeatedly, there is considerable uncertainty about several relevant aspects; namely, the output gap and the international context. This necessitates a frequent review of the macroeconomic situation and the macroeconomic forecast. Major changes in this respect can lead to important changes in the stance of monetary policy.

It also is advisable to wait for information on price hikes during the early months of the year, particularly to determine if tradables inflation is behaving as forecast, or has declined more than expected. This is important, since most price adjustments for tradables occur in the first quarter of the year. If there has been more of a decline in tradables inflation (with no surge in non-tradables inflation) the monetary policy bias in the last quarter would reinforce itself.