Inflation
REPORT

JUNE 2005

BANCO DE LA REPÚBLICA
(CENTRAL BANK)
BOGOTÁ, D.C., COLOMBIA
ISSN - 1657 - 7973

CONTENTS

Index of Graphs and Tables

I. Current Economic Situation

II. Macroeconomic Outlook

Inflation Situation and Outlook in June

- Inflation in June confirms the main trends observed since the start of the year: lower core inflation, lower inflation expectations and a great likelihood of meeting the 2005 target.

- The drop in nonfood inflation (from 4.8% in March to 4.3% in June) occurred in tradables and nontradables . As in the first quarter, the fall in tradables inflation reflected exchange-rate behavior. Nontradables inflation decreased mainly as a result of excess capacity and gradually declining inflation expectations.

- Moreover, the Colombian economy continued to expand over the first half of the year. This is confirmed by first-quarter GDP growth (adjusted for fewer working days) and most economic indicators available to date. Growth was chiefly driven by exports and investment.

- The main factors determining price behavior in the next four to eight months will be developments in inflation expectations, the existence or not of inflationary cost and wage pressures, exchange-rate behavior and size of the output gap.

- Inflation expectations continued to decrease. The credibility of meeting the 2005 target is at a record high, and expectations for June 2006 stand at 4.9%, according to the Bank's monthly surveys. But expectations derived from the rate differential of over three-year indexed and non-indexed bonds still remain at 5%.

- The recent months' fall in the producer price index (PPI) suggests the absence of inflationary pressures from prices of raw materials and intermediate goods. In contrast, the first half of the year has seen some significant rises in real wages in the retail trade and for skilled construction workers. These real-wage rises have probably been partially offset by faster labor-productivity growth, so that unit labor costs may have remained stable. But the emergence of bottlenecks in the near future in some sectors and some segments of the labor market is not ruled out.

- Though future exchange-rate movements are highly uncertain, no major change is expected in external conditions over the next few quarters. External conditions should remain favorable for emerging economies, even with gradual rises in the US Federal Reserves' interest rates. Demand from Colombia's main trading partners is expected to continue buoyant, with various export products retaining high prices or even higher than forecast in the previous report. Given these conditions, the peso is expected to undergo little devaluationary pressure over the rest of 2005.

- There is greater uncertainty about the exchange rate for 2006. Though commodity-price projections have increased, there are risks that might involve faster exchange-rate rises. Such risks are connected with elections in several Latin American countries, the effects of the oil-price increase on the global economy, and persistent macroeconomic imbalances in the United States.

- There are good prospects of available-income growth over the rest of the year and in 2006, thanks to gradually decreasing unemployment, higher employment in general and greater formalization of employment. Moreover, as stated earlier, the terms of trade continue to be favorable to Colombia. Despite the recent months' drop in the price of coffee, coffee growers' real income grew by 50% from January to May relative to the same period last year. In terms of national income, these factors should offset the negative impact of the peso's appreciation on remittances from abroad.

- Consumer- and business-confidence levels, as revealed by available surveys, provide further reasons for expecting economic buoyancy in the coming quarters. There is also evidence of asset revaluations, which should stimulate private spending. Given these conditions, the pace of economic growth in 2005 is expected to remain at around 4%, with domestic demand growing at much the same rate as in the first half of the year. Growth would be driven by satisfactory investment behavior (including public investment) and by acceleration of household consumption relative to the first quarter. The expansionary monetary- policy stance, as reflected by low real interest rates, will contribute to this buoyancy.

- The different measures of output gap show that it will continue to be negative but has narrowed in recent quarters. However, some indicators, such as capacity utilization and the percentage of industrialists seeing demand as a major problem, do not suggest that the gap has been closing any faster recently. Contributing factors to this development would be the expansion in production capacity resulting from the economy's high investing rate for almost three years, and, possibly, recovery of growth in total factor productivity.

- Based on the above elements, we may conclude that demand should present no major inflationary pressures in the second half of 2005. For 2006, the factors currently driving economic growth are expected to remain in play as long as there are no sudden changes in the external context and real interest rates stay low. Given these conditions, the output gap may continue to narrow, causing inflationary pressure to arise from demand.

- The findings of the inflation-forecasting models and the central monetary-policy simulation model show there is a great likelihood of meeting the 2005 inflation target (4.5% - 5.5%) and of lowering inflation down to the target range announced for 2006 (3% - 5%). Assuming a moderate devaluation in 2006, this inflation behavior will be consistent with maintaining a short-term interbank rate at around current levels.

- In this context, taking into account the following elements, the Banco de la República's Board of Directors decided to leave the Bank's current interest-rate structure unchanged:

- Last month the DTF deposit rate fell by some 20 basis points (bp) to 7.05%, further narrowing the margin between it and the interbank rate. Other, longer-term interest rates also dropped considerably over the first quarter. For instance, since March the rate for Treasuries (TES) maturing in 2014 has fallen by some 200 bp in real terms (240 bp in nominal terms), to a record low. To the extent that this rate affects aggregate demand (for example, as a measure of the opportunity cost of investment funds), its recent movements provide an additional impetus to economic activity.

- There is considerable uncertainty about the output gap's current level and the pace at which it may be closing. The previous quarter's faster growth in credit and private deposits may indicate that the economy is in better shape than was anticipated in the base scenario. Consumer credit has become more dynamic, growing now at a nominal rate of some 35%. Commercial credit has been registering nominal rises of around 15% in recent months, though part of this growth may reflect a reduction in external borrowing by the real sector. Acceleration in the monetary aggregates may have resulted from portfolio adjustments by agents, and also from a higher level of economic activity.

- Expected inflation more than a year ahead is still above or at the top of the target range for 2006. Nonfood nontradables inflation is forecast to run close to 5.5% in December 2005 and possibly remain around this level for part of next year. A potential rise in the exchange rate would therefore make it difficult to keep headline inflation on a declining path relative to current levels, because of its likely impact on tradables inflation. This is particularly relevant given the uncertainty about future exchange-rate movements, especially in 2006.

- Central simulation models show that the recent months' expansionary monetary-policy stance should be replaced in the medium and long term by a neutral position. For this reason, reduction of the intervention rates in force today would be transitory and would need to be reversed in the coming quarters, assuming there is no change in the fundamentals that determine inflation behavior. In these circumstances, such a policy would make short-term interest rates more volatile, and this volatility, transmitted to TES rates, might produce adverse effects on financial stability. This is particularly relevant, because over-reactions may occur in the public-debt market, given the high share of public-debt securities in the financial system's assets and their importance to financing government.

- Furthermore, based on assessment of the exchange-rate situation, balance-of-payments projections and recent information on foreign direct investment (FDI), the Bank's Board of Directors have decided to retain the scheme of discretionary intervention in the foreign-exchange market, with the aim of contributing to its gradual adjustment and averting over-appreciation of the peso.

Board of Directors, Banco de la República

INFLATION
REPORT

Prepared by:

Programming and Inflation Department

Economic Studies Division

TECHNICAL OFFICE
Hernando Vargas
Vice President

ECONOMIC STUDIES DIVISION (SGEE)
Jorge Hernán Toro
Deputy Vice President

PROGRAMMING AND INFLATION DEPARTMENT
Juan Mauricio Ramírez
Director

INFLATION SECTION (*)
Adolfo León Cobo
Head

Edgar Caicedo
Luisa Fernanda Charry
Luz Adriana Flórez
Mario Nigrinis
Alejandro Reyes
José Luis Torres
Andrés Mauricio Velasco

(*) This report has been prepared with the help of Gloria Alonso, Head , Macroeconomic Programming Section, Franz Hamman, Director, Macroeconomic Models Department, Martha López, Luis Fernando Melo, Norberto Rodríguez and Julián Pérez.

I. CURRENT ECONOMIC SITUATION

Core inflation continued on its downward trend, confirmin the first quarter's deflationary surprise.

So far this year external conditions have tended to surpass the previous two reports' expectations. Growth in the United States has been surprisingly vigorous despite such adverse factors as policy tightening by the Fed and high oil prices. Nor has the reduction in short-term liquidity caused long-term interest rates to rise in the US, as it might have been expected to do.

All these factors have continued to create favorable growth conditions for emerging economies. The effect on Colombia has been to accelerate export growth by more than was predicted in the March report and considerably expand the net inflow of foreign capital, particularly FDI. These two sources of income have offset the jump in imports and maintained downward pressure on the exchange rate.

Although first-quarter growth was under 4%, transitory supply developments anticipated in the previous report seem once more to have been accountable for this result. Domestic demand has continued to expand strongly so far this year, thanks to investment and durables consumption.

Core inflation continued to fall, confirming the first-quarter surprise. As expected, the biggest deflationary effect came from tradables inflation, thanks to the peso's accumulated appreciation. Nontradables inflation, too, decreased appreciably, despite growth in demand, which indicates that the economy still had excess productive capacity.

The second quarter saw the economy strengthened by better-than-expected external demand and terms of trade.

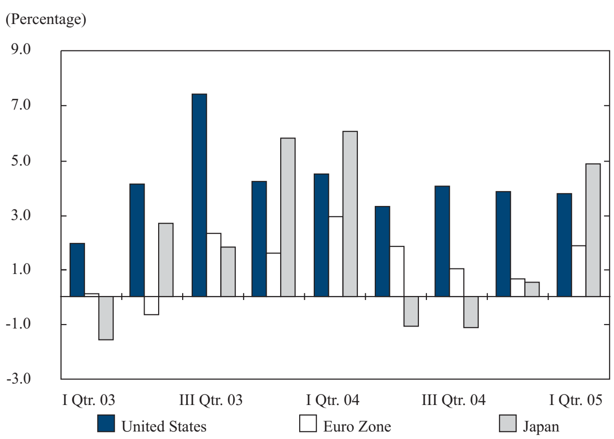
A. EXTERNAL CONTEXT AND THE EXCHANGE RATE

Although the world economy slowed over the first half of the year relative to 2004, it continued to outperform historical averages and was stronger than expected in the preceding report. Growth has not been uniform across the major economies, being concentrated in particular in the United States and China and weaker in the euro area and Japan. Even so, the strength of world demand, coupled with high international liquidity, which was not entirely anticipated, continued to favor economic performance in Latin America.

The US economy has shown significant growth for the year to date. In the first quarter, annualized quarterly growth, corrected from 3.3% to 3.8%, was once more driven by domestic demand (Graph 1). The latest data for the second quarter show an improvement, especially in industrial output, which rose by an annual 4% to June (from 2.7% in May) and retail sales, by 9.6% (from 6.4 in May). The confidence index and job creation also improved.

GRAPH 1

GDP OF UNITED STATES, EURO AREA AND JAPAN (ANNUALIZED QUARTERLY GROWTH RATE)



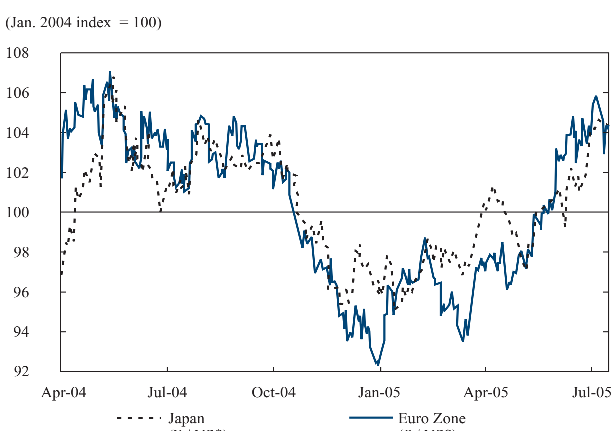
Source: Datastream.

In contrast, the situation in the euro area is not very encouraging. Though the first-quarter's 1.9% annualized quarterly growth was much better than the previous quarter's 0.6%, it does not seem to be sustainable. In the first quarter the economy was largely driven by strong net external demand (resulting particularly from lower imports), while growth in domestic demand was almost nil, owing to the effects of high oil prices, plus the fall in investment and only weak recovery in the labor market.

The Japanese economy registered very good growth in the first quarter (4.9% annualized quarterly rate), though its sustainability, too, is in doubt. Private consumption and non-residential investment contributed to this growth, whereas the export sector slackened, owing to deceleration of trade with China. Available indicators show that Japan's economy continued to expand in the second quarter but more slowly than in the first.

GRAPH 2

EURO AND YEN EXCHANGE RATES AGAINST THE DOLLAR



Source: Datastream.

From March on, slower growth in the euro area and Japan relative to the United States, coupled with a bigger interest-rate differential in favor of the US economy, strengthened the dollar against the euro and the yen (Graph 2). This was not anticipated in the previous report, when nervousness about the US deficit had fed expectations of the dollar's depreciation. In recent months, however, the US trade deficit has stopped rising for the fist time since February 2005 (when it was at its highest in US history). In the three months to May the trade deficit averaged $55.27 billion (bn) a month, which compares favorably with the $59.09 bn average for January and February and $56.40 bn for the final quarter of last year. A pick-up in export growth and a moderate fall in imports have influenced this outcome (Graph 3).

The above context has continued to favor developing economies, including Colombia's. China still heads the list of the more dynamic emerging countries, registering faster growth than was expected three months ago. This performance shows no sign of the soft landing anticipated on the strength of the monetary and credit-tightening measures adopted by Chinese authorities at the end of 2004. The country's annual growth was 9.4% in the first quarter and 9.5% in the second.

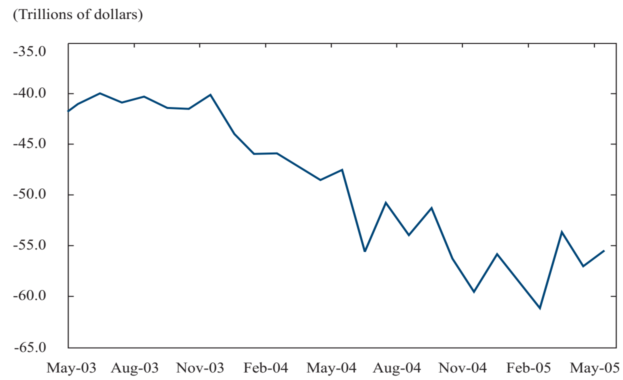
In recent months, strong world demand for oil, particularly on the part of the United States and China, has lifted oil prices to levels of $60 a barrel, $10 higher than at the start of the second quarter and far above most analysts' forecasts (Graph 4). Oil prices have risen despite OPEC's announcement of expanding its daily production by 500,000 barrels as from July, for a total supply of 28 million barrels a day. Added to strong demand was the outbreak of a number of climatic, labor and security problems.

Some other commodity prices have also remained high. This is specially true in the case of exports from Colombia, such as coffee, with a first-quarter growth of 49% (reduced in recent weeks by expectations of heavy supply from Brazil), and nickel, with 14.9% (Graph 5).

Despite expanding world demand and high prices for both oil and other commodities, inflationary pressure has remained contained at the global level. Most significantly, headline inflation in the US fell from an annual rate of 3.1% in march to

GRAPH 3

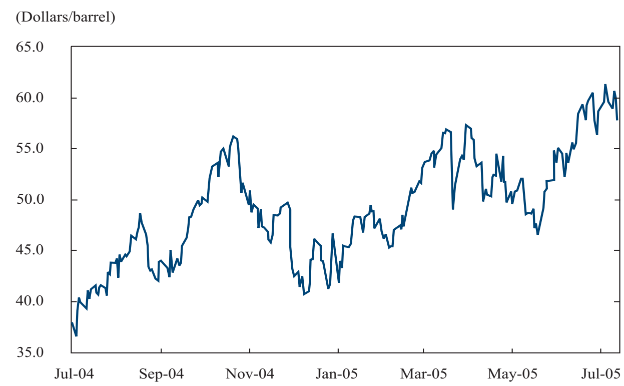
US TRADE BALANCE



Source: US Department of Commerce.

GRAPH 4

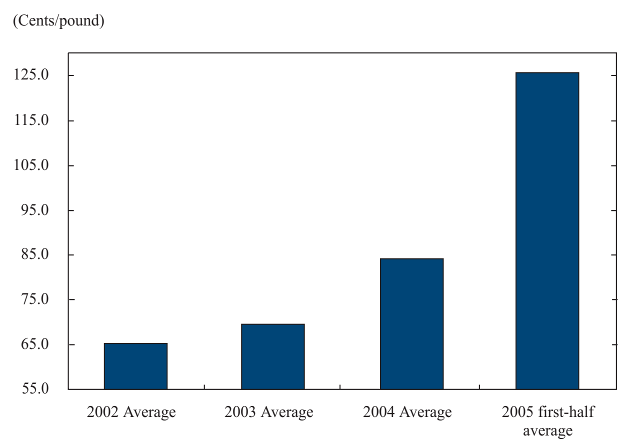
WTI OIL PRICE
NEW YORK EXCHANGE



Source: Bloomberg.

GRAPH 5

INTERNATIONAL COFFEE PRICE



Source: Datastream.

2.5% in June, while core inflation (excluding food and energy) dropped from 2.4% to 2.1% (Graph 6).

In this context, the Fed's monetary policy could continue to be one of gradual rate adjustments, in line with market expectations. So far this year the Fed has raised its benchmark rate by 100 bp, to 3.25%. Paradoxically, long-term rates have not responded as expected. For example, 30-year securities fell by 65 bp from March to June. Although recent weeks have seen an upturn, in reaction to positive news about demand movements in the US and a rise in labor costs, the upturn has been marginal (Graph 7).

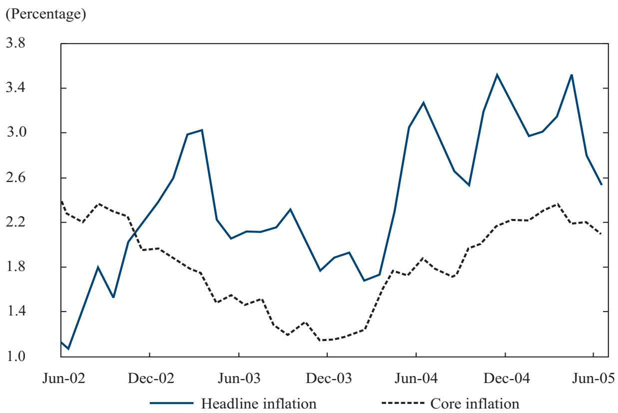
The fall in long-term rates, which is not exclusive to the US economy, points to abundant international liquidity and saving. Much of this saving has occurred in emerging countries, particularly in Asia and to a lesser extent in the euro area and Japan (see Box 2). Moreover, those low rates have stimulated demand for riskier investments, causing a drop in risk premiums.

In effect, the greater appetite for risk in financial markets has favored investment in emerging issuers' debt. The country-risk premium should therefore continue to fall over the second half, after the transitory pick-up observed since March (Graph 8). The foregoing, added to improvement in emerging economies' fundamentals, has maintained and in some cases increased capital flows (particularly FDI).

All the above has also allowed Latin American economies to grow faster than expected three months ago, though still not as fast as last year. High international prices for some commodities, such as oil and a number of minerals and metals, together with strong external demand continue to drive the region's exports. In addition, ample international liquidity has helped to maintain an abundant flow of capital that stimulates domestic demand.

GRAPH 6

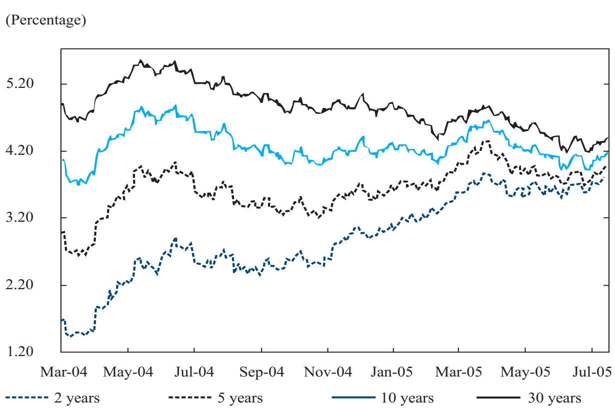
US ANNUAL INFLATION



Source: Datastream.

GRAPH 7

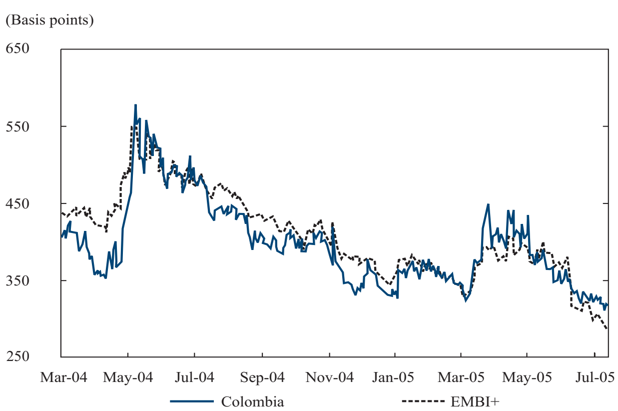
US BONDS RATES



Source: Datastream.

GRAPH 8

COUNTRY-RISK PREMIUM
LATIN AMERICA EMBI+ SPREADS



Source: Bloomberg.

In Venezuela and Ecuador, two of Colombia's major trading partners, growth continues to respond to high oil prices. First-quarter growth in Ecuador was 3.2%, moderate relative to the previous quarter because of both the political crisis that brought a change of government and slow progress in structural reforms. Venezuela's economic situation is much more promising, as indicated by a first-quarter growth of 7.9%, higher than forecast in the previous report. Moreover, this growth has stemmed not only from the oil economy but also from greater dynamism in the non-oil sector and domestic demand.

All the foregoing has worked in favor of the stability and even appreciation of Latin American currencies, especially Brazil's real, which has continued to rise against the dollar despite the political scandals affecting the country's government and some signs of economic weakening (Graph 9).

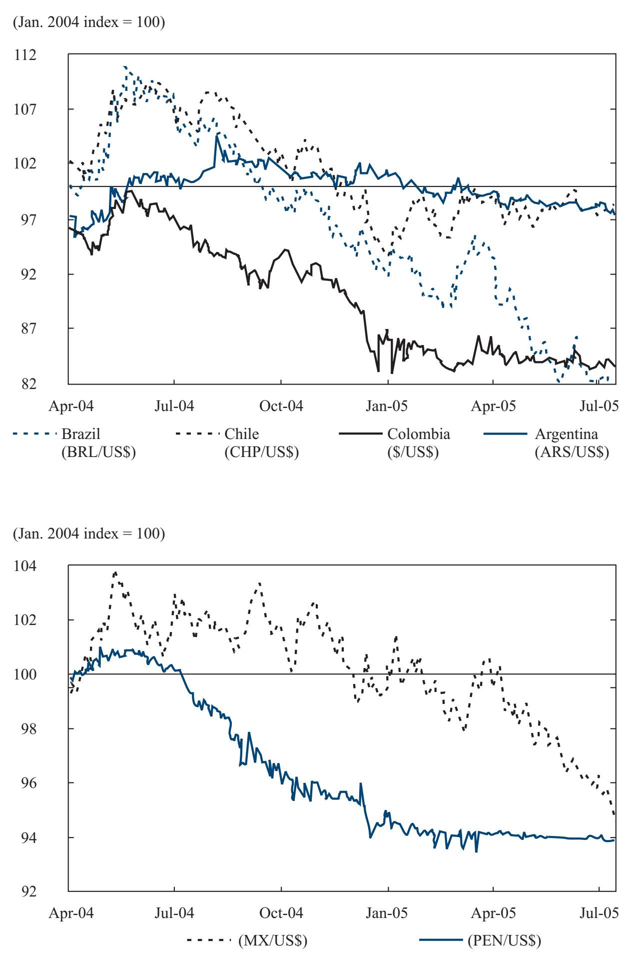
In the case of Colombia, the external context has resulted in further boosting the dynamism of exports and some capital flows in recent months. Export income, in particular, has overshot the previous report's predictions, as discussed below. But import expenditures, too, have been higher than expected, so that the net currency movement from these and other balance-of-payments current operations has been similar to the previous year's. Currency income from FDI, particularly in coal and oil, has also increased substantially. In contrast, there have been no large net short-term capital inflows, and the private sector has been making overseas transfers to pay for foreign debt and augment current accounts.

These movements, which would have probably involved a greater currency appreciation as in other countries, have been largely offset by the Banco de la República's discretionary intervention in the exchange market. To June 2005 the Bank's total currency purchases amounted to $1,165 million, with $841m of this amount bought in the second quarter.

Lastly, before release of this report, the Chinese economic authority modified the exchange-rate scheme[1] in a way that allowed a moderate

Graph 9

LATIN AMERICAN CURRENCY RATES AGAINST THE DOLLAR



Source: Datastream.

[1] Moreover, the renmimbi will no longer be pegged to the dollar alone; it will instead be tied to the behavior of a basket of

The external context has boosted the dynamism of exports and foreign direct investment.

appreciation (around 2%) of their currency and broadened the volatility band to 0.3%. This appears to be the monetary authorities' first step toward gradually adjusting their fixed exchange-rate policy, an adjustment deemed necessary for controlling the economy's and allowing a gradual correction of global imbalances. Although the appreciation is much smaller than expected by the market, it does signal a shift toward a more flexible exchange-rate policy.

B. DOMESTIC SITUATION

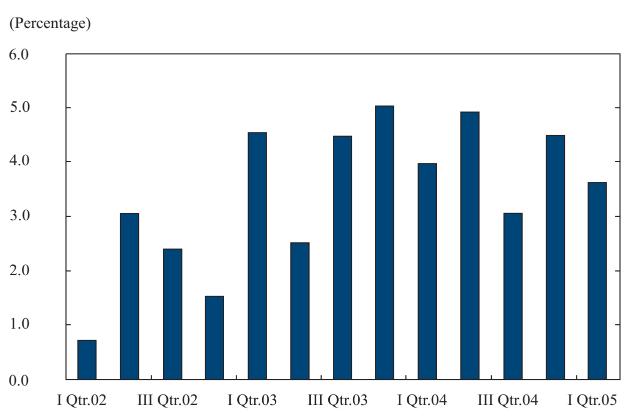
Colombia's economy continues in an expansion phase of the economic cycle, as evidenced by the first-quarter GDP growth of 3.6%, in line with expectations (Graph 10). This rate is lower than the average for 2004 but may be attributed in good part to fewer working days in the first quarter of this year compared with last year's (because Easter Week fell in March, not April, this year).

As regards revenues, the fastest growing component was indirect taxes net of subsidies (11%), while the aggregate value grew by 3.1%. Growth in taxes less subsidies far overshot not only the 3.7% assumption that had been made, but also actual growth of 7.1% in 2004.

The strongest growing taxes were import duties and taxes (22.6%), which are of course closely linked to movements in overseas purchases. VAT receipts expanded by 7.9%, possibly through more efficient collection and the entry into force of the 2003 tax reform, which raised the VAT rate on about 4% of the CPI basket from 7% to 10%.

GRAPH 10

GDP: REAL ANNUAL GROWTH



Source: DANE.

The National Statistics Agency (DANE), on releasing the first-quarter figures, revised up GDP growth rates for 2003 and 2004, to 4.1% for each of these years. Thus, over the past two years GDP growth was in all 0.24% higher than first reported by DANE.

currencies. The central bank of China will announce every day the renminbi's closing price, which will become the midpoint of the following day's band.

First-quarter economic growth continued to be driven by a sustained rise in domestic demand (chiefly investment, excluding housing construction) and by the favorable external climate (Table 1). Good external conditions were reflected in strong stable growth among Colombia's major trading partners, and in satisfactory movements in the country's terms of trade resulting from relatively high prices for several Colombian export products.

Colombia's economy continues in an expansion phase of the economic cycle, driven by investment and exports.

Contrary to the previous report's expectations of a more dynamic performance, household consumption grew at an annual rate of only 3.2%, less than the 4% average for 2004. Durables and semidurables remained the more dynamic sectors of household consumption, expanding by more than 10% and 4% respectively. What prevented the aggregate from exhibiting a stronger performance was, once again, sluggish growth in consumption of nondurables and services (1.9% and 2.1% respectively in the first quarter of 2005).

Overall domestic demand went up by more than 5% in the first quarter (Graph 11). This relatively good behavior did not differ much from the average for the six preceding quarters, indicating that aggregate spending in the economy has continued on the upward trend that started in mid-2003.

TABLE 1

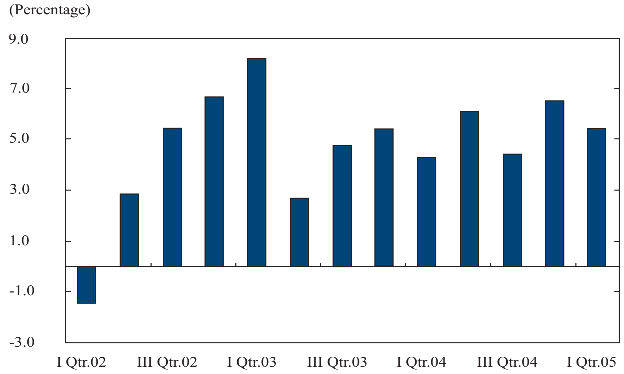
REAL GDP BY TYPE OF SPENDING
(PERCENTAGE)

	2004	I Qtr. 2005		
		Percentage growth	Participación share of GDP	Contribución to growth
Final consumption	**3.8**	**3.2**	**83.1**	**2.6**
Household	4.0	3.2	62.4	2.0
Government	3.3	3.0	20.8	0.6
Gross capital formation	**12.4**	**15.9**	**17.9**	**2.8**
Gross fixed capital formation	13.2	16.9	16.2	2.7
GFCF excl. civil works	22.5	12.0	13.8	1.7
Civil works	(19.1)	45.0	2.4	1.1
Variation in inventories	6.4	6.7	1.7	0.1
Domestic demand	**5.3**	**5.4**	**101.0**	**5.5**
Total exports	**10.2**	**13.1**	**18.0**	**2.4**
Total imports	**16.7**	**22.2**	**19.0**	**4.2**
Gross domestic product	**4.1**	**3.6**	**100.0**	**3.6**

Source: DANE. Calculations by Banco de la República.

Graph 11

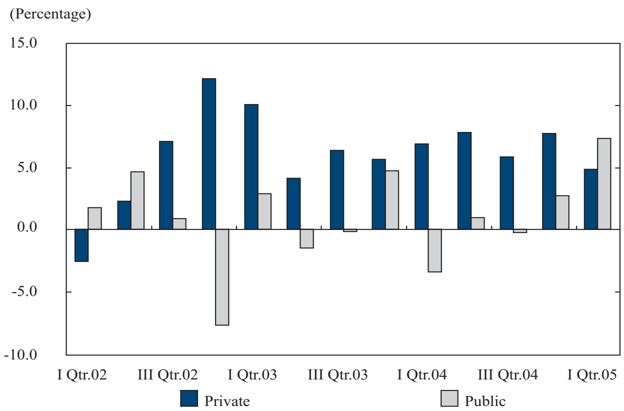
DOMESTIC DEMAND: REAL ANNUAL GROWTH



Source: DANE. Calculations by Banco de la República.

Graph 12

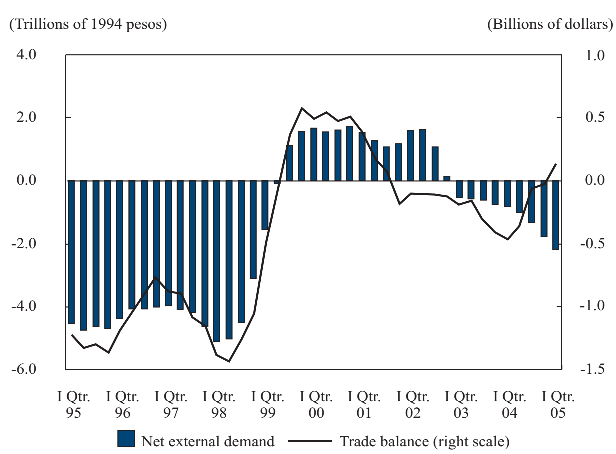
PUBLIC AND PRIVATE DOMESTIC DEMAND(*): REAL ANNUAL GROWTH



(*) Private: household consumption and investment, excluding civil works. Public: public consumption and investment in civil works.
Source: DANE. Calculations by Banco de la República.

Graph 13

TRADE BALANCE AND NET EXTERNAL DEMAND (FOUR QUARTERS' ACCUMULATED)



Source: DANE. Banco de la República.

Within domestic demand there was substantial acceleration of domestic public demand (measured as government consumption and gross fixed capital formation (GFCF) in civil-works. A major contributing factor was recovery in civil works, after last year's strong contraction.

Although growth in private demand (household consumption, and investment excluding civil works) was slower than in the fourth quarter of 2004 (Graph 12), it was still satisfactory at around 5.0%. Private demand was affected by the slowdown, referred to above, in some segments of household consumption, as also by GFCF contraction in the farm sector (-0.8%) and construction and building sector (-2.2%). In contrast, GFCF spending on machinery and equipment and transport equipment rose steeply (by 34.1% and 11.0% respectively).

Net external demand, measured in 1994 pesos, remained in negative terrain despite buoyancy in exports, which climbed by 13.1% in the first quarter. Exports rose in real terms across almost all products, except for oil, beef, threads and yarns, textiles, leather and leather articles, and refined petroleum products. The negative balance of net external demand resulted from even faster growth in real imports (22%), which accelerated considerably relative to 2004.

Note that the trade balance in dollars, using balance-of-payments figures, shows a surplus to March (Graph 13), suggesting that a large part of the rise in net exports in dollars has stemmed from higher terms of trade.

Recent figures suggest that external demand has continued to be strong, with Colombia's twelve-month accumulated exports (traditional and nontraditional) still growing by more than 30% to April (Graph 14).

Export growth has been dynamic across all destinations. In the case of nontraditionals, the twelve-month accumulated growth rate (used to obviate seasonal-volatility problems) was some 20.1% for exports to the United States, 69.1% to Venezuela, 27.6% to Ecuador and 23.2% to all other destinations.

Despite the nontraditionals' general favorable trend, overseas sales in some industrial sectors might be affected by international competition. This is the case of yarns and textiles to the United States, which have shrank in recent months, even the annual accumulated rate (Graph 15).

Imports to May have continued rising rapidly as a result of strong domestic demand (investment) and the peso's appreciation. Twelve-month accumulated imports of intermediate and capital goods expanded by more than 20% to May (Graph 16).

1. Tradable sectors

First-quarter growth for the tradable sectors as a whole was less than the 2004 average (Graph 17). The slowdown was particularly marked in industry, which contracted by 1% below the expected 0.6% rate. A good part of the fall may, however, be attributed to a statistical effect connected with fewer working days in the first quarter of 2005.

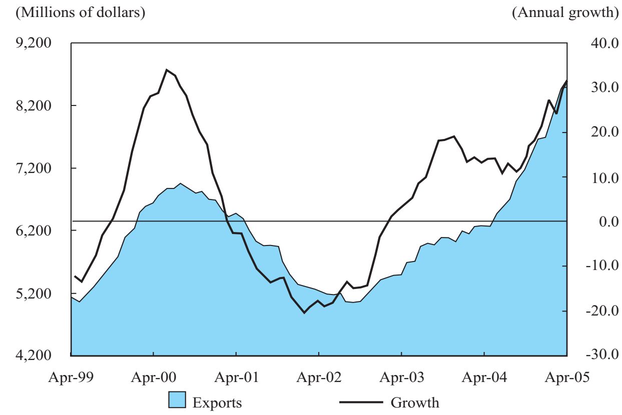
In effect, correcting for working days and seasonality, DANE's monthly manufacturing sample shows that first-quarter annual growth would have been around 3.5%. Even this, however, would have been slower than actual growth in 2004 (around 5%).

The farm sector expanded in the first quarter, largely driven by an 8.1% growth in coffee. The rest of the sector (excluding coffee and illegal crops) increased by 3.3%, less than the 3.9% average for 2004.

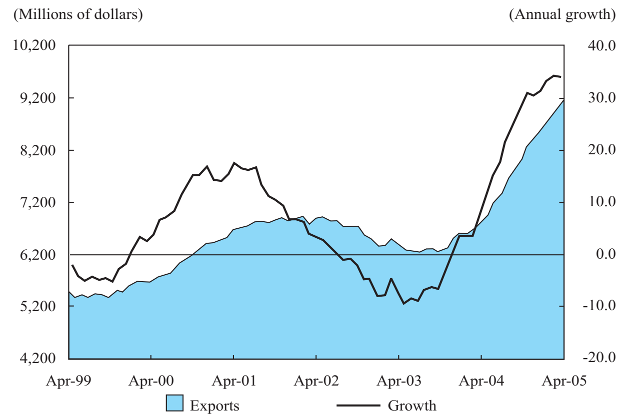
GRAPH 14

EXPORTS (12 MONTHS' ACCUMULATED)

TRADITIONAL



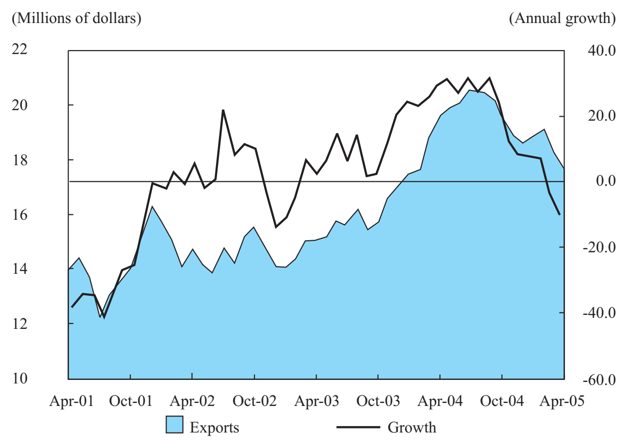
NONTRADITIONAL



Source: DANE. Calculations by Banco de la República.

GRAPH 15

YARN AND TEXTILE EXPORTS TO THE US (12 MONTHS' ACCUMULATED)

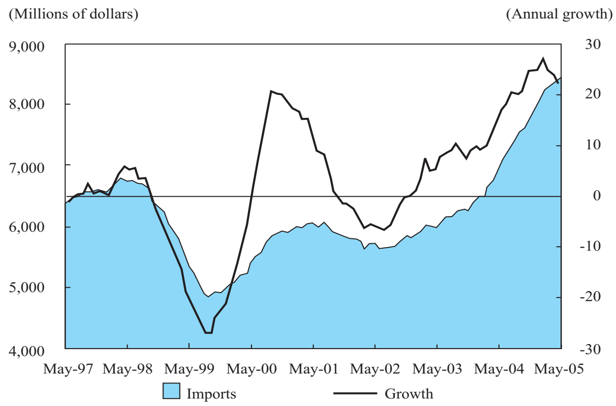


Source: DANE. Calculations by Banco de la República.

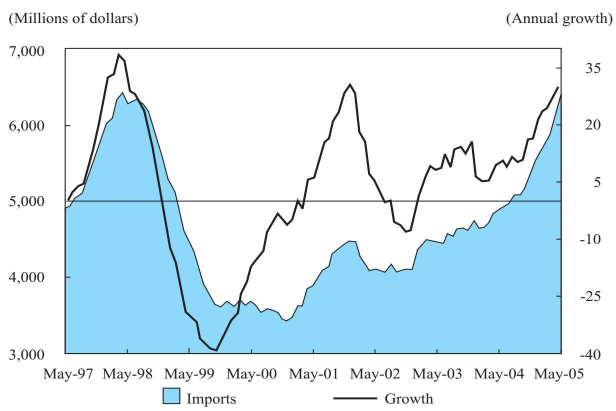
Graph 16

TOTAL IMPORTS
(12 MONTHS' ACCUMULATELD)

INTERMEDIATE GOODS



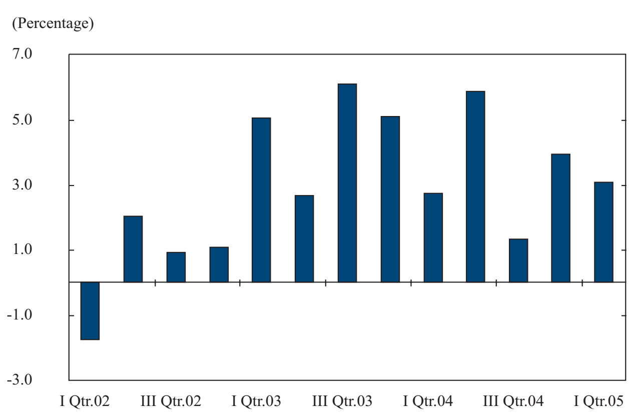
CAPITAL GOODS



Source: DANE. Calculations by Banco de la República.

Graph 17

TRADABLES GDP: REAL ANNUAL GROWTH



Source: DANE. Calculations by Banco de la República.

Slower growth in the farm sector appears to have stemmed in good measure from what may be a disruption of the cattle-liquidation cycle, associated perhaps with trade problems in January with Venezuela.

Production of perishable foodstuffs such as root crops and market-garden produce did not help either, this time. Potato prices, for instance, were low in the second half of 2004, discouraging new plantings and resulting in low production in the first half of 2005. The rising exchange-rate trend may have affected other farms products, particularly flowers, plantains and soybeans, according to the respective associations.

The first quarter saw relatively strong growth in mining products other than oil, notably coal (6.6%), metallic minerals (9.9%), and nonmetallic minerals, whose 12.7% increase was associated with the expansion in construction.

Although growth in oil production was weak (0.5%), it overshot forecasts and was also higher than in the past three years, perhaps as a result of exploitation of lower-quality crude, made profitable by a better world price for the product.

2. Growth in nontradables

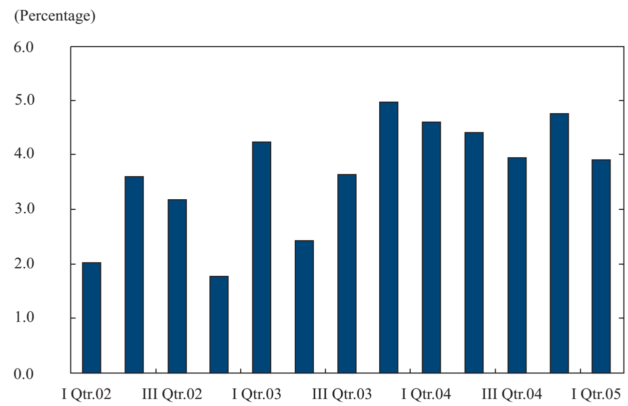
The slowdown in the nontradables' aggregate GDP between 2004 and the first quarter of 2005 resulted from the fact that faster growth in civil-works construction and commerce was not enough to offset slower growth in construction and house building, financial-intermediation services and utilities, the latter usually associated with industry (Graph 18).

Total construction speeded up in the first quarter of 2005 relative to its average growth in 2004 (10.6% against 9.7%), thanks to recovery in civil-works construction, which surged by 43.6%, after its 19.3% contraction in 2004. This recovery made up for the 2.3% fall in construction and house building in the first quarter. The fall in private construction was preceded by declines (averaging -15.8%) in building permits over the second half of 2004.

Another contributing factor would have been the slowdown in new construction reported in the construction census. New construction, having soared on average by 42.8% in the first half of 2004, rose by merely 1.6% in the second half. Construction in progress edged down from 20.6% in December 2004 to 19.9% in March 2005.

Graph 18

NONTRADABLES GDP: REAL ANNUAL GROWTH



Source: DANE. Calculations by Banco de la República.

The first quarter brought high rates of growth across all subsectors of commerce. Commerce expanded by 7.8%, largely thanks to sales of durable goods such as cars and electrical appliances, in line with imports of intermediate and capital goods and consumer durables and semi-durables. Repair services grew by 4.4%. Hotel and restaurant services did so by 6.9%, probably boosted by Easter Week falling in March this year, rather than in April as was the case last year.

Financial-intermediation services must have been affected in the first quarter by fluctuations in the financial institutions' portfolio, for the sector reported a real contraction of 9.1% despite good balance-sheet results. This contraction is explained by the fact that, in measuring economic activity, DANE takes into account price changes in TES Treasury securities, and at the end of March portfolios lost value because of the fall in the price of these securities. Since this was a temporary situation, the effect may be expected to reverse over the rest of the year.

C. MONETARY AGGREGATES, CREDIT AND INTEREST RATES

1. Monetary aggregates

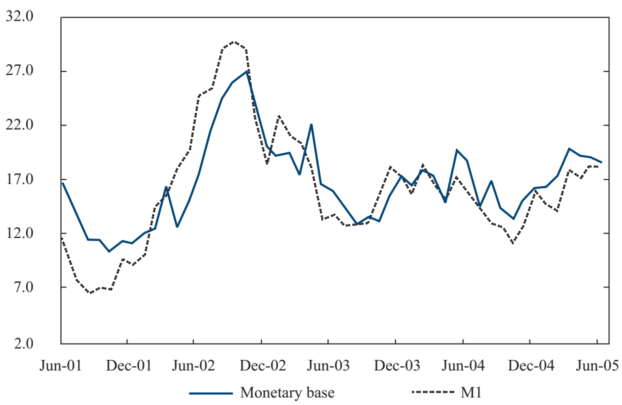
Second-quarter growth in the monetary aggregates was similar to their first-quarter expansion, at annual rates. The monetary base rose by an annual rate of 19% to June, and narrow money (M1) by 18.3% (Graph 19). Growth in financial saving (M3) speeded up from 17.4% in March to 18.9% in June.

The slowdown in industry over the first quarter is explained in part by fewer working days.

GRAPH 19

MONETARY AGGREGATES: ANNUAL GROWTH OF MONTHLY AVERAGE

(Percentage)



Source: Banco de la República.

Regarding the sources of monetary expansion, higher liquidity in the market, resulting from currency purchases and final TES purchases, has been sterilized to a high degree, and done so mainly through sales of foreign exchange to the government and deposits by the government in the central bank. In this connection, the relatively strong growth in primary liquidity seems to have stemmed from higher demand rather than being a symptom of monetary excess. Moreover, Table 2 shows that the monetary base's contraction so far this year is practically equal to its shrinkage over the same period in 2004.

TABLE 2

SOURCES OF THE MONETARY BASE (BILLIONS OF PESOS)

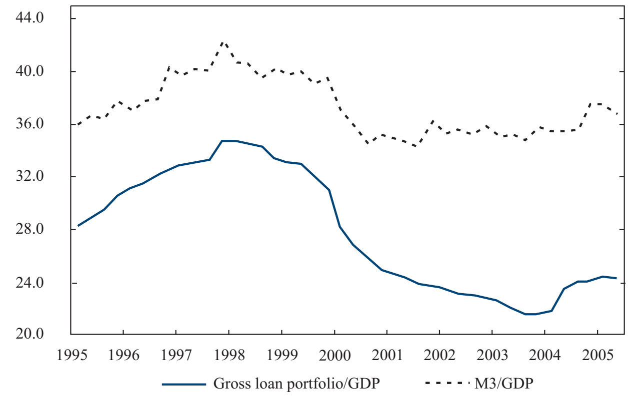
Description	Annual variation 2003	Annual variation 2004	January-June variation 2004	January-June variation 2005
I. Government	914	(236)	(360)	(6,101)
Profits transfer	830	803	803	454
Pesos	1,481	803	803	0
Dollars	(651)	0	0	454
Deposits in Banco de la República	83	(1,039)	(1,163)	(6,555)
II. Regulation TES	568	(2,524)	(1,102)	2,713
Final purchases	893	1,023	285	2,933
Final sales	(2,972)	(983)	0	
Maturity	(325)	(575)	(404)	(221)
III. REPOS	1,492	(1,058)	(1,904)	1,504
Expansion 1/	1,386	(1,086)	(1,790)	1,504
Contraction	106	28	(115)	0
IV. Foreign exchange	(703)	6,194	1,909	392
Accumulation options	(703)	4,183	2,185	
Discretionary intervention		3,264	0	3,779
Sale of foreign exchange to government		(1,252)	(276)	(3,387)
V. Other 2/	239	272	87	145
Total variation in the base	2,510	2,647	(1,370)	(1,348)
Balance of the base	16,615	19,262	15,244	17,914

1/ Comprises overnight and medium-term Repos.
2/ Includes the monetary effect of Banco de la Republica's profit and loss, TES maturities, loan recovery and investments of Banco de la República.
Source: Banco de la República.

Graph 20

FINANCIAL DEEPENING

(Percentage)



Source: Banking Superintendency, DANE and Banco de la República.

The acceleration in M3 is partly associated with an 11 percentage-point (pp) expansion in public M3 from March to May. Private M3, too, has widely outpaced nominal GDP growth since last year, rising in real terms by 10.5% in 2004 and by 12.5% so far this year.

Faster growth in M3 (particularly private M3) may be largely connected with a portfolio shift by agents toward domestic assets, as favorable external conditions (strong global demand, inflows of overseas remittances, low spreads and low foreign interest rates) generated revaluation expectations and higher relative returns on domestic assets. However, the effect of GDP growth on M3 movements should not be overlooked. In effect, higher income is estimated to have a strong impact on broad-money demand, with long-term income elasticities resulting greater than 2. The recent rise in M3 may therefore be partly explained by the lagged effect of GDP's faster growth since 2003.

In short, the monetary aggregates' current expansion may reflect the behavior of income and external conditions in the economy, though their relative weight (as a ratio of GDP) is still not comparable to what it was before the crisis of the late 1990s'. The same is true of the degree of financial deepening (as proxied by credit as a share of GDP), which has remained far below pre-crisis levels (Graph 20).

The widening gap between these two indicators reflects the shift in the financial system's assets, mostly toward government securities. At the same time, companies have in recent years substantially replaced bank credit by direct credit from suppliers, profit reinvestment, and issuing bonds and paper on the stockmarket (Table 3).

2. Credit

Local-currency loans accelerated in the second quarter relative to the first, the gross balance growing by 14.6% in June, against 11.2% in March (Graph 21). The acceleration occurred across the different types of loan, notably in commercial loans, which expanded by 13.6% in June, up from 10.4% in March. Consumer loans and microcredit continued to climb steeply (35.2%), while the fall in mortgage loans slowed from 8.2% in March to 4.7% in June. In contrast, growth in foreign-currency loans declined further, though still remaining high (33.8% in June, down from 78.% in March).

Monetary growth reflects a greater demand for liquidity, stemming from higher income and improved external conditions.

TABLE 3

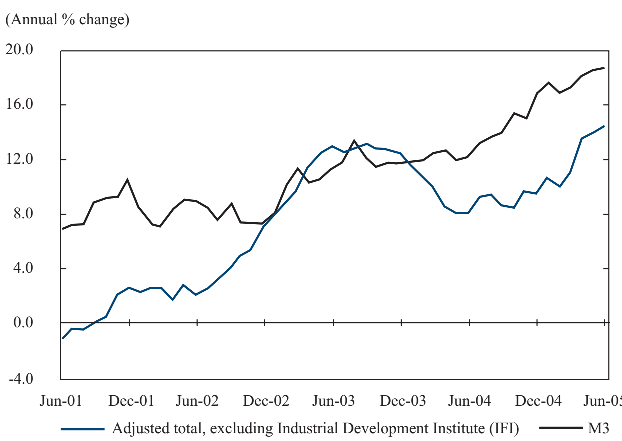
LIABILITIES OF NON-FINANCIAL ENTITIES REGISTERED WITH THE SECURITIES SUPERINTENDENCY

Description	2001	2002	2003	2004	I Qtr. 2005
Amounts (trillions of pesos)					
Total financial obligations	6.58	8.43	7.61	6.53	6.02
Total bonds and commercial paper	1.08	2.28	3.78	4.22	4.70
Commercial loans	24.04	27.19	31.87	34.84	36.49
Bonds plus commercial loans	25.13	29.47	35.65	39.06	41.19
As a percentage of liabilities (%)					
Total financial obligations	48.9	50.0	41.9	34.9	30.9
Total bonds and commercial paper	8.1	13.5	20.8	22.6	24.2
As a percentage of commercial loans (%)					
Total bonds and commercial paper	4.5	8.4	11.9	12.1	12.9

Source: Securities Superintendency. Calculations by Banco de la Repúblia.

GRAPH 21

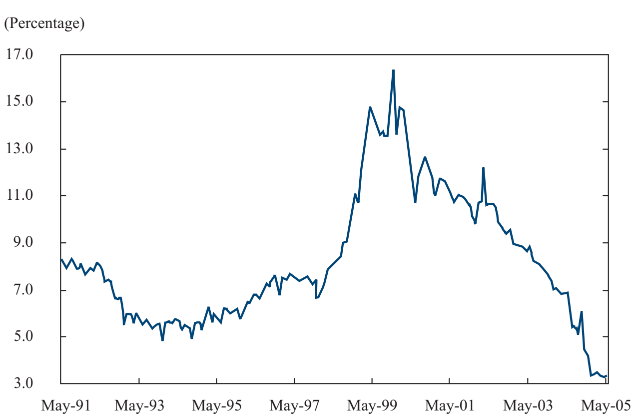
NOMINAL GROSS LOAN PORTFOLIO (*) AND M3



(*) In local currency, excluding FEN.
Source: Banking Superintendency and Banco de la República. Calculations by Banco de la República.

GRAPH 22

FINANCIAL SYSTEM'S OVERALL LOAN QUALITY (OVERDUE LOANS/TOTAL LOANS)



Source: Banking Superintendency. Calculations by Banco de la República.

Credit recovery has come hand in hand with improvement in loan quality. The ratio of overdue to overall loans is at its lowest historical level today (Graph 22).

3. Interest rates

After the Board of Directors decided to lower intervention rates by 25 bp on December 17, 2004 and opted to close the liquidity-tightening window at the end of the year, the DTF deposit rate began to fall, abandoning the stable behavior it had maintained for almost three years (Graph 23). In June the DTF rate stood at 7.79%, having dropped by 61 bp since the third week of December 2004 and by 26 bp since March. The interbank rate has decreased by 42 bp since December 17, 2004 but edged up by 10 bp over the second quarter, approaching the Bank's 6.5% expansionary intervention rate. The interbank rate's stability in a context of fast growing primary liquidity supports the contention that demand is expanding and that there is no primary liquidity excess.

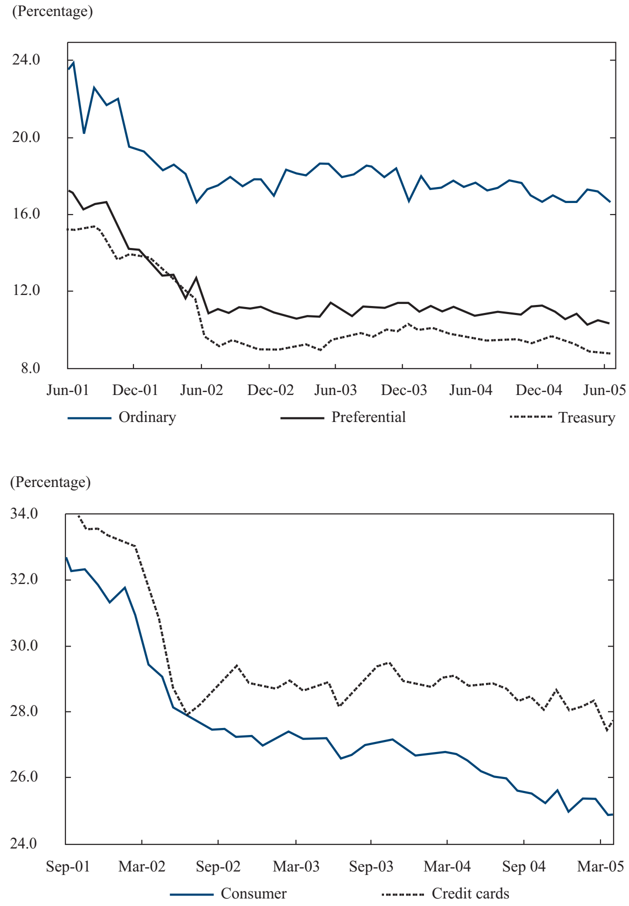
The decline in deposit rates over the first half of 2005 has been substantially transmitted to lending rates, except for interest on ordinary loans, which remained relatively stable (Graph 24). The rate for consumer loans fell by 63 bp between December 2004 and June 2005, the credit-card rate by 50 bp, and the preferential and Treasury rates by 89 bp and 68 bp respectively.

4. Domestic public-debt market and asset prices

After the pick-up in the yield curve of public-debt securities (TES) in March, the secondary market for TES securities has risen significantly in value, to the extent of reaching the lowest historical levels of real interest in June (Graph 25). At the same time, the yield curve flattened significantly in May and June, owing to relatively moderate rate falls for short and medium maturities and sharper falls for the longer maturities (Graph 26). Thus, the differential between TES-2014 and TES-2006 decreased by 49 bp in the past two months. The drop in long-term rates for TES securities and the flattening of their yield curve may be part of a worldwide process of declining long-term rates, reflecting a greater appetite for relatively riskier securities issued by emerging countries. (see Box 3).

GRAPH 24

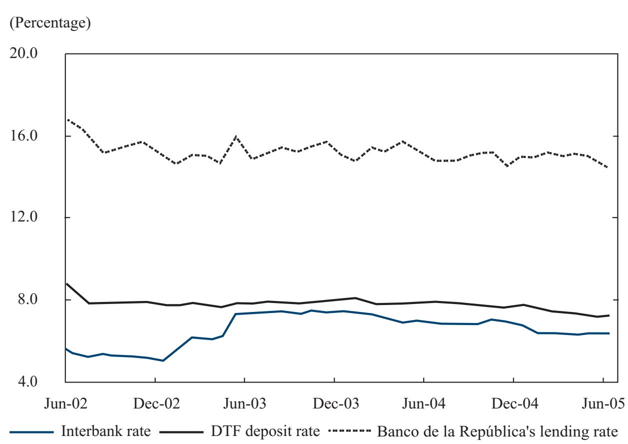
NOMINAL INTEREST RATES, BY TYPE OF LOAN



Source: Banking Superintendency. Calculations by Banco de la República.

GRAPH 23

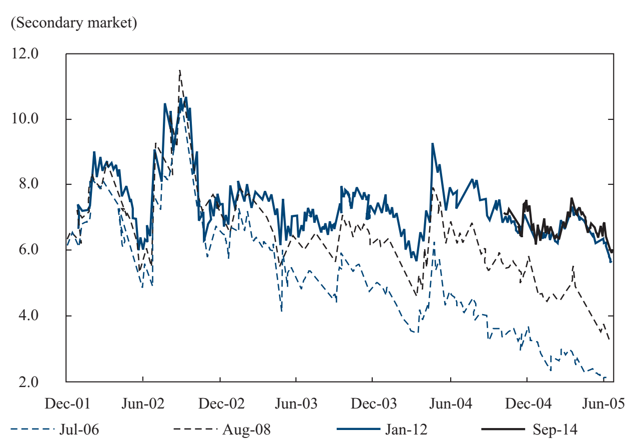
NOMINAL INTEREST RATES



Source: Banking Superintendency. Calculations by Banco de la República.

GRAPH 25

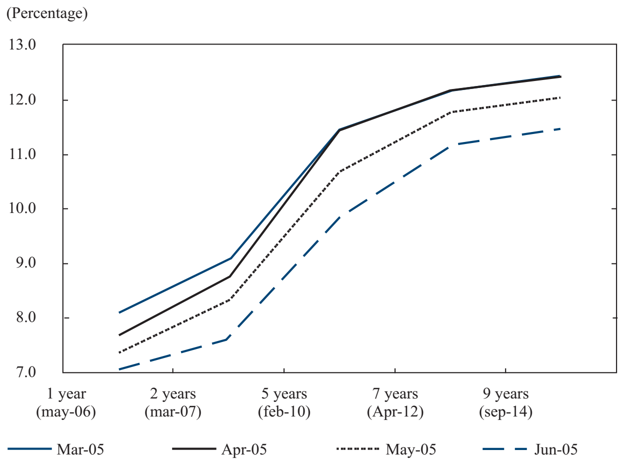
REAL INTEREST RATES ON TES SECURITIES



Source: Centralized Transactions Information System (SEN), Banco de la República.

GRAPH 26

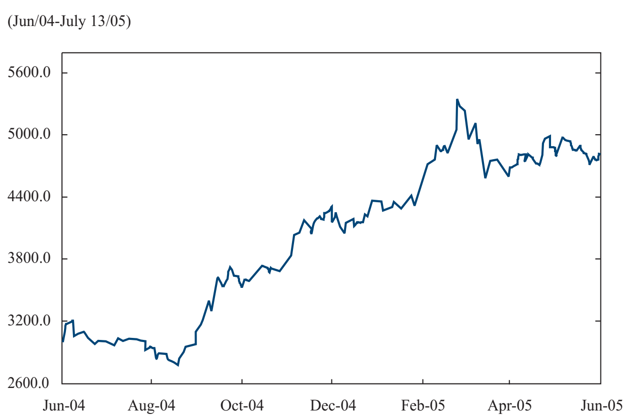
YIELD CURVE
SECONDARY MARKET TES SECURITIES (SEN)



Source: SEN, Banco de la República.

GRAPH 27

COLOMBIA STOCK-EXCHANGE GENERAL INDEX



Source: Colombia Stock Exchange. Calculations by Banco de la República.

The second quarter saw Colombia's equity market rebounding from its fall in March onto a new rising trend. Its level remains high (Graph 27). The stockmarket's satisfactory second-quarter performance was associated with the peso's revaluation, low real interest rates, buoyancy in the country's exports, good results posted by the real and financial sectors, and news of mergers and sale of Colombian entities.

According to information from the National Planning Department, house prices are estimated to have risen by 8.3% in Bogotá during 2004 and by 12.5% in Medellín. More recent information from DANE on prices for new housing (to the first quarter of 2005) shows no further increases and even a slight fall (-0.5% in March).

D. INTENSITY OF LABOR UTILIZATION AND LABOR MARKET

In the short term, firms respond to higher demand by more intensive use of their factors of production. But doing so indefinitely is not profitable. Further increases in factor utilization intensity have decreasing marginal effects on output and increasing ones on costs. In the case of labor, for instance, overtime has a higher cost than normal working hours and is subject, besides, to legal constraints on its use.[2] Accordingly, if firms consider the change in demand to be permanent, they have incentives for expanding their workforce. If at the time the labor market is loose, the employment rate will rise. But if the market is tight, higher demand for labor will induce a rise in wages. And if there is no change in productivity, marginal production costs will increase and generate inflationary pressure.

2 Without a permit from the Ministry of Social Protection, day or night overtime may in no case exceed two hours per day and twelve hours per week.

The factor utilization rate may be an indicator of potential inflationary pressure. Measuring this indicator is not a simple matter, however, and in many cases its value can only be inferred indirectly. It is also difficult to ascertain whether changes in the indicator are associated with variations in productivity or in intensity of factor utilization. In this report we present a half-yearly exercise for estimating the private sector's intensity of labor utilization. Output per worker is defined as half-yearly GDP excluding government services, divided by the average number of jobholders other than government wage-earners and employees at the national level for the period in question.[3] A separate measure is also presented for the urban context.[4,5]

Output per worker has increased substantially in 2004 and 2005.

The two measures, displayed in Graph 28, show a considerable increase in output per worker for 2004 and 2005. This result may reflect higher productivity or greater intensity of labor utilization. If productivity has increased sustainably, there is low risk of inflationary pressure. But if greater intensity is responsible for higher output, demand for labor is bound to rise. Depending on labor-market conditions, higher labor demand may be reflected either in higher employment or in inflationary pressure through higher wage costs.

So far this year the labor market, at least in the urban context, has been less loose than two years ago, as evidenced by the following figures:

- The unemployment rate fell by 3 pp between May 2003 and May 2005[6] (Graph 28);
- The number of jobholders rose (at an annual rate of 4.0% to May),[7] reflecting a higher demand for labor, associated with greater intensity of labor utilization (Graph 28); and
- A fall of 1.4 pp in the global participation rate in the past two years,[8] associated with moderate growth in the economically active population.

The emergence of bottlenecks in some segments of the labor market in the medium cannot be ruled out.

---

3 Information on jobholders, other than government wage-earners and employees, is taken from DANE's continuing household survey by occupational position.

4 In this case half-yearly GDP, excluding government services, farming and mining, is estimated and divided by the average number of jobholders, excluding government wage-earners and employees, for the 13 cities over the period in question.

5 At this writing, no figures are available for second-quarter GDP or from DANE's June household survey. Estimates for the first half of this year are based on projections by the Bank's Economic Studies Division for second-quarter GDP growth by economic activity. It is assumed that in June employment, both at the national level and for the 13 cities, will have grown at the same pace as observed for January to May.

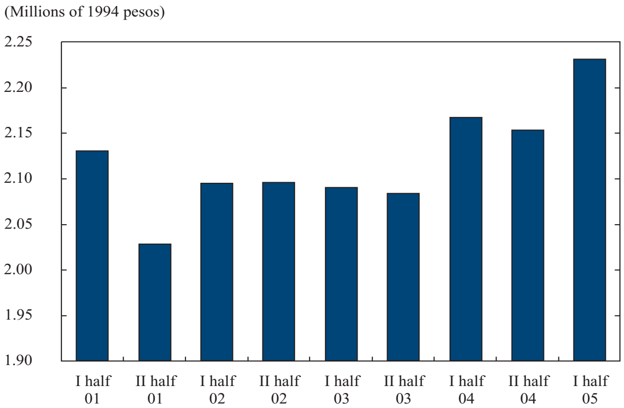
6 This fall is the three-year moving average for 13 cities. The point data for the same period show that unemployment fell by 2.8 pp, from 16.7% in May 2003 to 13.9% in May this year.

7 This rise is the three-year moving average for 13 cities. The point data for the same period show an annual growth of 3.7%.

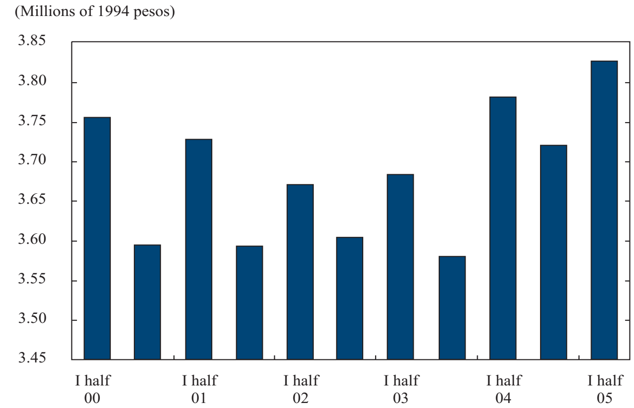
8 This fall is the three-year moving average for 13 cities. The point data for the same period show that the overall participation rate fell from 64.3% in May 2003 to 62.3% in May 2005.

Graph 28

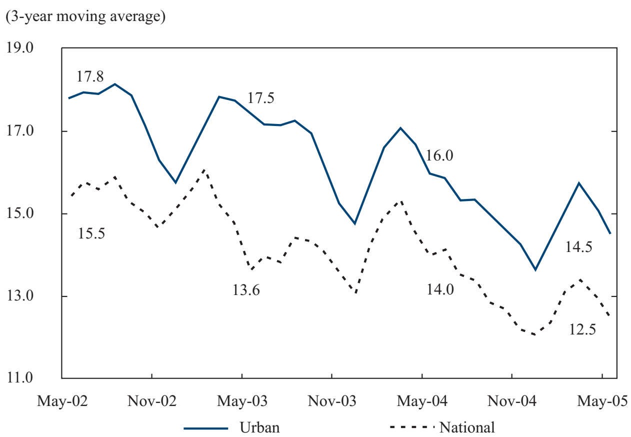
OUTPUT PER WORKER: NATIONAL TOTAL



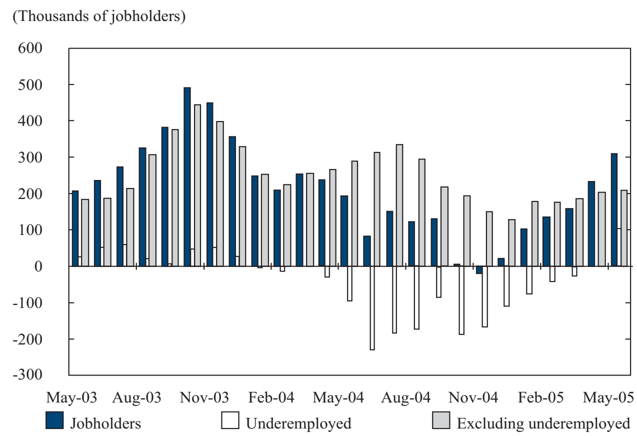
OUTPUT PER WORKER: URBAN



UNEMPLOYMENT RATE



JOB CREATION IN 13 CITIES



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

Moreover, a number of sectors have been raising pay by more than the inflation target for over a year now. This has occurred in commerce (10.1% annual rate to April), for skilled workers in construction (9.7% annual rate to June for engineering assistants and 14.4% for accountants) and in industry (8.3% annual rate to April for wage-earners) (Graph 29). However, pay rises in other cases have been moderate, as in the case of unskilled construction workers (4.6% average annual rate to June).

Available productivity measures for commerce (sales per worker) and industry (output per hour worked) show increases. Another indicator pointing in the same direction is higher capital per worker, associated with investment behavior over the past three years. Higher productivity has meant that there has been no variation in industry's unit labor cost (adjusted for average hours worked) in the past year. It should be pointed out however that these productivity measures may be affected by the economic cycle and do not, in themselves, indicate whether the productivity increase is sustainable or not. If not, the real pay rises can be inflationary (Graph 30).

In short, over the past 18 months some segments of the labor market, particularly skilled and semi-skilled labor, have received pay rises above the inflation target. These pay rises appear to have been temporarily accommodated by productivity improvements. Likewise, for the economy in general there is no sign of a tight labor market (the unemployment rate stands above Nairu[9]). However, the emergence of bottlenecks in some segments of the labor market in the medium cannot be ruled out.

E. INFLATION TO JUNE AND ITS DETERMINANTS

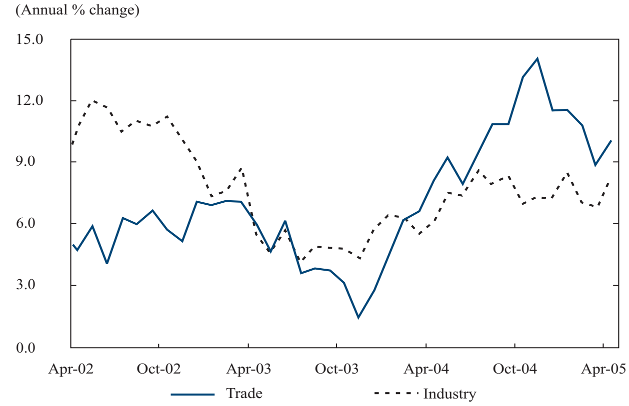
1. Inflation to June

In June, after remaining stable at around 5% for three months, inflation resumed the declining trend it had exhibited up to the previous quarter, dropping to 4.8%, below the midpoint of the target range (Graph 31). The fall in inflation came from nonfood inflation, which decreased continuously over the first half of 2005, down to 4.3% in June, undershooting the Bank's target range (Graph 31). Thus, second-quarter results confirmed the fall in core inflation observed in the first quarter, which had not been fully explained by the Bank's models.

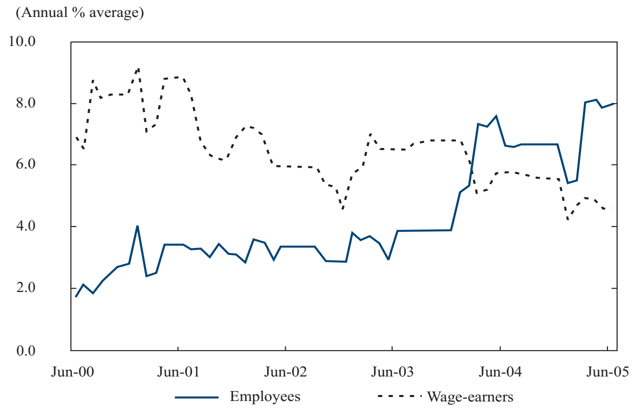
GRAPH 29

NOMINAL PAY

RETAIL TRADE AND INDUSTRY (WAGE-EARNERS)



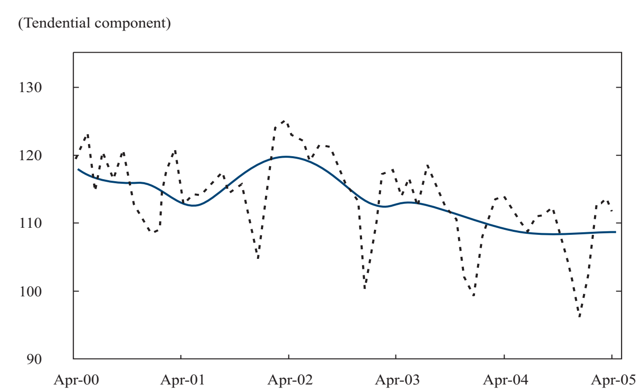
HEAVY CONSTRUCTION (*)



(.) Obreros: capataz. obrero. oficial y operador, Empleados: Ingeniero director. ingeniero auxiliar. almacenista. contador y celador,
Source:: MMCP. MMM y ICCP - DANE,

GRAPH 30

REAL INDUSTRIAL UNIT LABOR COST PER HOUR WORKED

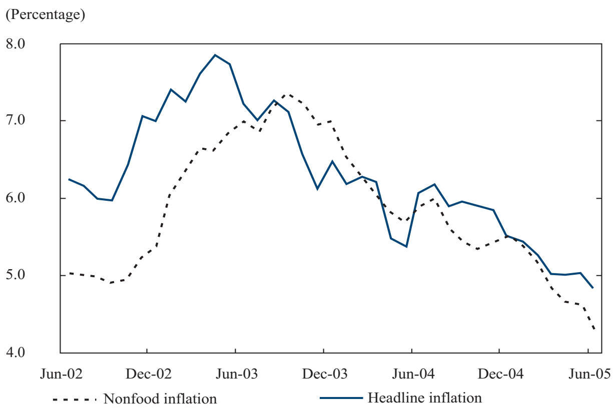


Source: DANE's monthly manufacturing surveys. Calculations by Banco de la República.

9 Nairu is the unemployment rate at which inflation is stable (Non-Accelerating Inflation Rate of Unemployment).

GRAPH 31

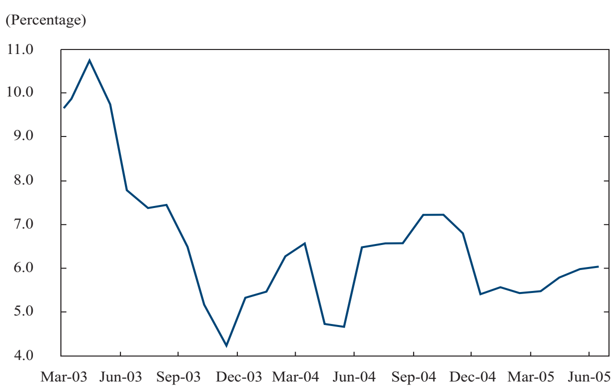
ANNUAL CONSUMER INFLATION (CPI)



Source: DANE. Calculations by Banco de la República.

GRAPH 32

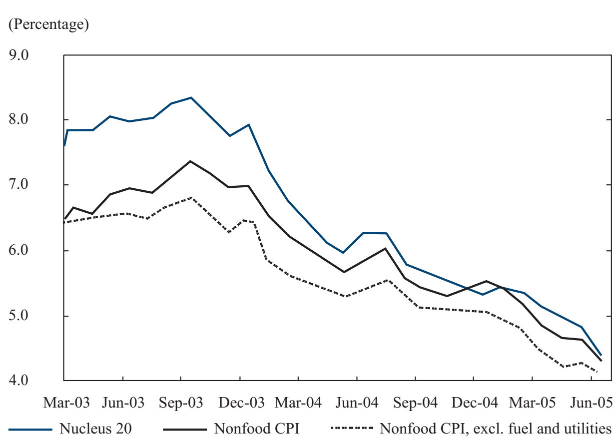
FOOD INFLATION
(ANNUAL % CHANGE)



Source: DANE. Calculations by Banco de la República.

GRAPH 33

CORE INFLATION INDICATORS
(ANNUAL % CHANGE)



Source: DANE. Calculations by Banco de la República.

The fall in headline inflation has not been any greater because of a substantial rise in food inflation, from 5.4% in December to 6.1% in June (Graph 32). Perishable foodstuffs (potatoes, cassava, carrots and peas, among others) were particularly responsible for higher food inflation in the first half of the year. By contrast, processed-food inflation continued to decrease, though at a slower pace than expected, considering the peso's accumulated appreciation and falling international prices. Note that a considerable part of processed foods (cereals and cooking oils) are imported.

Although, at 4.8%, headline inflation to June was as projected in the March Inflation Report, a breakdown of this figure by components of the CPI basket reveals a number of large misprojections. Thus, the Bank's projections underestimated food inflation by 75 bp by failing to anticipate fully the rise in perishable foodstuffs such as potatoes. On the other hand, they overestimated nonfood inflation by 31 bp by failing to foresee the substantial reduction in housing rents that occurred in June, and the further effect of the peso's accumulated appreciation on tradables inflation. Nor did the forecasts anticipate the size of the drop in regulated prices inflation.

As regards core or underlying inflation, the three most reliable indicators (nucleus 20, nonfood CPI, and CPI excluding food staples, fuel and public services) have decreased steadily, averaging 4.25% in June, their lowest level since they began to be estimated in 1998 (Graph 33). The biggest drop since March has been in nucleus inflation (75 bp), followed by nonfood inflation (53 bp). In June all three indicators were running below the floor of the Bank's target range for 2005.

Breakdown of nonfood inflation into tradables and nontradables shows a steep downward trend in both groups. Inflation in tradables[10] was the component that most contributed to reducing nonfood inflation and the other core-inflation indicators over the first half of 2005, down to the low levels they registered in June. Tradables inflation stood at 2.9% in June, having dropped by 60 bp over the second quarter and by 155 bp over the first half of the year (Graph 34), thanks notably to the peso's accumulated appreciation and a large second-quarter drop (350 bp) in fuel inflation (Graph 35). Leaving out fuel gives a less pronounced but not negligible drop: from 2.5% in March to 2.1% in June (Graph 34).

Inflation in nontradables[11] also fell steeply over the second quarter, mostly during June, down to 5.2%, having stood at 5.7% in March and 6.2% in December 2004 (Graph 36). The drop in nontradables inflation during June was 38 bp, the biggest monthly fall since January; the overall first-half drop was 100 bp.

Detailed analysis of nontradables shows that growth in regulated prices continued to lose pace, thanks mainly to utilities, which fell by 200 bp in the first half of 2005 (Graph 35). Inflation in housing rents also behaved favorably, decreasing from 4.5% in March to 4% in June; the first-half drop was 66 bp, concentrated in the month of June (Graph 37). Lastly, in the case of all other nontradables as a group, the downward trend in inflation reversed in the past two months (Graph 37), lifting the rate to 5.1% in June, 29 bp above its lowest level this year (4.8% in April), largely as a result of increases in such services as health and recreation, culture and entertainment.

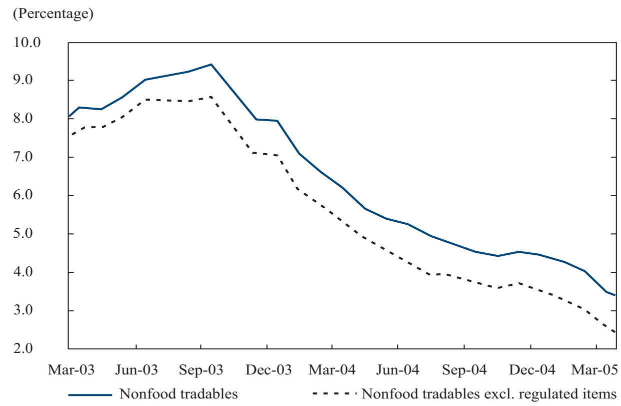
---

[10] Includes the nonfood tradables basket referred to in previous reports plus fuel, which is a regulated item highly correlated with external variables.

[11] Includes the nonfood nontradables basket referred to in previous reports, plus urban and intermunicipal transport and utilities, which have regulated prices.

GRAPH 34

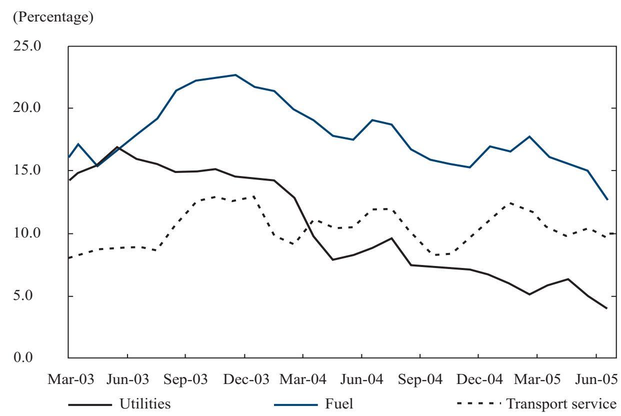
NONFOOD TRADABLES INFLATION
(ANNUAL % CHANGE)



Source: DANE. Calculations by Banco de la República.

GRAPH 35

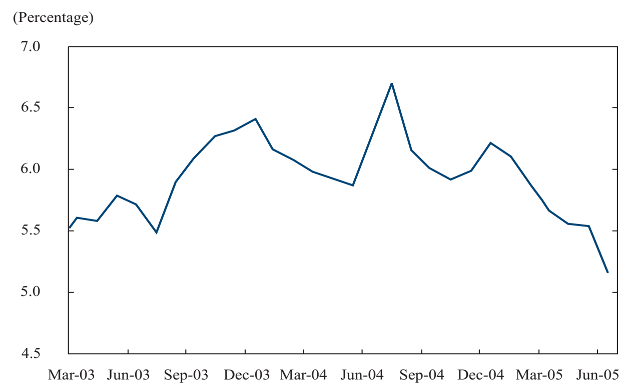
REGULATED INFLATION, BY COMPONENT
(ANNUAL % CHANGE)



Source: DANE. Calculations by Banco de la República.

GRAPH 36

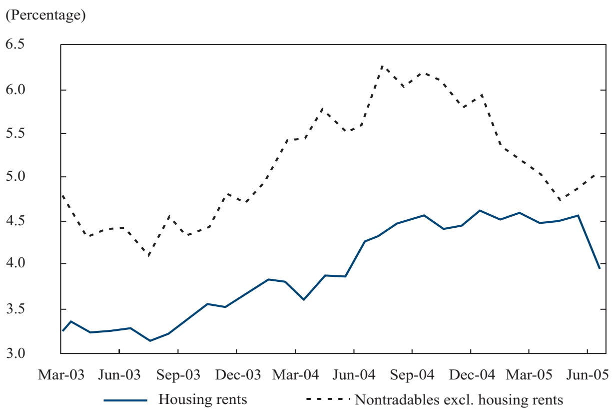
NONFOOD NONTRADABLES INFLATION
(ANNUAL % CHANGE)



Source: DANE. Calculations by Banco de la República.

Graph 37

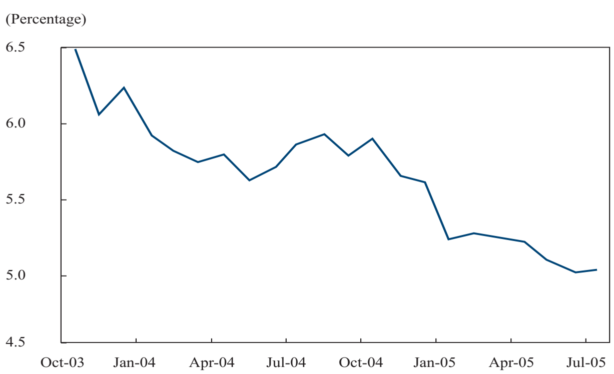
BREAKDOWN OF NONTRADABLES CPI (*)
(ANNUAL % CHANGE)



(*) Excluding food and regulated items.
Source: DANE. Calculations by Banco de la República.

Graph 38

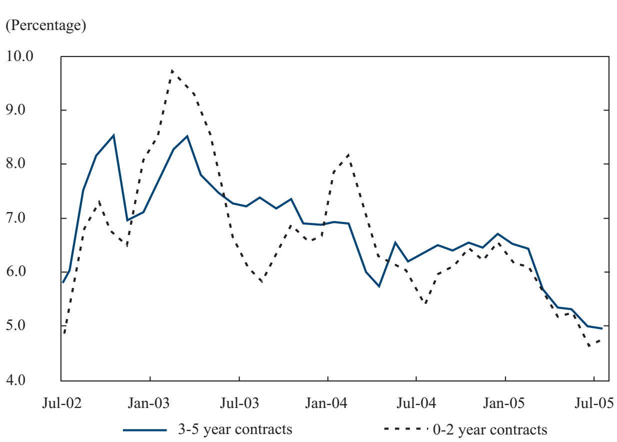
ANNUAL INFLATION FORECASTS AT DECEMBER OF EACH YEAR BY BANKS AND STOCKBROKERS



Source: Banco de la República.

Graph 39

INFLATION EXPECTATIONS DERIVED FROM FIXED- AND VARIABLE-RATE TES CONTRACTS



Source: Banco de la República.

2. Determinants of inflation to June

By analyzing the channels of monetary-policy transmission, it is possible to identify the factors behind the downward trend in Colombia's core inflation. The previous report identified four such factors. In order of importance they were: currency appreciation, lower inflation expectations, little demand pressure and, to a lesser extent, absence of cost pressures, particularly from wages.

Reviewing the past three months' inflation trends leads to the conclusion that most of these fundamental factors remain in play, as described below:

- Currency appreciation. Though the peso has remained stable now for several months, its appreciation in 2004 continues to affect annual inflation, because of the transmission channel's usual lag (one to two quarters for quarterly inflation). This is evidenced by declining inflation in nonfood tradables, discussed in the previous section. Though the pace of this decline has slowed this year, it has continued to contribute greatly to bringing down nonfood inflation.

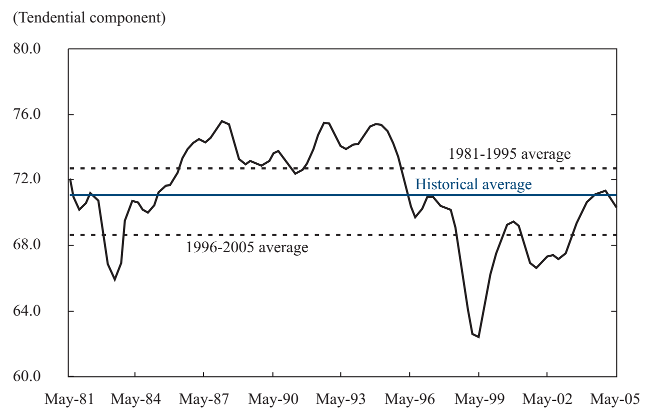
- Lower expectations. As in the first quarter, the various indicators of inflation expectations still showed continual falls, which may have intensified in recent months, to judge by the significant decline in the indicator based on fixed- and variable-rate TES rates (Graphs 38 and 39). The available indicators, in general, show that financial markets and firms expect inflation to finish the year very close to the target midpoint and remain there into next year. As a result, the target's credibility, measured by the Bank's quarterly survey, stood at 79% in April, its highest level ever. These developments may be interpreted as indicating increased confidence in the country's monetary policy, which has probably helped restrain price and wage rises from overshooting the target by too much, reduced contract indexation and contributed to lowering inflation.

- Labor costs. As discussed in detail in the section on the labor market, there is some evidence today of a more intensive utilization of labor. In this connection, there are also signs, such as higher employment, lower global participation rate and lower unemployment rates, that suggest the labor market is currently less loose than a year ago. These developments may already be reflected in higher-than-inflation nominal pay rises for skilled workers in some sectors, such as construction, industry and commerce (Graph 28 in Section I.D.). Yet, according to estimates by the Bank's Economic Studies Division (SGEE), much of the real increase in pay appears to have been offset by higher productivity. Hence, indicators of unit labor cost adjusted for hours worked, for example in industry, have remained stable so far this year.

- Demand pressure and output gap. The Bank's quarterly Inflation Reports usually identify demand pressure on the basis of output-gap indicators. In view of the uncertainty attendant on this exercise, the Bank normally performs an exhaustive review of a broad range of indicators of demand and production capacity. These indicators include, notably, Fedesarrollo's indicator of industrial capacity utilization, and the percentage of companies with capacity utilization higher than their individual historical averages (Graphs 40 and 41). The Bank also uses qualitative indicators, such as business perception of demand as a problem in expanding production (based on surveys by ANDI, a major business association) or spare capacity for meeting future demand (Fedesarrollo).

GRAPH 40

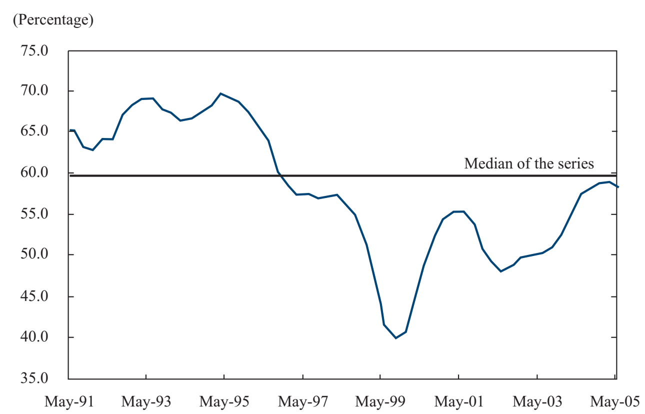
CAPACITY UTILIZATION



Source: Fedesarrollo. Calculations by Banco de la República.

GRAPH 41

PERCENTAGE OF COMPANIES WITH CAPACITY UTILIZATION HIGHER THAN INDUSTRY'S HISTORICAL AVERAGE

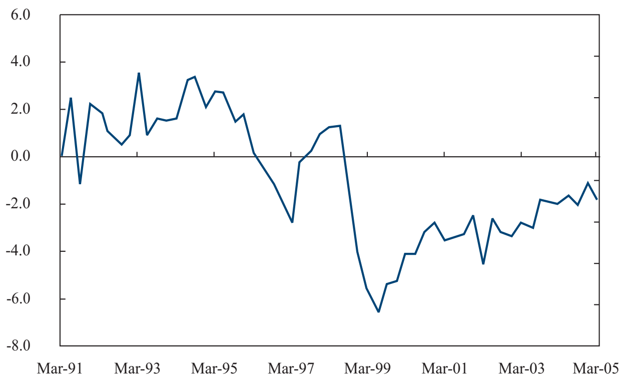


Source: Fedesarrollo. Calculations by Banco de la República.

Graph 42

OUTPUT GAP

(% of potential GDP)



Source: Banco de la República.

Most indicators show that the output gap has closed over the past year and a half, albeit perhaps at a somewhat slower pace in recent months. But estimates based on the production function approach (and other econometric approaches) using some of the above indicators (capacity utilization, Nairu, Naicu) show that the gap remains negative. The present report, taking into account those measurements, estimates that the output gap for the first half of this year was around -1.6% (Graph 42). Our estimate is backed by the fact that sustained investment growth over the past three years has expanded production capacity sufficiently for the rise in aggregate demand to be absorbed without causing any major inflationary effects. We may therefore conclude that there is no clear evidence of inflationary pressure from demand, and that such pressure should remain restrained in the coming months.

Despite the foregoing, the fact remains that the decline in nonfood inflation since December has occurred at a time when the economy is growing at some 4% for the third year running, with aggregate demand rising even faster. That growth is not far from the Colombian economy's average historical growth in recent decades, which makes it surprising that there is apparently no pressure on prices arising from demand, as implied by the strong fall in (nonfood) nontradables inflation. In view of this and the uncertainty attached to estimation of output-gap indicators, the behavior of demand and of price indicators sensitive to it, such as inflation in nonfood nontradables, would need to be closely monitored.

EFFECT OF THE NUMBER OF WORKING DAYS ON INDUSTRIAL OUTPUT

Mario Nigrinis O.
Andrés Mauricio Velasco M.*

DANE uses its monthly manufacturing sample survey to measure the behavior of industrial output. This is a monthly nationwide survey of a sample of industrial firms employing ten or more people or having an annual production value equal to or greater than 60 million pesos of 1997.

The firms answer questions about production, sales, employment, remuneration and hours worked in a month. The sample is updated every year, with a three-year lag, based on DANE's companies census taken through its annual manufacturing survey.

Under Colombian legislation the maximum ordinary working time may not exceed eight hours per worker per day or 48 hours per worker per week. Hence, the days of the week from Monday to Saturday are considered working days (except for official holidays).

When companies decide to run production on non-working days, they have to take on higher labor costs under the legislation in force. DANE's monthly sample survey findings on production and hours worked are affected by the total number of days worked in the month.

From January 1980 to May 2005,[1] the average number of working days in a month was 25 (Table B1.1). Hence, one more (or less) working day would involve an increase (or decrease) of about 4% in production.

The dynamics of the economy can have a bearing on the impact that irregularity in the number of working days has on annual change in industrial output. When demand is high, businesses may be prepared to run production on non-working days. In such cases, therefore, the effect of one less working day on industrial-production growth may be less than when demand in not high.

Graph B1.1 shows the number of working days for each month of the year in the period under review. The greatest variability was in March and April, mostly explained by the variable

---

* The authors are inflation specialists on the staff of the Banco de la República's Programming and Inflation Department, Inflation Section. The views expressed here are the exclusive responsibility of the authors and entail no commitment on the part of the Bank or its Board of Directors.

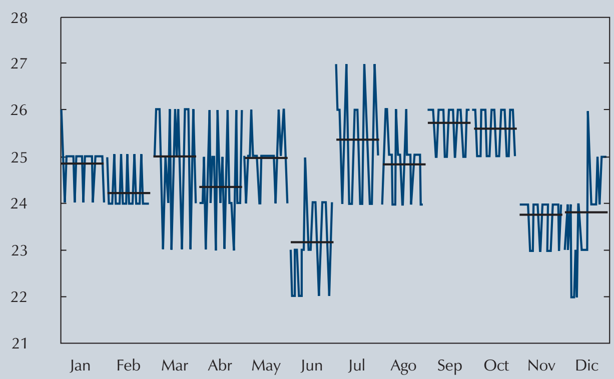
1 During the period under review the monthly manufacturing sample has been modified three times to bring it into line with ISIC revisions. The modifications may have statistical effects on findings within industrial sectors but do not affect findings for the consolidated industrial sector.

Table B1.1
DISTRIBUTION OF WORKING DAYS, JANUARY 1980 - MAY 2005

Days	Months
22	9
23	32
24	94
25	100
26	66
27	4
Months	305
Mean	24.6
Median	25

Source: Banco de la República.

Graph B1.1
ACTUAL AND AVERAGE WORKING DAYS FOR EACH MONTH , 1980-2005



Source: Banco de la República.

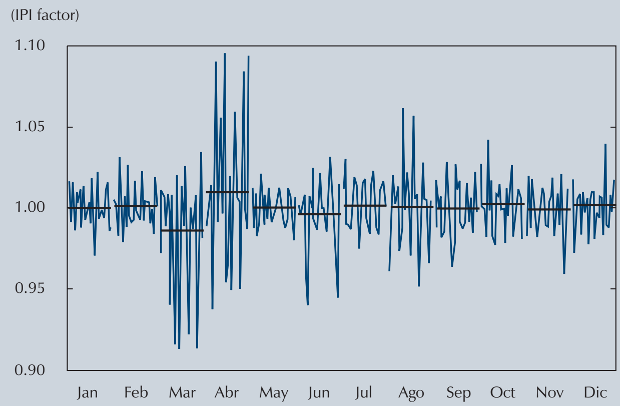
occurrence of Easter Week in these months. July and December also presented high variability but less frequently.

Using the X-12 multiplicative method, DANE's Industrial Production Index (IPI) from its monthly manufacturing surveys is broken down into its cyclical, tendential, seasonal and irregular (or unexplained) components. Graph B1.2 shows the irregular component of the Industrial Production Index. Theoretically, this should fluctuate stably around 1, for it represents random shocks, which may be positive or negative.[2]

Graph B1.2 reveals an unstable variance among the different months, showing it to be higher in March and April. The irregular component's variance for these two months is double the variance for the entire period.

2 In a multiplicative method, the Y-axis values represent percentage variations.

Graph B1.2
IRREGULAR COMPONENT OF THE INDUSTRIAL PRODUCTION INDEX (IPI)



Source: Banco de la República.

The number of working days may be the cause of instability in the irregular component of DANE'S Industrial Production Index. Different statistical and econometric exercises have been conducted that throw light on this relationship.

A simple regression shows that the number of working days explains some 20% of the irregular component of industrial production. A more appropriate exercise,[3] which takes account the non-stationary features (regular and seasonal) of the series, shows that the number of working days explains around 60% of the IPI's irregular component.

Furthermore, using the analogous neural networks methodology, a nonlinear relationship was found between the series of DANE's Industrial Production Index, ISA's energy demand and the number of working days. Discovery of this nonlinear relationship would bear out the hypothesis that the effect of the number of working days on production depends on the demand encountered by industry.

Graph B1.3 shows the irregular component of the series adjusted for the number of working days.[4] It may be observed that taking into account the number of working days corrects part of the variance of the IPI's irregular component revealed in Graph B1.2.

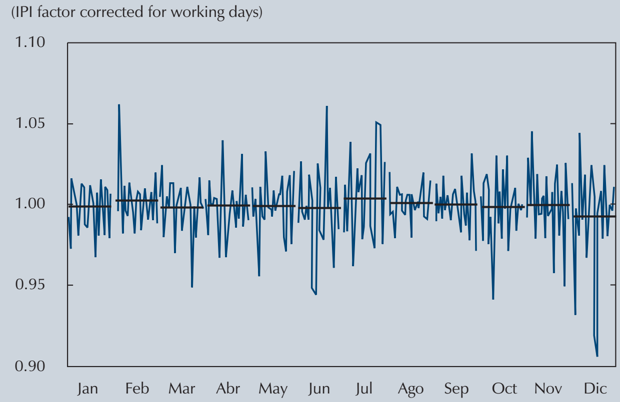
In synthesis, the number of working days affects industrial production in the irregular component of the series, that is, it explains specific changes but not tendential or cyclical ones.

On this basis a better interpretation can be offered of the findings presented by DANE in recent months. For example, in March this year industrial production fell

[3] Different statistical tests show that the IPI is a series 1(1) with regular and seasonal unit root. For this reason, the right way of modeling the series is to transform it through a regular and seasonal difference.

[4] To correct for working days, the IPI is divided by the number of working days to obtain average daily production.

Graph B1.3
IRREGULAR COMPONENT OF THE INDUSTRIAL PRODUCTION INDEX CORRECTED FOR WORKING DAYS



Source: Banco de la República.

by 4.2%.[5] There were two working days less in March 2005 than in March 2004. In contrast, industrial production rose by 11.0% in April this year, which had two working days more than April 2004. In this case the irregularity in the number of working days would have affected GDP growth for industry in the first quarter and then corrected the effect in the second quarter.

[5] According to the findings of the April 2004 monthly manufacturing survey.

WHAT IS HAPPENING TO MEDIUM- AND LONG-TERM WORLD INTEREST RATES?

Luz Adriana Flórez*

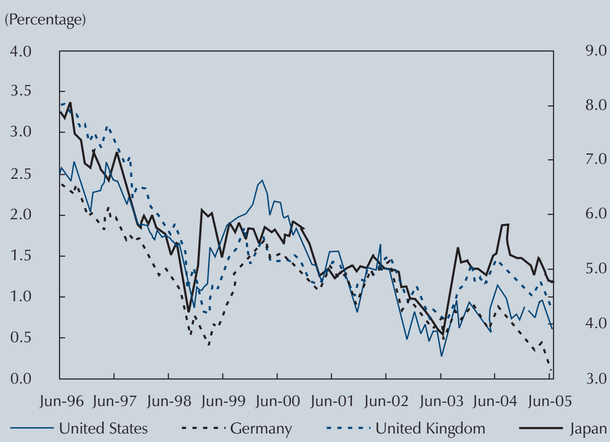
The behavior of long-term interest rates in recent months has caused some concern among analysts. While the United States Federal Reserve has been raising its short-term interest rates, long-term rates have been falling instead of rising. Alan Greenspan, chairman of the Fed, has referred to this development as an interest-rate conundrum.

The fall in long-term rates has not been exclusive to the US economy. It has also occurred in a good many developed economies and not a few emerging ones, including Colombia (Graph B2.1). Various arguments have been advanced to explain this fall: 1) higher global saving, 2) lower global inflation, 3) expectations of slower growth, and 4) some micro factors.

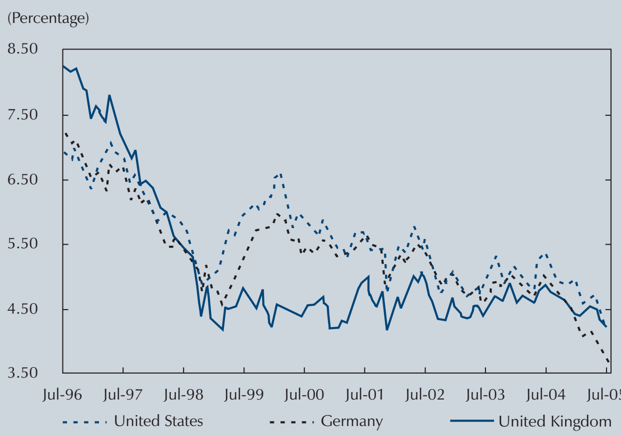
The first and most important argument, stressed by several analysts as the chief cause of the historically low levels of interest rates, has been the rise in global saving. This rise has come mainly from Asian economies, which have increased their average saving rate from 26% of GDP in the 1980s to around 40% in recent years. In the case of developed countries, the

GRAPH B2.1
INTEREST RATES ON BONDS

10-YEAR BONDS



30-YEAR BONDS



Source: Datastream.

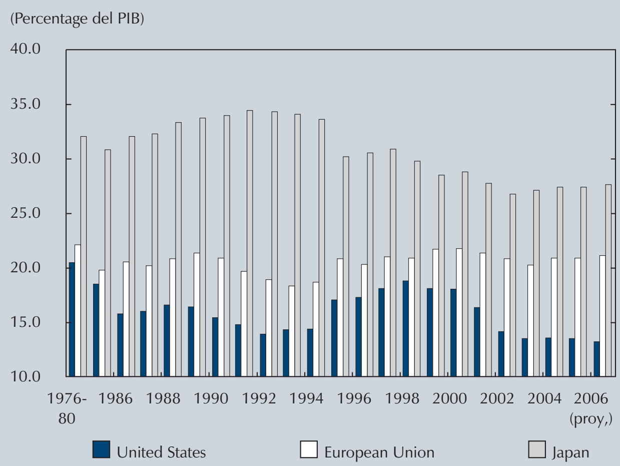
* The author is on the staff of the Banco de la República's of Programming and Inflation Department, Inflation Section. The views expressed here are the author's exclusive responsibility and entail no commitment on the part of the Bank or its Board of Directors.

saving rate has edged down in Japan and remained steady in the euro area. In contrast, the US economy exhibits the biggest fall in saving, from 20% of GDP in the 1980s to 13% today (Graph B2.2). The overall increase in global saving has allowed funding of the US economy's external deficit (6% of GDP, the highest in its history), without interest rates rising.[1]

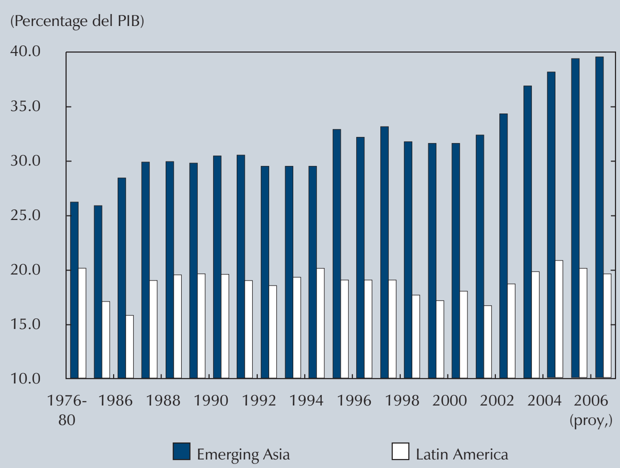
Higher saving in some emerging economies, particularly in Asia, is partly explained by various central banks' strategy of accumulating international reserves as protection against possible

Graph B2.2
GLOBAL SAVING

DEVELOPED ECONOMIES



DEVELOPING ECONOMIES



Source: Datastream.

1 According to Obstfeld and Rogoff, the US current-account deficit absorbs some 75% of the current-account surpluses of Germany, Japan, China and other economies of the world.

financial crises and as a means of keeping their exchange rates at competitive levels.[2] In other emerging economies higher saving has been fostered by rising prices for their export commodities, and by recent years' progress in undertaking fiscal adjustments and economic reforms.

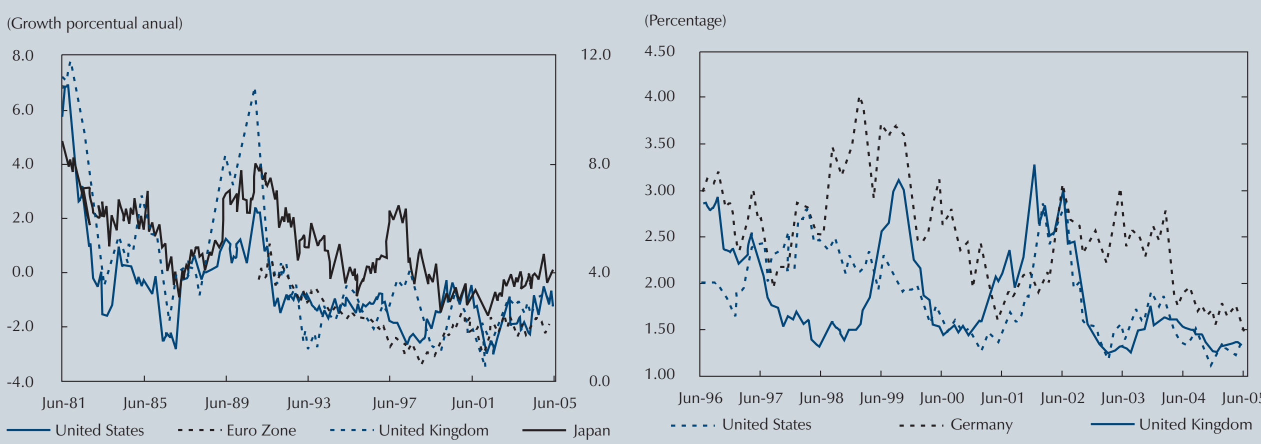
The second factor that may account for lower interest rates is the fall in inflation in most developed and emerging economies, made possible by a greater degree of financial and commercial integration since the 1990s. Lasting falls in inflation rates and expected inflation have allowed real interest rates to stay below the average levels of recent decades (Graph B2.3).

The third argument is that low long-term interest rates may, particularly in recent months, also reflect lower expectations of future growth (Graph B2.4). The fall in expected growth would be associated with fears arising from higher oil prices, greater global insecurity caused by terrorist attacks in some major world economies, the current conflict in Iraq and persistent macroeconomic imbalances in the United States.

Lastly, other analysts suggest that a number of micro factors, such as changes in the regulation of insurance companies and pension funds in some countries, might be intensifying the current behavior of long-term rates by encouraging greater demand for longer-maturing securities.

Graph B2.3
GLOBAL SAVING

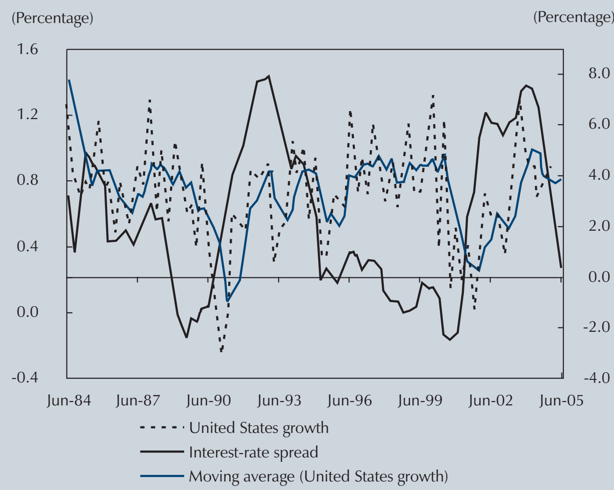
GLOBAL INFLATION | **REAL INTEREST RATES ON 10-YEAR BONDS**



Source: Datastream.

[2] It is difficult to estimate the effect of central-bank intervention. Some studies indicate a fall of 50-150 bp in interest rates of long-dated securities. See Roubini (2005).

Graph B2.4
US GROWTH AND INTEREST-RATE SPREAD (*)



(*) Difference between rates on five-year securities and Fed funds.
Source: Datastream.

The fall in long-term interest rates has increased markets' appetite for risk and thus stimulated demand for securities of emerging economies, including Colombia's. Greater global liquidity has kept these economies' risk premiums relatively low and thereby improved financing and restructuring conditions for their debt, particularly in the case of Latin American countries.

As may be appreciated, there are various factors that might help to explain the current behavior of long-term interest rates, some having a greater impact in certain economies than in others. Even so, it does not seem clear that these factors as a whole fully account for such behavior, particularly the intensity it has been displaying.

REFERENCES

Obstfeld, M. and Rogoff,K. (2005), "The unsustainable US current account revisited," Working Paper 10869, NBER.

Roubini N. and Sester B. (2005) ,"Will the Bretton Woods 2 Regime Unravel Soon? The Risk of a Hard Landing in 2005-2006," mimeo, New York University.

II. MACROECONOMIC OUTLOOK

Inflation forecasts indicate that the 2005 target is very likely to be met. For 2006, pressures from demand are not ruled out.

Colombia's external prospects for the rest of 2005 and early 2006 are better than was expected three months ago. The improvement is reflected in higher forecasts for the country's terms of trade and a greater appetite for risk in international financial markets, despite the rise in US short-term rates. There is also the fact that Latin America has become less vulnerable to changes in capital flows.

The economy is expected to stay on a path of expansion over the rest of 2005. The factors that would drive the economy in the second half of the year are not much different from those discussed in the previous report, and in some cases, such as the external situation, may have improved slightly. Hence, external demand will continue to play a major role, as will favorable terms of trade. Domestic demand will continue to be led by investment, while household consumption should grow faster, driven by higher employment and income levels and easy credit conditions.

The economy is expected to continue on a rising trend over the second half, stimulated by a favorable external context.

No inflationary pressures are expected from the side of demand, for investment in recent years has expanded productive facilities and the labor market is still loose, despite recent advances in employment. Pressure on the exchange rate will also remain restrained, at least for the rest of 2005. Hence, there is a very great likelihood that this year's target will be met, and a year-end figure close to the floor of the target range is not ruled out. For 2006, the greatest risk is the possibility of demand-side pressures if the output gap closes faster than expected. The second is the effect of a possibly strong exchange-rate depreciation, which cannot be overlooked, given the US rate adjustments.

Sustained growth in China and other large economies could keep up the pressure on raw-materials prices.

A. EXTERNAL CONTEXT AND BALANCE OF PAYMENTS

1. General considerations

No big changes are expected in world growth trends over the coming months. The outlook for the short term continues to be good, as confirmed by various leading indicators available to date, particularly for the economies of the United States, China and several emerging countries. Moreover, sustained growth in China and other large economies could keep up the pressure on raw-materials prices for a good while.

On a broader horizon-three quarters or more-the situation is less clear and will depend on several factors: 1) oil-price behavior and its effect on world demand; 2) changes in US monetary-policy and their impact on international liquidity; 3) the effect of US monetary policy on asset prices, particularly real estate prices; 4) movements in the US's macroeconomic imbalances, and possible repercussions from China's and other Asian economies' apparent move toward exchange-rate flexibility. These last two factors would become relevant in the longer run.

Strong external demand is expected to continue keeping oil prices high in the coming months. The present report has therefore raised its oil-price forecasts for the rest of 2005 and 2006. The crude benchmark price for Colombia-West Texas Intermediate (WTI)-is now expected to range between $50 and $55 in the next year and a half,[12] a large increase on the March Report's forecasts ($47.5 for 2005 and $43.5 for 2006)[13]. This is a particularly relevant change, because of its implications for the world economy and Colombia's in particular.

Current forecasts for other commodities are not substantially different from the March report's. Metal prices have remained steadily high, and there have been some reductions in farm produce. The World Commodity Forecast expects a moderate fall of 1.9% in the overall commodity index excluding oil for 2005. This is a little lower than the 2.2% fall expected three months ago; the reduction for 2006 would be of the order of 3.6% (Graph 43).

External demand is expected to continue keeping oil prices high in the coming months.

12 The forecasts for 2005 and 2006 are $54.1 and $50.3 respectively, according to The Economist Intelligence Unit (EIU) (World commodity forecasts: industrial raw materials, July 2005).

13 These figures were the average WTI prices predicted by several analysts: J.P. Morgan, AIE, EIU, Morgan Stanley, CSFB and WEO, among others.

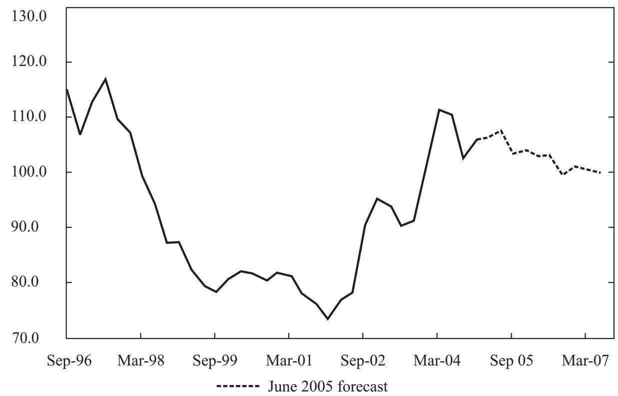
This report expects the rise in oil prices to have a very small negative impact on developed economies over the next year and a half. This is particularly valid in the case of the United States, whose economic prospects continue to be promising, with growth forecast at 3.5% for 2005 and 3.3% for 2006. These forecasts are only marginally lower than the March report's (Table 4).

The economic outlook for Japan has improved slightly relative to three months ago, though projections remain below actual growth in 2004. For 2005 growth is projected at 1.3%, a little higher than the March forecast, and for 2006 at 1.5%. The Japanese economy would be mainly driven by domestic demand, thanks to improved labor-market conditions. However, some negative impact from higher oil prices is not ruled out.

The economy most vulnerable to high fuel prices appears to be the euro area. As indicated in Chapter I, the area's domestic demand and

GRAPH 43

COMMODITY PRICE INDEX FORECASTS, EXCLUDING OIL (WCF)



Source: EIU.

TABLE 4

GROWTH FORECASTS FOR MAIN TRADING PARTNERS (PERCENTAGE)

	Actual growth	Forecast for 2005, at:		Forecast for 2006, at	
	2004	Apr-05	Jul-05	Apr-05	Jul-05
Main partners					
United States	4.4	3.7	3.5	3.4	3.3
Ecuador	6.9	3.5	3.3	3.5	3.2
Venezuela	17.3	5.4	6.0	4.3	4.3
Other partners					
Euro Zone	1.8	1.9	1.2	2.5	2.0
Japan	2.6	1.0	1.3	1.7	1.5
China	9.5	8.6	8.9	7.9	8.1
Peru	5.1	4.6	5.0	4.2	4.4
Mexico	4.4	3.9	3.6	3.5	3.5
Chile	6.1	5.7	5.8	5.1	5.2
Argentina	9.0	6.7	6.7	4.1	4.1
Brazil	5.2	3.7	3.1	3.7	3.5
Bolivia	3.6	3.5	3.4	3.7	3.3
Developed countries	3.9	3.3	3.0	3.2	3.0
Developing countries	10.7	4.6	4.9	4.0	4.0
Total trading partners (*)	5.8	3.8	3.8	3.6	3.6

(*) Balance of payments calculated on nontraditional exports.
Source: Datastream-Consensus.

The Fed's benchmark rate is expected to be around 4% by the end of 2005.

confidence indices have already shown some deterioration in recent months, which could be connected with fuel prices. The euro area also faces other problems that cast doubt on its capacity for medium- and long-term growth. One problem is greater political uncertainty, arising from rejection of the European Constitution by several countries, and from slim progress on economic reforms to introduce greater market flexibility. The euro area's growth forecasts have therefore been reduced to 1.2% for 2005 (from 1.9% in the March report) and to 2% for 2006 (from 2.5%). Higher growth in 2006 should result from a number of factors, such as external demand and better financial conditions, that would boost investment and consumption.

The growth outlook for Asian economies, headed by China, has improved relative to the previous quarter's figures. The region's growth is now forecast to be 8.9% in 2005 and 8.6% in 2006 (against 8.6% and 7.9% projected in the March report). A slight appreciation in China's currency should not have any significant impact on the country's growth. However, though the Chinese authorities' decision on July 21 suggests a strategy of gradual appreciation, the possibility cannot be overlooked of a speculative market action forcing a faster and more aggressive appreciation on China in a not too distant future.

Despite strong global demand and high prices for raw materials, especially oil, no heavy inflationary pressures are expected to arise at the global level, at least in the next four quarters. Developments such as growing participation in global trade by countries, such as China and India, with ample production capacity and an abundant cheap workforce may help to curb widespread price rises. Added to this are large productivity gains at the global level, associated with information-technology advances and large investment inflows into emerging Asian countries. In the case of the United States in particular, capacity utilization has not yet exceeded the country's historical averages, and labor productivity keeps growing at rates of 2% to 3%.

Accordingly, given the country's prospects of low stable inflation over the coming quarters, in an economy growing at a pace close to its historical average, the US monetary authorities are expected to move gradually toward a more neutral liquidity position. The Fed's benchmark rate is therefore expected to be around 4% by the end of 2005, which would raise the real shot-term rate close to its historical average of some 1.7%.

The ample availability of global savings should moderate increases in long-term interest rates.

It is not clear what effect such further rate increases would have on long-term rates and on international liquidity. Long-term rates would normally rise in line with monetary-policy tightening. But the ample availability of global savings in Asia, Europe and various emerging economies might perhaps moderate their rise, at least over the rest of the year. It should be pointed out, however, that appreciation of the Chinese currency and the possibility of greater flexibility in its exchange rate and in those of other Asian economies might drive long-term rates in the global economy higher than is expected in this report.

Latin American economies are expected to grow a little more slowly in the next eighteen months than they did in 2004, but still at a satisfactory pace. Growth will be driven by exports, which will continue to be stimulated by good terms of trade and solid external demand.

The economic-growth outlook for Colombia's main trading partners continues to be positive. Venezuela's economy, in particular, is expected to expand by 6% in 2005 and by 4.3% in 2006, faster than Ecuador's projected growth of 3.3% and 3.2% respectively. Risks remain, however, in the longer run. Venezuela and Ecuador are highly vulnerable to oil-price falls, which would sharply reduce their chances of long-term growth. Other risks are associated with slim progress on structural reforms and recurrent political instability.

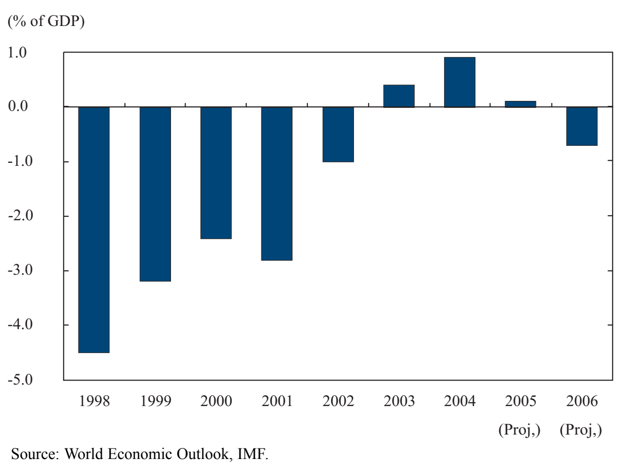
In view of the above, the average growth forecasts for Colombia's trading partners (weighted for nontraditional exports) have been left unchanged from the projections made three months ago. The expansion is expected to be 3.8% in 2005 and 3.6% in 2006. These figures are used in making the balance-of-payments forecasts discussed further below.

One risk that may cloud the above outlook for Latin America and has been pointed out repeatedly by several analysts has to do with the effect of a US rate increase on domestic interest rates and on capital flows. Although the fall in long-term rates has so far kept the profitability differential in favor of emerging economies, their increase could reduce it. Nevertheless, a pick-up in external interest rates should not necessarily have a strong impact on these economies. There is a consensus among different analysts that Latin America is better prepared today to deal with a fall in international liquidity, for the following reasons:

- First, the external balances of most Latin American countries have recovered notably, driven by exports and the terms of trade (Graph 44). For most countries this has led to a significant rise in their international-reserves positions, and for some the reserves amply exceed their external-debt amortizations

GRAPH 44

LATIN AMERICA'S CURRENT-ACCOUNT BALANCE



Source: World Economic Outlook, IMF.

Latin America is better prepared today to deal with a fall in international liquidity.

- Second, progress made in developing local capital markets has made Latin America less dependent on foreign capital.

- Third, fiscal adjustments have been implemented with some visible results.

- Lastly, there is greater stability in the macroeconomic environment, which is reflected, among other things, in low inflation rates in most countries of the region.

2. Colombia's balance of payments

As stated earlier, Latin American economies, including Colombia's, will continue to benefit from a still buoyant external demand and a gradual monetary policy on the part of the Fed. In addition, prices for some of Colombia's major export products are forecast to be higher than was expected three months ago (Table 5) and should therefore boost exports over the rest of 2005 and even in 2006. However, some manufacturing sectors such as textiles, clothing and footwear may face problems from competition on the part of China and India. Something may already be happening on these lines in Colombia and various other countries.

Based on the main balance-of-payment figures on prices, global-demand growth, FDI flows, and assumptions on capital flows other than FDI, among other things, the peso is not expected to depreciate significantly from its levels observed so far this year. The base scenario for 2005 assumes a 1.7% current-account deficit, as a ratio of GDP.

Table 5

INTERNATIONAL PRICES

	Averages			Current projection 1/	Previous projection 2/	Current projection 1/
	2002	2003	2004	2005	2005	2006
Coffee (ex dock) (dollars per pound)	0.7	0.7	0.9	1.2	1.2	1.1
Oil (dollars per barrel) (*)	24.2	29.0	37.3	43.9	40.6	43.9
Coal (dollars per metric ton)	30.8	28.2	36.1	44.5	36.1	44.5
Ferronickel (dollars per pound)	1.1	1.4	2.3	2.6	2.3	2.3
Gold (dollars per troy ounce)	310.2	362.5	409.3	423.1	484.5	423.6

(*) Average price for Colombian crude export. For current 2005 and 2006 projections, the implicit price for WTI IS $55.7.
1/ Balance of payments estimated in June 2005.
2/ Balance of payments estimated in March 2005.
Source: Banco de la República.

3. Base-scenario risks

The peso is not expected to depreciate significantly from its levels observed so far this year.

A number of factors might jeopardize the base scenario presented in the previous sections. The first is a political factor, applicable to Colombia and the region as a whole. This year and next, election periods will begin in nine Latin American countries, including Colombia. In the past, election periods have been attended by a higher risk perception, which has involved strong capital outflows and exchange-rate depreciations.

The second risk is a further rise in oil prices, to more than $60 a barrel. This would be bound to affect global growth in the medium term, with adverse consequences for Latin American exports. The impact on Colombia, however, could be smaller if the country maintains its capacity to export crude.

The third, though longer-term, risk is still connected with the US's wide imbalances, which continue to cause doubt about the soundness of its economy. Sudden adjustment of these imbalances could be attended by sharp interest-rate rises and global-growth deterioration, creating an external context difficult to deal with for Latin American economies, despite their lower vulnerability. High real-estate prices currently prevailing in the United States and other developed economies could complicate this situation. Despite the foregoing, the US trade deficit's recent stability could reduce this possibility a little.

Lastly, there is the possibility of China's and other Asian countries' currencies appreciating sharply under market pressures. This could trigger a rapid rise in long-term interest rates globally and cause the emerging economies' financing conditions to deteriorate, particularly in Latin America. However, a stronger depreciation of China's currency could also improve the Latin American economies' competitive position on the international stage, particularly in markets where they must face competition from products made in China. A third effect is associated with the impact of a possible appreciation on China's economic growth and import demand, and through this demand on the terms of trade. On the whole it is difficult, on existing information, to gauge the effect of a sharp appreciation in the renmimbi on Latin American economies. What can be asserted is that as long as the Chinese economy continues to expand at accelerated rates, commodity prices are likely to remain under pressure.

B. DOMESTIC CONTEXT

There are several reasons for expecting the country's economy to perform well over the rest of 2005 and in 2006. They include, notably, a favorable external context, improved labor conditions, consumer and investor confidence, and a loose monetary policy. On this basis and taking into account supply factors, discussed further below, real growth is forecast to stand steady at close to 4.0% (Table 6).

As stated in the previous section, external-demand conditions for Colombia are expected to remain favorable in the next few quarters, so that exports will continue to be a strong source of growth. The possibility cannot be overlooked that some industrial sectors may see their export capacity weakened by stronger foreign competition, particularly from China and other Asian countries.

The conditions also suggest that the terms of trade for Colombian products will be high, with positive effects on disposable income and spending. Coffee producers' disposable income is estimated to have increased in January-May at an annual real rate of some 50. Coffee earnings are expected to maintain this dynamism over 2005, given that production is forecast to rise by 5% and the external price to remain steady at around $1.10 a pound.

The real disposable income of Colombians in general will benefit from lower unemployment, a greater number of jobholders and greater

TABLE 6

GROSS DOMESTIC PRODUCT BY SECTOR
(ANNUAL % CHANGE)

	2004	2005		
		I Qtr.	II Qtr.	III Qtr.
Farming, forestry, hunting and fishing	2.6	3.4	2.3	4.5
Mining and quarrying	2.9	5.1	(0.7)	3.7
Electricity, gas and water	3.0	0.4	4.4	2.7
Manufacturing	4.8	(1.0)	6.5	3.7
Construction	9.7	10.6	13.1	7.1
Buildings	30.4	(2.3)	7.3	2.1
Civil work	(19.3)	43.6	26.2	18.9
Trade, repairs, restaurants and hotels	5.9	7.3	5.6	3.9
Transport, storage and communication	5.1	3.5	7.1	6.5
Financial estabs., insurance, real estate and business services	4.3	(2.7)	7.6	3.0
Social, community and personal services	2.8	2.4	2.3	3.9
Financial intermediation measured indirectly	12.2	(14.2)	26.0	4.7
Subtotal aggregate value	3.9	3.1	4.4	4.1
GDP	4.1	3.6	4.7	4.5

Source: DANE. cálculos del Banco de la República.

formalization of employment, as indicated in Section I.D. In contrast, net overseas remittances are not expected to contribute to growth in real disposable income, given the peso's appreciation and their projected increase of only 4.2%, in dollars. Estimates of real disposable-income estimates, taken together, indicate a growth of some 4% for 2005, unchanged from the figure reported in the previous report.

Based on disposable-income and confidence information, household consumption is expected to accelerate over the rest of the year.

Other factors benefiting economic growth are consumer and producer expectations. According to Fedesarrollo's surveys, consumer confidence remains high and stable, as does business perception, with investment conditions still being regarded as benign.

Based on disposable-income and confidence information, household consumption is expected to accelerate over the rest of the year, after sluggish growth in the first quarter. Private investment may remain buoyant, particularly investment in machinery and equipment and transport equipment. Civil-works investment is expected to continue stimulating economic growth, having recovered from its fall in 2004 and also because there is a long agenda of national and local investment projects to be implemented over the next quarters.

Investment in buildings could recover in the second and third quarters of 2005, given the recovery in building licenses to May and good data on works in progress revealed by DANE's housing census to March. But the outlook for a longer horizon than two quarters is not sufficiently clear. Construction is expected to make a soft landing, after strong growth in the previous quarters. All this suggests that domestic demand should keep on rising in the coming quarters, at rates of over 5%.

Regarding supply, some indicators point to stable economic growth over the rest of 2005 and in 2006. The farm sector, for example, will be driven by higher coffee production and by continuation of the cattle-liquidation cycle over the second half of 2005. Growth in the farm sector is expected to be stronger than in 2004, averaging a little over 3% for the whole year.

For 2006, the farm sector should profit from favorable conditions in the form of tax benefits, exemptions and aid that the government has provided to specific sectors, and from a more secure environment. Though the duration of the cattle-liquidation cycle is not very certain, it could last to the end of 2006 and even into 2007 (the last cycle lasted six years).

Mining performance over the second half of 2005 will be associated with higher coal production (12% expected average rise for the year) and falling oil output (expected at -3.4%). Other important factors will be a boost from the construction sector to production of nonmetallic minerals, and sluggish growth in production of metallic minerals (gold and ferronickel).

In the medium term, 2006 and beyond, investment associated with mineral production should maintain its pace of growth, given the high prices for commodities. In the case of oil, no major discoveries are expected that would become exploitable before 2007. Growth in mining will be conditioned by the foregoing. Though the mining sector is unlikely to decline in real terms, it will not be a driver of growth.

Today, the outlook for industry is mixed, with good prospects of growth in the coming quarters but uncertainty at the end of 2005 and in 2006. In the short term, figures for industrial-GDP growth will prove to be high, particularly for the second quarter. Though the figure for May 2005 was low (2.12%), the April rate was over 11.0%, practically ensuring a second-quarter growth of over 4.5%. The more reliable forecasting models give a rate of up to 6.5% for industrial growth in the second quarter. However, short-term growth in 2005 would be mainly associated with more working days: two more in the second quarter and one more in each of the two second-half quarters, compared with 2004.

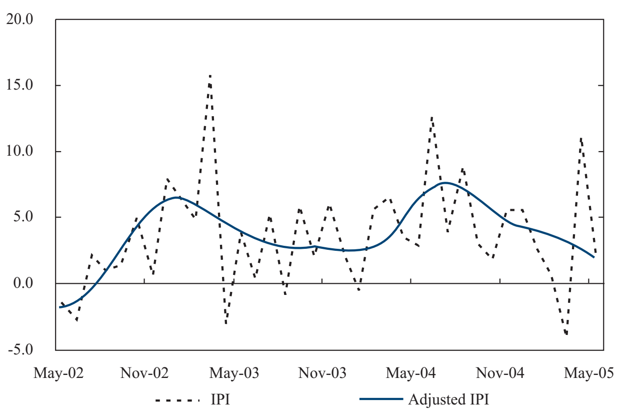
Yet, controlling for this factor, it is not clear how industrial GDP will behave beyond 2005, for it is precisely its tendential growth (adjusted for seasonality and working days) that has been deteriorating since the end of 2004 (Graph 45).

Though there is as yet no conclusive account of the fundamentals affecting industrial growth, a detailed analysis of sectoral developments might provide useful information about some negative effects of foreign competition; intermediate-goods sectors such as textiles, leather, wood, nonferrous metals and chemicals; and final-goods sectors such as footwear and clothing.

Qualitative information from Fedesarrollo's business-opinion surveys seems to indicate that expectations have steadied recently, remaining high still, after falling for four months in a row (Graph 46). In view of this and the prospects of

GRAPH 45

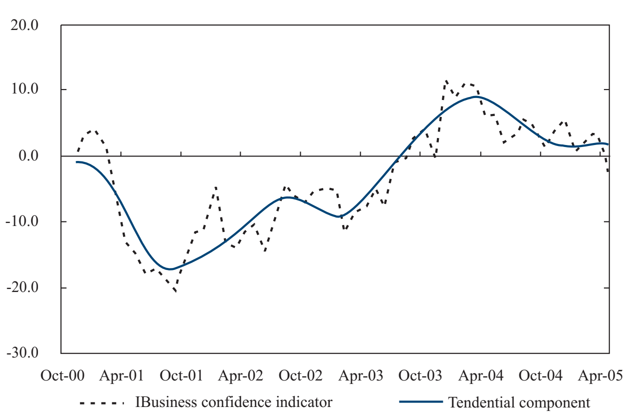
INDUSTRIAL PRODUCTION INDEX (IPI), ADJUSTED FOR WORKING DAYS AND SEASONALITY
(ANNUAL GROWTH)



Source: DANE. Calculations by Banco de la República.

GRAPH 46

BUSINESS CONFIDENCE INDICATOR



Source: Fedesarrollo.

a stable external demand, the slowdown observed in recent quarters is expected to ease during the second half of 2005.

The external outlook for Colombia for the rest of 2005 and early 2006 has improved relative to expectations three months ago.

Public investment in civil works should continue on the upswing over the next quarters, registering an expected real growth of over 20.0% for the entire year. The outlook beyond this year is good, with a long agenda of pending public works. At the national level, Plan 2500 provides for the construction or rehabilitation of 2500 km of highways, to be completed by 2008. At the regional and local levels, the authorities spent 2004 drawing up development plans, are passing contracts in 2005 and should begin to execute civil works at the end of the year under their four-year plans.

C. INFLATION FORECATS

1. External assumptions

The inflation projections presented in this section take account of the above considerations on external and domestic outlooks. The March report predicted a relatively favorable external environment for Colombia's economy in 2005. This implied an expanding global demand, albeit less buoyant than in 2004; favorable terms of trade; and relatively loose external financing conditions despite actual and expected interest-rate rises.

As mentioned in the first chapter of this report, a good part of these assumptions have proved true in the course of this year, including the second quarter. Besides, new elements have emerged in recent months that indicate an improvement in Colombia's external outlook for the rest of 2005 and early 2006, compared with projections made three months ago. The most relevant are: higher forecasts of the country's terms of trade, especially for oil; and a greater appetite for risk in global financial markets, despite the rise in US short-term rates. In addition, Latin America has become less vulnerable to possible changes in capital flows. This factor has been reinforced recently by accumulation of international reserves, and by the fact that the behavior of the region's external sectors appears to be grounded on more solid and permanent foundations.

These views have been incorporated into the base scenario of the new inflation forecasting, through higher forecasts for Colombia's main export products. The most striking change made was in the price of oil, the average for 2005 and 2006 being raised to $43.9, or $4 higher than forecast in the March report.

The forecast for growth of Colombia's main trading partners in 2005 remains at 3.8%.

Regarding external demand, the forecasts envisage no major changes for Colombia's main trading partners, despite higher oil prices and short-term interest rises. Thus, weighted growth remains at around 3.8%, lower than in 2004 but still satisfactory compared with historical behavior. Expected growth for 2006 stays at 3.6%. But the nontraditional exports' good performance to May inspires optimism for the rest of the year and hence an upward revision of their forecast made in the previous report.

With regard to capital flows, large increases are currently assumed in FDI for 2005 and 2006 (around $1,200 m and $700 m respectively) relative to March. These increases would be partly offset by a decline in short-term capital inflows for private and public sectors.

The above assumptions affect inflation forecasts through balance-of-payments and exchange-rate projections. The balance-of-payments satellite model for this report has reduced the forecasts for current-account deficit to 1.7% of GDP in 2005 and 2.5% in 2006. A smaller current-account deficit, coupled with better prospects of external financing, means that depreciation pressures in the coming quarters are expected to be weaker than was forecast in March.

Note that the above findings assume gradual rises in the Fed's intervention rate, to 4% by the end of this year or start of the next. Given these movements, the real short-term interest rate is expected to be very close to its historical average (2%), causing US monetary policy to adopt a neutral stance toward economic activity and inflation.

Based on the views of analysts and experts, this report does not expect the Fed to raise its rate much above 4%, at least not for a good part of 2006. For no lasting rise is forecast in US inflation, and growth is expected to moderate in 2006, reducing the risks of possible inflationary pressure.

2. Domestic assumptions

On the domestic front, the analysis set out in the preceding chapters suggests that the economy may remain on a path of expansion over 2005. For purpose of inflation forecasting, a 4% growth has been used for the full year, much the same as the rate assumed in the March report.

Forecasts of current-account deficit for 2005 and 2006 have been lowered to 1.7% and 2.5% respectively.

The first quarter's low GDP result (3.6%) does not alter the forecasts for the year, for it is attributable to a transitory shock (fewer working days) that was already anticipated in previous reports. For this same reason, growth for the second quarter is expected to be higher (4.7%). This forecast is supported by industry results to April, which show a real growth of 11% in production.

The first-quarter GDP result does not alter the 4% growth forecast for the year.

The factors expected to drive the economy over the rest of the year are not much different from those discussed in the March report; in some cases such as the external climate they may have improved slightly. Hence, external demand will continue to play a major part in the economy's performance, as will favorable terms of trade.

Regarding domestic demand, investment is estimated to continue leading growth, thanks in large part to public investment, which should rebound from its contraction in 2004. Private investment, too, is expected to make a significant contribution this year, given the favorable environment for technology renewal, created by low interest rates and the current level of the exchange rate. Proof of this may be seen in the strong growth of capital-goods imports over the first five months of the year.

The two biggest risks to the growth assumptions specified above are concentrated in household consumption and unclear trends in industry. Fears about private consumption are justified because of its poor performance in the past two years, including the first quarter of 2005. Nevertheless, improved labor and income conditions, greater availability of consumer credit at lower rates, and the recent rise in consumer confidence are grounds for optimism that the second half of 2005 will see some recovery in private consumption. Regarding industry, there is a possibility that the recent slowdown may be connected with some loss of foreign markets for specific products (leather, footwear, textiles), in which case sectoral growth for the rest of the year could be less than expected in this report.

For 2006, there is no reason to fear a sharp slowdown in economic growth,...

For 2006, there is no reason to fear a sharp slowdown in economic growth, provided the external setting remains in line with this report's predictions. Given these conditions, real domestic interest rates should not come under any great pressure, so that credit might continue to support private spending. Add to this the low level of indebtedness still enjoyed by firms and households, and support from a financial sector placed on a sound footing, as indicated by mid-2005 loan-quality measures.

In these circumstances, the output gap would tend to close gradually over the rest of this year and in 2006. Specifically, this report estimates that with GDP growing at 4%, the output gap will narrow by 0.3% over the second half. Its average level for the year would thus be -1.4%, similar to the March report's assumption of -1.7%. For 2006, the Bank's central model predicts an output gap of -0.7%. It goes without saying that gap estimates involve a high degree

...provided the external setting remains in line with this report's predictions.

of uncertainty and that, using some other methodologies, the gap would be much narrower than is envisaged in the central scenario described here.

3. Inflation forecasts

Medium- and long-term inflation forecasting for this report has been carried out using a new transmission-mechanism model (TMM) that tries to simulate the behavior of monetary-policy transmission channels in greater detail. The new model seeks, in particular, to capture more precisely the relationship between excess aggregate demand and prices and to improve estimation of exchange-rate pass-through. To this end, nonfood inflation has been separated into tradables, nontradables and regulated items, and equations have been defined for each of these sub-baskets. The sub-basket of regulated items has been introduced in an attempt to isolate price movements that may depend more on microeconomic administrative decisions than on macroeconomic fundamentals. The features of the new model are described in more detail in Box 3 .

The findings of the new transmission-mechanism model, using short-term projections to December, are summarized in Table 7. The new model estimates nonfood inflation indirectly, based on forecasts for the tradables, nontradables and regulated sub-baskets. For this reason, the present report's forecasts are not entirely comparable with the March report's, at least as regards specific levels.

The new forecasts show medium- and long-term trends similar to those obtained with the old model, in parallel exercises, using actual information

TABLE 7

CENTRAL TMM FORECASTS (*)
(PERCENTAGE)

	Headline inflation	Nonfood inflation	Food inflation	Nontradables inflation	Tradables inflation	Regulated inflation	Output gap
Jun-05	4.8	4.3	6.1	4.5	2.1	8.0	(1.5)
Sep-05	4.9	4.4	6.0	4.5	2.0	9.0	(1.3)
Dec-05	4.7	4.4	5.4	4.5	2.0	8.9	(1.2)
Mar-06	4.7	4.8	4.6	4.8	2.6	9.2	(1.0)
Jun-06	4.5	4.9	3.6	4.8	2.8	9.3	(0.8)
Sep-06	4.1	4.6	2.9	4.4	2.5	9.7	(0.6)
Dec-06	4.1	4.2	4.1	4.3	2.7	7.8	(0.4)
Mar-07	4.1	4.1	4.0	4.1	3.0	7.3	(0.3)
Jun-07	4.0	4.0	3.9	4.0	3.0	6.8	(0.2)

(*) Inflation forecasts are annual variations. The output gap is given as a percentage of potential GDP.
Source: Banco de la República.

to June. These trends do not differ significantly from those identified in the first quarter, since assumptions and outlooks for external and domestic situations did not change substantially from March to June.

Nonfood inflation for year-end 2005 and 2006 is forecast at 4.4% and 4.2% respectively.

In these circumstances, the new transmission-mechanism model using short-term projections to December shows nonfood inflation remaining stable at slightly below the target-range floor over the second half of 2005. It is also expected to stay relatively stable in 2006, with some increases at the start of year that should reverse subsequently. The point forecasts for the end of 2005 and 2006 are is 4.4% and 4.2% respetively.[14] On a broader horizon, inflation should continue falling, as suggested by the projection for the first half of 2007, which is presented for the first time in this report.

The March report's forecasts were substantially lower than the predictions made in the September and December 2004 reports. At the time, the reduction was attributed in part to an inflationary surprise not explained by any of the fundamentals identified in the central model. Second-quarter data have confirmed the reduction earlier in the year in annual nonfood inflation, which is why the current forecasts have stayed at the low levels registered three months ago. In other words, the inflationary surprise at the start of the year has not yet reversed, at least not as far as analysis of annual inflation is concerned.

For the second quarter, the nonfood CPI's three sub-baskets show no substantial changes in annual inflation. The sub-basket with the lowest inflation would continue to be tradables (2% in December), while nontradables inflation would remain at the target-range floor (4,5%). In view of fuel readjustments and some expected rises in transport and utility charges, regulated inflation would end the year far above target, at 8.9%.

Note however that if the tradables and nontradables baskets are regrouped to include the respective regulated items (fuel in tradables, utilities and public transport in nontradables), the inflation forecast for nonfood nontradables so defined would be 5.2% in December 2005; for nonfood it would be 2.4%.

Given the seasonal nature of inflation in Colombia and the lags in the different transmission channels, annual nonfood inflation is unlikely to change greatly over the rest of the year. This will hold true even if sizable changes occur in exchange-rate assumptions or in the pace of economic growth. In the latter case, the price effects would most probably occur at the start of next year, since firms and workers tend to concentrate the bulk of price adjustments and contract revisions at the beginning of the year.

---

14 The March report's projections were 4.7% and 4.1%. [p.80]

In 2006 the output gap will contribute less to reducing nontradables and headline inflation.

The stability of nonfood inflation for next year may be explained by several factors:

i. Nontradables inflation (excluding regulated items) stops falling, as it did at the start of this year. The reason for this is that growth in aggregate demand will lead to gradual closing of the output gap. According to the model, by the end of 2006 the gap will be -0.4%, against -1.6% in June this year (Table 7). Compared with the disinflationary effect produced at the start of 2005, by a wide negative gap, the effect next year will be much smaller or perhaps nonexistent.

ii. Tradables inflation rises, given that the models envisage pressures toward nominal exchange-rate depreciation, particularly in 2006. Even so, the pick-up in inflation would be moderate (70 bp over 2006, raising the rate to 2.7% by the end of the year), for several reasons, including the low exchange-rate pass-through estimated for the model.

iii. Regulated inflation falls to levels more in line with inflation targets announced by the Bank's Board of Directors. This fall assumes moderate rises in the domestic price of fuel next year.

iv. According to the transmission-mechanism model, inflation expectations will remain at or a little below their current levels and so help to keep nonfood inflation stable. The way they have been modeled, expectations depend in good part on lagged inflation, hence their level would drop substantially only after inflation has actually fallen. However, the Board of Directors' commitment to reduce inflation in the long run also plays some part in predicting expectations, in that it is assumed that the Board's target announcements are credible.

None of the four points specified above exhibited any substantial changes between March and June. It is not surprising therefore that, despite the change of model, the forecasts of nonfood inflation have changed little relative to March.

Although the models envisage pressures toward depreciation in 2006, their effect on inflation would be moderate.

Regarding headline inflation, the model to December 2005 predicts a figure of 4.7%, the same as was forecast in March. For December 2006, inflation is expected to run at 4.1%, also as predicted in March. The central and satellite models indicate that the climb in annual food inflation since the start of 2005 will come to an end between June and September. Starting from the fourth quarter, annual food inflation will be on a downward trend that will extend into 2006 and help reduce headline consumer inflation in 2006.

4. Risk balance

The greatest inflation risk is posed by possible pressure from demand.

A description follows of the main risk factors that may substantially affect the central forecast:

- Private consumption might grow faster than expected, since the effects of low real interest rates and ample availability of credit may be underestimated. Besides, credit availability might expand by more than expected, given the recent acceleration in financial savings (M3). Similarly, better employment quality might translate into higher consumption than is envisaged in the central path forecast, given the difficulty in capturing this phenomenon in our models.

- The dynamism of global demand poses a risk of oil prices exceeding the levels considered in the central scenario, in which case export income from oil will overshoot the base-scenario assumption. In the medium term, nontraditional exports will stand to benefit from higher growth among the country's trading partners such as Venezuela and Ecuador. In the long run, the outcome will depend on how hard the impact is on global growth and US growth in particular, and what repercussions this will have on the country's risk perception.

- Consistent with the foregoing, stronger medium-term output growth cannot be ruled out and would entail faster import expansion than predicted. The above considerations lead to the conclusion that there is a risk of the output gap closing faster than is envisaged in the central scenario.

- Forecasts for food prices are thought to face an upward bias, because the central scenario's expected prices are historically very low. It is also possible that the cycle of cattle liquidation will end sooner than expected, given recent developments in cattle slaughter. This would mean higher prices for beef and meat products, a group with a heavy weight in the CPI. Note that food forecasts involve much greater uncertainty than other items, because food behavior is traditionally volatile.

- Price projections for regulated goods and services might be underestimated, to the extent that oil prices turn out higher than is envisaged in projections of domestic-fuel prices.

Credit may expand faster than expected, given the recent acceleration in financial savings (M3).

- An opposite risk is may arise in the case of tradables inflation. The central scenario might be overestimated if import markets, chiefly of manufactured goods, become affected by the rise in cheap supply from China.

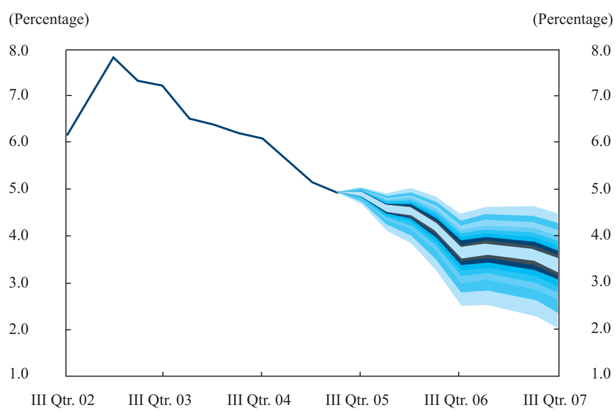
Based on the above risk balance, there is a strong likelihood that the 2005 inflation target will be met, and even a possibility that by the end of December inflation will be closer to the floor of the target range than its mid-point. As shown by Graph 47, there is a 99% probability that inflation will be running below 5% by the end of this year.

For 2006, too, the risk balance presents an upward bias in respect of the central path, consistent with the announcement made last year by the Bank's Board of Directors.[15] Specifically, there is a 62% probability that headline inflation in December 2006 will be below 4%.

Lastly, it should be pointed out that the risk balance presented in this section, like the central forecast path of the transmission-mechanisms model, is based on the assumption that monetary policy will be actively adjusted to ensure that long-term inflation targets will be met.

GRAPH 47

INFLATION FORECAST'S PROBABILITY DISTRIBUTION (FAN CHART)



ACCUMULATED PROBABILITY OF CONSUMER INFLATION FALLING IN THE RANGE INDICATED

Inflation	Probability (%)							
	2005		2006				2007	
	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.
Above a 6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Below a 6.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Below a 6.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Below a 5.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9
Below a 5.0	96.5	99.3	93.9	98.1	99.8	99.2	98.8	98.6
Below a 4.5	2.3	43.5	47.5	72.5	94.0	89.5	89.1	90.0
Below a 4.0	0.0	4.3	12.8	36.0	67.9	62.4	64.0	67.5

Source: Calculations by Banco de la República.

[15] In November 2004, the Bank's Board of Directors undertook to set a target for 2006 that would be neither above 5% nor below 3%.

NEW VERSION OF THE TRANSMISSION-MECHANISM MODEL

Macroeconomics Models Department
Economic Studies Division

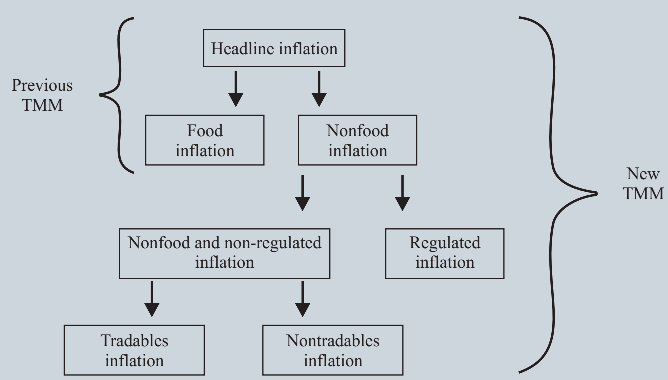
This box describes a new version of the transmission-mechanism model (TMM) that has been used for this report and will be henceforth as the Banco de la República's central policy and forecasting simulation model. With the new model, as with the one it replaces, the chief macroeconomic variables can be analyzed in relation to the central bank's policy. This is possible because the model's forecasting takes account of the monetary authority's responses to the different shocks felt by the economy.

Since its implementation in September 2001, the transmission-mechanism model has been modified and fine-tuned several times in the areas of specification, calibration and estimation of the parameters of the equations it consists of. As a policy simulation and analysis model, it should be capable of replicating stylized events of the Colombian economy, and its response to specific shocks, in terms of interest-rate and exchange-rate reactions, should be consistent.

In the previous version of the model, headline inflation was broken down into two groups: food inflation and nonfood inflation. Each group was characterized by a behavior equation (expectations-augmented Phillips curve). Supply shocks were introduced into the model through them.

The most important innovation of the new version is that nonfood inflation is broken down into three components: tradables inflation, nontradables inflation and regulated inflation. Figure B3.1 illustrates the new breakdown of inflation in the new TMM and its relationship to the previous model.

FIGURA B3.1
NEW TMM BREAKDOWN OF INFLATION



The new model's baskets are classified on the following criteria:

1. Tradables: defined as goods and services whose prices are sensitive to exchange-rate movements. This basket includes vehicles, medicines, toiletries, etc. It represents 25% of headline CPI and 35% of nonfood CPI.

2. Nontradables: defined as goods and services whose prices are not sensitive to the exchange rate, responding primarily to domestic conditions, especially demand movements and inflation expectations. This basket contains house rents, banking services, mechanical services, etc. It has a weight of 37% in headline inflation and 52% in nonfood CPI.

3. Regulated items are the goods and services whose prices are determined by the central government, local governments or regulating agencies. This basket contains transport, electricity, water supply, etc. It represents 9% of headline CPI and 13% of nonfood CPI.

The new version retains the previous model's main equations (aggregate demand, uncovered interest parity relationship and political rule equations).[1] But now each component of nonfood inflation (tradables, nontradables and regulated) is characterized by a behavior equation. The following are the behavior equations of tradable-goods inflation and nontradable-goods inflation: En el marco del nuevo modelo la clasificación de las nuevas canastas se hizo con base en los siguientes criterios:

(1) $$\pi_t^{NT} = 0.65\pi_{t-1}^{NT} + 0.35\pi_t^e + 0.29\hat{y}_t + \varepsilon_t^{\pi NT}$$

(2) $$\pi_t^T = 0.86\pi_{t-1}^T + 0.05(\pi_{t-1} + \delta_{t-1} - \delta_t^Z) + 0.09\pi_t^e + \varepsilon_t^{\pi T}$$

The equation for nontradables inflation (Equation 1) is an expectations-augmented Phillips curve. Apart from the autoregressive component, inflation depends equally on expected headline inflation π_t^e, output gap $\hat{y}_t$, and a component $\varepsilon_t^{\pi NT}$ that represents this sector's supply shocks.

The equation for tradables inflation (Equation 2) relates tradable inflation to external inflation π_t, nominal depreciation δ_t, real long-term depreciation δ^Z_t, and expected headline inflation π_t^e, $\varepsilon_t^{\pi T}$ is a component that represents this sector's supply shocks.

With the introduction of these new equations, the Colombian economy's stylized facts are captured better.

[1] For greater detail see the June 2003 Inflation Report, Banco de la República.

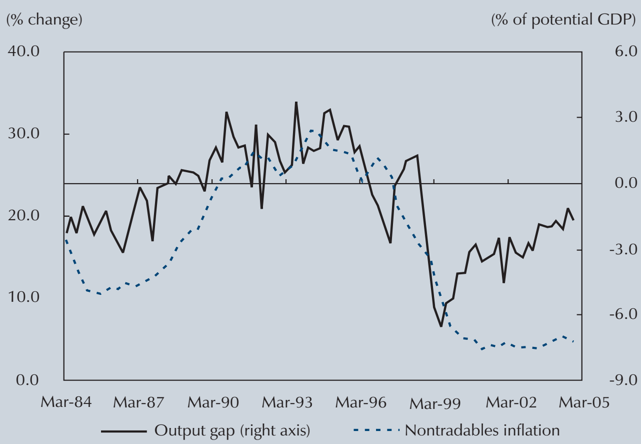
As may be appreciated from Graph B3.1, movements in nontradables inflation (nonfood, non-regulated) and the output gap are highly correlated. Hence, defining a Phillips curve for nontradables inflation would reflect the close relationship between these variables. Econometric estimates of Equation 1 show that this Phillips curve is significant.

Colombian data for tradables inflation (nonfood, non-regulated) show that there is a relatively close relationship between this variable and nominal depreciation (Graph B3.2). This is borne out by the statistical significance of the exchange rate in the equation for tradables inflation (Equation 2).

Moreover, breakdown of nonfood inflation into the new components provides the model with greater flexibility, in that supply shocks specific to each of the three sectors (tradables, nontradables and regulated) can be introduced through each equation's particular error component.

Graph B3.1

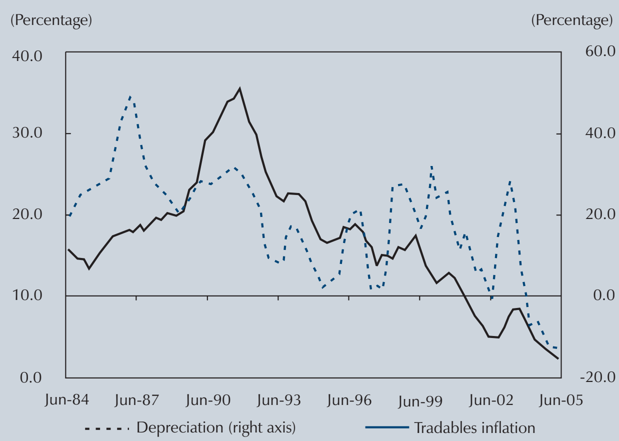
NONTRADABLES INFLATION(*) AND OUTPUT GAP



(*) Nonfood, non-regulated.
Source: DANE. Calculations by Banco de la República.

Graph B3.2

TRADABLES INFLATION (*) AND DEPRECIATION ANNUAL % CHANGE



(*) Nonfood, non-regulated.
Source: DANE. Calculations by Banco de la República.

LOCAL AND FOREIGN ANALYSTS' MACROECONOMIC PROJECTIONS

This annex reviews local and foreign analysts' latest projections of Colombia's main macroeconomic variables for 2005 and 2006. At the time of the poll, agents possessed information to June 2005.

I. Projections for 2005

Table A1 shows forecasts for 2005. On average, local analysts have improved their growth forecast made in the previous quarter by 11 bp to 3.9%, while foreign analysts have reduced theirs by 13 bp to 3.6%. Only one of the eleven analysts has reduced his forecast; three have raised theirs and the remaining seven have left theirs unchanged. This suggests that, in general, the forecasts have not been affected by DANE's further upward correction to the growth series, which was prompted by revision to the industrial-output series; the earlier correction had been made in the first quarter, because of revision to civil works.

TABLE A1
PROJECTIONS FOR 2005

	Real GDP growth %	CPI inflation %	Nominal exchange rate (year-end)	Nominal DTF %	Deficit (% of GDP)		Unemployment (13 cities) %
					Fiscal (CPS)	Currt. Acct.	
Local analysts							
Revista *Dinero*	3.8	5.2	2,420	7.7	2.5	n,d,	13.5
BBVA Ganadero	3.8	5.0	2,400	n,d,	2.5	-0.5	12.0
Citibank Colombia	4.0	5.0	2,300	7.2	2.5	n,d,	14.2
Suvalor-Corfinsura	3.7	5.1	2,420	7.3	2.8	n,d,	n,d,
Corfivalle	4.0	5.2	2,441	7.7	2.5	n,d,	13.0
ANIF	3.8	5.2	2,400	7.5	2.5	n,d,	12.5
Fedesarrollo	3.9	5.0	2,372	7.5	2.5	2.3	14.9
Average	**3.9**	**5.1**	**2,393**	**7.5**	**2.5**	**0.9**	**13.4**
Foreign analysts							
CS First Boston	3.5	5.0	2,359	n,d,	2.5	0.9	12.8
IDEA Global	4.3	5.0	2,350	7.5	2.1	1.1	12.5
J. P. Morgan Chase	3.0	4.9	2,450	7.3	2.4	1.1	13.5
Deutsche Bank	3.6	4.9	2,400	7.1	2.5	2.6	11.7
Average	**3.6**	**5.0**	**2,390**	**7.3**	**2.4**	**1.4**	**12.6**

Sources: Revista Dinero and Consensus Forecast.

The local analysts' inflation forecast has been decreased by 11 bp to 5.1%, the foreign analysts' by 15 bp to 5.0%. Considering that annual inflation in June was in fact 4.83%, these forecasts see inflation rising on average over the rest of the year. As in the previous quarter, all analysts count on the target being met. But this time their forecasts are at the midpoint of the range set by the Bank's Board of Directors for the end of the year (4.5% - 5.5%), whereas three months ago they stood in the upper part of the range.

The difference between local and foreign agents' exchange-rate forecasts is 4 pesos (a quarter ago it was 90 pesos). Nine of the eleven analysts have revised their forecasts down, and one has left it unchanged. On average, local analysts have lowered their forecasts by 128 pesos (having already done so by 12 pesos a quarter ago); foreign analysts have reduced theirs by 42 pesos (96 pesos a quarter ago). Exchange-rate forecasts have been steadily revised down this year. Thus, agents now expect the peso to devalue by 0.1% in 2005 from its year-end level in 2004, whereas a quarter ago the expected devaluation was 3.4%, and two quarters ago 5.6%. The maximum expected devaluation is now 2.5% and the minimum -3.9% (6.1% and -1% a quarter ago, and 11% and 1% two quarters ago). Four analysts expect an exchange-rate appreciation for (year-end) 2005, while a quarter ago only one thought this was a possibility, and two quarters ago no-one. This suggests that analysts have probably been surprised by the size and duration of the appreciation and have, little by little, incorporated this surprise into their forecasts.

For the DTF deposit rate, the local analysts' average is 7.5% and their foreign counterparts' 7.3% (a quarter ago they were 7.9% and 7.5% respectively, and two quarters ago 8.0% and 8.1%). The figures imply that analysts expect the DTF rate to run a little below its actual level at end of 2004. Six of the eleven analysts have revised down and three made no changes. The fiscal deficit is expected to be around 2.5% of GDP, similar to the levels forecast in the past nine months. Local forecasters see the current-account deficit running at 0.9% (2% a quarter ago); the foreigners place it at 1.4% (1.2% a quarter ago). Lastly, unemployment in thirteen cities is forecast to remain at 13.4% by local agents and at 12.6% by foreigners. Only one analyst has made a downward revision while nine have left their forecasts unchanged.

II. Projections for 2006

Table A2 presents a few forecasts for 2006. Local analysts predict a 3.9% growth rate, foreigners 3.7% (unchanged in the past two quarters). Inflation is revised down by locals analysts from 4.8% a quarter ago to 4.7%, and by foreign analysts from 5.2% to 5.1%. On average, a 5.1% annual devaluation is expected by year-end 2006, relative to forecasts for year-end 2005; a quarter ago the expected rate was 10%, and two quarters ago 6%. Analysts thus expect the market exchange rate to stand at 2,513 pesos by the end of 2006, approximately its actual rate in July 2002; a quarter ago they had expected it to be 2,643 pesos, and two quarters ago 2,685 pesos.

These forecasts imply a 5.2% devaluation of the peso in 2006, relative to year-end 2004 (10% a quarter ago and 12% two quarters ago). In contrast to the situation presented by the past two quarters' forecasts, there are no longer any large differences in the distribution of this devaluation.

Table A2
PROJECTIONS FOR 2006

	Real GDP growth %	CPI inflation %	Nominal exchange rate (year-end)
Local analysts			
Revista *Dinero*	3.4	5.0	2,589
BBVA Ganadero	3.5	4.7	2,561
Citibank Colombia	3.9	4.5	2,398
Suvalor-Corfinsura	3.8	4.7	n,d,
Corfivalle	4.5	5.0	2,532
ANIF	4.0	4.7	2,500
Fedesarrollo	4.0	4.0	2,556
Average	**3.9**	**4.7**	**2,523**
Foreign analysts			
CS First Boston	3.5	5.0	2,426
IDEA Global	4.0	4.4	2,420
J, P, Morgan Chase	3.3	4.9	2,600
Deutsche Bank	3.8	6.0	2,569
Average	**3.7**	**5.1**	**2,504**

Sources: Revista Dinero and Consensus Forecast.

All analysts see the devaluation occurring mostly in 2006 (a quarter ago two saw it occurring mostly in 2005, one equally in 2005 and 2006 and seven mostly in 2006). There has thus been a change in expectations, for, while all analysts now think the devaluation will be concentrated in 2006, at the start of the year most thought it would be concentrated in 2005. This development, too, suggests that the peso's appreciation has lasted much longer than analysts thought it would at the start of the year.

MONETARY-POLICY DECISIONS IN THE PAST THREE MONTHS

Background: March 2005 Inflation Report

In the first quarter of 2005, the Board of Directors left the Bank's intervention-rate structure unchanged and kept the liquidity-tightening auctions and window closed. The latter measure, adopted on December 17, 2004, induced a fall of around 25 bp in the interbank rate in January.

The above decisions were taken in the context of lower nontradables inflation and lower inflation expectations. These developments, coupled with the effect of the peso's appreciation on tradables inflation, contributed to sharp falls in headline and core inflation over the first quarter. In addition, model findings indicated a great likelihood that the 2005 target (between 4.5% and 5.5%) would be met and that inflation would decline toward the target range announced for 2006 (between 3% and 5%). This would occur even with a moderate devaluation of the peso in 2006 and would be consistent with the short-term (interbank) interest rate remaining at or slightly below levels prevailing at that time (6.3.%). In the longer run, the interbank rate should rise in real terms.

Exchange-rate projections showed no tendency in the Colombia peso to depreciate in 2005, given our main trading partners' robust growth (albeit slower than in 2004), and the upward revision to terms-of-trade projections. In addition, ample liquidity was expected to be maintained in international markets, without any substantial pick-ups in country-risk premiums, even with the Fed gradually raising interest rates. However, balance-of-payments projections indicated that the above situation would be transitory, and that devaluation pressures might build up once more, in 2006.

Although these findings suggested the possibility of easing monetary policy, the Bank's Board of Directors felt there were risks that precluded adopting a looser monetary posture. The risks were mainly associated with the possibility of an increase in economic growth that entailed faster closing of the output gap, and with the first-quarter inflationary surprise that could not be explained by the models, making it unknown whether it was permanent or transitory. There was also doubt about future movements in the exchange rate. The Board of Directors therefore decided it was necessary to collect more complete information before making any monetary-policy change.

The Board also retained the scheme of discretionary foreign-exchange intervention to avert excessive appreciation of the peso, which would adversely affect the economy's tradables sectors and might induce future sharp exchange-rate rises, with possible destabilizing effects on inflation and expected inflation.

In implementing this latter policy during the first quarter of 2005, the Banco de la República made discretionary purchases worth $773.8 m in the foreign-exchange market. Over the same period, it also sold foreign exchange worth $1,250 m to the national government; this operation was sterilized through purchases of TES B securities for an equivalent sum in pesos (2,933 billion pesos). The government announced that these reserves would be used to prepay foreign debt in 2005.

Monetary-policy decisions in the second quarter of 2005

Inflation indicators in June confirmed the main trends observed since the start of the year: lower core inflation and inflation expectations, and great likelihood of meeting the 2005 target (between 4.5% and 5.5%). In addition, Colombia's economy continued in an expansion phase, as evidenced by first-quarter GDP growth (taking into account the smaller number of working days) and most other available economic indicators. The economy was thus entering on its third year of growing by around 4%, driven particularly by investment and exports.

Based on the technical team's analyses, the Board assessed the behavior of inflation expectations, costs and wages, the exchange rate and the output gap, as the chief determinants of inflation and its possible path over the next six to eight quarters, the time horizon for monetary policy to make its effects felt. This assessment was supplemented by the findings of the central forecasting model, which showed that there was great likelihood of meeting the 2005 inflation target (even in the lower half of the target range) and lowering inflation in 2006 toward the range announced for the point target (3% to 5%). Given low depreciation in 2006, this finding was consistent with maintaining a low short-term (interbank) interest rate, between 6.2.% and 6.4%. The model showed that in the medium and long term monetary policy should abandon its expansionary stance and return to a neutral stance.

On the basis of the above elements, the Board decided to leave unchanged its monetary-policy stance, reflected in the current intervention rates (Table A), at the same time as keeping closed the short-term liquidity-tightening window and auctions.

The main reasons for the Board's decision to maintain the monetary-policy stance were the following:

- Inflation expectations beyond a year remained above or at the top of the range announced for the 2006 target range.

- There was considerable uncertainty about two variables that were determinants of the inflation-forecasting findings: the exchange rate and the output gap. Although no big exchange-rate depreciation was expected for 2005, there were risk factors for 2006 that could imply a bigger exchange-rate adjustment than was predicted in the central scenario. Those risk factors were associated with elections in several Latin American countries, oil prices and persistent macroeconomic imbalances in the United States.

Table A
LATEST CHANGES TO BANCO DE LA REPÚBLICA'S INTERVENTION RATES
(Percentage)

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

n.a. Not applicable. The Bank suspended (auction and Lombard) monetary-tightening operations from December 22, 2004.
Source: Banco de la República.

- There was also uncertainty about the output gap's level and pace of closing. Several indicators pointed to stronger economic growth, expansion in consumer and commercial loans, and observed acceleration in the growth of private deposits and monetary aggregates.

- In several sectors (construction, retail trade and industry) significant real pay rises were observed in the past six months. Though these rises were apparently accommodated through labor-productivity gains, they could subsequently signify repressed cost pressures if productivity improvements were not maintained.

- The forecasts indicated that nonfood nontradables inflation would be running at 5.5% in December 2005 and would remain at this level at least over the first part of 2006. In these circumstances, it could be more difficult to accommodate sudden increases in tradables inflation if the exchange rate were to rise sharply.

- Various interest rates of the economy had fallen substantially in the previous month. Among them, the DTF deposit rate had dropped by around 20 bp to 7.05%. Other, longer-term rates had also decreased appreciably over the previous quarter: for example, the TES-2014 rate had declined by about 200 bp in real terms (240 bp in nominal terms), to a record low. Insofar as these interest rates reflected an opportunity cost for the economy's investment funds, those falls gave a further boost to economic activity.

- As stated earlier, simulations with the central forecasting model indicated that in the medium and long run monetary policy should abandon its expansionary stance and return to a neutral position. Hence, any current reduction in the intervention interest rates would be transitory and would have to be reversed in the quarters ahead, to the extent that there were no changes in the fundamentals determining inflationary behavior. In those circumstances, such a policy shift would increase the volatility of short-term interest rates, which, transmitted to TES interest rates, could have negative effects on financial stability. This was considered to be particularly relevant, given the possibility of over-reactions in the TES market, the large share of TES investments in the financial system's assets and their importance to government financing.

- Lastly, the Board analyzed the monetary aggregates' behavior and found no reason to alter its view that the intervention rates in force were appropriate for supplying the liquidity the economy needed.

Furthermore, based on evaluation of the exchange-rate situation, balance-of-payments projections and recent information on FDI flows, the Board decided to retain the scheme of discretionary intervention in the exchange market with the aim of contributing to its gradual adjustment and averting excessive appreciation of the exchange rate. In implementing this policy, the Bank bought $841.3 m during the second quarter, bringing the total of discretionary purchases so far this year to $1,615 m (Table B).

Lastly, in June the Board introduced a new liquidity-supplying scheme whereby the Directorate General of Public Credit and National Treasury deposits the entirety of its resources at market rates in the Banco de la República, and the Bank distributes liquidity to the market according to monetary projections, through Repo operations. These projections will take into account the provisions of liquidity needed for keeping short-term rates at levels compatible with the inflation target. For this reason, the scheme is consistent with inflation targeting, while providing a means of fostering the development of the monetary and public-debt market.

The new scheme is the outcome of a coordinated effort between the Ministry of Finance and Public Credit and the Banco de la República.
La JDBR también mantuvo el esquema de intervención cambiaria discrecional con el fin de evitar

Table B
BANCO DE LA REPÚBLICA'S CURRENCY OPERATIONS

	2004	2005						
		January	February	March	April	May	June	Jan.-June Total
Purchases	**2,904.9**	**267.9**	**335.5**	**170.04**	**407.7**	**151.3**	**282.4**	**1,615.0**
Put options	1,579.6	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0
for int'l. reserve accumulation	1,399.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
for volatility control	179.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Discretionary intervention	**1,325.3**	**267.9**	**335.5**	**170.04**	**407.7**	**151.3**	**282.4**	**1,615.0**
Sales	**500.0**	**0.0**	**250.0**	**1,000.0**	**0.0**	**0.0**	**0.0**	**1,250.0**
National government	500.0	0.0	250.0	1,000.0	0.0	0.0	0.0	1,250.0
Net purchases	**2.404.9**	**267.9**	**85.5**	**(829.6)**	**407.7**	**151.3**	**282.4**	**365.0**

SSource: Banco de la República.