Inflation
Report

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Banco de la República

(Central Bank of Colombia)

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The Inflation Targeting Strategy in Colombia

Objectives

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

Horizon and Implementation

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

The Decision-making Process

Monetary policy decisions are based on an analysis of the current state of the economy and its prospects for the future and on an assessment of the forecast for inflation compared to the targets. If the assessment suggests with enough certainty that, under current monetary-policy conditions, inflation will deviate from its target during the course of that policy, and the deviation would not be caused by temporary shocks, the BDBR modifies the stance of its policy. This is done primarily through changes in the intervention interest rate (charged by Banco de la República on short-term liquidity operations).

Communication and Transparency

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

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Inflation Summary

- In December, annual consumer inflation was 4.48% (as opposed to 4.58% in September). This is at the center of the target range for 2006. Although the growth in inflation at December was consistent with expectations, the rise in non-food consumer prices (CPI) and other core inflation indicators, which averaged 4.52%, was a surprise.

- The increase in non-food inflation is explained primarily by non-tradable goods and services, excluding food and regulated items. Tradable inflation remained stable, consistent with the trend in the exchange rate.

- Consumer inflation for the year as a whole declined from 4.86% in 2005 to 4.48% in 2006, primarily due to less of an increase in prices for perishable foods and tradable goods. In the case of tradables, the reduction was attributed to an adjustment in long-distance telephone rates. Non-tradable inflation, excluding food and regulated items, went from 4.57% to 4.75%.

- Third-quarter GDP growth (7.7%) surpassed expectations. Most of the increase was in private GDP, which was up by 8.7%. The rise in domestic demand (9.7%) was due largely to further growth in household consumption and investments, especially in machinery and equipment (19.3% during the quarter) and in construction and buildings (24.5%). Total exports continued to perform well and accelerated in real terms.

- The forecasts for growth during 2007 are revised upward in this report. Domestic demand should continue to rise at a vigorous pace, given the momentum in private consumption and investment. Compared to 2006, more of an increase in public consumption is expected. Accordingly, economic growth during 2007 should be somewhere between 4.4% and 6.6%.

- External conditions are expected to continue to favor good economic performance in Colombia throughout 2007. A slight decline in demand on the part of our trading partners is anticipated (with respect to 2006), but terms of trade should remain high, although not at the level seen in recent years. Risk perception on the financial markets would stay relatively low, thanks to ample liquidity in the international context. Given this scenario, the United States Federal Reserve Bank (Fed) is not expected to raise interest rates.

- The quick expansion in credit continues. The peso loan portfolio in the financial system is up by 34.9% and consumer loans, by 48.3%. Some of this performance is due to the increase in credit supply created when credit institutions shifted a portion of their portfolios from investments in TES to loans. In fact, between March and December 2006, they reduced their TES holdings by nearly $4.2 trillion pesos.

- Part of the Bank's interest rate hikes (150 basis points (bp) between April and December) were passed through to the market rates. Interest rates on time certificates of deposit at different maturities rose by 87 bp, on average, during that period. Real lending rates on preferred and treasury loans increased, but the others are down (ordinary, consumer and credit card loans).

Policy Decisions

- The following are the major changes with respect to the inflation analysis in the September report:

  - Evidence of acceleration in aggregate demand emerged, raising the growth forecasts for 2006 and 2007.

  - The late third-quarter reduction in non-tradable inflation without food and regulated items was reversed at the end of 2006. As a result, non-tradable inflation without food and regulated items finished the year at 4.75%, which is more than in 2005 (4.57%). The average for core inflation went from 4.25% in September to 4.51% in December, continuing its upward trend.

  - The peso continued to appreciate, raising the exchange rate from $2,400 per dollar in September to $2,238 at the end of December.

  - Inflation was 4.48% in 2006, which is slightly below the forecast published in the September edition of this report (4.6%). In other words, the inflation target was met at the center of the 2006 range (between 4% and 5%).

- These elements, on the whole, imply an increased risk of inflationary pressure compared to the pressure discussed in the September report. This is due to the following reasons:

:

  - The next few quarters are expected to see no significant slowdown in the growth of aggregate demand. External conditions remain favorable, real domestic interest rates are historically low, and credit continues to grow at a fast pace, particularly consumer loans.

- The calculation on *rate of installed capacity use* is highly uncertain. However, different methods suggest it continues to increase compared to the estimates published in the September inflation report. This means the margin that existed previously with respect to the *rate of use consistent with price stability* continues to decline.

- Although compliance with the inflation target for the third year in a row increases the credibility of the 2007 target, total inflation anticipated during the first half of the year could have a negative impact on inflationary expectations. In fact, the forecasts indicate it will be above 4.5% during that period (the top of the target range for the year). This would be due to food prices (affected by El Niño weather) and prices for regulated items (because of the low levels compared to 2006). These effects are temporary and would tend to be reversed during the second half of the year. However, if transmitted to inflationary expectations, they could have a more permanent impact.

- Although movement in the exchange rate is a highly uncertain variable, tradable inflation is not expected to make a further contribution to reducing total inflation.

- Given this context, the BDBR decided to continue to reduce the Bank's monetary incentive by adding 25 bp to the intervention interest rate on three occasions: in October, December and January. The last of these increases placed the base rate for expansion auctions at 7.75%.

- The decision to continue the monetary standardization process ratifies the Board's commitment to adopting the measures required to ensure that inflation converges towards its long-term target. The gradual elimination of monetary incentives does not affect the Colombian economy's capacity for growth in terms of its potential. On the contrary, it lends continuity and sustainability to the economy.

- There are risks associated with the external context that can raise the exchange rate and the country-risk premium. These could originate with expectations of additional rate hikes by the Fed, more of a downturn in commodity prices, or a reduction in capital flows to the emerging economies, which could heighten the risk of inflation, given the impact of peso depreciation on tradable inflation and possibly on expectations of inflation. Some of these events could have a negative impact on economic growth in Colombia (as would be the case with a drop in terms of trade), thus reducing potential demand-pull inflationary pressures. The country's monetary authority must consider these risks and identify their possible effect on inflation forecasts.

- The early months of 2007 are expected to see a strong influx of foreign exchange from the sale of public-sector assets. This monetization could unnecessarily and temporarily aggravate interest rate volatility and the prices of other assets. Therefore, the Board of Directors felt it was appropriate to announce its intention to intervene in the exchange market on a mass scale. In any case, this will be done in a way that does not move the Bank's interest rate away from a level that is compatible with achieving the inflation targets for 2007 and 2008.

Board of Directors, Banco de la República

INFLATION REPORT

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I. The Current Economic Situation

Domestic growth surpassed expectations. The sector indicators herald strong growth in the fourth quarter and allow for higher estimates of GDP growth in 2006.

The force of private consumption during the second half of the year was surprising and contributed to a sharp increase in loans. The momentum in investments would have raised their share, as a percentage of GDP, to historic highs in 2006.

The external context remained favorable. The world economy enjoyed plenty of liquidity. This allowed for a major influx of capital, particularly in the form of foreign direct investment. Some trading partners experienced more growth than was forecast.

The credit channel would have been reestablished entirely. The sale of investments was an important source of funds for banks. In this context, only a portion of the Bank's interest rate hikes were passed on to the market rates. The interest rates on consumer loans declined.

Inflation dropped with respect to 2005 and the target was met for the third year in a row. This gradually lowered expectations of inflation and enhanced the credibility of the country's monetary policy. By the end of the year, the rise in non-tradable inflation without food or regulated items was more than had been anticipated in the September report.

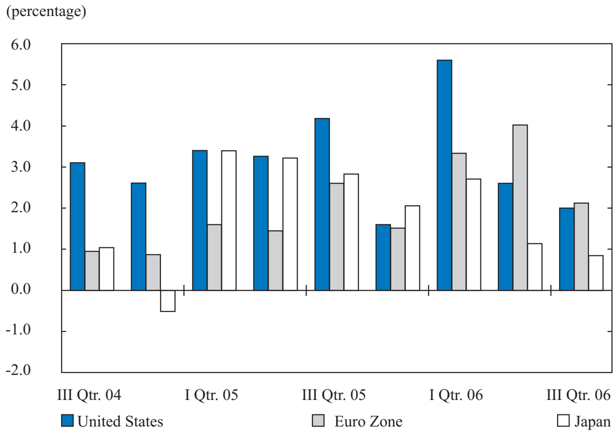
A. External Context

World economic growth during the second half of the year was more moderate, due to less growth in the United States and in other developed economies. On the contrary, the emerging economies continued to perform extremely well. The slowdown in economic growth in the United States and the unexpected decline in prices for raw materials curbed the upward tendency in inflation in that country. Given this context, there were no interest rate hikes.

Growth in the United States economy slowed during the second half of the year. It was 2.0% in the third quarter (annualized quarterly), because of deceleration in the housing market and the automotive sector (Graph 1). In the

Graph 1

Annualized Quarterly GDP Growth: United States, the Euro Zone and Japan



Source: Datastream.

fourth quarter, the indicators were mixed; the primary industrial indicators continued to weaken, although less so than in previous quarters, while some of the figures for consumption, the job market and housing picked up, possibly because of the mild winter[1].

The euro zone and Japan grew less during the second half of 2006 than at the beginning of the year. In the third quarter, economic growth was 2.1% in Europe and 0.84% in Japan. The sharp slowdown in the pace of Japanese economic growth is explained by the limited increase in consumption; however, this situation is expected to be temporary, given excellent terms for financing and an improvement in the job market. The latest indicators of business confidence, industrial production and household expectations for both economies are still relatively favorable.

The emerging economies continued to see strong growth during the fourth quarter. The increase in the Chinese economy was 10.4%, which slightly exceeds the third-quarter figure. The slowdown in economic growth in the United States and the policies adopted by that country's monetary authority to control growth in certain sectors have yet to exert a major impact on economy. Moreover, the performance of the Latin American economies, particularly Colombia's major trading partners, continued to be highly favorable, with growth rates similar to those seen during the first half of the year. In the third quarter, gross domestic product (GDP) was up by 10.4% in Venezuela and by 4.6% in Ecuador.

During the final months of 2006, inflation in the developed economies tended to slow in line with the deceleration in economic growth and the drop in prices for certain raw materials. Nonetheless, core inflation in the United States at December (2.6% annual) was still above what the monetary authority regards as its implicit targets (Graph 2)[2]. Also, wage hikes and

1 The preliminary figure for US economic growth in the fourth quarter (3.5%) was announced at the time this report was being written and exceeds the market's expectations. Residential investment continued to decline, and there was no growth in other types of investment. The increase in consumption was good, surpassing the forecasts. Economic growth for the entire year would have been 3.4%.

2 The implicit consumption deflater in the United States was 2.2% in December and slowed a bit as of mid-year. The United States Federal Reserve Bank follows this indicator closely. It is as important to monetary-policy decisions as the CPI.

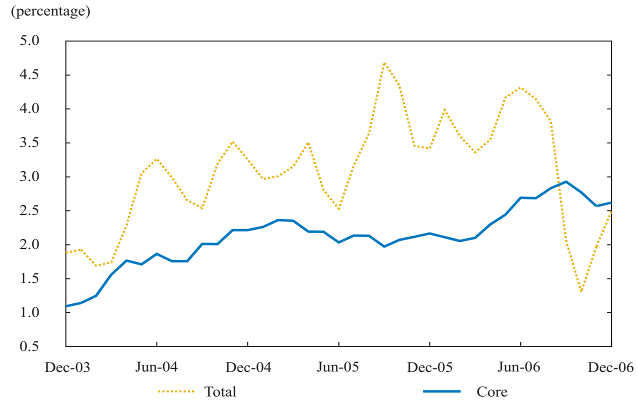
considerable use of installed capacity are still a major source of concern. As for the euro zone and Japan, there was less inflationary pressure, although the risks for the future are still there.

In this context of favorable world economic growth, commodity prices fell at the end of December. Some analysts see the drop as temporary, given larger inventories of certain commodities such as oil, thanks to mild winter weather in Europe and the United States (Graph 3). However, it might be a longer-term tendency related to more efficient use of these raw materials in the developed economies and a shift in demand towards the nearest substitutes, such as bio-fuels. In fact, 2006 did not see much of an increase in the global demand for fuel, which has not been the case for a number of years. The aforementioned drop in prices also would be associated with the role of investment funds; their speculative operations would have made these markets more volatile.

Despite the decline in commodity prices, most of the Latin American currencies were relatively stable (Graph 4). The same was true of risk premiums; their low levels indicate investors are still confident about the performance of the regional economies. Ecuador is, however, a different

Graph 2

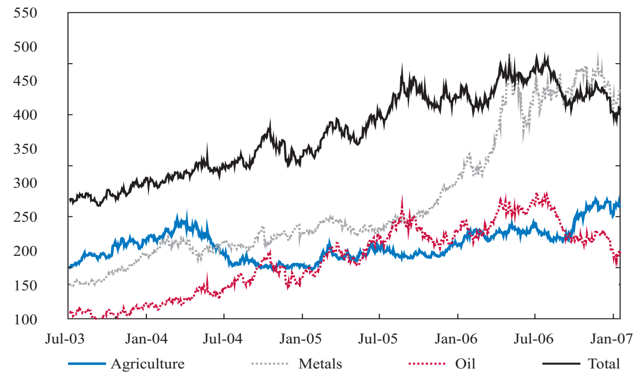
Annual Consumer Inflation in the United Status



Source: Datastream.

Graph 3

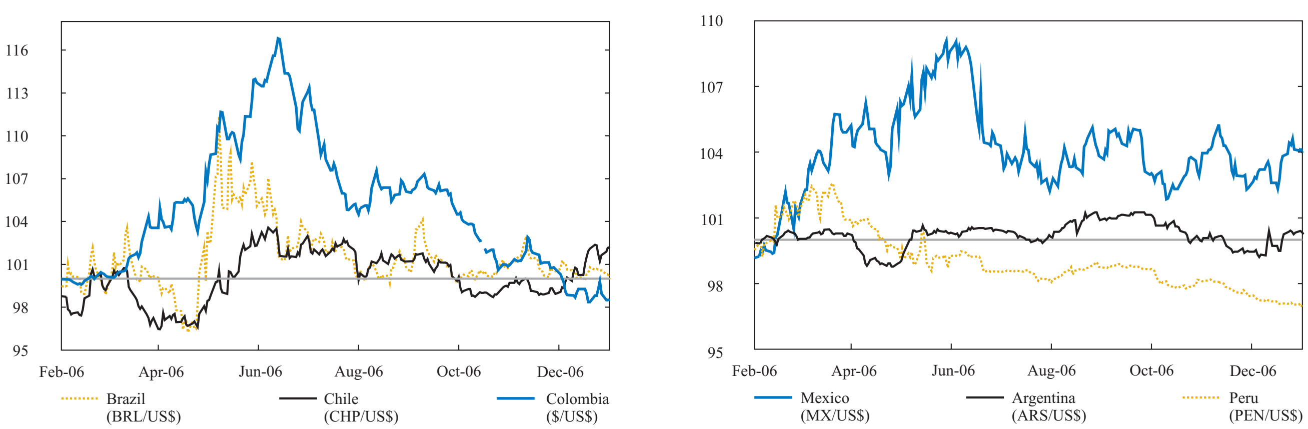
Commodities Index, Goldman Sachs



Source: Datastream.

Graph 4

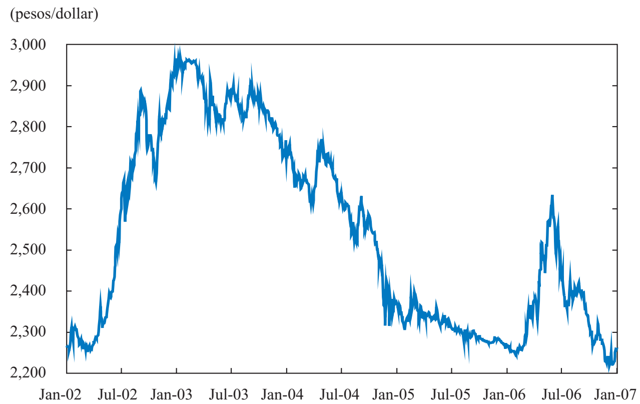
Nominal Exchange Rate of Different Latin American Currencies against the Dollar (Index: February 15, 2006 = 100)



Source: Datastream.

Graph 5

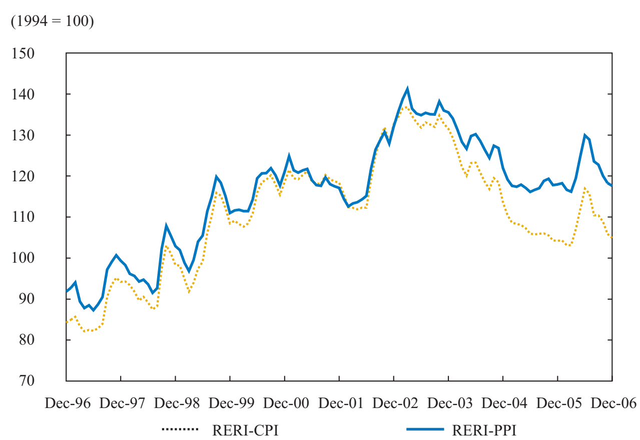
Representative Market Rate a/



a/ To January 31.
Source: Banco de la República.

Graph 6

Real Exchange Rate Index a/



a/ Calculated with the PPI.
Source: Banco de la República.

Graph 7

Country-risk Premium: EMBI+ Emerging Economies

Source: Bloomberg.

case; its economy was downgraded in recent weeks by Standard and Poor's and Fitch, after its risk premium rose by 500 basis points (bp) compared to the levels observed in November 2006.

B. Financial Variables

1. The Exchange Rate

The behavior of the exchange rate in 2006 was characterized by high volatility in the market. This also was true of the other Latin American economies, reflecting the uncertainty international investors faced with the unexpected changes in international interest rates (Graph 5 and 6).

At the start of 2006, the peso looked as though it would continue to gain strength, following the tendency observed since 2003 and demonstrating international investors' preference for domestic debt securities from emerging markets. The reduction in the spread on the external debt of various countries in the region was a manifestation of that tendency (Graph 7). However, it reversed sharply in the second quarter of the year, when the risk of external interest rate hikes increased, prompting outflows of private capital from the country and fewer portfolio inflows. The foregoing translated into a generalized increase in country-risk premiums throughout the region, with increases of nearly 70 bp in the emerging markets index for Colombia (EMBI in Spanish) between January and June. In June, the dollar was the highest it had been during the entire year (Col$2,634); average devaluation on that date was close to 4.0% (Table 1).

As threats of further interest rate hikes by the Fed were dispelled and good conditions in the world economy became evident, particularly in the emerging economies (high terms of trade and strong demand worldwide), the risk perception on international markets declined. The increased demand for bonds from emerging economies is a reflection of that decline, as is the generalized reduction in EMBIs. Added to the news about sales of state-

Table 1

Real and Nominal Exchange Rate in 200

	Nominal Exchange Rate			Real Exchange Rate	
	Average	End of	Average Annual Variation (%)	Index	Annual Variation (%)
2004	2,626.2	2,389.8	(14.1)	122.7	(9.7)
2005	2,320.8	2,284.2	(5.5)	118.9	(3.1)
2006	**2,358.0**	**2,238.8**	**1.6**	**118.8**	**0.0**
January-March	2,264.1	2,290.0	(3.8)	118.1	(0.6)
April-June	2,431.5	2,633.1	3.9	125.6	6.6
July-September	2,433.4	2,394.3	5.4	126.1	6.5
October-December	2,305.4	2,238.8	0.9	119.9	0.5

Source: Banco de la República.

owned companies in Colombia and the growing increase in foreign investment, this moved the expectations of these agents towards peso appreciation, particularly during the last two months of the year. Between July and December, the exchange rate dropped by Col$394, closing out the year at $2,239 per dollar.

The average rate of exchange in 2006 was $2,358 per dollar, with 1.6% annual average nominal devaluation. However, in real terms, there were no variations in the exchange-rate indicator at the close of the year (Graph 6 and Table 1).

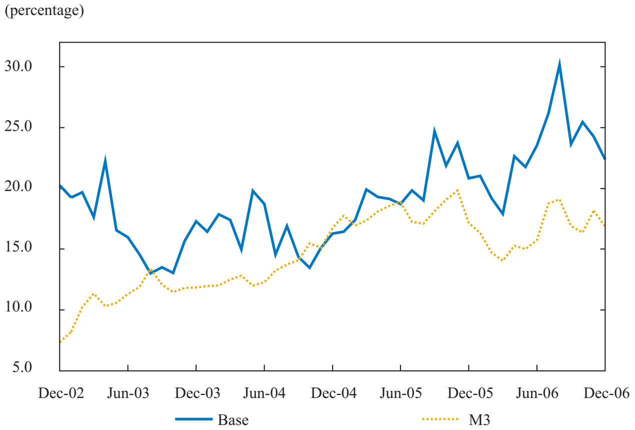
2. Monetary Aggregates and Credit

Monetary aggregates continued to grow at a high rate during the final months of 2006, although less sp than in the third quarter. The expansion in these aggregates accelerated sharply at the start of the second quarter of 2006, probably because of an increase in the supply of deposits from households and companies that reduced their stock and government bond positions given the devaluation in stocks and bonds during that quarter (Graph 8).

Base money increased by $4.2 trillion (t) in 2006, primarily due to repo expansion operations with Banco de la República ($2.6 t) and cash withdrawals by the government ($1.2 t). The Bank made no discretional purchases of foreign exchange during the

Graph 8

Monetary Aggregates, Monthly Average Annual Growth Rate



Source: Banco de la República.

last nine months of the year, although US$190 million (m) in foreign currency were purchased through put options to control volatility, all during the fourth quarter of 2006.

Contrary to the restrained growth in base money and, to a lesser extent, in M3, cash continued to increase sharply during the final months of 2006, when it was up by nearly 30%. The momentum in the demand for cash could be the result of several factors, such as the growing uncertainty generated by the extreme volatility in financial assets at mid-year and the acceleration in economic activity, particularly private consumption, during the third and fourth quarters. Growth in the purchase/sale of luxury homes could be another reason for the rising demand for cash.

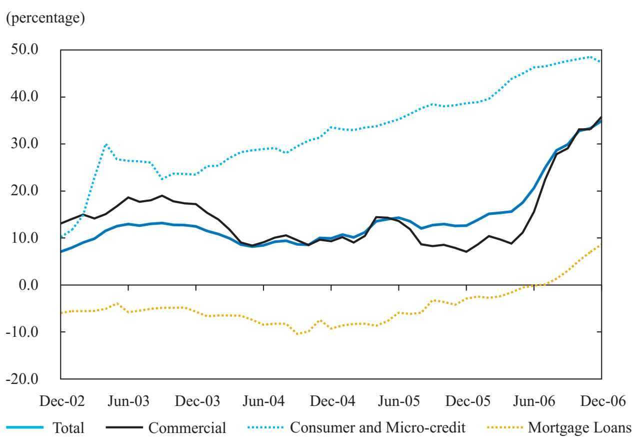
Credit continued to grow at an accelerated pace during the third and fourth quarters of 2006. By the end of the year, the annual increase in credit was 35% in nominal terms. This expansion applies to all types of loans, including mortgage loans, which registered an annualized monthly increase of nearly 20% by the end of the year (equivalent to 9% annual growth) (Graph 9).

As these figures show, the growth in credit during the fourth quarter continued to exceed the increase in monetary aggregates by a wide margin. This was particularly true of the growth in liabilities subject to reserve requirements (LSR). Part of the gap (16% increase in LSR compared to 35% in loans) was covered with disinvestments by lending institutions (especially in TES). They reduced their TES holdings by nearly $4.2 t between March and December 2006. This represents approximately 22% of the growth in the financial system's total loan portfolio during the same period (Graph 10).

The momentum in credit during 2006 led to a sizeable increase in the financial-depth indicators (loan portfolio/GDP) for consumer and commercial loans. By the end of the year, they were near the highs registered during the last ten years (Graph 11, Panel A). However, in the case of the mortgage loan portfolio, the extent of financial depth at year's end was still quite low. For this reason, in historic terms, there is relatively limited depth in broader measurements such as the household portfolio (consumer + mortgage loans) and the total loan portfolio (Graph 11, Panel B).

GRAPH 9

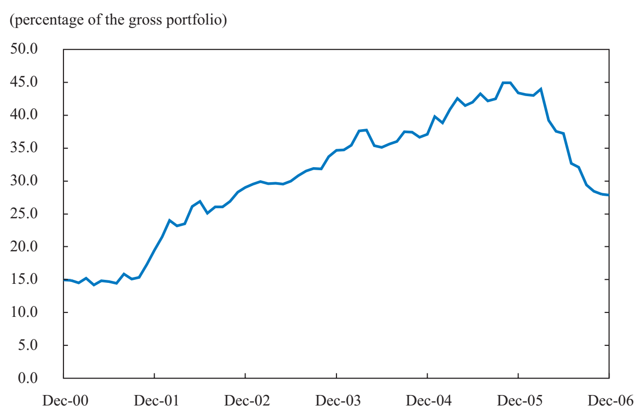
GROSS PORTFOLIO L/C:
ANNUAL GROWTH RATE



Source: Office of the National Superintendent of Financial Institutions. Calculations by Banco de la República.

GRAPH 10

TES HOLDINGS OF CREDIT INSTITUTIONS



Source: Office of the National Superintendent of Financial Institutions and Banco de la República.

The strong growth in credit throughout the year implied no deterioration in loan portfolio quality. In fact, the percentage of non-performing loans as a share of all loans in the financial system was less than 3% in November. This is well below the levels registered at the start of the current decade (10%).

3. Interest Rates

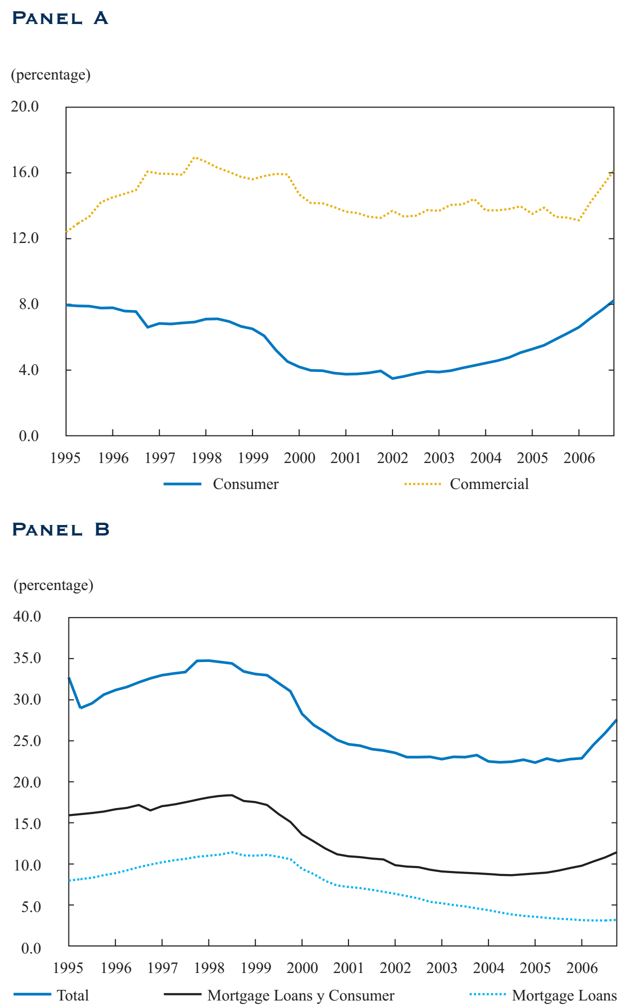
The Board of Directors (BRBD) raised the Bank's intervention interest rate on two occasions during the fourth quarter, by a total of 50 bp. In all, ever since the Bank began its hikes in April, these rates have increased by 150 bp, placing the expansion auction rate at 7.50% by December[3]. The market rates reflected these increases partially and in a mixed way. The pass through to term deposit rates (CDs) was only 50%. For example, the DTF (CD at 90 days) registered an increase of 74 bp during the period from April to December, mostly between the second and third quarters. In the fourth quarter, the increases were much less, closing out the year at 6.75% (Box 1).

Considering all deposit-taking in the form of CDs at various maturities, the increase in rates was slightly higher: 87 bp on average (Graph 12). The biggest adjustment in CD rates was for 360 days or more, with increases of 200 bp between April and December. Similarly, the increase in rates for other maturities was more pronounced in the second and third quarters, than at the end of the year.

[3] At its meeting in late January 2007, the Board of Directors ruled another 25 bp increase in the Bank's intervention rates, placing the expansion auction rate at 7.75%. A more detailed explanation of that decision can be found at the start of this report, in section on inflation situation analysis and policy decisions.

GRAPH 11

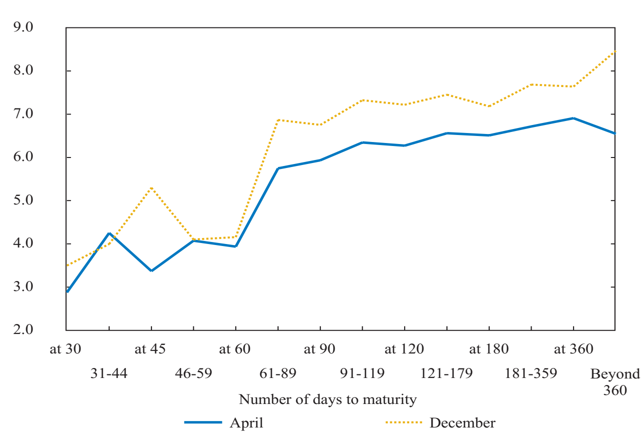
GROSS PORTFOLIO/GDP



Note: The figures are quarterly.
Source: Office of the National Superintendent of Financial Institutions and DANE. Calculations by Banco de la República.

GRAPH 12

CD CURVE: APRIL AND DECEMBER 2006

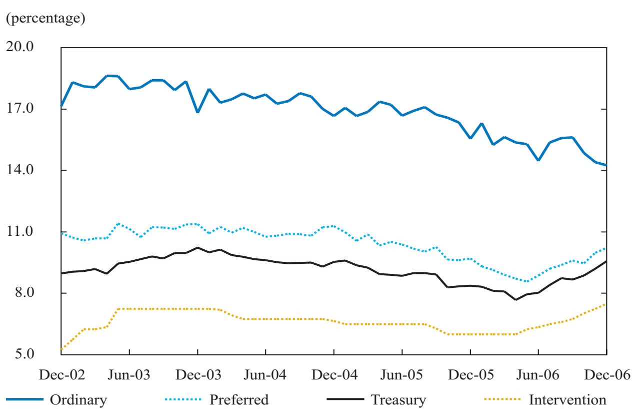


Source: Banco de la República.

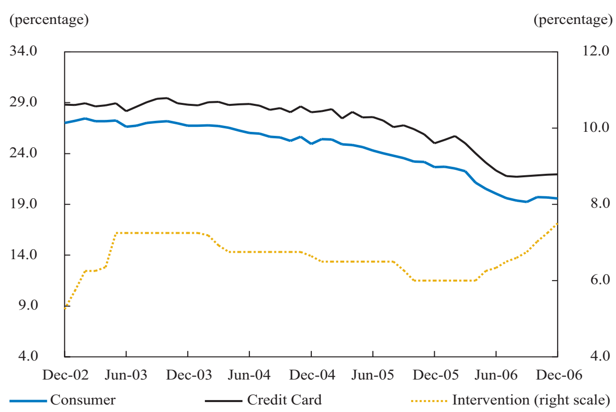
Graph 13

Lending Rate

Panel A



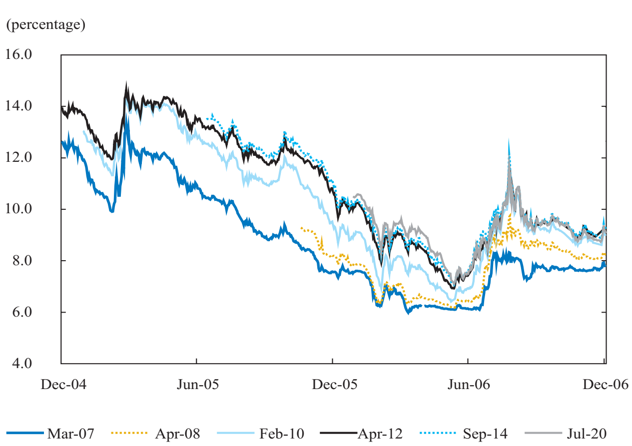
Panel B



Source: Office of the National Superintendent of Financial Institutions.

Graph 14

TES Trading Rates a/, Fixed Rate on the Secondary Market - SEN



a/ Data at January 15, 2007.
Source: SEN - Banco de la República.

The lending rates show mixed movement, suggesting different degrees of response to the change in the Bank's stance or the presence of additional influences. As to interest on treasury and preferential loans, the pass through appears to have been significant: the average increase in these rates between April and December was 189 bp and 150 bp, respectively, and continued throughout the entire second half of the year. In contrast, the rates on consumer and credit card lending declined substantially, even during the fourth quarter (Graph 13). With the levels reached in December, all real rates, both lending and deposit, remained low compared to their historic averages (Graph 13).

In the public domestic debt market, TES rates dropped slightly during the fourth quarter, especially on the long-term bonds. Broadly speaking, the behavior of TES throughout the year was linked closely to risk perception in foreign markets. In particular, the rise in rates at mid-year was due to growing uncertainty about the Fed's monetary policy. Likewise, the increase in Banco de la República's intervention rates in April, coupled with expectations of further hikes, produced a rise in TES rates, particularly for those with short and medium-term maturities.

In the third and fourth quarters, a clearer external outlook and good domestic news favored a gradual decline in interest rates, especially on long-term securities (Graph 14). Up until December, the correction was partial and the yield curve, although not as steep as in early 2006, was up by more than 200 bp.

4. Stock Market

During the last quarter, stock prices tended to return where they were at the start of the year (Graph

15). As with TES, stock prices and the exchange rate have reflected changes in the demand for domestic assets. The recent recovery is tied to a growing demand for domestic assets and a tendency towards appreciation during the last five months of the year. A healthy domestic economy, with growth figures that surpassed the market's expectations and indications that company sales and earnings continue to be satisfactory, also could have contributed to the recovery.

Changes in the Bank's Intervention Rate during 2006
(Percentage)

May 2	6.25	Oct 2	7.00
June 21	6.50	Oct 30	7.25
August 22	6.75	Dec 18	7.50

Source: Banco de la República.

C. Economic Activity and Employment

1. Third-quarter Growth in 2006

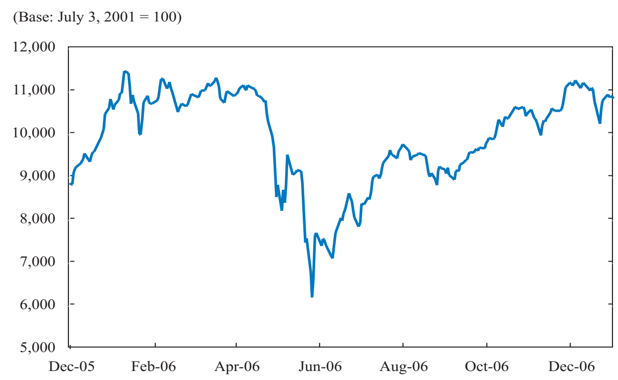
The third-quarter GDP figures released by the National Bureau of Statistics (DANE) showed more economic growth that was forecast by different analysts and by Banco de la República. The annual GDP growth rate during that period was 7.7%. There had not been an increase of that magnitude since the end of 1994 (Graph 16).

A real annual increase of 6.5% in household consumption, a level not seen since the mid-nineties, was an important contribution to that growth. Although growth during the third quarter was distributed evenly among the different types of consumption, the acceleration in non-durable goods consumption was a high point. This item has increased at relatively good rates: 4.5% and 3.6% in 2004 and 2005, respectively, and 4.1%, on average, during the first half of 2006. However, the increase during the third quarter of 2006 was close to 6.5% (Table 2).

The acceleration in non-durable goods consumption has been accompanied by more growth in retail sales of food and beverages (according to the Monthly Retail Trade Sample (MRTS) conducted by DANE) and by a substantial rise in imports of consumer non-durables, which went from an average annual increase of 22% in dollars during the first half of the year to more than 30% in the second.

Graph 15

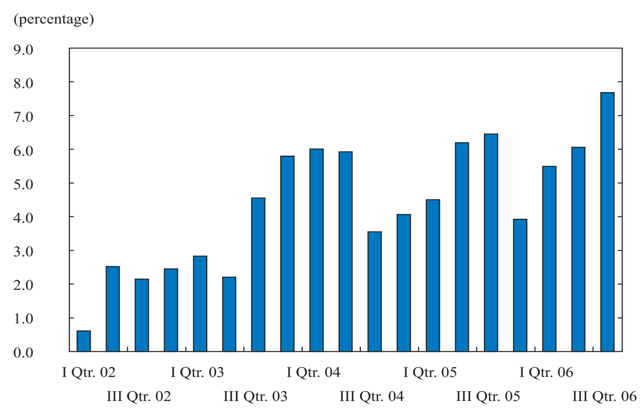
Colombian Stock Market Index



Source: Colombian Stock Market.

Graph 16

Real Annual Growth in Quarterly GDP



Note: The figures from 2005 to 2006-III are preliminary.
Source: DANE. Calculations by Banco de la República.

Economic growth in the third quarter was 7.7%, surpassing what the analysts had forecast.

Growth in the other consumer items remained high. The annual increase in durables was nearly 20%, semi-durables, 10.3% and services consumption, around 4.0%. Because household consumption is the least volatile item of spending, its added growth indicates the coming quarters could see a continuation of the momentum in the economy.

The acceleration in consumption would be explained by several factors; namely, households find themselves in a good economic situation, confidence is high (as the Fedesarrollo Consumer Survey shows), better terms of trade have had an impact, remittances from abroad are up, and conditions with respect to loans and liquidity remain positive. In addition to private consumption, the economy continued to be bolstered by a sharp rise in investment, both public and private, which was up by nearly 25% in the third quarter of 2006. This is slightly below the rate in the first six months of the year (30.4% on average).

Public and private investment continued to propel the economy.

The third quarter saw a 20% increase in gross fixed capital formation (GFCF), without civil works (which is akin to private investment). The figures since April suggest some shift in composition, namely an acceleration in investment in construction and buildings (from 3% to 25%) accompanied by a slowdown in GFCF in machinery and equipment (from 30% to 20%). Even so, it is still a high rate.

Aggregate public spending contributed less than one percentage point (1 pp) to the third-quarter increase during 2006. Government consumption rose by only 1.2%, while the growth in investment in civil works came to 13.3%. This implies a slowdown with respect to 2005 and the first half of 2006 (with respective annual increases of 28.2% and 25.6%). In short, during the third quarter of 2006, domestic demand continued to increase at rates close to 10%, with a growing contribution from household consumption and a shift from private investment in machinery and equipment to construction. Aggregate public spending continued to make only a limited contribution.

Exports in constant pesos rose sharply during the third quarter of 2006 (Table 2). According to several estimates, non-traditional exports saw a real increase of nearly 12% during that quarter, while the estimated increase in traditional exports was 7.2%, thanks to sales of coal and coffee.

Domestic demand rose by around 10% in the second quarter, with a growing contribution from consumption and investment in housing and civil works.

Despite the good momentum in exports, net external demand stayed in negative terrain. Broadly speaking, intermediate and capital goods accounted for the bulk of all imports (79.6%), although imports of consumer goods accelerated sharply in 2006, as indicated earlier. During the year to November, consumer goods imports experienced the most growth, with a 34% increase in dollars as opposed to 21% and 22% for imports of intermediate and capital goods.

Annual Growth and Contribution to GDP by Type of Spending

	2004	2005 (pr)	2006 (pr)		III Qtr. 06	
			I trim	II Qtr.	Growth	Contribution
End Consumption	**4.8**	**4.8**	**4.6**	**4.5**	**5.3**	**4.3**
Household Consumption	6.0	4.7	5.1	5.5	6.5	4.1
Non-durable goods	4.5	3.6	3.7	4.4	6.4	1.6
Semi-durable goods	9.1	5.8	4.8	7.3	10.3	0.7
Services	4.2	3.2	4.6	4.1	3.8	1.0
Durable goods	21.8	19.3	18.6	17.0	22.3	1.0
Other household consumption	(29.7)	(11.0)	43.0	15.4	248.0	(0.2)
Government consumption	1.1	4.8	2.9	1.4	1.2	0.2
Gross capital formation	**15.6**	**25.7**	**27.6**	**33.2**	**24.9**	**6.0**
Gross fixed capital formation (GFCF)	15.0	18.8	16.2	22.5	20.4	4.2
GFCF without civil works	22.0	16.7	15.8	20.2	22.1	3.6
Agriculture, livestock, forestry, hunting and fishing	1.1	(1.3)	4.7	3.6	3.4	0.0
Machinery & equipment	15.8	35.3	30.8	19.8	19.3	1.3
Transport equipment	18.4	20.7	30.8	16.8	32.0	0.6
Construction & buildings	31.5	3.4	0.4	23.6	24.5	1.6
Other GFCF	7.0	2.5	6.5	6.8	5.8	0.0
GFCF civil works	(7.9)	28.2	17.9	33.3	13.6	0.6
Variation in inventories	28.0	158.3	389.7	132.2	52.2	1.8
Domestic demand	**6.6**	**8.5**	**8.9**	**10.3**	**9.7**	**10.3**
Total exports	**10.0**	**5.6**	**7.2**	**1.2**	**10.5**	**2.0**
Total imports	**19.8**	**21.7**	**23.2**	**20.7**	**18.5**	**4.6**
Gross domestic product	**4.9**	**5.3**	**5.5**	**6.1**	**7.7**	**7.7**

(pr) Preliminary
Source: DANE. Calculations by Banco de la República.

A look at GDP growth on the supply side shows good performance in manufacturing and commerce. Together with home construction, these sectors contributed the most to economic growth in the third quarter (Table 3). After lagging behind in growth, the agriculture and livestock sector displayed excellent momentum in the third quarter, with a real increase of 5.9%, propelled largely by the production of coffee, live animals and animal products.

The aggregate (Graph 17) shows good momentum in the tradable sectors, with an all-time high of 9.5%, despite real revaluation in the exchange rate during the last few years. This is explained by good external conditions for traditional products (mining and agro-coffee), as well as non-traditional items (industry and services), and by the demand placed on industrial production due to more consumption and investment. The non-tradable sectors also benefited from the increase in domestic demand and were up by 6.6%. Within this group, the most dynamic sectors were commerce, private construction and transport.

GDP in the tradable sectors showed record growth in the third quarter (9.5%).

Table 3

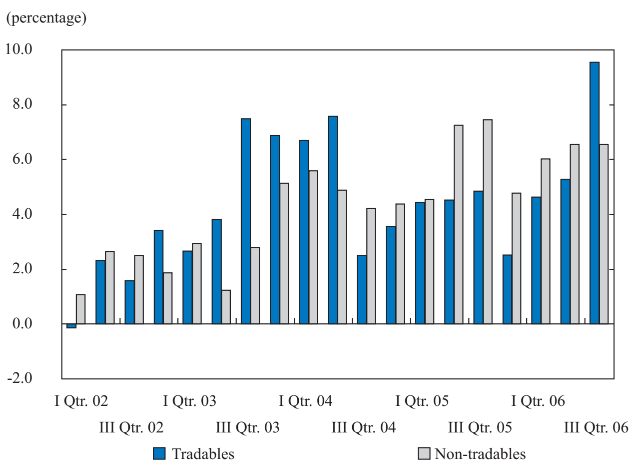
Growth and Contribution to GDP, by Type of Spending

	2004	2005 (pr)	2006 (pr)		III Qtr. 06	
			I Qtr.	II Qtr.	Growth	Contribution
Agriculture, forestry, hunting & fishing	2.0	3.0	0.9	(0.3)	5.9	0.8
Mining & quarrying	2.7	3.0	2.2	(3.5)	3.3	0.2
Electricity, gas & water	2.8	3.2	2.9	0.9	3.5	0.1
Industrial manufacturing	7.2	3.9	7.6	6.5	13.3	1.9
Construction	12.4	12.1	7.2	26.9	19.0	1.1
Buildings	29.4	3.6	0.6	23.2	22.6	0.8
Civil works	(10.0)	28.2	17.9	33.3	13.6	0.3
Commerce, repairs, restaurants & hotels	7.6	9.4	8.9	9.0	11.5	1.3
Transport, storage & communications	6.2	5.1	10.1	10.2	7.5	0.6
Financial institutions, insurance, real estate agencies & business services	4.8	3.6	6.9	(6.9)	2.4	0.4
Social, community & personal Services	1.4	4.0	2.7	1.9	1.5	0.3
Financial brokerage services measured indirectly	10.3	8.4	14.9	(40.2)	(0.6)	(0.0)
Subtotal: aggregate value	4.5	4.7	5.1	5.6	7.3	6.8
Taxes minus subsidies	10.6	12.8	10.0	11.7	12.0	0.9
GDP	**4.9**	**5.3**	**5.5**	**6.1**	**7.7**	**7.7**

Source: DANE. Calculations by Banco de la República.

Graph 17

Annual GDP Growth in Tradables and Non-tradables



Note: The figures from 2005 to 2006-III are preliminary.
Source: DANE. Calculations by Banco de la República.

2. Employment

Several indicators signal continued adjustments in the job market. The sector figures show more growth in employment, while the DANE home surveys indicate the number of participants in the labor market has declined. Information from the Comprehensive Home Survey (CHS) for the period from September to November 2006 shows a major reduction in the global participation rate (GPR). This phenomenon is nationwide, but particularly prevalent in the dispersed rural area where the GPR is down by more than 6 pp compared to 2005 (Graph 18). This finding coincides with the introduction of changes in the way information for the Home Surveys is collected[4].

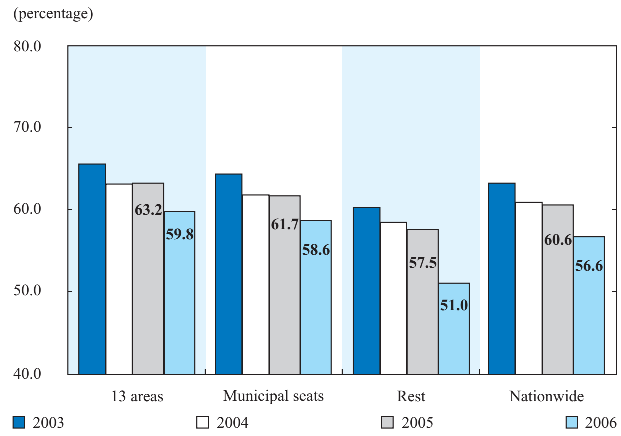
A lower GPR implies less of a labor supply and can be the result of more household income, which enables secondary members to withdraw from the job market (be they employed or unemployed) and to dedicate themselves to other activities such as study, domestic chores or caring for other members of the household.

For the same period, the CHS also shows a major drop in the employment rate (ER) at the general level, but an increase in the dispersed rural area (Graph 19). This would confirm that less participation in the job market can be attributed to the withdrawal of persons who were employed, implying a reduction in that number. However, other indicators developed by DANE, such as the Monthly Manufacturing Sample (MMS) show increases in the number of employed (5.6% in industry and 5.7% in commerce) during the same period (September-November 2006).

As indicated earlier, the GPR and OR reductions reported by the GHS coincided with changes in the survey. Consequently, it is impossible to determine if the fluctuations reflect the actual situation in the job market or if, on the contrary, they can be attributed to the changes made by DANE. If the reduction in the labor supply during the second half of 2006 is confirmed, the job market would have narrowed faster than expected, given the growing demand for labor in sectors such as commerce and industry.

Graph 18

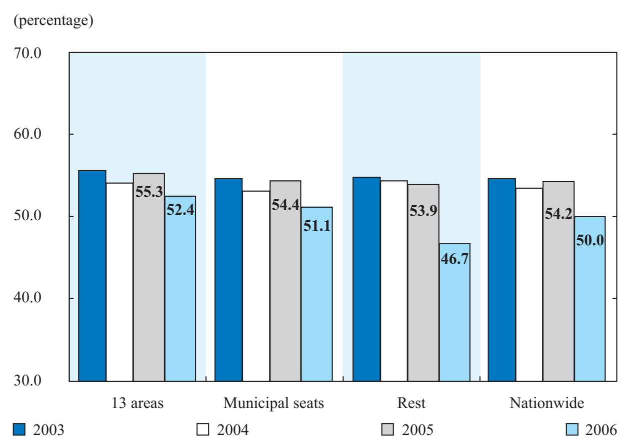
Global Participation Rate for September, October and November



Source: DANE National Home Survey.

Graph 19

Average Employment Rate for September, October and November

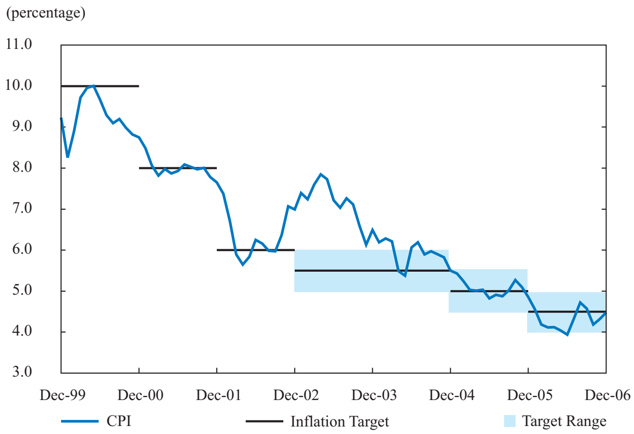


Source: DANE National Home Survey.

4 DANE enlarged the household sample from 40,500 to 62,.500 interviews as of the second half of 2006 to maintain the quality of the job market statistics. This was accomplished through the use of hand-held computers as opposed to paper forms, the idea being to increase the proportion of direct interviews from 40% to 85%.

GRAPH 20

ANNUAL CONSUMER INFLATION



Source: DANE. Calculations by Banco de la República.

D. INFLATION AT DECEMBER

1. General Aspects

Annual consumer inflation in the fourth quarter displaced a definite tendency. It was 4.5% by December, which is slightly less than the figure registered in September (4.6%) and the one observed a year earlier (4.9%). As a result, inflation ended 2006 in the middle of the target range, thereby completing three consecutive years of strict compliance with the BDBR targets (Graph 20). The outcome for December was in line with the forecast in the September report, but surpassed the forecasts published in reports at the beginning of the year. For the most part, the principal forecast errors were in food inflation, which tended to be underestimated. There were fewer discrepancies for the CPI without food.

Two factors helped to lower inflation in 2006. One was the decline in inflationary expectations due to the increased credibility of the Bank's monetary policy. The fact that the inflation targets for the last three years have been met and inflation has declined since 1991 has helped to align expectations with the targets set by the Bank. Secondly, a favorable supply of perishable foods lowered annual inflation in this sub-basket with respect to 2005.

These two factors offset the upward pressures that originated with the rise in commodity prices. As a matter of fact, an assortment of external factors, such as higher international prices for hydrocarbons, metals and certain foods, played a major role in the way inflation behaved during 2006. The high price of oil had a direct impact on the CPI through fuels (gasoline and gas) and public transportation. Indirect effects on the prices of processed and imported foods were observed as well, due to the higher cost of raw materials (fertilizers and pesticides) and the external price of various agricultural products.

2. Core Inflation

Inflation ended 2006 in the middle of the target range.

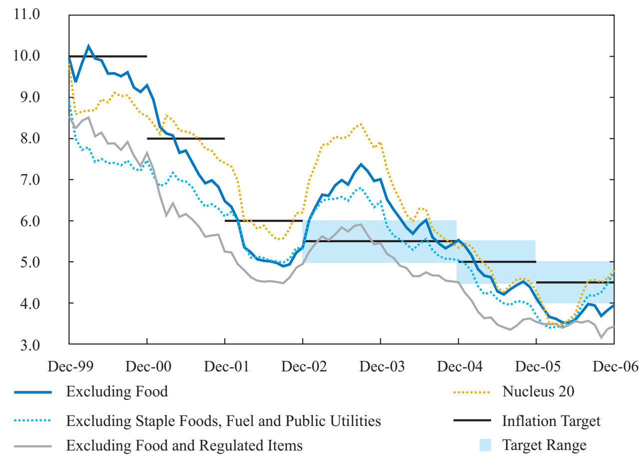
The reduction in total inflation during 2006 was accompanied by a slight decline in non-food inflation, which was 3.95% in December as opposed to 4.1% during the same month in 2005 (Graph 21). This being the case, core inflation completed 18 months below the target ranges established by the

Bank (Box 2). The same was not true of the core inflation indicators. The average for the three indicators used (nucleus 20, non-food CPI and CPI without staple foods, fuel and public utilities) was 4.5% in December 2006, which is 50 bp more than in 2005 (Graph 21).

In general, the second half of the year witnessed an upward bias in the three core inflation indicators, although less so in the case of the non-food CPI. In fact, the dispersion in measurements became more pronounced in the final months of the year, making it difficult to interpret the results and particularly to determine the real tendency in core inflation. A fourth indicator that was calculated recently (non-food CPI excluding regulated items) showed added stability throughout the year[5].

GRAPH 21

ANNUAL VARIATION IN CORE INFLATION INDICATORS



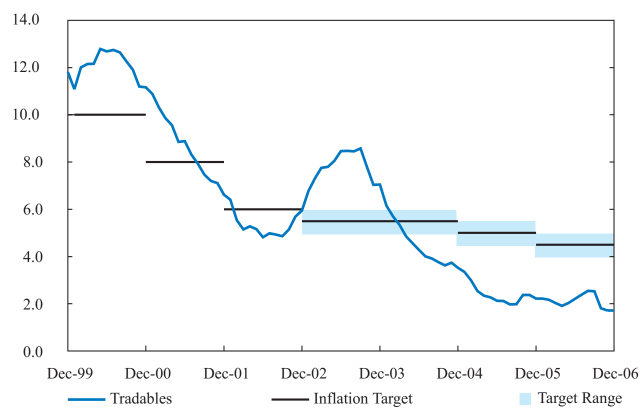
Source: DANE. Calculations by Banco de la República.

3. Inflation in Tradables, Non-tradables and Regulated Items

For the inflation report, non-food CPI is broken down into three sub-baskets: tradables, non-tradables and regulated items. According to that classification, the reduction in non-food inflation was possible thanks to the behavior of tradables and regulated items. Non-tradable inflation, in contrast, experienced a slight increase during 2006.

GRAPH 22

ANNUAL VARIATION IN TRADABLE CPI (EXCLUDING FOOD AND REGULATED ITEMS)



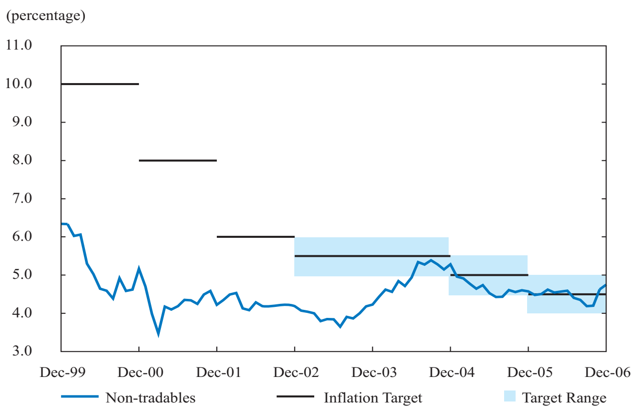
Source: DANE. Calculations by Banco de la República.

As of February 2004, tradable inflation has done much to keep inflation in line with the targets. In 2006, it ended the year at 1.7%. This is a historic low and 50 bp less than in 2005 (Graph 22), rounding out 32 months below the target range. However, even though inflation at the end of 2006 was less than at the end of 2005, it surged several times throughout the year, mainly because of temporary depreciation in the exchange rate during the second quarter. Most of this pressure had disappeared by the end of the year and tradable inflation again showed a slight downward bias that was reinforced by a one-time reduction in long-distance telephone rates.

5 Banco de la República is in the process of reviewing and evaluating its traditional indicators of core inflation.

GRAPH 23

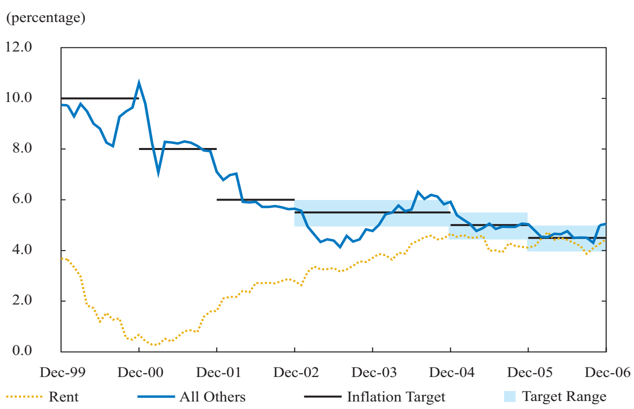
NON-TRADABLE CPI (EXCLUDING FOOD AND REGULATED ITEMS) ANNUAL VARIATION



Source: DANE. Calculations by Banco de la República.

GRAPH 24

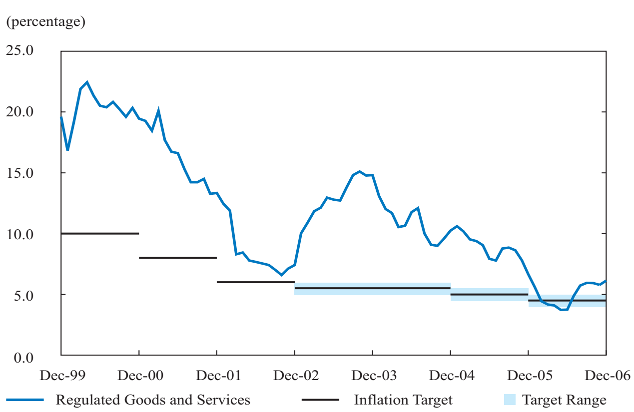
BREAKDOWN OF NON-TRADABLE CPI (EXCLUDING FOOD AND REGULATED ITEMS) ANNUAL VARIATION



Source: DANE. Calculations by Banco de la República.

GRAPH 25

REGULATED GOODS AND SERVICES CPI ANNUAL VARIATION



Source: DANE. Calculations by Banco de la República.

Non-tradable inflation at year's end was 4.75%, which is 18 bp more than the final figure for 2005 (Graph 23). The increase was concentrated in the fourth quarter and completely wiped out the third-quarter reduction. Non-tradable inflation has fluctuated around 4.5% since March 2004, helping to meet the country's inflation targets. Nonetheless, by the end of 2006, the indicator was in the upper half of the target range for the first time. Given the historic persistence of the series at around 4.5%, it could be far more difficult for non-tradable inflation to continue to help meet the targets, particularly considering the objective of moving inflation towards its long-term levels (between 2% and 4%).

The increase in non-tradables during the year was due to rentals, which were up by 4.5% in December. This is 34 bp above inflation in 2005 (Graph 24). The other component of non-tradable inflation ended 2006 at 5.05%, which is near the level registered in 2005. Both indicators have fluctuated around those percentages for nearly three years, without exhibiting a clear tendency.

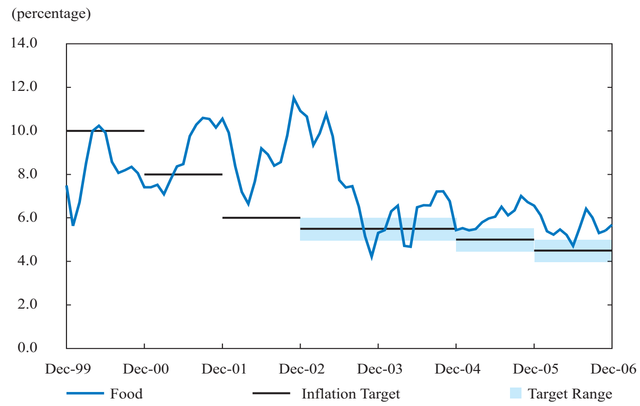
Annual inflation in regulated items was 6.1% by December, which is less than the figure for 2005 (Graph 25). The prices for these items were influenced by a range of shocks throughout the year, which made the annual inflation series highly volatile. Annual inflation in this sub-basket dropped sharply during the first six months of 2006, due to reductions in some public utility rates and to other factors that were largely reversed during the second half of the year. Generally speaking, the changes in prices for regulated items surpass the long-term targets for the decade. This is due largely to the removal of state subsidies to public utilities and fuel, and to the increase in international fuel prices. Nonetheless, ever since October 2003, the inclination has been downward and annual inflation in this sub-basket has moved gradually towards the targets set by Banco de la República.

4. Food Inflation

Food inflation was the CPI component that did the most to lower inflation in 2006. By the end of December, it was 5.7%, which is 90 bp less than a year earlier (Graph 26). Fundamentally, the reduction was due to less inflation in perishables. Processed food inflation rose steadily as of March, largely because of the exchange rate during the second half of the year and higher international prices for a range of foods (Graph 27). The price of sugar, cane and similar agricultural products used to produce plant fuels rose sharply in 2006. Finally, it is important to note that food inflation has exceeded the Bank's target range for 30 months in a row.

Graph 26

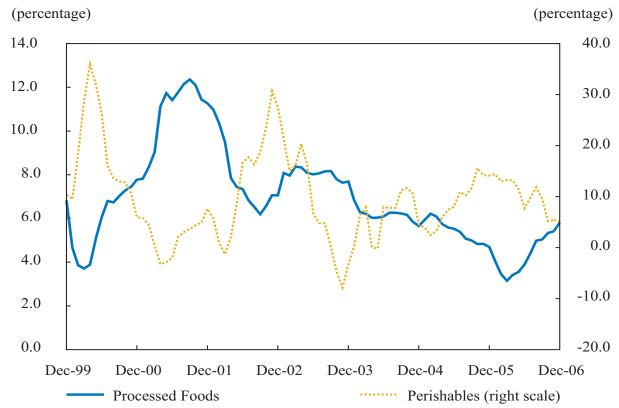
Food CPI, Annual Variation



Source: DANE. Calculations by Banco de la República.

Graph 27

Food CPI Breakdown
Annual Variation



Source: DANE. Calculations by Banco de la República.

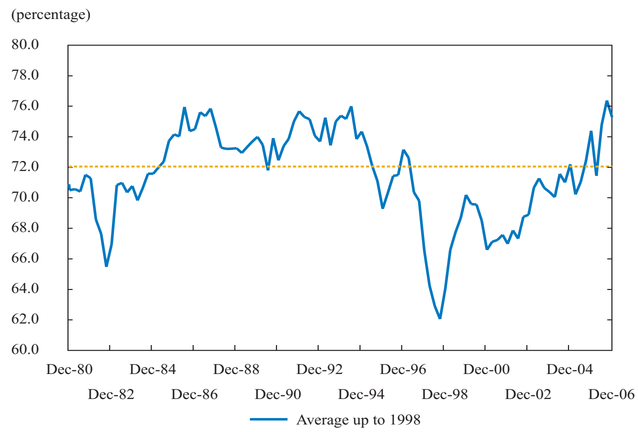
E. Determinants of Inflation

1. Surplus Installed Capacity and Demand Pressures

The increase in aggregate demand as of 2004 has allowed for a considerable recovery in installed capacity utilization indicators. During the two previous quarters, with the acceleration in economic growth, these indicators for industry were near the historic high achieved in the mid-nineties (Graph 28). In spite of this and the fact that the strength of growth during the third quarter was surprising, the present report indicates no substantial change with respect to the estimate of surplus production capacity in the economy. Specifically, the various indicators used by the Bank suggest the economy in 2006 operated, on average, somewhat beyond its productive capacity and at a level slightly above what was anticipated in the September report.

Graph 28

Use of Installed Capacity



Source: Fedesarrollo.

Recent years would have seen important gains in productivity.

There are three reasons that justify this situation. First, the estimates of labor productivity and total factor productivity point to major gains in this area during the last two years, even discounting the cyclical component that is characteristic of the way this variable performs. Secondly, it is clear the economy recently experienced a major investment effort that translates into high rates of investment. Third, the trend non-tradable CPI during 2006, excluding food and regulated items, was consistent with the target set by the BDBR. Although annual inflation in this sub-basket surged unexpectedly in last quarter, the figures available at December were still not enough to regard these movements as a break in the trend due to demand-pulled inflationary pressures. In this sense, the relative stability of non-tradable inflation at around 4.5% (the center of the target range for 2006) indicates the economy was operating near its productive capacity throughout most of the year. Also, these pressures might have been latent, and the positive behavior of inflationary expectations might have kept them from surfacing in 2006.

All of these factors support the idea that some of the recent acceleration in growth can be assimilated by the economy without having an undesirable impact on prices. Consequently, for this report, a confidence interval between -0.7% and +2.0% was estimated for the output gap, with a slight increase compared to the range established for the September report (between -0.8% and +1.8%). The specific estimate of the gap compatible with the new range is +0.6% as opposed to +0.5% in the last report. However, these measurements are averages for all of 2006. Considering the strong growth during the second half of the year, they imply positive and larger output gaps in the third and fourth quarters. In other words, by the end of 2006, the economy is likely to be operating at a higher level with respect to its productive capacity than what these average figures suggest.

2. Expectations

There is every indication that inflationary expectations played an important role in lowering inflation during 2006, and particularly in price stability for non-tradables, despite strong economic growth. The range of measurements taken throughout the year showed a downward bias that largely stayed below 4.5% (the center of target range). In the final two months of 2006 and in January 2007, expectations appeared to remain in check, despite the rise in inflation. Banco de la República's monthly survey of financial operators and stock brokers showed they anticipate 4.2% inflation by the end of 2007, which is within the target range set by the BDBR (between 3.5% and 4.5%) (Graph 29).

The economy can assimilate part of the recent acceleration in growth without an undesirable effect on prices.

The recent stability in inflationary expectations might be an indication that monetary policy and future inflation targets have acquired more credibility. This is good news for inflation in Colombia, as it reduces the effort required of the monetary authority to comply with its mandate. Nonetheless, the emergence of expectations still appears to depend heavily on past inflation. Therefore, any increase in inflation, even if only temporary, can have a permanent impact by raising expectations. In this sense, if inflation stays above 4.5% during the first half of the year, as the forecasts indicate, expectations could increase and do less to lower inflation towards the target.

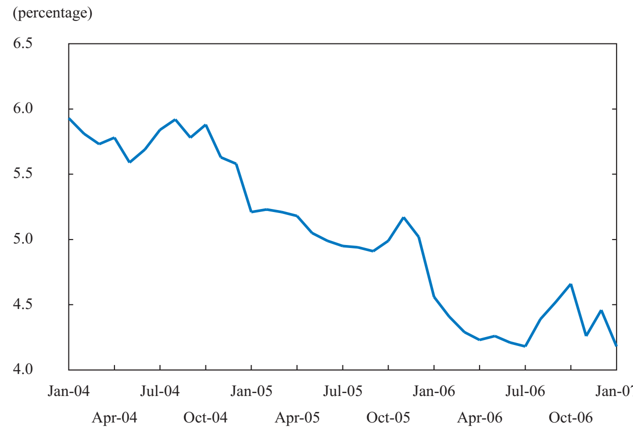
3. Cost and Wage Pressures

The chief inflationary pressures in 2006 originated with higher costs for raw materials, particularly because of the increase in domestic and foreign prices for fuel. The effects were seen mainly in producer prices for a number of agricultural and agro-industrial products (cereals, sugar, oils and fats), as well as in agricultural input (fertilizers and insecticides) and transport services, among others. Pressure also was brought to bear on producer prices in industry and construction, due to higher external prices for metals and the domestic price of cement.

Although the rise in prices for raw materials was felt mainly during the early quarters of 2006, some of the hikes remained during the fourth quarter, particularly those originating with agricultural products such as coffee and corn. The price of other items increased as well. Wood and wood by-products are two examples. However, the reasons for these increases are still unclear and warrant follow-up.

Graph 29

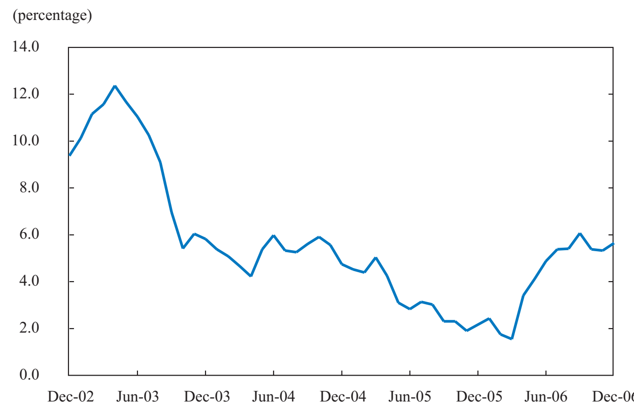
Inflationary Expectations Each Year at December: Banks and Stock Brokers



Source: Banco de la República.

Graph 30

Annual Producer Inflation



Source: Banco de la República.

The rise in the price of raw materials was reflected mainly in the producer price index (PPI). In March, part of the increase in annual PPI inflation from 2% to more than 5% was due to these pressures (Graph 30), which were added to the effect of temporary depreciation in the exchange rate. During the fourth quarter, producer inflation remained stable at around 5.3%, increasing slightly at the end of the year due to the upsurge in coffee, wood and certain fuel prices, as mentioned earlier.

Transmission of the increase in the price of raw materials to the PPI was less intense and occurred essentially through prices for public transportation and processed foods. These effects continued throughout the second half of the year, including the final months of 2006, and filtered down, in part, to the core

The wage hikes would have been offset by the improvement in productivity.

inflation indicators (particularly nucleus 20 and CPI without staple foods, public utilities and fuels). Generally speaking, the growth in productivity could have reduced the impact of these cost pressures on both the PPI and the CPI.

The behavior of wages during 2006 was mixed. In sectors such as construction, the wage hikes were moderate compared to past years. As DANE reported, throughout most of 2006, the increase in nominal wage costs in this sector would have been less than 6%. In the case of industry, the nominal increases would have been larger (around 9%), but with a downward bias towards the end of the year. In contrast, the pace of wage hikes in commerce tended to accelerate throughout 2006 and was approximately 10% by October.

In spite of significant wage hikes in a number of sectors, it is unclear if there labor costs exerted inflationary pressure in 2006, given the improvements in productivity mentioned earlier. Accordingly, the nominal increases in the unit cost of labor in industry and commerce would have been small and in keeping with the inflation target for 2006. These findings, which were observed throughout the year, are supported by the available figures for the fourth quarter (Table 3).

4. The Exchange Rate

The tendency towards peso appreciation during the last three years and the drop in inflationary expectations did the most to lower inflation in Colombia. Due to the performance of the exchange rate, the growth in the CPI for tradables (excluding food and regulated items) has been well below target since 2004, even in the midst of several sporadic episodes of high exchange volatility.

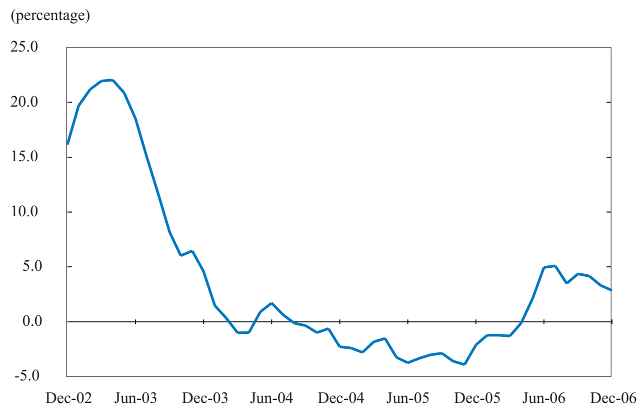
Tradable inflation, excluding food and regulated items, remained below the target thanks to the behavior of the exchange rate.

In 2006, the extent to which inflation (CPI and PPI) mirrored the movement in the exchange rate and the lags in pass-through were not all that different from what the models suggested, particularly in the case of temporary depreciation during the second quarter of the year. In the case of producer prices, the reaction was quick, as would be expected, and occurred through the PPI for imports (Graph 31). As to the CPI, there was a one-quarter lag in the effect of depreciation on prices, which occurred through the CPI for tradables and was slight at best, because it was a short episode.

As was expected, the pace of these price increases declined towards the end of the year, consistent with appreciation as of July. However, the drop in the exchange rate had yet to translate into reductions per se in the PPI or the CPI. This shows the asymmetry that exists in exchange rate pass-through to prices. With respect to the latter, the evidence for Colombia suggests that prices tied to the exchange rate tend to be far more responsive to increases than to reductions. And, even in times of appreciation, they can increase, although much more slowly. This is particularly true of consumer prices, inasmuch as producer prices have experienced reductions in the past (for example, producer inflation was in negative terrain during 2005).

Graph 31

Annual Inflation in the PPI for Imported Goods



Source: Banco de la República.

II. The Macroeconomic Outlook

The Colombian economy began the year with solid growth. The favorable outlook for external conditions, couple with an ample supply of credit and high consumer and investor confidence, indicate that growth in 2007 is likely to be similar to what it was in 2005 and 2006.

Terms of trade and growth registered by the country's principal trading partners would remain relatively high, bolstering exports. No abrupt drop in the price of oil is expected in 2007.

There would be no major interruption in the flow of capital, based on direct foreign investment as an important source of funds. In that context, the exchange rate will remain stable.

Inflation during the first half of the year would exceed the target, due to food prices and those for regulated items. The effect would be temporary and, at the end of the year, total inflation would be within the target range for 2007 (3.5% to 4.5%).

Strong economic growth would raise pressure on productive capacity and the risk of inflation. In 2007, non-tradable inflation is not expected to contribute as much to meeting the targets as in past years.

A. The External Context

The outlook for the world economy in 2007 has not changed much since the September report. The forecast continues to indicate solid economic growth worldwide, despite more moderate growth in the United States. On this occasion, more than in past years, much of the leadership in economic growth will fall to the emerging economies, with less participation by the euro zone and Japan.

With the exception of a few marginal adjustments, the forecasts for growth in the developed economies were not changed in this report compared to the predictions three months ago. In the United States, growth in 2007 is still expected to be less than it was a year earlier (2.5%) (Table 4). The significant inventory build-up in sectors such as housing, vehicles and machinery, coupled with the standstill in housing prices and the impact this has on household consumption, will imply restrained growth, at least until mid-2007.

For 2007, inflationary pressures in the United Status are expected to ease in line with more moderate growth...

For the euro zone and Japanese economies, growth in 2007 would fluctuate around 2.2% and 2.0%, respectively. Excellent financial conditions, positive investment performance and improvements in the job market are factors that should support an increase in demand in both regions. However, economic growth in the euro zone is not uniform, and the limited momentum in countries such as France and Italy could cancel out the considerable growth that has begun to be seen in Germany. Furthermore, the Japanese government's decision to adopt a tighter fiscal policy could have a negative impact on consumption.

As for the United States, this report continues to consider the most likely scenario as one where the inflationary pressures seen in 2006 would ease slowly during the course of 2007. The slowdown in U.S. economic growth is regarded as part of this process. Accordingly, by the end of the year, core consumer inflation is

TABLE 4

GROWTH FORECASTS FOR THE MAJOR TRADING PARTNERS
(PERCENTAGE)

	Actual Rate in 2005	Forecasts for			
		2006 at:		2007 at:	
		Oct-06	Jan-07	Oct-06	Jan-07
Major Trading Partners					
United States	3.2	3.5	3.3	2.6	2.5
Ecuador	3.9	3.6	4.5	3.4	3.9
Venezuela	9.4	8.7	9.8	6.2	6.9
Other Partners					
Euro Zone	1.4	2.2	2.6	2.1	2.2
Japan	2.7	2.8	2.4	2.2	2.0
China	9.3	10.4	10.5	9.1	9.5
Peru	6.1	6.3	7.2	5.3	5.9
Mexico	3.1	4.5	4.7	3.4	3.9
Chile	5.9	5.0	4.3	5.3	5.2
Argentina	8.9	7.8	8.4	5.9	7.2
Brazil	2.5	3.2	2.8	3.5	3.4
Bolivia	3.7	3.4	4.1	3.1	3.8
Developed countries	3.1	3.2	3.2	2.5	2.3
Developing countries	6.3	6.2	7.1	5.0	5.4
Total trading partners [a/]	5.1	4.7	4.9	3.4	4.1

a/ alance of payments calculated according to non-traditional exports.
Source: Datastream-Consensus.

... in that environment, the Fed would not change its interest rates.

expected to be 2.3% and inflation measured with the consumption deflator — core PCE (personal consumption expenditures) inflation — is expected to be 2%[6]. Therefore, at the end of 2007, the monetary authority probably will leave its interest rates at 5.25%. A reduction in rates during the second half of the year is now less likely than when the September report was written, because of the positive surprises with respect to fourth-quarter growth in 2006. Any change in the Fed's stance will depend on how inflation and economic growth behave in the months ahead.

Inflation in the euro zone and Japan would remain low, allowing the authorities in those countries to continue their gradual interest rate hikes (50 and 75 additional bp, respectively, during the year).

The good momentum in the emerging economies during 2006 allowed for an increase in the growth forecasts for this year. For China and India, the respective estimates are 9.5% and 7.7%, which is more than was anticipated three months ago. In the case of the Latin American economies, the forecasts are up as well, although they continue to suggest less growth than in 2006. The forecasts for Venezuela and Ecuador are 6.9% and 3.9%, in that order, although risks such as those related to the announcement of structural changes in the ownership of large companies and the intention to reform the constitution cannot be ruled out. All of this could heighten investor and consumer uncertainty. Also, there are the usual risks associated with changes in the price of oil, if it drops more than expected and permanently.

Given all of the above, the growth forecast for Colombia's major trading partners is still relatively favorable. The estimate in this report is 4.1%, which is more than the forecast in the September report (3.4%) but less than the estimate for 2006 (4.9%).

Most of the drop in oil prices at the end of the year would be temporary.

The context described above assumes that most of the drop in oil prices at the end of 2006 and the start of 2007 will be temporary. Geopolitical risks and the supply restrictions decided by the Organization of Oil Exporting Countries (OPEC)[7] are expected to keep prices relatively high, although not at the peak levels observed in mid-2006. Accordingly, the forecast for

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6 Core PCE is an indicator that is carefully monitored by the Fed and could be the most important reference in assessing compliance with its implicit target for inflation (between 1% and 2%).

7 OPEC's effectiveness in controlling prices during 2007 would continue to be important, inasmuch as several major oil producing countries will be joining the organization. Angola is a case in point and is scheduled to become a member in January 2007. Sudan has announced it wants to join as well (The Economist Intelligence Unit).

West Texas Intermediate (WTI) is US$57 a barrel in 2007. This is more than the price during the first weeks of January, but less than the estimate three months ago (US$62). Even so, an increase in supply from non-OPEC member countries and further and more efficient substitution in oil consumption could generate some downward pressure.

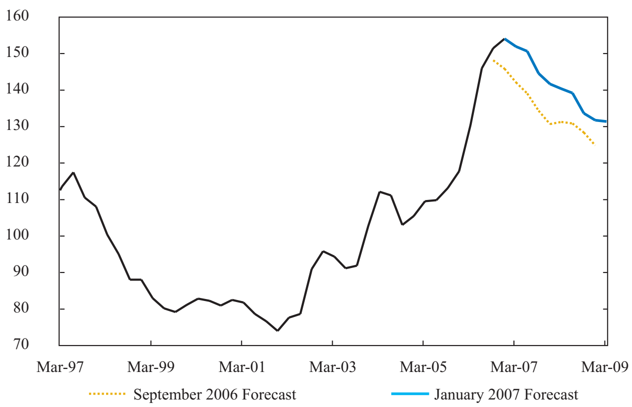
The price of oil is expected to average US$57 a barrel in 2007.

Prices for other commodities are expected to remain relatively favorable, despite the anticipated slowdown in world demand. According to *The Economist Intelligence Unit* (EIU), commodity prices without energy would increase by 1.2% in 2007, with a drop of 8.2% forecast for 2008 (Graph 32). These analysts expect some supply shocks, especially for metals, which could keep prices high, particularly at mid-2007. Based on these forecasts, one can imagine that prices for some of Colombia's leading exports would tend to be less in 2007 and would be slightly lower than the forecast in the September report. Oil is a case in point, contrary to coffee and gold, since their prospects have improved (Table 5). In this context, the external sector would continue to favor economic growth in Colombia, as it has in recent years.

The central scenario for the external context described above presents several risks that deserve mention and are related to the positive recent news about U.S. economic growth. Although these signs could be the result of temporary shocks associated with mild winter in the United States, they might be an indication of more permanent strength in that country's economy, which could imply more inflationary pressure in the future and further interest rate hikes

Graph 32

Price Index for All Commodities without Oil (WCF)



Source: *The Economist Intelligence Unit.*

Table 5

International Prices

	Average			Current Forecast a/	
	2004	2005	2006	2007	2008
Café (ex dock) (dollars/pound)	0.8	1.2	1.2	1.2	1.2
Oil (dollars/barrel)	37.3	49.8	56.3	48.9	51.9
Coal (dollars/ton)	36.1	47.8	47.8	46.1	42.1
Ferronickel (dollars/pound)	2.3	2.4	3.1	2.6	2.1
Gold (Dollars/troy ounce)	409.3	445.0	610.2	670.3	705.3

a/ Estimated balance of payments at January 2007.
Source: Banco de la República.

There still is a great deal of uncertainty about how the United States economy will perform in 2007.

by the Fed. This scenario, which has begun to gain acceptance among market analyst, would have repercussions for the emerging economies and particularly for Colombia. The repercussions are difficult to determine, but could include higher external interest rates and more dynamic export markets in the short term, perhaps with higher commodity prices, but with a risk of less growth and lower prices in the long run.

However, there are those who say the good figures currently seen in the United States are nothing more than the temporary effect of lower oil prices and mild winter weather. In fact, they predict the economy is headed for a sharper slowdown than the one estimated by the market consensus, in which case the Fed would have to lower its interest rates sooner than is forecast in our base scenario. Although that risk is becoming less pronounced, it cannot be ruled out entirely, at least until the strength of the economic indicators is confirmed.

The pace of growth in Colombian exports is expected to slow during 2007…

For the most part, there is still a great deal of uncertainty about how the United States economy will perform in early 2007. Therefore, it is difficult to predict what action that country's monetary authorities will take during the year. The behavior of inflation and the growth in the US economy will have to be watched closely, as they are the two most important variables in the Fed's decisions. Under these circumstances, some slowdown in the growth of traditional and non-traditional exports is anticipated with respect to 2006, given the impact of international prices, especially for oil, coupled with the prospect of less economic growth on the part of Colombia's major trading partners. Furthermore, good economic growth in Colombia would continue to propel the rise in imports. Both these factors will expand this year's current account deficit.

Due to economic growth, coupled with the business expansion plans underway since last year and the news of corporate mergers and the sale of Colombian companies, there is every reason to believe that capital flows associated with direct foreign investment (DFI) will continue throughout 2007, although not to the extent seen in previous years. Barring an abrupt change in interest rates in the United States, or external shocks of any other type, no significant interruptions in the tendency of private capital flows to Colombia, apart from DFI, are expected.

... and no change in the flow of private capital into the country is anticipated.

Within a broader range of time (2008 and thereafter), one can expect the tendency towards appreciation to reverse itself, particularly if commodity prices drop or if there is added uncertainty about the Fed's plans for interest rates.

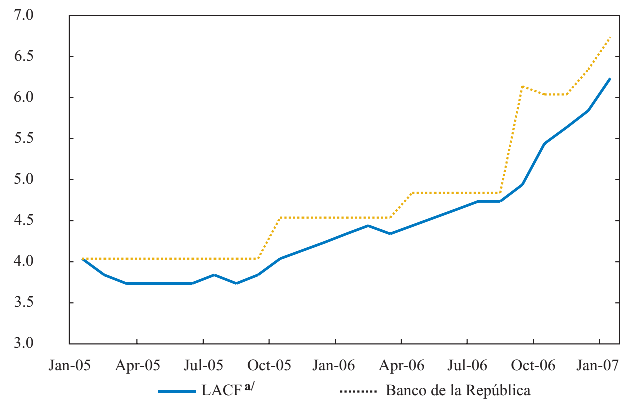
B. The Domestic Context

1. Short-term GDP Forecast

Graph 33

Change in the Real Annual GDP Growth Forecast for 2006 between January /05 and January/07

(percentage)



Source: a/ Latin American Consensus Forecast and Banco de la República.

The growth forecasts for the year were raised in response to the third-quarter figure for GDP. These went from 4.0% at the beginning of 2005 to between 4.0% and 4.5% in January, and are now between 6.0% and 7.0%, excluding the fourth-quarter figures (Graph 33).

The force of domestic demand would have continued to consolidate at the end of 2006 and during 2007 to date, as the primary source of Colombian economic growth. The momentum in household consumption, bolstered by the rise in household income, ample conditions for loans and liquidity, and the confidence in the economy, could have helped to further accelerate GDP growth during the fourth quarter. In the absence of any relevant negative supply shock, GDP could have seen a real increase of more than 8.0% during that period.

This being the case, the range of economic growth in 2006 would be between 6.5% and 7.1% (compared to 5.5% and 6.5% in the September report). Table 6 shows the demand-side forecasts for the middle of that range. They assume a good deal of growth in every item of household consumption towards the end of 2006. This perception is confirmed by the National Bureau of Revenue (DIAN) and by DANE, given the statistics on imports of items for household consumption, the sharp rise in consumer loans, the reports by the Colombian Trade Association (Fenalco) on record sales in December, the information from DANE on retail trade, and consumer confidence, which remains at an all-time high, according to the Fedesarrollo survey.

In 2006, growth would be between 6.5% and 7.1%.

The increase in household consumption during the last three years dispels any doubt about the position of the economy in the cycle. According to estimates by Banco de la República, real per capita consumption at mid-2005 would have surpassed the maximum levels reached in the first half of the nineties (Graph 34).

TABLE 6

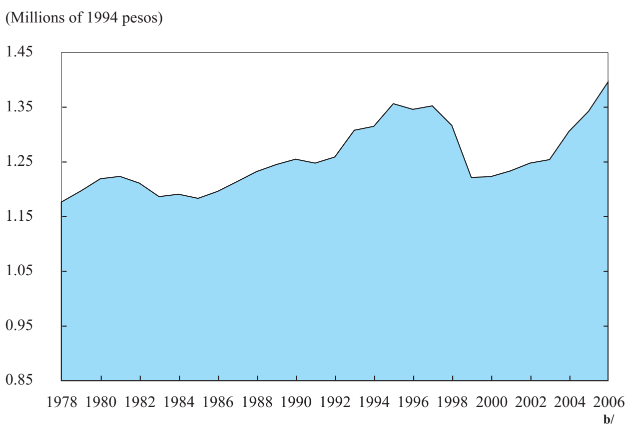
REAL ANNUAL GDP GROWTH BY TYPE OF SPENDING
(PERCENTAGE)

	2004	2005 a/	2006 b/
End Consumption	**4.8**	**4.8**	**4.9**
Households	6.0	4.7	5.9
Government	1.1	4.8	1.7
Gross Capital Formation	**15.6**	**25.7**	**28.6**
Gross fixed capital formation (GFCF)	15.0	18.8	20.0
GFCF without civil Works	22.0	16.7	20.9
Civil Works	(7.9)	28.2	16.4
Domestic Demand	**6.6**	**8.5**	**9.9**
Total Exports	**10.0**	**5.6**	**8.0**
Total Imports	**19.8**	**21.7**	**21.1**
GDP	**4.9**	**5.3**	**6.8**

a/ Preliminary
b/ Projection.
Source: DANE. Calculations by Banco de la República.

GRAPH 34

PER CAPITAL HOUSEHOLD CONSUMPTION A/



a/ Banco de la República inter-census population estimates, with data from DANE.
b/ Projected.
Source: DANE. DNP and Banco de la República.

The fourth quarter is not expected to see a major surge in public-sector consumption, which has increased relatively little throughout 2006. The performance of this aggregate suggests that growth in central and local-government consumption would have been offset by a sharp drop in social security consumption.

The rise in total investment during the fourth quarter could be around 30%, bolstered more by the increase in home building than in previous quarters. By the end of 2006, the growth in investment in civil works would have been similar to what was reported in previous quarters and could amount to an annual rate of almost 16%. This would round out five years of growth in total investment well above the increase in GDP (19.4% on average, as opposed to 4.6% for GDP), including a record high of 26% with respect to investment as a percentage of GDP (Graph 35).

Exports in the fourth quarter are expected to be positive. According to the forecasts, traditional exports at constant prices could increase by nearly 14%, bolstered by sales of coffee and coal, contrary to the real decline in exports of oil and petroleum derivatives. Non-traditional exports will continue to propel economic growth, with a real increase of 12%.

However, net external demand will remain in negative terrain due to the strong growth in imports of consumer and capital goods. Imports as a whole are expected to see a real increase of 20% during the fourth quarter of 2006.

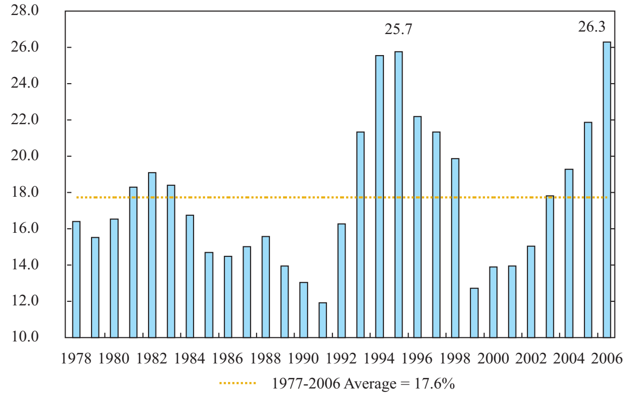
A look at GDP on the supply side shows that fourth-quarter growth will be fueled by industrial production, which was up by more than 17% in October-November. This is according to the DANE Monthly Manufacturing Sample (Graph 36).

The latest industrial bulletin shows that, in November, only seven of the 47 sectors monitored experienced a decline in real production. During the year (to November), only two activities registered a real decline: printing and oil refining (Table 7).

Real growth in agriculture is expected to return to above 4.0% in the fourth quarter, primarily due to a low basis of comparison for the 2006 coffee crop with respect to 2005. The tradable sectors, for the most part, could increase as they did in the third quarter, when they were up by nearly 9.5%.

Graph 35

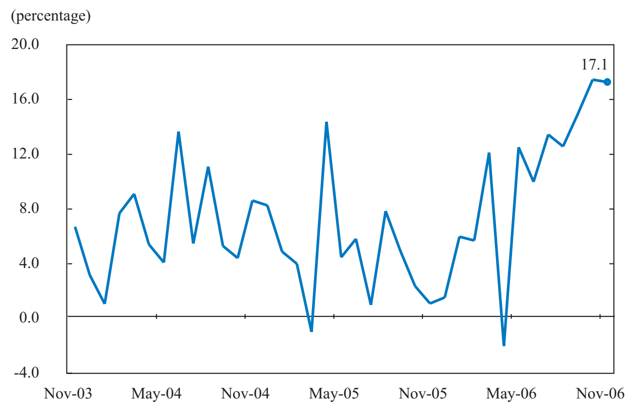
Total Investment as a Percentage of GDP



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

Graph 36

Annual Growth in the Industrial Production Index



Source: MMM-DANE. Calculations by Banco de la República.

A possible acceleration in the fourth quarter would be explained by the non-tradable sectors. This aggregate could grow, even above 7.5%, led by commerce and home construction. The increase in DANE's MMCM and in building permits (17% and 34%, respectively, during October-November) (Graph 37) confirm this.

Table 7

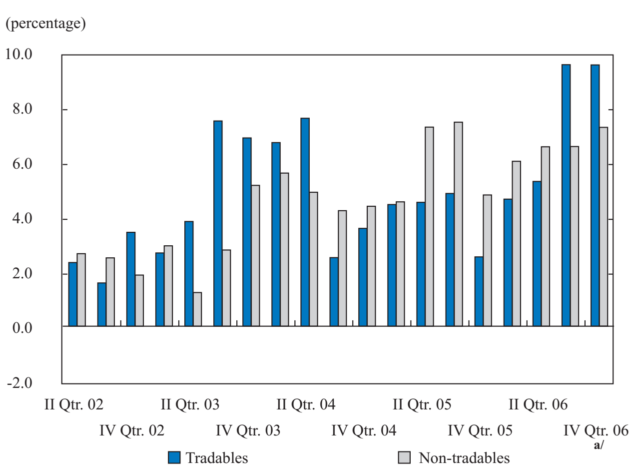
Real Annual GDP Growth by Sector
(Percentage)

	2004	2005 a/	2006 b/
Agriculture, forestry, hunting and fishing	2.0	3.0	2.6
Mining and quarrying	2.7	3.0	0.8
Electricity, gas and water	2.8	3.2	2.9
Manufacturing industry	7.2	3.9	10.9
Construction	12.4	12.1	17.9
Buildings	29.4	3.6	18.9
Civil Works	(10.0)	28.2	16.4
Commerce, repairs, restaurants and hotels	7.6	9.4	10.5
Transport, storage and communication	6.2	5.1	9.2
Financial establishments, insurance, real estate and company services	4.8	3.6	1.6
Social, community and personal services	1.4	4.0	1.8
Financial brokerage services measured indirectly	10.3	8.4	(6.0)
Subtotal: Aggregate value	4.5	4.7	6.4
GDP	**4.9**	**5.3**	**6.8**
Taxes minus subsidies	10.6	12.8	12.3
Net FBSMI c/	3.1	2.0	4.6
Tradables d/	5.0	4.1	7.3
Non-tradables	4.8	6.0	6.6

a/ Preliminary
b/ Projection.
c/ FBSMI: financial brokerage services measured indirectly
d/ Agriculture and livestock, mining, manufacturing, air and water transport services (complementary and auxiliary), and certain private services for companies are classified as tradable sectors.
Source: DANE. Calculations by Banco de la República.

Graph 37

Annual Growth in Tradable and Non-tradable GDP



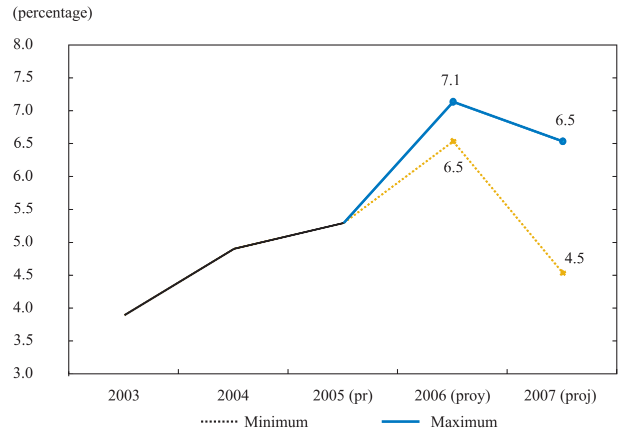
a/ Projected.
Source: DANE. Calculations by Banco de la República.

2. GDP Forecast for 2007

The GDP simulation exercises for 2007, which were conducted with a multi-sector general equilibrium model and mainly on the basis of assumptions for the balance of payments, show that growth this year could be as high as it was in previous years. In comparison to the growth range forecast three months ago (between 4.3% and 5.7%), the new forecasts are more optimistic and suggest an increase in GDP between 4.5% and 6.5%. This forecast is based on several principal assumptions. These include an increase of 1.0% in total factor productivity, a 2.5% increase in the price of coffee, a drop of 13.2% in the price of oil and 4.2% in other mining products (coal, ferronickel and gold). The exportable coffee supply would increase by 0.5% and the rest of mining by 16.4%, while real exogenous production of oil and petroleum derivatives would decline by 1.0%.

Graph 38

Real Annual GDP Growth



(pr) preliminary.
(proj) projected.
Source: DANE. Calculations by Banco de la República.

The assumption for external inflation is 2.6%, and our major trading partners are expected to register 3.5% to 4.1% economic growth. Remittances in dollars would be up by about 6.0%. The scenario with more GDP growth is associated with larger external capital flows (Graph 38). In 2007, this growth implies a slowdown with respect to 2006, which is consistent with less growth in investment, particularly the slowdown in investment in machinery and equipment. As to this point, there would be some decline in imports (particularly imports of intermediate and capital goods). Household consumption would be up by about 6.5% and public consumption, by 3.0%; the real increase in exports would be somewhere between 4.0% and 6.0%. As to branches of economic activity, the central GDP forecast contemplates a 7% increase in the manufacturing sector and 9% for construction and commerce.

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C. Inflation Forecasts

1. Forecasts

The inflation forecast developed by the Bank for a two year period is presented in this section. As is customary, forecasts of this type are calculated on the basis of an active monetary policy that allows for gradual convergence towards the long-term target for inflation (around 3%). Taking into account the analysis in previous sections of this report, it is possible to say that the outlook for inflation in 2007 will be determined largely by the continued force of aggregate demand. At present, domestic demand has increased far more than was anticipated in earlier reports; the forecasts had to be revised as a result.

The strong growth in demand increased the likelihood of inflationary pressures in 2007.

Therefore, the likelihood of demand-pulled inflationary pressure the coming quarters is now greater than was outlined in previous reports. The available figures indicate that aggregate demand could be up by nearly 9.8% at the end of 2006, following considerable growth during the three previous quarters. This being the case, the economy would have been operating slightly above its

Given the growth anticipated during 2007, surplus productive capacity in the economy likely will continue to decline.

productive capacity at the end of the year. Given the growth expected in 2007, these surpluses are likely to continue, or increase, even when taking into account a sizeable rise in productivity and expanding the estimates to include investments made during previous years. However, it is important to remember these estimates are highly uncertain.

The existence of surpluses with respect to productive capacity use does not necessarily increase core or non-tradable inflation. Growth in these types of inflation depends on a range of factors above and beyond an increase in demand, such as the extent of competition in the market, changes in expectations and the credibility of monetary policy.

It is important to point out that non-tradable inflation, excluding food and regulated items, was up during the final months of 2006 (undoing the reductions seen during the third quarter). In fact, it reached the upper portion of the target range (4.5%) for the first time during the current decade. Moreover, the upward trend in core inflation indicators during the last few months also is a cause for concern, although part of it could be due to high external prices for raw materials (fuels and agricultural raw materials). These are identified herein as temporary supply shocks.

Fuel prices are another factor that will affect inflation in 2007, as they did in 2006. In the base scenario for this report, the international price of oil (WTI) is expected to average US$57 during 2007. This is less than in 2006, but above the reference values used to calculate the domestic price in Colombia. Therefore, fuel price hikes are expected to exceed the target range for inflation in 2007 (between 3.5% and 4.5%) and would pass through to the price of public transport.

According to Banco de la República's forecasts, a sharp drop in inflationary pressure this year will be attributed again to the exchange rate and its impact on the CPI for tradables. The downturn in the exchange rate during the second half of 2006, stronger than anticipated in earlier reports, allows us to expect only limited increases in the price of tradables at the start of 2007 and annual tradable inflation below the target range set by the BDBR. Moreover, according to the Bank's forecasts, there should be relative exchange stability throughout much of the year, which would help to keep tradable inflation under control. Nevertheless, in a longer time frame (late 2007 and 2008), a trend towards depreciation with upward effects on the tradable CPI is expected.

In 2007, the exchange rate will continue to reduce inflationary pressures.

The present report still anticipates several temporary price shocks in 2007. The first involves the possible impact of El Niño weather, which has been confirmed by meteorologists already. According to the experts, the current episode of El Niño is moderate and would affect different parts of the country during the first quarter of the year, before disappearing in the second[8]. Although it is difficult to know exactly what impact it will have on the supply of staple foods, some reduction is expected between March and June, with an upward effect on prices. What usually happens in these circumstances is that prices drop during the second half of the year, as soon as the weather returns to normal. Consequently, the effects on inflation are temporary and are reversed during the same year.

Some upward pressure on food prices can be expected, but it would be temporary

A second shock would occur when the value added tax (VAT) takes effect. This levy was approved at the end of last year; however, a number of estimates suggest that its direct and indirect impact on consumer inflation would be minimal, either because the end goods and services subject to the new rate have little weight in the consumer basket or because the intermediate goods affected by the change in VAT are not overly important in productive chains.

A third, although less certain, upward pressure could originate with external prices for a number of imported goods, especially those of agricultural origin. This was a major source of inflationary pressure in 2006 and could be in 2007, if high oil prices continue to raise the price of biofuels. En 2006, these hikes were passed through to inflation via food prices: the same could happen in 2007. It should be noted that changes in the price for processed foods in Colombia have exceeded the inflation targets for quite some time. This raises the risk that they might continue to generate inflationary pressure in the future.

As to the role inflationary expectations will play, the available indicators suggest they are in line with the target for 2007. However, a bit of a surge during the first half of the year is expected, due to temporary price shocks. For this reason, the role played by lower inflation might not be as important in 2007 as it was in 2006. Ultimately, its long-term development will depend on whether inflation in food and regulated items actually declines, as is forecast for the second half of the year (Table 8). The credibility of monetary policy and the signals transmitted to agents in the economy through decisions by the monetary authority are also factors in this respect.

Table 8 shows the forecast for inflation developed with the Bank's central model, using the base scenario assumptions described in earlier sections of this report. There are four aspects that are important to mention. To begin with, the fore-

The change in VAT will have only a minimum effect on inflation in 2007.

8 See reports by the United States National Oceanic and Atmospheric Administration (NOAA/ National Weather Services) at http://www.nws.noaa.gov.

Table 8

Central Model (TMM) Forecasts

	Total Inflation	Food Inflation	Non-food Inflation				Output Gap
			Total	Non-tradable	Tradable	Regulated Goods & Services	
Dec-06	4.5	5.8	3.9	4.7	1.7	6.0	1.0
Mar-07	4.6	5.9	4.1	4.8	1.7	6.8	1.2
Jun-07	4.7	6.2	4.1	4.9	1.4	7.2	1.3
Sep-07	4.0	4.8	3.7	5.1	1.1	5.4	1.1
Dec-07	4.0	4.7	3.7	4.6	1.5	5.9	0.9
Mar-08	4.2	5.0	3.9	4.6	1.9	6.5	0.5
Jun-08	4.0	4.1	3.9	4.5	2.3	6.0	0.2
Sep-08	3.9	3.9	3.9	4.5	2.7	5.0	(0.0)
Dec-08	3.8	3.8	3.8	4.3	3.0	4.1	(0.3)

Source: Banco de la República.

casts for non-tradable inflation excluding food and regulated items are still above the target range for 2007 and are somewhat higher than those in the September report. Inflation in this basket of items should decline during 2008 in response to the interest rate hikes applied in 2006 (and those that would occur throughout 2007); but this would be a gradual process. Therefore, the forecasts suggest that prices would face some upward pressure during much of 2007, owing to the strong growth predicted for demand. As to this year, the economy would be operating with a positive output gap and with some surplus in use of productive capacity, which would disappear gradually.

Secondly, the first half of 2007 is expected to see more of an annual variation in the CPI for regulated items, given a low basis of comparison. The same period in 2006 witnessed rate reductions for some public utilities, due to a change in regulations that would not be repeated this year. Moreover, the forecasts contemplate increases of 6% to 8% in fuel and public transport prices during the entire year, which would keep inflation in this sub-basket above target for quite some time. A gradual convergence towards the long-term targets for inflation during a broader time period is expected

The forecasts for non-tradable inflation excluding food and regulated items continue to exceed the target range for 2007.

The food inflation forecast for 2007 is higher in this report than in the September edition. An upsurge during first half of the year is still expected. It should reverse itself during the second half, although not enough to allow food inflation to end 2007 within the target range. These figures do not fully contemplate the impact moderate El Niño weather conditions (such as those already confirmed) could have on staple food prices. Accordingly, the path outlined in this report might underestimate food inflation to some extent, particularly during the first half of the year. However, even with El Niño weather, the increases at mid-year would be temporary and perishable food prices would tend to decline during the fourth quarter. Moreover, it is important to remember that food inflation forecasts are highly uncertain. The models underestimated inflation in this item during previous quarters.

In 2007, tradable inflation would stay below the target range.

As in the September report, tradable inflation excluding food and regulated items is expected to remain below the target range, offsetting the upward pressure seen in the other components. Therefore, meeting the target in 2007 would depend on the limited inflationary pressure expected from the exchange rate during the year and on lower inflation in food and regulated items throughout the second half. However, it is important to note that the monetary policy measures adopted last year are helping to control non-tradable inflation and to anchor inflationary expectations.

In view of the above, the Bank's central model predicts non-food inflation will be within the target range for all of 2007 and will decline slightly at the end of the year (Table 8). Total consumer inflation is expected to rise during the first six months of 2007, mainly because of food-price shocks and the statistical noise in public utility rates. These hikes would disappear in the second half of the year, allowing total inflation to fall within the target range.

2. Risks

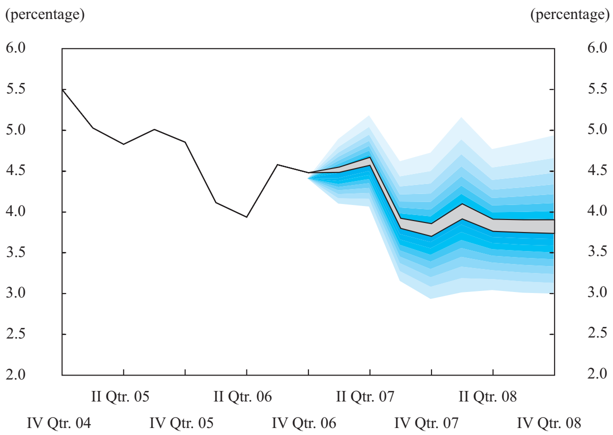
Although the central forecast is regarded as the most likely, it is a highly uncertain prediction. For this reason, a fan chart was prepared to show its probability distribution (Graph 39). In calculating that distribution, we consider the risk factors that could result in a very different level of inflation than the central forecast. We also look at the historic standard deviation of forecasts produced with the TMM. The following are some of the factors that could lead to a higher rate of inflation than the one contemplated in the central scenario.

- An increase in domestic demand beyond what is contemplated in the central forecast of the base scenario. The central forecast assumes that private consumption will increase during 2007 at a rate similar to the one in 2006. However, an increase in the rate of private spending cannot be ruled out, inasmuch as consumer confidence is high and there is an ample supply of credit. The recent trend in imports of consumer goods is also a factor. By the same token, the assumed growth in public spending is regarded as conservative and could be

More-than-expected growth in demand is an upward risk for inflation.

Graph 39

Probability Distribution of the Inflation Forecast (Fan Chart)



Source: Calculations by Banco de la República.

Accumulated Probability of Actual Consumer Inflation within he Indicated Range

Inflation Ranges (%)	Probability (%)	
	December 2007	December 2008
above 5.5	0.8	2.1
below 5.5	99.2	97.9
below 5.0	94.8	91.6
below 4.5	79.3	75.8
below 4.0	50.3	49.2
below 3.5	20.6	19.8
below 3.0	4.9	3.8

underestimated, given the positive way tax collections have performed. These factors, as a whole, could result in domestic demand that outweighs the economy's productive capacity; they also could generate more inflationary pressure.

- The forecasts do not include the impact El Niño weather could have on the supply of food or food prices. Consequently, food inflation might end up being higher than the central forecast, at least for part of the year. If the anticipated hikes translate into increased expectations of inflation, their impact can be permanent and will influence long-term inflation and monetary policy.

The following are the principal factors that could place inflation below the central forecast:

- The exchange rate dropped recently to less than what it was in the second half of 2006. If this downward trend continues, tradable inflation could be less than the central forecast. By the same token, a tendency towards appreciation could have a favorable effect on inflationary expectations. This, in turn, would help to achieve the targets.

The price hikes for fuel and transportation might be overestimated in this report.

- The increase in prices for fuel and transportation could be less than what is contemplated in the base scenario, given the relatively low exchange rate in recent months and the price of oil on the international market.

Given all these factors, there appears to be an upward bias in the risks surrounding the central forecast, particularly for 2008. Even so, the likelihood of meeting the target announced for 2007 is high (59%). It is important to point out that the central inflation forecast is based on the assumption that monetary policy is in line with achieving the target in the medium term and long term.

Interest Rate Pass-through in Colombia

Yanneth Rocío Betancourt G.
Edgar Caicedo G.*

The Board of Directors of Banco de la República (BDBR) raised the intervention interest rate (repo expansion rate) on six occasions between April and December 2006, for a total increase of 150 basis points. Although these policy rate changes were passed through entirely to the interbank rate (TIB in Spanish),[1] other market rates were slower to react.

The interbank interest rate is set by Banco de la República according to the *Inflation Report* and must be consistent with the target for inflation. The intervention rate is what the Bank charges on the repo and reverse repo transactions it conducts daily with institutions in the financial system.[2] Because credit institutions often turn to the Bank for liquidity quotas, the stance of monetary policy is transmitted through the rate it charges on those operations. This is the liquidity cost banks face, and market rates should respond to it. The purpose of this article is to analyze, on the basis of theory and empirical evidence, how interest rates in the market respond to changes in Banco de la República's policy rate.

I. Theory and Empirical Evidence

To ensure price stability, a central bank must know exactly to what extent and how long it takes a change in its policy instruments to influence inflation. Five channels for monetary policy transmission are identified in economic literature. They include the interest rate channel, the credit channel, the asset price channel, the exchange rate channel and the expectation channel.[3] Differentiating between these transmission channels is justified if it allows for a better understanding of the speed and extent to which each contributes to the effectiveness of the policy. Because the first link in the monetary policy mechanism is transmission of the policy rate to

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1 The TIB has increased by 148 basis points since April 2006.

2 All reverse monetary transactions were suspended in January 2005.

3 See the Bank for International Settlements (1998) for a review of the importance of transmission mechanisms in emerging economies.

interest rates in the market,[4] knowing if this transmission is complete is extremely important to the strategy of the policy. Incomplete transmission can seriously hamper its effectiveness (Égert. *et al*. 2006).

A number of studies found that changes in a central bank's policy rate are not passed through entirely to the interest rates that are most important to decisions on company and household spending (e.g. De Bondt. 2005; Berstein and Fuentes. 2003). This rigidity has been explained by the different characteristics of the financial structure, among other factors (e. g. Cottarelli y Kourelis, 1994)[5] For example, in the case of the United States, Hannan and Berger (1991) found that banks in more concentrated markets are more rigid in their interest rates, as are small banks, and that deposit rates are less accommodating to upward incentives. According to Kot (2004) in a study done for the consumer credit market, the more competitive the market, the faster and more complete the rate change in response to a policy rate change. For the euro zone, De Bondt (2005) found that pass-through is complete for rates with less than three months maturity and incomplete for rates with longer maturity. He also found that credit risk explains the difference in the speed of change in deposit and lending rates.

In the Colombian case, empirical studies show a stable long-term relationship between the policy rate and market rates (Julio. 2001), as well as incomplete pass-through to short-term interest rates (Huertas *et al*.. 2005).[6] According to the authors, this is explained by a loss of effectiveness in the credit channel. With a disaggregated estimate for the banking system, Amaya (2006) found that lending rates react more quickly to changes in the intervention rate,[7] and that banks react in different ways and with different degrees of intensity to a change in policy, depending on their characteristics (such as size[8]). In a recent study, Betancourt *et al*. (2006) found the relation between the policy rate and market rates can be complex and is not one to one. This is because changes in the policy rate can have a direct impact on interest

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4 At an initial stage of the pass-through process, the policy rate influences short and long-term market rates. These, in turn, affect deposit and lending rates through a variety of factors such as the cost of funding for banks and the existence of government bonds as a substitute for loans.

5 See Ahumanda and Fuentes (2004) for a review of the literature on the banking industry and monetary policy.

6 Using descriptive statistics, Huertas et al. (2005) estimated that a 1% change in the policy rate implied a short-term change of 0.26% in the rate on 90-day certificates of deposit (DTF in Colombia) and a long-term change of 0.6%. In contrast, the authors used VAR models to estimate the impact of the interbank rate on the DTF.

7 The maximum response to a policy rate change is 4.4 months for lending rates and 6.1 for deposit rates.

8 The big banks, compared to others, react more strongly in the deposit market than in the credit market.

rates in the market and an indirect effect through changes in other macroeconomic variables (income, depreciation, inflation and expectations), while economic shocks impact market rates directly, without a change in the policy rate.[9]

II. The Situation in Colombia

As mentioned already, interest rate pass-through in Colombia is incomplete and inconsistent. Between April and December 2006, the reaction of deposit rates was less than the policy rate change, although the pass-through to rates on installment certificates of deposit was mixed. The response of lending rates was more complex: treasury and prime or preferred rates increased as much or more than the policy rate, while consumer and credit card rates declined (Graph B1.1).

The large sell-off of domestic government bonds (TES) held by financial institutions is one possible explanation for this mixed response. It may have enabled banks to fund their credit and reserve needs without having to raise their deposit rates in a proportion similar to the increase in the intervention rate. Also, the supply of certain types of loans increased with the banks' shift away from TES, lowering some lending rates (consumer, commercial and credit card).[10]. This change in market rates could reflect the hypothesis that commercial banks adjust only a portion of all the rates during each period and to a different extent, depending on various factors. The result is imperfect policy rate pass-through (Kobayashi. 2005).

III. Conclusions

With this evidence, it is possible to conclude that interest rate pass-through is a complex process where other variables, aside from the policy rate, influence the actions banks take, the conditions prevailing in loan and deposit markets and, therefore, the decision on interest rates in the financial market. If a central bank is to minimize the risk of not meeting the inflation target and to avoid excessive volatility in interest rates and output, it must take these considerations into account when deciding on policy rates.

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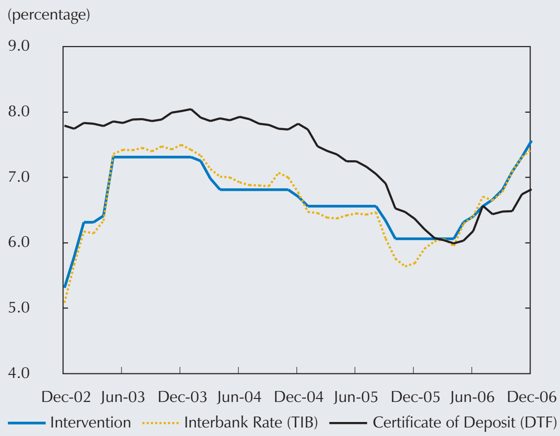
9 Other studies, such as those by Arango et al. (2006), Melo and Becerra (2006) and Roland (2006), examine interest rate pass-through from different angles, such as the interest rate payment profile.

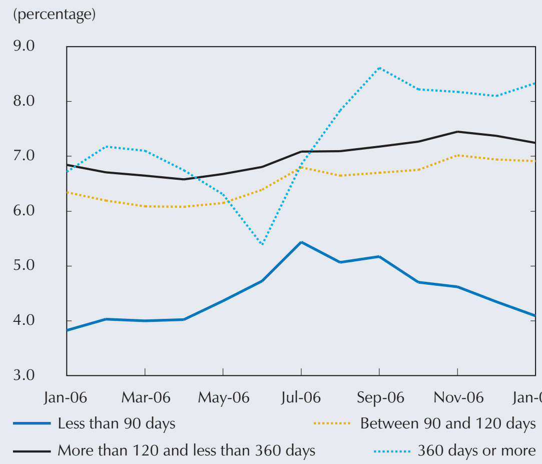
10 Banks reduced their exposure to TES by more than $5 trillion pesos between March and December 2006; the outstanding portfolio balance was up by more than $23 trillion pesos during the same period.

Graph B1.1

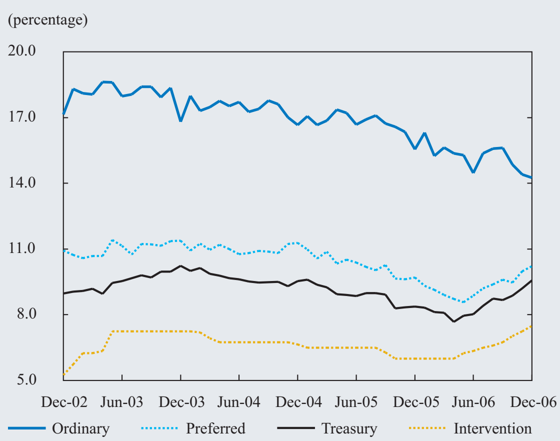
Interest Rates

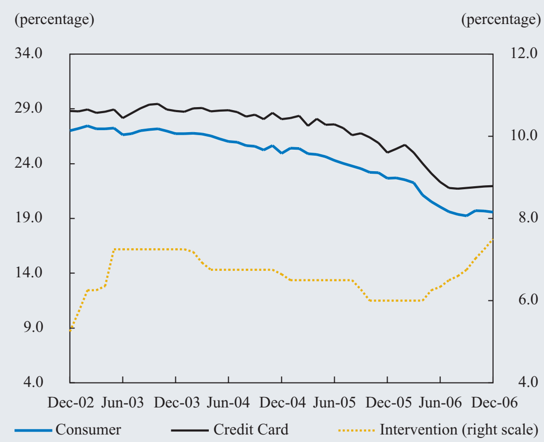


Weighted Average for Installment Certificates of Deposit



Lending Rates





Source: National Office of the Superintendent of Financial Institutions and Banco de la República.

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Meeting Inflation Targets in Colombia

Alejandro Reyes G.*

The 1991 Constitution gave Banco de la República responsibility for maintaining the purchasing power of Colombian currency and ensuring stable output and employment. In pursuit of that mandate, the Bank has set a declining operational target for inflation since 1991. During the first eight years, that target was combined with others for exchange and monetary aggregate management. As of 1999, when the exchange-band system was modified, the Board of Directors of Banco de la República (BDBR) explicitly adopted inflation targeting as the strategy for monetary policy management. Based on that strategy, the Bank defines compliance with each year's inflation targets and their gradual convergence towards the long-term goal (in the 2%-to-4% range) as the monetary policy objective.

At this time, the inflation target is set for the annual variation in the Consumer Price Index (CPI) at December, calculated by the National Bureau of Statistics (DANE). Initially, specific targets were established for the end of each year. However, as of 2003, the Board of Directors has defined target ranges. In doing so, it is acknowledging the volatility of the CPI in Colombia, given the importance and frequency of temporary price shocks. These are associated mainly with prices for food and regulated items. Also, in addition to the target for the coming year, the BDBR announces the range within which the two-year inflation target will be set.

The pattern of inflation throughout the last two decades reflects the usefulness of this strategy: consumer inflation has experienced a steady decline since 1990, interrupted only in 1997 (Graph B3.1). Moreover, the targets have been met on a number of occasions and with increasing frequency, particularly in the last three years (2004, 2005 and 2006). On other occasions, as in 2002 and 2003, the target was missed by only a narrow margin and because of temporary shocks (external and in food supply). These were explained by the monetary authority in due course. In all, during 64% of the months since 1999, the economy has been below the inflation target (with respect to the central point in 1999-2003 and the top of the target range in 2004 - 2006) (Table B2).

As part of the inflation targeting strategy, the announcement of targets gives the economy a nominal anchor to guide the course of expectations and the adoption of price and

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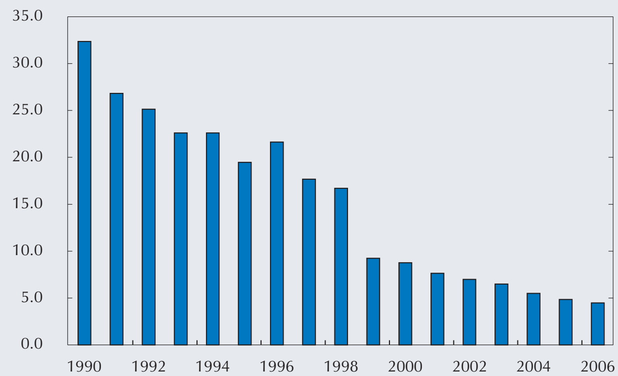
Graph B2.1
Annual Consumer Inflation Each Year at December



Source: DANE.

Table B2
Inflation Targets and Actual Inflation

	Inflation Target			Actual Inflation	
	Bottom of the Range	Middle	Top of the Range	Total	Without Food
Dec-91	n,a,	22.0	n.a.	26.8	27.6
Dec-92	n.a.	22.0	n.a.	25.1	23.8
Dec-93	n.a.	22.0	n.a.	22.6	26.8
Dec-94	n.a.	19.0	n.a.	22.6	22.4
Dec-95	n.a.	18.0	n.a.	19.5	21.0
Dec-96	n.a.	17.0	n.a.	21.6	23.2
Dec-97	n.a.	18.0	n.a.	17.7	18.2
Dec-98	n.a.	16.0	n.a.	16.7	17.1
Dec-99	n.a.	15.0	n.a.	9.2	10.0
Dec-00	n.a.	10.0	n.a.	8.8	9.3
Dec-01	n.a.	8.0	n.a.	7.6	6.5
Dec-02	n.a.	6.0	n.a.	7.0	5.4
Dec-03	5.0	5.5	6.0	6.5	7.0
Dec-04	5.0	5.5	6.0	5.5	5.5
Dec-05	4.5	5.0	5.5	4.9	4.1
Dec-06	4.0	4.5	5.0	4.5	3.9

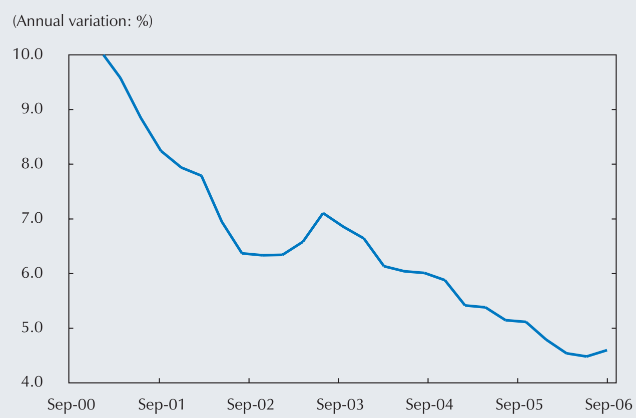
n.a. Not applicable
Source: DANE and Banco de la República.

wage agreements. In this sense, the positive effects of compliance with inflation targets in Colombia are evident not only in the downward inflation trend described earlier, but also in the way expectations have behaved during the current decade.

The Bank now has two surveys of inflationary expectations: a monthly survey of banks and stock brokers and a quarterly survey based on a representative sample of different segments of the population (banks, labor unions, businessmen and academics, among others). The monthly survey, initiated in 2003, shows expectations have followed the targets, even ignoring certain increases in inflation that ultimately proved to be temporary. In fact, those interviewed for the surveys done in December 2006 and January 2007 anticipated 4.16% inflation at 12 months. This is within the target range set by the Bank for 2007 (3.4% to 4.5%), even despite the rise at the end of 2006.

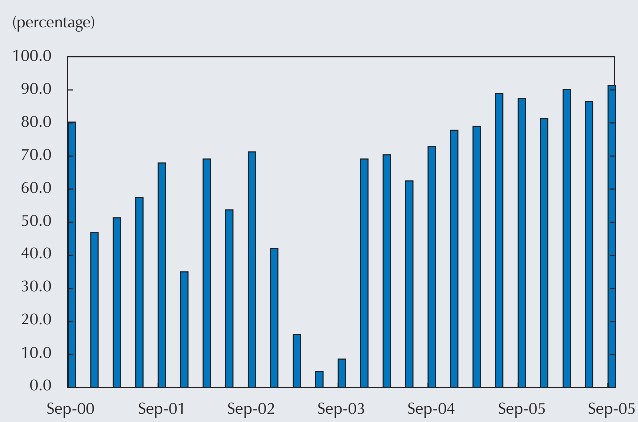
As to a more long-term trend, the quarterly survey shows expectations have declined since 2000 on par with the reduction in inflation and the targets (Graph B2.2). A module of the same survey that contains a question about the likelihood of the target being met shows a steady increase since 2003. It was 92% in the latest survey available, which exceeds every percentage registered in the last two years (Graph B2.3).

Graph B2.2
Expectations of Inflation at One Year (Quarterly Survey)



Source: Banco de la República.

Graph B2.3
Probability of Meeting the Inflation Target



Source: Banco de la República.

On the whole, compliance with the targets and the steady downward trend in inflation, coupled with the policy decisions made by the monetary authority, have sparked growing confidence among the agents in the economy and enhanced the credibility of the country's monetary policy. This, in turn, has reduced the cost of continuing the disinflation process and guaranteeing price stability in the Colombian economy.

Measurement and Change in Labor Productivity in Colombian Industry and Its Effect on Costs

Mario Nigrinis*

Productivity is an important variable in analyzing what determines inflation. Increases in productivity are associated with a reduction in the marginal costs incurred by companies. This reduces the odds that companies will raise their prices and thus the appearance of inflationary pressures, if such hikes become generalized. A rise in real wages does not necessarily affect a company's labor costs (which could prompt inflationary pressures), provided it is offset by positive variations in productivity.

Because productivity is a variable that cannot be observed directly, it must be measured indirectly through a combination of other indicators. In its inflation reports, Banco de la República uses output per hour worked in industry as an appropriate indicator of labor productivity in that branch of the economy. According to economic literature, one particular feature of such measurements is their close correlation to variations in output.[1] As indicated in previous reports, this characteristic can lead to mistaken conclusions about the behavior of productivity and the existence of inflationary pressures during the course of the economic cycle.

One way to avoid this problem is to filter the productivity series. The annual variation in the industrial production index, calculated without the seasonal and irregular component, is shown in Graph B3.1, along with the original increase in output per hour worked (unfiltered) and a new productivity indicator constructed with the Hodrick and Prescott filter. While the correlation between growth in industrial production and the unfiltered indicator of productivity is 98.2%, the correlation with filtered productivity declines to 62.8%.

Three episodes of the economic cycle can be identified in the productivity series by levels (Graph B3.2). The first is from 1990 to 1994, when the rise in industrial production (15.2%) was accompanied by an increase in labor productivity (13.9%). The second period, from 1995 to 2002, saw production and productivity decline

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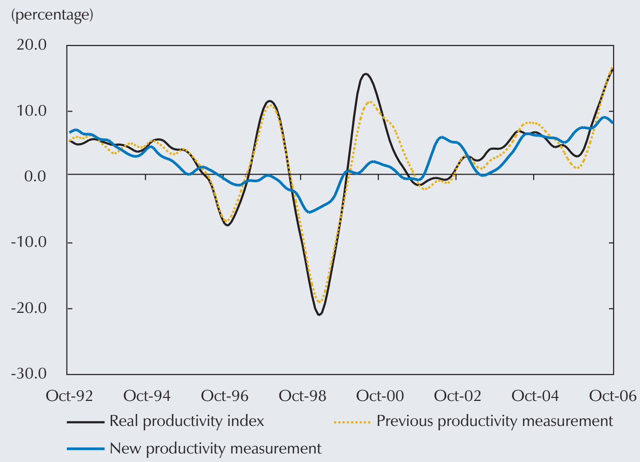
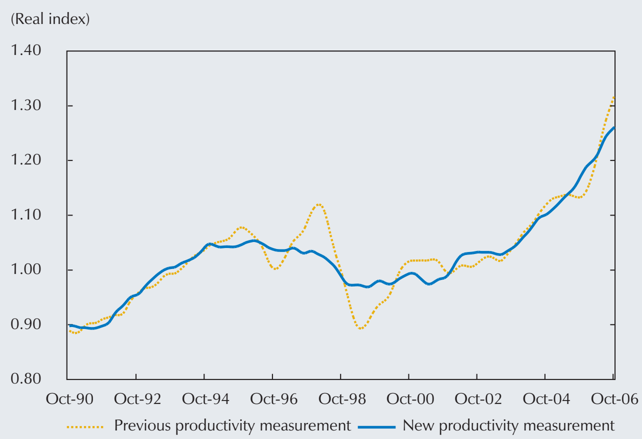
1 See Argia M. Sbordone (1997) "Interpreting the Procyclical Productivity of Manufacturing Sectors: External Effects or Labor Hoarding?", *Journal of Money. Credit and Banking*, Vol. 29. No. 1. pp. 26-45.

GRAPH B3.1
GROWTH IN OUTPUT AND INDUSTRIAL PRODUCTIVITY



Source: DANE-MMM.

GRAPH B3.2
OUTPUT PER HOUR WORKED IN INDUSTRY

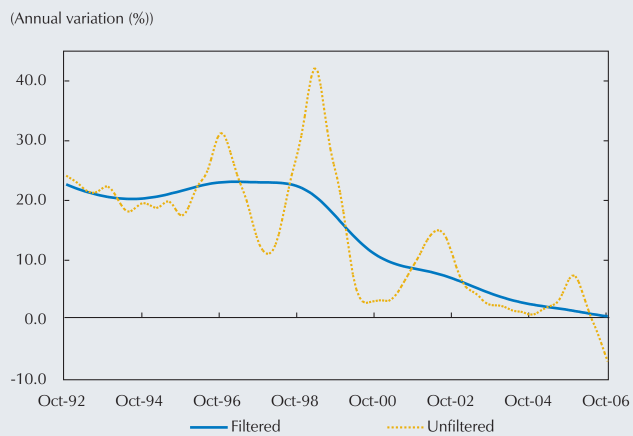


Source: DANE-MMM.

(5.9% and 1.7%, respectively). The third, beginning in 2003, has seen an important recovery in industrial production, 7.1% on average, and strong growth in productivity (averaging 6.8% per year). As a result, it has now surpassed the levels registered in the past. A look at the series also shows the increase in industrial production during 1995-1997 (4.1% and 2.5% respectively) was not accompanied by an increase in productivity, which may be why it did not last long.

Finally, using a filtered productivity series to calculate the unit labor cost (ULC: the ratio of wages to labor productivity), this indicator was found to be virtually stable between 1992 and 1998 (Graph B3.3). Accordingly, the reduction in inflation during that period (from 25.1% to 16.7%) was not accompanied by a reduction in industrial labor costs. This contrasts with the current decade, which has seen an important decline the rate of nominal ULC hikes. Therefore, taking into account the nominal wage increases observed in industry during these years, which average 8.3% a year, productivity must have made a significant contribution to the estimated reduction in costs.

Graph B3.3
Nominal Unit Cost per Hour Worked in Industry



Source: DANE-MMM.

Macroeconomic Projections by Domestic and Foreign Analysts

The following are the latest projections by domestic and foreign analysts on the main variables of the Colombian economy in 2007 and 2008. When consulted, the contributing analysts had access to data at December 2006.

I. Projections for 2007

The forecasts for 2007 are shown in Table A1. On average, the domestic analysts expect 5.3% economic growth, which is 56 bp more than the forecast last quarter. The foreign analysts anticipate 5.1% (50 bp more). Expectations improved once again, reflecting the positive situation described by the economic indicators for supply and demand, the healthy increase in credit, and the fact that Fedesarrollo's consumer confidence index remains near an all-time high. This means we can expect good growth in private consumption.

Table A1
Projections for 2007

	Real GDP Growth (percentage)	CPI Inflation (percentage)	Nominal exchange rate	Nominal DTF (percentage)	Fiscal Deficit (percentage of GDP)	Unemployment Rate (percentage for 13 cities)
Domestic Analysts						
Corredores Asociados	5.5	4.5	2,285	7.5	(2.0)	11.5
BBVA Ganadero	6.2	3.6	n.a.	n.a.	n.a.	n.a.
Bancolombia-Suvalor	5.1	4.1	2,194	7.3	(1.0)	10.8
Corficolombiana-Corfivalle	5.0	4.2	2,480	7.8	(1.7)	n.a.
Banco de Bogotá	5.1	4.3	n.a.	n.a.	n.a.	n.a.
Fedesarrollo	5.2	4.0	2,285	n.a.	(1.8)	n.a.
Citibank-Colombia	5.5	4.2	2,300	7.4	(1.5)	10.0
Alianza Valores	5.2	3.8	2,069	7.6	(1.3)	11.5
Banco Santander	5.0	4.0	2,310	7.7	(1.3)	9.5
Average	**5.3**	**4.1**	**2,275**	**7.6**	**(1.5)**	**10.7**
External Analysts						
CS First Boston	5.4	4.5	2,430	n.a.	(1.7)	n.a.
J. P.. Morgan Chase	5.0	4.4	2,400	n.a.	(1.5)	n.a.
Goldman Sachs	5.0	4.4	2,380	n.a.	(1.0)	n.a.
Deutsche Bank	4.9	4.0	2,338	n.a.	(1.2)	n.a.
Average	**5.1**	**4.3**	**2,387**	**n.a.**	**(1.4)**	**n.a.**

n.a. Not available.
Sources: Banco de la República, base on data from the analysts.

As to inflation, the domestic analysts lowered their forecast by 258 bp to 4.1%; the foreign analysts kept theirs at 4.3%. Both figures are within the target range for the year (3.5% to 4.5%).

The domestic analysts lowered their forecasts for the exchange rate by Col$205, on average (to Col$2,275); the foreign analysis reduced theirs by Col$134 (to Col$2,387). In other words, on average, the domestic analysts expect foreign exchange to depreciate by 1.6% and the foreign analysts, by 6.2%, compared to the price at the end of 2006 (the maximum expected depreciation is 9.7% and the minimum is -8.21%). In keeping with the situation during the last seven quarters, the forecasts were revised downward once again. That change probably was influenced by the sharp drop in the exchange rate during the fourth quarter of 2006, which offset the entire second-quarter increase. This occurred along with a sharp drop in risk aversion on world markets, renewed by less inflation in the United States and Europe, and accompanied by market growth that surpassed expectations.

On average, the analysts anticipate interest on term deposits (DTF in Spanish) to be 7.6% by the end of the year. Compared to the DTF at the end of 2006, this would imply an increase of 80 bp and a level similar to the interbank rate, following recent hikes in Banco de la República's interest rates. The consolidated fiscal deficit is expected to be around 1.5% of GDP, which is slightly above the CONFIS projection (1.3% for the consolidated public sector). Finally, the forecast for unemployment in 13 cities is 10.7%. This could suggest, contrary to last quarter, that analysts do not expect the recent increases in DANE's measurements to continue in the coming months.

II. Projections for 2008

For 2008, the domestic analysts expect 4.6% growth and the foreign analysts, 4.5% (Table A2). Both groups anticipate 3.7% inflation. This is inside the range (3% to 4%) within which the target for 2008 will be set. As to the exchange rate, annual devaluation is expected to average 2.9% compared to the forecasts for the end of 2007. This would place the representative market rate (TRM in Spanish) at Col$2,430 by the end of 2008, which is similar to what it was in July 2006 and July 2002. These forecasts imply 7.9% accumulated peso devaluation between 2007 and 2008, compared to the end of 2006. On average, the analysts expect 44% of this devaluation to occur in 2007 and the other 56% in 2008.

Table A2
Projections for 2008

	Real GDP Growth (percentage)	CPI Inflation (percentage)	Nominal Exchange Rate (end of 2008)
Domestic Analysts			
Corredores Asociados	4.5	4.0	2,330
BBVA Ganadero	5.0	3.1	n,d,
Bancolombia-Suvalor	4.5	3.5	2,227
Corficolombiana-Corfivalle	4.5	4.0	2,554
Banco de Bogotá	4.5	3.9	n,d,
Fedesarrollo	4.8	3.5	2,350
Citibank-Colombia	4.5	3.5	2,450
Alianza Valores	n,d,	n,d,	n,d,
Banco Santander	4.8	3.7	2,350
Average	**4.6**	**3.7**	**2,377**
Foreign Analysts			
CS First Boston	5.0	4.0	2,479
J. P. Morgan Chase	4.7	3.8	2,500
Goldman Sachs	4.0	3.8	2,500
Deutsche Bank	4.1	3.6	2,456
Average	**4.5**	**3.8**	**2,484**

n.a. Not available.
Sources: Banco de la República, based on data provide by the analysts.