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Banco de la República

CENTRAL BANK OF COLOMBIA

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José Darío Uribe Escobar

Bogotá, D.C., August 1, 2007

Honorable Chairmen and Members
Third Standing Constitutional Committees of
The Senate and
The House of Representatives

Dear Sirs,

Pursuant to Law 31 of 1992, Article 5, the Board of Directors of the Banco de la República hereby submits for consideration by Congress a report on the country's macroeconomic results for the first half of 2007. The report also presents the Board's targets for this year and the outlook for the different macroeconomic variables. The last two chapters describe the composition of the international reserves and discuss the Banco de la República's financial situation.

Yours truly,

A handwritten signature in black ink, consisting of a stylized 'J' and 'U' followed by a horizontal line.

José Darío Uribe Escobar
Governor

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Introduction

Colombia's economic performance makes it now one of the fastest growing economies not only in Latin America but in the world. Investors from the developed countries are the first to recognize this good moment and to appreciate the promising economic outlook.

Colombia's economy continues to grow apace. Gross domestic product went up by 8% in the first quarter of 2007, the third consecutive quarter with a GDP rise of over 7%. Investment and household consumption drove first-quarter growth, while public spending decreased in keeping with this year's consolidated deficit target. This composition of aggregate demand can undoubtedly be considered appropriate.

Investment, mainly fueled by higher gross capital formation in public infrastructure and in machinery and equipment, has favored sustainable growth by increasing the economy's potential output and raising its productivity. Higher household consumption has spread the benefits of economic growth to broad segments of the population, at the same time as public consumption has moderated. On the external front, exports continue to increase at a healthy pace, of over 9% in real terms. Imports, too, show strong growth, reflecting a booming economy that needs to import capital goods and raw materials to improve its competitiveness and continue expanding.

Investment, mainly fueled by higher gross capital formation in public infrastructure and in machinery and equipment, has favored sustainable growth by increasing the economy's potential output and raising its productivity.

On the supply side, the fastest expansion has been in construction, industry, commerce and the sector of transport and communications. The strength of the economy is being gradually reflected in lower unemployment and higher quality of employment. This is evidenced by recent figures from DANE (the national statistics agency), despite the difficulty in comparing statistics because of the methodological changes introduced in 2006 in DANE's household surveys.

Colombia's economic performance makes it now one of the fastest growing economies not only in Latin America but in the world. Investors from the developed countries are the first to recognize this good moment and to appreciate the promising economic outlook. This is why they are vying to enter the country,

The interest-rate increases made by the Banco de la República's Board of Directors over the past fifteen months are intended to maintain and prolong this favorable state of affairs.

as confirmed by surprising figures on foreign investment and by high bids for state and private assets sold at public auction.

The interest-rate increases made by the Banco de la República's Board of Directors over the past fifteen months are intended to maintain and prolong this favorable state of affairs. Just as an athlete needs to husband his strength on a marathon, so does the economy need to moderate its growth to avoid exhaustion. In economic terms this means it is important to try to smooth the economic cycle, so that growth will not exceed the economy's production capacity and result in runaway inflation or unsustainable external imbalances, which undermine confidence, scare away investors and cause the loss of a historic-and difficult to regain-opportunity for economic development.

Inflation rose steadily over the first four months of 2007, from 4.5% in December to 6.3% in April, overshooting the ceiling of the 3.5-4.5% target range for the year but edged down in May and June, to 6%. As explained in this report, various factors were responsible for the pick-up in inflation. Supply shocks, for one, pushed up food prices to an annual inflation rate of 9.7%, to June. Food inflation was also driven by the climatological phenomenon, El Niño, by higher world prices for the commodities used in making biofuels, and by strong demand from Venezuela-particularly for meat. An 11% increase in overall domestic demand put heavy price pressure on other items of the CPI basket besides food. Although some factors, such as El Niño, were transitory and their effects have therefore begun to disappear, others are longer-lasting and have consequently called for action from the monetary authority.

The Bank's Board of Directors began in April 2006 to tighten monetary policy gradually. By anticipating inflationary pressures the Board managed to buy time for the monetary-policy transmission mechanisms to begin to operate.

In April 2006 the Bank's Board of Directors, recognizing the lasting nature of some of those shocks and the fact that excessive aggregate demand could intensify inflationary pressures, began to tighten monetary policy gradually. By anticipating inflationary pressures the Board managed to buy time for the monetary-policy transmission mechanisms to begin to operate. As discussed in this document, these mechanisms operated slowly, partly because of a very rapid rise in bank credit, associated with a shift in bank portfolios away from investments in TES and toward loans. In view of this situation, to accelerate transmission of monetary policy toward credit and aggregate demand, the Board decided at the beginning of May to set a marginal reserve requirement on banking-system liabilities. The timely interest-rate decisions and the recently imposed marginal reserve requirement have been of critical importance in forestalling a surge in inflation expectations, which would have introduced another pressure factor on the general level of prices.

Another variable the Board has focused on in the first half of this year is exchange-rate behavior. A section of this report analyzes real and nominal exchange-rate movements, their short- and long-term determinants, and the policy of intervention in the exchange market. A significant conclusion is that appreciation against the US dollar is a common phenomenon among numerous currencies in Latin America and other regions of the world. This is why Colombia's real bilateral exchange rate with respect to several countries appreciated only marginally in 2003-2006 and even depreciated in some cases, for instance against the Venezuelan bolívar. For this and other reasons the loss of competitiveness has not been as pronounced as it might have been. This is borne out by the continuing strength of exports, which grew by 17.3% in dollars between January and April, and of tradables, which showed a real first-quarter increase of 8.5%, greater than the nontradables' 7.8%

The report also analyzes real exchange-rate determinants in detail and comes to the conclusion that a confluence of permanent and transitory factors accounts for the Colombian peso's appreciation. The permanent factors include, among others, devaluation of the dollar, productivity gains, and higher remittances from Colombian workers abroad. Among transitory but prolonged factors the report points to favorable terms of trade, rising foreign direct investment, expanding domestic demand, lower risk premiums, and interest-rate differentials in favor of Colombia. The emphasis on the real exchange rate helps in understanding the role of aggregate demand and relative prices in determining this variable. It also explains the reasons why public and private efforts to save help to reduce pressure toward appreciation, particularly in the face of strongly rising public and private investment, such as has been occurring.

In the above context, the report reviews the different stages that exchange-market intervention policy has gone through since 2003. The analysis shows that the macroeconomic conditions in which intervention is made are crucial to its effectiveness. More specifically, for intervention to achieve its aims a necessary condition is that monetary and exchange-rate policies be consistent the one with the other, in the sense that interest-rate decisions reinforce the market signal that the intervention provides. Experience has demonstrated this. As discussed in the report, the episodes of intervention in 2003 and 2005 were effective in terms of modifying exchange-rate behavior, for the two policies were consistent, in that interest-rate movements did not go against the aims of the interventions but reinforced them.

The possibility of maintaining consistency depends, however, on the economy's position at every instant and, concretely, on the interest-rate policy needed to meet the inflation target. If economic conditions are such that the authority

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feels a rate rise is needed to secure the inflation target, as has been the case since the second quarter of 2006, this could prove inconsistent with an intervention policy designed to moderate appreciation. Developments between January and April 2007 clearly demonstrate this. Despite discretionary currency purchases during this period in an amount similar to purchases during the whole of 2005, very little was achieved in terms of moderating appreciation. In such circumstances, discretionary monetary intervention cannot be persistently applied. To do so could jeopardize meeting the inflation target and weaken the inflation-targeting scheme. Accordingly, discretionary interventions ceased from May on, and the only intervention applied today is through options to control volatility.

Moreover, the onset of a strong net inflow of private capital, originating from external borrowing, led the Board of Directors to introduce a six-month unremunerated peso deposit, equivalent to 40% of foreign-loan disbursements. Subsequently, the government extended this measure to the capital portfolio. The latest data on the foreign-exchange balance show that this measure has already begun to be instrumental in discouraging the inflow of short-term capital, thereby moderating pressure on the peso to appreciate.

This report consists of seven chapters. The first one presents inflation results for the first half of 2007, with the inflation outlook for the second half of the year. Chapter II analyzes the results of economic activity and employment in the first quarter of 2007. Chapter III discusses monetary policy and foreign-exchange intervention strategy; it also reviews movements in financial markets, interest rates and monetary aggregates and evaluates the financial establishments' quality and risk indicators. Chapters IV and V deal with balance-of-payments and fiscal-policy behavior, respectively. Chapter VI discusses the level of international reserves and indicators of external vulnerability. The last chapter, VII, presents the Banco de la República's financial situation.

The report also contains a number of boxes on topics considered of importance in analyzing the current economic situation: Box 1: Macroeconomic context of currency appreciation in Latin American countries; Box 2: Import and export movements, 2005-2006; and Box 3: Drug-trafficking economy in Colombia: measurements and studies.

I. Inflation in the First Half of 2007 and Outlook

Over the first four months of the year consumer inflation went up from 4.5% in December to 6.3% in April, overshooting the ceiling of the 3.5%-4.5% target range set by the Banco de la República's Board of Directors for the end of 2007. It edged down in May and June, to 6%.

A. FIRST-HALF INFLATION

Consumer inflation rose strongly in the first four months of the year, exceeding market expectations and the Bank's forecasts. Both headline and core inflation showed a rising trend in the annual rate. This trend had begun in late 2006, mainly as a result of pressure from the price of food and regulated services, and intensified in early 2007, driven once more by a steep rise in food prices.

Consumer inflation rose over the first four months of the year, from 4.5% in December to 6.3% in April, overshooting the ceiling of the 3.5-4.5% target range set by the Banco de la República's Board of Directors for the end of 2007. It edged down in May and June, to 6% (Graph 1).

Up to June, food accounted for about 80% of the acceleration in annual inflation (Graph 2 and Table 1). As expected by previous reports, perishable-food prices rose sharply in the first months of the year as a result of the climatological phenomenon, El Niño. The items most affected were potatoes, milk and garden produce, which are usually highly price-sensitive to climate change. This time however the effect of El Niño was more moderate than in 2002, when the inflation target for the year was missed because of a sharp rise around the fourth quarter in the price of potatoes and other primary foodstuffs. Note that price rises associated with El Niño tend to be transitory.

El Niño aside, food prices so far in 2007 have continued to be affected by other, longer-lasting factors such as external demand from Venezuela, strong private consumption in Colombia, and higher world prices.

El Niño aside, food prices so far in 2007 have continued to be affected by other, longer-lasting factors such as external demand from Venezuela, strong private

Graph 1

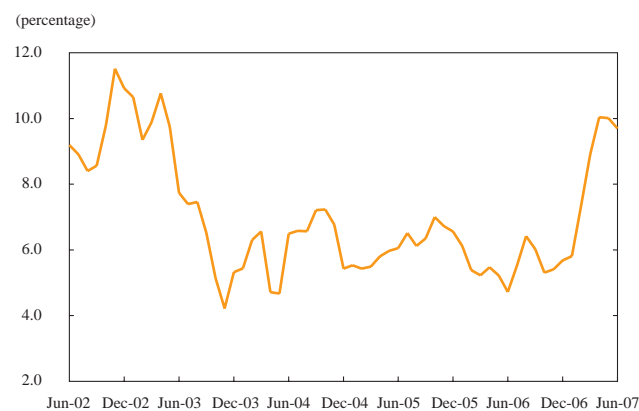
Annual Consumer Inflation



Source: DANE; calculations by Banco de la República.

Graph 2

Annual Food Inflation



Source: DANE; calculations by Banco de la República.

consumption in Colombia, and higher world prices (Table 1). The force of these factors was greater than expected, preventing a faster drop in food inflation for the second quarter.

External demand seems to have been the factor contributing most to higher inflation. In effect, food exports to Venezuela have gone up sharply from the end of last year through the first half of this year. Their biggest effect has been to raise the price of meat and meat products and hence inflation in Colombia, given the high relative share of beef (4%) and the meat group in general (6.7%) in the consumer price index.

To external demand has been added strong growth in domestic consumption, which may have also had an effect on the prices of various foodstuffs and related services. This effect is currently difficult to isolate, for it is intertwined with other upward pressures.

External food prices rose sharply in 2006, pushing up domestic prices, particularly for highly tradable products such as sugar, cereals, oils and oil products. Although world prices, especially for cereals and oils, were still rising in late 2006 and early 2007, Colombian prices have increased more

Table 1

Breakdown of Consumer Price Index Variations, to June 2007

Description	Weighting	Annual growth			Share of acceleration of acceleration	
		Dec-06	Mar-07	Jun-07	Jan-March	Jan-June
Total	100.00	4.48	5.78	6.03	100.00	100.00
Nonfood	70.49	3.95	4.38	4.38	22.64	18.15
Food	29.51	5.68	8.90	9.69	77.36	81.85
El Niño	7.15	2.79	9.45	7.06	44.25	24.89
World prices	5.35	9.62	11.04	9.22	6.47	(0.63)
Domestic demand	9.52	5.83	7.74	8.56	13.71	15.99
External demand	7.48	5.81	8.08	14.57	12.94	41.60

Source: DANE; calculations by Banco de la República.

moderately because of the compensatory effect of the peso's appreciation.

Colombia has not been alone in experiencing inflationary pressure from higher food prices. Across the world a number of economies, developed and emerging alike, are facing rising inflation from this source (Graph 3). A good part of the problem is associated with the rise in world fuel prices, which has stimulated the development of alternative sources of energy (biofuels, biodiesel, ethanol, etc.), which in turn are competing with food production for resources. Their price effect will tend to be lasting if the world oil price remains high and incentives continue to be provided for biofuels production.

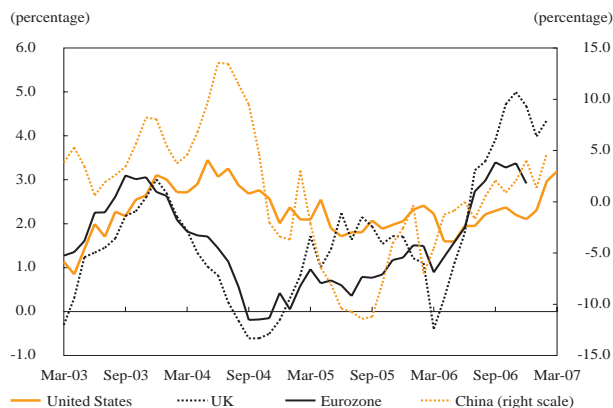
Food is the CPI component most responsible for higher inflation in Colombia this year, but other items of the basket have also registered growth. Nonfood inflation and other core-inflation indicators increased in the first four months of the year (Graph 4). The three core-inflation indicators used by the Bank rose from an average of 4.5% in December to one of 5.3% in April, overshooting the ceiling of the target range. May and June saw a reversal of this rising trend, with the three indicators edging down, to an average of 5.1%.

The rise in nonfood inflation came mostly from regulated services and the nonregulated nonfood nontradables group. In the case of regulated services (Graph 5), relatively high price adjustments in public transport and natural gas delivery were partly accountable. The transport sector has seen its operating costs rise considerably in recent years because of previous years' increases in fuel prices; in 2007 adjustments to the domestic price of gasoline have been moderate.

Nontradables inflation has been on the rise since October 2006, though with some interruptions in

Graph 3

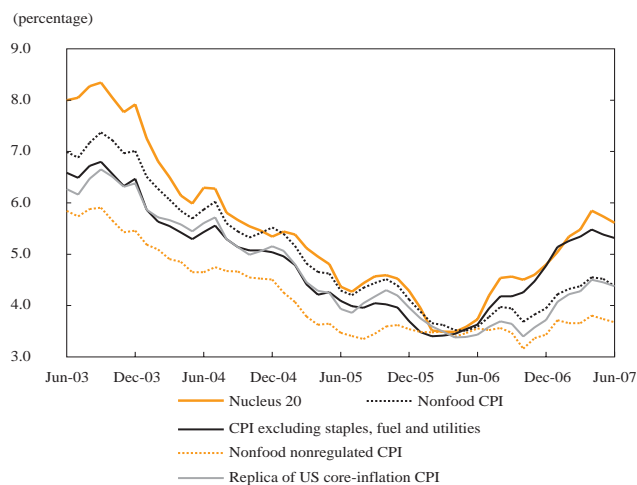
Annual Food Inflation, by Country



Source: Datastream.

Graph 4

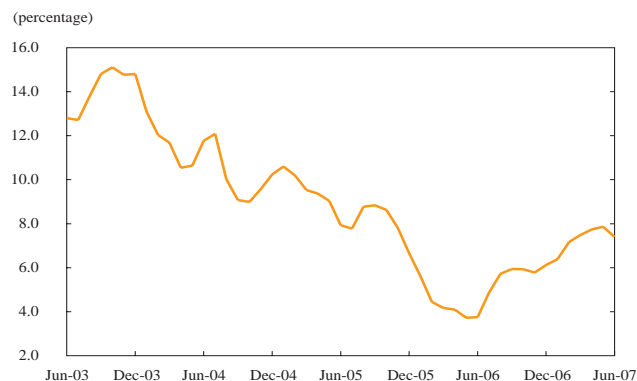
Annual Core-Inflation Indicators



Source: DANE; calculations by Banco de la República.

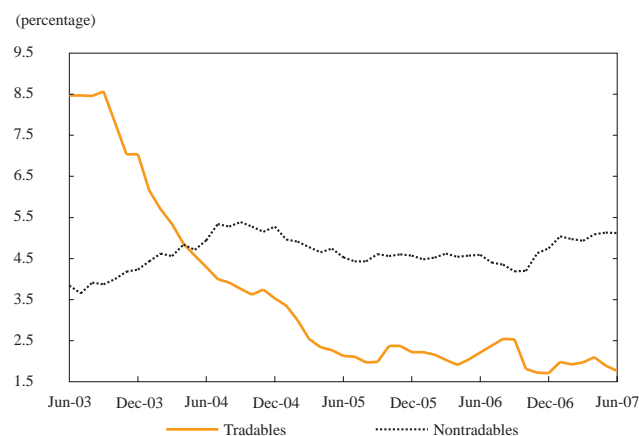
Graph 5

Annual Inflation in Regulated Prices



Source: DANE; calculations by Banco de la República.

Annual Tradable and Nontradable Inflation, Excluding Food and Regulated Prices



Source: DANE; calculations by Banco de la República.

the first half of this year. In June nontradables (nonfood, nonregulated) inflation stood at 5.2%, up from 4.8% in December (Graph 6). This basket's inflation has been a good indicator of demand pressure, and its rise this time suggests that such pressure may be building up again in the economy; this would be consistent with the strong growth displayed by aggregate demand for over a year.

Lastly, it is noteworthy that nonfood nonregulated tradables CPI reacted little to the peso's appreciation in the first half of the year. Although cumulative appreciation over the first six months amounted to 9.6%, tradables inflation did not decline (Graph 6); by contrast, producer inflation fell

heavily, from 5.5% in December to -1.0% in June, with the biggest drop occurring in imported-goods inflation, which plunged to -18.0%.

B. INFLATION OUTLOOK

Supply shocks resulting from El Niño and higher regulated prices are expected to abate in the second half of 2007, allowing annual consumer inflation to decline. As regards demand pressure, the monetary-policy adjustments put in place since mid-2006 should begin to be reflected in slower growth in credit and domestic demand, allowing inflation to move toward target in 2008. In mid-2007 there are already signs of slower credit growth, particularly in consumer loans, suggesting that monetary policy may be starting to take effect. Given the natural lag between interest-rate changes and price movements, prices are expected to begin to react in the second half of this year, the reaction intensifying in 2008. According to some recent surveys, consumption and investment have already begun to moderate, as discussed elsewhere in this report.

Consumer inflation in the second half is therefore expected to resume a downward trend thanks to a more favorable price behavior in perishable foods, and above all in public transport and gas. The coming months should see prices decline in various perishable foodstuffs as harvesting gets under way—and does so, moreover, in favorable weather conditions.

Supply shocks resulting from El Niño and higher regulated prices are expected to abate in the second half of 2007, allowing annual consumer inflation to decline.

Processed foods, including meat, should show no further large increases, since the peso's cumulative appreciation, if it continues to rise, should offset the higher external prices already in evidence. In the case of meat, in particular, measures taken by the government to limit exports of cattle on the hoof to Venezuela are expected to help curb new price rises. The seasonal increase in meat supply that occurs in the second half of every year will help too.

Despite the foregoing, food inflation is likely to end the year at a relatively high level, because the price increases in processed products will not be easily reversed in 2007. Processed-food inflation may abate in 2008, provided world prices do not climb and movements in domestic demand and the exchange rate so permit. Note that processed foods and meat account for about 80% of consumers' food spending and therefore have a great effect on inflation.

The peso's appreciation should also help to reduce inflation over the rest of the year, especially through its price effect on nonfood nonregulated tradables and regulated items (fuel and public transport, in particular, but also utilities such as energy and gas). Even so, the impact of appreciation may not be very strong, given the exchange rate's low transmission to consumer inflation in Colombia in previous quarters and the considerable force of domestic demand.

The Bank's models suggest that nonfood nonregulated nontradables may edge up by the third quarter and close at a relatively high level, beyond the target. This behavior is explained by the current buoyancy in demand, which may tend to persist over the rest of the year, given the lag with which monetary policy works.

On the whole, consumer inflation is still expected to decrease over the rest of the year, though the possibility cannot be dismissed of its remaining above target in the coming months, in which case it will be more likely to end the year beyond the target ceiling. In contrast, core inflation, which isolates the effect of transitory shocks—mostly on food—, is not expected to rise and should remain within the target range (3.5%-4.5%). Given the transitory nature of the shocks that affected inflation in the early months of 2007, headline inflation is expected to continue on a downward trend in the first half of 2008, thanks to favorable behavior of food inflation, backed by price stability at the international level.

In this context, the main risk for 2008 inflation lies in expectations, which might become misaligned with long-term targets if the final rate for 2007 overshoots the target. High inflation expectations could have a very harmful effect if they seeped into wage negotiations for next year. Food inflation, too,

Food inflation is likely to end the year at a relatively high level, because the price increases in processed products will not be easily reversed in 2007.

Processed-food inflation may abate in 2008, provided world prices do not climb and movements in domestic demand and the exchange rate so permit.

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poses a major risk, because strong world demand for biofuels might continue to push up external prices, which in turn would ultimately affect a wide range of domestic prices, given the importance of agricultural products in numerous chains of production.

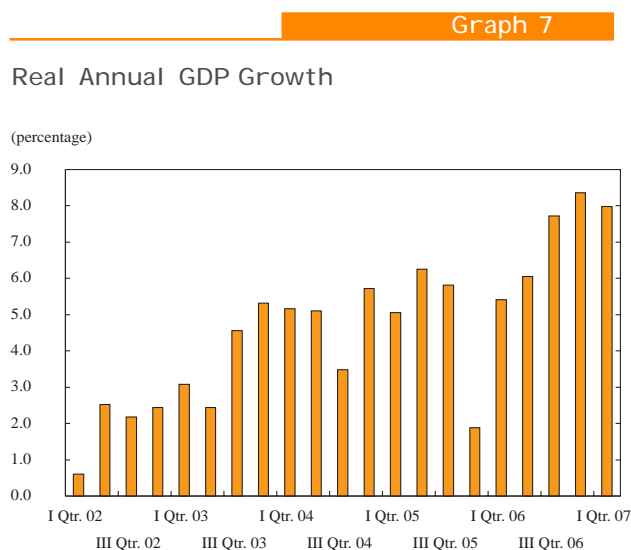
II. Economic Activity and Employment

Colombia's economy continues to grow apace. Gross domestic product went up by 8% in the first quarter of 2007, the third consecutive quarter with a GDP rise of over 7%.

A. Economic Activity

1. Current economic situation

The Colombian economy continued to expand in the first quarter of 2007, driven by buoyancy in public and private investment and, to a lesser extent, by household consumption. According to the latest information from DANE (the national statistics agency) GDP expanded by 8% in the first quarter (Graph 7), making this the third consecutive quarter with over 7% growth. DANE has, moreover, revised up its 8% fourth-quarter growth rate for 2006, reported three months ago, to 8.4%.



Source: DANE; calculations by Banco de la República.

GDP behavior in the first quarter of 2007 continued to be fueled by domestic demand, which was still growing faster (at 11.0%) than overall GDP (Graph 8). Household consumption went up by 7.3%, while overall investment soared by 32%. Public-administration consumption shrank by 0.6%, in line with the central government's consolidated deficit targets (Table 2). As in previous quarters, investment was still the component that contributed most to growth (7.1 percentage points), followed by consumption (4.5 pp).

All components of household consumption expanded, particularly durable goods (17% annual

rate), followed by semi-durables (16%). Nondurables, such as food, beverages, public services, pharmaceuticals and house-cleaning products, grew by 6.4%, faster than in 2006. Services (chiefly house renting, communal and personal social services, and commercial services) rose by 4%.

In terms of gross fixed capital formation (GFCF), the biggest rise for the first quarter of 2007 was in transport equipment (48.3%), followed by civil works

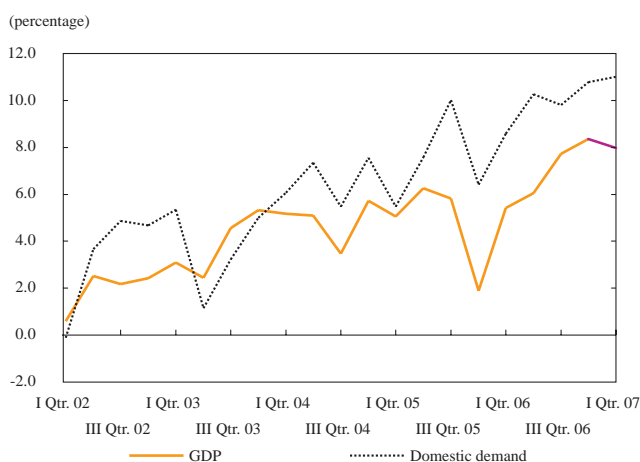
(39.6%). GFCF also rose strongly in machinery and equipment (26.9%) and housing construction (2%). Investment in the farming sector showed the slowest growth, at an annual rate of around 1.7%. Overall investment amounted to 25.9% of GDP, a level only exceeded in some quarters of 1994 and 1995.

Strong investment growth in machinery and equipment and in transport equipment was reflected by buoyancy in capital-goods imports, which increased by 23.4% in dollars during the first quarter of 2007, a lower increase however than a year earlier. Real growth in overall imports was 21.8% to March 2007.

The first quarter saw overall exports grow by 9.4% in real pesos. In dollars, their rate of growth was

Graph 8

Real Annual Growth In GDP and Domestic Demand



Source: DANE; calculations by Banco de la República.

Table 2

Real Annual GDP Growth, by Type of Spending and Contribution To Growth (Percentage)

	IV Qtr. 06	I Qtr. 07	Contribución
Final consumption	6.8	5.4	4.5
Households	7.9	7.3	4.6
Government	3.1	(0.6)	(0.1)
Gross capital formation	23.3	31.8	7.1
Gross fixed capital formation (GFCF)	16.7	28.6	5.8
GFCF excl. civil works	18.8	25.7	4.1
Civil Works	8.8	39.6	1.7
Inventory variation	105.2	64.3	1.3
Domestic demand	10.4	11.0	11.3
Domestic demand excl. inventory variation	8.8	10.0	10.5
Total exports	12.4	9.4	1.9
Total imports	19.7	21.8	5.5
GDP	8.4	8.0	8.0

Source: DANE; calculations by Banco de la República.

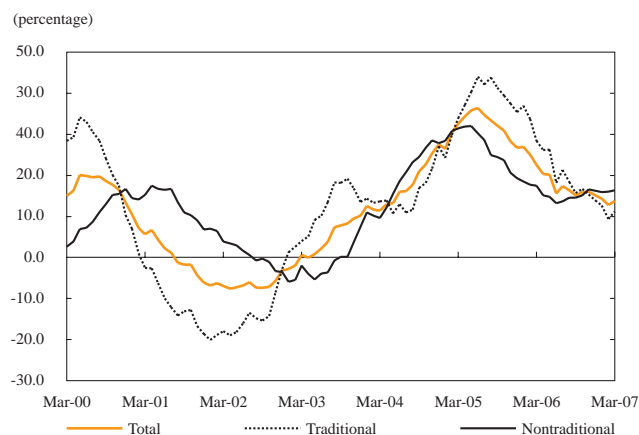
13.8%, driven by both traditional exports (11.2%) and nontraditional (19.2%) (Graph 9). Among traditional exports, coal and ferronickel stand out with 12-month cumulative annual growth rates of 15.4% and 51.5% respectively. In the case of coffee, good harvests and high international prices raised 12-month cumulative exports by 8.9%. Oil exports performed less well, growing by a moderate 5%.

Supply-side growth was appreciable in both the tradables¹ and nontradables² sectors but higher in the former: 8.5% against 7.8% (Graph 10). Tradables however were less dynamic than in the previous two quarters, mainly because of slower growth in farming and mining and, to a lesser extent, in manufacturing. Expansion in tradables has benefited from strong demand from Venezuela, high world prices for some goods exports, and buoyancy in the construction sector with its demand for tradables resources (glass and cement, among others). Growth in nontradables, though smaller than in tradables, was substantial, accelerating at a good pace, mainly on the back of construction.

The breakdown by sector shows construction as the fastest growing (28.3%)-particularly in civil works (39.6%) and, to a lesser extent, in housing (20.1%)-, followed by manufacturing (14.6%), commerce (11.2%), and the transport and communications sector (9.8%) (Table 3). The biggest contribution to annual growth came from manufacturing (2 pp) and the second biggest from construction (1.6 pp).

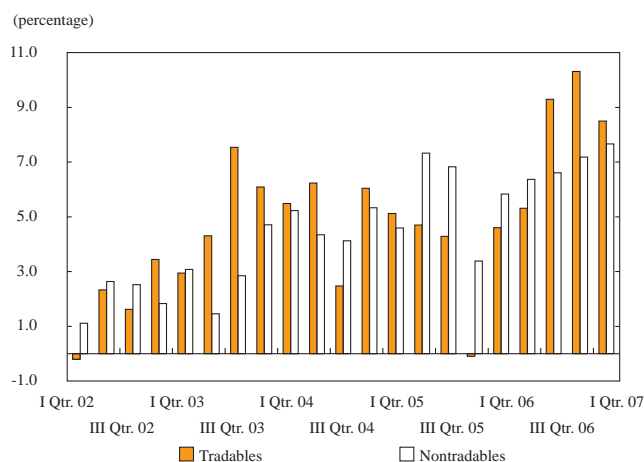
The farming sector and government services made little contribution to growth. In the farming sector this was mainly because of El Niño, which considerably

Exports:
Total, Traditional
and Nontraditional
(Annual Growth, Past 12 Months)



Source: DANE.

Annual Growth in Tradable e
and Nontradabl e GDP



Source: DANE; calculations by Banco de la República.

¹ The tradables sectors are: farming, forestry, hunting and fishing; mining and quarrying; manufacturing; water and air transportation, including complementary and auxiliary services; and business services, excluding financial and real-estate services.

² The nontradables sectors are: electricity, city gas, and water; construction; commerce, repairs, restaurants and hotels; land transportation services, mail and telecommunications services; financial intermediation and related services; real-estate and house-renting services; and social, communal and personal services.

Real Annual GDP Growth, by Sector
(Percentage)

	IV Qtr. 06	I Qtr. 07	Contribution
Farming, forestry, hunting and fishing	3.3	1.7	0.2
Mining and quarrying	1.3	(0.9)	(0.0)
Electricity, gas and water	4.9	3.9	0.1
Manufacturing	16.6	14.6	2.2
Construction	10.0	28.3	1.6
Buildings	10.8	20.1	0.7
Civil work	8.9	39.6	0.9
Commerce, repairs, restaurants and hotels	13.8	11.2	1.3
Transport, warehousing and communication	12.1	9.8	0.8
Financial establs., insurance, real estate and business services	3.8	4.9	0.8
Social, community and personal services	2.9	0.2	0.0
Financial intermediation indirectly measured	7.9	8.0	0.3
Subtotal value added	7.7	7.3	6.7
GDP	8.4	8.0	8.0
Tradables ^{a/}	10.3	8.5	3.2
Nontradables	7.2	7.7	4.8

a/ The tradable sectors are assumed to be: farming, mining, manufacturing; air and water transport, including complementary and auxiliary services; and some private services to businesses.
Source: DANE; calculations by Banco de la República.

affected the production of milk and garden produce. El Niño also caused a 9.3% contraction in illegal crops. Low growth in social, communal and personal services (0.2%) resulted mainly from shrinkage in government services (0.7%).

Mining showed negative growth (0.9%), especially in metallic minerals (28.6%) because of contraction in gold and silver. Oil, too, fell (2.1%). The only mining subsector to grow well was nonmetallic minerals (25%), thanks mostly to expansion in cement for construction.

2. Economic outlook

The economic recovery cycle that became discernible in mid-2002 was characterized by two consecutive trends: first, a strong upward trend in investment in 2002-2003, followed by consolidation of economic growth at rates of over 4% in 2004-2006. Thus not only did investment become buoyant but, in addition, household consumption made good recovery, at first in durable goods and later across the board.

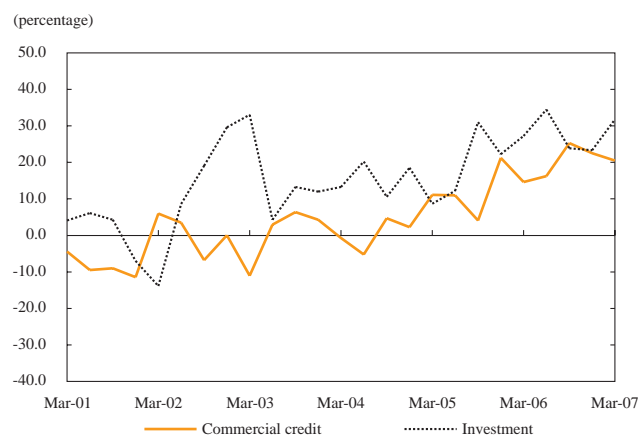
The nature of the growth can best be appreciated by analyzing credit behavior. In the first period, 2002-2003, investment expanded by 30%, fueled by funds from non-credit sources, namely, reinvestment of profits and foreign investment. By the second period, 2004-2006, with investment growing by around 20% (Graph 11), thanks to domestic and foreign demand and to fiscal policies stimulating investment, other funding sources began to be needed. Ordinary credit started to show considerable positive growth in 2005, the pace reaching 20% by the end of 2006.

Consumption behavior was somewhat different: household consumption grew very slowly in the first period, at rates of 3% or less, but in 2004 with consumer credit beginning to revive it started to show a sharp rise, mainly in durable and nondurable goods. At December 2006, household consumption was growing by 7.9% and consumer credit by 40%, annual rates (Graph 12).

Given the active part played by consumer credit in reviving aggregate demand by stimulating household consumption, moderation of consumer credit would clearly go some way to reducing the future strength of aggregate demand, operating in a reverse direction to its moves in the recent part.

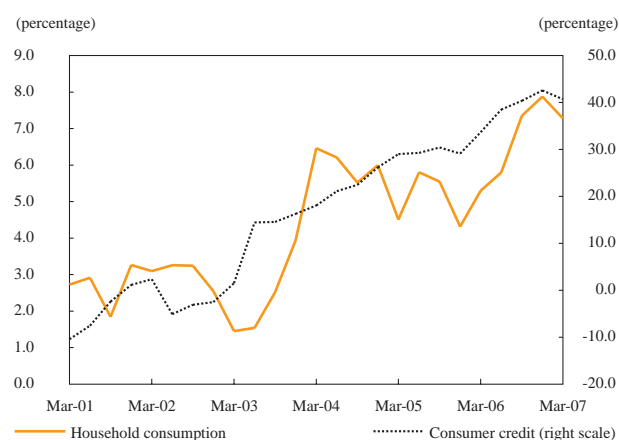
Accordingly, interest-rate and reserve-requirement measures taken by the Bank are expected to help actively to stabilize output at levels consistent with meeting future inflation targets. First-quarter GDP results and information available to date make it likely that the pace of growth observed in the second half of 2006 will be maintained in the first half of 2007. Full-year growth for 2007 is projected at 6.6%, similar to the rate reported for 2006. This projection implies a slowdown in output for the balance of the year, compared with growth rates for the second half of 2006 and first quarter of 2007. The base scenario therefore projects for full-year 2007 a GDP growth in the range of 5.8%-7.7% (Graph 13)-with a 6.6% central point. The bias however is upward, because demand from Venezuela, household consumption and

Investment and Commercial Credit



Source: DANE and Banco de la República.

Household Consumption and Consumer Credit



Source: DANE and Banco de la República.

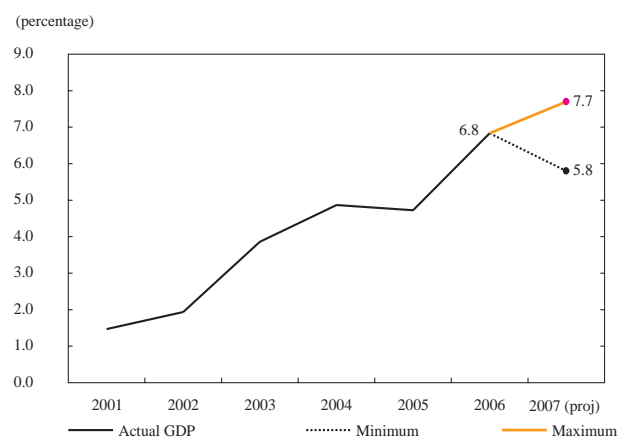
Real Annual GDP Growth, by Type of Spending (2003-2007)
(Percentage)

	2003	2004	2005	2006	2007 (proj)
Final consumption	1.7	4.8	4.9	5.5	5.5
Households	2.4	6.0	5.0	6.6	6.6
Government	(0.3)	1.1	4.3	2.1	1.8
Gross capital formation	14.7	15.6	18.7	26.9	23.2
Gross fixed capital formation (GFCF)	15.4	15.0	18.9	18.2	21.8
GFCF excl. civil works	15.9	22.0	16.7	18.5	22.0
Civil Works	14.0	(7.9)	28.7	17.2	21.3
Domestic demand	3.7	6.6	7.4	9.8	9.6
Total exports	5.7	10.0	7.0	7.8	10.0
Total imports	4.7	19.8	19.9	20.8	21.0
GDP	3.9	4.9	4.7	6.8	6.6

(proj): projected
Source: DANE; calculations by Banco de la República.

Graph 13

Real Annual GDP Growth



(proj): projected
Source: DANE; calculations by Banco de la República.

public and private investment are higher than expected.

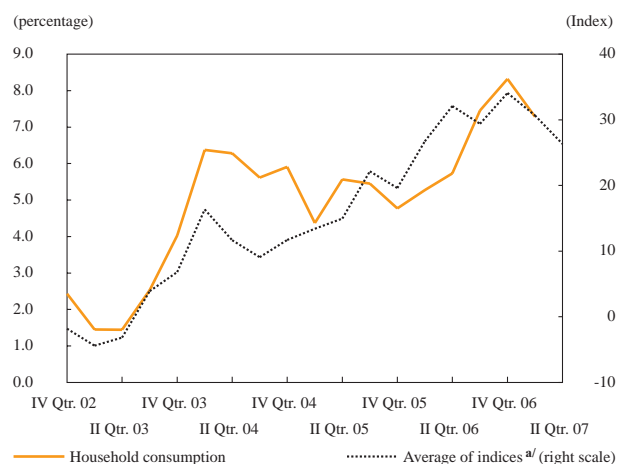
The strength of output continues to come from a highly favorable international context, characterized by solid external demand, by considerable capital flows making for elevated investment, and by ample world liquidity. Domestically, confidence remains good about the march of the economy; and lasting recovery in employment is expected to have a favorable effect on domestic demand.

The different spending components making up GDP continue to show good results, in some cases even better than in 2006. Household consumption, the biggest component of GDP, was high at the end of 2006 and somewhat weaker in the first quarter of 2007. This weakening is confirmed by Fedesarrollo's consumer confidence indicators (Graph 14) and further borne out by DANE's retail sales surveys. Even so, growth for 2007 is projected at 6.6%, similar to the 6.8% reported for 2006 (Table 4). The Bank's recent measures to control credit expansion and thereby curb growth in household consumption are expected to begin to produce an effect in the second half of the year.

Investment continues to account for much of the recent cycle of expansion and will remain a major engine of growth in 2007. Capital-goods imports, growing by about 26% in dollars (Graph 15), suggest a good pace of expansion in private investment. The start of various government-funded infrastructure projects has considerably raised investment in civil works, and such projects are expected to continue making a substantial contribution throughout 2007. Gross capital formation in 2007 is therefore estimated to increase by 23.2%, a little less than in 2006 (26.9%), while gross fixed-capital formation (excluding inventory change) is projected to rise by more than in 2006: 21.8% versus 18.2%. This favorable investment cycle is strongly related to the fact that the cost of capital goods has been reduced both by appreciation and by lower world prices associated with such goods. Moreover, a good part of the growth in capital-goods imports goes to the Colombian export sector, raising production capacity to meet external demand.

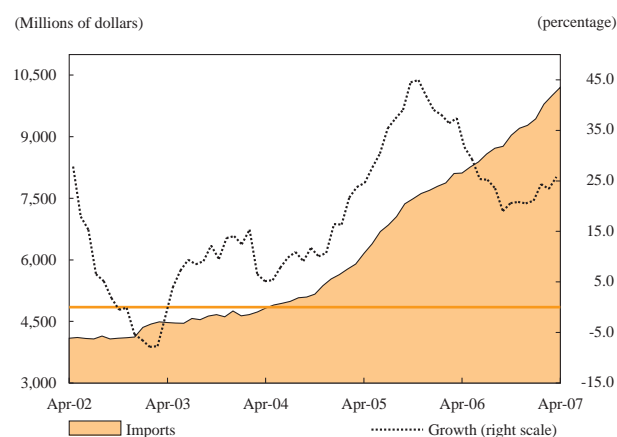
With investment and household consumption expanding considerably, imports can be expected to rise accordingly, by an estimated 21% in 2007, much the same as in 2006 (20.8%) (Table 4). Strong growth in external demand, mainly from Venezuela (with a 22% rise in domestic demand), has brought recovery and positive movement in Colombian exports. But the peso's appreciation against the dollar has been reflected in lower exports to the United States and Ecuador. On the whole, exports are expected to behave well over the rest of 2007, the full-year growth coming to 10%, compared with 7.8% in 2006 (Table 4).

Household Consumption and Fedesarrollo's Consumer Survey



^{a/} Average of Fedesarrollo's consumer indices: consumer confidence index (ICC), consumption expectations index (IEC), and economic conditions index (ICE).
Source: Fedesarrollo; calculations by Banco de la República.

Capital-Goods Imports (12 Months' Cumulative Value)



Source: DANE.

B. Employment and Unemployment

1. What does DANE'S household survey show?

The findings of DANE's Great Integrated Household Survey for the moving quarter of March, April and May³ show that the rate of unemployment was lower than in the same period a year earlier. Moreover, both the global participation rate⁴ and the employment rate⁵ were down on the same periods in previous years (Table 5). In absolute terms, the falls in these two rates reflect a decrease in the economically active population between 2006 and 2007, the net nationwide decrease being 311,000 people, of whom 226,000 were jobholders and 85,000 jobseekers. The decrease was concentrated in the wider rural areas, where 445,000 people stopped participating in the labor market (411,000 jobholders and 44,000 unemployed), while in the county seats the economically active population rose by 144,000 people, with total jobholders rising by 185,000 and total unemployed falling by 41,000.⁶

Thus, the relative increase in the number of inactive people-not taking part in the job market-would be explained by people no longer looking for work plus previously employed people who have decided to return to studies or housework. This suggests that heads of household may have found good stable employment, allowing secondary members of the household to take up other activities; in economic literature this is known as the additional-worker hypothesis. Analysis of changes in paid employment appears to verify this hypothesis, revealing that the number of workers in

³ DANE started in January 2007 to publish the findings of its Great Integrated Household Survey by moving quarters.

⁴ The global participation rate is measured as the economically active population relative to the working-age population. The economically active population is made up of people in the job market, whether employed or unemployed. The working-age population is made up of people over the age of 12 years in the county seats and metropolitan areas and over the age of 10 in rural areas.

⁵ The employment rate is measured as the total of jobholders relative to the working-age population.

⁶ These figures should be interpreted with caution, for DANE's Great Integrated Household Survey is designed to measure *rates relative to the working-age population* (such as the global-participation, employment and unemployment rates) and not to make inferences regarding variations in the numbers of people. Besides, the figures given here are derived from expansion factors built on demographic projections based on the 1993 census, and these projections *have not been adjusted* to the results of the latest census.

Labor-Market Indicators

	March-April-May quarter					Difference 2006-2007
	2003	2004	2005	2006	2007	
Global participation rate						
Nationwide	61.82	61.16	59.43	59.23	57.17	(2.1)
Rural areas	60.08	59.54	56.90	56.74	51.33	(5.4)
County seats	62.46	61.75	60.34	60.11	59.20	(0.9)
Thirteen major cities	63.68	62.52	62.34	61.93	60.70	(1.2)
Employment rate						
Nationwide	53.42	52.61	52.00	52.30	50.61	(1.7)
Rural areas	55.33	53.69	52.37	52.24	47.35	(4.9)
County seats	52.72	52.23	51.86	52.32	51.75	(0.6)
Thirteen major cities	52.57	52.54	53.30	54.07	53.51	(0.6)
Unemployment rate						
Nationwide	13.60	13.97	12.51	11.70	11.46	(0.2)
Rural areas	7.91	9.83	7.95	7.93	7.75	(0.2)
County seats	15.60	15.42	14.06	12.97	12.58	(0.4)
Thirteen major cities	17.46	15.97	14.51	12.69	11.85	(0.8)
Head of household unemployment rate						
Nationwide	6.2	6.7	5.6	5.3	5.0	(0.3)
Rural areas	3.4	3.7	2.9	3.2	2.2	(1.0)
County seats	7.2	7.7	6.6	6.1	6.0	(0.1)
Thirteen major cities	8.8	8.7	7.2	6.2	5.5	(0.7)
Economically active population (thousands)						
Nationwide	20,159	20,377	20,223	20,556	20,245	(311.3)
Rural areas	5,249	5,265	5,111	5,150	4,695	(455.5)
County seats	14,910	15,112	15,112	15,405	15,550	144.2
Thirteen major cities	9,216	9,280	9,484	9,662	9,776	113.9
Jobholders (thousands)						
Nationwide	17,418	17,530	17,692	18,150	17,924	(226.0)
Rural areas	4,834	4,748	4,704	4,742	4,331	(411.3)
County seats	12,584	12,782	12,988	13,408	13,593	185.2
Thirteen major cities	7,606	7,798	8,108	8,436	8,618	182.0
Unemployed (thousands)						
Nationwide	2,741	2,847	2,531	2,406	2,321	(85.3)
Rural areas	415	517	407	408	364	(44.3)
County seats	2,326	2,330	2,124	1,998	1,957	(41.0)
Thirteen major cities	1,609	1,482	1,376	1,226	1,158	(68.1)

Source: DANE.

Breakdown of Employment
(March-April -May Quarter)

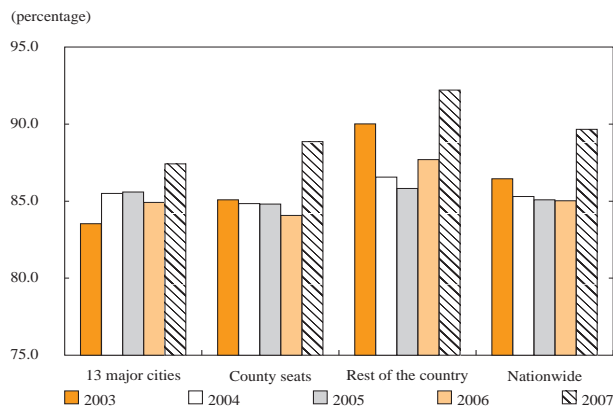
Wage and salary employment ^{a/} (as a proportion of working-age population) ^{a/}					
	2003	2004	2005	2006	2007
Nationwide	21.3	20.8	20.7	20.7	22.1
Rural areas	12.6	10.9	8.3	8.9	10.8
County seats	24.4	24.3	25.2	25.0	26.0
Thirteen major cities	27.2	27.4	28.3	29.0	29.5
Wage and salary employment ^{a/} (as a proportion of total jobholders)					
	2003	2004	2005	2006	2007
Nationwide	39.8	39.5	39.9	39.7	43.7
Rural areas	22.8	20.3	15.9	17.0	22.8
County seats	46.3	46.6	48.5	47.7	50.3
Thirteen major cities	51.7	52.2	53.0	53.7	55.1
Unwaged and unsalaried employment ^{b/} (as a proportion of total jobholders)					
	2003	2004	2005	2006	2007
Nationwide	60.2	60.5	60.1	60.3	56.3
Rural areas	77.2	79.7	84.1	83.0	77.2
County seats	53.7	53.4	51.5	52.3	49.7
Thirteen major cities	48.3	47.8	47.0	46.3	44.9

a/ Wage and salary employment is defined as the sum of private-sector and government wage and salary earners.

b/ Unwaged and unsalaried employment is defined as the sum of all other jobholders.

Source: DANE.

Graph 16

Job-Satisfaction Indicator
In The Three Months March-April -June

Source: DANE.

paid employment⁷ as a proportion of total workers was higher this year 43.7% than last year (39.7%) (Table 6).

Another indicator of improvement in the quality of employment can be obtained from the estimated difference between the total number of workers and the number classified as objectively underemployed⁸ (Graph 16). This measure, denominated the job-satisfaction indicator, shows that the proportion of workers satisfied with their current job and not looking for a new one, relative to total workers, was higher in 2007 than in 2006.

⁷ People working as wage-earners or employees in the private sector or for the government are considered as being in paid employment.

⁸ DANE's methodology classifies a jobholder as objectively underemployed if he wishes to work longer hours a week or wishes to change jobs to make better use of his abilities or earn more and, in addition, if in the four weeks before the survey he has taken steps to work longer hours or change jobs.

The foregoing analysis should be regarded with caution in view of the changes introduced by DANE into its ongoing household survey as of 2006 July. It is not therefore possible to infer whether the variations observed in the periods under analysis reflect an economic phenomenon or whether, on the contrary, they are attributable to the changes made by DANE. The results will not begin to be comparable until information is obtained in July this year.

2. What do the indicators say?

Other indicators reveal that employment continues to rise in Colombia in line with economic growth. The monthly manufacturing surveys point to a 5.0% increase in the sector's employment of wage-earners from January to April; similarly, the monthly retail-trade surveys indicate a 6.2% rise in employment over the same period.

Moreover, data from the Ministry of Social Protection on social-security contributions in respect of health, pensions and professional risk indicate that formal employment increased to March 2007. Professional-risk management companies saw total enrollment rise by 3.2% (180,000 persons) from the level in December 2006. Over the same period enrollment in family-benefit funds grew by 1.8% (90,000 persons), and the total number of active contributors to the public and private pension systems expanded by 2.0% (Table 7).

Table 7

Nationwide Social Security Indicators

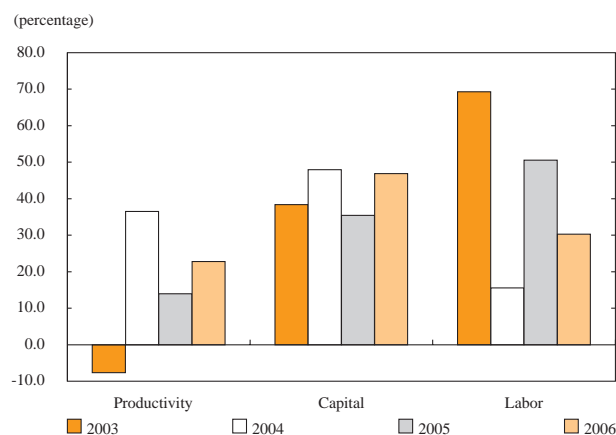
Subsystems	Dec-02	Dec-03	Dec-04	Dec-05	Dec-06
Workers enrolled in family benefit funds	3,422,734	3,574,910	3,982,629	4,390,160	4,858,857
Enrollment in professional-risk managers	4,164,975	4,602,468	4,829,098	5,104,050	5,637,676
Pensions: active contributors to public social security	2,292,846	2,250,890	2,394,469	2,447,981	2,303,947
Pensions: active contributors to individual savings funds	2,243,604	2,538,688	2,843,644	3,217,576	3,637,760
Total active pension contributors	4,468,131	4,789,578	5,238,113	5,651,438	5,941,707

Subsystems	2007	Cut-off date 2007	Absolute change between 2007 and Dec. 2006	Percentage change between 2007 and Dec. 2007
Workers enrolled in family benefit funds	4,948,303	Mar,	89,446	1.8
Enrollment in professional-risk managers	5,816,071	Mar,	178,395	3.2
Pensions: active contributors to public social security	2,294,349	Feb,	(9,598)	(0.4)
Pensions: active contributors to individual savings funds	3,764,318	Mar,	126,558	3.5
Total active pension contributors	6,058,667	Feb, Mar,	116,960	2.0

Source: Social Protection Ministry.

Graph 17

Contribution of Production Factors to Output Growth



Source: Banco de la República.

3. Relative cost of labor

Despite the economy's accelerating growth in recent months, labor-market indicators show a loss of momentum. In effect, labor's contribution to growth has decreased in recent years, as revealed by a growth-accounting exercise (Graph 17). Some factors that may explain what is happening in job creation are analyzed in this section.

Using information from the monthly manufacturing surveys, movement in production and employment over the first quarter of every year from 2003 to 2007 has been calculated for the 26 main branches of industry in the three -digit ISIC classification

Table 8

Growth In Manufacturing Output And Employment (Percentage)

Sector	Output						Employment					Ratio	
	2003	2004	2005	2006	2007	Total	2003	2004	2005	2006	2007		Total
Earthenware and porcelain	11.0	35.7	2.9	36.1	(19.5)	53.1	2.3	4.9	8.7	4.6	4.9	25.2	2.11
Beverages	(8.5)	(14.0)	1.1	2.7	22.3	9.1	(10.3)	(8.3)	(9.8)	(4.8)	1.8	(19.9)	(0.46)
Footwear	8.4	14.4	(8.4)	(10.5)	24.8	17.0	(7.2)	2.1	12.2	(11.5)	(0.5)	0.8	21.46
Rubber	(1.9)	20.3	(1.6)	17.1	(0.3)	38.2	(8.0)	3.6	1.1	15.5	(1.8)	18.8	2.03
Leather	1.0	14.3	3.6	20.9	11.7	60.1	(6.0)	6.9	0.0	3.7	11.3	23.3	2.58
Byproducts	(19.1)	9.3	1.8	13.8	9.5	38.6	(14.8)	3.3	(3.6)	4.0	8.9	12.8	3.02
Electricals	(3.3)	15.4	9.7	15.2	28.6	87.7	(3.5)	3.0	6.5	5.2	12.6	30.0	2.92
Transport equipment	(1.8)	21.8	35.1	22.8	36.5	175.9	(5.2)	2.0	14.5	7.3	20.9	51.5	3.41
Ironware	33.4	39.5	(0.2)	(2.0)	54.5	110.9	2.7	(1.9)	11.0	9.7	(1.7)	17.5	6.35
Printing	(6.7)	6.3	(0.3)	6.5	15.2	30.0	(8.2)	(1.9)	(0.8)	(1.7)	2.2	(2.2)	(13.62)
Wood	9.3	19.1	9.0	(5.0)	22.4	50.9	(2.3)	(2.0)	(9.0)	(0.4)	2.3	(9.1)	(5.58)
Machinery	(13.1)	19.2	(6.5)	20.4	46.0	95.9	(10.2)	(2.8)	6.8	7.3	(1.7)	9.5	10.07
Metallics	11.1	13.3	0.5	4.4	14.3	35.9	6.9	(5.0)	(0.5)	4.3	10.0	8.4	4.26
Non-ferrous metals	65.8	(13.1)	24.1	25.8	4.5	42.0	(4.4)	5.3	12.7	5.2	5.2	31.4	1.34
Non-metallic minerals	19.8	6.1	0.2	40.2	26.6	88.8	3.3	2.3	5.7	5.3	10.4	25.7	3.46
Furniture	6.2	21.4	18.7	9.9	12.9	79.0	3.5	4.3	13.8	(0.3)	11.0	31.4	2.52
Other chemicals	1.4	(3.8)	0.1	4.8	9.7	10.7	(3.8)	(4.6)	3.7	5.6	4.6	9.2	1.17
Paper	0.6	2.2	4.0	4.8	15.4	28.5	(4.2)	(2.0)	2.8	3.0	1.4	5.3	5.41
Plastics	7.6	8.3	2.0	11.8	8.6	34.1	(3.6)	3.2	7.8	(1.9)	7.8	17.6	1.94
Clothing	4.7	0.6	0.3	0.6	19.1	21.0	8.2	(4.2)	(7.9)	(10.9)	(3.4)	(24.1)	(0.87)
Chemicals	23.4	8.8	5.8	1.2	11.8	30.2	(4.9)	3.8	5.2	2.7	(0.2)	11.9	2.54
Rest of foodstuffs	4.9	5.2	(2.9)	9.7	7.6	20.5	(1.0)	(0.6)	1.8	1.4	3.2	5.8	3.54
Tobacco	5.7	13.5	(15.3)	1.9	30.9	28.2	18.7	5.7	(2.6)	(6.3)	4.3	0.6	47.55
Textiles	0.5	12.5	(6.5)	7.7	16.8	32.3	(1.2)	1.0	(3.7)	2.1	4.0	3.3	9.82
Coffee threshing	0.3	11.2	11.6	(15.5)	7.3	12.5	13.0	(0.1)	16.2	(1.9)	(2.6)	11.0	1.13
Glass	(0.4)	(3.2)	15.6	6.0	4.0	23.4	2.9	3.8	0.5	(2.9)	0.7	1.9	12.39
Total	6.1	5.5	2.0	7.9	15.3	34.0	(1.3)	(0.7)	1.2	0.6	4.1	5.2	6.51

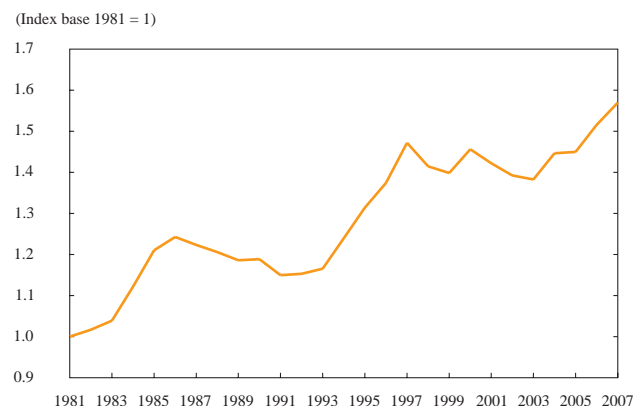
Source: DANE.

(Table 8). Overall industrial production expanded by 34.0% and industrial employment by 5.2%, that is to say, production grew 6.5 times as much as employment. The breakdown of both variables shows that all 26 industries increased their production over the period, while four (beverages, printing, wood and garments) reduced the total number of wage-earners hired.

The higher increase in production, relative to employment, reflects in part expanded use of installed capacity, from 67.5% to 75.2% over the period under study according to Fedesarrollo. But the impact of variables affecting the use-cost of capital and labor have to be considered too.

Appreciation in the exchange rate⁹ and such measures as the lowering of income tax on companies investing their profits, in addition to better economic conditions,¹⁰ have fostered a considerable increase in investment, as reflected by buoyancy in industrial capital-goods imports in recent years. The use-cost of labor has risen in dollars because of appreciation in the exchange rate, and in pesos because of nominal industrial pay rises in pesos (30.1% between first-quarter 2003 and first-quarter 2007) and such measures as a 50 bp increase in health-insurance contributions under the social-security reform of 2006.¹¹ Thus, while the use-cost of capital has decreased in recent years, the use-cost of labor has increased,¹² stimulating the use of capital in production, as evidenced by a 13.5% estimated rise in the ratio of capital to worker over the past four year (Graph 18). Consequently, to reinforce the creation of formal jobs and thereby redistribute the gains of faster economic growth, consideration should be given to the possibility of taking measures to reduce the use-cost of labor.

Capital per Worker Ratio



Source: Banco de la República.

⁹ Over the period under study the average nominal exchange rate fell from 2,941.29 pesos to the dollar to 2,222.03 pesos, an appreciation of 24.45%.

¹⁰ According to Fedesarrollo's business opinion survey, between first-quarter 2003 and first-quarter 2007 the balance of respondents believing that economic conditions were favorable for investment rose from -25 units to 39 units.

¹¹ The payroll charges imposed by law signify over-costs of 72.1% on a formal worker's base monthly pay (see the Banking Association's *Semana Económica* No. 612, July 6, 2007).

¹² For recent-year estimates of these costs in Colombia, see ANIF, "Comentario económico del día", June 26, 2007.

While the use-cost of capital has decreased in recent years, the use-cost of labor has increased, stimulating the use of capital in production.

III. Monetary and Exchange-Rate Policy

Gradual elimination of the monetary stimulus has not affected the Colombian economy's capacity to grow at around its potential and has, in fact, helped to maintain its continuous, sustainable growth. Interest-rate transmission has fallen short of what was expected and is needed to stabilize aggregate demand. But in June there was stronger transmission to all rates, consistent with the Board's May 2007 decisions on monetary reserve requirements.

A. Monetary Policy

Monetary policy in Colombia has pursued inflation targeting since 1999, with the aim of keeping prices stable and smoothing the economic cycle. To achieve these objectives, the central bank can affect the cost of money through interest-rate intervention, which is the chief instrument of monetary policy. The changes the Banco de la República makes to intervention interest rates are transmitted to the rest of the economy through various channels, which ultimately affect aggregate demand and its main components, consumption and investment. A brief description follows of these channels:

- The credit channel. This refers to how the financial system directly perceives changes made by the central bank in the interest rate in order to provide liquidity. A rate increase makes it more costly to obtain funds from the central bank, which should induce financial institutions to raise lending rates. Moreover, the central bank's rate is a benchmark for negotiations in the interbank market (of both lendable funds and securities), and for all financial-market agents. Depositors would seek higher returns on their funds, which in a growing market competing for deposits would result in higher deposit rates, intensifying the pressure for raising lending rates. Costlier credit would discourage consumption and investment and ultimately aggregate demand.
- The exchange-rate channel. Changing the Bank's interest rates affects also the exchange rate, because uncovered interest parity

The changes that the Banco de la República makes to intervention interest rates are transmitted to the rest of the economy through various channels: i) the credit channel, ii) the exchange-rate channel, and iii) the expectations channel.

in an open economy with capital mobility signifies that the devaluation rate will depend on the domestic-foreign interest rate differential, adjusted for the country-risk premium. And exchange-rate movements affect the price of tradable goods.

- The expectations channel. Changes made to interest rates will affect agents' inflation expectations. If agents trust the Bank, they will fix their prices according to targets and not alter their decisions on account of temporary inflation shocks; that is, the central bank's credibility in the eyes of agents amplifies the outcome of its monetary-policy actions. In the long run this means that less intense monetary-policy changes will be needed, which will make for greater stability in prices and economic activity.

The monetary-policy transmission mechanisms described above operate with a certain lag, because many spending decisions by agents take time. In Colombia the lag in monetary-policy transmission to inflation is estimated to be between four and eight quarters.

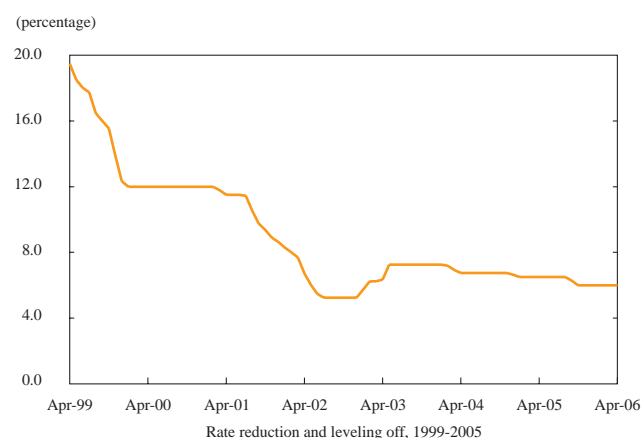
To keep inflation close to target, the central bank should foster an increase in aggregate demand that is in line with the economy's production capacity. If demand outstrips production capacity inflationary pressures will arise, and failure to act promptly will intensify macroeconomic imbalances, resulting most significantly in a weakening of the external sector. In an inflationary economy, there is no inflow of external capital, and the outflow of local capital increases; domestic experience shows that the correction involves drastic reductions in imports, paralyzing the productive apparatus and sparking off unemployment.

Monetary policy should therefore be restrictive in periods of boom and expansionary in recessions. This has been precisely the case in Colombia, as shown by Graphs 19 and 20. In 1999-2005 the economy was clearly performing below potential, which made it possible for inflation to be reduced

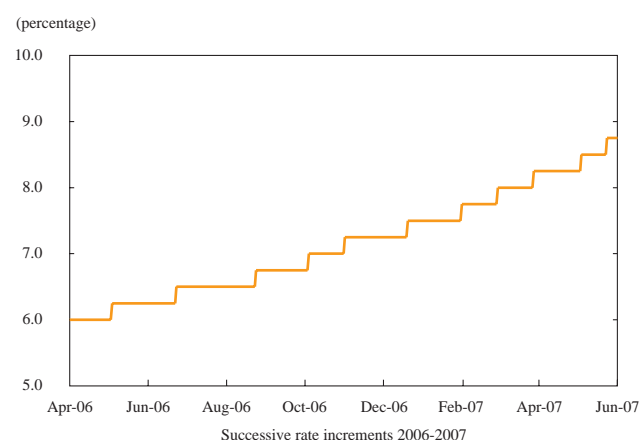
Graph 19

Nominal Interest Rate of Liquidity-Expansion Auctions

A. From April 1999 to April 2006

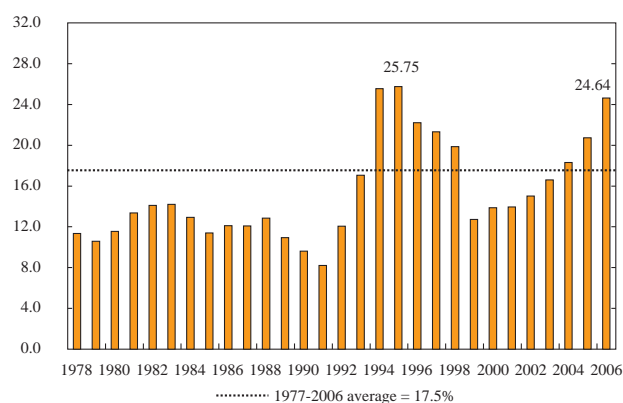


B. From April 2006 to June 2007

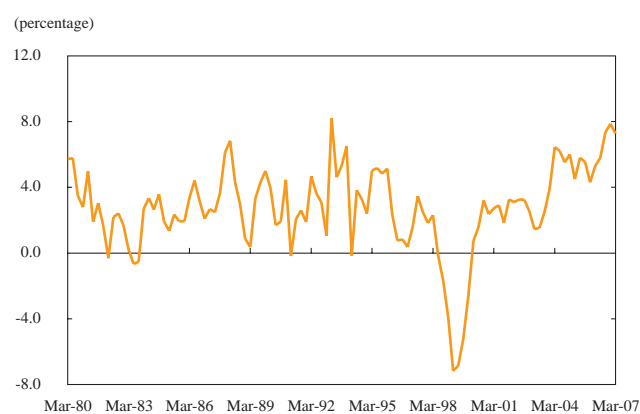


Source: Banco de la República.

A. Total Investment as a Percentage of GDP



B. Household Consumption (Annual Change)



Source: National Planning Department and DANE; calculations by Banco de la República.

gradually from 9.23% to 4.85% over the period. The monetary authorities could thus maintain an easy monetary-policy stance, reducing the Bank's intervention rate from over 20% in the first quarter of 1999 to 6% in October 2005; in real terms this signified a fall from 7.8% to 0.7%. This stance, added to extremely favorable external conditions and higher confidence levels in the country, allowed investment and consumption to recover substantially over the period. Since then, the Bank has modified its stance, tightening monetary policy by raising its intervention rates in response to higher inflation and inflation projections, and also to signs that growth in aggregate demand might exceed the economy's production capacity. The tightening is meant to stabilize inflation around the target and to smooth economic fluctuations.

Investment and consumption behavior in 2000-2006 shows that the interest-rate policy described above worked in the right direction. In effect, lower interest rates led to substantially higher consumption and investment, both essential to recovery in economic growth.

With the economy on the upturn and aggregate demand rising sharply, the Board began to raise monetary-policy interest rates in April 2006 so as to reduce the monetary stimulus it was giving to the economy. The reasons behind this change in stance, as explained above, were the prospects of aggregate demand exceeding the economy's production capacity and the rise in inflation and inflation forecasts relative to targets. No special monetary stimulus was therefore needed to maintain the economy's pace of growth. Besides, prolonging an excessive monetary stimulus, as reflected by historically low real interest rates, could have generated inflationary pressures, macroeconomic imbalances and unsustainable growth. Accordingly, the Board decided to raise its intervention rates by 150 bp between April and December 2006.

Subsequently, information available in early 2007 revealed an unexpected acceleration in aggregate demand, which raised the growth estimate for 2006 and the growth forecast for 2007.

In addition, the rising trend in nontradables inflation and core-inflation indicators continued. In this context the Board thought it advisable to keep on reducing the monetary stimulus by raising intervention interest rates, each time by 25 bp in the months of January to June this year. This gradual elimination of the monetary stimulus has not affected the Colombian economy's capacity to grow at around its potential and has, in fact, helped to maintain its continuous, sustainable growth.

The effect of the Bank's interest-rate increases has been transmitted to the credit market slowly and partially.

The effect of the Bank's interest-rate increases has been transmitted to the credit market slowly and partially, judging by their limited impact on lending rates and the still fast expanding credit portfolio. Consequently, at their May 6 meeting the Board of Directors set a marginal reserve requirement to accelerate transmission of the impact of monetary policy to lending rates, so that growth in the credit portfolio and hence in aggregate demand would be moderated sufficiently to help control inflationary pressures.

The marginal reserve requirement was imposed at the following rates on deposits over and above May 7 levels: 27% on checking accounts, 12.5% on savings accounts, and 5% on certificates of deposit. The requirement applies only to the margin, that is, it does not affect the supply of credit from deposits received by banks before May 7,¹³ which implies that it is a measure designed not to cut the supply of credit to the economy but only to moderate credit growth. According to figures available to May 30, the annual rate of credit growth stood at 32% and in some cases, such as consumer loans, as high as 47%. Note that the recent behavior of bank-loan disbursements shows that credit growth has begun to abate little by little.

Consequently, at their May 6 meeting the Board of Directors set a marginal reserve requirement to accelerate transmission of the impact of monetary policy to lending rates,...

Subsequently, at their June 15 meeting the Board of Directors, bearing in mind that savings and checking accounts were currently financial assets with similar liquidity characteristics, decided to unify the two reserve requirements. Thus the ordinary reserve requirements for these deposits were set at a single rate of 8.3% and the marginal ones at a single rate of 27%, with the latter continuing to be calculated on the basis of levels at May 7, 2007. Credit establishments were given a period of adjustment of two "fortnights of reserves" (Table 9 compares reserve requirements before and after the Board's June decision).

...so that growth in the credit portfolio and hence in aggregate demand would be moderated sufficiently to help control inflationary pressures.

¹³ The marginal reserve was to be applied at the rate of 27% on checking accounts, 12.5% on savings accounts and 5% on CDs.

Ordinary and Marginal Reserve Requirements
(Percentage)

	Ordinary reserve requirement		Marginal reserve requirement	
	No. 3 of BR, May 6, 2007	No. 7 of BR, June 15, 2007	No. 3 of BR, May 6, 2007	No. 7 of BR, June 15, 2007
Checking accounts and other sight liabilities	13.0	8.3	27.0	27.0
Savings accounts	6.0	8.3	12.5	27.0
CDs	2.5	2.5	5.0	5.0

Source: Banco de la República.

1. Interest rates

a. Market interest rates

The decision taken at the end of April 2006 to normalize monetary policy has been implemented by raising the expansion-auction interest rate by 25 bp on 12 different occasions. To date, the cumulative adjustment amounts to 300 bp, with the rate standing at 9.0%. That was the highest nominal increase since December 1994, when the annual change was 33.1%. The interbank rate has reflected the above policy-rate change in full (Table 1 and Graph 21). To keep the interbank rate from moving away from the policy rate, currency market interventions have been sterilized.

Interest-rate transmission has fallen short of what was expected and needed to stabilize aggregate demand. Unlike the interbank rate, credit institutions' deposit and lending rates have reacted less fully over the period in question. The lending rate for all types of credit¹⁴ rose by 227 pb and the rate for certificates of deposit (DTF) by 209 bp. The weakness of rate transmission becomes much more evident after discounting for inflation: in real terms the above rates have barely changed (by 18 bp and 14 bp, respectively) and remain at historically low levels (Table 11 and Graph 22). Hence, judging by the scant rise in the real interest rate, the effect of policy-rate increments on aggregate demand has been even more fragile, revealing how slowly the transmission channels have been operating.

A more detailed review of lending rates shows that rates for consumer and ordinary loans—the largest by value—have dropped in real terms from their levels in April 2006, when the Bank changed its policy stance.

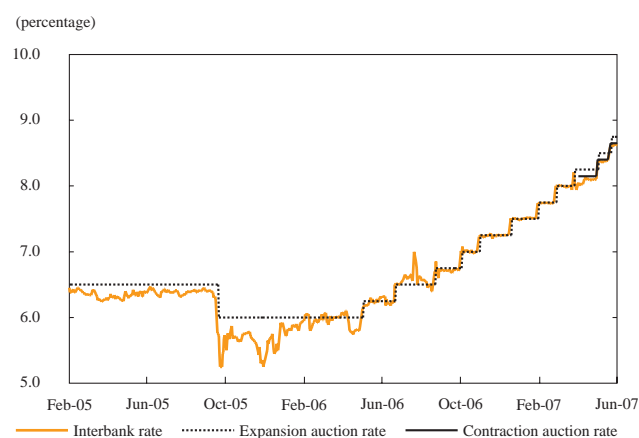
¹⁴ This is the lending rate calculated by the Banco de la República, which includes on all loan types, but giving a lower weighting to Treasury loans.

Intervention And Interbank Rates (Percentage)

End of	Nominal minimum expansion auction rate	Nominal inter-bank rate	CPI	Real interbank-rate
Apr. 06	6.00	5.85	4.12	1.66
Dec. 06	7.50	7.50	4.48	2.89
Jun. 07	9.00	9.05	6.04	2.84
Variation				
Apr. 06 to Jun. 07	3.00	3.20	1.91	1.18

Source: Banco de la República.

A. Interbank Rate and Banco de la República's Rates ^{A/}

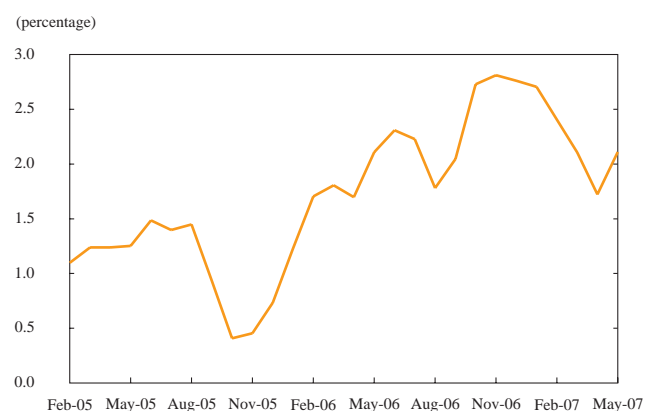


a/ Tasa diaria nominal.

b/ Deflactada con el IPC.

Source: Financial Superintendency; calculations by Banco de la República.

B. Real Interbank Rate ^{B/}

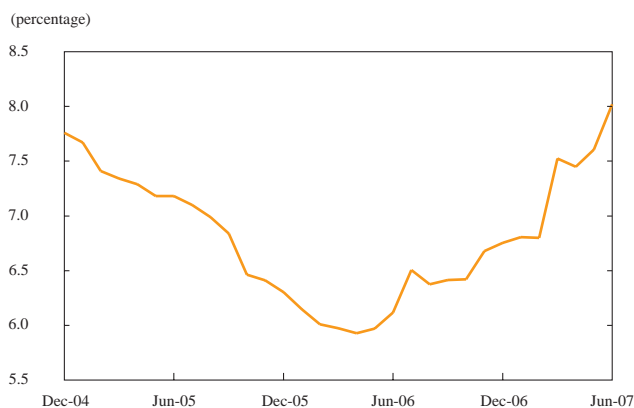


Interest-Rate Transmission (Percentage)

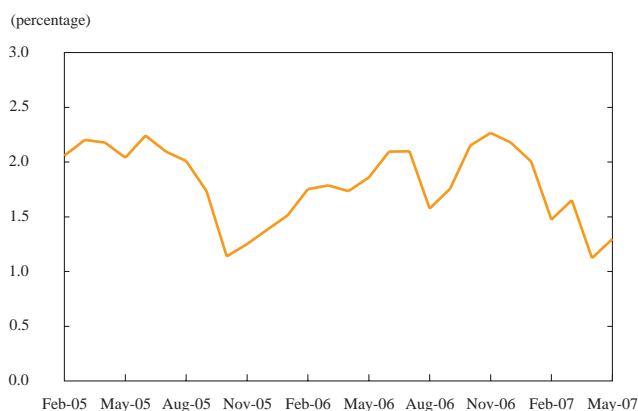
	Nominal expansion auction rate	Nominal DTF deposit rate	Nominal lending rate	Real DTF deposit rate	Real lending rate
Average for the month					
Apr. 06	6.00	5.93	12.94	1.73	8.47
Dec. 06	7.36	6.75	13.04	2.18	8.19
Jun. 07	8.83	8.02	15.21	1.87	8.65
Variation					
Apr. 06 to Jun. 07	283	209	227	14	18
Apr. 06 to Dec. 06	136	83	10	44	(27)
Dec. 06 to Jun. 07	147	127	217	(30)	46

Source: Financial Superintendency; calculations by Banco de la República.

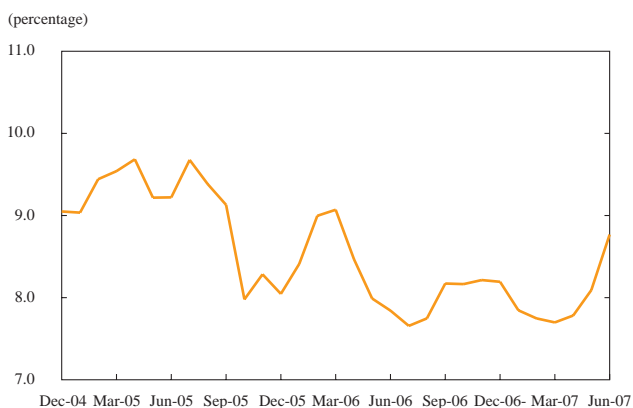
A. DTF Deposit Rate (Nominal Monthly Average)



B. Real DTF Deposit Rate (Deflated By CPI)



C. Real Lending Rate (Deflated By CPI)



Source: Banco de la República.

A more detailed review of lending rates shows that rates for consumer and ordinary loans—the largest by value—have dropped in real terms from their levels in April 2006, when the Bank changed its policy stance. Transmission to treasury- and preferential-loan rates has been a little smoother. It goes without saying that transmission to all rates was stronger in June, consistent with the Board's May 2007 decisions on monetary reserve requirements (Table 12).

Lastly, the reaction of consumer-loan rates may have been delayed by the effect of the usury rate, which placed a ceiling to the rise. As may be appreciated from Graph 23, recalculation of the usury rate in May 2007 has left room for the consumer rate to react to changes in the policy interest rate (Graph 24).

b. Evolution of the domestic public-debt market in 2007

So far this year two trends have been observed in the rates of domestic public-debt securities. The first was a rising trend in TES rates, running from the beginning of the year to the end of April, followed by a very gentle downward adjustment, starting from the first week of May. The Board's successive increments in the auction rate for expansion Repos, the international liquidity situation, and less aversion to risk in international financial markets have been determining factors in the evolution of the negotiating rate for local public-debt securities over this period.

In effect, as shown by Graph 25, the TES yield curve followed the trend of gradual increments in the Bank's benchmark rate. But from May, when the Bank took measures to attenuate credit-supply growth and reduce the likelihood of systemic risk and some intermediaries' counterparty risk, the

Lending Rates
(Percentage)

Average for the month	Consumer		Ordinary		Preferential		Treasury		Banco de la República lending rate ^{a/}	
	nominal	real	nominal	real	nominal	real	nominal	real	nominal	real
Apr. 06	21.14	16.34	15.36	10.80	8.73	4.42	7.68	3.42	12.94	8.47
Dec. 06	19.57	14.44	14.24	9.35	10.22	5.50	9.58	4.88	13.04	8.19
May 06	21.19	14.08	16.45	9.62	11.71	5.16	11.36	4.83	14.83	8.09
Jun. 07	21.80	14.87	16.98	10.32	12.17	5.79	11.66	5.30	15.21	8.65
Variation										
Apr. 06 to Jun. 07	0.66	(1.48)	1.61	(0.48)	3.45	1.36	3.98	1.88	2.27	0.18
Apr. 06 to Dec. 06	(1.57)	(1.90)	(1.12)	(1.45)	1.50	1.07	1.89	1.46	0.10	(0.27)
Dec. 06 to Jun. 07	2.23	0.43	2.73	0.97	1.95	0.29	2.08	0.43	2.17	0.46
May 07 to Jun. 07	0.61	0.79	0.53	0.70	0.46	0.63	0.29	0.47	0.38	0.56

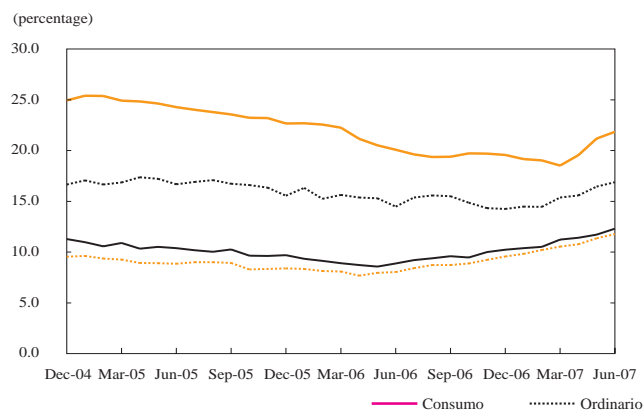
a/ Total lending rate calculated by Banco de la República.

Source: Financial Superintendency; calculations by Banco de la República.

Graph 23

Lending Rates

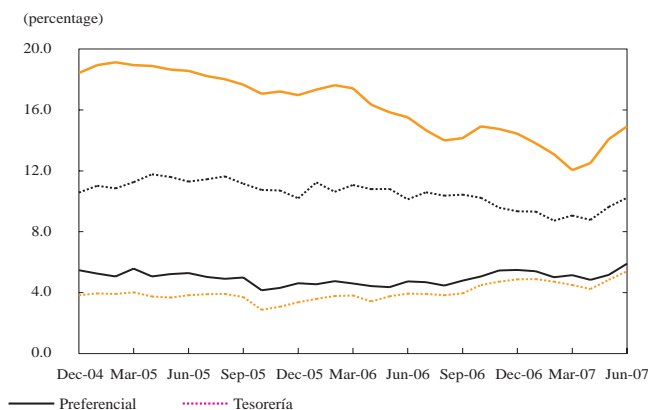
A. Lending Rates (Nominal Monthly Average)



Source: Financial Superintendency; calculations by Banco de la República.

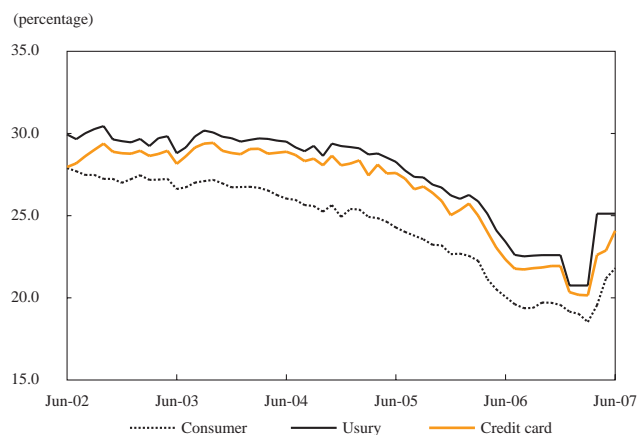
Graph 24

B. Lending Rates (Deflated By CPI)



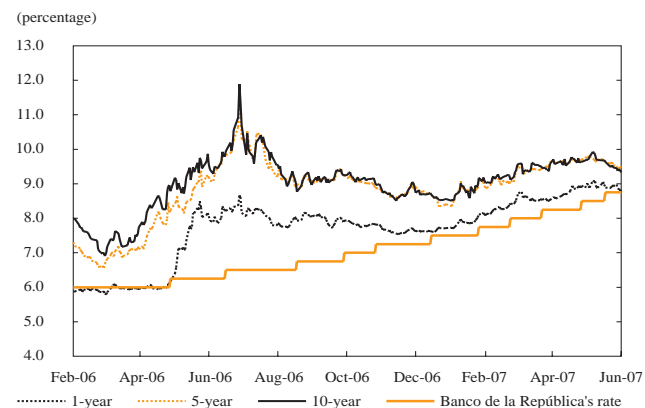
Graph 25

Consumer, Credit-Card and Usury Rates



Source: Financial Superintendency; calculations by Banco de la República.

Zero-Coupon Peso TES Curve and Banco de la República's Benchmark Rate February 2, 2006 to June 2007



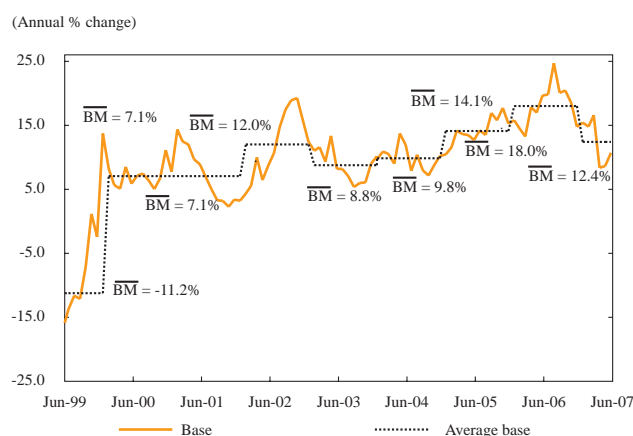
Source: Banco de la República.

yield-curve level has corrected downward, particularly on the long tranche of the curve, suggesting that the measures have been effective in moderating inflation expectations.

Moreover, commodity price behavior, uncertainty over the major industrialized countries' economic performance, fluctuations in international markets' aversion to risk, and better risk ratings for Colombia's and other emerging countries' public debt account for the TES rates' upward movement and subsequent correction.

Graph 26

Real Monetary Base



Source: Banco de la República.

2. Monetary base, credit and funding sources of the financial system

a. Monetary base

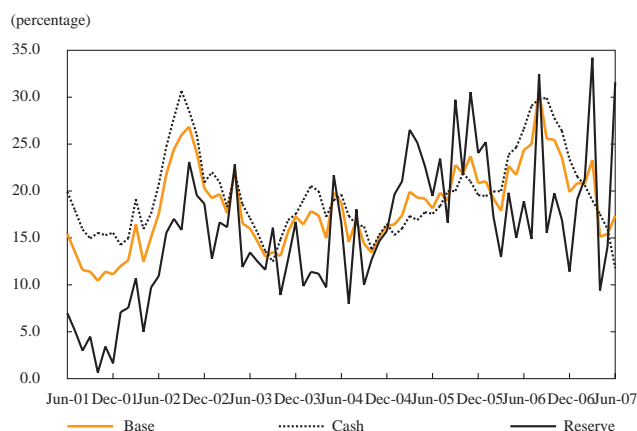
Between January and June 2007 the average annual change in the monetary base was 18.8%, implying a real increase of 12.4% (Graph 26). Expansion in the monetary base has decelerated since August 2006, when the annual rate was 30.6%. The second quarter of 2007 saw a further reduction, to an annualized 15.9%.

Slower growth in the monetary base is largely explained by movements in the cash component, which rose in January-June 2007 by an average annual rate of 17.7% (11.4% in real terms), down from an average annual growth of 25.1% in 2006 (19.9% in real terms). Bank reserves expanded in the first half of 2007 on average by 21.6% (15.1% in real terms), faster than in 2006, as a result of both a higher level of liabilities subject to reserves and the financial institutions' decision to keep higher levels of excess reserves (Graph 27).

The behavior of the monetary base's sources of expansion, to June 2007, reflects prudent and consistent management of monetary and exchange-rate policies and coordination with the government. The expansionary effect of intervention in the currency market, through the

Graph 27

Monetary Base and Its Uses (Annual Growth Rate of Monthly Average)



Source: Banco de la República.

purchase of foreign currency (11,750 billion pesos), has been partly sterilized by smaller liquidity operations (1,676 bn pesos), a smaller portfolio of TES securities (1,357 bn pesos) and higher government deposits at the Banco de República (3,484 bn pesos) (Table 13). Thanks to this sterilization, the base's growth was just enough to meet demand, as evidenced by the fact that the interbank rate did not move away from the policy rate.

b. Loan portfolio

Normalization of the monetary policy stance, currently in progress, began in April 2006 in a context of good economic growth in the previous two years and an expected GDP growth of 4%-5% for 2006. In mid-2006 the financial system was exhibiting strong credit growth; policy rates were

Table 13

Sources of The Monetary Base (Billions of Pesos)

	Annual variation			
	Jun-06	Dec-06	Mar-07	Jun-07
I. Government	1,611	1,968	4,394	(3,484)
Transfer of profits ^{a/}	793	793	0	0
Pesos	793	793	0	0
Deposits at Banco de la República	818	1,175	4,394	(3,484)
II. Liquidity-regulating TES	(1,755)	(327)	(1,208)	(1,357)
Outright purchases	2,499	463	693	491
Outright sales	(4,000)	(261)	(1,089)	(1,089)
Maturities	(254)	(529)	(812)	(759)
III. Banco de la República liquidity operations	2,894	2,586	(5,345)	(1,676)
Expansion ^{b/}	2,894	2,586	(5,345)	(518)
Contraction	0	0	0	(1,158)
IV. Foreign exchange	513	(483)	7,600	11,750
Put options	0	1,397	1,398	2,157
Call options	(2,316)	(2,315)	(2,315)	(347)
Discretionary intervention	9,678	2,702	8,517	9,939
Sale of foreign exchange to government	(6,848)	(2,268)	0	0
V. Other ^{c/}	658	483	531	(458)
Total variation in the base	3,921	4,227	5,972	4,775
Balance of the base	21,835	27,032	26,505	26,610

^{a/} In 2007 all profit transfers to the government were in dollars: 1,186 bn pesos (\$533 m).

^{b/} Includes one-day, overnight and medium-term repos.

^{c/} Consists mainly of the monetary effect of Banco de la República's profit and loss, deposits from foreign borrowings and portfolio investment of foreign capital.

Source: Banco de la República.

therefore raised to moderate credit growth and make it compatible with stable economic expansion and a sound financial system.

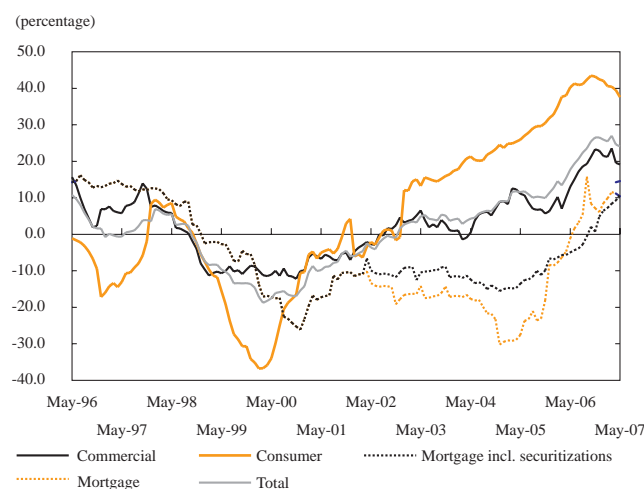
The financial system's loan portfolio has been expanding sharply since late

2005, though the pace of expansion has slowed gradually in recent months (Graph 28 and Table 14). In the first half of 2007 the gross total loan portfolio (in local and foreign currencies) showed an average annual growth of 31.4%, with consumer loans as the strongest growing component (47.4%), followed by commercial loans (33.4%). The mortgage loans' recovery in the first half is also noteworthy: 15.3% average annual growth in nominal terms (14% adjusted for securitizations), thanks to a sharp rise in monthly disbursements for home buying (Graph 29). Financial leasing increased by 45.5%, on average, over that same period. Thus, the net portfolio plus leasing increased, on average, by 32.5% in the first six months of the year.

Two other developments connected with the credit surge were as follows: i) the credit institutions' financial statements report higher credit income than

Graph 28

Annual Real Growth in Credit Institutions' Gross Loan Portfolio



Source: Financial Superintendency; calculations by Banco de la República.

Table 14

Financial System's Gross Loan Portfolio ^{A/}

	End-of-June balance in millions of pesos			End-of-June annual percentage growth			January-June average annual growth (%) ^{b/}		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
A. Local currency	59,624	73,227	95,699	11.9	22.8	30.7	9.7	17.1	35.5
Mortgage	7,211	7,608	8,550	(20.7)	5.5	12.4	(24.6)	(2.1)	15.3
Consumer	14,679	21,652	31,304	33.3	47.5	44.6	32.4	42.5	47.4
Microcredit	1,062	1,468	1,840	71.1	38.2	25.3	60.1	41.3	31.5
Commercial	36,672	42,498	54,006	12.6	15.9	27.1	11.8	10.6	33.4
B. Adjusted mortgage portfolio	10,193	10,127	12,062	(6.3)	(0.6)	19.1	(7.8)	(1.6)	14.0
C. Foreign currency	3,794	5,320	5,661	30.4	40.2	6.4	57.7	39.1	(17.6)
D. Total (A + C)	63,418	78,547	101,360	12.9	23.9	29.0	11.9	18.5	31.4
E. Financial leasing (local & foreign currency) ^{c/}	4,535	6,548	9,325	49.7	44.4	42.4		41.9	45.5
F. Total portfolio incl. leasing (D + E)	67,953	85,095	110,684	14.7	25.2	30.1		20.0	32.5

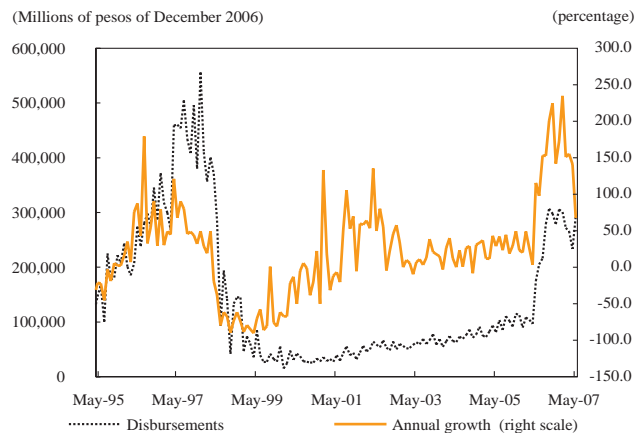
a/ Excluding FEN (state energy funding institution) and institutions in liquidation. Data at end of monetary month.

b/ Average annual growth of weekly data.

c/ Financial-leasing figures are available only from January 30, 2004.

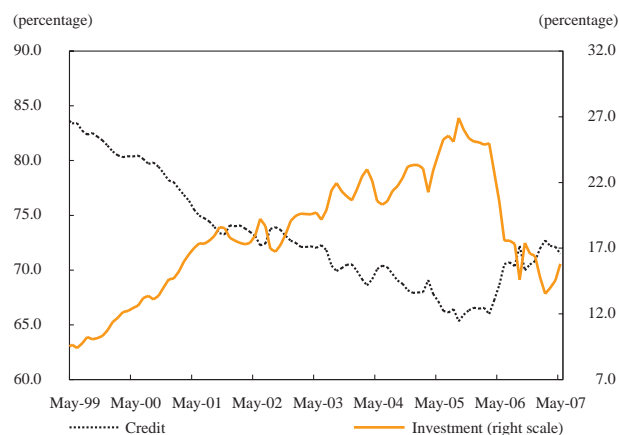
Source: Financial Superintendency Form 281 (Asset and Liability Accounts).

Monthly Disbursements in Real Terms for Homebuying



Source: ICAV (mortgage banks' institute); calculations by Banco de la República.

Credit Income and Investment Income As Shares of Financial Income



Source: Financial Superintendency; calculations by Banco de la República.

investment income (Graph 30); and ii) the quality indicator of the different types of loan stabilized at around 6.6%.

c. Credit institutions' funding sources

The financial system's flow of funds suggests that institutions have assimilated the monetary intervention rate increases, rebalancing asset allocations toward credit and away from investments. To this was added the public's greater preference for financial-system deposits, as suggested by the fact that deposits accelerated without any considerable adjustment to deposit rates.

In effect, analysis of the credit establishments' main balance-sheet accounts reveals a major change in funding sources since 2006, arising from a decrease in investments by the financial system mainly in TES, and an increase in liabilities subject to reserve requirements, which financed credit growth. This behavior continued over the first half of 2007 (Table 15), with reservable liabilities increasing by 8,911 bn pesos, while investments decreased by 2,452 bn pesos. The financial system's net leasing portfolio expanded by 10,398 bn pesos in the same period.

Between January and June 2007 annual nominal growth in financial-system deposits, as measured by reservable liabilities, averaged 19%, equivalent to

The financial system's flow of funds suggests that institutions have assimilated the monetary intervention rate increases, rebalancing asset allocations toward credit and away from investments.

Main Balance-Sheet Accounts of Credit Establishments, Including FEN

	Balance in billions of pesos at end of:			Annual absolute change		Annual percentage change	
	Jun-05	Jun-06	Jun-07	Jun-06	Jun-07	Jun-06	Jun-07
Assets							
Own cash position ^{a/}	1,151	2,154	1,819	1,003	(335)	87.15	(15.54)
Bank reserves	5,492	5,345	8,417	(148)	3,073	(2.69)	57.49
Banco de la República OMO liabilities and interest-bearing deposits not constituting ^{b/}	0	0	1,160	0	1,160	-	-
Net loan portfolio (local currency) ^{c/}	57,046	70,471	91,794	13,424	21,323	23.53	30.26
Investments ^{c/}	38,399	40,340	34,437	1,941	(5,903)	5.06	(14.63)
Leasing portfolio (local currency) ^{d/}	4,469	6,369	9,038	1,901	2,669	42.53	41.91
Net other	(14,745)	(15,815)	(19,950)	(1,071)	(4,135)	7.26	26.15
Total	91,813	108,864	126,716	17,051	17,852	18.57	16.40
Liabilities							
Banco de la República OMO assets ^{d/}	3,641	6,909	6,391	3,269	(518)	89.78	(7.49)
Reservable liabilities	88,172	101,955	120,325	13,783	18,370	15.63	18.02
Total	91,813	108,864	126,716	17,051	17,852	18.57	16.40
Memoranda items							
Financial system TES-B, par value ^{e/}	18,579	20,250	15,762	1,671	(4,488)	8.99	(22.16)
Financial system TES-B, par value + loan portfolio	80,093	97,090	116,594	16,996	19,505	21.22	20.09
Investments + loan portfolio	99,914	117,180	135,269	17,266	18,089	17.28	15.44

Note: Figures refer to monetary month.

a/ Including banks, industrial development banks (corporaciones financieras), commercial financing companies, broker-dealers, Colombian Foreign Trade Bank (Bancoldex) and FEN.

b/ Including all OMO dealers.

c/ Including banks, industrial development banks, commercial financing companies, financial cooperatives and FEN.

d/ Including banks, industrial development banks, commercial financing companies, and financial cooperatives.

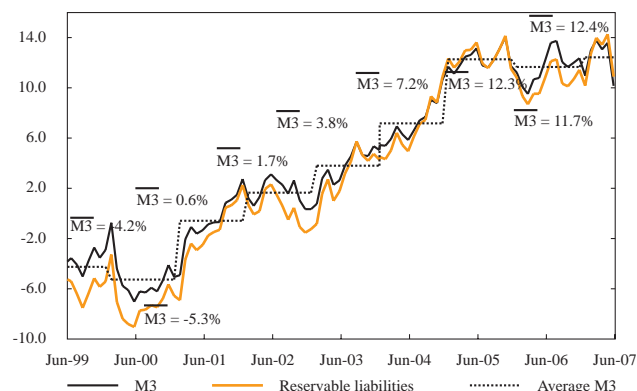
e/ Excluding FEN and financial cooperatives

Source: Financial Superintendency; calculations by Banco de la República

Graph 31

Real Broad Monetary Aggregate M3

(Annual % change)



Source: Banco de la República.

12.5% in real terms (Graph 31). This growth was driven by expansion in the two major components of such liabilities: savings (24.5%) and CDs (17.6%). The more dynamic deposits were those of the private sector (Table 16).

Section B analyzes the loan portfolio's quality and coverage indicators and the financial system's chief measures of profitability. It also presents the general results of a number of credit-, liquidity- and market-risk exercises.

Broad Money Supply: Public and Private M3
(Billions of Pesos)

	Balance as of May			Average % growth 2007
	2006	2007	Var, anual (%)	
Private M3	92,577	113,237	22.3	22.8
Cash	15,286	17,483	14.4	18.2
Reservable liabilities	77,291	95,755	23.9	23.7
Checking accounts	11,061	13,058	18.0	21.8
CDs	27,381	34,425	25.7	21.2
Savings accounts ^{a/}	33,795	42,492	25.7	28.2
Other	5,053	5,779	14.4	12.5
Public M3	22,117	26,335	19.1	12.4
Checking accounts	4,149	4,349	4.8	7.4
CDs	2,739	1,958	(28.5)	(22.6)
Savings accounts	11,673	12,468	6.8	13.8
Trusts	2,565	6,312	146.1	56.1
Other	990	1,248	26.0	23.7
M3 total	114,694	139,572	21.7	20.8
Cash	15,286	17,483	14.4	18.2
PSE	99,408	122,089	22.8	21.2
Cuentas corrientes	15,210	17,407	14.4	17.7
CDs	30,120	36,383	20.8	17.6
Savings accounts	45,469	54,960	20.9	24.5
Trusts	2,565	6,312	146.1	56.1
Other	8,609	13,339	55.0	24.9

a/ Excluding deposits of the Military Housing Bank, created in July 2006.
Source: Banco de la República and Financial Superintendency.

B. Financial System's Asset Quality

1. Financial system's quality, profitability and solvency ratios

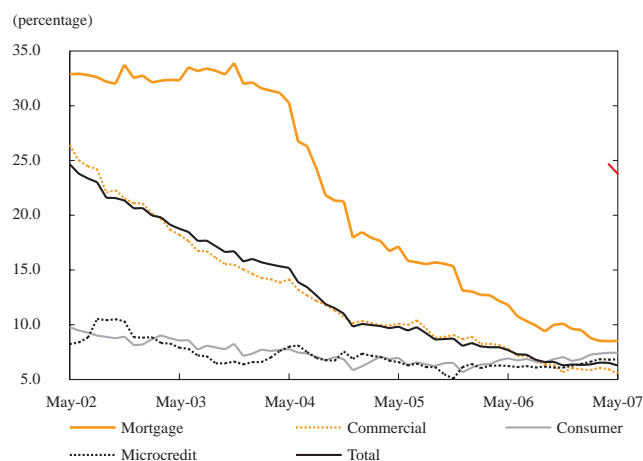
a. Loan quality and coverage ratios

By May 2007 the loan quality ratio (risky loans¹⁵ / gross loans) was around 6.4% (Graph 32). Low ratios are common to most loan types, with commercial loans having the best quality (5.54%).

¹⁵ Risky loans are loans with a rating other than A.

Graph 32

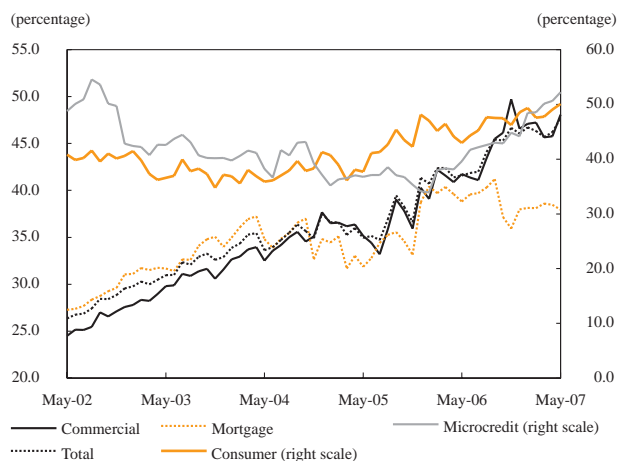
Portfolio Quality, by Type of Loan^{a/}



a/ The portfolio-quality index is calculated as risky loans / gross loans.
Source: Financial Superintendency; calculations by Banco de la República.

Graph 33

Coverage: Provisions / Overdue Loans



Source: Financial Superintendency; calculations by Banco de la República.

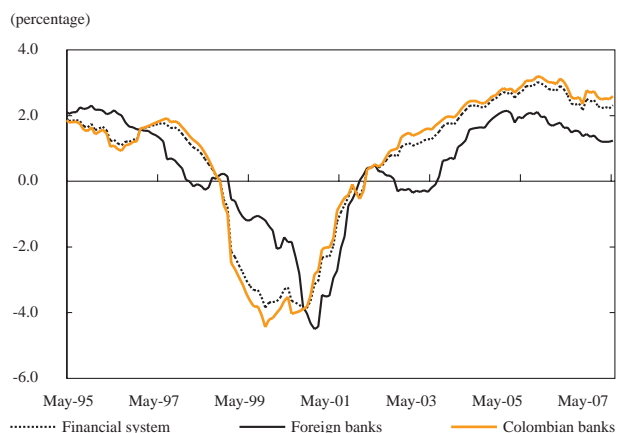
Mortgage loans improved in quality, the ratio falling from 11.8% in May 2006 to 8.5% a year later. In contrast, the quality of consumer loans deteriorated from 6.93% to 7.44% over the same period, suggesting careful monitoring of consumer-loan growth by financial institutions.

The loan-coverage ratio (provisions / risky loans) has been on the rise since 2002, reaching 47.7% in May 2007 (Graph 33), driven largely by microcredit and consumer and commercial loans (52.2%, 50% and 48%, respectively) and providing greater protection in the event of non-payment.

As in the previous *Report to Congress*, growth in consumer and commercial loans can be said to have contributed most to buoyancy in the credit establishments' loan portfolio. This trend has gone hand in hand with stable loan-quality ratios and higher coverage, reducing the system's vulnerability. Consumer loans need careful monitoring because of their deteriorating quality.

Graph 34

Return on Assets



Source: Financial Superintendency; calculations by Banco de la República.

b. Profitability indicators

The financial system's profitability (defined as the ratio of profits to average assets - ROA) dropped from 2.62% in May 2006 to 2.32% a year later (Graph 34); it has however been high since 2004, even compared with pre-crisis levels (2.13% in December 2004).

Local banks' margin of intermediation is wider than the foreign banks', as a result of higher *ex-post* lending rates,¹⁶ given that deposit rates are

¹⁶ 16.The *ex-post* lending rate is the ratio of interest income to productive loans.

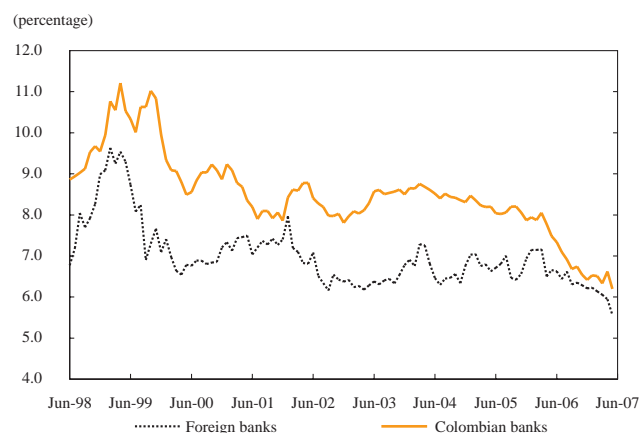
practically the same for both groups (Graph 35). But the spread between local and foreign banks has been narrowing, mainly because of falling local ex post lending rates (from 7.48% in May 2006 to 6.2% a year later). This similarity of indicators stems from the spread of the multibank system in the financial sector, as compared with typically specialized banking activity in the past. Overall, both Colombian and foreign banks present favorable profitability ratios, confirming that times are good in the Colombian financial system.

The solvency ratio for the financial system as a whole¹⁷ is used to analyze credit establishments' capital soundness (Graph 36). In May 2007 this ratio stood at 13.67%, average for the past decade and more than 4 pp over the mandatory minimum (9%), signifying that expansion in financial intermediation is not constrained by capital levels and that there are good provisions to face any crisis.

2. Analysis of main risk indicators¹⁸

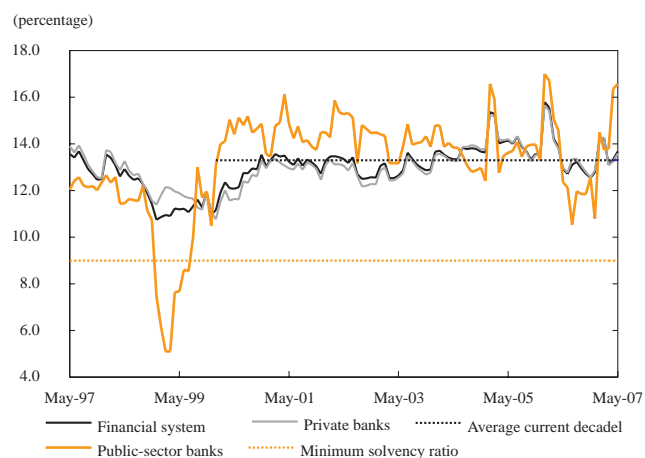
Credit establishments have maintained their profitability and capital-soundness levels despite difficulties experienced in financial asset markets in the second quarter of 2007. Hence the need to intensify the monitoring of both market risk (as evidenced by valuation and liquidation losses in the first half) and credit risk (posed by robust growth of the loan portfolio). Liquidity risk remains low.

Real *Ex-Post* Spreads



Source: Financial Superintendency; calculations by Banco de la República.

Solvency Ratio, By Type of Intermediary



Source: Financial Superintendency; calculations by Banco de la República.

¹⁷ The solvency ratio is the ratio of technical capital to risk-weighted assets (including market risk).

¹⁸ Further information will be found in the Banco de la República's March 2007 *Financial Stability Report*.

Broadly speaking, market risk continues to be the main threat, despite the credit establishments' lower exposure at the end of 2006. Credit risk remains low, though exercises show institutions taking on greater risk without a corresponding increase in capital. Liquidity risk is still low but presents a rising trend that requires careful monitoring, particularly as liquid assets continue to be drawn down.

a. Market risk

Credit establishments have reduced a large part of their public-debt holdings, while non-banking financial institutions have kept on increasing their exposure (Table 17).

A sensitivity analysis shows that a 200 bp rise¹⁹ in all maturities of zero-coupon fixed-rate TES would result in a 20.2% loss of profits for credit establishments and a 2.77% loss of portfolio value for pension fund managers (Graph 37).

¹⁹ This is the shock suggested by the Basle Committee on Banking Supervision for non-G-10 countries.

Table 17

Changes In Tes-B Holdings ^{a/}
(Millions of Pesos)

Subsector	Volume change	Price change	Total
Total credit institutions	(1,998,638)	2,083,801	85,162
Commercial banks	(2,161,568)	1,949,629	(211,939)
Commercial financing companies	48,480	23,226	71,705
High-grade financial cooperatives	7,717	7,248	14,965
Industrial development banks	106,733	103,698	210,431
Total non-banking financial sector	3,527,386	6,337,702	9,865,088
Broker-dealers	(53,930)	55,577	1,647
Insurance and capitalization companies	202,087	367,963	570,051
Pension fund managers	2,699,955	4,983,246	7,683,201
Trust companies	679,274	930,916	1,610,190

^{a/} Change from August 29, 2006 to February 16, 2007.
Source: Banco de la República.

b. Credit risk

High loan quality, elevated provision levels and a good macroeconomic outlook suggest that credit risk does not represent a source of instability in the short run. Sensitivity exercises contemplating several possible scenarios are conducted, assuming an extreme and unlikely macroeconomic scenario (stress-test), to observe how adverse shocks to macroeconomic variables affect profit-and-loss variables and hence solvency. Credit establishments' soundness is assessed in terms of the solvency ratio, which measures their capacity to absorb unexpected losses.

Stress-testing for the consumer and mortgage portfolios assumes a 6.8% decline in economic activity, as occurred in the second quarter of 1999, an interest-rate rise of 450 bp, as occurred between May and June 1998, and an 8% fall in house prices, equal to the average fall in 1996-2000. In the case of commercial loans, sales are assumed to decrease by 9%, as occurred in 1999. The results show that a sharp rise in interest rates and a drastic fall in economic activity would cause the solvency ratio for 12 out of 17 banks to drop below the regulatory minimum (9%).

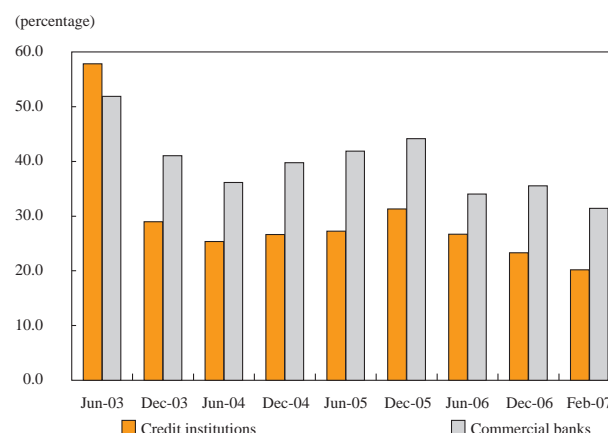
c. Liquidity risk

Financial intermediation, by its nature, involves transforming liquid liabilities into illiquid assets; hence the possibility of a financial institution's becoming unable to meet its obligations because of a lack of liquid resources. Liquidity risk is connected with this possibility.

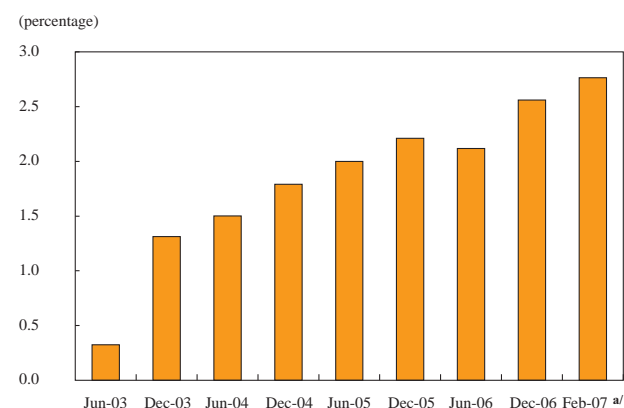
Liquidity risk is analyzed by using two methodologies. The first is the uncovered liability ratio,²⁰ and the liquidity-adjusted value at risk. The true effect of the risk can be analyzed more precisely using the liquidity-adjusted value at

Valuation Losses Resulting from a 200 Basis-Point Shock

A. Valuation Losses as a Percentage of Annualized Profits



B. Valuation Losses of Pension Fund Managers As a Percentage of the Portfolio Value

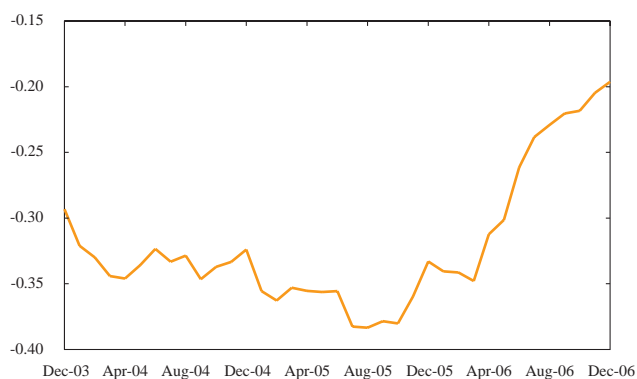


a/ Percentage of the portfolio as of December 2006.
Source: Banco de la República.

²⁰ $20. \text{Uncovered liability ratio} = (PTr + PL) - [\lambda IN + (AL - IN)] / AT - AL$, where PL is liquid liabilities, PTr is the transitory component of all other liabilities, IN is negotiable investments, AL is liquid assets and AT is total assets.

Graph 38

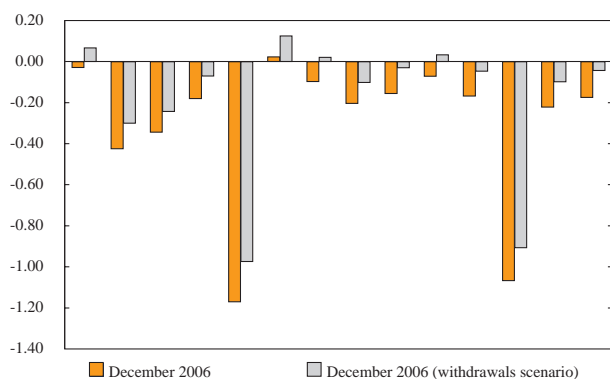
Credit Institutions' Uncovered-Liability Ratio



Source: Financial Superintendency; calculations by Banco de la República.

Graph 39

Sensitivity Test: Uncovered-Liability Ratio of Commercial and Mortgage Banks



Source: Financial Superintendency; calculations by Banco de la República.

risk, by measuring the losses that institutions may incur in liquidating a position (such as public-debt securities) in the event of a liquidity crisis.

The uncovered liability ratio is a good proxy for liquidity risk. It refers to the difference between redeemable liabilities and liquid assets; this difference, as a percentage of illiquid assets, implies that the more negative the indicator, the smaller the liquidity risk facing the institution.

Graph 38 shows the uncovered liability ratio for financial-system institutions, while Graph 39 presents this ratio in the stress scenario with December 2006 as the cut-off date. In March 2006 the uncovered liability ratio was around 0.34 and steadily deteriorated over the year to 0.19 in December, indicating that the impact of liquidity risk on the banking system intensified in the course of 2006, after a long period in which it had diminished, from around 0.3 in September 2003 to 0.36 in October 2005. This reversal is explained by various phenomena reviewed in earlier sections of this report: the liquidation of negotiable investments implied a reduction in the size of the system's liquidity support; the sharp rise in the loan portfolio meant that institutions assumed a greater risk of facing liquidity shortfalls; and liquidity in the financial markets decreased, particularly in the second quarter. Though the level of risk remains low (in the

sense that the uncovered liability ratio is still negative), its trend makes it necessary to monitor movements in the institutions' liquidity position carefully.

There are great differences however among individual institutions, with one institution in particular showing a positive uncovered liability ratio in December, a phenomenon not seen before. Moreover, in comparison with exercise results presented in previous reports the uncovered liability ratio is approaching zero, leading to the conclusion that the risk may be low but it is rising.

On a simulated stress scenario,²¹ four institutions representing 20% of the banking system's assets showed a positive uncovered liability ratio. In such

²¹ The simulated stress scenario consisted of estimating the impact of a sudden withdrawal of 12% of deposits on each institution's uncovered liability ratio.

a scenario therefore the financial system should present no aggregate liquidity problems (Graph 39).

In the event of needing highly liquid resources to meet their obligations, financial institutions will seek to liquidate a certain portion of their negotiable investments in the financial markets. This convergence of institutions on the market, together with diverse regulatory elements, exposes them to a market risk, in that the value of those investments may change suddenly. Moreover, in the event of a liquidity crisis in the market, they face the risk of realizing not the market value of the investments but a discounted value.

This effect of market liquidity on the value of negotiable investments makes it necessary to correct the traditional measure of market risk (value at risk - VaR), to enable institutions to know the real value of their investment portfolio more accurately and, by allowing them to analyze the true impact of the risk, to measure the losses they might incur in liquidating a position (such as public-debt securities) in the event of a liquidity crisis.²² The results of this methodology show that, if the situation occurring in the second quarter of 2006 should arise, the liquidity risk—measured as the percentage by which the value at risk should be adjusted for the institutions as a group—would be multiplied by three. That is, in a scenario of turbulence the percentage by which traditional VaR should be increased to take into account the liquidity effect is 38%, as compared with the current situation (11.9%) (Table 18).

To sum up, attention should be kept on changes in the liquidity risk faced by credit establishments, for this risk is highly sensitive to conditions in public-debt securities markets. The new regulations under study by the Financial Superintendency are therefore expected to take this into account.

3. Non-banking financial institutions²³

The importance of these institutional investors in local markets is illustrated by their growing participation in the public-debt securities market (Table 19). In 2006 non-banking financial institutions (NBFI) became the major agents in this market, superseding the banking financial sector. In December

Broadly speaking, market risk continues to be the main threat. Credit risk and liquidity risk remain low.

²² This methodology refers to the difference between redeemable liabilities and liquid assets; the more negative this difference, as a percentage of illiquid assets, the lower the liquidity risk faced by the institution.

²³ 23. For further information see the Banco de la República's March 2007 *Financial Stability Report*.

2006 they held 27.5% of outstanding TES securities, while the banking financial sector held 21.7% (Table 20).

In 2006 non-banking financial institutions²⁴ reduced their investment portfolio's annual rate of growth because of unfavorable second-quarter

²⁴ 24.The NBFIs reviewed in the March 2007 *Financial Stability Report* included pension-fund, insurance, trust, brokerage and mutual-fund companies, among others.

Table 18

Liquidity Risk
(Percentage by Which Value-At-Risk Should be Adjusted)

Actual data February 6, 2007		Volatility stressed scenario	
Entities	Percentage	Entities	Percentage
1	16.76	1	24.93
2	4.24	2	34.14
3	28.14	3	83.14
4	15.17	4	46.48
5	13.51	5	28.12
6	31.30	6	21.61
7	16.37	7	36.09
8	11.67	8	28.82
9	9.65	9	42.95
10	8.65	10	37.99
11	11.21	11	27.49
12	25.38	12	38.94
13	9.68	13	49.20
14	17.27	14	57.37
15	40.53	15	31.93
16	12.01	16	35.26
17	6.10	17	30.08
Total	11.94	Total	38.03

Source: Banco de la República.

Table 19

Distribution of Total Outstanding TES Among Different Agents

	2004	2005	2006
Total outstanding TES (billions of pesos)	58.19	77.91	84.82
Percentage share			
Banking financial sector	29.04	28.08	21.69
Total non-banking financial institutions (NBFI)	24.22	24.72	27.48
Pension fund managers	15.47	16.51	19.05
Insurance, reinsurance and capitalization companies	2.61	2.66	3.43
Other NBFI	6.14	5.54	5.00
Real sector	17.19	19.38	24.70
Public sector	22.15	20.59	20.83
Banco de la República	2.88	3.89	3.05
Securities depositories	4.52	3.33	2.24

Source: Banco de la República.

results. The negative price shock of paper adversely affected these investors' portfolios, given their high exposure to these assets, particularly TES and equities. The subsequent recovery, in the second half of the year, did not occur uniformly among the NBFi group.

The importance of all these institutions to the country's financial stability lies in their management of household savings resources (mainly pension funds) and in their relationship to the financial system in general, whether as counterparties or as a benchmark in local markets. Thus the NBFIs play a key role in risk transmission between agents, particularly since many of the NBFIs are attached to a financial group. In the event of a crisis occurring, whether particular or systemic, the degree of transmission would largely depend on agents' interrelationships with this sector and on management of its portfolio in the different markets.

Table 20 shows the value and relative size of the NBFi portfolio in recent years; it can be seen that the overall portfolio value has risen steadily, despite falls in many individual portfolios.

Given the pension funds' growth and their increasing importance in such a market as the public-debt market, it is possible to estimate their potential

Table 20

Financial Institutions' Investment Portfolio

	2003		2004		2005		2006	
	Trillions of pesos	% del PIB	Trillions of pesos	% del PIB	Trillions of pesos	% del PIB	Trillions of pesos	% of GDP (proj)
Credit establishments								
Investments	28.81	12.46	36.93	14.30	43.93	15.48	37.65	12.39
Loans	57.45	24.85	66.06	25.57	77.09	27.16	101.91	33.54
Total	86.26	37.31	102.99	39.87	121.02	42.64	139.56	45.92
Non-banking financial institutions								
Mandatory pensions	20.34	8.84	26.45	10.33	36.58	12.86	43.17	14.21
Voluntary pensions	3.77	1.64	4.49	1.76	7.33	2.58	7.23	2.38
Severance entitlements	2.74	1.19	3.13	1.22	3.71	1.30	3.77	1.24
General insurance	2.47	1.07	2.84	1.11	3.62	1.27	3.35	1.10
Life insurance	3.55	1.54	4.38	1.71	5.82	2.04	6.19	2.04
Trust companies' Ordinary Common Funds	3.98	1.73	4.52	1.77	5.33	1.87	3.79	1.25
Trust companies' Special Common Funds	1.83	0.80	1.93	0.75	3.12	1.10	1.54	0.51
Broker-dealers ^{a/}	1.77	0.77	2.78	1.09	4.18	1.47	2.94	0.97
Mutual investment funds	0.30	0.13	0.40	0.16	0.57	0.20	0.56	0.18
Total	40.75	17.71	3.19	19.89	70.27	24.69	72.54	23.87
Total	127.01	55.02	106.18	59.76	191.29	67.33	212.10	69.79

(proj): projected

a/ Own position.

Source: Securities Superintendency; calculations by Banco de la República.

demand for government securities. Assuming that they grow at much the same rate as in recent months, the pension funds' value by the end of 2007 will be more than 61.5 trillion pesos. If their position in public-debt securities remains at around 50% of their value, their normal growth would mean a demand for such securities amounting to some 3.7 tr pesos. Since the government is thinking of issuing TES worth some 9.0 tr pesos in 2007, about 40% of this issue can be expected to be absorbed exclusively by the pension funds.

C. Foreign-Exchange Intervention and Monetary Policy

1. Nominal and real exchange-rate movements

From the second half of 2006 the Colombian peso resumed its appreciating trend against the dollar that had began in 2003 and was temporarily interrupted in the

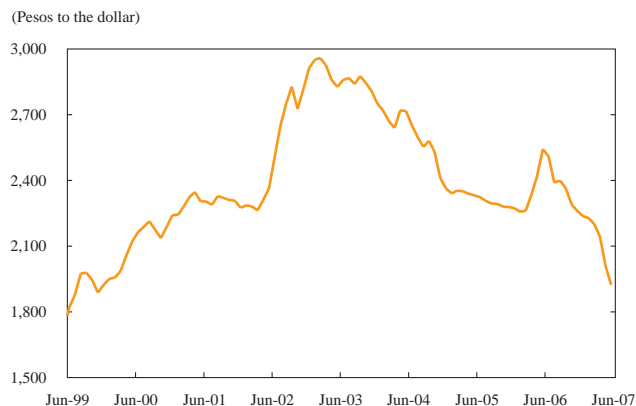
first half of 2006 in response to expectations of higher international interest rates. This trend has continued in 2007 and by June the peso-dollar quote had fallen by 337.6 pesos (14.93%) relative to December 2006 (Graph 40). Relative to June 2006 the peso has appreciated by 24.3% against the dollar in nominal terms.

In evaluating changes in competitiveness it is important to consider movements in multilateral exchange-rate measures. For instance, the United States and Ecuador account for 47.5% of Colombia's global trade, with most of the rest being accounted for by Europe, Venezuela, other Andean countries and Japan. Between 2003 and June 2007 the currencies of a good many of these countries have also appreciated in nominal terms against the dollar (Table 21), some of them (the euro, real and sterling) by more than the Colombian peso.

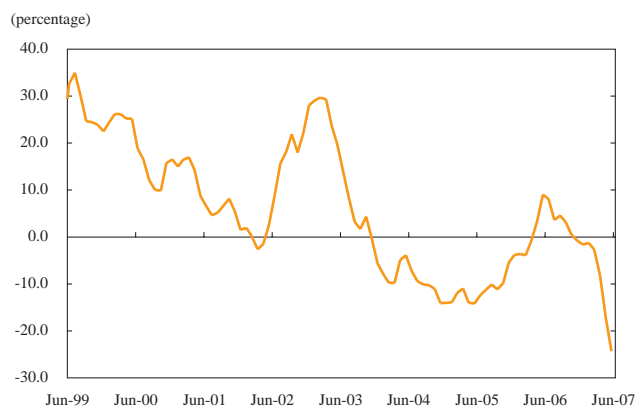
More pertinently still, to evaluate changes in the country's exchange-rate competitiveness, differences between Colombia's relative costs and those of our main trading partners need to be taken into account. The real exchange rate, which shows how the prices of our main trading partners vary relative to ours, provides a measure of these relative costs: in real

Graph 40

A. Nominal Exchange Rate



B. Nominal Annual Devaluation



Source: Banco de la República.

Nominal Exchange Rate: Foreign Currency Against the Dollar ^{a/}

	Weighting in Colombia's nontraditional exports	Average annual % change		
		2000-2002	2003-June 2007	Jan-June 2007
Colombia		12.9	(1.6)	(9.2)
Venezuela	12.7	26.1	17.2	0.0
Ecuador	9.2	43.6	0.0	0.0
Mexico	5.5	0.4	3.0	0.7
Brazil	4.3	17.8	(5.5)	(6.5)
Eurozone	3.6	4.5	(6.6)	(7.5)
Peru	3.5	1.5	(2.0)	(4.1)
Japan	2.7	3.7	(0.9)	3.9
Chile	2.2	10.8	(5.2)	1.3
Canada	1.4	1.9	(6.9)	(0.4)
England	1.3	2.5	(5.3)	(9.2)
Argentina	0.9	70.2	2.8	0.8

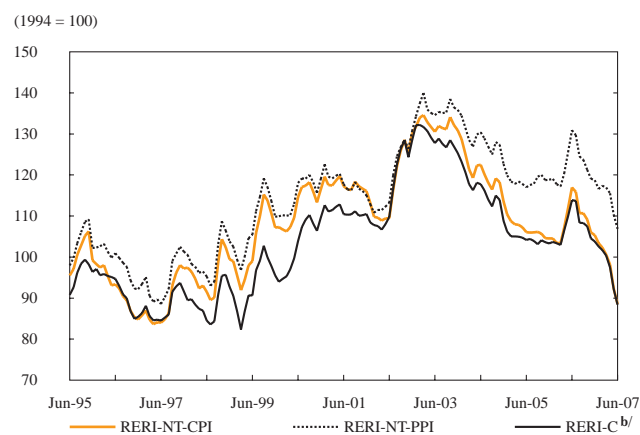
a/ PPI weighted.

Source: Central banks, Banco de la República.

multilateral terms, the peso has gained 10.01% (measured by the PPI) from January to June this year and 18.5% relative to June 2006 (Graph 41).

An interesting exercise involves breaking down that real multilateral exchange-rate measure and estimating what has happened to the Colombian peso in real terms against the currency of each of its main trading partners. The results can be used in part to explain the behavior of total and nontraditional exports in recent years. As can be appreciated from Graph 42, between January 2003 and June 2007 the Colombian peso appreciated by 0.5% in real terms against the dollar and depreciated against some currencies of the region, such as the bolívar (2.8%), the real (10.4%) and the Chilean peso (6.0%) (Table 22). This partly explains the sharp rise in our exports to these economies. The peso has also depreciated in real terms against the euro (4.3%) and sterling (1.3%). Since June, however, appreciation pressures have been stronger in Colombia than in other countries. This is reflected by the real bilateral exchange-rate indicator, which has begun to register a strengthening of the Colombia peso against the other currencies, though it is still weakening against the bolívar. Box 1 analyzes the macroeconomic context in which the currencies of some of the region's economies have appreciated.

Graph 41

Real Exchange-Rate Index ^{A/}

a/ Geometric average

NT: Nontraditional trade

^{b/}Obtained by comparing (in the same currency) the CPI in Colombia with CPIs of other countries that also export coffee, flowers, bananas and textiles to the United States.

The Colombian Peso's Real Exchange-Rate Index Against Other Currencies



Source: Banco de la República.

Table 22

Real Bilateral Exchange Rate ^{a/}:
Colombian Peso Against Foreign Currency

	Weighting in Colombia's nontraditional exports	Average annual % change		
		2000-2002	2003-June 2007	Jan.-Jun. 2007
United States	41.0	5.0	(1.4)	(8.6)
Venezuela	12.7	2.4	2.8	3.8
Ecuador	9.1	17.9	(2.9)	(10.0)
Mexico	5.5	9.1	(3.3)	(7.8)
Brazil	4.3	3.5	10.4	(1.4)
Germany	3.6	1.6	4.3	(2.3)
Peru	3.5	3.3	(2.1)	(7.3)
Japan	2.7	(0.7)	(4.0)	(13.3)
Chile	2.2	(3.3)	6.0	(9.6)
Canada	1.4	3.6	2.1	(8.6)
England	1.3	1.7	1.3	(0.1)
Argentina	0.9	(10.4)	4.0	(7.6)

^{a/} PPI weighted.
Source: Central banks, Banco de la República.

2. Understanding the peso's appreciation

The nominal exchange rate is of limited use in comparing the country's competitiveness with respect to its trading partners on the basis of peso-dollar movements, for it does not take into account inflation differentials between the economies. Since the nominal exchange rate is a relative price but also the price of an asset, in the short run it may be influenced by different factors such as market expectations or information available to agents on economic variables, which can affect national income permanently or transitorily. It does, of course, have a bearing on bilateral competitiveness (with the United States), because it affects conversion of domestic production costs to foreign currency. In the long run, however, to the extent that Colombia trades in markets other than the US or the dollar's parity against other currencies changes, then, given that there is an inflation differential between economies, the nominal exchange-rate concept loses its causal relationship with the country's competitiveness. For this reason real exchange-rate indices are used as a measure in analyzing sectoral competitiveness with respect to the rest of the world.

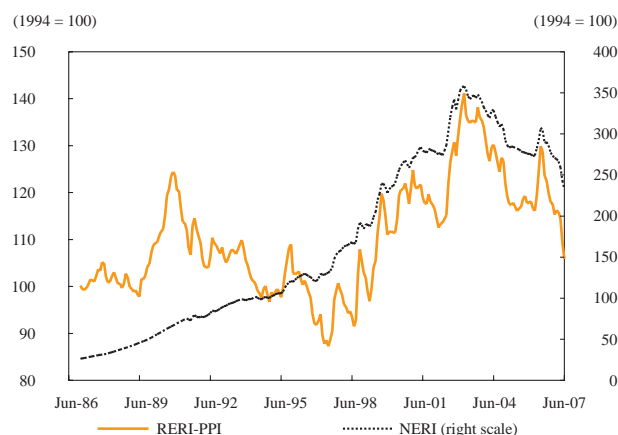
As shown by Graph 43, the behavior of nominal and real exchange rates differs over time as prices in Colombia and the rest of the world change, affecting competitiveness; hence the importance of using the real exchange rate as an indicator of competitiveness.

The real exchange rate measures movements in the prices (or costs) of a given basket of goods and services produced in the country, with respect to another country, when both are expressed in a common currency. To the extent that the real exchange rate captures changes in relative prices, these tend to be associated with changes in a country's competitive position. In particular, real appreciations in the local currency (other things being equal) make goods produced in the country comparatively more expensive, a situation associated with a loss of competitiveness. But economic theory warns that this causality is not so mechanical. A number of factors that affect competitiveness, such as relative productivity changes between countries, have an impact on the real exchange-rate index (RERI). For instance, if a country is more competitive because its tradables sector is more efficient (for example, because it has become more technologically advanced), its productivity gains may be reflected in falls in the real exchange-rate index, as explained below. Thus, while competitiveness rises, the real exchange rate may fall. In this context therefore it is higher relative competitiveness that causes exchange-rate appreciation.

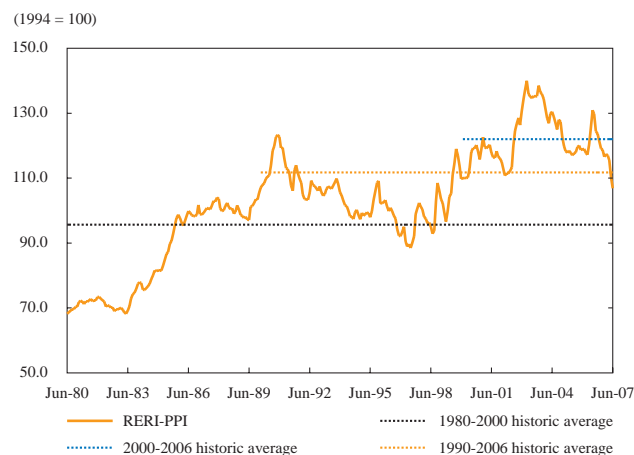
The nominal exchange rate is of limited use in comparing the country's competitiveness with respect to its trading partners on the basis of peso-dollar movements, for it does not take into account inflation differentials between the economies.

Graph 43

Nominal and Real Exchange-Rate Index^{a/}



a/ Geometric average.
Source: Banco de la República.

Real Exchange-Rate Index ^{a/}

a/ Geometric average
Source: Banco de la República.

Hence the need to identify what elements are behind the exchange-rate appreciation before drawing any conclusions about its impact on economic activity and sector competitiveness. To this end, a distinction must be made between factors affecting nominal exchange-rate dynamics in the short run, and those that depend on the fundamentals of the economy and in the long run determine real exchange-rate dynamics and thereby competitiveness. Graph 44 shows that in the long run there have been large movements in Colombia's real exchange rate, which has in fact been running above the historical average during the present decade.

The following analysis shows that the Colombian peso's trend to appreciate since 2004 in both nominal and real terms can be explained by long-term structural factors and only recently by short-term factors.

a. *Short-term factors*

As mentioned earlier, to the extent that the nominal exchange rate is the expression of the price of one country's currency in terms of another's, it can be defined as the price of an asset. And as with any asset, its price is determined in the market by supply and demand factors. Decisions by agents in the economy about holding this asset depend largely on the return they expect to receive on this investment. In other words, today the peso-dollar exchange rate depends a lot on agents' expectations of its future level.

To put it simply, the level of the exchange rate in the local market is affected by the yield differential between holding an asset in pesos and holding it in dollars.²⁵ The differential will then be determined by domestic and foreign interest rates, the country risk and exchange-rate expectations. If the interest rate on peso investments is higher than the US interest rate plus the expected rate of appreciation (depreciation),²⁶ Colombian and foreign investors will prefer to hold peso investments, creating pressure on the currency to appreciate.

²⁵ Assuming that agents do not hedge against exchange-rate risk.

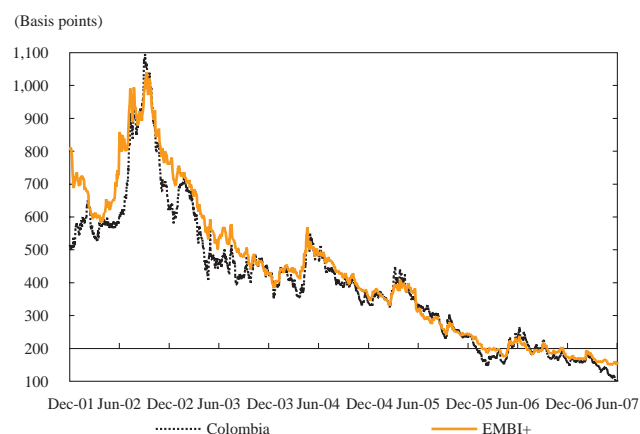
²⁶ $R_t = R_t^* + [(E^e - E_t)/E_t]$, where R is the rate of interest on peso assets, R_t^* the interest on assets held in dollars or other currency, E^e the expected exchange rate in $(t + 1)$ and E_t is the exchange rate in t .

Consequently, agents' decisions to make external asset and liability portfolio shifts because of yield differentials and perception of risk can have an impact on the nominal exchange rate to the extent that they affect the supply of foreign exchange in the economy. For example, by April 2006 expectations arose of possible unexpected US Treasury bond rate rises, prompting an outflow of capital from emerging countries, in search of the higher yield on those bonds. The effect of this uncertainty was a temporary devaluation in currencies until the markets' expectations of possible rate rises by the US Federal Reserve were realized. From then on all currencies resumed their appreciation trend.

Broadly speaking, emerging countries' debt-risk premiums have been on a falling trend since 2003, attracting foreign investors' attention to these economies, and to Colombia in particular (Graph 45). At the same time, both long- and short-term external interest rates have remained relatively low (Graph 46), allowing real interest rates in Colombia to decrease steadily, at least until mid-2006 (Graph 47). In Colombia there is no evidence that in the two years to April 2007 the yield differential generated upward pressure on the nominal exchange rate. In other words, in those years there was no increase in the supply of foreign currency from portfolio investment—the type of investment entering the country in search of short-term profit—to suggest that portfolio investment was the cause of appreciation. As discussed in detail in the next section, from 2003 to March 2007 the increased supply of foreign exchange stemmed rather from structural factors having to do with macroeconomic stability and was associated, among other things, with long-term capital flows, such as direct foreign investment and remittances from abroad (Graph 48).

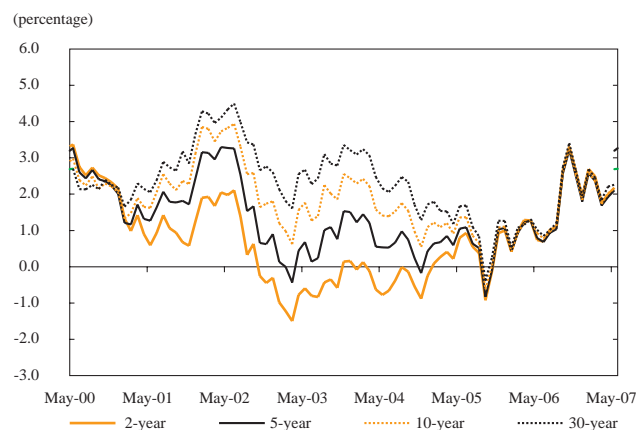
It goes without saying that since April 2006 the clear signs of inflationary pressures in Colombia have entailed a process of gradual adjustment of policy interest rates by the central bank. Although these rates are still low in real terms, the nominal rate, added to agents' expectations of appreciation, has been sufficiently attractive for investors, who have found financial vehicles to increase

Country-Risk Premium:
Embi+ Latin American Countries



Source: Bloomberg.

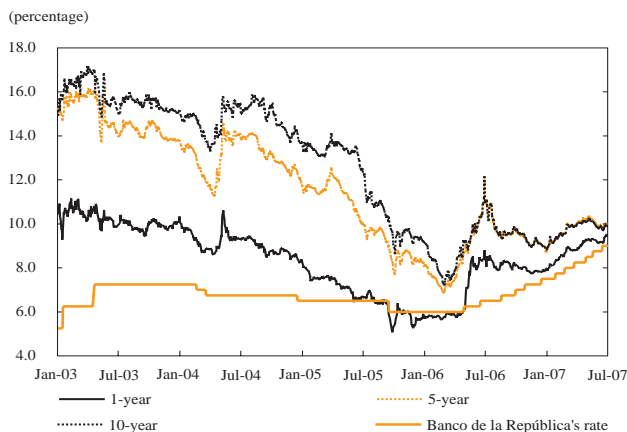
US Treasuries' Real
Interest Rates



Source: Datastream.

Graph 47

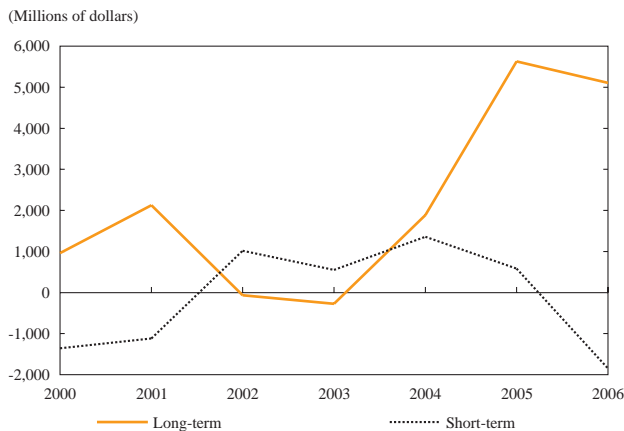
Zero-Coupon Peso TES Curve and Banco de la República's Benchmark Rate, January 2003 To July 2007



Source: Banco de la República.

Graph 48

Capital Flows to The Private Sector, Including Net FDI



Source: Banco de la República.

their profitability in pesos (carry trade),²⁷ particularly since April 2007. As explained in detail further below, in May 2007 the Banco de la República took steps to reduce the incentives that were thus generated for foreign-currency borrowing by Colombians. And a little later the government took equivalent decisions on portfolio investment by foreigners in Colombia. The Bank has also restricted financial intermediaries' exposure to forward operations.

b. Long-term factors

To understand which fundamental factors determine real exchange-rate behavior, it is worth referring back to the definition of the real exchange rate as the indicator of relative prices that compares the prices of a basket of goods in one economy with the prices of goods abroad expressed in the same currency. Specifically $TCR = E \times P^* / P$, where E is the nominal exchange rate, P^* the level of external prices, and P the level of domestic prices. If nontradables (such as services) and tradables (negotiated internationally) are produced in both economies, then the real exchange rate will depend on how the nontradables' relative prices (compared with the tradables) behave in each economy. The real exchange rate also depends on the price relationship between tradables abroad and those produced in the country.²⁸

The relationship with the above-mentioned variables is as follows:

$$TCR \equiv \left(\frac{q^{*\beta}}{q^\alpha} \right) \varepsilon$$

²⁷ If a foreign investor can borrow funds in a country such as Chile, where the interest rate is around 5.0%, and invests it in the Colombian market, where interest rates are over 8.0% and expected to appreciate, he is very likely to obtain positive return on his investment, without running a proportional risk. An operation of this kind is known as carry trade. In financial literature.

²⁸ Formulation of the real exchange rate in terms of tradables and nontradables is as follows:

$$TCR = \frac{P_N^{*\beta} P_T^{1-\beta} E}{P_N^\alpha P_T^{1-\alpha}} = \left(\frac{P_N^*}{P_T} \right)^\beta \left(\frac{P_T^* E}{P_T} \right) \equiv \left(\frac{q^{*\beta}}{q^\alpha} \right) \varepsilon$$

The real exchange rate depends directly on the external relative price of nontradables to tradables (q^*), inversely on the domestic relative price of nontradables to tradables (q), and directly on the relative price of external tradables to domestic tradables (ϵ).

Accordingly, the best way to explain real exchange-rate behavior is to start with the factors affecting these relative prices. The following paragraphs will show that the Colombian peso's appreciation trend since 2004 can be explained by movements in several of its fundamental determinants, according to the real exchange-rate theoretical framework.

As demonstrated above, the real exchange rate is a relative price and, as such, its movements are affected by the economy's aggregate supply and demand factors. In particular, the fundamental determinants of the real exchange rate are such factors as affect the supply and demand of tradables and nontradables.

i. Relative prices of nontradables

As in any other market, these prices are determined by the conditions of supply and demand for this type of goods in both countries.

- *Supply factors*

In the long run, the main factor determining the relative supply of nontradables (to tradables) is productivity. Given a relative demand, if the tradable sectors' productivity in a country grows faster than the nontradables', the relative price of nontradables will rise faster (because nontradable supply will grow more slowly than tradable supply).²⁹ Since the real exchange rate reflects the relative prices of nontradables in both countries, the effect of these changes on it will depend on whether the growth differential of tradable and nontradable productivities is greater at home or abroad. If the differential is greater abroad, the currency at home will tend to depreciate in real terms, because external relative nontradable prices (q^*) will rise faster than the domestic ones (q).³⁰

Remember the original definition of $TCR \equiv \left(\frac{q^*}{q} \right) \epsilon$. To the extent that productivity growth is normally higher in tradable sectors than in nontradable

The real exchange rate is a relative price and, as such, its movements are affected by the economy's aggregate supply and demand factors.

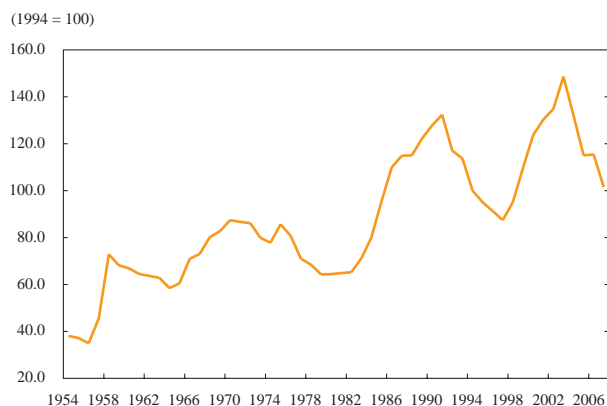
The fundamental determinants of the real exchange rate are such factors as affect the supply and demand of tradables and nontradables.

²⁹ To the extent that the tradable sectors of the economy have productivity gains, these may lead to a rise in real wages (assuming that wages are adjusted in line with productivity gains), affecting in parallel the wages in nontradable sectors. The general rise in wages is not transferred to tradable prices (P), because these are internationally given, but it is transferred to nontradable prices (PN), which will go up.

³⁰ This is known in economic theory as the Balassa-Samuelson effect.

Graph 49

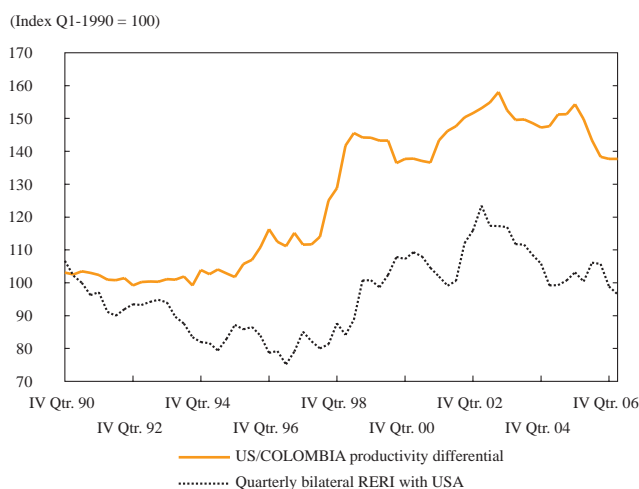
Bilateral Real Exchange-Rate Index With USA ^{a/}



a/ Real Exchange rate index for 2007 calculated on information to June.
Source: Banco de la República.

Graph 50

Colombia-USA: Manufacturing Productivity Differential, And Bilateral Real Exchange-Rate Index



Source: Calculations by Banco de la República on information from DANE and the Bureau of Labor Statistics.

ones (for example, manufacturing vs. services), this effect has been used to explain why currency appreciation is usually higher in countries with high per-capita income than in poorer countries. By way of illustration, Graph 49 shows the Colombia-US bilateral real exchange rate on a rising trend of depreciation since 1954.

This real depreciation trend is explained by the fact that for a number of decades manufacturing productivity per hour worked has grown more slowly in Colombia than in the US (Graph 50). In recent years, however, relative growth in Colombia's tradable productivity has accelerated, which may account at least in part for the current trend toward appreciation. This conclusion should, of course, be viewed with caution, for the productivity behavior of other tradable sectors (e.g. farming) and of nontradable ones (e.g. services, construction) need to be taken into account.

- *Demand factors*

Changes in demand for tradable goods affect their relative price and hence the real exchange rate.³¹ What factors increase the relative demand for tradables? This demand depends essentially on national income, the real exchange rate and exogenous shocks (e.g. public spending):

- Income from the economy may increase, for example, because of the discovery of an exportable natural resource, a shock in the terms of trade, or a fall in net factor payments to abroad. These may all induce a real appreciation of the peso, to the extent that they are reflected in greater spending. Put another way, the peso's tendency to appreciate may be mitigated if the income increase is saved, at least in part.

³¹ Assuming decreasing scale returns in both tradable and nontradable production, or at least in production of nontradables.

Greater spending by agents in the economy means higher demand for both tradable and nontradable goods. But tradable demand may be supplied from abroad-and in any case prices are fixed from abroad-, whereas nontradable demand can only be supplied domestically. For this reason, the relative price of nontradables will rise and put upward pressure on real wages (in terms of tradables).

In recent years, Colombia's terms of trade have improved considerably (Graph 51, Table 23), and net factor income excluding oil (inflows net of interest, profits and transfers) has increased by an annual average amount of \$445 m from 2000 to 2003 and \$914 m from 2004 to (projected) 2007. These factors therefore account for part of the appreciation in the past two years. Workers' remittances have also contributed to raising the available income of Colombians; their annual average soared from \$2,300 m in 2000- 2003 to \$3,700 in 2004-2006 (Graph 52).

- Foreign direct investment inflows can induce a real appreciation, for they generate demand for nontradable goods and services and by doing so raise their relative prices. The same occurs when public or private spending rises. In fact, fiscal policy can be used as a policy instrument to induce a currency depreciation, if so desired.

Graph 51

Terms-Of-Trade Ratio

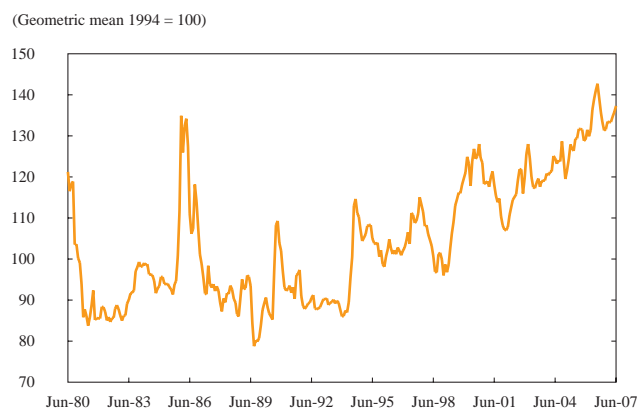


Table 23

International Prices-Colombia

	Average				Current projection ^{a/}	
	2002	2003	2004	2005	2006	2007
Coffee (ex dock) (dollars per pound)	0.7	0.7	0.8	1.2	1.2	1.2
Oil (dollars per barrel)	24.2	29.0	37.3	49.8	58.3	54.1
Coal (dollars per tonne)	30.8	28.2	36.1	47.8	48.0	51.5
Nickel (dollars per pound)	1.1	1.4	2.3	2.4	3.6	6.6
Gold (dollars per troy ounce)	310.2	362.5	409.3	445.0	604.6	655.3

^{a/} Balance of payments estimated in July 2007.
Source: Banco de la República.

Higher public spending tends to generate a real appreciation-even if financed by additional taxes-, to the extent that the composition of public spending, compared with private spending, is more biased toward nontradables, inducing a net rise in demand for nontradables and thereby increasing their relative value

and producing a real appreciation (q rises, and $TCR = \left(\frac{q^{*\beta}}{q^\alpha}\right)\epsilon$ falls).

If the real public-spending increase is financed externally,³² higher public demand for tradables will widen the trade deficit, and higher public demand for nontradables will raise the relative price of nontradables, increasing their supply, sector firms' demand for labor and, hence, equilibrium wages. The wage rise will restrict tradable supply and broaden the external deficit. The final outcome

will therefore be a real appreciation (q rises, and $TCR = \left(\frac{q^{*\beta}}{q^\alpha}\right)\epsilon$ falls) and a widening of the trade deficit.

These phenomena, too, account for part of the peso's appreciation since 2003. In effect, economic conditions in Colombia, fostered by strong growth, better security, and confidence in the country's medium-term prospects, have attracted substantial foreign direct investment in both oil activity and other sectors of the economy. Thus, net FDI inflows soared from an annual average of \$1,924 m in 2000-2004 to \$5,400 m in 2005-2006; they have continued to rise in 2007 and are projected to top \$6,500 m for the year.

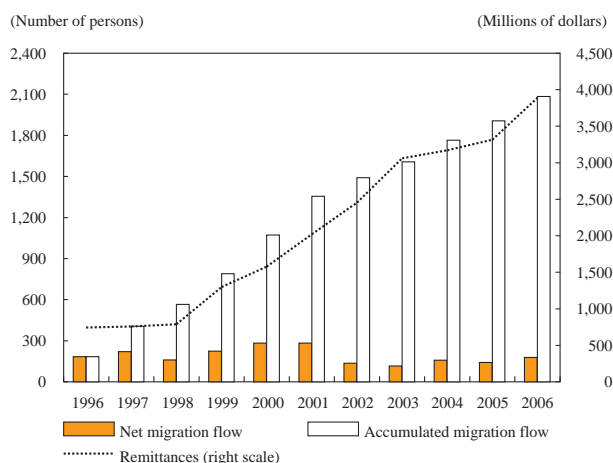
Although real growth in public-administration consumption has decreased in recent years, private-sector consumption has accelerated, currently to a real rate of over 7%. Thus the effect on the real exchange rate of lower public-sector spending has been offset to a certain extent by higher pressure toward exchange-rate appreciation by rising private-sector spending (Graph 53).

ii. Relative prices of tradable good

Remember that $TCR = \left(\frac{q^{*\beta}}{q^\alpha}\right)\epsilon$. So far we have examined the determinants q^{*} and q . The behavior of ϵ , the price of external tradables relative to the

Graph 52

Migration Flow and Workers' Remittances



Source: Security Agency (DAS); calculations by Banco de la República.

³² And if here is no increase in private saving to offset the rise in public deficit entirely.

price of domestic tradables, remains to be analyzed.³³

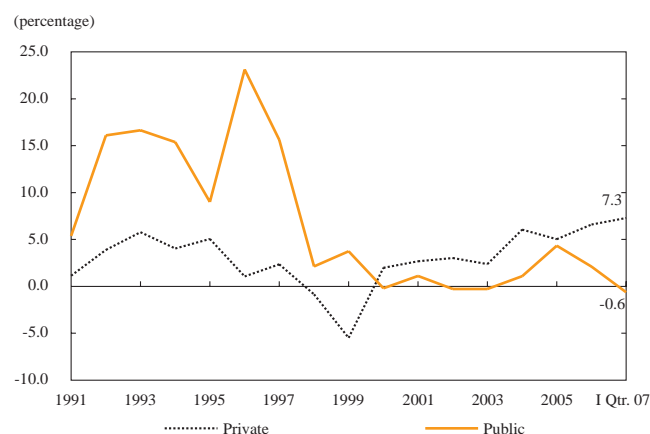
If these were perfect or very close substitutes, said relative price would be equal to one or constant (the hypothesis of absolute or relative purchasing power parity), moving only when changes occurred in trade policy or transport costs.

If domestic and external tradables are not very close substitutes, then changes in preferences, external demand, internal demand, terms of trade and net factor payments will affect the relative price ε . Similarly, other macroeconomic factors that alter the economy's saving-investment balance (economic productivity, external interest rates or autonomous changes in aggregate domestic demand) will have a bearing on the relative price.³⁴

For instance, if a given current-account balance is determined by the capital flows needed to finance the difference between savings and investment, a rise in external demand for Colombian products will tend to appreciate the real exchange rate and (P_T rises and ε falls), thereby inducing a pick-up in imports and a deceleration in exports.

- The main trading partners' faster growth in recent years accounts for the strength of Colombia's nontraditional exports, particularly to Venezuela (Graph 54). At the same time, to March 2007 twelve-month imports were expanding by 30.6% in dollars, or 28.5% in real terms, part of this expansion reflecting growth in the Colombian economy. For 2007 no great change is expected in the difference between the major trading partners' growth rate (4.1% according to the IMF's World Economic Outlook) and Colombia's (6.6%), hence no strong change is expected in the real exchange rate from this source, relative to 2006.

Consumption: Public And Private
(Annual Growth)



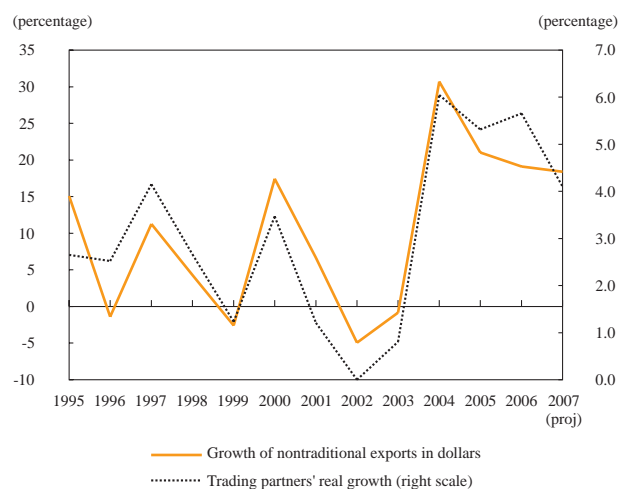
Source: Ministry of Finance and Public Credit.

³³ Remember that in the original equation $\varepsilon \equiv \frac{P_T^* E}{P_T}$, where P_T^* is the overseas price of tradables,

P_T the price of tradables in the domestic market and E the nominal rate of exchange.

³⁴ These effects may be more easily understood by considering a simple model of the country's balance of payments: $XN(\varepsilon, D_x, D_i) + Z = S - I$, where XN is net real exports, D_x external demand for the country's products, D_i aggregate domestic demand, and Z net external income connected with net factor payments or terms-of-trade movements. The equilibrium relative price is the price that makes the current account equal to the saving-investment balance.

Growth of Trading Partners and Nontraditional Exports



(proj) projected

Source: Banco de la República, balance-of-payment projections.

- The lower cost of external funding (because of lower external interest rates and low risk premiums) and higher foreign direct investment may have led to a rise in aggregate spending and a reduction of the economy's saving-investment balance. If to this is added higher spending, fueled by an increase in income resulting from better terms of trade or lower net factor payments, the outcome will be a real appreciation.^{35,36}

In conclusion, the Colombian peso's real appreciation trend since 2004 may be explained by movements in several of its fundamental determinants, according to the traditional real-exchange rate model. In 2007 no major changes have occurred in those factors and therefore none either in the exchange-rate trend:

- The terms of trade have remained high relative to 2006.
- External demand is still strong (4.1% growth in demand from trading partners).
- Colombia's GDP growth should be in the range of 5.8% - 7.7%.
- Net factor income excluding oil (but including transfers) is rising by 30%.
- At 4.1%, FDI as a percentage of GDP is higher than in 2004. FDI inflows this year have been driven by the sale of several state-owned companies, as also by reactivation of oil exploration and by the decisions of various international conglomerates to invest in Colombia in different economic activities such as commerce, industry and communications.
- The surplus of the rest of the capital account should be around \$4,000 m, including a consolidated public-sector funding of \$3,300 m (\$1,000 if interest payments are excluded).

³⁵ This will be the case provided higher demand for foreign exchange, resulting from rising imports (driven by greater domestic demand), does not offset the higher supply of foreign exchange from capital inflows.

³⁶ Note that the current-account balance, $S - I$, will not necessarily show a higher deficit if additional net receipts from abroad (including the effect of better terms of trade) are sufficiently large.

3. Exchange-rate intervention and policy decisions

It follows from the foregoing analysis that in the long run the real exchange rate is determined by a series of real factors beyond the control of monetary policy. But, then, how should monetary policy react to shocks that alter its long-term trend? The answer depends on the type of shock that occurs. For example, if the relative productivity of tradable sectors improves, the correct answer would be to allow a real appreciation of the currency, for the productivity gain itself will protect the economy from a loss of competitiveness. Alternatively, if the terms of trade undergo a lasting improvement or an exportable natural resource is discovered, the counterpart of the appreciation would be improvement in the country's external situation, so the economy as a whole should not be adversely affected. If, however, it is desired to protect the sectors not involved in the bonanza, the proper answer would be an increase in (public and/or private) saving in the economy, rather than an exchange-rate intervention, which would be a more suitable instrument for moderating transitory deviations.

So, how can the economic authority position the real exchange rate at a desired level? As explained in the previous section, fiscal policy has an impact on the long-term real exchange rate. Higher public spending on nontradables raises their relative price, thereby reducing the real exchange rate. Consequently, if the authority means to bring about a real depreciation, an effective policy would consist of shifting public spending away from nontradable goods and services and toward tradables. Higher public spending also narrows the private saving-investment balance, another mechanism whereby an impact can be made on the balance-of-payments current account and the real exchange rate.³⁷

One difficulty facing the economic authorities is uncertainty about how long or how lasting an external shock will be. Some prices are rigid in the short run, and monetary policy can produce a temporary effect on the real exchange rate by its impact on the nominal exchange rate. These two factors sometimes justify central-bank action to modify real exchange-rate behavior. For instance, if an external shock causing substantial currency appreciation is perceived to be transitory, the bank can try to smooth real exchange-rate movements. By doing so it minimizes the adverse effects of appreciation on some tradable-sector firms whose market entry involves sunken costs or funding difficulties it would be inefficient to incur in a temporary real-exchange rate shock.

³⁷ The latter condition obtains when the government's default risk is low, either because of a low level of public debt (relative to GDP or tax revenues) or because the actual and expected primary-deficit path is judged to be sustainable with high probability. Otherwise, a lasting public-deficit correction may reduce the risk of default and the country-risk premium, inducing capital inflows that appreciate the exchange rate.

The main trading partners' faster growth in recent years accounts for the strength of Colombia's nontraditional exports, particularly to Venezuela.

FDI inflows this year have been driven by the sale of several state-owned companies, as also by reactivation of oil exploration and by the decisions of various international conglomerates to invest in Colombia.

Sterilized intervention in the foreign exchange market: the central bank buys or sells foreign exchange but offsets the monetary of such actions by means of open-market operations or other mechanisms, thereby keeping its interest rates unchanged at levels compatible with meeting the inflation target.

The action the central bank can take to this end are of two types:

- Sterilized intervention in the foreign-exchange market: In this case the central bank buys or sells foreign exchange but offsets the monetary effect of such actions by means of open-market operations or other mechanisms described below. In this way it keeps its interest rates unchanged at levels deemed compatible with meeting the proposed inflation target.
- Unsterilized intervention in the foreign-exchange market: In this case the effect of the monetary intervention is not offset, hence changes may occur in interest rates.

A detailed analysis follows of the policy measures taken by the Banco de la República in respect of recent years' exchange-rate appreciation, with due regard to the Bank's inflation targeting. The efficiency and effectiveness of the measures are also discussed.

a. Types of intervention

Since 1999, when the exchange rate was allowed to float, the Bank has combined intervention in the foreign-exchange market with inflation targeting. Currency intervention has aimed variously to accumulate international reserves, reduce exchange-rate volatility, or moderate pressures toward excessive appreciations or depreciations liable to compromise the competitiveness of productive tradable sectors or meeting inflation targets.

There are different ways of intervening in Colombia's foreign-exchange market:

- i) *Discretionary intervention* is not governed by any rules but conducted on guidelines given by the Bank's Board of Directors, such as preventing any sharp appreciations considered to be transitory and resulting from specific circumstances.
- ii) *Intervention through options* is governed by rules established in 1999 and only marginally amended since then. There are two types of options:
 - *Options to accumulate (put) or decumulate (call) international reserves.* Put (call) options give the holder the right to sell (buy) foreign currency to (from) the central bank. The amount of options

Unsterilized intervention in the foreign-exchange market: In this case the effect of the monetary intervention is not offset, hence changes may occur in interest rates.

to be auctioned is determined by the Board. Options are valid for one month and may be exercised in full or in part during this period, provided the exercise conditions are in place.

Exercise conditions obtain when the market exchange rate is below (put options) or above (call options) its past twenty-working-day moving average. The option is executed at the market exchange rate on the day of exercise. If options are completely exercised before their expiry date, the Board may announce new auctions.

- *Put or call options to control exchange-rate volatility.* These options may be auctioned by the central bank on the very day the nominal exchange rate is 2% or more above (below) the market rate's past twenty-working-day moving average. This condition holds also for exercising the option. The amount of options to be auctioned is determined by the Board (it is currently \$180 m). Options are valid for one month and are executed at the market rate for the day of exercise. The Banco de la República may announce new volatility options, provided the above conditions are in place, even if the existing options have not expired. The amount of the new options is specified at the same time as the auction is announced.

b. Amounts of intervention

The currency market's fluctuating conditions in recent years have made it necessary for the Banco de la República to make use of the different forms of intervention described above (Table 24). From 1999 to 2002 currency intervention was mostly made through put options to accumulate reserves, for the Bank was in the process of restoring the level of international reserves, which had been reduced during the late nineties' economic recession (Graph 55). In late 2002 and during the first half of 2003 decumulation (call) options were used and volatility call options were activated as a result of depreciation pressures on the peso, arising from market uncertainty caused by the election of Luis Inácio Lula da Silva as president of Brazil and by restrictions imposed by Venezuela on exports to it.

In September 2004, to deal with the peso's accelerated appreciation, the Board of Directors announced their decision to intervene discretionarily in the currency market. The intervention was originally announced for a fixed sum of \$1,000 m and for a limited period, covering the final quarter of 2004. But toward the third week of December 2004 the monetary authority announced its intention of continuing to intervene discretionarily for an indefinite period and amount. Thus,

Since 1999, when the exchange rate was allowed to float, the Bank has combined intervention in the foreign-exchange market with inflation targeting.

Currency intervention has aimed variously to accumulate international reserves, reduce exchange-rate volatility, or moderate pressures toward excessive appreciations or depreciations liable to compromise the competitiveness of productive tradable sectors or meeting inflation targets.

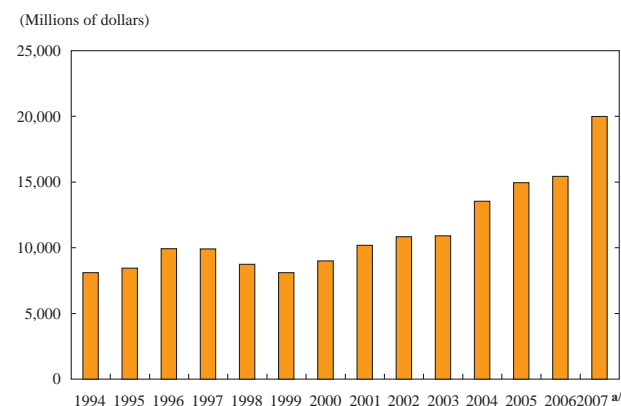
Banco de la República's Foreign-Currency Operations
(Millions of Dollars)

Operations	2000	2001	2002	2003	2004	2005	2006	Jan.-Jun. 2007 cumulative amt.
Purchases	318.6	629.2	251.5	106.2	2,904.9	4,658.4	1,780.5	4,901.9
Put options	318.6	629.2	251.5	106.2	1,579.6	0.0	583.8	374.5
For accumulating reserves	318.6	629.2	251.5	106.2	1,399.7	0.0	0.0	0.0
For volatility control	0.0	0.0	0.0	0.0	179.9	0.0	583.8	374.5
Discretionary intervention	0.0	0.0	0.0	0.0	1,325.3	4,658.4	1,196.7	4,527.4
Sales	0.0	0.0	414.0	344.5	500.0	3,250.0	1,944.3	176.5
Call options	0.0	0.0	414.0	344.5	0.0	0.0	944.3	176.5
For decumulating reserves	0.0	0.0	0.0	344.5	0.0	0.0	0.0	0.0
For volatility control	0.0	0.0	414.0	0.0	0.0	0.0	944.3	176.5
Government	0.0	0.0	0.0	0.0	500.0	3,250.0	1,000.0	0.0
Net purchases	318.6	629.2	(162.5)	(238.3)	2,404.9	1,408.4	(163.8)	4,725.4

Source: Banco de la República.

Graph 55

Net International Reserves



a/ Information to June.
Source: Banco de la República.

in 2005 discretionary intervention amounted to \$4,700 m as a result of the Bank's efforts to contain strong appreciation pressures on the peso. In 2006 discretionary intervention was on a smaller scale (\$1,197 m), because uncertainty about the Fed's interest-rate decisions prompted a reversion of capital flows, producing a temporary depreciation. Both put and call options were repeatedly activated all through 2006 to control volatility.

The resurgence of strong appreciation pressures on the peso in the first quarter of 2007 led the Bank to reactivate discretionary intervention in the currency market, buying \$4,527 between January and April, similar to the amount bought over the whole of 2005 and representing 3% of GDP. In addition, put options to control volatility were activated on two occasions in May, for a total purchase of \$374.5 m at June.

c. *Intervention consistency and effectiveness*

The effectiveness of currency intervention and its impact on inflation expectations depend on the state of the economy and public perception of consistency between

monetary and exchange-rate policy. When an intervention is made, the public may think the central bank has an inflation objective and also an exchange-rate objective. Should a contradiction be perceived in achieving the two objectives at the same time, the credibility of both will come into question, and the effectiveness of intervention in the currency market may be reduced. For instance, if the commitment to the inflation target enjoys high credibility, and the authority deems it necessary to raise interest rates to meet the target, a sterilized intervention will not be very effective, for the market will see any future interest-rate cut as unlikely, and capital inflows will thus continue to be attracted. A discussion follows of consistency and effectiveness and the relationship between the two.

i. Consistency

The Bank has repeatedly affirmed that currency intervention is conducted without jeopardizing the inflation target. The facts themselves bear this out: from 2004 to 2006 the process of disinflation was still under way, and targets were being met with great precision at the same time as large interventions were being made in the currency market, as described earlier. Thus, from an ex post perspective, currency-market intervention may be said to have been consistent with inflation targeting.

A first element that has helped to preserve this consistency has been the use of different mechanisms to sterilize the monetary effect of currency intervention, enabling the Bank to maintain the short-term interest rate it considers necessary for meeting the inflation target. The following sterilization mechanisms have been used: i) reduction of Repo expansion operations; ii) open-market contraction operations (sale of TES); iii) sale of international reserves to the government; iv) accumulation of government deposits at the central bank; and v) liquidity contraction through financial-system deposits at the central bank. Table 25 highlights the role played by foreign-exchange sales to the government and Treasury deposits at the Bank as sterilization mechanisms, which have required close coordination with the government.

A second element that helped to preserve consistency between currency intervention and inflation targeting was an interest-rate management that did not come into contradiction with the aims of currency intervention until April 2006. Sales of international reserves were made in a context of interest-rate increments (first half of 2003), while purchases were carried out in a scenario of decreasing or constant interest rates (2004 to March 2006) (Graph 56). Thus, currency intervention and monetary policy managed to maintain consistency between their aims, helping to increase both the effectiveness of the intervention and the credibility of inflation targeting.

The effectiveness of currency intervention and its impact on inflation expectations depend on the state of the economy and public perception of consistency between monetary and exchange-rate policy.

The Bank has repeatedly affirmed that currency intervention is conducted without jeopardizing the inflation target.

Sources of the Monetary Base
(Billions of Pesos)

	2000	2001	2002	2003	2004	2005	2006	May-07
I. Government	432	1,310	1,296	914	(235)	(2,637)	1,968	(1,531)
Transfer of profits ^{a/}	516	1,226	1,226	830	803	0	793	0
Deposits at Banco de la República	(84)	84	70	83	(1,038)	(2,637)	1,175	(1,531)
II. Liquidity-regulating TES	190	(954)	150	568	(2,524)	897	(327)	(1,211)
Outright purchases	805	160	1,208	893	1,023	5,230	463	638
Outright sales	0	0	0	0	(2,972)	(4,000)	(261)	(1,089)
Maturities	(615)	(1,113)	(1,058)	(325)	(575)	(334)	(529)	(760)
III.Repos	(755)	(730)	1,128	1,492	(1,058)	1,539	2,586	(5,501)
Expansion ^{b/}	(781)	(589)	1,101	1,386	(1,086)	1,539	2,586	(3,245)
Contraction	25	(141)	28	106	28	0	0	(2,256)
IV.Foreign exchange	675	1,445	(517)	(703)	6,194	3,239	(483)	11,640
Put options	675	1,445	601	300	4,183	0	1,397	2,130
Call options	0	0	(1,118)	(1,002)	0	0	(2,315)	(429)
Discretionary intervention	0	0	0	0	3,264	10,758	2,702	9,939
Sale of foreign exchange to the government	0	0	0	0	(1,252)	(7,519)	(2,268)	0
V. Other ^{c/}	429	(135)	399	239	270	506	483	415
Total variation in the base	971	937	2,457	2,510	2,647	3,543	4,227	3,811
Balance of the base	10,710	11,648	14,105	16,615	19,262	22,805	27,032	24,424

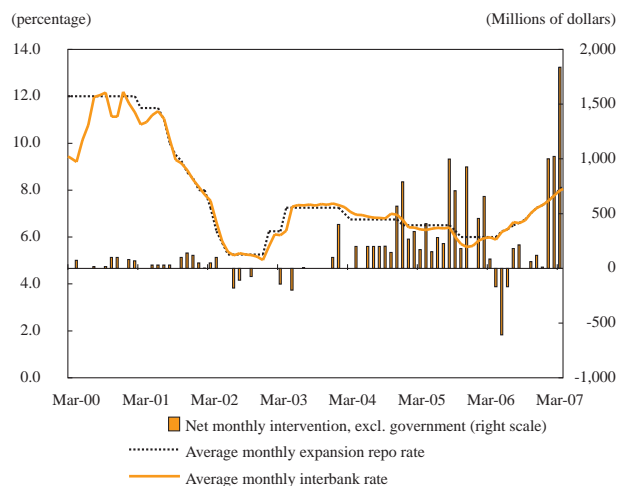
a/ In 2003, \$220 m, part of the profits, was transferred to the government. In 2005, the entire profits were handed over in dollars (\$195.9 m). These transfers had no monetary effect.

b/ Includes one-day, overnight and medium-term repos.

c/ Includes the monetary effect of Banco de la República's profit and loss, loan recoveries and the Bank's investments.

Source: Banco de la República.

Graph 56

Net Monthly Intervention:
Expansion Repo Rate and Interbank Rate

Source: Banco de la República.

In April 2006 the monetary authority set on foot a process of gradually incrementing the interest rate at which it supplies liquidity to the financial system, lifting it from 6% then to 9% now. As fully explained in previous Reports to Congress, the reason for successive rate rises was that the economy was approaching its potential output capacity and thus making it foreseeable that inflationary pressures would emerge. Hence the need to act preemptively by incrementing the interest rate so as to moderate growth in aggregate demand. This interest-adjustment policy reaffirmed the fact that meeting the inflation target was the monetary authority's central objective. But where the exchange rate was concerned this policy had a cost. For, as the rate increments

proceeded, consistency between currency intervention and inflation targeting, which had been maintained until March 2006, was progressively lost, with the ultimate result that the effectiveness of currency intervention was reduced, as discussed in the following section.

ii. Effectiveness

The effectiveness of currency-market intervention to influence the exchange rate depends strictly on consistency of the intervention with inflation targeting. Because that consistency has changed, the effectiveness of intervention will need to be analyzed by periods.

The first intervention to affect the exchange rate after it was floated took place in the first half of 2003 and involved the sale of foreign exchange through decumulation options. The aim of the intervention was to moderate the peso's strong depreciation trend, which posed a risk to meeting the inflation target. The nominal exchange rate stabilized immediately upon announcement of the auction of decumulation call options in mid-February 2003. The auction was conducted after a 100 bp rise in the Bank's interest rate in January 2003, which was followed by another increment of equal size in April of that year. Those decisions ensured consistency between foreign-exchange intervention and monetary policy, which undoubtedly contributed to the aim of stabilizing the exchange rate.

The second intervention experience began on September 29, 2004 with the Board's announcement of intervening discretionarily in the currency market. The intervention was originally conceived as a very limited and transitory instrument. Accordingly, the announcement set quantity and time limits: \$1,000 m, to the end of 2004. These limits being public knowledge, the initial effectiveness of the discretionary intervention to moderate the appreciation trend was very limited. In effect, except for the first two weeks after the announcement, during which there was a positive impact on the exchange rate, the peso continued to appreciate, this trend deepening toward December 2004, for the market knew that the Bank was approaching the stated limits.

On December 22, 2004 the Board modified its strategy, announcing that discretionary intervention was to be continued without any time or quantity restrictions. Almost simultaneously the Board announced its decision to close the contraction window and cut the Repo rate by 25 bp. Thus, this time, the announcement of a more determined intervention, combined with decisions that clearly signaled an easier monetary policy, significantly improved the

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On December 22, 2004 the Board modified its strategy and announced that discretionary intervention was to be continued, but without any time or quantity restrictions.

Nominal Exchange-Rate Indices,
Local Currencies Against US Dollar

Source: Datastream.

effectiveness of the intervention to moderate the appreciation trend. As shown by Graph 57, the peso's appreciation throughout 2005 was quite moderate and less sharp than currency appreciation in other countries of the region (such as Brazil and Chile). A contributing factor was that consistency between intervention and monetary policy was confirmed by the Board's decision to cut the interest rate by 50 bp in September 2005.

New upward pressures on the peso prompted further discretionary intervention in the first quarter of 2006. But they disappeared suddenly in late March, because of market uncertainty about interest-rate decisions by the US Federal Reserve. As a result, the second quarter of 2006 saw a significant reversal of the

uptrend, with the exchange rate depreciating by as much as 11.8% from late March to mid-July. In those circumstances the Bank stopped making discretionary interventions until the end of 2006 and used only volatility options to intervene in the currency market.

In January 2007 the peso was once more under intense upward pressure, in view of the imminent monetization of a large volume of resources in payment of state companies sold at the end of 2006. The Board, judging the pressure to be transitory, decided to return to making massive discretionary interventions in the foreign-exchange market, as was publicly announced. By then the Bank had already raised the interest rate by 175 bp, and the market clearly expected it to continue doing so, given the monetary authority's commitment to meeting the inflation target. In those conditions, inconsistency between monetary and intervention policy intensified.

Despite the large amount of funds (\$4,887.4 m) used in interventions between January and May 2007, it was not possible to stop the appreciation trend, and by the end of May the nominal exchange rate was 5.2% higher than at the end of 2006, showing that discretionary intervention was no longer effective. As on previous occasions, the monetary authority had of course taken the precaution of sterilizing the monetary effect of interventions by using the mechanisms described earlier (Table 13). Moreover, in late March the Board decided to reopen the contraction window, which had remained closed since December 2004. This became necessary because the massive interventions had turned the Bank's position as a net creditor in the money market to one of net debtor. Failing that decision, excess liquidity in the market would have reduced the

New upward pressures on the peso prompted further discretionary intervention in the first quarter of 2006. But they disappeared suddenly in late March, because of market uncertainty about interest-rate decisions by the US Federal Reserve.

interbank rate, moving it away from the policy rate and jeopardizing the inflation target.

Other reasons for the loss of effectiveness in discretionary intervention include, notably: i) devaluation of the dollar, associated with US macroeconomic imbalances; ii) excess international liquidity and its low aversion to global risk; iii) the fact that Colombia's monetary cycle is out of sync with the cycles of the region's major countries and particularly with that of the US; iv) the high volume of foreign direct investment in the first half of 2007; and v) agents' expectations about the impact of intervention on monetary-policy efficiency.

The Bank's successive rate rises, together with expectations that it would maintain this adjustment policy, widened current and future differences between domestic and foreign interest rates. All this made it highly attractive to bring capital into the country. In such conditions, discretionary intervention ended up stimulating capital inflows by providing the market with abundant liquidity in pesos, thereby facilitating operations by investors seeking to profit from the interest-rate differential. In effect, recent technical studies have shown that the size of the currency market would rise by more than 100% of the intervention amount, because of a dollar-supply overreaction in the market, when the Bank took decisions to intervene.³⁸ In the face of a wide rate differential, intervention failed to create a net excess demand for foreign exchange in the currency market.

The Banco de la República, aware of this situation and of evidence that massive interventions in the first quarter had made it increasingly difficult to curb the monetary aggregates' growth and hence interest rates, left off making discretionary interventions from May 2007. Persistence with the intervention policy would have compromised the inflation objective and occasioned large financial losses from sterilization efforts. The Bank continued to intervene but only through volatility put options, which, as explained above, are activated when the nominal exchange rate stands 2% below the market rate's twenty-day moving average.

To limit the carry trade the Board decided to establish a mandatory six-month non-remunerated deposit requirement in an amount equal to 40% of foreign-debt disbursements. These measures are expected to help reduce the interest-rate differential and moderate intervention expectations, so as to discourage capital inflows. The government subsequently extended the deposit requirement

In January 2007 the peso was once more under intense upward pressure, because of the imminent monetization of a large volume of resources in payment of state companies sold at the end of 2006. The pressure being transitory, the Board decided to return to making massive discretionary interventions in the currency market.

By the end of May the nominal exchange rate was 5.2% higher than at the end of 2006, showing that discretionary intervention was no longer effective. In view of the evidence that massive interventions in the first quarter had made it increasingly difficult to curb the monetary aggregates' growth and hence interest rates, the Bank left off making discretionary interventions from May 2007.

³⁸ Herman Kamil, "Is Central Bank Intervention Effective Under Inflation Targeting Regimes? New Evidence for Colombia," working paper under preparation.

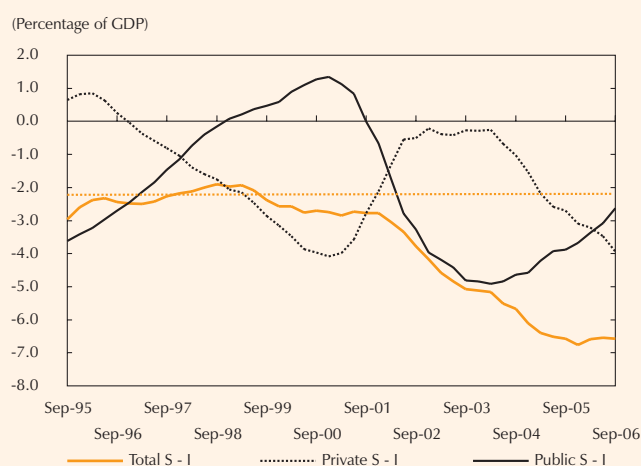
to portfolio capital inflows. In addition, as a prudential measure to mitigate counterparty risk, the Board has set a leverage limit of 500% of financial intermediaries' net worth, for operations in derivative markets.

Macroeconomic Context of Appreciation in Latin American Countries

The US economy's current-account deficit has, worryingly, risen to over 6% of GDP in recent years. It has been financed with savings from the rest of the world, particularly from emerging economies, which, thanks to their large commodity export revenues and their high saving rates,¹ have generated ample excess liquidity, directed largely to funding the US spending.

Analysis of this deficit from the perspective of the saving-investment balance reveals that the US private-sector's balance has deteriorated by about 4% since 2004, while the public sector's has improved considerably, rising from 5% to 2.6%. The private sector's widening imbalance is explained by strong investment growth, and the public-sector's improvement by higher tax revenues (Graph B1.1).

Graph B1.1
Saving-Investment Balances



Source: Bureau of Economics Analysis.

The ever widening US current-account deficit has generated worldwide deterioration of the dollar. Between 2003 and 2006 the dollar depreciated in real terms by an average rate of 3.3% and end rate of 7.1% (Graph B1.2). While the dollar has been falling, the

¹ La tasa de ahorro de China se acerca al 50%. algunas de las explicaciones de ésto son la falta de seguridad en salud, pensión, jubilación, educación y, además, del frágil sistema financiero, entre otros,

Graph B1.2
United States Real Exchange-Rate Index



Source: Federal Reserve.

currencies of developed economies and emerging countries have been appreciating, some more strongly than others, depending on each country's domestic conditions. Since Colombia has not been unaffected by this development, the purpose of this box is to compare the macroeconomic context of the Colombian peso's appreciation in 2003-2006 with those of other countries of the region, namely, Mexico, Peru, Brazil and Chile.

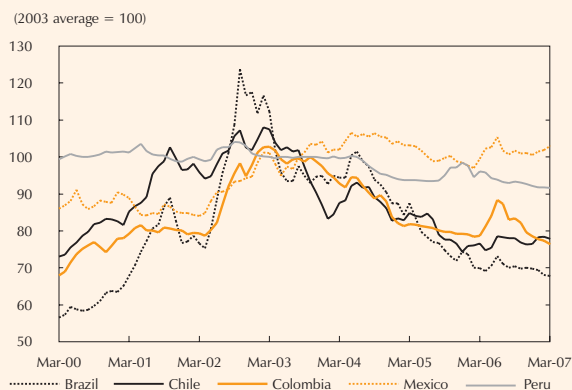
In the aftermath of the political developments in Brazil in 2002, which had a region-wide contagion effect in terms of exchange rates, the year 2003 saw the start of widespread appreciation trends running in sync with the fall of the dollar. As may be appreciated from Graph B1.3, the region's currencies were on a downturn from 2000 to 2002, most pronounced in Brazil's real, followed by the pesos of Chile and Colombia. These are also the countries whose currencies have most appreciated since 2003, particularly from 2004 on, in both nominal and real terms (Table B1.1). The appreciation in these countries' currencies since 2004 can therefore be said to have corrected the loss of value they suffered in 2002 and the first half of 2003, which was associated with transitory factors.

Besides the transitory nature of the 2002 devaluation there is a set of factors that account for the greater or lesser appreciation trend in these economies. One such factor to be considered is higher external receipts in both the current account and the capital account and their impact on agents' spending in the public sector and the private sector alike. In effect, higher external receipts generate a greater supply of foreign exchange, raise agents' available income and induce a real exchange-rate appreciation, to the extent that they are reflected in higher spending in the economy, pushing up the prices of nontradable goods and services. The behavior of aggregate demand (and domestic saving) depends

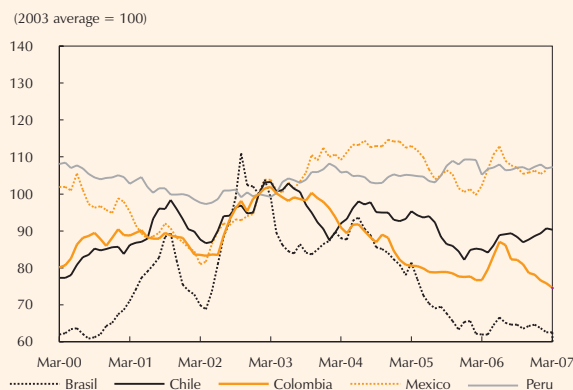
crucially on management of macroeconomic policy and, in particular, on changes in fiscal stance and monetary policy. The following paragraphs analyze these factors for the region's economies.

Graph B1.3

A. Nominal Exchange-Rate Index against the Dollar



B. Real Exchange-Rate Index



Source: Central banks and Latin Focus Consensus Forecast, June 2007.

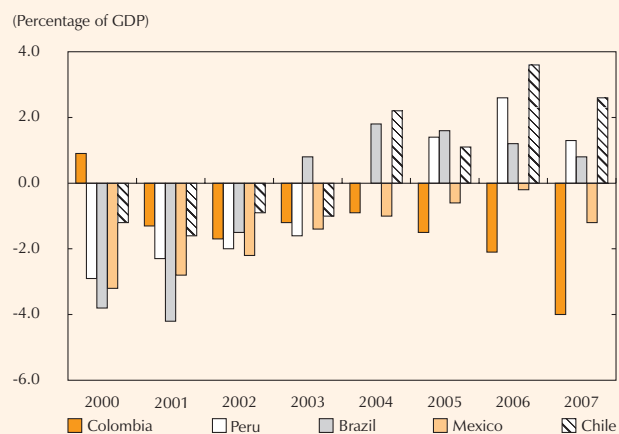
Table B1.1
Macroeconomic Indicators

	Colombia		Chile		Brazil		Mexico		Peru	
	2000-2003	2004-2006	2000-2003	2004-2006	2000-2003	2004-2006	2000-2003	2004-2006	2000-2003	2004-2006
1. Nominal devaluation (average)	13.6	6.2	7.7	(7.7)	15.8	(10.4)	3.2	0.4	0.7	(2.2)
2. Real devaluation (average)	6.9	(6.5)	6.2	(4.2)	8.5	(9.8)	(1.2)	0.8	0.0	1.2
3. International reserves/ GDP (average)	12.6	12.4	21.2	14.7	6.9	7.1	7.5	9.4	16.0	17.7
4. International reserves / goods & services imports (average)	10.3	8.9	10.8	7.2	7.5	7.4	3.3	3.7	13.5	14.1
5. Real growth (average)	2.5	5.5	3.5	5.2	2.0	3.6	2.2	3.9	3.1	6.6
6. Inflation (average)	7.7	5.1	3.2	2.5	8.9	5.4	6.4	4.2	2.1	2.4
7. Nominal policy interest rate (average)	8.9	6.6	4.3	3.4	19.4	16.3	10.8	7.7	7.0	3.3
Real policy interest rate (average)	1.2	1.5	1.1	0.9	10.6	10.9	4.4	3.5	4.9	0.9

Source: Banco de la República, other central banks and Latin Focus.

Current-account conditions have been favorable in recent years in the balance of payments of all these countries, thanks to good terms of trade for export products (oil, copper, other metals and other commodities) and strong world demand, reflected in higher income from nontraditional exports. In all the countries except Colombia higher current-account receipts have been reflected in external-balance improvement (that is, correction of the current-account deficit and a higher external surplus) in 2004-2006, relative to the four years before (Graph B1.4). This means that those economies did not rely on foreign saving to finance growth or investment. In Colombia's case, the current-account deficit grew and was financed by higher receipts from the capital account (mainly foreign direct investment flows), which, as shown below, have served to finance a large increase in the rate of investment.

Graph B1.4
Current-Account Balance (External Saving)



Source: Central banks and Latin Focus Consensus Forecast, June 2007.

To assess what has happened to aggregate spending and domestic saving, we shall, as before, compare two periods: the devaluation period (2000-2003) and the appreciation period (2004-2006).

Table B1.2 shows that in the countries under study higher external receipts have gone hand in hand with higher domestic saving in the form of higher public saving, which has improved their fiscal balances. Chile, for example, has a primary-surplus rule, and a copper-stabilization fund in which income from high world copper prices is saved; it has moreover adopted a strategy of prepaying external public debt. The other countries have done the same, significantly correcting their fiscal imbalances through higher public saving (Graph B1.5). But the magnitudes differ: Chile's fiscal balance improved by 5 pp of GDP from one period to the other, whereas the adjustment was much smaller in

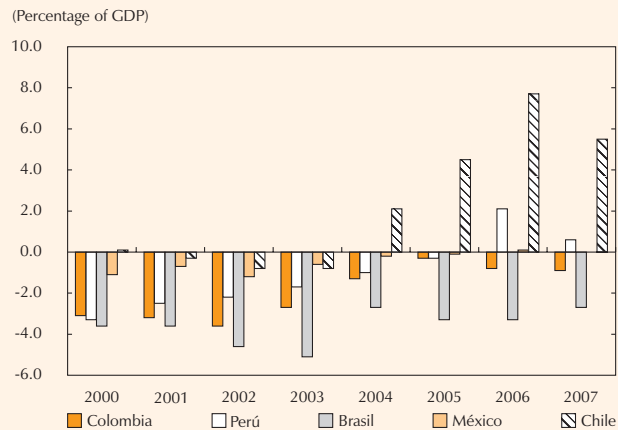
Table B1.2
Saving-Investment Balance

	Colombia		Chile		Brasil		México		Perú	
	2000-2003	2004-2006	2000-2003	2004-2006	2000-2003	2004-2006	2000-2003	2004-2006	2000-2003	2004-2006
i. External balance:										
current-account deficit = external saving	(0.8)	(1.5)	(1.2)	2.3	(2.3)	1.5	(2.4)	(0.6)	(2.2)	1.3
(% of GDP, average)										
ii. Fiscal balance (public saving - investment)										
(% of GDP)	(3.2)	(0.8)	(0.5)	4.8	(4.6)	(3.1)	(0.9)	(0.1)	(2.4)	0.3
iii. Private balance (private saving - investment)										
(% of GDP)	2.4	(0.7)	(0.8)	(2.5)	2.3	4.6	(1.5)	(0.5)	0.2	1.0
Saving - investment = current-account balance										
1. Total investment (% of GDP)	14.7	21.2	5.1	11.9	20.6	21.1	24.7	26.2	19.1	19.5
Public	6.9	6.8	n,d	n,d	3.4	3.7	6.1	6.2	3.2	2.8
Private	7.8	14.5	n,d	n,d	17.2	17.4	24.7	26.2	16.0	16.7
2. National saving (% of GDP)	13.9	19.7	3.9	14.2	18.2	22.6	22.3	25.6	17.0	20.9
Public	3.7	6.0	n,d	n,d	(1.2)	0.6	5.2	6.2	0.8	3.1
Private	10.2	13.8	n,d	n,d	19.4	22.0	17.1	19.5	16.2	17.8

n.a. : Not available

Source: Banco de la República, other central banks and Latin Focus Consensus.

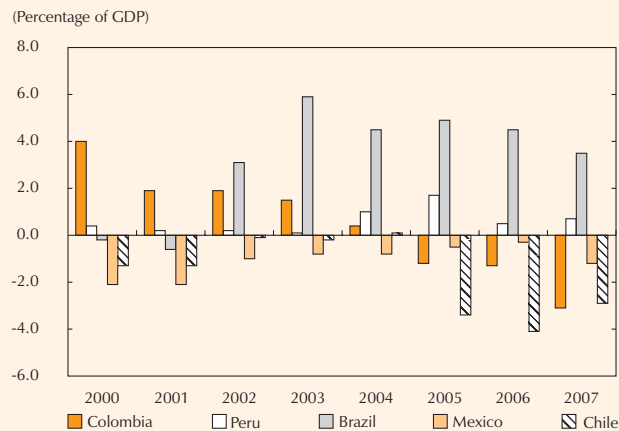
Graph B1.5
Non-Financial Private Sector Fiscal Balance



Source: Central banks and Latin Focus Consensus Forecast, June 2007.

Brazil (1.1 pp) and Colombia (2.4 pp). Brazil and Colombia are also the only two economies still presenting a deficit in public-sector accounts; and the fact that their public spending has been less countercyclical may have helped to intensify their currencies' appreciation.

Graph B1.6
Private Sector Balance



The behavior of the private-sector balance has been less homogeneous across the different countries. In Chile, for example, higher public saving and higher external receipts have served to finance a higher private-sector deficit, largely from greater expansion in investment (Table B1.2 and Graph B1.6).

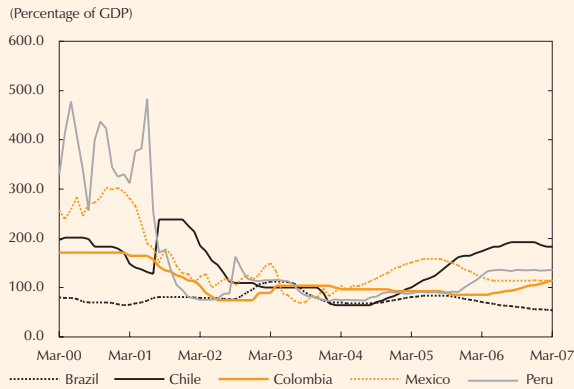
In Mexico and Peru the private sector has increased its net saving. In Brazil the private sector has significantly increased its domestic saving (by 2.8 pp of GDP) but expanded its investment by only 0.2 pp of GDP; in this case, higher private saving can be said to have gone to finance the public sector's imbalance. In Colombia private-sector saving has grown by 3.5 pp of GDP since 2000 but not enough to finance the expansion in investment, which has more than doubled in value, in terms of GDP, rising by over 7 pp of GDP; external funding in the form of FDI has therefore been relied on to finance the extra spending. Note that, in Colombia, reduction of the fiscal imbalance has been of help in allowing the private sector-with its considerably increased saving-to use the resources to finance its investment plans, thereby helping to drive economic growth.

In short, fiscal policy can be said to have contributed to making growth sustainable by reducing fiscal imbalances in the region's countries, though its contribution has been smaller in Colombia and Brazil.

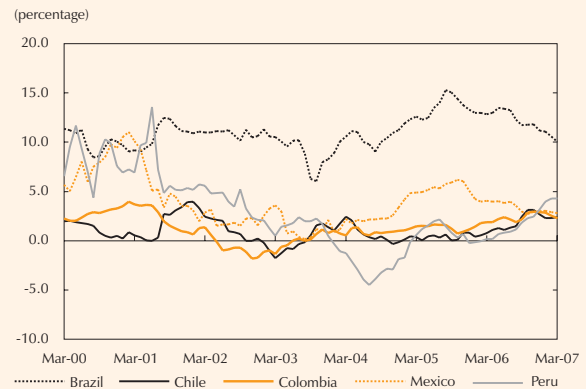
Monetary policy, too, has played a very important part. In Chile, for example, mounting domestic demand generated inflationary pressures that prompted the central bank to raise rates; the same occurred in Brazil and Peru (Graph B1.7).

Graph B1.7

A. Intervention-Rate Index



B. Real Intervention Rates



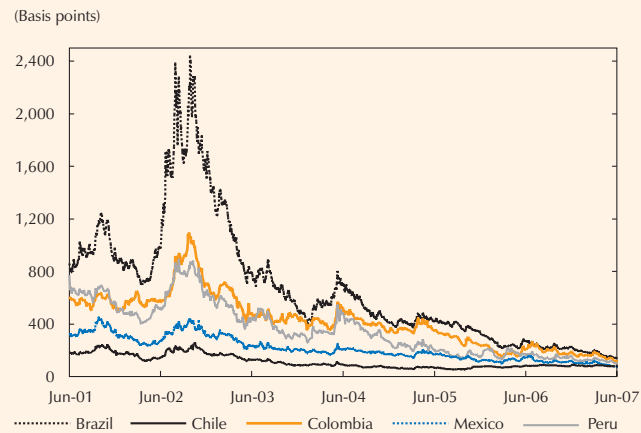
Source: Central banks and Latin Focus Consensus Forecast, June 2007.

In contrast, while other central banks were raising policy interest rates, in Colombia they were kept constant (and even cut by 125 pp) between 2004 and 2005. In recent years, the rise in Colombian private spending, particularly in private consumption, and the emergence of inflationary pressures associated with demand in 2007 have been the reasons behind the Banco de la República's decisions to raise intervention interest rates since mid-2006. Thus Colombia began to raise its rates much later than the other countries of the region, some of which—Chile, Peru and Mexico—had even stopped doing so by then. Brazil started to cut its policy interest rate in 2006 to bolster its economic growth.² In real terms however Brazil has the highest interest rate in the region, followed by Mexico, while Colombia has one of the lowest, despite its recent rises.

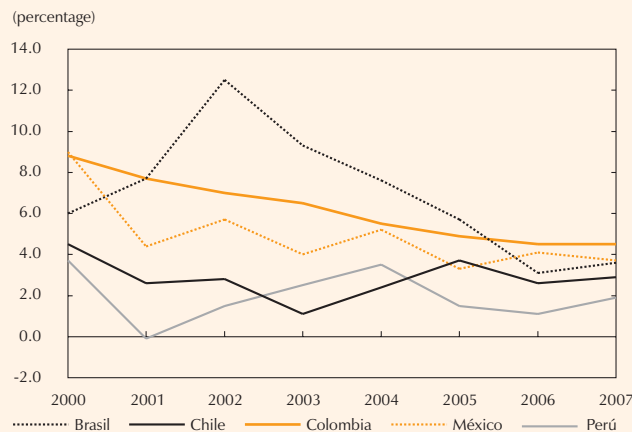
The return differential is another factor contributes to currency appreciation, for it encourages investors to take capital into an economy. In estimating returns investors do of course take into account the risk involved in investing in an economy, and the indicator most used for this purpose is the EMBI. Brazil, with the strongest appreciation, is the clearest example of this argument. It has the highest real interest rate and has seen its country risk fall by 600 bp (Graph R1.8). Colombia's EMBI dropped by 319 bp between 2003 and 2006; and though it has the region's lowest real interest rate it is considered an attractive country for investment, given its relatively low country risk and recent stability in economic growth, among other factors (Graph B1.9).

² Como se aprecia en el Graph R1,5. en 2005 y 2006 Brasil tenía la tasa de crecimiento más baja de la muestra de países analizados,

Graph B1.8
EMBI+ Risk Premiums



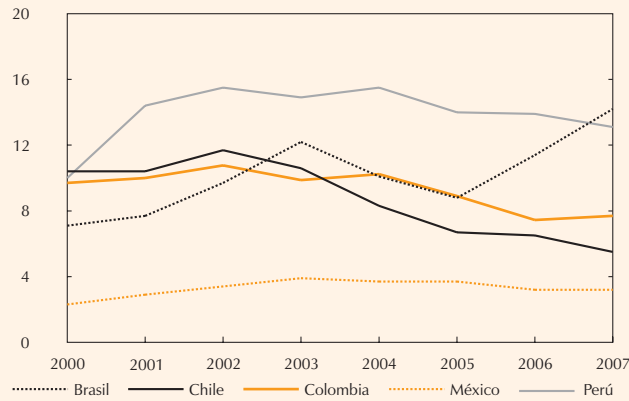
Graph B1.9
Inflation



Lastly, to curb appreciation trends, only the central banks of Brazil, Peru and Colombia have pursued strategies for foreign-exchange intervention.

Comparison of international-reserve levels, as measured by months of imports, shows Brazil and Peru holding the highest reserves and both Chile and Colombia presenting declining trends (Graph B1.10). In recent months, however, Colombia's Banco de la República has acquired a large amount of reserves.

Graph B1.10
International Reserves (Months of Imports)



Source: Central banks and Latin Focus Consensus Forecast, June 2007.

To sum up, currency appreciation in Latin America has occurred in a context of weakness in the dollar, growth in global demand and high world prices for export products. This has worked in favor of correcting external imbalances in all the economies and expanding domestic spending. Growth in domestic spending is of particular importance in assessing how strongly external variables are reflected in higher or lower appreciation. In several economies of the region, the existence of a countercyclical fiscal policy has helped to raise the saving rate of the economy as a whole, thereby attenuating the impact of currency appreciation, though to a lesser degree in Colombia and Brazil. The reduction of Colombia's fiscal deficit has been comparatively small, and although the private sector has increased its saving rate it has at the same time raised its investment rate considerably and therefore been obliged to rely on external saving for funding. In Brazil, too, reduction of the fiscal imbalance has been relatively small and private saving has helped to finance excess government spending.

IV. Balance of Payments

At the end March 2007 the gross balance of international reserves held by the Banco de la República was \$18,997 m: 2.6 times outstanding short-term foreign debt (original maturity) and 1.7 times service payments on foreign debt with a residual maturity of one year.

A. Balance-Of-Payments Behavior in First-Quarter 2007

The current-account deficit rose in the first quarter of 2007 to \$1,795 m (4.6% of quarterly GDP), far above the level a year earlier (\$784 m, 2.4% of GDP). As explained in detail below, this higher deficit was amply financed from external capital funds of \$4,998 m (12.9% of quarterly GDP), consisting chiefly of foreign direct investment and long-term external debt. The excess funds (\$3,430 m)³⁹ went to expand international reserves, which amounted to \$18,997 m in March,⁴⁰ equivalent to 8.1 months of goods imports and 6.8 months of goods and services imports (Table 26). Errors and omission for the quarter were estimated at \$227 m.⁴¹

1. Current account

The rise in the current-account deficit in first-quarter 2007 stemmed essentially from net factor payments (\$1,728 m), a trade-balance deficit (\$759 m) and a negative nonfactor service balance (\$514 m), partly offset by net current transfer receipts (\$1,206 m).

³⁹ The variation in gross international reserves was the net result of foreign-exchange purchases of \$3,861 m by the Banco de la República and returns of \$126 m on the reserves, partly offset by the transfer of Banco de la República profits of \$537 m to the government.

⁴⁰ The first-quarter change was \$3,557 m, which differs from the balance-of-payments figure of \$3,430 m, because the balance of payments records changes originating from transactions and does not include exchange rate and price valuation gains of \$126 m.

⁴¹ Net errors and omissions, in the balance of payments, records transactions to be identified in the current and capital accounts.

Colombia's Balance of Payments (Summary)

	Millions of dollars			Percentage of GDP			Difference 2007 I-2006 I (millions of dollars)
	I Qtr. 06	I Qtr. 07 (pr)	2007 (proj)	I Qtr. 06	I Qtr. 07 (pr)	2007 (proj)	
I. Current account	(784)	(1,795)	(6,610)	(2.4)	(4.6)	(4.0)	(1,010.5)
Receipts	7,773	8,760	38,668	23.3	22.6	23.1	987.3
Payments	8,557	10,555	45,278	25.7	27.2	27.1	1,997.8
A. Nonfactor goods and services	(201)	(1,274)	(6,755)	(0.6)	(3.3)	(4.0)	(1,072.1)
1. Goods	207	(759)	(4,434)	0.6	(2.0)	(2.7)	(965.6)
Exports	5,586	6,263	27,322	16.8	16.1	16.3	677.1
Imports	5,379	7,022	31,756	16.1	18.1	19.0	1,642.7
2. Nonfactor services	(408)	(514)	(2,320)	(1.2)	(1.3)	(1.4)	(106.5)
Exports	776	804	3,728	2.3	2.1	2.2	27.1
Imports	1,185	1,318	6,048	3.6	3.4	3.6	133.5
B. Factor income	(1,633)	(1,728)	(5,270)	(4.9)	(4.5)	(3.2)	(94.2)
Receipts	297	395	1,900	0.9	1.0	1.1	97.9
Payments	1,930	2,123	7,169	5.8	5.5	4.3	192.1
C. Current transfers	1,050	1,206	5,414	3.2	3.1	3.2	155.8
Receipts	1,113	1,299	5,719	3.3	3.3	3.4	185.3
Workers' remittances	856	969	4,416	2.6	2.5	2.6	113.2
Other	257	330	1,303	0.8	0.8	0.8	72.1
Payments	63	92	304	0.2	0.2	0.2	29.5
II. Capital and financial account	774	4,998	11,323	2.3	12.9	6.8	4,223.9
1. Long-term financial flows	(105)	2,037	10,674	(0.3)	5.3	6.4	2,142.0
i. Net foreign direct investment							
in Colombia	995	2,535	6,589	3.0	6.5	3.9	1,540.1
ii. Net loans ^{a/}	(1,111)	(534)	4,132	(3.3)	(1.4)	2.5	576.7
iii. Net financial leasing	12	60	1	0.0	0.2	0.0	48.1
iv. Other long-term movements	0	(23)	(47)	0.0	(0.1)	(0.0)	(23.0)
2. Short-term financial flows	879	2,961	649	2.6	7.6	0.4	2,081.9
III. Net errors and omissions	160	227	265	0.5	0.6	0.2	67.2
IV. Change in gross international reserves^{b/}	150	3,430	4,713	0.4	8.8	2.8	3,280.6
V. Balance of gross international reserves	15,157	18,997	20,281	45.5	49.0	12.1	
VI. Balance of net international reserves	15,153	18,993	20,277	45.5	49.0	12.1	
Months of goods imports	8.5	8.1	7.7				
Months of goods and services imports	6.9	6.8	6.4				
Nominal GDP in millions of dollars	33,335	38,783	167,178				
VII. Change in net international reserves	151	3,430	4,713				3,279.4

(pr) Preliminary.

(proj) Projection.

a/ Including portfolio investment, direct loans and commercial credit.

b/According to balance-of-payments methodology.

Source: Banco de la República.

The deficit under factor rent was similar to last year's and was mostly generated by profit and dividend payments by foreign-capital firms to their parent companies (\$1,221 m) and interest payments on foreign debt (\$892 m). Yield income from Colombian investments abroad came to \$282 m.

The first quarter's trade balance in goods (including special foreign-trade operations⁴²) showed a deficit of \$795 m, the net result of exports worth \$6,263 m and imports amounting to \$7,022 m (Table 26). This deficit contrasts with last year's surplus (\$207 m) and is attributable to slower growth in sales to abroad (12.1%, \$677m) and acceleration in external purchases (30.5%, \$1,643 m).

Table 27 summarizes the behavior of exports in the first quarter of 2007 by product.⁴³ Nontraditional exports expanded strongly (by \$530 m, 19.2%), accounting for 80% of the rise in total exports. Traditional exports totaled \$2,823 m, an increase of \$132 m (4.9%) relative to the same period last year.

⁴² Mainly includes free-zone trade transactions, and goods re-exports chiefly originating from trade operations under financial leasing.

⁴³ Excluding special foreign-trade operations.

Table 27

Exports, by Main Product and Economic Sector^{a/}

	Millions of dollars		Variation		Contribution to growth	
	I Qtr. 06	I Qtr. 07 (pr)	Absolute ^{b/}	%	% points	%
Traditional exports	2,691	2,823	132	4.9	2.4	20.0
Coffee	369	436	67	18.1	1.2	10.1
Oil and oil products	1,447	1,319	(129)	(8.9)	(2.4)	(19.4)
Coal	700	928	228	32.5	4.2	34.4
Nickel	173	140	(33)	(19.3)	(0.6)	(5.0)
Nontraditional exports^{c/}	2,763	3,293	530	19.2	9.7	80.0
Nonmonetary gold	89	47	(42)	(47.0)	(0.8)	(6.3)
Emeralds	21	26	4	19.4	0.1	0.6
Rest	2,653	3,221	567	21.4	10.4	85.7
Farming sector	491	626	135	27.5	2.5	20.4
Industrial sector	2,002	2,406	404	20.2	7.4	61.0
Mining sector	161	189	28	17.5	0.5	4.3
Total exports	5,454	6,116	662	12.1	12.1	100.0

(pr) Preliminary.

a/ Excluding exports through special trade operations.

b/ In millions of dollars.

c/ Excluding temporary exports, re-exports and others; including balance-of-payments adjustments.

Source: DIAN and DANE.

The behavior of traditional exports between January and March 2007 was characterized by the following developments:

- A 29.3% increase of in the volume of coal shipped and a 1.3% rise in the export price.
- The volume of coffee shipped rose by 6.4%, to 2.7 m bags, while the price remained at 2006 levels (\$1.2 a pound).
- Nickel exports plunged from 34 tonnes in first-quarter 2006 to 12 tonnes a year later. But the decrease in volume was offset by a price surge: between January and March the implicit export price jumped from \$2.3 a pound to \$5.2.
- The volume of oil products exported fell (26%) as did the export price of fuel oil (21.9%) and crude (4.4%).

Nontraditional exports⁴⁴ in the first quarter of 2007 totaled \$3,293 m, an increase of \$530 m (19.2%), fueled by higher manufacturing sales, which rose by an annual rate of 20.2% to \$2,406 m. Exports from the farming and mining sectors expanded by annual rates of 27.5% and 17.5% respectively to \$626 m and \$189 m.

By geographic destination, strong growth was seen in nontraditional exports to Venezuela (transport materials, beef, chemicals, garments, among other things), member countries of the European Free Trade Association (EFTA), particularly Switzerland (unused gold), and China (common-metals products). In contrast, sales to the United States decreased by 14.7%, with the industrial and mining sectors accounting for most of the decline (Table 28).

Capital goods accounted for 42.8% of import growth, expanding by 36.8% (\$700 m) relative to the first quarter of 2006, thanks especially to transport equipment. Imports of intermediate goods accounted for another 36.3%, with an increase of 24.7% (\$594 m), driven by chemicals, pharmaceuticals and mining products. And consumer goods contributed a further 20.9%, with an expansion of 34.8% (\$342 m), fueled by imports of vehicles, household machinery and appliances, pharmaceuticals and toiletries (Table 29).

⁴⁴ Exports of non-monetary gold and emeralds have been reclassified as nontraditional exports. This reclassification makes it easier to compare DANE's statistics on nontraditional exports with those the Banco de la República's reports in the balance of payments.

Colombia's Nontraditional Exports, by Country of Destination (PR)
January-March 2007

Annual percentage change in dollar value									
	United States	Venezuela	Ecuador	Japan	Germany	Mexico	China	Rest	Total
Total	(5.6)	64.6	4.3	(22.8)	35.7	(15.7)	115.8	20.9	12.1
Traditional	(0.6)	9.1	19.5	(20.8)	37.9	(83.2)	(12.9)	12.7	4.9
Nontraditional	(14.7)	64.9	4.2	(29.8)	31.7	5.7	48.7	30.0	19.2
Farming sector	0.5	166.6	74.3	22.1	22.5	(14.7)	(11.1)	18.6	27.5
Industrial sector	(13.3)	51.0	12.1	(5.7)	46.6	5.6	n.a.	23.7	20.2
Food, beverages and tobacco	(33.5)	23.6	5.3	(10.9)	145.8	(52.1)	n.a.	34.5	12.9
Yarns and fabrics	(7.7)	15.4	(3.6)	n.a.	(42.9)	2.0	(20.0)	17.1	9.9
Garments	(9.1)	131.5	5.1	(69.4)	(38.9)	31.7	n.a.	(16.6)	16.2
Plastic and rubber products	7.4	65.9	0.5	n.a.	(24.1)	0.0	n.a.	25.6	22.4
Leather and leather goods	(5.4)	206.0	(0.5)	75.7	78.3	(8.1)	460.5	14.8	32.1
Wood and wood products	(14.2)	121.0	1.9	n.a.	0.0	(41.4)	n.a.	34.9	41.9
Graphic arts and publishing	(1.7)	48.2	5.5	80.5	0.0	32.5	n.a.	3.1	13.9
Chemical industry	(9.5)	25.0	17.2	(8.2)	0.0	0.0	130.3	22.2	17.1
Nonmetallic minerals	10.8	54.2	37.8	400.0	(41.2)	(14.0)	n.a.	11.3	19.8
Common-metals industry	(17.2)	32.1	25.9	(82.4)	(91.7)	11.4	n.a.	21.7	12.6
Machinery and equipment	(9.7)	61.4	31.9	(100.0)	0.0	n.a.	n.a.	85.0	54.8
Transport materials	(77.5)	51.2	3.8	n.a.	n.a.	n.a.	(100.0)	30.0	30.6
Optical, movie and other apparatuses	(52.9)	127.8	(0.9)	n.a.	(50.0)	(51.1)	n.a.	28.5	2.1
Other industries	5.3	145.8	(14.6)	81.8	106.5	(8.8)	n.a.	2.2	26.6
Mining sector ^{al}	(45.3)	77.5	(50.7)	(84.1)	353.3	475.0	n.a.	n.a.	(3.4)

Value of January-March 2007 exports (millions of dollars)									
	United States	Venezuela	Ecuador	Japan	Germany	Mexico	China	Rest	Total
Total	2,222.9	850.0	297.6	68.8	105.7	119.7	107.8	2,343.8	6,116.3
Traditional	1,505.5	3.4	1.8	54.5	69.7	5.7	40.9	1,141.5	2,823.0
Nontraditional	717.4	846.6	295.7	14.4	36.0	114.0	66.9	1,202.3	3,293.3
Farming sector	268.7	164.1	1.3	6.8	23.1	0.3	0.1	161.6	625.9
Industrial sector	365.6	679.4	276.7	6.3	12.2	113.4	66.8	885.2	2,405.7
Mining sector ^{al}	83.0	3.2	17.8	1.3	0.7	0.2	0.0	155.5	261.7

Contribution to growth (percentage points)									
	United States	Venezuela	Ecuador	Japan	Germany	Mexico	China	Resto	Total
Total	(2.4)	6.1	0.2	(0.4)	0.5	(0.4)	1.1	7.4	12.1
Traditional	(0.2)	0.0	0.0	(0.3)	0.4	(0.5)	0.7	2.4	2.4
Nontraditional	(2.3)	6.1	0.2	(0.1)	0.2	0.1	0.4	5.1	9.7
Farming sector	0.0	1.9	0.0	0.0	0.1	0.0	0.0	0.5	2.5
Industrial sector	(1.0)	4.2	0.5	0.0	0.1	0.1	0.4	3.1	7.4
Mining sector ^{al}	(1.3)	0.0	(0.3)	(0.1)	0.0	0.0	0.0	1.5	(0.2)

(n.a.) Not applicable

(pr) Preliminary.

(*) Including gold and emeralds.

Source: DANE and Banco de la República.

Box 2 presents a somewhat more detailed analysis of the type of goods being bought from abroad by Colombia, particularly by exporters, benefiting in some way from lower equipment costs in pesos thanks to the currency's appreciation.

The trade deficit in services was \$514 m, or 1.4% of quarterly GDP, up from 1.3% in the first quarter of 2006. This wider deficit is attributable to transport services (freight and fares), essentially connected with the strong growth in imports.

The overall value of foreign trade in services (exports plus imports) is mostly accounted for by activities connected with transport, travel, corporate services and construction services, which together generated 86.7% of receipts and 83.2% of payments.

Deficits in the non-factor services balance and in factor rent were partly offset by net current-transfer receipts of \$1,206 m. The breakdown of transfers was as follows:

Table 29

FOB Imports, by Economic Use or Destination (PR) ^{a/}

	January-March		Variation		Contribution to growth	
	2006 ^{b/}	2007 ^{b/}	Absolute ^{b/}	%	% points	%
Consumer goods	980.7	1,322.4	341.6	34.8	6.5	20.9
Durables	531.3	759.4	228.1	42.9	4.3	13.9
Nondurables	449.5	563.0	113.5	25.3	2.1	6.9
Intermediate goods	2,405.4	2,999.2	593.8	24.7	11.2	36.3
Fuel and lubricants ^{c/}	196.9	173.8	(23.1)	(11.7)	(0.4)	(1.4)
For farming	183.8	225.6	41.8	22.8	0.8	2.6
For industry	2,024.7	2,599.8	575.1	28.4	10.9	35.1
Capital goods	1,902.2	2,602.6	700.4	36.8	13.2	42.8
Construction materials	106.6	145.2	38.7	36.3	0.7	2.4
For farming	12.7	17.7	5.0	39.3	0.1	0.3
For industry	1,168.7	1,504.7	336.0	28.8	6.4	20.5
Transport equipment	614.2	934.9	320.7	52.2	6.1	19.6
Unclassified goods	2.1	4.3	2.2	101.4	0.0	0.1
Total imports	5,290.4	6,928.4	1,638.0	31.0	31.0	100.0

(pr) Preliminary

a/ Excluding temporary exports, re-exports and others; including balance-of-payments adjustments.

b/ In millions of dollars.

c/ Including byproducts of both oil and coal

Source: DANE and DIAN.

- Receipts of workers' remittances of \$969 m, up by \$113 m (13.2% annual rate). They represent 2.5% of quarterly GDP and 11.1% of current balance-of-payment receipts;
- Receipts of donations of \$244 m, mostly to nongovernmental organizations and non-profit institutions, up by \$95 m (66% annual rate);
- Receipts of donations and other transfers to the government, amounting to \$85 m; and
- Total transfer payments of \$92 m.

2. Capital and financial account

Between January and March this year the capital and financial account showed net inflows of funds to the economy of \$4,998 m, up by \$4,224 m on a year earlier, when the amount was \$774 m. In particular, these net inflows consisted essentially of receipts in respect of foreign direct investment (\$2,535 m) and external borrowing (\$2,486 m) (Table 30).

In the first quarter of 2007 the Colombian economy obtained from abroad net receipts of \$2,342 m (6.0% of quarterly GDP) in respect of foreign direct investment, double the \$1,171 m received a year earlier. By economic activity, the main sectors receiving resources from abroad were manufacturing (\$841 m), coal (\$583 m) and oil (\$404 m). Foreign resources were also channeled—though to a lesser extent—to the telecommunications and transport sector and the sector of commerce, which together received \$412 m. Colombian foreign direct investment abroad accounted for receipts of \$193 m, consisting of repayments of principal, originating in particular from operations of industrial firms.

To March 2007, the Colombian economy's net debtor position relative to the rest of the world showed an increase, representing receipts of \$2,486 m, compared with net outflows of \$221 m in 2006. As shown by Table 30, net inflows to the private sector stood at \$1,864 m and to the public sector at \$622 m.

Note that the private sector's net receipts of funds, excluding FDI, came essentially from short-term operations (\$1,773 m), in the form of both foreign debt and portfolio capital flows. Moreover, the short-term funding was associated in part with commercial activity, particularly imports.

Capital and Financial Balance
(Millions of Dollars)

	I Qtr.			2007 (proj)
	2005	2006	2007 (pr)	
Capital and financial account (a + b + c + d)	(270)	774	4,998	11,323
a. Net foreign investment in Colombia	829	995	2,535	6,589
Foreign investment in Colombia	878	1,171	2,342	7,534
Colombian investment abroad	(49)	(176)	193	(946)
b. Total public sector	(1,243)	(822)	622	2,722
Nonfinancial	(1,002)	(739)	614	3,039
Financial	(241)	(83)	9	(318)
c. Total private sector, excl. FDI	144	601	1,864	2,060
Long term	(198)	(255)	91	1,071
Short term	342	856	1,773	990
d. Other capital flows	0	0	(23)	(47)

(pr) Preliminary.

(proj) Projection.

Source: Banco de la República.

In the first quarter public entities received \$1,678 m in disbursements and made debt repayments amounting to \$717 m, chiefly on new short-term debt and under bond and loan obligations to commercial banks and multilateral agencies. Likewise, public entities acquired foreign assets of \$383 m, the net result of financial investments of \$678 m made by nonfinancial, financial and other public entities and the liquidation of investments worth \$295 m, mostly by the General Treasury.

3. Change in international reserves

At the end March 2007 the gross balance of international reserves held by the Banco de la República was \$18,997 m: 2.6 times outstanding short-term foreign debt (original maturity) and 1.7 times repayments of foreign debt with a remaining maturity of one year.⁴⁵

⁴⁵ Includes the total balance of obligations having a maturity of one year or less and repayments on debt with a maturity of over one year.

The first-quarter accumulation of gross reserves was \$3,557 m. Balance-of-payment transactions accounted for \$3,430 m of this amount, and price and exchange-rate gains for \$85 m and \$42 m, respectively.

B. Balance-Of-Payments Outlook for 2007

Assuming an external-imbalance correction, the current-account deficit for 2007 is forecast at \$6,619 m, or 4.0% of annual GDP, as compared with the first-quarter result of 4.6% of GDP (Table 26). This narrowing of the deficit assumes a slower pace of import growth, associated with an expected slowdown in private consumption as rate rises are transmitted to the economy. Export income is expected to be higher in the coming quarters of the year than in the first, given the rising trend in world commodity prices.

The current-account deficit for 2007 is projected to be more than fully covered by net FDI funds and public- and private-sector capital flows. Privatizations and sales of private-sector companies to overseas conglomerates have continued strongly in 2007, and net FDI capital flows are projected to exceed \$6,500 m.

As shown by Table 30, in the second half of 2007 the effects should begin to appear of the measures taken by the Banco de la República and the government to discourage speculative (short-term) capital inflows, which have been attracted by the foreign-domestic yield differential. Accordingly, for full-year 2007 private-sector capital inflows (excluding FDI) are projected at \$2,060 m, compared with actual first-quarter inflows of \$1,864 m.

Lastly, the country's overall outstanding foreign debt at December 2007 is forecast at \$45,006 m (26.9% of annual GDP), with the public sector accounting for \$29,276 m (65%) of this amount and the private sector for \$15,730 m (35%) (Table 31).

Colombia's Outstanding External Debt

	Millions of dollars					Percentage of GDP ^{a/}				
	2003	2004	2005	2006 (pr)	2007 (proj)	2003	2004	2005	2006 (pr)	2007 (proj)
Total outstanding	38,008	39,441	38,456	40,039	45,006	47.8	40.2	31.3	29.4	26.9
Public sector	24,527	25,779	24,133	26,215	29,276	30.9	26.3	19.6	19.3	17.5
Private sector	13,480	13,662	14,324	13,825	15,730	17.0	13.9	11.7	10.2	9.4
1. Medium and long term	34,689	34,530	32,833	34,551	38,684	43.7	35.2	26.7	25.4	23.1
a. Public sector according to lender	24,228	25,321	23,677	25,948	29,018	30.5	25.8	19.3	19.1	17.4
Nonfinancial public sector	23,634	24,856	23,253	25,785	28,722	29.7	25.3	18.9	19.0	17.2
Government	20,663	22,320	20,852	23,466	24,278	26.0	22.8	17.0	17.3	14.5
Decentralized entities	2,970	2,536	2,401	2,319	4,445	3.7	2.6	2.0	1.7	2.7
Financial public sector	594	465	424	163	295	0.7	0.5	0.3	0.1	0.2
b. Private sector	8,357	7,180	7,100	6,619	7,682	10.5	7.3	5.8	4.9	4.6
Financial	166	151	516	386	1,349	0.2	0.2	0.4	0.3	0.8
Nonfinancial	8,191	7,030	6,583	6,233	6,333	10.3	7.2	5.4	4.6	3.8
c. Financial leasing	2,104	2,029	2,056	1,984	1,984	2.6	2.1	1.7	1.5	1.2
Public	76	67	56	49	41	0.1	0.1	0.0	0.0	0.0
Private	2,028	1,962	2,000	1,935	1,943	2.6	2.0	1.6	1.4	1.2
2. Short term	3,319	4,911	5,623	5,488	6,322	4.2	5.0	4.6	4.0	3.8
a. Public sector	224	391	399	218	218	0.3	0.4	0.3	0.2	0.1
b. Private sector	3,095	4,520	5,224	5,270	6,105	3.9	4.6	4.3	3.9	3.7
Memo ítem:										
Total outstanding external debt excl. financial leasing	35,904	37,413	36,400	38,056	43,022	45.2	38.2	29.6	28.0	25.7
Public	24,452	25,712	24,077	26,166	29,235	30.8	26.2	19.6	19.2	17.5
Private	11,452	11,701	12,323	11,890	13,786	14.4	11.9	10.0	8.7	8.2

(pr) Preliminary.

(proj) Projection.

^{a/} Estimated based on end-of-period exchange rate.

Source: Banco de la República.

Import and Export Movements 2005-2006

The Colombia peso's appreciation has lowered exporters' local-currency income. According to various business associations,¹ from January to March 2007 exports grew by 21% in volume but by only 5% in pesos. This has meant smaller peso earnings for exporting firms and, hence, lower profit margins and, in some cases, operating losses. The nominal (end-period) peso/dollar exchange rate appreciated by 4.4% in 2005, 1.9% in 2006, and 25.5% in the first half of 2007.

On the other hand, revaluation has benefited various economic agents, mainly in two ways: i) by reducing the debtor positions of firms with foreign-currency financial obligations, through smaller principal and interest payments in pesos on their foreign liabilities, facilitating greater access to credit; and ii) by reducing the cost in pesos of the value of imports, which lowers prices for consumers and benefits importers of intermediate goods and capital equipment by improving their competitiveness in domestic and foreign markets.

One striking benefit among those mentioned above is that exporting firms can regain part of the competitiveness lost through revaluation, by having to pay less in pesos for their imports of raw materials and capital goods.

Given the importance of this effect, this box identifies and quantifies the goods imported by Colombian exporters. To this end a group of exporting firms were selected from the foreign-trade databases of the National Statistics Agency (DANE) and the Tax and Customs Administration (DIAN) for 2005 and 2006. The 2,600 firms making up the sample were identified by cross-matching detailed export and import information (tax identification numbers, products, sectors, among others).

The general results show that the selected sample accounts for 90% and 53% of the total value of exports and imports, respectively. According to the Classification of Products by Economic Use or Destination (Cuode), the sample countries mostly import industrial raw materials and inputs, industrial machinery, transport equipment and consumer durables.

¹ National Foreign Trade Association (Analdex), June 2007.

Goods imported by the sample's exporting firms are quantified and described below, first by the Cuode classification of economic use or destination, next by the exporters' sector of economic activity .

I. Colombian exporters' imports, by economic use or destination, 2005-2006

Table B2.1 shows the exporters' share of total imports in 2005 and 2006, by value and by groups of goods as classified by use or destination (Cuode). In both years the exporting firms' contribution to total import value was around 53%.

In 2006, imports by sample exporters grew by 23.6% (\$2,486 m) and contributed 53.1% of the year's overall increase in import value. The biggest rise in value was in industrial raw materials and inputs (20.6%, \$1,067 m), followed by transport equipment (34.9%, \$405 m), consumer durables (39.1%, \$300 m) and industrial capital goods (17.6%, \$283 m).

Table B2.1
Overall Imports, by Exporters and Non-Exporters
2005-2006

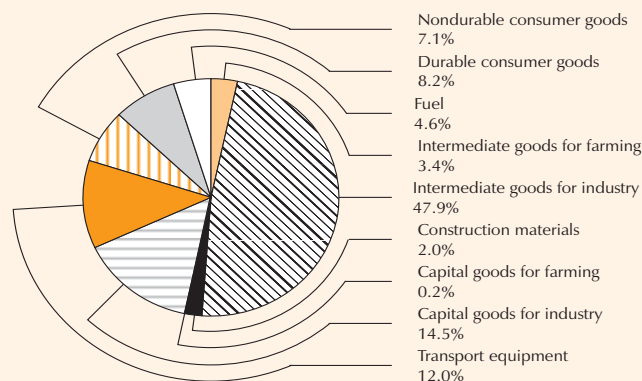
Institutions	Millions of dollars FOB						Percentage share		Percentage change	
	Exporters		Non-exporters		Total		Exporters		Exporters	Total
	2005	2006	2005	2006	2005	2006	2005	2006	2006	2006
Imports										
Consumer goods	1,501	1,996	2,172	2,925	3,673	4,921	40.9	40.6	32.9	34.0
Durables	733	928	982	1,230	1,715	2,158	42.8	43.0	26.5	25.8
Nondurables	768	1,067	1,190	1,695	1,958	2,762	39.2	38.6	39.1	41.1
Raw materials and inputs	6,055	7,281	2,699	3,396	8,754	10,677	69.2	68.2	20.2	22.0
Fuel	499	596	21	57	520	653	96.1	91.3	19.4	25.7
For farming	385	447	282	315	668	762	57.7	58.6	15.9	14.1
For industry	5,171	6,238	2,396	3,024	7,567	9,262	68.3	67.4	20.6	22.4
Capital goods	2,983	3,749	4,376	5,174	7,359	8,923	40.5	42.0	25.7	21.2
Construction materials 190	262	207	259	397	521	47.8	50.4	38.1	31.2	
For farming	19	23	40	33	59	57	32.0	41.0	23.4	(3.7)
For industry	1,611	1,894	3,002	3,508	4,613	5,403	34.9	35.1	17.6	17.1
Transport equipment	1,163	1,569	1,126	1,374	2,290	2,942	50.8	53.3	34.9	28.5
Diverse imports	2	3	11	11	13	14	13.7	19.2	55.5	10.7
Total	10,541	13,027	9,258	11,507	19,799	24,534	53.2	53.1	23.6	23.9

Source: Tax and Customs Administration (DIAN) and National Statistics Agency (DANE).

By economic use, the exporters' biggest share of overall imports in 2006 by value was of fuel and lubricants: 91.3%. They also accounted for more than 50% of overall imports of industrial raw materials and inputs (67.4%), intermediate goods for agriculture (58.6%), transport equipment (53.3%), and capital equipment for construction (50.4%). In addition, they had a substantial share of imports of consumer goods (40.6%) and industrial capital equipment (35.1%).

In dollars, the exporters' biggest imports in 2006 were concentrated in industrial raw materials, inputs and capital equipment, together amounting to \$8,132 m and representing 62.4% of the total value imported by them (Graph B2.1). Overseas purchases of transport equipment and consumer durables also stand out as a share of the exporter's overall import value: 12% and 8.2% respectively.

Graph B2.1
Exporters' Imports, by Economic Use or Destination:
Percentage Share, 2006



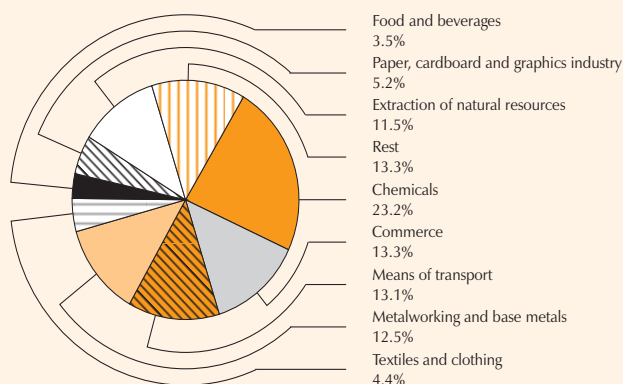
Source: DIAN and DANE.

II. Imports, by exporters' sector of activity

Graph B 2.2 presents the breakdown in 2006 of major imports by exporters' sector of economic activity:

- Manufacture of chemical, rubber and plastic products accounted for 23.2% (\$3,028 m) of exporters' total import value. This sector's overseas purchases were concentrated in intermediate consumer goods for distribution in the local market and for the manufacture and marketing of rubber, plastic and chemical products. Imports included notably:

Graph B2.2
Exporters' Imports, by Sector of Economic Activity:
Percentage Share, 2006



Source: DIAN and DANE.

- Raw materials and inputs, in particular alcohols, propylene, polyethylene, vinyls and plastic sheets.
- Nondurables such as medicines and pharmaceuticals, cosmetics, soaps, plastic and rubber products, and pesticides and chemicals for farm use.
- The commercial sector imported goods worth \$1,732 m, or 13.3% of exporters' total imports, mostly buying consumer goods, industrial inputs, and capital equipment for trade in the domestic market. Their main purchases were:
 - Consumer goods, particularly medicines, foodstuffs, clothing, cleaning and beauty products, household electrical appliances, and office equipment.
 - Industrial and farming inputs, such as urea, chlorides, nitrates, insecticides, herbicides, and feed concentrates.
 - Capital equipment, such as tractors, computers, and office equipment.
- Transport-equipment manufacture and commercialization. This sector accounted for some 13.1% (\$1,711 m) of exporters' total imports, their purchases consisting mainly of parts and accessories for assembly, assembled vehicles, and transport equipment for distribution in the domestic market. Imported items included notably:
 - Dump trucks, motor vehicles, tractors, trucks, cranes, automobile chassis, parts and accessories, and wheels.

- Metalworking, base metals, and machinery and equipment industries imported goods worth \$1,629 m, or 12.5% of exporters' total imports. They mostly bought intermediate goods and capital equipment for treating and coating metals to be used in mechanical engineering, transformation of iron and steel, and steel sheet processing. Their overseas purchases included notably:
 - Laminated iron and steel products, copper and aluminum wire, and electrical conductors.
 - Cast-iron receptacles, molding machines, printing machines, elevators, forklifts, bucket loaders, self-propelled machines, parts and pieces for machines, lifting apparatuses, drum rollers, rollers and cutters.
- Extraction of natural resources accounted for 11.5%, or \$1,964 m, of exporters' total imports. The sector mostly imports machinery and equipment for exploitation of oil and oil products, coal and nickel, and also fuel and lubricants, for distribution in the domestic market. Main purchases included:
 - Drills, bucket loaders, bulldozers, self-propelled machines, machine parts and pieces, conveyor belts, drum rollers, and excavators.
 - Fuel imports by Ecopetrol and exporting companies engaged in the exploitation of coal and commercialization of fuels. Purchases of gasoil, crude petroleum oils, and base lubricating oils were major items of this import amount.
- The textiles and clothing sector imported goods worth \$570 m, representing 4.4% of exporters' total imports. Purchases consisted mainly of raw materials and specialized machinery for the manufacture of clothing and leather. Major imports were:
 - Yarns, fabrics, denim, cotton, pigments, dyes and other petroleum products.
 - Specialized machinery and equipment, such as dryers, sewing machines, centrifuges, and stamping and cutting machines.
- The food and beverages sector accounted for \$460 m, or 3.5%, of exporters' total import value. Its purchases were concentrated in inputs and capital goods for food production, the major import items being:

- Oils, essences, syrups, yeast, wheat, soya, corn and chemicals.
- Paper and cardboard manufacture and the graphics industry. This sector's imports amounted to \$671 m, or 5.2% of exporters' total imports, and consisted mainly of inputs such as paper pulp, cardboard pulp, paper and cardboard for printing and writing, and specialized machinery for producing paper for writing and printing.

It is worth noting that in 2006 the overseas sales of the above-mentioned export sectors came to \$18,839 m, or 77% of the country's overall exports (\$24,390 m), having risen by 15.1% over the year, much as did the latter. Traditional products accounted for 50.7% of the \$18,839 and nontraditionals for 49.3%.

These sectors' nontraditional exports made up 75.5% of overall nontraditional exports and 71%, or \$1,422 m, of the latter's expansion in 2006. The biggest exporters among this group of sectors were:

- Trading companies, with of \$2,142 m, equivalent to 17.4% of the group's total nontraditional products in 2006.
- The chemicals, rubber and plastics sector, with \$2,108 m, or 17.1% of the total.
- Firms belonging to the metalworking, base metals, and machinery and equipment industries, with \$1,450 m, or 11.8% of the total.
- Other major exporting sectors were textiles and clothing (\$1,097 m), food and beverages (\$900 m), and paper and graphic industries (\$777 m).

The sectors of activity under study saw their exports grow or remain steady in 2006 and the first quarter of 2007, the fastest growths being in: commerce (187% and 39.5%); the chemicals, rubber and plastics sector (14.8% and 17.6%); the transport sector (15.8% and 30.6%), the metalworking, base metals, and machinery and equipment industry (34.4% and 28.1%); textiles and clothing (5.9% and 14.5%); paper making and graphics industry (16% and 13.9%); and food and beverages (12.2% and 12.9%) (Table B2.2).

The above results suggest that the negative effects of the peso's appreciation on Colombian exporters' [...] currency income in Colombia might have been attenuated by the lower local-currency value of raw materials and capital goods imported by

Table B2.2
Percentage Change in Overall Exports
2006 - First Quarter 2007

	Percentage change		
	2006	Q1-2007	
Overall exports	15.1	12.1	
Coffee		(0.6)	18.1
Coal	12.1	32.5	
Nickel	50.1	(19.3)	
Oil and oil products	13.8	(8.9)	
Nontraditional exports	16.2	19.2	
1. Farming sector	9.5	27.5	
2. Industrial sector	17.1	20.2	
Trading companies	187.0	39.5	
Manufacture of chemicals, rubber and plastics	14.8	17.6	
Transport material	15.8	30.6	
Metalworking, base metals, machinery and equipment	34.4	28.1	
Food, beverages and tobacco	12.2	12.9	
Textiles and clothing	5.9	14.5	
Graphic arts and publishing	16.0	13.9	
Leather and leather goods	19.4	32.1	
Wood and wood goods	19.7	41.9	
Nonmetallic minerals	22.8	19.8	
3. Mining sector	22.9	(3.4)	

Source: DANE.

exporters to meet higher external and domestic demand. The capital-goods imports of this group of firms should lead to future improvement in their production processes and in the productivity of the economy at large.

Drug-Trafficking Economy in Colombia: Measurements and Studies

Knowledge of the main events characterizing cocaine and heroin production and trade, and of the impact of eradication and interdiction policy is of great importance and interest to different actors in the Colombian economy interested in measuring their effect on the domestic economy or assessing the effectiveness of fumigation, eradication and alternative crop programs.

Taking into account the constraints inherent in measuring any illegal activity, this review describes the main aspects of and available statistics on Colombian narcotics production and trafficking and the incorporation of profits therefrom into the country's economy, based on information from different sources.¹ Note that, although the source documents include in their the production, processing and export of heroin and marijuana, the statistical description is centered on coca leaves, coca base and cocaine.

Cocaine production is a value-added chain that starts with the planting of coca crops, then transformation of the coca leaves into a basic paste and cocaine base, and subsequently conversion of the cocaine base into cocaine chlorhydrate or pure cocaine.

The statistics on coca-leaf production are focused on measuring areas under coca cultivation, based chiefly on satellite and aerial photography aids. Leaving aside eradicated or fumigated crop areas, the Illicit Crop Monitoring System (Simci) run by the United Nations Office on Drugs and Crime (Unodc) estimated the net area under coca cultivation in 2006 at 78,200 ha and the US government at 157,200 ha, a difference of 79,200 ha. Until 2004 the difference between the estimates from these two sources of information had been steady and had displayed the same trend. The similarity was lost in 2005, with the US saying, among other things, that its satellite monitoring was expanded to cover a greater area of cultivation, that satellite instruments of greater precision were being used, and that eradicated areas were being monitored to preclude the replanting of illegal crops.

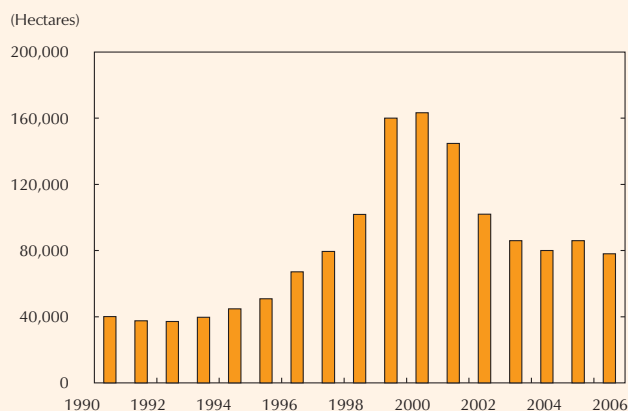
¹ R. Rocha and M. Clemencia Ramírez, 2005, "Impactos de la economía ilícita de la droga: estudio para Colombia," USAID; Daniel Mejía y Carlos E. Posada, "Cocaine Production and Trafficking: What do we know?" Borradores de Economía No. 444, Banco de la República, 2007; United Nations Office on Drugs and Crime (Unodc) and the Illicit Crop Monitoring System (Simci), "Colombia, censo de cultivos de coca" several years, June of: 2007, 2006, 2005 and 2004; Unodc, Simci, National Narcotics Office: "Características agropecuarias de los cultivos de coca en Colombia," National Statistics Agency, 2007 National Accounts Report; US Government, Unodc "World Drug Report," several years: 2004, 2005, 2006 and 2007.

According to Simci-Unodc reports, coca growing in Colombia reached a record figure of 163,300 ha in 2000 and then decreased, down to 86,000 ha in 2003, a fall of 47%. The area under cultivation picked up in 2005 and stood at 78,000 ha in 2006. The annual rate of change averaged 18.9% in 2001-2003, compared with 2.9% in 2004-2006, giving a 52% fall in coca growing from 2000 to 2006, Graph B3.1.

This sharp fall resulted from a process of eradication implemented by the authorities. The first three years of this decade saw a 52% average annual increase in cumulative hectares eradicated, which surged from 62,000 in 2000 to 153,000 in 2002, a record up to that year of total hectares eradicated, with a major role played by manual eradication.

The 47% decrease in coca fields from 2001² to 2006 was distributed across the land, excluding the Pacific region, where the coca-crop area soared by 68% over that period. In contrast, coca growing decreased in the Putumayo-Caquetá region and the Meta-Guaviare region, by 44,415 ha and 16,438 ha respectively, accounting for 91% of the

Graph B3.1
Colombia: Area under Coca Cultivation
1990-2006 ^{a/}



^{a/} Harvestable after eradication.

Source: 1990-1998: Inter-American Drug Abuse Control Commission and US State Department, "Informe sobre la estrategia internacional para la fiscalización de estupefacientes"; 1999-2005: Illicit Crop Monitoring System (Simci), supported by the United Nations Office on Drugs and Crime (Unodc).

² There are no regional figures before 2001.

overall decrease in Colombia in those years. Coca is currently grown in 23 of the country's 32 provinces (Simci, 2006) (Table B3.1).

Table B3.1
Colombia: Coca Growing, by Region
(Hectares)

	2001	2002	2003	2004	2005	2006
Meta-Guaviare	36,978	36,603	28,977	28,507	25,963	20,540
Pacífico	11,171	17,362	19,561	15,789	17,633	18,807
Central	18,474	14,829	15,389	15,081	15,632	12,131
Putumayo-Caquetá	61,636	22,137	14,789	10,888	13,951	17,221
Orinoco	11,915	7,124	4,357	6,250	9,709	6,829
Other ^{a/}	4,633	4,016	3,267	3,850	2,862	2,342
Tounded total	144,807	102,071	86,340	80,365	85,750	77,870

a/ Crops grown in the Sierra Nevada and the Amazon region.
Source: Simci-Unodc.

The monitoring of drug-related activity calls for estimating potential cocaine production, based on net cultivated areas and technical productivity ratios of coca-plant production and its conversion into coca base and subsequently cocaine. These ratios are estimated based on the monitoring of cocaine production per hectare of coca planted and efficiency in laboratory production of the alkaloid.

According to these parameters and Simci-Unodc estimates, potential cocaine production in Colombia in 2006 was 610 tonnes, similar to what it was in 2001 and somewhat lower than in 1999 and 2000, when it was close to 700 tonnes. Simci and Unodc studies indicate the possible use of new varieties of plants and production techniques may have raised the annual productivity coca crops and cocaine making. According to Unodc, potential cocaine production in Colombia was 4.7 kg per hectare/year until 2004, but recent calculations reveal a rise in productivity. The 2006 report estimates that productivity had risen to 7.4 kg per ha/year (Graph B3.2).

According to the studies referred to above, in Colombian production areas the price of cocaine in pesos³ rose steadily over the first three years of this decade (2000-2002), by an annual average rate of 16.3%. In the following two years the price stabilized, showing increments of a little over 2%. This growing dynamism halted, and in 2005 the price of

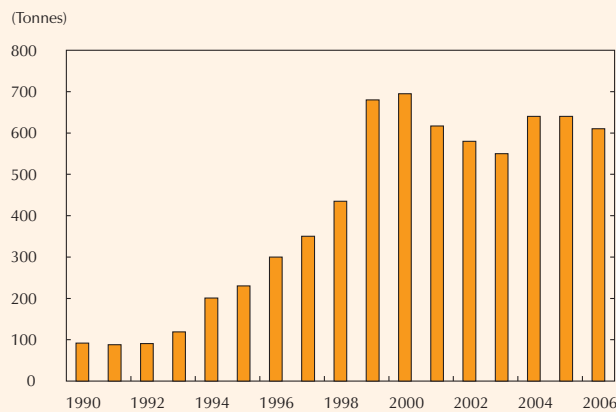
³ 1991 constant values.

⁴ Unodc, National Narcotics Office and Simci, "Características agroindustrial de los cultivos de coca en Colombia," 2005.

cocaine in Colombia began to fall, going down to much the same levels as were seen between 2001 and 2002. The Unodc study⁴ suggests that this behavior may have resulted from higher productivity, for although the cultivated area has decreased, cocaine production and, hence, prices have remained relatively stable.

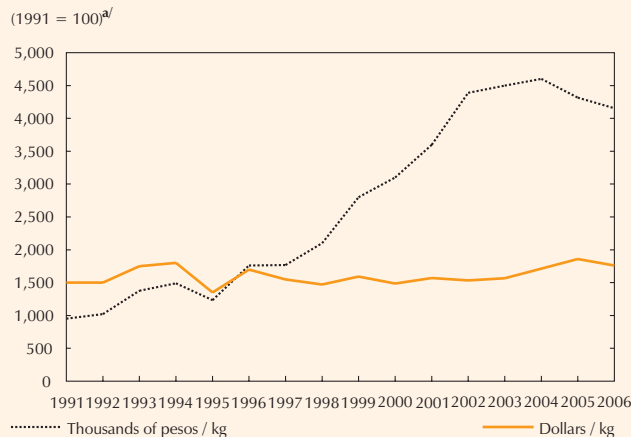
In the retail market⁵ on US streets, the inflation-adjusted dollar price of a gram of pure cocaine dropped from \$284 in 1990 to \$107 in 2005. A similar trend was observed on

Graph B3.2
Colombia: Potential Cocaine Production, 1990-2006 ^{a/}



^{a/} Estimates of potential cocaine production from 2004 on are not directly comparable with previous years.
Source: Simci, Unodc.

Graph B3.3
Price of Cocaine in Colombia



^{a/} Average annual prices in thousands of pesos and in dollars, at 1991 constant values.
Source: Diran, Simci Unodc.

⁵ Buyers of one gram or less on US streets.

the streets of Europe, where the price fell from \$180 to \$85 over the same period. Mejía and Posada (2007) suggest that the contradictory behavior between production and prices in Colombia may be attributable to importation of coca base from Peru and higher productivity.

To measure the size of the drug-dealing business and its impact on the Colombian economy Rocha and Ramírez (2005), Simci-Unodc and the National Statistics Agency (DANE) calculate different values on the basis of different concepts of production and prices.

Regarding production, Simci and Unodc prepare statistics on the gross production of coca leaves and their byproducts, valued at production-site prices. In these terms, in 2006 the production-site value of coca leaves and their byproducts was \$683 m, representing 0.5% of overall GDP and 5% of farming-sector GDP, measured at current prices (Table B3.2).

DANE's national-accounts estimates include drug-dealing activity in its phase of agricultural production. According to DANE's estimate, which began to be made in 1994, illegal crops as a share of farming GDP⁶ rose from 7% in 1994 to a record 10.34% in 1999, then fell steadily, down to 5.43% in 2004. In 2005 this share edged up to 5.46%, before dropping to 4.84% in 2006.

Similarly, illegal crops as a share of total GDP at constant prices rose from 1.05% in 1994 to 1.48% in 1999, then declined continuously, to 0.6% in 2006. Thus, at constant prices illegal crops as a share of annual GDP averaged 1.24% in 1994-1999 and 0.93% in 2000-2006 (Graph B3.4 A and B).

Table B3.2
Total Farm-Gate Value of a Tone of Coca Leaves and by Products

	Millions of dollars	Percentage of total GDP	Percentage of farming GDP
2006	683	0.5	5.0
2005	843	0.7	6.0

Source: Simci-Unodc.

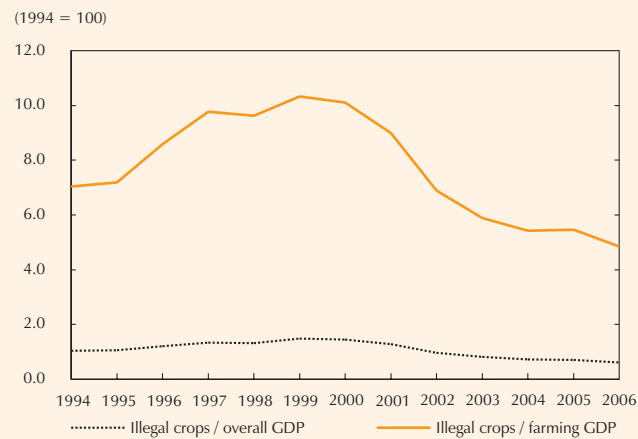
⁶ Including illegal crops.

Note that DANE's estimates take into account only the agricultural phase of illegal-drug production, leaving aside the industrial and commercialization process; the impact of drug trafficking is thus measured on farming GDP alone. It is curious that the impact of coca-leaf production should be accounted for only in relation to farming, when in fact the transformation of coca leaves into coca base requires the use of industrial inputs such as lime, cement, gasoline and ammonia.

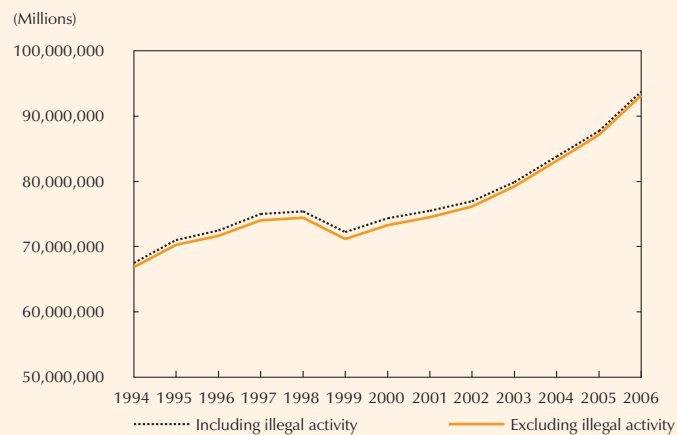
Rocha and Ramírez (2005) go more deeply into the economics of drug trafficking, incorporating into their analysis the stages of transformation and international distribution of cocaine. They estimate that in 2003 the value added in producing coca

Graph B3.4

A. GDP Including Illegal Activity: Contribution of Illegal Crops



B. GDP at 1994 Constant Prices



Source: National Statistics Agency.

base and poppy latex may have represented 0.05% of GDP, as compared with 0.4% in transforming them into cocaine and heroin (Table B3.3).

Another way of measuring the size of drug trafficking in the Colombian economy is through records of external accounts.

Rocha and Ramírez (2005) estimate that 350 tonnes of cocaine and 1.2 tonnes of heroin may have been exported in 2003, which, discounting seizures and international-marketing costs, would have come to some \$1,300 m, representing 8.6% of overall goods exports.

Rocha and Ramírez (2005) point out that the drug trade's foreign-currency export earnings would have been officially turned into pesos (reintegro) through over-invoicing of exports, importing of smuggled goods, and over-invoicing of remittances. Using econometric models in different reintegro scenarios for the export-generated foreign currency, the authors conclude that, on average, capital repatriation under these assumptions would have ranged between \$365 m and \$868 m.

Yet, econometric estimations of capital inflows show that, on average, \$1,300 m a year may have come into the country since 1990. This figure is over and above the estimated amount of repatriated assets, because, the author believes, smuggling and the over-invoicing of exports and of remittances occur not only in the context of the drug trade but also in other illegal activities. In the case of remittances, it is to be noted that the model does not consider migration behavior as an explanatory variable and therefore tends to underestimate its impact on changes in remittances since 1999 and to overestimate possible asset-laundering through this mechanism.

Table B3.3
Size of the Drug-Trade, by Phase

	1999	2000	2001	2002	2003
(1) % GDP (base)	0.30	0.30	0.20	0.10	0.04
(2) % GDP (latex)	0.00	0.01	0.00	0.00	0.01
(3) = (1 + 2) % GDP (farming)	0.30	0.30	0.20	0.10	0.05
(4) % GDP (cocaine chlorhydrate)	0.40	0.40	0.50	0.50	0.40
(5) % GDP (heroin chlorhydrate)	0.00	0.00	0.00	0.00	0.00
(6) = (4 + 5) % GDP (industrial)	0.40	0.40	0.50	0.50	0.40
(7) = (3 + 6) % GDP FOB	0.70	0.70	0.70	0.60	0.40

Source: Rocha and Ramírez, 2005.

Based on these findings it may be concluded that, although available statistics on illegal-crop production and transformation and narcotics exports have improved, they still present dispersion and consistency problems, making it difficult to diagnose clearly the size and impact of the drug trade on the Colombian economy. In particular, estimates of illegal-crop production vary according to the concepts used: the National Statistics Agency focuses on coca base, latex and marijuana, Rocha and Ramírez (2005) on cocaine and heroin.

In turn, the transformation process under study modifies the sizes and values produced and exported and their impact on external accounts. National accounts estimate only the impact of production activity on the farming sector, leaving aside the impact that the process of transforming coca base into cocaine has on other productive sectors such as industry. The study by Rocha and Ramírez (2005) deals partly with the stages of transformation and international distribution of cocaine and their impact on the Colombian economy.

V. Fiscal Policy

The consolidated fiscal-deficit target for 2007 has been reduced from 1.3% of GDP to 0.7%

A. FIRST-QUARTER 2007 RESULTS

At the end of March the consolidated public sector had accumulated a fiscal deficit of 1,141 bn pesos, equal to 0.3% of GDP, lower than a year earlier. By sector, this resulted from a deficit of 1.6% of GDP in central-government finances, which was partly offset by the decentralized sector's surplus of 1.3% of GDP. The Banco de la República's cash balance was in surplus by 0.2% of GDP, and the financial system's restructuring costs came to 0.1% of GDP in the first quarter (Table 32).

Central-government finances showed revenues rising nominally by 24.5% and expenditures by 11.7%. Tax receipts expanded strongly, particularly income tax (23.7%), domestic VAT (27.2%), customs duties (30.5%), and foreign VAT (25.9%). This strong expansion in tax revenues was generally associated with greater economic activity over the past two years and with higher goods imports, up by 30.8% on the first quarter of last year. In contrast, the gasoline tax fell by 0.7%, because of the phasing out of the fuel subsidy, which has led to consumption of regular gasoline being replaced by that of diesel and natural gas for vehicles. Under capital resources, corporate profit transfers increased by 4.9% and financial returns by 23.9% (Table 33).

The strong expansion in tax revenues was generally associated with greater economic activity over the past two years and with higher goods imports.

Central-government spending showed growth of 20.3% in debt interest payments, 10.4% in operating expenditures and 4.4% in investment. Under operating outlays, personal services rose by 3.7%, overhead by 14.5% and transfers by 11.2%. The rise in transfer outlays stemmed from a 16.7%

Consolidated Public-Sector Fiscal Balance:
First Quarters of 2006 and 2007

Item	Billions of pesos		Percentage of GDP	
	2006	2007 (pr)	2006	2007 (pr)
A. Total nonfinancial public sector (1 + 2)	(2,744)	(1,132)	(0.9)	(0.3)
1. National government	(6,471)	(5,699)	(2.0)	(1.6)
2. Subtotal decentralized sector	3,727	4,567	1.2	1.3
Power sector	177	150	0.1	0.0
Emcali (Cali municipal utilities co.)	32	119	0.0	0.0
EPM (Medellín municipal utilities co.)	9	(107)	0.0	0.0
FAEP (oil stabilization fund)	75	101	0.0	0.0
Ecopetrol	2,066	1,964	0.6	0.6
Rest of entities	(22)	504	(0.0)	0.1
Social security	1,124	1,185	0.4	0.3
Regional and local governments	266	651	0.1	0.2
B. Banco de la República quasi-fiscal balance	141	562	0.0	0.2
C. Fogafin (deposit insurance agency) balance	66	137	0.0	0.0
D. Financial restructuring costs	(427)	(446)	(0.1)	(0.1)
E. Adjustments	1,204	(262)	0.4	(0.1)
F. Total consolidated public sector (A+B+C+D+E)	(1,760)	(1,141)	(0.5)	(0.3)

(pr) Preliminary.
Source: Ministry of Finance and Public Credit.

expansion in pension payments and a 9.3% increase in transfers under the General Revenue Sharing System (SGP).

Funding for the central-government deficit came from privatization proceeds and from the transfer of Banco de la República profits. External funding flow was negative in the amount of 1,253 bn pesos, the net result of disbursements of 211 bn pesos and debt repayments of 1,464 bn pesos. Similarly, net domestic indebtedness decreased by 99 bn pesos, with disbursements amounting to 8,177 bn pesos, as against debt repayments of 8,276 bn pesos. The first quarter saw the sale of long-term TES securities worth 8.346 bn pesos; agreed and mandatory purchases accounted for 5.064 bn pesos of this amount, and auctions for 3,282 bn pesos. These funding operations resulted in reducing the central government's outstanding debt from 47.3% of GDP in December 2006 to 46% in March 2007.

Funding for the central-government deficit came from privatization proceeds and from the transfer of Banco de la República profits.

As pointed out earlier, the decentralized public-sector finances accumulated a first-quarter surplus of 1.3% of GDP, thanks largely to a cash surplus of 0.6% of GDP in Ecopetrol and one of 0.4% in the social-security sector. Ecopetrol's surplus mainly reflects high world crude prices, and social

Central Government Fiscal Balance
 First Quarters of 2006 and 2007
 (Billions of Pesos)

	2006	2007 (pr)	Annual growth 2006-2007
I. Total revenues (A + B + C + D + E)	11,945	14,873	24.5
A. Tax revenues	11,394	14,219	24.8
Income tax	4,135	5,115	23.7
Internal VAT	3,892	4,951	27.2
External VAT	1,586	1,997	25.9
Customs	686	895	30.5
Gasoline tax	278	276	(0.7)
Financial-transactions levy	606	715	18.0
Wealth tax	4	10	150.0
Other	207	260	25.6
B. Non-tax revenues	48	49	2.1
C. Special funds	108	142	31.5
D. Capital resources	379	447	17.9
Financial returns	142	176	23.9
Excess funds	143	150	4.9
Other	94	121	28.7
E. Accrued interest	16	16	0.0
II. Total expenditures (A + B + C + D + E)	18,416	20,572	11.7
A. Interest	3,375	4,060	20.3
External	1,212	1,360	12.2
Domestic	2,163	2,700	24.8
B. Operating expenses ^{a/}	11,499	12,690	10.4
Personal services	1,725	1,788	3.7
Overhead	983	1,126	14.5
Transfers	8,791	9,776	11.2
C. Investment	3,308	3,453	4.4
D. Net loans	92	83	(9.8)
E. Accrued payments	142	286	101.4
III. Deficit or surplus (I - II) ^{b/}	(6,471)	(5,699)	(11.9)
Financial restructuring costs	432	446	3.2
IV. Funding (A + B + C + D)	(6,903)	(6,145)	(11.0)
A. Net external credit	(1,751)	(1,253)	(28.4)
Disbursements	388	211	(45.6)
Debt repayments	2,139	1,464	(31.6)
B. Net domestic credit	7,094	(99)	(101.4)
Disbursements	7,578	8,177	7.9
Debt repayments	484	8,276	1,609.9
C. Banco de la República's profits	793	1,186	49.6
D. Other	767	6,311	722.8
V. Deficit as a percentage of GDP	(2.0)	(1.6)	

(pr) Preliminary

a/ Including payments and floating debt.

b/ Excluding financial-restructuring costs.

Source: Ministry of Finance and Public Credit.

security's the accumulation of resources in the Subnational Pension Liabilities Fund (Fonpet) and in Ecopetrol's Pension Fund.

B. FISCAL OUTLOOK FOR 2007

The consolidated fiscal-deficit target for 2007 has been revised down from 1.3% to 0.7% of GDP, because of good first-quarter tax revenues and the spending cut announced in July for the current fiscal-year budget. By sector, the assumptions underlying the new target are a central-government deficit of 3.3% of GDP, together with a decentralized public-sector surplus of 2.3%. Official estimates further project surpluses of 0.5% and 0.2% of GDP for the Banco de la República and Fogafin, respectively. The financial system's restructuring costs will amount to 0.3% of GDP (Table 34).

Central-government operations will produce a 14.5% rise in revenues and a 10.8% increase in expenditures. The fastest growing tax items will be the wealth tax (103.4%), domestic VAT (19.4%) and the financial-transactions

Table 34

Consolidated Public Sector
Fiscal Balance, 2006-2007

Item	Billions of dollars		Percentage of GDP	
	2006	2007 (proj)	2006	2007 (proj)
A. Total nonfinancial public sector (1 + 2)	(3,221)	(3,645)	(1.0)	(1.0)
1. National government	(13,094)	(11,679)	(4.1)	(3.3)
Subtotal decentralized sector	9,873	8,034	3.1	2.3
Power sector	483	463	0.2	0.1
Emcali (Cali municipal utilities co.)	(54)	432	0.0	0.1
EPM (Medellín municipal utilities co.)	150	166	0.0	0.0
FAEP (oil stabilization fund)	1,221	522	0.4	0.1
Ecopetrol	2,217	(677)	0.7	(0.2)
Rest of entities	814	194	0.3	0.1
Social security	3,742	5,808	1.2	1.7
Regional and local governments ^{a/}	1,300	1,125	0.4	0.3
B. Banco de la República's quasi-fiscal balance	1,440	1,595	0.4	0.5
C. Fogafin (deposit insurance agency) balance	773	781	0.2	0.2
D. Financial restructuring costs	(1,113)	(1,213)	(0.3)	(0.3)
E. Adjustments	(587)	0	(0.2)	0.0
F. Total consolidated public sector (A + B + C + D + E)	(2,708)	(2,481)	(0.8)	(0.7)

Note: déficit (-) o superávit (+).

a/ Including National Royalties Fund.

(proj) Projection.

Source: Ministry of Finance and Public Credit.

levy (15%). Growth in external VAT and customs duties will be equally substantial: 12.9% and 14.6%, respectively. An important point is that, while the original deficit projection took into account payment of two wealth-tax installments, the revised projection includes payment of only the first installment. This means that in 2008 taxpayers liable for the wealth tax will have to make three installment payments during the year.

The latest official projections of central government spending see interest payments rising by 7.6%, operating expenditures by 10.3%, and investment by 10.7%. Under operating expenditures, personal services will grow by 10.1%, overhead by 0.5%, and transfers by 11.2%. Higher personal-services spending is associated with police-force expansion, activation of mobile brigades, and introduction of a public-order bonus for professional soldiers and officers. Higher investment outlays reflect implementation of road and prison building infrastructure projects.

Funding for the central-government deficit will come largely from privatizations and General Treasury cash, the latter originating mainly from prefunding operations for the budget that were carried out during the previous fiscal year in the amount of \$2,000 m. Net external funding will come to 1,053 bn pesos, the outcome of disbursements of 4,349 bn pesos and debt repayments of 3,297 bn pesos. Long-term domestic credit will be negative in the amount of 208 bn pesos, with disbursements of 16,781 bn pesos and repayments of 16,989 bn pesos.

As discussed in the March 2007 report, the decentralized sector's fiscal surplus will be smaller in 2007, mostly because of Ecopetrol's fiscal deterioration and poorer performance of the subnational finances. According to official estimates, Ecopetrol will have a deficit of 0.2% of GDP, resulting mainly from the transfer of more profits to the government and from higher investment in oil-field exploration and development projects. The subnational finances, too, are expected to show higher spending, as usually occurs toward the end of local administrations' terms of office.

Lastly, it is noteworthy that in early July a Constitutional Amendment was passed by Congress reforming the General Revenue Sharing System (SGP), effective from 2008. The reform is meant to ensure the medium-term sustainability of the national finances and guarantee the availability of resources for meeting education and health-care needs, as well as basic-sanitation and drinking-water needs.

Higher personal-services spending is associated with police-force expansion, activation of mobile brigades, and introduction of a public-order bonus for professional soldiers and officers.

In early July Congress passed a Constitutional Amendment reforming the General Revenue Sharing System (SGP), effective from 2008.

VI. International Reserves

The Banco de la República's criteria for managing the international reserves are, in order of importance, security, liquidity and profitability. On these criteria, to ensure that the country's external payment obligations are met the reserves are invested in financial assets that have a large secondary market, except for a portion held as working capital for immediate availability.

A. External -Vulnerability Indicators

Analysis of the economy's external vulnerability focuses on indicators that measure the effect of external borrowing in terms of both the level of such borrowing and the short-term payment obligations it generates.

These indicators are supplemented by the inclusion of the current-account deficit. International markets generally consider that a value less than one for these indicators may be a warning signal about an economy's external vulnerability, depending on each country's characteristics.

The Banco de la República holds a level of international reserves sufficient for intervening in the currency market when the inflation target is at risk or when it wishes to stabilize the economy. Moreover, the Bank is responsible to society for administering the reserves and must obtain positive yields on them.

A higher level of reserves makes it possible to safeguard the economy from external crisis. External and internal environments are favorable today, but the risk of their reversing in future is great. In past decades the external crises suffered by countries arose from different circumstances, such as unsustainable current-account deficits in the balance of payments, short-term foreign debt exceeding the level of international reserves, loss of confidence in the financial system's solvency, high fiscal contagion or deficits resulting in unsustainable levels and growth rates of public debt. These have been the main causes of external crises in emerging countries, and although such situations do not exist in Colombia they might arise from one moment to the next if international credit markets were to close. In short, holding international reserves has "opportunity costs" and benefits that increase directly affect with the level of the reserves.

A higher level of reserves makes it possible to safeguard the economy from external crisis. External and internal environments are favorable today, but the risk of their reversing in future is great.

Some empirical studies⁴⁶ have identified the following set of variables to be taken into account for a long-term stable demand for reserves:

- **Size of the economy:** Insofar as international transactions increase with the size of the economy, reserves are expected to increase with the size of the population and per-capita GDP.
- **Current-account vulnerability:** If external-demand or terms-of-trade shocks cause the country to face an unexpected demand for foreign exchange, it is advisable as a precautionary measure to have high levels of reserves.
- **Capital-account vulnerability:** Greater financial liberalization may mean more intensive transmission of external shocks if the country does not have a developed capital market. In this respect, having a good level of reserves will enable the country to reduce its vulnerability to unexpected capital outflows.
- **Exchange-rate flexibility:** There is less demand for reserves where the exchange rate is flexible. The central bank will not therefore need to hold a large stock.
- **Opportunity cost:** The cost of holding reserves arises from the fact that central banks have to invest in low-risk liquid assets. This cost is defined as the difference between the income earned on the stock of reserves and the marginal cost of an alternative investment. Thus, a high opportunity cost will reduce the level of reserves, involving as it does a less profitable investment for the central bank.

Accordingly, the most relevant indicators for determining sovereign country risk are the following:

1. **Reserves / GDP:** As an economy grows, it will require a greater stock of international reserves to meet demand from the different sectors.
2. **Reserves / current- or following-year debt repayments:** This indicator suffices for countries that have neither a current-account deficit nor an over-valued currency, so the need for international liquidity is limited to external debt repayments.
3. **Reserves / overall external debt service:** This is a useful measure when a country needs to look to the international market to finance

Analysis of the economy's external vulnerability focuses on indicators that measure the effect of external borrowing in terms of both the level of such borrowing and the short-term payment obligations it generates.

Holding international reserves has 'opportunity costs' and benefits that increase directly with the level of reserves.

⁴⁶ International Monetary Fund "Three Current Policy Issues in Developing Countries," World Economic Outlook, September 2003.

Colombia's level of reserves relative to the size of the economy, as measured by GDP, is lower than Chile's and Peru's but higher than Brazil's and Mexico's.

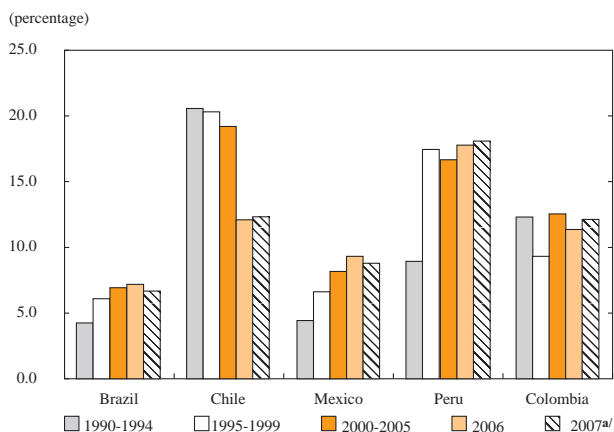
payments not only of principal but also of interest on the total debt.

4. Reserves / (debt repayments + current-account deficit): This ratio indicates the external vulnerability of countries that have large principal and interest payment obligations and a current-account deficit and, in the event of world markets closing, would want to make a gradual adjustment, without sharp cuts in spending and output.
5. Other reserves indicators: Vulnerability indicators are supplemented by measures that quantify the size of reserves relative to other economic variables: i) the traditional ratio of reserves to imports; and ii) the ratio of reserves to the broad monetary aggregate (M3).

As explained earlier, in recent years the Bank's interventions in the currency market have been directed toward accumulating reserves and reducing exchange-rate volatility. This strategy has resulted in net international reserves amounting to \$20,409 m as of May 2007. As illustrated below, this level of net reserves, considered in terms of the vulnerabilities facing the Colombian economy, is no higher than net reserves in other countries of the region.

Graph 58

International Reserves / GDP



a/ As forecast by the IMF and *The Economist*.
Source: IMF.

In the first place, Colombia's level of reserves relative to the size of the economy, as measured by GDP, is lower than Chile's and Peru's but higher than Brazil's and Mexico's (Graph 58). And, although Colombian reserves have expanded strongly in recent years, the vulnerability ratio of reserves to GDP has risen only marginally. For growth of GDP in dollars has partly offset the expansion in reserves. GDP measured in current dollars⁴⁷ has grown significantly because of the peso's appreciation and the strength of the economy.⁴⁸

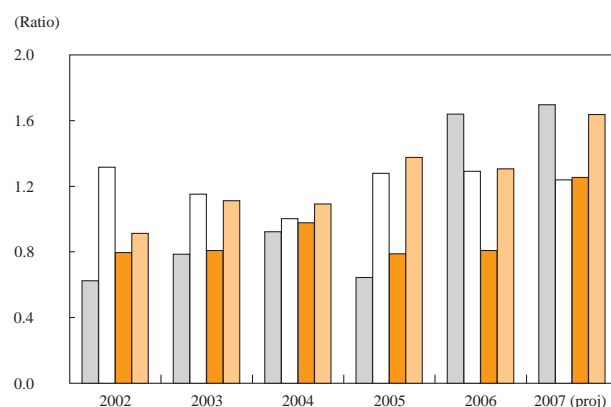
⁴⁷ GDP has to be measured in dollars, at current prices, in order to be expressed in the same units as the international reserves.

⁴⁸ In a scenario of local-currency appreciation, GDP in dollars grows more than GDP in pesos. For example, if the economy does not grow during a given period and the peso appreciates, GDP in dollars will show positive growth, because the same level of output in pesos is equal to a higher amount of output measured in dollars.

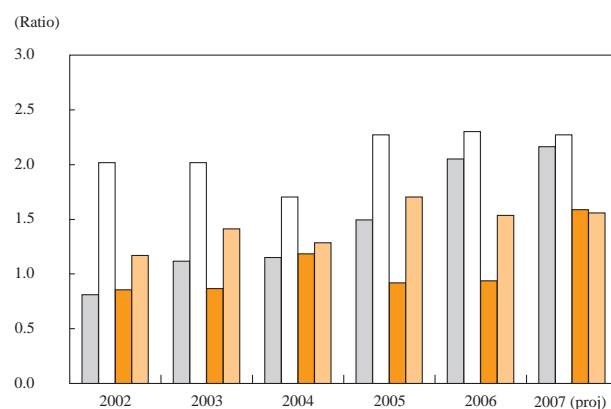
Other international liquidity indicators, such as reserves expressed as months of goods imports, show that Colombia has been in a better position than Chile, Mexico and Brazil since 2004 (Graph 59). But this indicator fell between 2004 and 2006 and has not yet recovered this year despite strong growth in reserves. The reason for this behavior is that reserves have been growing more slowly than imports. Over 2006 and so far this year goods imports have grown by about 24%, while reserves accumulation for 2006 was 4% and so far this year 21.3%.

Chile and Mexico have tended to show higher ratios of reserves to external-debt repayments and reserves to external-debt service than Colombia; and Brazil began to overtake Colombia in 2006. At this juncture, one of the most important indicators of external vulnerability to consider is the ratio of reserves to external-debt repayments plus current-account deficit, which should be kept above one. As shown by Graph 60, in the period 2002-2006 Chile and Mexico met the criterion of a higher-than-one ratio from 2003 on, and Brazil did so in

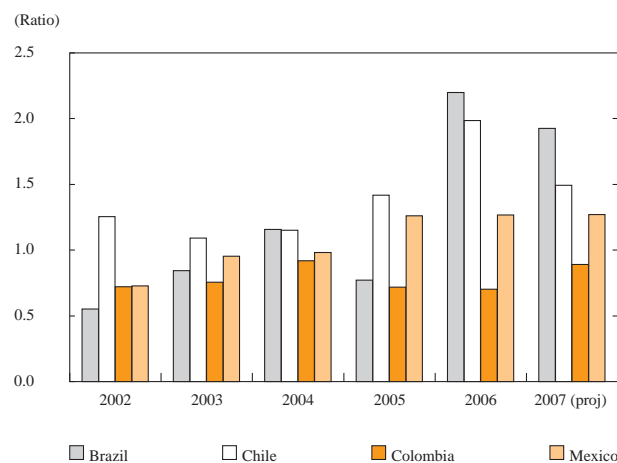
A. International Reserves / Debt Repayments



B. International Reserves / Foreign Debt Service

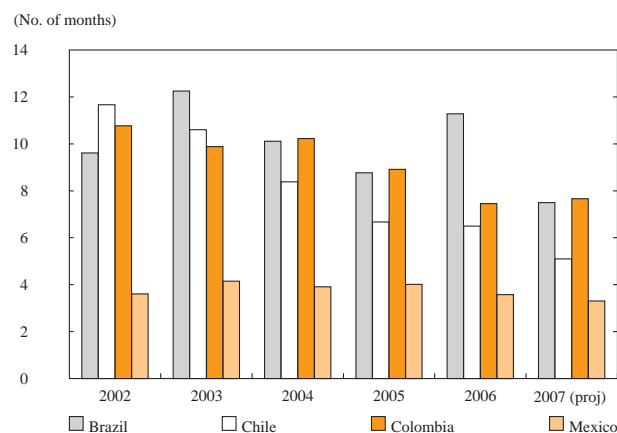


C. International Reserves / (Debt Repayments + Current-Account Deficit)



Graph 59

International Reserves As Months of Goods Imports



(proj) projected.
Source: Central banks, IMF, *The Economist* and Banco de la República.

(proj) projected.
Source: Central banks, IMF, *The Economist* and Banco de la República.

The government's prepayment of public foreign debt during the past two years, as part of its policy of replacing foreign debt by domestic borrowing, has had a positive effect on the country's vulnerability ratios.

2004 and in 2006. Colombia's ratio has remained below one, indicating external vulnerability.

Table 35 presents movements in the above-described ratios for Colombia from 2002 to May 2007. In groups A and B, the ratios that take into account debt repayments and external liquidity showed substantial improvement up to 2004, though some of them (net reserves/debt repayments + current-account deficit) were still under one at the end of 2005.

The government's prepayment of public foreign debt during the past two years, as part of its policy of replacing foreign debt by domestic borrowing, has had a positive effect on the country's vulnerability ratios. Note that the ratios that take into account following-year debt repayments and debt servicing weakened in 2004 but have improved since 2005, rising to levels higher than one. In contrast, the ratios taking into account current-year debt repayments and debt servicing have been negatively affected. Nevertheless, foreign-debt prepayments have had favorable repercussions on the profile and future trajectory of debt repayments, so that estimates for 2007 show significant improvement in said ratios under groups A and B.

Section C of Table 35 shows that the reserves have continued to represent over seven months' imports of goods, a higher level than international

Table 35

International Reserves Indicators

	2002	2003	2004	2005	2006	2007 ^{a/} (e)
Balance:						
Net international reserves-NIR (millions of dollars)	10,841	10,916	13,536	14,947	15,436	20,409
Indicators:						
A. Foreign-debt repayment indicator						
Foreign-debt repayments (millions of dollars)	10,146	10,173	8,918	13,329	13,617	9,862
NIR/current-year foreign-debt repayments	1.07	1.07	1.52	1.12	1.13	2.07
NIR/following-year foreign-debt repayments	1.07	1.22	1.02	1.10	1.57	1.64
B. Adequate external-liquidity position						
NIR/current-year debt service	0.86	0.87	1.19	0.92	0.94	1.60
NIR/following-year debt service	0.86	0.96	0.83	0.91	1.21	1.30
NIR/(current-yr. debt repayments + current-yr. currnt.-acct. def.)	0.94	0.98	1.38	0.98	0.93	1.24
NIR/(following-yr. debt repayments + following-yr. currnt.-acct. def.)	0.97	1.11	0.89	0.90	0.94	1.06
C. Other international reserves indicators						
NIR as months of goods imports ^{b/}	10.8	9.9	10.2	8.9	7.5	8.7
NIR/M3 (Percentage) ^{c/}	41.9	36.5	33.3	30.3	26.3	30.3
NIR/GDP ^{d/}	13.4	13.7	13.8	12.2	11.4	12.2

(e) Estimated.

a/ Balance of international reserves as of May 2007.

b/ Value of goods imports refers to the monthly average between January and March 2007 DANE.

c/ Balance of broad M3 as of May 2007, monetary closing.

d/ Estimated GDP value in dollars for 2007.

Source: Calculations by Banco de la República.

standards for this indicator. Note also the increase in the balance of reserves to June of this year both as a ratio of annual GDP (from 11.4% in 2006 to 12.2% in 2007) and relative to the size of deposits in the financial system (M3).

B. International Reserves: Current Level , and Management Criteria

In June 2007 net international reserves stood at \$19,994.4 m, up by \$4,558.6 m from December 2006.⁴⁹ Over this period: reserves worth \$4,527.4 m were bought through discretionary interventions; volatility-control options were used to buy \$374.5 m and sell \$176.5 m of foreign exchange; and a net return of \$406.7 m was obtained on investments of reserves.

The biggest component of the reserves is the investment tranche, representing 94.2%, or \$18,833.09 m, of the total.⁵⁰ The remaining balance is divided between: i) reserves positions at the International Monetary Fund and the Latin American Reserves Fund, \$781.3 m; ii) Special Drawing Rights, \$206.6 m; iii) gold, Andean pesos, and positive balances under international agreements, \$172.09 m; and iv) demand deposits and cash on hand, \$6.22 m. Short-term external liabilities stood at \$4.9 m (Table 36).

The Banco de la República's criteria for managing the international reserves are, in order of importance, security, liquidity and profitability. On these criteria, to ensure that the country's external payment obligations are met the reserves are invested in financial assets that have a large secondary market, except for a portion that is held as working capital for immediate availability.

In accordance with the above guidelines, a part of the international reserves' investment tranche is administered by overseas fund management firms, chosen through a rigorous selection process that evaluates their experience in the business, the size of the funds they administer, and the quality of their investment and risk management. As mentioned in previous reports, these firms have improved the yield on reserves through specialized management.

⁴⁹ Net reserves are equal to total international reserves, or gross reserves, less the Banco de la República's short-term external liabilities. These liabilities consist of foreign-currency sight obligations owed to non-resident agents. Unless otherwise indicated, all figures in this document are provisional figures as of the end of June 2007 and may not coincide, because of rounding.

⁵⁰ The investment tranche refers to the funds of the internally administered portfolios and the delegated portfolios, plus the amount set aside as working capital.

The ratios that take into account following-year debt repayments and debt servicing weakened in 2004 but have improved since 2005, rising to levels higher than one.

In June 2007 net international reserves stood at \$19,994.4 m, up by \$4,558.6 m from December 2006.

Composition of International Reserves

Description	Dec-06		Jun-06		Jun-07	
	Millions of dollars	%	Millions of dollars	%	Millions of dollars	%
Cash	2.50	0.02	3.0	0.02	6.2	0.03
Cash on hand	2.13	0.0	2.5	0.02	2.8	0.01
Demand deposits	0.37	0.0	0.5	0.00	3.5	0.02
Investments	14,249.30	92.3	13,345.4	92.28	18,833.1	94.19
Direct portfolio	6,795.01	44.0	6,088.6	42.10	10,615.9	53.09
Investment portfolio	5,974.61		5,407.1		8,416.7	
Working capital	820.41		681.5		2,199.1	
Portfolio under administration	7,454.29	48.3	7,256.9	50.18	8,217.2	41.10
Gold	140.96	0.9	133.3	0.92	143.5	0.72
On hand	0.00	0.0	0.0	0.0	0.0	0.0
Under custody	140.96	0.9	133.3	0.92	143.5	0.72
International Monetary Fund	626.80	4.1	609.3	4.21	639.8	3.20
SDR	196.84	1.3	186.5	1.29	206.6	1.03
Reserve position	429.96	2.8	422.8	2.92	433.2	2.17
Latin American Reserves Fund	351.22	2.3	351.2	2.43	368.2	1.84
Contributions	331.22	2.1	331.2	2.29	348.2	1.74
Andean pesos	20.00	0.1	20.0	0.14	20.0	0.10
International agreements	69.45	0.0	22.8	0.00	8.6	0.00
Total gross reserves	15,440.23	100.0	14,465.0	100.03	19,999.3	100.02
Short-term liabilities	4.42	0.0	3.8	0.03	4.9	0.0
International agreements	0.00	0.0	0.0	0.0	0.0	0.0
Overseas banks	0.00	0.0	0.0	0.0	0.0	0.0
Latin American Reserve Fund	0.00	0.0	0.0	0.0	0.0	0.0
Securities payable, purchase, investments	0.00	0.0	0.0	0.0	0.0	0.0
Accrued interest on liabilities	4.42	0.0	3.8	0.0	4.9	0.0
Total net reserves	15,435.82	100.0	14,461.2	100.00	19,994.4	100.00

Source: Banco de la República.

The Banco de la República has directly managed \$10,615.86 m (or 56.4%) of the investment tranche, including a working capital of \$2,199.12 m. The remaining 43.6% (\$8,217.22 m) has been administered by the specialized firms: Barclays Global Investors, Goldman Sachs Asset Management, BlackRock Financial, Wellington Management and Pacific Investment Management Co.

The investment portfolio is mainly concentrated in the sovereign sector, including short- and long-term assets and representing 52.90% of the portfolio. The remaining portion is distributed among other sectors, as follows: banking sector 29.00%, corporate sector 14.98%, supranational sector

2.09%, and repurchase agreements at the Federal Reserve Bank of New York 1.03%. As of June 2007 the distribution by credit quality according to the ratings of specialized agencies⁵¹ was as follows: 52.65% "P-1,"⁵² 39.76% "AAA", 2.85% "AA", 3.66% "A", 1.03% Federal Reserve Bank of New York repurchase agreements, and 0.05% BIS. The distribution of credit risk reflects the strict security criterion applied in managing the international reserves.

Table 37 shows returns on the various portfolios making up the investment tranche of the international reserves.

The yield earned so far in 2007 on the investment tranche of reserves has been slightly lower than in the first half of last year. As in 2006, the portfolio has continued to benefit from higher interest rates than in previous years, particularly since the US Federal Reserve has kept the federal funds rate at 5.25%, the benchmark for a high proportion of the reserves invested in short-term securities (Graph 61). This component has more than made up for the effect of the fall in bond prices caused by higher yield rates on these securities (there is an inverse relationship between bond prices and yields). Behavior in the foreign-exchange market was mixed: the euro rose by 2.6% against the US dollar, while the yen weakened by 3.45%. But given the

⁵¹ Standard & Poor's, Moody's and Fitch Ratings.

⁵² In the short-term ratings scale, "P-1" is the best.

Table 37

Return on International -Reserves Portfolios
(Percentage)

Manager	Return on portfolios					
	Dec. 31/2006-jun. 30/2007			Jun. 30/2006-jun. 30/2007		
	Portfolio	Benchmark index	Difference	Portfolio	Benchmark index	Difference
Banco de la República ^{a/}	2.19	2.18	0.01	5.08	5.14	(0.06)
Barclays Global Investors	2.41	1.96	0.45	5.52	5.03	0.48
BlackRock Financial	1.95	2.25	(0.29)	4.79	5.16	(0.37)
Goldman Sachs Asset Management	2.17	2.25	(0.07)	5.13	5.16	(0.03)
Pacific Investment Management Co.	1.63	1.96	(0.33)	4.38	5.03	(0.65)
Wellington Management	2.11	2.25	(0.14)	5.21	5.16	0.05
Working capital	2.65			5.39		

Note: Provisional figures subject to revision.

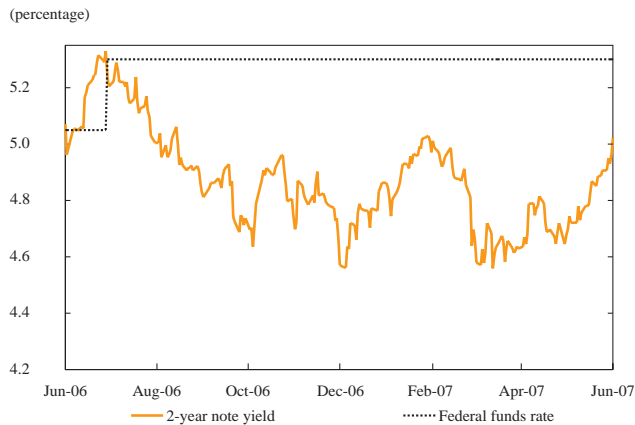
a/ Excluding working capital

Source: Banco de la República.

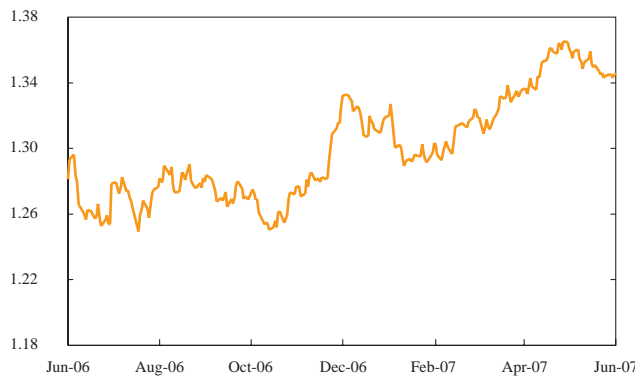
Graph 61

Movements in US Treasury Interest Rate and in the Dollar against the Yen and Euro

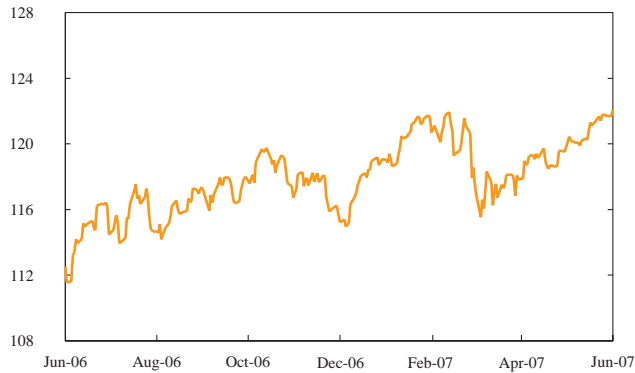
A. Movements in 2-Year Treasury Note Yield and the Federal Funds Rate, 2006-2007^{a/}



B. Euro against The Dollar, 2006-2007^{b/}



C. Yen Against the Dollar 2006-2007^{c/}



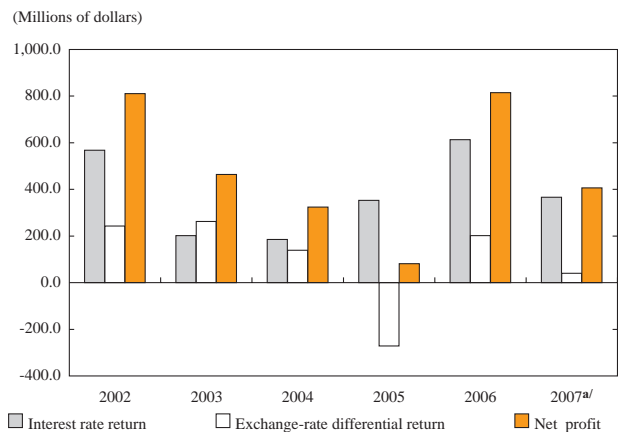
a/ The inverse relationship between price and rate of return means that, as the rate of return rises, the price of a fixed-income asset falls.
 b/ The direct quote euro/dollar means that the euro loses value as it approaches zero.
 c/ The indirect quote dollar/yen means that the yen loses value as it moves away from zero.
 Source: Bloomberg L.P.

portfolio's higher proportion of euros than yen, the net yield effect has been positive. The reserves have benefited from a 2.10% rise in the price of gold since January 2007.

Net yield on total international reserves was \$406.7 m to June 30, 2007. Gains from interest-rate movements and exchange-rate differentials together came to \$157.3 m, and accrued interest yield amounted to \$2494 m (Graph 62).

Graph 62

Returns on International Reserves, 2002-2007^{a/}



a/ To June 30, 2007.
 Source: Banco de la República.

VII. The Banco de la República's Financial Situation

The peso's appreciation against the dollar so far this year has reduced the international reserves' value expressed in pesos.

A. Results to June 2007

In the first half of 2007 Banco de la República obtained profits of 371.9 bn pesos, the net result of income of 1,207.0 bn pesos and expenses of 835.1 bn pesos. Profits were down by 41.8% (267.4 bn pesos) on the same period the year before (Table 38).

Income decreased by 7.2%, largely because of the peso's appreciation against the dollar, which lowered the peso value of income from the international reserves, and because of lower valuation gains as a result of appreciation in the euro and yen against the dollar.⁵³ The major expenses were valuation losses on

⁵³ The euro appreciated against the dollar by 8.4% in the first half of 2006 and by 2.4% in the first half of 2007.

Table 38

Banco de la República's Summary Income Statement
(Billions of Pesos)

	Dec. 2006	Jun. 2006	Jun. 2007	Absolute annual change
	A	B	C	C - B
Income	2,729.5	1,300.6	1,207.0	(93.6)
Monetary	2,570.0	1,218.5	1,143.0	(75.4)
Corporate	159.5	82.1	63.9	(18.1)
Expenditures	1,105.6	661.2	835.1	173.9
Monetary	605.7	347.9	589.5	241.6
Corporate	312.4	138.8	149.5	10.7
Pensioners	187.5	174.5	96.1	(78.4)
Results for the period	1,624.0	639.3	371.9	(267.4)

Source: Banco de la República.

The major expenses were valuation losses on foreign-currency assets other than international reserves, and market-rate interest paid on higher deposits at the Bank from the government and financial institutions.

foreign-currency assets other than international reserves, and market-rate interest paid on higher deposits at the Bank from the government and financial institutions (Table 39).

Exchange-rate differences on foreign-currency accounts other than international reserves produced a net negative result to June 2007 of 109.1 bn pesos, in particular because of losses on contributions to international organizations from the peso's appreciation against the dollar.

Other major income items were: i) interest received on transitory securities purchases (136.0 bn pesos), thanks to the rise in the Bank's intervention rates, and ii) valuation gains on the portfolio of TES securities used for monetary regulation.

Interest and monetary-returns expenses were up by 66.1% (140.9 bn pesos) on the year before because of: i) activation of interest-bearing deposits as an instrument of monetary contraction from April on, and ii) higher market rates paid on government deposits.

Corporate expenses (149.5 bn pesos) rose by 10.7 bn pesos year-on-year, or 7.7% nominally and 1.6% in real terms. This behavior is largely attributable to collective-bargaining pay increases, higher contribution payments to the Financial Superintendency, and to the fact that in 2006 cultural programs in the first half of the year were delayed by application of the Election Guarantees Law.

B. Banco de la República's Financial Structure

This section explains changes in the Banco de la República's assets, liabilities and equity at June 30, 2007 relative to December 31, 2006 (Table 40).

1. Assets

The Banco de la República's assets amounted to 52,831 bn pesos at June 30, up by 3,264 bn pesos (or 6.6%) from 46,617.0 bn pesos at December 2006. The main changes in the accounts are explained as follows:

- International reserves: At closing in June 2007 gross foreign reserves, valued at market prices, stood at 39,211 bn pesos (\$19,999 m), having

The Banco de la República's assets amounted to 52,831 bn pesos at June 30, up by 3,264 bn pesos (or 6.6%) on December 2006.

Banco de la República's Income Statement, December 2006 to June 2007
(Billions Of Pesos)

	Dec. 06	Jun. 06	Jun. 07	Annual change	
				Percentage (B / A)	Absolute (B -A)
		A	B		
1. Income	2,729.5	1,300.6	1,207.0	(7.2)	(93.6)
1.1 Monetary income	2,570.0	1,218.5	1,143.0	(6.2)	(75.4)
1.1.1 Interest and returns	2,419.3	1,007.1	1,036.2	2.9	29.1
International reserves	1,922.2	934.0	878.9	(5.9)	(55.1)
Liquidity operations-repos & transitory support	304.1	112.1	136.0	21.2	23.8
Valuation gains/losses on monetary-expansion TES operations	172.4	(47.8)	13.7	128.7	61.5
Credit portfolio, valuation gains/losses on other securities ^{a/}	20.7	8.8	7.7	(12.5)	(1.1)
1.1.2 Exchange differences	25.9	159.0	62.4	(60.8)	(96.6)
1.1.3 Coins	76.2	25.6	26.7	4.3	1.1
1.1.4 Other ^{b/}	48.6	26.8	17.8	(33.7)	(9.0)
1.2 Corporate income	159.5	82.1	63.9	(22.1)	(18.1)
2. Expenditures	1,105.6	661.2	835.1	26.3	173.9
2.1 Monetary expenditures	605.7	347.9	589.5	69.4	241.6
2.1.1 Interest and returns	430.1	213.0	353.9	66.1	140.9
Deposit-account reserve requirements	117.0	55.1	60.6	10.0	5.5
Deposit accounts, Finance Ministry Treasury Office	295.9	148.7	233.3	56.9	84.6
Deposit of monetary contraction	0.0	0.0	51.0	n, a,	51.0
International-reserves management expenses	17.2	9.3	9.1	(2.3)	(0.2)
2.1.2 Exchange differences	37.0	69.0	171.5	148.6	102.5
2.1.3 Cost of issuing and distributing bills & coins	128.4	62.6	58.4	(6.8)	(4.2)
2.1.4 Other ^{c/}	10.2	3.3	5.6	73.1	2.4
2.2 Corporate expenditures	312.4	138.8	149.5	7.7	10.7
2.2.1 Personnel expenses	184.7	91.6	98.2	7.2	6.6
2.2.2 Overhead	44.2	18.6	19.1	2.4	0.4
2.2.3 Taxes	8.1	4.4	4.0	(8.1)	(0.4)
2.2.4 Insurance	7.3	3.7	3.4	(7.9)	(0.3)
2.2.5 Contributions and membership dues	5.3	2.9	3.2	12.5	0.4
2.2.6 Cultural expenditures	8.2	1.9	3.6	94.2	1.8
2.2.7 Depreciation, provisions, debt repayments & other ^{d/}	54.5	15.8	18.0	13.9	2.2
2.3 Pensioners' expenses^{e/}	187.5	174.5	96.1	(44.9)	(78.4)
3. Operating result (1 - 2)	1,624.0	639.3	371.9	(41.8)	(267.4)

n.a. Not applicable.

a/ External and government credit lines, valuation gains/losses on non-monetary gold, returns on other operations, Law 546 TES and valuation gains/losses on other securities.

b/ Other, operating and non-operating monetary income.

c/ Portfolio management, precious-metals refining, and other monetary expenditures.

d/ Including other operating and non-operating corporate expenses

e/ Return on funds, less expenses.

Source: Banco de la República.

Banco de la República's Balance Sheet, December 2006 to June 2007
(Billions of Pesos)

	December 2006		June 2007	
	Balance	% share	Balance	% share
Assets	49,567	100.0	52,831	100.0
Gross international reserves	34,568	69.7	39,211	74.2
Contributions at international organizations	2,802	5.7	2,544	4.8
Investments	2,473	5.0	1,534	2.9
Public sector, consolidated debt	0	0.0	0	0.0
Public-sector, monetary control	2,405	4.9	1,470	2.8
Capitalization bonds public banks and others	68	0.1	64	0.1
Credit portfolio	1	0.0	1	0.0
Public sector, national government	2	0.0	2	0.0
Provisions	(1)	0.0	(1)	0.0
Resale agreements: transitory liquidity support	6,636	13.4	6,391	12.1
Accounts receivable	39	0.1	29	0.1
Other net assets	3,048	6.1	3,121	5.9
Liabilities and equity	49,567	100.0	52,831	100.0
Liabilities	32,921	66.4	42,273	80.0
Foreign-currency liabilities affecting international reserves	11	0.0	10	0.0
Monetary base	27,032	54.5	26,611	50.4
Bills in circulation	23,925	48.3	21,756	41.2
Treasury coin	538	1.1	562	1.1
Banks' reserve requirement deposits	2,381	4.8	4,025	7.6
Checking-account deposits rest of financial sector	188	0.4	267	0.5
Interest-bearing deposits not constituting reserve requirements			1,160	2.2
Deposits from external borrowing and foreign-capital portfolio investment			1,113	2.1
Other deposits	111	0.2	106	0.2
National government: Ministry of Finance Treasury Office	2,548	5.1	10,274	19.4
Obligations to international organizations	2,243	4.5	2,021	3.8
Accounts payable	60	0.1	59	0.1
Other liabilities	915	1.8	919	1.7
Total equity	16,647	33.6	10,558	20.0
Capital	13	0.0	13	0.0
Reservs	1,398	2.8	1,832	3.5
Capital surplus	12,567	25.4	7,298	13.8
Special Foreign-Exchange Account settlement	453	0.9	453	0.9
Foreign-exchange adjustment from 1993 on and surplus	12,023	24.3	6,749	12.8
Other	91	0.2	95	0.2
Property valuation gains/losses (works of art, cultural artifacts, real estate)	1,045	2.1	1,044	2.0
Results	1,624	3.3	372	0.7
Profit/loss for previous periods	0	0.0	0	0.0
Profit/loss for the period	1,624	3.3	372	0.7

Source: Banco de la República,

increased in pesos by 4,643 bn over the first half of the year. The increase is largely explained by: i) higher reserves through net foreign-exchange purchases in the first half (10,352 bn pesos); ii) exchange-rate adjustment, resulting from the peso's appreciation against the dollar, which reduced the balance in pesos of gross international reserves by 5,273 bn pesos; iii) transfer by the Banco de la República to the government of profits in dollars amounting to 1,186 bn pesos; iv) interest and valuation gains which increased reserves by 720 bn pesos; v) exchange-rate differentials between reserve currencies and the dollar, resulting in gains of 93 bn pesos; and vi) other income, 66 bn pesos.

Reserves increased in pesos by 4,643 bn over the first half of the year.

- Repo operations for providing transitory liquidity showed a balance of 6,391 bn pesos at the end of June 2007, a decrease of 245 bn pesos on a year earlier.
- The local-currency investment portfolio (valued at market prices) stood at 1,543 bn pesos at June 30, 2007, down by 939 bn pesos from the December before. The fall is mainly attributable to: i) net sales of TES amounting to 596 bn pesos in the first half; ii) principal and coupon payments of 274 bn pesos and 77 bn pesos, respectively; and iii) valuation losses of 64 bn pesos in the first half resulting from higher TES negotiating rates.

2. Liabilities

At June 30, 2007 liabilities amounted to 42,273 bn pesos, up by 9,353 bn pesos (or 28.4%) on December 2006. The main sources of change were:

- Government deposits at the Banco de la República, made through the Finance Ministry's Treasury Office, showed a balance of 10,274 bn pesos at closing in June, up by 7,726 bn pesos (or 303.3%) on December 2006.
- The monetary base stood at 26,622 bn pesos at the end of June, a decline of 421 bn pesos from its level in December 2006.

3. Equity

The Bank's equity amounted to 10,558 bn pesos in June, down by 6,089 bn pesos on December 2006, mainly because of a decrease of 5,273 bn pesos (or 43.9%) in foreign-exchange adjustment, resulting from the peso's first-half

At June 30, 2007 liabilities amounted to 42,273 bn pesos, up by 9,353 bn pesos (or 28.4%) on December 2006.

appreciation against the dollar, which reduced the peso value of the international reserves.

C. 2007 PROFIT FORECAST

Profits for 2007 are projected at 997 bn pesos, the net result of income of 2,568 bn pesos and expenses of 1,571 bn pesos. The 2007 forecast is lower than last year's actual profits by 627 bn pesos, owing to a rise of 465 bn pesos in expenses and a fall of 162 bn pesos in income (Table 41). This result mostly reflects the cost of monetary sterilization of reserves accumulation. Sterilization was carried out by means of higher government deposits at the Banco, the opening of interest-bearing deposits not constituting required reserves, sale of TES securities from the Bank's portfolio, and reduction of expansion Repos.

Table 41

Banco de la República's Income Statement, 2006-2007
(Billions Of Pesos)

	December 2006	Projected 2007	Change	
			% (B/A)	Absolute (B - A)
	(A)	(B)		
I. Total income	2,729.5	2,567.8	(5.9)	(161.7)
1. Operating income	2,687.5	2,557.4	(4.8)	(130.0)
Interest and returns	2,419.3	2,256.2	(6.7)	(163.1)
International reserves	1,922.2	1,885.2	(1.9)	(36.9)
Valuation gains/loss on monetary-expansion TES operations	172.4	66.5	(61.4)	(105.9)
Liquidity operations: repos and transitory support	304.1	296.0	(2.7)	(8.1)
Other ^{a/}	20.7	8.5	(58.8)	(12.1)
Fees	139.4	105.4	(24.4)	(34.0)
Exchange differences	25.9	48.5	87.6	22.7
Other ^{b/}	102.9	147.3	43.1	44.4
2. Non-operating income	42.1	10.4	(75.3)	(31.7)
II. Total expenditures	1,105.6	1,570.7	42.1	465.1
1. Operating expenditures	1,102.3	1,564.4	41.9	462.1
Interest and returns	430.1	728.5	69.4	298.3
Reserve requirements, and Finance Ministry Treasury Office deposit accounts	412.9	653.3	58.2	240.4
Monetary-contraction deposits	0.0	54.5	n.a.	54.5
International reserves management expenses	17.2	20.7	20.0	3.4
Exchange differences	37.0	101.0	172.9	64.0
Cost of issuing and distributing bills and coins	128.4	183.4	42.9	55.0
Personnel costs	184.7	199.1	7.8	14.4
Pensioners' expenses	187.5	222.6	18.7	35.1
Overhead	44.2	46.7	5.7	2.5
Other ^{c/}	90.4	83.1	(8.1)	(7.3)
2. Non-operating expenditures	3.3	6.4	91.0	3.0
III. Profit or loss for the year	1,624.0	997.1	(38.6)	(626.8)

n.a. Not applicable.

a/ External lines of credit, national government, valuation gains/losses on non-monetary gold, returns on other operations, Law 546 TES and valuation gains/losses on other securities.

b/ Coins and other monetary and corporate operating income.

c/ Taxes, insurance, contributions and membership dues, cultural expenditures, depreciation, provisions, debt repayments and other monetary and corporate operating expenditures.

Source: Banco de la República.

An explanation follows of the more relevant differences between the profit forecast for 2007 and profits reported for 2006:

- Interest expenses will be 298 bn pesos higher, with 240 bn pesos of this amount basically representing higher payments on government deposits at the Bank and 54 bn pesos on monetary-contraction deposits from financial institutions.
- Interest income will be 163 bn pesos lower, mainly because of: i) a fall of 106 bn pesos in interest on the Bank's TES portfolio, as a result of a lower portfolio balance and lower TES prices; ii) a fall of 37 bn pesos in returns on international reserves, attributable to the peso's appreciation, which will counteract the reserves' higher returns in dollars; and iii) a fall of 8 bn pesos in income from expansion Repos, because of their smaller balance.
- Fee income will be lower by 34 bn pesos, because of the lower rates for administration of TES securities, in effect since July 2006, and the lower volume of operations carried out through the Electronic Trading System (SEN).
- Lastly, net pension spending will be higher by 35 bn pesos, as a result of a fall of 57 bn pesos in returns from the portfolio built with pension liability funds, and a decrease of 22 bn pesos in provisions for pension liabilities.

The profit and loss projections are sensitive to possible changes over the rest of the year in: i) the exchange rates of reserve-portfolio currencies, ii) the behavior of the peso-dollar exchange rate, iii) TES trading rates, and iv) the level of international reserves.

Given that the main determinant for meeting the profit forecast is return on foreign reserves, movement in reserve currencies against the dollar is a major variable to be considered in distribution of the Bank's profits. Under the Banco de la República's statutes, the exchange-rate behavior of reserve currencies may make it necessary to create, among other things, a currency-fluctuation reserve.⁵⁴

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Given that the main determinant for meeting the profit forecast is return on foreign reserves, movement in reserve currencies against the dollar is a major variable to be considered in distribution of the Bank's profit.

⁵⁴ Funds set aside to cover possible losses from fluctuations in the dollar against the other currencies of the international reserves.