



# INFLATION REPORT

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December 2009

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\* Submitted by the Technical Team for a meeting of the Board of Directors on January 29, 2010

Banco de la República  
Central Bank of Colombia  
Bogotá, D. C., Colombia  
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# THE INFLATION TARGETING STRATEGY IN COLOMBIA

## OBJECTIVES

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

## HORIZON AND IMPLEMENTATION

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

## THE DECISION-MAKING PROCESS

Monetary-policy decisions are based on an analysis of the current state of the economy and its prospects for the future, and on an assessment of the forecast for inflation in light of the targets. If the assessment suggests, with enough certainty, that inflation will deviate from its target under current monetary-policy conditions and the deviation would not be due to temporary shocks, the BDBR modifies its policy stance. For the most part, this is accomplished by changing the intervention interest rate (charged by the Central Bank of Colombia on short-term liquidity operations).

## COMMUNICATION AND TRANSPARENCY

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

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# ASSESSMENT OF INFLATION AND POLICY DECISIONS

Inflation during the past quarter continued the downward trend registered throughout 2009, ending the year at 2%. This is below the target range established for that year (4.5% to 5.5%) and at the floor of the long-term target range for inflation (2% -4%). During the same quarter, a historically high proportion of sectors in the food and non-food categories of the consumer price index (CPI) registered negative monthly inflation.

Last quarter, 62% of the slowdown in annual inflation (-120 basis points [bp]) was due to less of an adjustment in the food CPI, which is the spending group that ended with a negative annual variation (-0.3%). The decline in the annual variation in this group was generalized, with nonperishable foods, beef and beef substitutes contributing the most to this trend. The cost of perishable foods declined as well, but at a slower pace compared to earlier this year.

The non-food CPI (2.9%) also slowed significantly during the past quarter, as did the other core inflation indicators traditionally calculated by Banco de la República. In fact, all the core inflation indicators were within the long-term target range for inflation. Expectations of inflation at different appointed dates, as reflected in surveys or those resulting from government debt paper (TES) showed a similar pattern. At one year, inflation expectations are under 4%. At five and 10 years out, they were within the long-term target range in December, but increased in January to between 4.0% and 4.5%.

Figures on economic activity reflected an absence of demand-pulled inflationary pressures. GDP levels increased during each of the first three quarters of the year; however, the third-quarter increase was less than anticipated in earlier editions of this report. Consumption showed positive annual growth, fueled entirely by government spending. Household consumption did not increase in

annual terms. Investment was meager and declined compared to the level on record for the same period in 2008. The drop in investment would have been greater had it not been for the sharp increase in civil works. The slowdown in exports and imports continued.

Available indicators of supply and demand in the final quarter of 2009 show a continuation in the tendency for the economy to recover slowly. Most of those indicators reflect added quarterly and annual growth; the latter was due, in a number of cases, to the limited amount of activity witnessed a year earlier. Accordingly, the fourth quarter of 2009 is likely to see positive annual economic growth and an annual variation of around 0% in GDP for the year as a whole.

The slow recovery in aggregate demand was accompanied by limited use of the country's productive capacity. Together, these factors contributed to the reduction in inflation during 2009. During the past quarter, the indicators of industrial installed capacity utilization published by Fedesarrollo and ANDI showed levels similar to those on record at the start of the decade, and are well below the highs observed between 2006 and 2007. Factors such as less internal and external demand and the restrictions on trade with Venezuela contributed to this outcome. In this sense, although industrial production is expected to recover in 2010, surplus installed capacity among companies can lead to price stability or low price hikes.

Consumer and business opinion polls continued to reflect substantially higher expectations for economic activity at different time horizons, suggesting the increase may continue into 2010. Similarly, the models used by Banco de la República's technical team forecast between 2% and 4% economic growth in 2010; however, it most likely will be at the bottom of the range.

As for the job market, the supply of labor continued to expand more than the demand for labor, as reflected by the steady rise in the unemployment rate. Employment continued to increase during the moving quarter ended in November 2009 and even accelerated, but there were still more people looking for work. In the end, the result was an increase in the unemployment rate for the thirteen major cities to levels similar to those reported in mid-2006 and more than two percentage points above the low point for the decade, which was in 2007. The job market in 2010 probably will remain loose and wage pressure is likely to be subdued.

The gross portfolio, plus leasing, showed signs of stabilizing towards the end of 2009 and in early 2010, following a steady slowdown in annual growth since they start of 2007. In December and the first two weeks of January, the mortgage portfolio continued to post important gains and consumer lending showed signs of recovery; that is, when the seasonal component is deducted from the portfolio figures. Commercial lending was the type of credit that slowed the most in 2009, partly because of the large bond issues floated

by major companies. All types of lending, with the exception of mortgage loans, grew at positive rates that can be classified as low. This is according to the figures at December and in real terms. At any rate, the total gross loan portfolio (plus corporate bonds) as a portion of GDP is at its highest level for the decade. Moreover, the risk indicators for the total loan portfolio stabilized; specifically, the quality of consumer and mortgage loans improved, while commercial lending deteriorated slightly.

Banco de la República's policy interest rate is still being passed through to market interest rates. The figures for the first fifteen days in January showed interest rates on deposits and on household and commercial lending declined again, although less so than in December 2008. Accordingly, the benchmark rate as it now stands should continue to encourage economic growth in an environment characterized by a healthy financial system.

As for the external environment, global economic activity continued to recover during the fourth quarter of 2009, particularly due to the monetary and fiscal stimuli provided by developed countries and the impulse observed in Asian countries such as China and India. This recovery is reflected in enhanced world trade and in better international commodity prices, which are above their historic average. Consequently, the external context for Colombia in 2010, excluding the Venezuelan market, is more favorable than it was in 2009, thanks to: I) a revival of external demand; II) international prices for our commodities that are above the historic average; and III) an international interest rate at levels that reduce the cost of financing international trade.

Colombian exports to Venezuela feasibly could plunge to historic lows during 2010 if the restrictions on sales to Venezuela continue. The impact of such a shock on the country's economic activity would depend not only on whether or not Colombia's export sector can find new markets, but also on international competition for Colombia products and the recovery in external demand worldwide. At the same time, an increased local supply of these goods will help to keep prices stable or to keep price hikes low.

The models calculated by the Bank's technical team, which are updated with key supply and demand determinants of inflation, suggest that the annual change in the CPI could increase during the first half of 2010, but would slow again towards the end of the year, ending within the long-term target range. This is due to the effect the current bout of El Niño weather might have on prices. As the records show, when this phenomenon is not accompanied by demand-pulled pressures or sudden increases in international prices or in the price of the dollar, the impact on prices is temporary and generally tends to reverse during the final quarter of the year.

The macroeconomic scenario described above was the basis for the decisions taken by the Board of Directors of Banco de la República (BDBR) between November 2009 and January 2010.

On November 23, the BDBR decided, by a majority vote, to lower its intervention interest rate by 50 bp to 3.50%. This decision was motivated by several factors; namely, I) annual inflation that declined faster than expected and, given current expectations, should be within the long-term target range for inflation; II) slower than estimated economic growth, coupled with a portfolio that continued to slow; and III) the drop in trade with Venezuela and the anticipated decline in that country's GDP during 2009 and 2010. Consequently, the 50 bp cut in the intervention rate was intended to bolster economic recovery and to reduce the negative effects of the collapse in trade with Venezuela.

In December 2008 and in January of this year, the BDBR analyzed the international situation once again, as well as the forecasts and performance with respect to inflation and growth. After doing so, it decided to hold the benchmark interest rate steady. The BDBR will continue to monitor these variables carefully and reiterated that future monetary policy will depend on whatever new information becomes available.

Board of Directors  
Banco de la República

# INFLATION REPORT

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# I. INFLATION AND ITS DETERMINANTS

**Consumer inflation declined from 7.7% in 2008 to 2.0% in 2009.** This is largely explained by the drop in food prices and, to a lesser extent, by the non-food CPI, particularly the slowdown in inflation in the price of regulated goods and services.

**All core inflation indicators** slowed last year. The average of the four core inflation indicators ended 2009 at 3.1%, which is quite near the center of the long-term target range for inflation (2% -4%).

**The recovery in economic activity towards the end of 2009** was linked to a revival of domestic demand and to less of an impact from the external crisis. However, the drop in sales to Venezuela prevented that scenario from resulting in better performance by the Colombia economy.

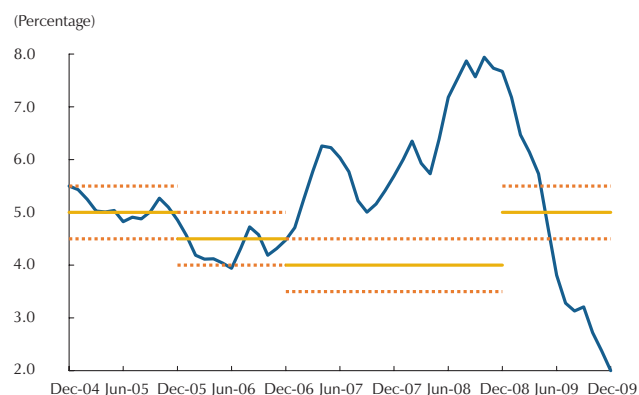
## A. RECENT DEVELOPMENTS IN INFLATION

The sharp drop in annual consumer inflation in Colombia during 2009 was far more than expected. It was uninterrupted, except in September, and applied

to all the major sub-baskets in the consumer price index (CPI). The outcome for December 2009 was 2%, which is less than what was anticipated in the previous edition of this report and below the floor the target range for 2009 (between 4.5% and 5.5%) (Graph 1).

During the second half of the year, annual inflation remained consistent with the long-term target established several years ago by the Board of Directors of Banco de la República (BDBR) (2% and 4%). That range will operate as the official target range for 2010, as announced by the BDBR last October.

Graph 1  
Annual Consumer Inflation



Source: DANE; calculations by Banco de la República.

*Annual inflation during the second half of 2009 remained consistent with the long-term target established several years ago by the Board of Directors of Banco de la República (2% and 4%).*

Consumer inflation in December 2009 is the lowest since 1955, when it was 1.6%. This excellent outcome is due to external and internal factors. Some of them can be interpreted as supply shocks, others as demand shocks.

The global recession was the major external event that contributed to disinflation in Colombia. It implied less demand for oil and other commodities, with a subsequent decline in international prices. Added to this are the restrictions imposed on Colombian exports to Venezuela, particularly during the second semester; those restrictions led to a surplus supply of several agricultural products on the local market, pushing down internal prices.

Internally, weak demand due to the impact of the external crisis also meant less of an adjustment in the price of foods and many other goods and services. Moreover, peso appreciation as of April affected the price of imported goods and their close substitutes. An ample supply of agricultural products also contributed to lower prices for perishable foods, especially as of June. Finally, the country's monetary policy during the first half of 2008 encouraged lower expectations for inflation and contributed to lower adjustments in the price of certain non-tradable goods and services, such as rentals.

The decline in inflation during 2009 was concentrated in food and regulated prices, reversing much of the upward shock observed in 2007 and 2008. About 99% of the increase in annual consumer inflation during 2008 was caused by these two groups; in 2009, these same groups explained 90% of the decline (see Table 1 and the December 2008 Inflation Report, pg. 18).

## **1. Core Inflation**

Although much of the drop in inflation during 2009 was concentrated in food and fuel prices, the other items also contributed in an important way, as demonstrated by the behavior of core inflation. The average of the four core inflation indicators used regularly by Banco de la República declined gradually as of late 2008. The average in December of that year was 5.6%. In June 2009, it was 4.6% and in September it was 4.0%. It closed out the year at 3.1%, which is below the target range for this year and in the midpoint of the long-term target (2% to 4%).

*The decline in inflation during 2009 was concentrated in food and regulated prices, reversing much of the upward shock during 2007 and 2008.*

All the core inflation indicators contributed to the slowdown in inflation last year, ending below the 2009 target for inflation and within the long-term range. Nucleus 20 was the indicator that declined the most, having gone from 7.3% in December 2008 to 4.6% in September and 3.7% in December of this year. Even so, Nucleus 20 ended up being the highest of the core inflation indicators. Moreover, it has been heavily biased to the upside, given the performance of certain items that have a great deal of inflationary inertia (such as eating out, health care and education).

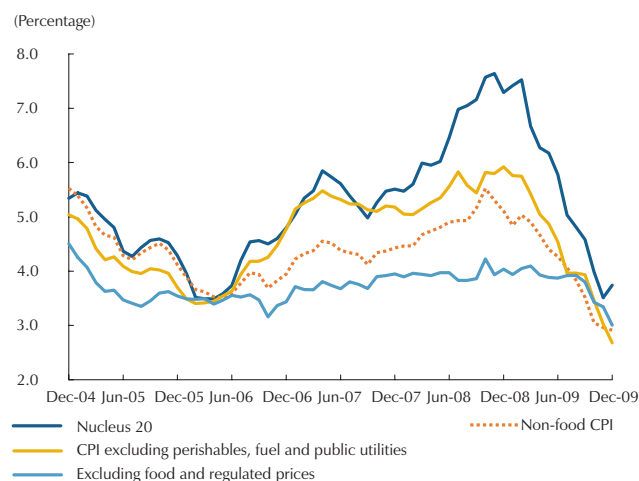
Table 1  
Inflation Breakdown According to Upward Pressure at December 2009

Description	Weight	Annual Growth					Share (%) of Slowdown VI Quarter	Share (%) of Slowdown for the Entire Year
		Dec-08	Mar-09	Jun-09	Sep-09	Dec-09		
<b>Inflación</b>								
<b>Total</b>	100.00	7.67	6.14	3.81	3.21	2.00	100.00	100.00
<b>Excluding food</b>	71.79	5.11	4.90	4.27	3.52	2.91	37.76	29.29
Tradables	26.00	2.37	2.45	2.78	2.68	1.36	29.88	4.91
Non-tradables	30.52	5.24	5.36	4.73	4.76	4.41	9.30	4.77
Regulated Items	15.26	9.45	8.11	5.85	2.47	2.58	(1.42)	19.61
<b>Food</b>	28.21	13.17	8.67	2.81	2.23	(0.31)	62.24	70.71
Vegetables, fruits, tubers and milk	5.12	21.94	12.28	(3.68)	(3.40)	(4.24)	3.40	24.72
Cereals, oils and others	8.03	19.02	12.89	5.29	0.91	(5.27)	38.99	35.94
Eating out and others	11.59	7.27	6.71	5.99	5.74	5.02	6.57	4.81
Beef and beef substitutes	3.47	6.45	4.17	4.56	3.11	(1.76)	13.28	5.25

Source: DANE; calculations by Banco de la República.

The non-food CPI ended the year at 2.9%. This is 219 basis points (bp) below the rate on record for December 2009 and 61 bp less than in September 2009. There was a similar reduction in the CPI excluding perishable foods, fuel and public utilities, which posted an annual variation of 2.7% in December. The lowest reductions were in the CPI excluding food and regulated prices; its annual variation fluctuated around 4% during the first three quarters of the year and did not decline until the fourth quarter, when it went to 3.0% in December. This is the lowest annual variation on record from the time information for this indicator first became available (1983) (Graph 2).

Graph 2  
Annual Core Inflation Indicators



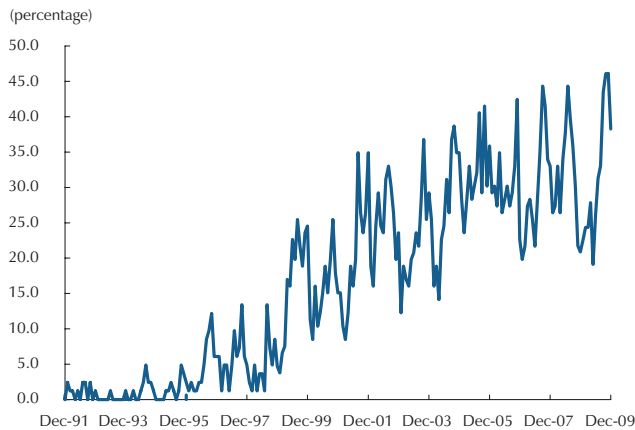
Source: DANE; calculations by Banco de la República.

The added downside flexibility in non-food prices during 2009 is a fact worth noting.

As illustrated in Graph 3, there were monthly price reductions in more than 45% of the items in the non-food CPI between the third and fourth quarters. Except on two previous occasions (in 2007 and 2008), there have never been so many items to decline in price at the same time.

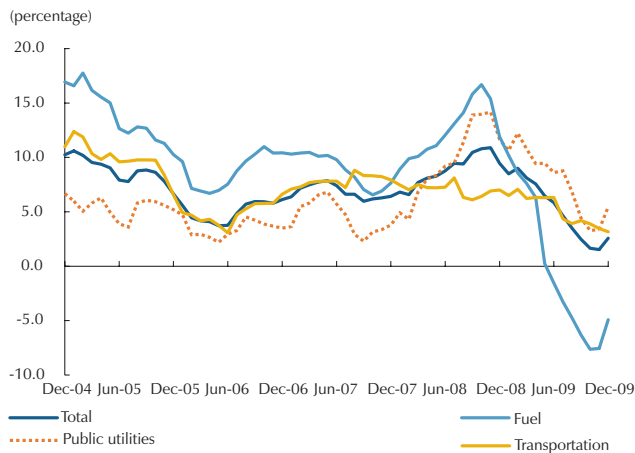
A breakdown of core inflation into the usual sub-baskets – particularly the non-food CPI – shows the most pronounced reductions throughout the year involved the annual change in regulated CPI (including gasoline, public utilities and public transportation). This reflects the influence fuel and energy prices have on that indicator; the fuel

Graph 3  
Items with Negative Monthly Changes in the CPI



Source: DANE; calculations by Banco de la República.

Graph 4  
Annual Regulated Price Inflation: Total and by Components



Source: DANE; calculations by Banco de la República.

and energy price increases in 2007 and 2008 were reversed during 2009, in tune with the drop in international prices and moderate depreciation of the peso. The bulk of the decline was concentrated between March and September, since there was a slight rise in the fourth quarter, partly because of an extremely low comparison base a year earlier due to the drop in prices during December of that year (primarily in gas for residential use) (Graph 4).

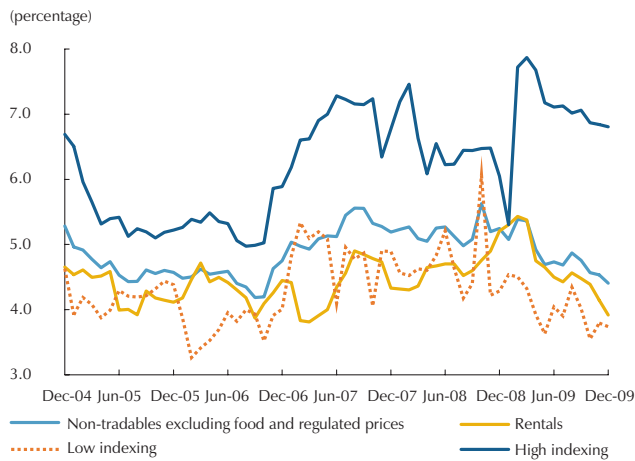
Given the decline in international fuel prices, the domestic price of gasoline dropped during the first half of the year and remained relatively stable during the second. This, in turn, tempered the rising cost of public transportation and, in the case of Bogotá, it even helped to postpone the usual yearly price hikes until early 2010, as announced by the local government. Further low inflation in 2009 led to less of an increase in the components of utility rates (i.e. electricity and water) that are pegged to inflation.

In addition to regulated items, non-tradables and tradables excluding food and regulated prices also helped to lower inflation during 2009, although on a small scale. In the case of the non-tradable CPI excluding food and regulated prices, the annual variation went from 5.3% in December 2008 to 4.8% in September 2009 and 4.4% in December. This is the lowest level recorded for that index since mid-2006, when inflation took an upward turn, partly because of strong demand.

The reduction in non-tradables during 2009 was concentrated in personal services, which usually are offered by small companies and at prices that are not indexed by law. The variation in rentals also declined (from 5.2% in December 2008 to 4.5% in September 2009 and 3.9% in December); however, indexing rules apply in this case. On the contrary, the annual variation in prices for health and education services, among others, which usually are more controlled and depend on increases established by law, remained high and tended to increase throughout the year, ending at 6.8%. These prices are adjusted at the beginning of the year and, given low inflation at the end of 2009, we should see a drop in their annual variation towards the first quarter of 2010 (Graph 5).

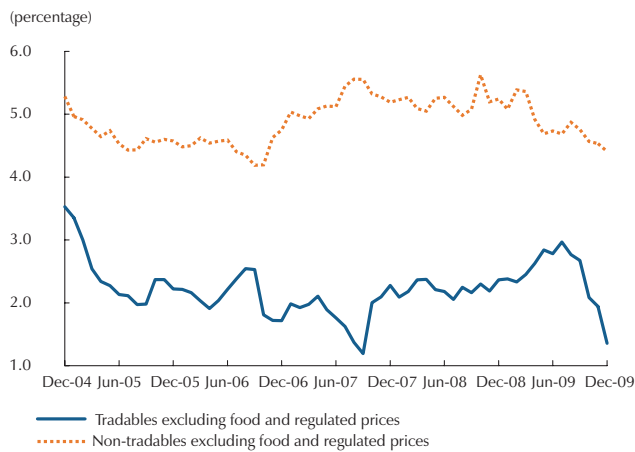
The largest annual variations towards the end of the year were in private insurance and supplementary payments (8.8%) and college tuition (7.9%). During the fourth quarter, in particular, the reduction in the annual variation

**Graph 5**  
Annual Inflation in Tradables and Non-tradables, Excluding Food and Regulated Prices



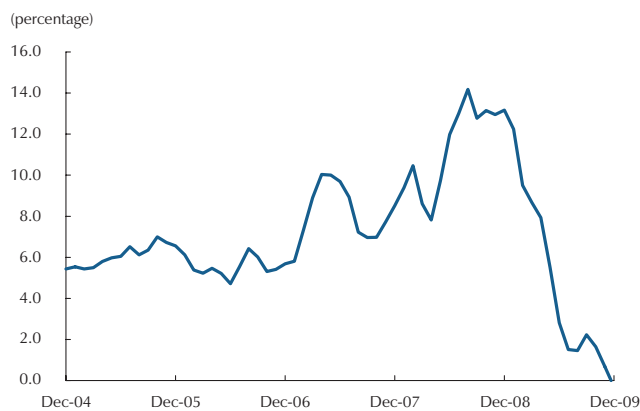
Source: DANE; Calculations by Banco de la República.

**Graph 6**  
Annual Inflation in Non-tradables, Excluding Food and Regulated Prices



Source: DANE; calculations by Banco de la República

**Graph 7**  
Annual Food Inflation



Source: DANE; calculations by Banco de la República.

accelerated and appeared in a larger number of items compared to previous quarters. This might suggest that demand, which is still weak, coupled with the decline in inflation expectations (as documented later in this report) helped to tone down the year-end price hikes.

As for the tradable CPI excluding food and regulated prices, its annual increase went from 2.4% in December 2008 to 2.7% in September and 1.4% in December 2009 (Graph 6). The annual variation increased during the first three quarters of 2009, possibly due to depreciation in the price of the peso during late 2008 and early 2009 and its delayed effect on domestic prices. In the fourth quarter, tradable inflation was favored by peso appreciation since April and the added availability of vehicles and other tradable goods, as a result of restrictions imposed by the government of Venezuela on imports from Colombia. This being the case, the tradable items that exerted the most downward pressure in recent months were vehicles, telephone services and certain medicines and toiletries.

## 2. Food Inflation

The annual variation in food dropped sharply during the first half of 2009 and continued to decline steadily during the second half of the year, although at a slower pace, and entered negative terrain (-0.3% compared to 13.2% in December 2008) (Graph 7). This prolonged downward trend was not forecasted in previous editions of this report, which anticipated a rebound between the third and fourth quarters. The reduction in the annual variation was the result of negative monthly variations and, therefore, declines in the absolute level of the food CPI from March to June. This has happened on very few occasions in Colombia during the last five decades.

Perishable and processed foods, and to a lesser extent eating out, registered declines throughout the year (Graph 8). As explained earlier, this was the result of peso appreciation and less pressure on internal prices thanks to the drop in international prices for food, fuel and other agricultural production

Graph 8  
Annual Food Inflation, by Components



Source: DANE; calculations by Banco de la República.

costs as of late 2008 and throughout much of 2009. This also was the result of a significant increase in agricultural production within Colombia, especially in temporary crops such as rice. Added to this is the plunge in sales to Venezuela, especially since the summer, which would have created a local surplus of products such as meat. In fact, the price of meat fell 7% during the second half of the year. These events combined more than offset the negative impact of El Niño weather and the limited supply of potatoes on the local market during the final months of 2009.

The decline in food prices was more moderate during the fourth quarter and, in some cases, such as potatoes, there were sharp gains (25% in the last three months). This could be due to the normal cycle for this product, but also to the effects of El Niño weather, given below normal rainfall for this time of year. However, not all perishable foods were affected by bad weather, inasmuch as fruits and vegetables continued to post lower prices. Likewise, fewer sales to Venezuela pushed down prices for meat and other less perishable foods.

## B. INFLATION DETERMINANTS

### 1. Aggregate Demand in 2009

#### a. Third-quarter GDP

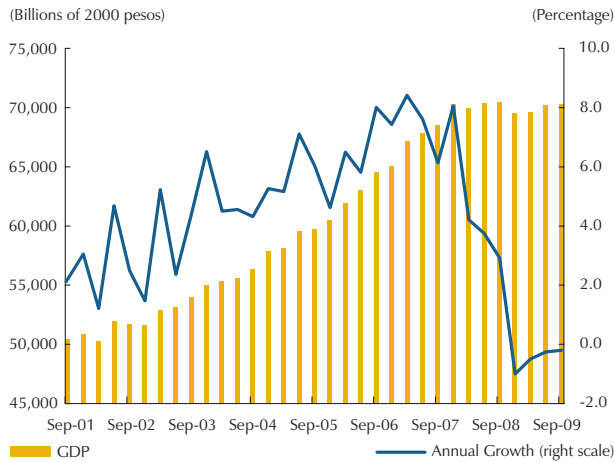
According to figures released by the National Bureau of Statistics (DANE), gross domestic product (GDP) posted an annual decline of 0.2% in the third quarter of 2009 and completed a full year of negative annual variations. This outcome was within the range anticipated in the last edition of this report and indicates the downturn in the economy, in annual terms, has somewhat eased after the sharp drop experienced during the fourth quarter of 2008, when GDP fell 1.0% (Graph 9).

As to quarterly growth, GDP continued to increase for the third quarter in a row, although at a lower rate than during the second quarter (0.2% in the third, as opposed to 0.8% in the second). The fact that the economy has expanded steadily throughout 2009, in quarterly terms, means the only significant interruption in economic growth during the international crisis was in fourth quarter of 2008 (Graph 9).

The signs of recovery observed during the third quarter came mainly from domestic demand, which increased with respect the second quarter. Although still hurting from the drop in confidence among market players in the midst of

*The annual variation in food dropped sharply during the first half of 2009 and continued to decline steadily during the second half of the year, although at a slower pace, and entered negative terrain.*

Graph 9  
Real GDP Growth



Source: DANE.

the global crisis, this variable recovered somewhat as a result of consumption and investment in civil works. In contrast, the sharp drop in external demand continued, despite signs of recovery in the global economy. This could be due, in part to the reduction in exports to Venezuela as a result of the setback in that country’s economy, and the trade restrictions it imposed on imports from Colombia.

As for annual variations, government and private consumption made a positive contribution to GDP growth (Table 2). Private consumption in the third quarter showed no annual growth; however, this represents an improvement compared to the annual declines witnessed in the two previous quarters and, in level terms, it is slightly higher with respect to the previous period.

The relative improvement in household consumption coincided with a positive perception among consumers about the economic situation at present and in the future. This was coupled with the reduction in inflation and the lower interest rates resulting from a loose monetary policy, which should have a positive impact on available family income.

Government consumption during the third quarter of 2009 should have posted the highest annual growth so far this year (4.7%). It showed no decline up to the third quarter of 2009, which would be consistent with the counter-cyclical plan launched by the government.

The setback in GDP during the third quarter of 2009 was associated primarily with the decline in investment (10.7%), especially investment in areas other than civil works. According to DANE, investment apart from civil works dropped sharply (16.2%), accentuating its downward trend and eroding total investment, despite the major increase in investment in civil works (41%) (Table 2). The construction of highways, streets, roads and bridges bolstered civil works in the third quarter, unlike previous quarters when the momentum came from other works.

With respect to external demand, exports suffered a serious setback in annual terms (10%), as largely anticipated in previous editions of this reports. Their poor performance was mainly the result of fewer coffee sales due to less production and the slump in exports to Venezuela. Non-traditional exports to other countries, such as the United States, also continued to be affected by weak external demand. Raw material exports were the exception, having managed to maintain an important amount of growth in volume and in real pesos; however, in terms of dollars, they were affected by lower international prices this year compared to 2008 (for more on exports and imports, see the

*The downturn in the economy, in annual terms, has eased a bit after the sharp drop experienced during the fourth quarter of 2008.*

Table 2  
Real Annual GDP Growth, by Type of Spending

	2008	2009 Annual Variation (%)			Contribution to Annual Growth in III Qtr. 2009
		I Qtr.	II Qtr.	III Qtr.	
<b>Consumption</b>	2.3	(0.4)	0.1	1.0	0.9
Household consumption	2.5	(0.6)	(0.1)	0.0	0.0
Nondurable Goods	1.6	(1.1)	(1.5)	1.7	0.4
Semi-durable goods	1.2	(2.3)	1.3	(1.0)	(0.1)
Services	4.1	1.3	1.9	0.1	0.0
Durable goods	(3.9)	(7.0)	(7.4)	(4.9)	(0.3)
Government consumption	1.3	0.3	1.0	4.7	0.9
<b>Gross capital formation</b>	7.5	(3.0)	(8.0)	(10.7)	(3.0)
Gross fixed capital formation (GFCF)	4.7	(1.8)	(2.0)	(2.8)	(0.7)
GFCF without civil works	11.1	(5.7)	(14.9)	(16.2)	(3.0)
Agriculture, forestry, hunting and fishing	2.2	(0.3)	0.2	5.1	0.0
Machinery and equipment	14.2	2.6	(18.5)	(19.9)	(1.9)
Transportation equipment	(8.7)	(17.5)	(15.8)	(2.0)	(0.0)
Construction and buildings	18.4	(15.0)	(11.1)	(19.2)	(1.1)
Services	2.1	2.4	(0.2)	0.5	0.0
GFCF in civil works	(11.8)	11.4	40.6	41.0	2.3
Inventory	32.6	(12.6)	(47.8)	(57.2)	(2.3)
<b>End local demand</b>	3.5	(1.0)	(1.9)	(1.9)	(2.1)
<b>Exports</b>	7.2	1.3	(5.9)	(10.0)	(1.8)
<b>Imports</b>	9.8	(1.5)	(10.2)	(12.5)	3.7
<b>GDP</b>	2.4	(0.5)	(0.3)	(0.2)	(0.2)

Source: DANE; calculations by Banco de la República.

highlighted section on page 23). Imports also fell sharply (12.5%) in the third quarter, continuing the trend witnessed during the three previous quarters. Exports of metallurgical products and machinery were the products in this aggregate that were affected the most.

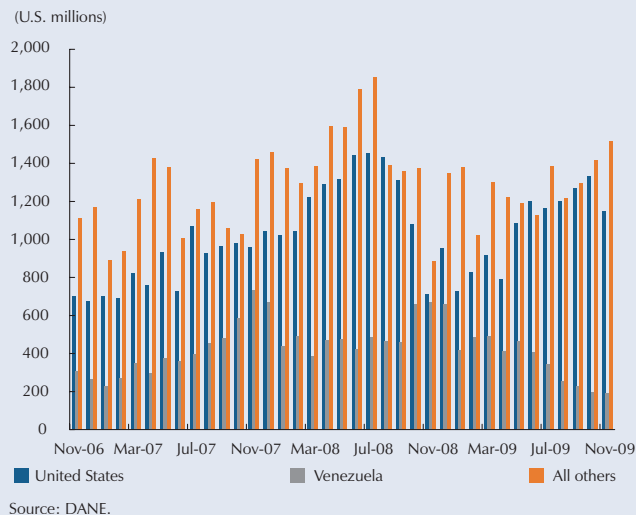
As for the different branches of economic activity, manufacturing was still the sector with the most negative contribution to the annual decline in GDP, having falling 5.8% in annual terms during the third quarter (Table 3). Even so, the level of industrial GDP in the third quarter was higher than in the second, which suggests some recovery in the sector.

Because it is linked so closely to world trade, industry has been hardest hit branch by the setback in trade flows resulting from the global crisis and the drop in exports to Venezuela. The impact of the latter would have begun to be felt strongly by the third quarter, causing significant annual slowdowns in production for certain industries such as yarn and thread, clothing, leather, machinery and equipment, among others.

## EXPORTS AND IMPORTS IN DOLLARS AT NOVEMBER 2009

In November 2009, total exports in U.S. dollars rose 25.9% compared to the same month last year, mainly because of an increase in sales to the United States (61.6%). Part of this performance is explained by a base effect, given the low level of exports a year earlier. Exports to Venezuela fell 71.5% in November, in annual terms (Graph A).

**Graph A**  
Total Exports to the United States, Venezuela and All Others



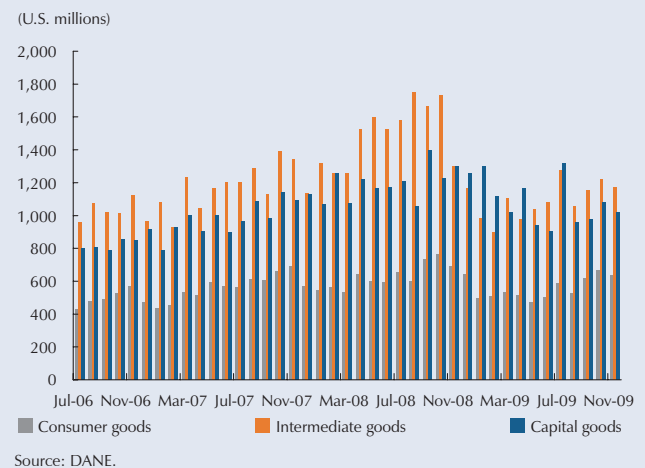
Total exports in dollars between January and November 2009 came to U.S. \$ 29.660 b, but declined 14.4% in annual terms. Nevertheless, these levels are slightly higher compared to those for the same period in 2007 (U.S. \$ 26.815 b). The reduction in 2009 was generalized and affected all sectors. The value of industrial exports was down 21% compared to a year ago, mining exports decreased 7.2% and agricultural exports declined 1.6%. However, with respect to volume, the industrial sector was the only one to post a reduction (-19.4% in annual terms) during the same period. As for destination, exports to Venezuela during

the year to November, in US dollars, were down 28.2%, those to Ecuador declined -17% and to the United States -12.7%.

In 2009, up to November, imports (CIF) came to U.S. \$ 29.836 b, having declined 18.5% with respect to the same period the year before. The largest reduction was in foreign purchases of intermediate goods (-27.6%), but the decline in imports of consumer and the capital goods is important as well; they dropped 12.5% and 10.2%, respectively. There were reductions in the volume of all imports, with a cumulative total drop of 7.6%.

In November 2009, the total value of imports was 14.2% less compared to the same month in 2008, mainly because of a decline in imports of capital goods (21.6%) (Graph B).

**Graph B**  
Imports by Type of Goods



This being the case, the monthly trade balance (FOB) in November showed a surplus of U.S. \$ 181 m, while the balance for the year to date (January-November) was positive by U.S. \$ 1.369 b.

Together with industry, the other sectors that accounted for the annual drop in GDP were trade (with an annual variation of -4.0%), building construction (-18.6%) and transport (-2.9%), in that order (Table 3). In the case of transport, the setback was associated primarily with air cargo transport, which also would be associated with the trade restrictions. Moreover, current net government revenue (taxes minus subsidies) dropped 4.1% in annual terms, accentuating the decline in GDP by quite a bit; without these figures, the annual growth in aggregate value was 0.2%.

Table 3  
Real Annual GDP Growth by Branch of Economic Activity

	2008	2009 (Annual percentage variation)			Contribution to annual growth in III Qtr.-09
		I Qtr.	II Qtr.	III Qtr.	
Agriculture, forestry, hunting and fishing	2.6	(0.2)	(1.5)	2.0	0.2
Mining and quarrying	7.3	10.9	10.2	8.8	0.4
Industrial manufacturing	(1.8)	(7.7)	(10.1)	(5.8)	(0.8)
Electricity, gas and water	1.2	0.4	(0.1)	1.7	0.0
Construction	(0.3)	(0.8)	17.1	13.7	0.7
Buildings	18.2	(14.2)	(10.1)	(18.6)	(0.4)
Civil Works	(11.8)	11.3	40.5	41.0	1.1
Commerce, repairs, restaurants and hotels	1.7	(2.4)	(3.9)	(4.0)	(0.5)
Transport, storage and communication	4.0	(1.1)	(1.2)	(2.9)	(0.2)
Financial, insurance, real estate and business service establishments	5.6	5.1	4.3	1.1	0.2
Social, community and personal services	2.1	0.2	1.6	0.9	0.2
Subtotal: aggregate value	2.4	(0.1)	0.2	0.2	0.2
Taxes minus subsidies	3.2	(4.3)	(5.2)	(4.1)	(0.4)
<b>GDP</b>	2.4	(0.5)	(0.3)	(0.2)	(0.2)

Fuente: DANE; cálculos del Banco de la República.

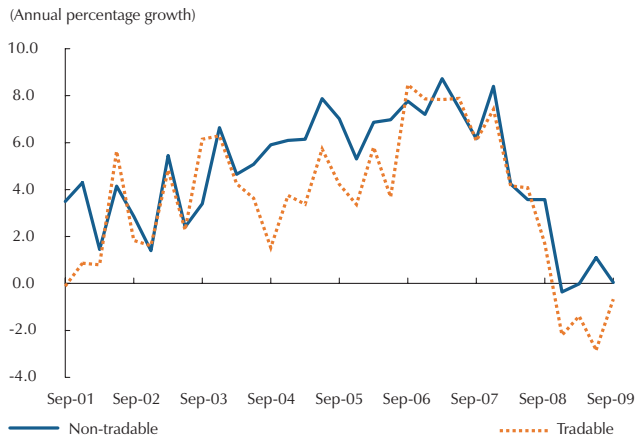
Accordingly, the tradable sectors most exposed to external crisis in the third quarter of 2009, industry included, continued to be those on the whole that demonstrated less growth (-0.7%). The non-tradable sectors posted no reductions; even so, they continued to perform poorly (Graph 10). In the case tradable GDP, mining is still the most dynamic sector. The third quarter also saw an increase in GDP for other agricultural products (temporary crops such as rice, tubers and sugar cane), which offset the drop in coffee production (Graph 10).

*Because it is linked so closely to world trade, industry has been the hardest hit branch by the setback in trade flows resulting from the global crisis and the drop in exports to Venezuela.*

#### **b. GDP in the Fourth Quarter and All of 2009**

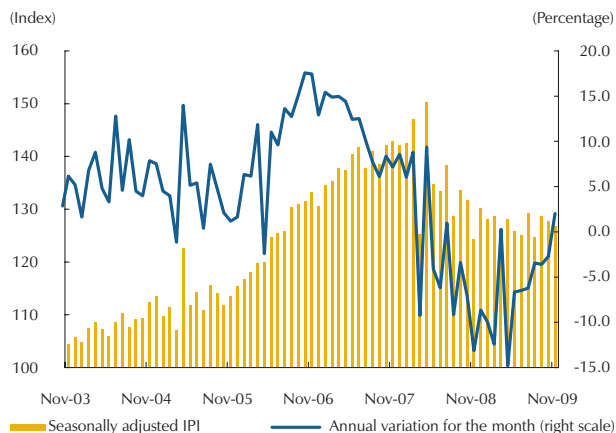
Most of the indicators available for the fourth quarter of 2009, show more economic activity with respect to annual growth. In industry, the non-coffee production index (IPI) published by DANE in November recorded the largest annual increase for any month since April 2008: 2.0%. This figure, coupled with the one for October, show a slightly better level of output than in the three previous quarters, after being adjusted by the seasonal component (Graph 11). Consequently, the figures for industry point to a slight upward trend for the first time since early 2008.

**Graph 10**  
GDP: Tradable and Non-tradable Sectors



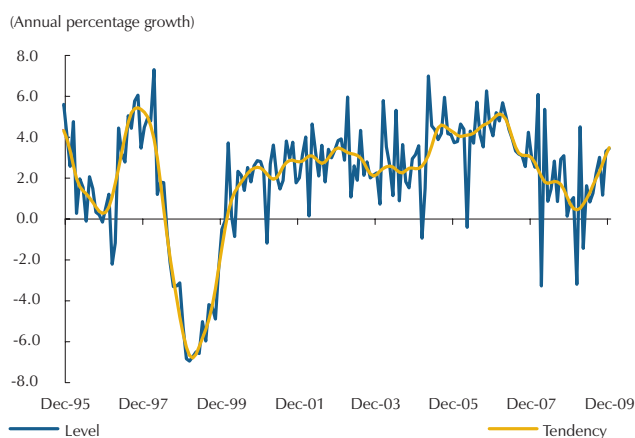
Fuente: DANE; cálculos del Banco de la República.

**Graph 11**  
Industrial Production Index Excluding Coffee Processing  
(seasonally adjusted index and annual growth)



Source: DANE; calculations by Banco de la República.

**Graph 12**  
Energy Demand and its Tendency



Source: DANE; calculations by Banco de la República.

Nearly half of the industrial branches show signs of recovery, including chemicals, furniture, tobacco and metal products. However, in November, other items such as clothing, paper, petroleum by-products, glass, cement and electrical appliances, among others, continued to show signs of a revival. Some of these industries would be affected by Venezuela's trade restrictions.

The total demand for energy (regulated and unregulated) was another supply indicator linked to urban economic activity that rebounded during the fourth quarter. It rose at an annual rate of 3.4% in December and 2.6% throughout the last quarter, which is still the best on record for any quarter since late 2007 (Graph 12).

As for private consumption, the indicators at hand suggest this aggregate continued the trend towards recovery begun in the third quarter. For example, the Fedesarrollo consumer confidence index (ICC in Spanish), with quarterized data, increased during the fourth quarter (Graph 13), bolstered by a better perception of economic conditions and, to a lesser degree, by better household expectations.

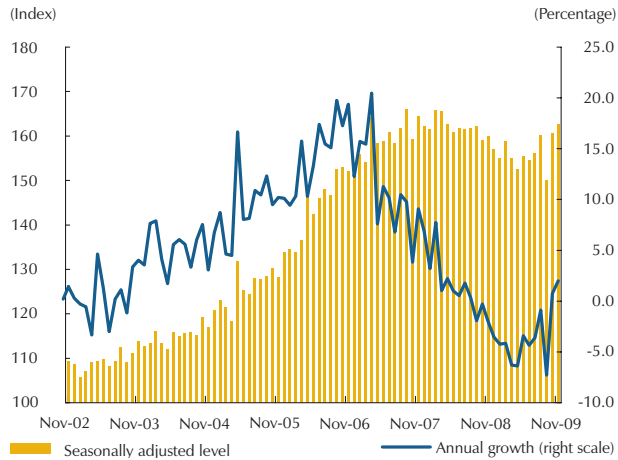
Retail sales during November leaned in the same direction, having risen 2% in annual terms. Seasonally adjusted sales in a good many merchandise lines registered by DANE increased

**Graph 13**  
Household Consumption and the Fedesarrollo Indicator



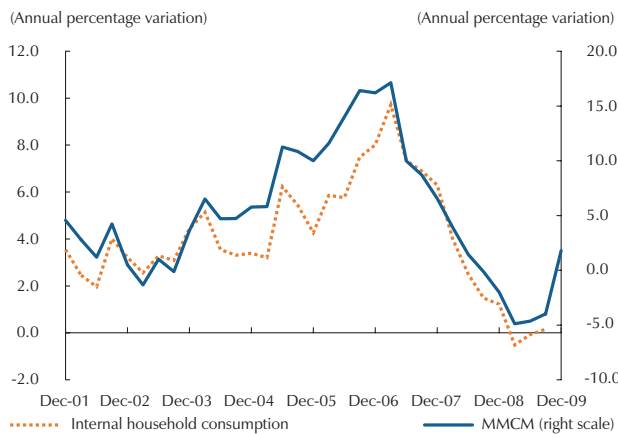
Source: Fedesarrollo, DANE; calculations by Banco de la República.

Graph 14  
Retail Trade, Excluding Fuel



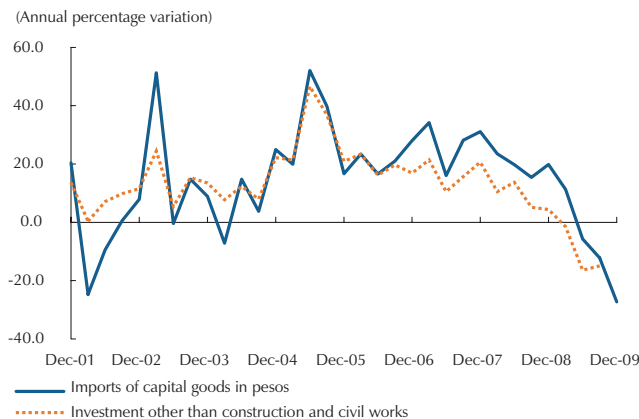
compared to past months (Graph 14). However, food and beverages were an important exception (and account for nearly 50% of all retail sales). The high correlation between annual growth in the sales index and consumer GDP suggests the likelihood of positive annual and quarterly growth for this variable during the fourth quarter (Graph 15).

Graph 15  
Internal Household Consumption and MMCM



The investment situation is less clear (at least, in terms of investment without civil works or building construction). Unlike consumption, this variable does not seem to have rebounded at the end of 2009. This conclusion is based on the drop in imports of capital goods in real pesos, as suggested by the figures in dollars available at November (Graph 16). Civil works, on the other hand, maintained an important degree of momentum during the fourth quarter, thanks to work on the highway system, the Bogota airport and the mass transit systems in several cities, among other projects.

Graph 16  
Investment Other Than Construction and Civil Works Compared to Capital Goods Imports



Based on the information at hand, a reassessment of the GDP forecast models suggests economic growth during the fourth quarter was somewhere between an annual rate of 0.7% to 2.3%. Although the positive annual growth in the fourth quarter is partly due to a low basis of comparison, it also can be explained by the trend in investment in civil works and household consumption.

The forecasts for the fourth quarter anticipate a recovery in household spending. While not considerable, this is significant given the poor performance of household spending in the recent past and its considerable weight as a portion of GDP (about 66%). Even so, domestic demand overall would have continued to contribute negatively to GDP, as a further decline in investment other than for civil works is expected.

As was the case during the first three quarters of 2009, net external demand contributed positively to fourth-quarter growth, thanks to more of a drop in imports (in annual terms) than in exports. The latter would have been hit hard by the dramatic plunge in sales to Venezuela, as suggested by the figures in dollars (see page 23: Exports and Imports). This

is why no improvement in performance is expected compared to previous quarters, although exports to other destinations have rebounded a bit.

Growth during the fourth quarter would have been due primarily to mining and civil works, as was the case during the rest of year. Annual growth in industry and commerce probably remained negative, although with some expansion in quarterly terms.

Banco de la República's technical team expects growth during 2009 to be between -0.2% and 0.4%, which is a more favorable range than the one included in the last edition of this report. The forecasts changed because of better performance in terms of civil of works, household consumption and government consumption compared to what was expected previously. This offset the added setback in exports during the second half of the year, given less of an increase in Venezuelan demand and the impact of restrictions imposed on trade with that country, which proved to be more than initially expected.

In general, Colombia's GDP in 2009 was affected by the international crisis and by the drop in world demand, as occurred in other countries in region. Besides less demand for Colombian goods and services, the external crisis affected the economy mainly through less consumer and business confidence, which paralyzed household consumption and caused the biggest plunge in annual investment since 2002.

The impact of the external crisis was the strongest in late 2008 and in the first six months of 2009. However, by the second half of 2009, a few signs of recovery were beginning to appear, also linked to the global economic recovery, a loose monetary policy and to government spending and investment in civil works, which would have behaved in a counter-cyclical way. Added to this was the favorable effect less of inflation on household income and consumption. However, the winding down of sales to Venezuela prevented this improved external and internal situation from translating into more favorable performance for exports and the economy as a whole.

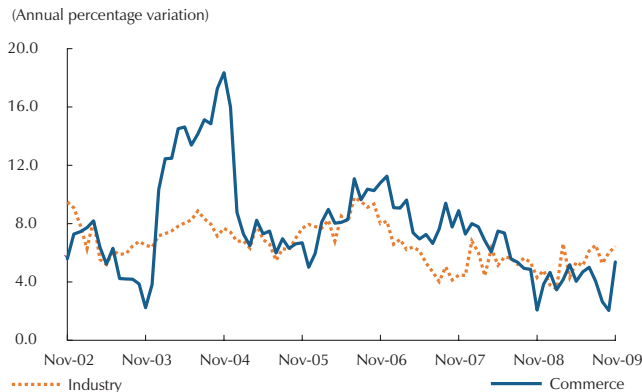
## **2. Wage Costs and the Labor Market**

Wage increases during the fourth quarter of 2009 tended to be higher in some sectors and showed signs of stability in others. Coupled with the drop in annual inflation, this would have led to a major increase in real wages. This could be responsible for the momentum in certain elements of employment, such as the salaried component, especially in the industrial and commercial sectors.

The pace of the adjustment in nominal wages in industry and commerce accelerated slightly during the fourth quarter of 2009. According to the monthly manufacturing sample (MMM in Spanish), nominal industrial wages rose at an annual rate of 6.4% in November as opposed to an average of 6.0%

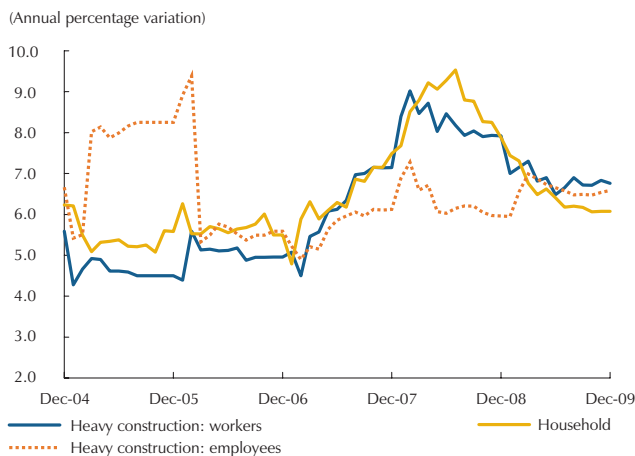
*Banco de la República's technical staff expects growth in 2009 to be between -0.2% and 0.4%, which is a more favorable range than the one estimated in the last edition of this report.*

Graph 17  
Nominal Sector Wage Indexes: Industry and Commerce



Source: DANE (MMM and MMCM).

Graph 18  
Nominal Sector Wage Indexes: Heavy Construction and Housing



Note: Workers: foremen, manual laborers, craftsmen, inspectors, surveyors and line workers. Employees: engineers, chief engineers, assistant engineers, warehouse employees, accountants, watchmen, mechanics and laboratory technicians.  
Source: DANE (ICCP and ICCV).

for the third quarter. Nominal wages in commerce did much the same, having increased in November at an annual rate of 5.4% versus 3.9% during the third quarter. This is according to the monthly retail trade sample (MMCM in Spanish) (Graph 17).

In contrast, nominal construction wages in the fourth quarter increased at a rate similar to that of the third quarter. Heavy construction wages rose at annual rates between 6.5% and 6.8%, while the increase in home construction wages was close to 6.1% (Graph 18).

However, it is worth mentioning that the price increases perceived by these sectors during 2009 were low (as illustrated by the consumer price index and the producer price index, particularly for the fourth quarter). Therefore, 2009 appears to have been characterized by a build-up in real wages, which was more pronounced at the end of the year.

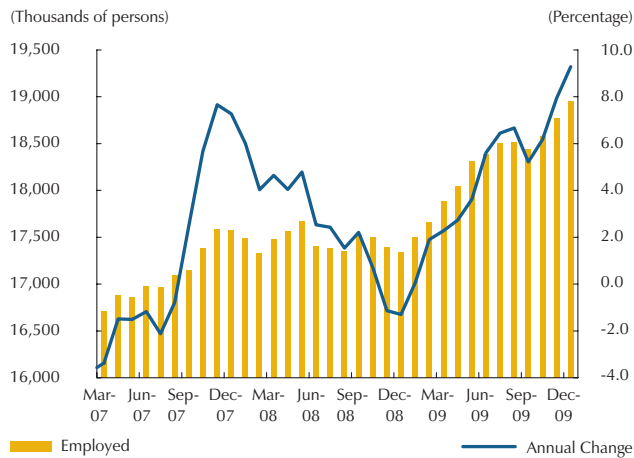
This situation suggests there might have been pressure on prices in 2009 due to readjustments in nominal and real wages, but it did not materialize because of being offset by other factors (such as weak demand). However, high wage increases definitely could have discouraged real demand for formal or salaried labor, which would explain the poor performance of this type of employment throughout the year, as discussed later.

Although the Household Survey (GEIH in Spanish) shows total employment increased at an annual rate of 9.3% nationwide and 5.6% for the thirteen major metropolitan areas, this trend did not include salaried

employment. It was concentrated in non-salaried employment, which usually is associated with lower and less stable jobs, most likely in the informal sector (Graphs 19 and 20).

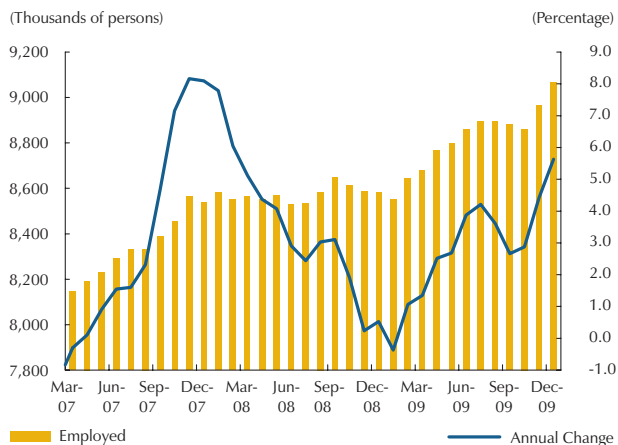
These opposing trends were particularly strong in the thirteen urban areas, where the employment numbers are more reliable. As illustrated in Graph 21, salaried employment in the thirteen major metropolitan areas was at a standstill since mid-2009, while non-salaried employment rose significantly during the fourth quarter (7.3%) and, in general, throughout the year. Furthermore, a breakdown of salaried employment shows higher-grade employment suffered the most; in fact, salaried employment declined, at least according to the data up to September 2009. Most salaried jobs created in the first three quarters of 2009 were low-grade jobs (Graph 22).

**Graph 19**  
Employed (National Total, Seasonally-adjusted Moving Quarter)



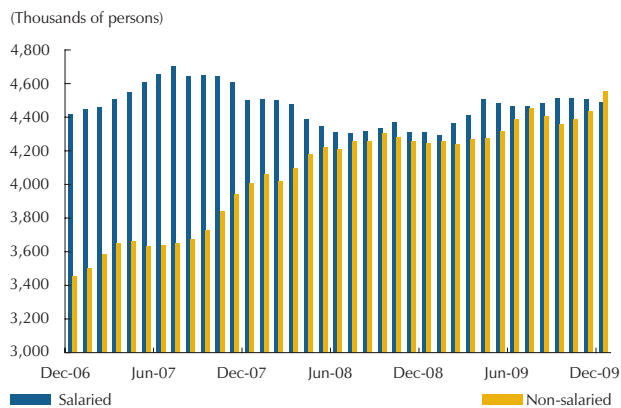
Source: DANE-GEIH; calculations by Banco de la República.

**Graph 20**  
Employment (13 Areas, Seasonally-adjusted Moving Quarter)



Source: DANE-GEIH; calculations by Banco de la República.

**Graph 21**  
Employment by Job Type (13 areas, Seasonally-adjusted Moving Quarter)

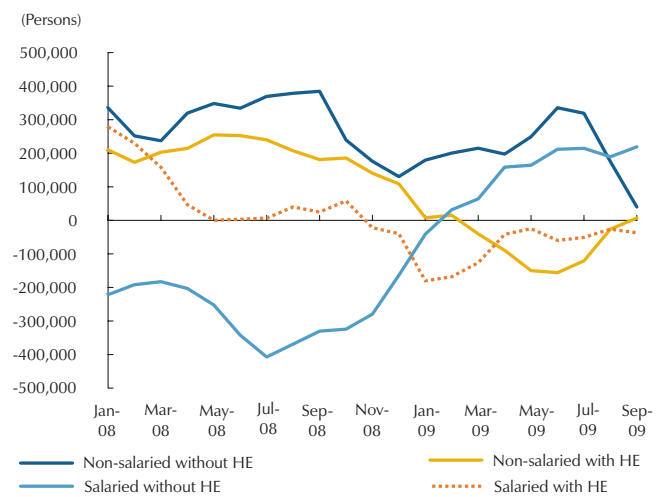


Source: DANE-GEIH; calculations by Banco de la República.

In the past, job creation and the demand for labor were determined by factors such as wages and production. On the one hand, the number of salaried employees without a higher education has been associated with development of the real wage, given a certain lag. On the other hand, employment in the modern sectors, which tend to employ less skilled and skilled workers alike – has been associated with urban GDP.<sup>1</sup> The decline in output witnessed since late 2008, coupled with the increase in real wages, would have prompted companies to eliminate jobs to control costs and to avoid more of a blow to profits. The standstill in the level of salaried employment in the thirteen major metropolitan areas is a reflection of this situation (Graph 23), as is the dismissal of workers in industry and commerce throughout 2009 (Graph 24).

Evidence in recent months suggests the drop in employment in sectors such as industry and commerce would be helping to stabilize labor costs by allowing for more intensive use of labor. Output per hour worked in industry increased in November for the first time since May 2008, having risen at an annual rate of 0.6%. This helped to offset part the hike in real wages and led to a more moderate increase in the unit labor cost (ULC = real wage/

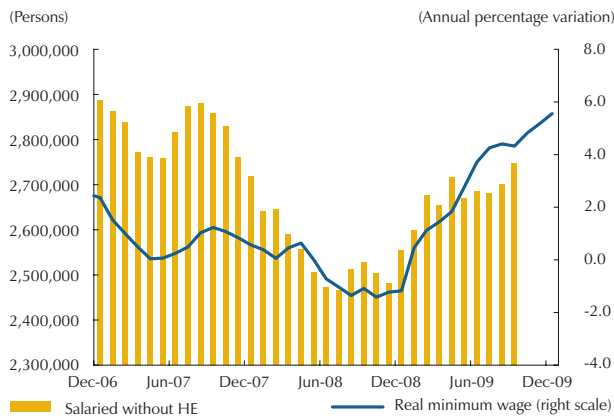
**Graph 22**  
Annual Variation in Employment (13 Areas – Moving Quarter)



HE: higher education.  
Source: DANE (GEIH); calculations by Banco de la República.

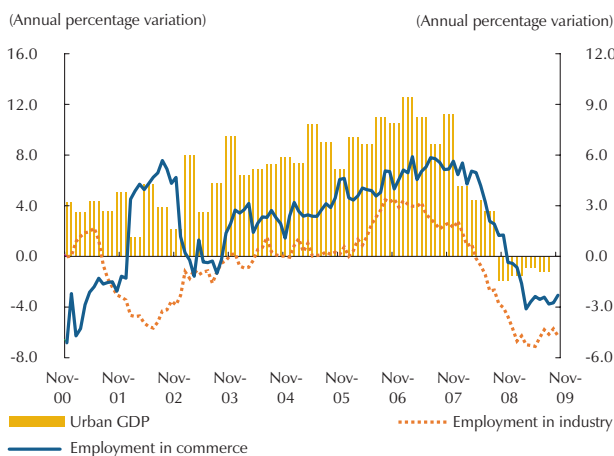
1 Urban GDP does not include mining or agriculture..

**Graph 23**  
Real Minimum Wage and Low-grade Salaried Employment  
(13 areas, moving quarter)



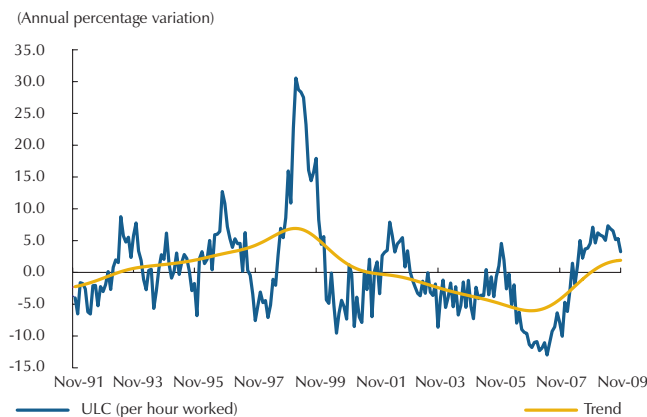
HE: Higher Education  
Source: DANE; calculations by Banco de la República.

**Graph 24**  
Urban GDP and Employment in Industry and Commerce



Source: DANE (MMM and MMCM); calculations by Banco de la República.

**Graph 25**  
Real Unit Labor Cost (ULC) in Industry



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

output per hour) during the final quarter, which went from an annual increase of 6.5% in August to 3.3% in November (Graph 25). Much the same can be said of retail trade.

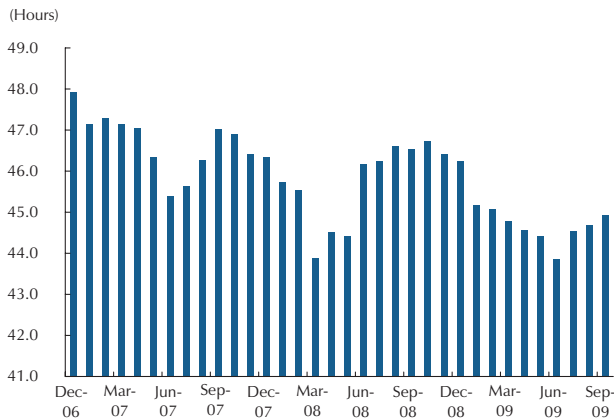
As for 2010, the recovery in employment in the modern sectors and in salaried employment will depend largely on whether or not the economic recovery is consolidated, but probably also on less of an adjustment in the real wage. It is important to point out that Banco de la República's quarterly survey, available in January 2010, shows employers expect to increase nominal wages in 2010 by about 3.8%, which is similar to the increase ruled for the minimum wage and far less than in past years.

Aside from the situation with respect to the demand for labor, conditions on the job market and their impact on prices are determined by the supply of jobs or job participation. This variable, which is measured by the overall participation rate (GPR), has increased considerably throughout 2009, including the fourth quarter, when it jumped sharply (3.5 pp compared to the fourth quarter of 2008).

The behavior of the GPR has been associated in the past with the family income cycle and with job stability for the household head. For this reason, in the midst of a downturn in economic activity, agents other than the household head tend to leave aside their activities and enter the job market to offset a possible decline in income.

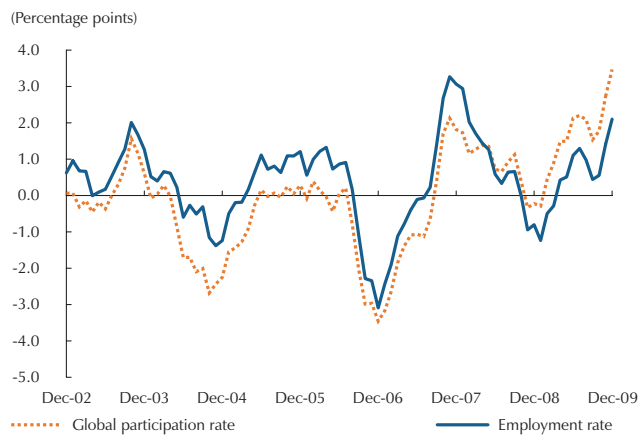
There is evidence to suggest that household income in 2009 was affected by a reduction in the number of hours worked. For example, in the case of employees without higher education in the thirteen major metropolitan areas, the number of hours worked weekly during the third quarter of 2009 was down 3.5% compared to same period in 2008 (Graph 26). This drop was not offset by the increase in the real wage, as demonstrated by income per worker, as noted on the basis of the GEIH. During that period, the average income for this group declined by about 1%. Accordingly, the build-up in the GPR during the fourth quarter would indicate that household income continues to be affected (Graph 27.)

**Graph 26**  
Average Hours Worked Last Week  
(Salaried employees without higher education, 13 areas,  
moving quarter)



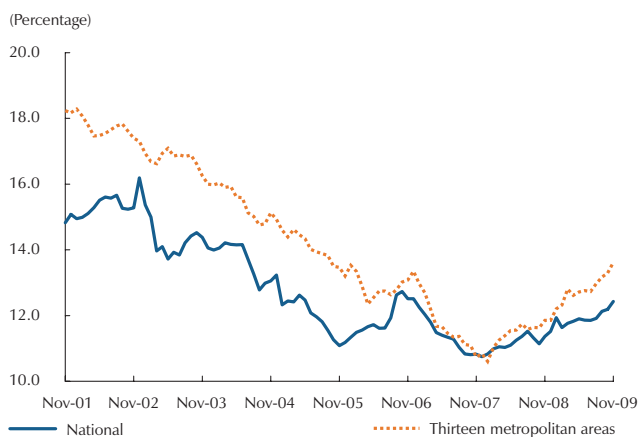
Source: DANE (GEIH); calculations by Banco de la República.

**Graph 27**  
Annual Change in Global Participation Rate (GPR) and the  
Employment Rate (ER)  
(13 areas, moving quarter)



Source: DANE (GEIH).

**Graph 28**  
Unemployment Rate (Seasonally-adjusted moving quarter)



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

The increased labor supply has not been absorbed entirely by the economy, as illustrated by the difference between the annual increase in the GPR and in the employment rate (ER) (Graph 27). The result is a rising unemployment rate (TD), which did not subside during the fourth quarter of 2009, as seen in the seasonally-adjusted unemployment series (Graph 28).

Information from the GEIH conducted by DANE shows a substantial increase in the number of unemployed persons who have been job hunting for more than six months. During the third quarter of 2009, nearly 645,000 people were in this situation. This is approximately 176,000 more than during the same period in 2008. Being jobless for a long time can lead to a loss of qualification for the unemployed. This, in turn, could have an adverse effect on labor productivity in the future.

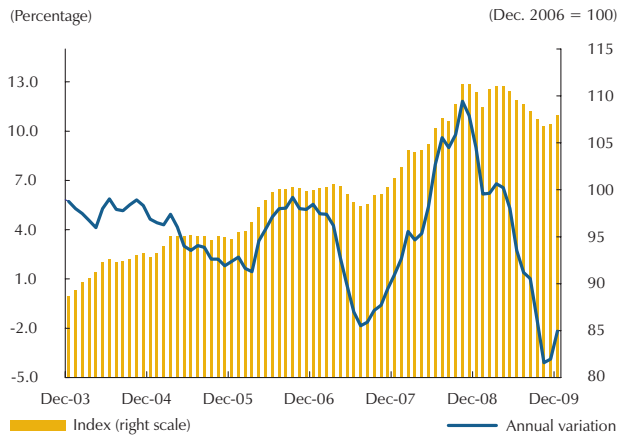
Accordingly, the current situation in the job market and for households could have a negative impact on economic recovery in the short and mid-term. On the one hand, it could limit the rebound in consumption, if household income does not improve. On the other, it could affect potential economic growth, since the quality of jobs has declined and labor productivity may be undermined.

However, towards 2010, the increase in labor force participation and limited growth in the demand for salaried labor suggest a very loose job market. Coupled with an increase in labor intensity, this could lower costs, thereby reducing the risk of inflationary pressure on this front. This becomes even more probable when considering the unemployment rate could continue to rise this year, if the economy is not quick to get back on course with respect to long-term growth (Box 1, pg. 37).

### 3. Other Costs

Non-wage costs experienced a few minor surges during the fourth quarter of 2009, after falling since late 2008. Annual producer inflation in December, measured by the total producer price index (PPI),

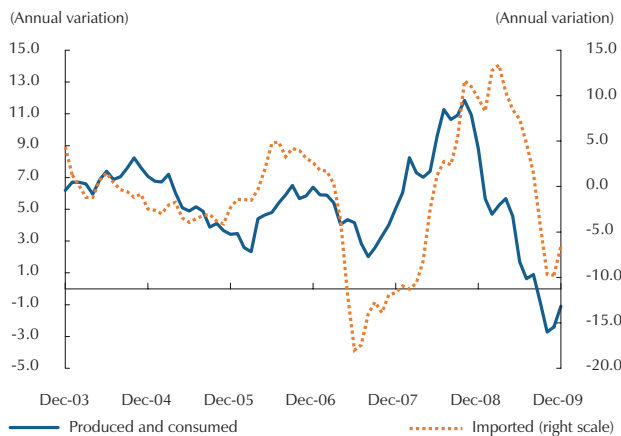
Graph 29  
Total PPI



Source: DANE.

was -2.2%. This is less than the figure on record for September (-1.5%), but higher than in October (-4.1%), when this variable hit an all time low (Graph 29). The increase in annual producer inflation is due largely to the decline in the PPI level during the final months of 2008, but also to its increase in the last two months of 2009. Monthly inflation in this index was positive throughout most of the fourth quarter (Graph 29).

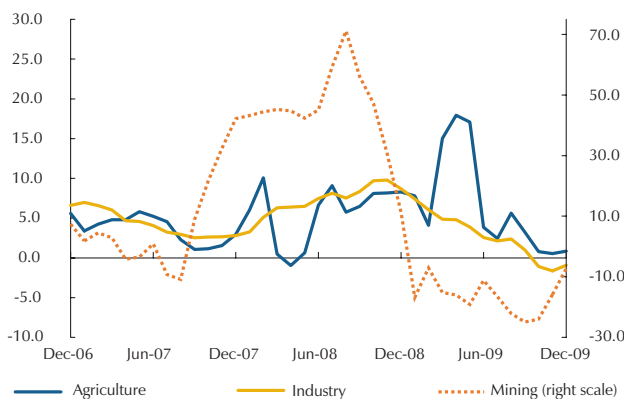
Graph 30  
PPI by Origin



Source: DANE.

The behavior of total annual producer inflation in the fourth quarter was replicated in its two components based on origin. Accordingly, the annual variation in imports and in goods produced and consumed in Colombia hit a low in October. They have increased since then, but remain in negative terrain (Graph 30). Both indexes increased in level during November and December; this has not happened since March 2009. In the case of the imported PPI, the rebound at the end of the year is related more to depreciation in the exchange rate than to higher international prices. With respect to the PPI produced and consumed in Colombia, there were increases in every branch of economic activity (industry, agriculture and mining) (Graph 31).

Graph 31  
PPI - Products Produced and Consumed in Colombia, by Branches (Annual variation)

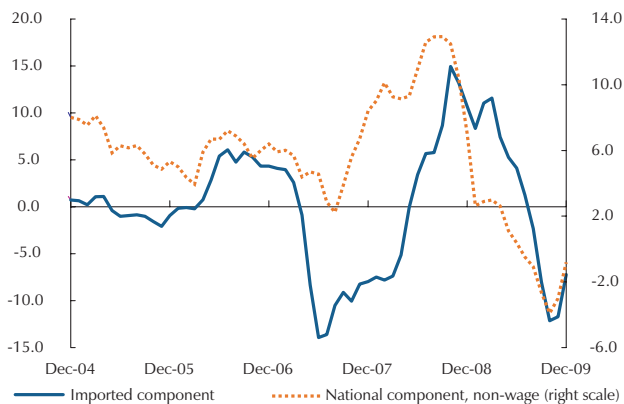


Source: DANE.

Based on the CPI, the PPI and DANE sector samples, non-labor cost-weighted indexes were calculated using the social accountability matrix (SAM). The indexes also show slight cost rebounds during the last two months 2009 for national and imported components alike. The national component had adjusted at an annual rate of -2.7% by September and -0.8% by December. The import component increased from -8.0% in October to -7.2% annually in December (Graph 32). The monthly variations in these indexes became positive once again in recent months.

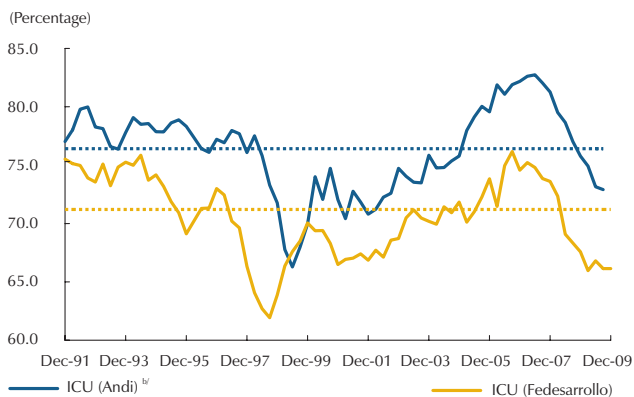
In short, non-wage costs must have exerted a slight amount of upward pressure during the final quarter of the year, for the first time since early 2009. This would be related, in part, to the price of the peso, and could be associated with signs of an incipient recovery in demand in different branches of activity economic. Moreover, a portion of the increases would be linked to the recent surge in

Graph 32  
SAM-based Non-wage Cost Index  
(Annual percentage variation)



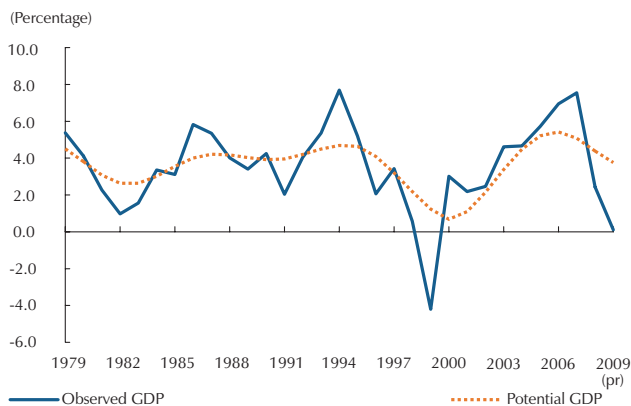
SAM: Social Accountability Matrix  
Source: Calculations by Banco de la República.

Graph 33  
Installed Capacity Utilization (ICU) <sup>a/</sup>



a/ Seasonally adjusted series.  
b/ The ANDI ICU series is calculated using the arithmetic average.  
Source: ANDI and Fedesarrollo.

Graph 34  
GDP Growth: Observe and Potential  
(Annual average)



(pr) Preliminary.  
Source: Banco de la República.

international prices for coffee and several mining products. El Nino does not seem to have affected costs by the end of the year.

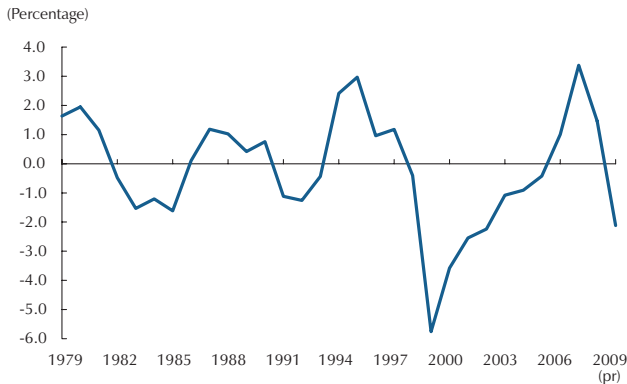
#### 4. Surplus Productive Capacity and Demand pulled Pressure

The balance between production and potential supply in the economy is one of the determinants of the inflationary pressure. The decline in economic activity throughout 2009 has reduced demand-pulled inflationary pressure significantly. This situation did not change substantially in the fourth quarter, as suggested by the fact that use of the country's productive infrastructure remains at low levels.

During the last quarter of 2009, the industrial production capacity indicators estimated by the National Association of Industrialists (ANDI) and Fedesarrollo remained stable at the low levels reached during the third quarter of the year. By November and December, both these indicators of installed capacity utilization were well below their historic average (Graph 33). In the case of the Fedesarrollo indicator, installed capacity was 68.1% in the fourth quarter, down 1.4 percentage points (pp) compared to the fourth quarter of 2008 and 3.1 pp below the historic average. According to ANDI, use of installed capacity was 75.2% in October 2009, 2.7 pp less with respect to the same period in 2008 and 1.3 pp below average.

In addition to surplus capacity, the fact that the labor force grew more than the demand for labor led to a surplus in the labor market. Therefore, Banco de la República's calculations indicate the unemployment rate now exceeds what is compatible with low and stable inflation, or the called non-accelerating inflation rate of unemployment (NAIRU). Accordingly, low installed capacity utilization, coupled with the gap in the labor market, curbed demand-pulled pressure on prices at the end 2009 and most likely will continue to do so during much of 2010.

Graph 35  
Output Gap  
(Annual average)



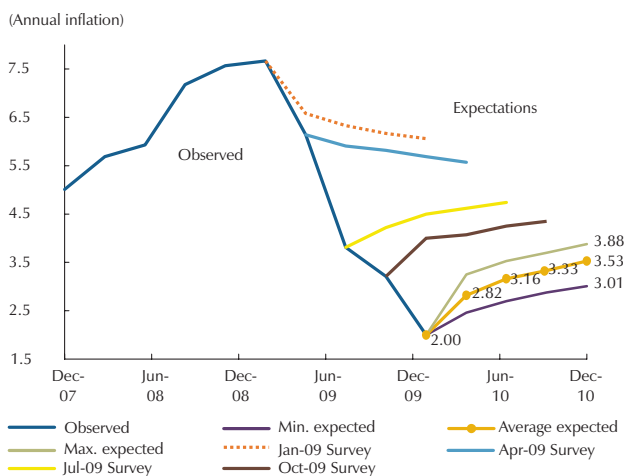
(pr) Preliminary.  
Source: Banco de la República.

On the other hand, the permanent shocks to the Colombia economy occasioned by the international crisis and the deterioration in financial conditions, coupled with the trade restrictions that have been imposed on the country, would have meant less growth in potential output during 2009. As a result, econometric estimates done by Banco de la República point to potential GDP growth between 3.5% and 4% during 2009 (Graph 34). This would imply an output gap at -2.1% (Graph 35), given the growth in output anticipated for 2009, as discussed in Chapter III of this report.

Certain factors are expected to add to further undermine the potential for economic growth during 2010. On the one hand, the decline in investment in 2009 would weaken productive capacity during 2010. Coupled with the downturn in the quality of employment and the possible loss of rating or standing for the workforce (as discussed in previous sections), this could have a negative impact on economic output in 2010 and would imply less potential GDP growth than in 2009 (somewhere between 3% and 3.5%). Therefore, how the output gap evolves during 2010 will depend on the capacity of the Colombian economy to recover (see Chapter III).

## 5. Inflation Expectations

Graph 36  
Observed Inflation and Inflation Expectations  
(at three, six, nine and twelve months)



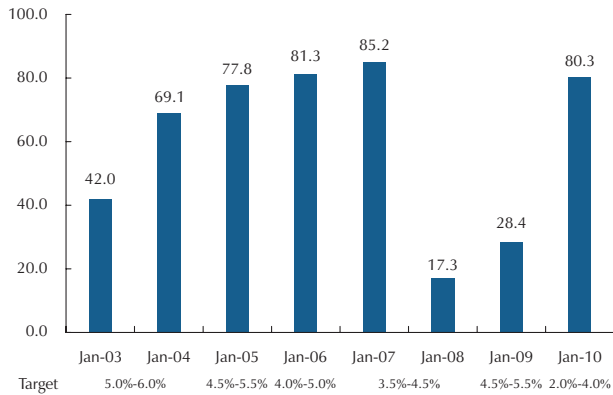
Source: Banco de la República.

The inflation expectations for 2010, as indicated by Banco de la República's latest surveys, both quarterly and monthly, are within the target range set by the BDBR (between 2.0% and 4.0%).

According to Banco de la República's quarterly expectation survey, which was applied to a wide range of agents and analysts in early January 2010, average inflation expected for the end of 2010 is 3.5% (Graph 36). In the same survey, 80% of those consulted anticipate inflation at the end of 2010 will be within the target range set by the BDBR. This percentage has increased significantly compared to January of last year, when only 28% of those consulted were confident the target would be met (Graph 37).

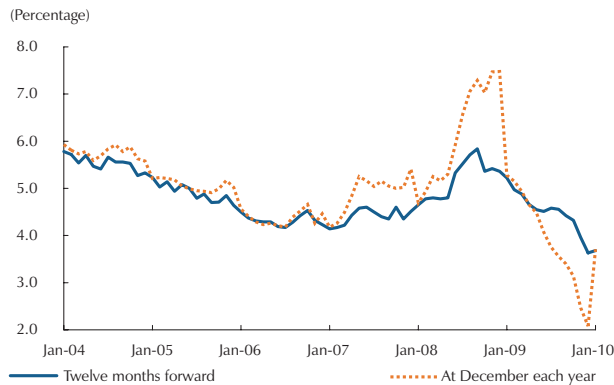
The monthly expectation survey applied to financial market operators shows 3.7% total inflation expected by December 2010 (Graph 38). Expectations twelve months out (up to January 2011) increased

**Graph 37**  
**Percentage of Credibility in the Inflation Target**  
**2003-2010**  
 (Survey conducted in January of each year)



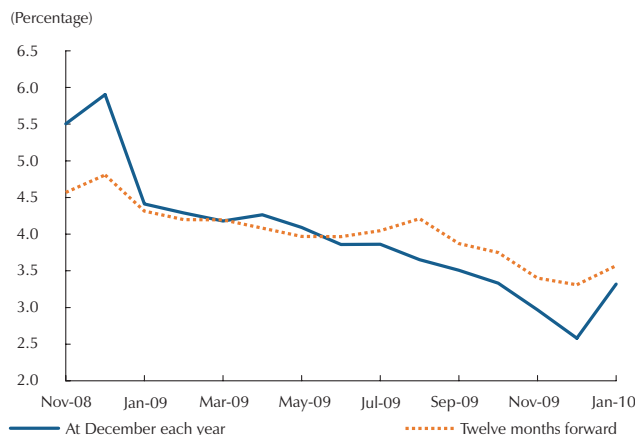
Source: Banco de la República.

**Graph 38**  
**Annual Inflation Forecast by Banks and Brokerage Firms**



Source: Banco de la República.

**Graph 39**  
**Annual Non-food Inflation Forecasts by Banks and Brokerage Firms**



Source: Calculations by Banco de la República

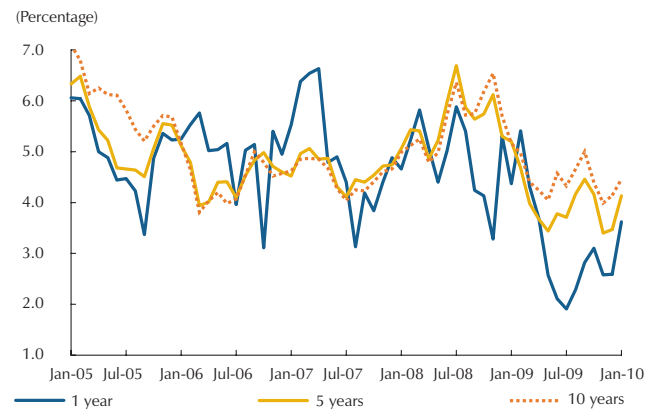
by only 5 bp compared to the month before and reached 3.7% (Graph 38).

This survey shows financial system analysts expect non-food inflation to be 3.3% by December 2010 and 3.6% in January the year thereafter (Graph 39). Given the foregoing, coupled with the expectations of total inflation outlined above, it appears analysts anticipate a moderate rebound in food inflation towards the end of 2010, which would be due to the impact of El Niño weather.

Finally, the average inflation expectations derived from TES (with preliminary data at January) are 3.62%, 4.13% and 4.46% for one-year, five-year and ten-year TES, respectively (Graph 40). They rebounded recently, placing expectations at five and ten years outside the long-term target range for inflation (2% to 4%). However these indicators of expected inflation can be distorted by the liquidity premiums on fixed-rate and UVR-denominated securities and the inflation risk premium.

Broadly speaking, the decline in inflation during 2009 was surprising because of its intensity. Banco de la República and the experts thought consumer inflation would decline during 2009, but not as much was the case. For example, at the beginning of 2009 the market expected inflation for the year would be above 5%. It was only after March that expectations went below 5%.

**Graph 40**  
**Indicators of Inflation Expectations Implicit in the TES Market <sup>a/</sup>**



a / Difference between the rates for TES-UVR and fixed-rate TES.  
 Source: Banco de la República.

## Box 1

### LABOR MARKET PERSPECTIVES IN COLOMBIA ACCORDING TO OKUN'S LAW

Rafael Puyana Martínez Villalba\*

Between 2003 and 2007, when GDP growth in Colombia was the highest in more than a decade, the unemployment rate (UR) dropped significantly compared to the elevated levels inherited from the 1999 crisis. However, as of the slowdown in output in 2008, unemployment began to rise again. Moreover, although the current recovery in productive activity is expected to continue during 2010, which is shaping up as a year of economic expansion, it is not expected to be enough to lessen the UR and to improve conditions on the job market.

The indirect relationship between economic growth and unemployment is a recurrent empirical observation in different economies and is known as Okun's Law, named after Arthur Okun, the economist who first documented it in the early sixties (Okun, 1962). Although Okun's Law is not a structural relationship in itself, but a statistical regularity, a mechanism can be found in the Colombian labor market that explains its existence.

First of all, unemployment cycles in Colombia have been related closely to the labor force participation cycle, which mainly depends, in turn, on household wealth, as shown by Arango and Posada (2002) and Arango, Posada and Charry (2003). Once economic activity begins to contract, labor force participation tends to increase as agents enter the market to compensate for job instability affecting the household head or any loss of income. Under these conditions, the productive apparatus is unable to absorb the new supply of labor in its entirety, which is why unemployment increases and jobs creation is mostly non-salaried or in the informal economy.

Once the economy begins to grow again, the UR is usually slow to react. In fact, it continues to grow despite the increased demand for labor that accompanies economic recovery. This is because the initial expansion in demand is not enough to offset the incentives that caused agents to enter the market in the first place. Only when the situation stabilizes and household income recovers does one see a reduction in labor force participation that reduces pressure on the job market and leads to a decline in unemployment.

\* The author is an expert with the Inflation Section of the Programming and Inflation Department of the Economic Studies Division at Banco de la República. His opinions do not necessarily reflect those of Banco de la República or its Board of Directors.

This could be the situation characterizing the job market in 2010, as suggested by an estimate of Okun's Law for Colombia. In this exercise, we began with a specification similar to the one presented by Mankiw (2002), where the annual change in GDP is explained by the annual increase in UR in seven major cities, plus a constant. In addition, a correction was made for a possible structural change in the data, due to introduction of the Comprehensive Household Survey (GEIH) in the third quarter 2006. This was done through a dummy interacted with the change in unemployment. The result of estimate based on the ordinary least squares method (OLS) for the period from the first quarter of 1984 to the third quarter 2009 is presented in Table B1.1.

Table B1.1

$$\Delta Y_t = \beta_0 + \beta_1 \times \Delta U_t + \beta_2 \times \delta_{2006-2009} \times \Delta U_t + \beta_3 \times \delta_{1999} + \varepsilon_t \quad (1)$$

OLS (n=99)		
Dependent variable: annual GDP growth		
	Coefficient	Standard Error
Constante	0.0385	(0.002)
$\Delta$ Unemployment	-0.0047	(0.001)
$\delta_{2006-2009} \times \Delta$ Unemployment	-0.0191	(0.004)
$\delta_{1999}$	-0.0622	(0.010)
R-square	0.61	
Adjusted R-square	0.60	
Durbin-Watson	1.14	
Prob (F)	0.00	

Source: Author's calculations.

Although problems with autocorrelation and endogeneity in the specification are not ruled out, the result is interesting in that it provides a simple tool for illustrating the statistical ratio to which Okun refers and allows us to interpret the constant as the GDP growth needed for the UR to remain constant from one year to another (Knotek, 2007).

This preliminary estimate shows GDP will have to expand at a rate of 3.85% to prevent the UR from increasing in annual terms. On the other hand, it indicates the annual growth in output needed to reduce the UR by one percentage point (pp) is 6.23%. Both claims are consistent with the actual decline in the UR during 2006 and 2007, and with the increase in the UR in 2008 and 2009.

A second estimate was done, motivated by the fact that modern employment in the seven cities is associated more with urban GDP,<sup>1</sup> as documented by Arango, Gomez and Posada (2009), Lopez and Lasso (2008) and Tamayo (2008). For that reason, an estimate of Okun's law was developed in which the annual growth in urban GDP is explained by the annual change in unemployment for the seven cities, with the same corrections that were made in the first version. The results are presented in Table B1.2.

Table B1.2

$$\Delta Y_{\text{urbano}_t} = \beta_0 + \beta_1 \times \Delta U_t + \beta_2 \times \delta_{2006-2009} \times \Delta U_t + \beta_3 \times \delta_{1999} + \varepsilon_t \quad (2)$$

OLS (n=99)		
Dependent variable: Annual urban GDP growth		
	Coefficient	Standard Error
Constante	0.0406	(0.002)
$\Delta$ Unemployment	-0.0061	(0.002)
$\delta_{2006-2009} \times \Delta$ Unemployment	-0.0207	(0.005)
$\delta_{1999}$	-0.0897	(0.013)
R-square	0.65	
Adjusted R-square	0.63	
Durbin-Watson	0.89	
Prob (F)	0.00	

Source: Author's calculations.

This second estimate provides evidence that urban GDP would have to grow at a rate of about 4.1% to prevent an annual increase in the UR in the seven cities. Moreover, urban GDP must expand at about 6.7% annually to reduce unemployment by 1 pp. This suggests that UR stability requires more growth in urban GDP, which could be indicative of a labor market where job creation is not all that sensitive to improvements in urban economic activity.

The results of the estimates provide important information on the dynamics of unemployment anticipated for 2010. To begin with, if the economy grows at an annual rate of 2% to 4%, equation (1) indicates the UR could be between 0.0 and 0.8 pp above what it was in 2009, which is quite a broad range. However, the result obtained with the second equation could help to determine the anticipated change in the UR more

precisely. However, if the mining sector (which tends not to be labor intensive) is one of the driving forces of the economy as a whole, urban GDP growth is likely to be less dynamic than the increase in total GDP. For that reason, the second equation, which places more demand on output, would suggest an upward bias in UR growth during 2010. Therefore, one would expect the annual increase in unemployment in the seven cities to approach the upper part of the range; that is, approximately 0.8 pp above what it was in 2009.

In conclusion, despite the fact that 2010 probably will be the year when the economy starts to grow again, the data suggest the turning point in unemployment is still a ways off. As such, the job market will remain slack and will exert no pressure on prices.

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1 Urban GDP does not include the mining and agricultural sectors.

## II. FINANCIAL MARKETS

**Although the international financial markets** continued to recover, the credit channel has yet to be restored and there are still a few risks.

**The high levels of debt in the developed economies and** in several Eastern European countries have caused their risk premiums to rise.

**In that environment, the risk premiums for Latin American countries** remained stable and their currencies continued to strengthen against the dollar.

**Monetary and credit aggregates in Colombia slowed throughout 2009, but have shown signs of stability.** Mortgage lending continues to grow at a good pace and there has been some recovery in consumer lending.

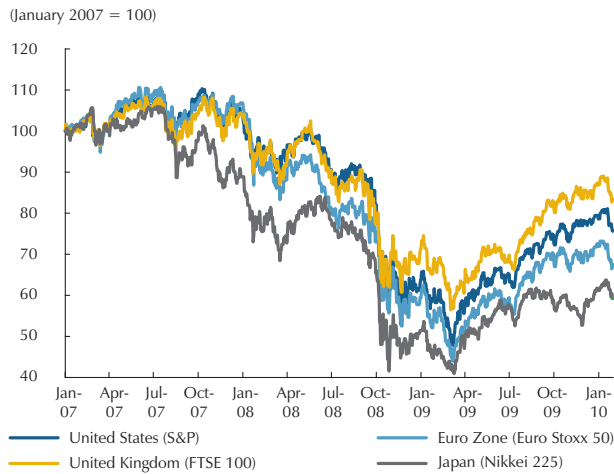
**The cuts in the policy interest rate is still** working its way through to market interest rates.

### A. EXTERNAL MARKETS

The situation on world financial markets continued to improve during the final quarter of 2009, with progress towards liquidity conditions on interbank markets and stock market gains being the high points. However, in the early weeks of 2010 (when this report was written), the stock markets suffered several setbacks, partly because the market still regards the high levels of public debt in the industrialized countries as a major risk to long-term economic stability. In addition, the Obama administration announced it wants a new regulatory framework for the financial system, coupled with the fact that the credit channel in some developed countries has yet to be restored fully. All of this complicates the sustained economic growth led by the private sector.

As mentioned in the last edition of this report, the fiscal programs implemented by governments and the monetary easing by central banks made it possible to stabilize the international financial system and to avoid a systemic crisis.

**Graph 41**  
Stock Market Indexes of Several Developed Economies

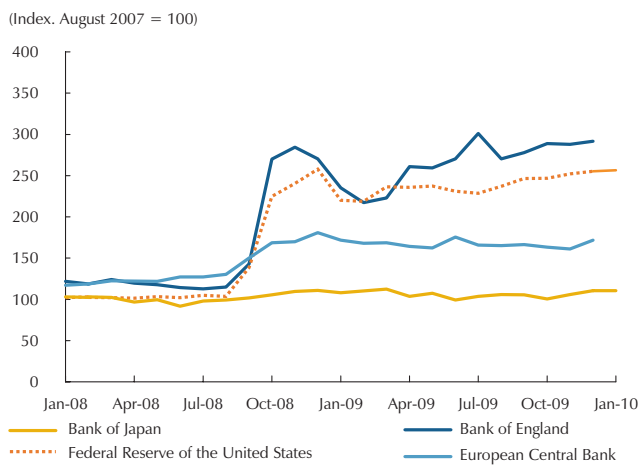


Note: Data at January 31, 2010  
Source: Bloomberg

The impact of this strategy on productive activity has been remarkable and has generated important rebounds in several productive sectors (see Chapter III.) This stimulated investor confidence and, consequently, there has been a greater willingness to invest in the stock market since March. The result was a recovery of the upward trend in stock market assets, which continued throughout the fourth quarter of 2009 (Graph 41).<sup>2</sup>

In this environment, several central banks announced plans to gradually dismantle their liquidity facilitating mechanisms during first half of 2010.<sup>3</sup> In fact, the expansion in the balances of some central banks came to a halt in the fourth quarter 2009 and, consequently, their value is expected to decline during the coming quarters (Graph 42). Also, other central banks of developed countries that did not expand their balance sheets through unconventional policies began to raise their benchmark rates. Australia, Norway and Israel are a case in point (Table 4).

**Graph 42**  
Total Assets of Central Banks



Sources: Central Banks.

Although this means hardening the monetary stance in the short term, the central banks have made it clear that support will continue for a prolonged and prudent period of time, at least until the economy shows more solid signs of recovery. Specifically, the central banks are expected to keep their interest rates at near-zero figures until an acceptable level of economic activity is reached, provided inflation and inflation expectations are kept in check, which could take the better part of 2010. In the case of the United States, analysts expect interest rates to increase between 25 and 50 bp during the final

2 In January, the stock market losses in advanced economies are between 5% and 6%, on average. This is due largely to the lower than expected job numbers and the uncertainty created by the huge deficits of several countries in the euro zone. To a lesser extent, these losses also can be attributed to profit-taking.

3 The Fed announced plans to gradually dismantle several of its programs in the coming months. Most are liquidity facilities and currency exchange agreements established with various central banks. However, the Fed will continue to purchase mortgage-backed securities from government-supported agencies and debt issued by those agencies. The total amount of the program will be around U.S. \$ 1.25 trillion (t). On the other hand, although the Bank of England announced an increase in asset purchases at year's end, but they will continue only during the first quarter of 2010. Also, at its meeting on December 3, 2009, the European Central Bank concluded it was time to begin a gradual withdrawal of unconventional liquidity measures. This implies a reduction in the number of longer-term funding operations in the first quarter of 2010.

Table 4  
Benchmark Rates of Central Banks

	Current Level	Latest Change	Next Meeting
United States	(0 a 0.25)	16 Dec. 08 (-87.5pb)	16 Mar. 10
Euro Zone	1.00	7 May. 09 (-25pb)	04 Mar. 10
United Kingdom	0.50	5 Mar. 09 (-50pb)	04 Mar. 10
Czech Republic	1.00	16 Dec. 09 (-25pb)	25 Mar. 10
Japan	0.10	19 Dec. 08 (-20pb)	17 Feb. 10
Norway	1.75	16 Dec. 09 (+25pb)	24 Mar. 10
Israel	1.25	28 Dec. 09 (+25pb)	22 Feb. 10
Brazil	8.75	22 Jul. 09 (-50pb)	17 Mar. 10
Mexico	4.50	17 Jul. 09 (-25pb)	19 Feb. 10
Chile	0.50	9 Jul. 09 (-25pb)	11 Feb. 10
Colombia	3.50	23 Nov. 09 (-50pb)	26 Feb. 10
Peru	1.25	6 Aug. 09 (-75pb)	11 Feb. 10
Turkey	6.50	19 Nov. 09 (-25pb)	16 Feb. 10
China	5.31	22 Dec. 08 (-27bp)	1Q10
New Zealand	2.50	30 Apr. 09 (-50bp)	10 Mar. 10
Australia	3.75	1 Dec. 09 (+25bp)	01 Mar. 10
India	4.75	21 Apr. 09 (-25bp)	01 Apr. 10
South Africa	7.00	13 Aug. 09 (-50bp)	25 Mar. 10

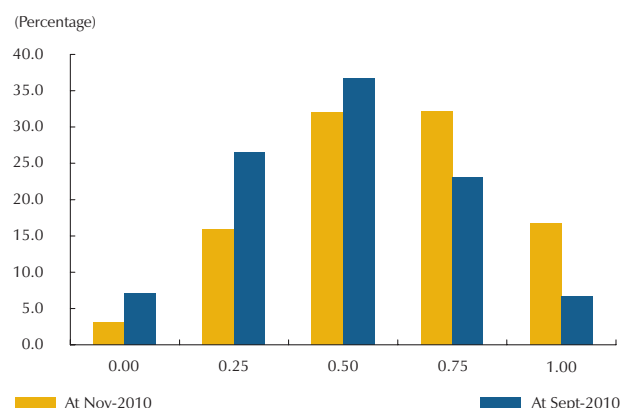
Sources: Various central banks, Bloomberg and JPMorgan.

quarter of 2010, while the futures market assigns a 16% and 30% probability that the United States Federal Reserve rate by November 2010 will be at 0.25% and 0.5%, respectively (Graph 43).

Despite better performance in the interbank market and more momentum in the stock market, the credit channel has yet to be restored fully in the economies advanced. While a number of surveys show commercial banks eased their loan requirements during the year, the levels remained relatively high. Added to this

is the fact that the loan portfolio has continued to deteriorate (Graph 44) and unemployment remains high, complicating the recovery in both the supply and demand for credit.

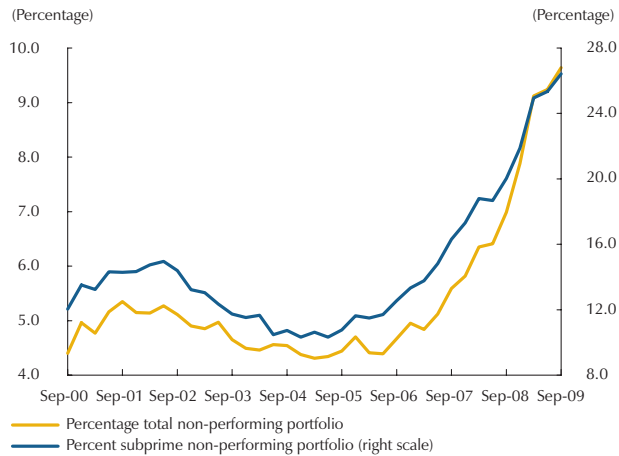
Graph 43  
Implicit Probabilities of the Futures Markets for the Fed Rate



Sources: Bloomberg.

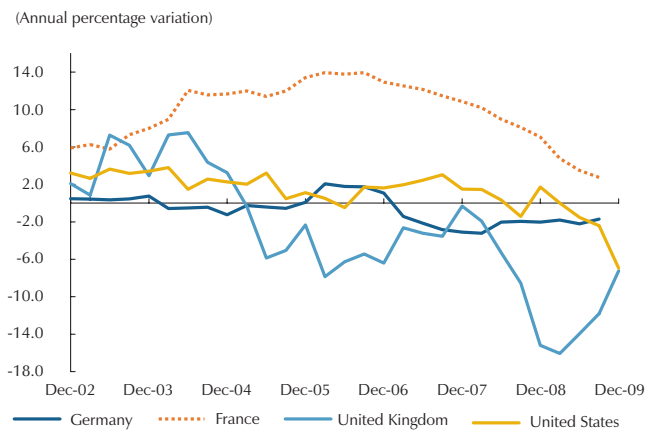
Consequently, lending in the developed economies continued to slow and even declined during the fourth quarter in terms of resources for consumption and loans to finance trade and investment activities (Graph 45). It is possible these trends will continue for part of 2010, given the deteriorating job market, the loss of wealth, high household debt and the extent to which financial institutions are leveraged. In the case of United States, which has a more developed securitization market, commercial paper

**Graph 44**  
Non-performing Mortgage Loan Portfolio in the United States



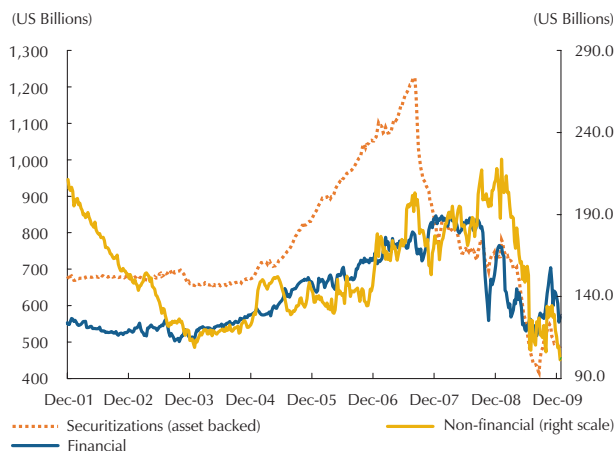
Sources: Bloomberg.

**Graph 45**  
Total Real Consumer Lending in Developed Economies



Sources: Various central banks.

**Graph 46**  
Outstanding Commercial Paper in Circulation in the United States, by Type of Issuer<sup>a/</sup>



Note: Seasonally adjusted series.  
Sources: US Federal Reserve.

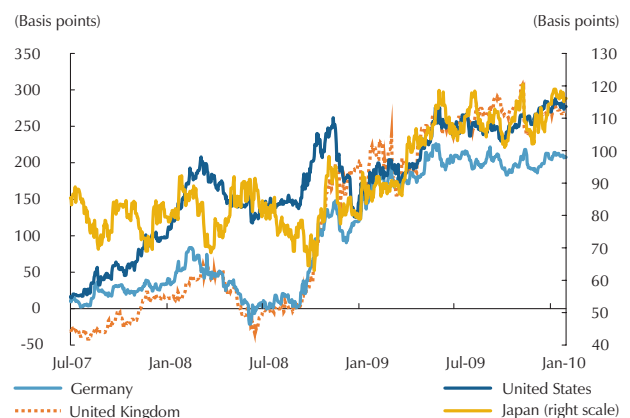
holdings dropped again during the fourth quarter after a slight rebound in the third. Credit originating through this channel still is far less than what it was before the crisis (Graph 46).

So, although commercial banks have reported earnings in recent quarters, they might not be sustainable and could be hit again by problems such as those that might arise in the commercial real estate sector. It is important to point out that the markets are keeping a close eye on this sector, since the large amount of investment in the past and the drop in demand due to the crisis beg the question as to whether or not a profit can be made. On the other hand, is still unclear whether or not the losses from toxic assets have been fully reflected on the balance sheets of financial institutions.

The slope of the yield curves in the government bond market of developed economies has been maintained. The differential between bonds at two and ten years rose slightly during the fourth quarter 2009 (Graph 47), possibly because of the huge fiscal deficit accumulated by these economies and the need for extensive financing in the medium and long term.

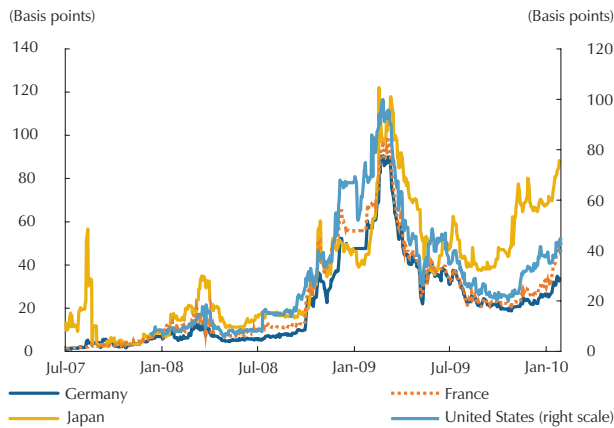
Specifically, the added stress in the financial market has increased the demand for short-term liquid securities, causing some downturn in this segment of the curve. Coupled with the rise in long-term

**Graph 47**  
Spread on Government Bonds at Two and Ten Years



Note: Data at January 31, 2010.  
Source: Bloomberg

**Graph 48**  
Credit Default Swaps (CDS) of Several Developed Economies<sup>a/. b/</sup>

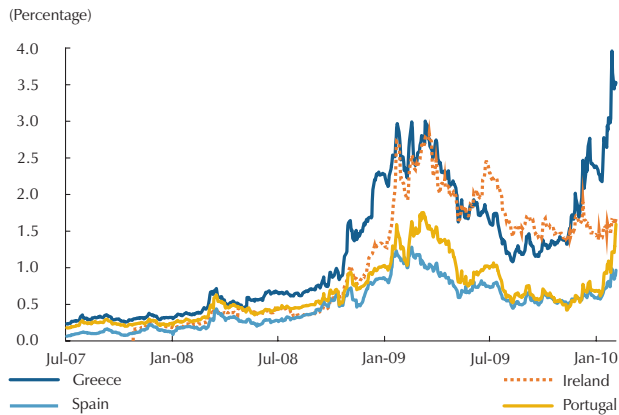


a / The CDS of Germany, Japan and France are linked to the dollar, while the CDS of the United States are linked to the euro.  
b / Data at January 31, 2010.  
Source: Bloomberg.

rates, this added to the perception of risk due the fiscal dilemma. As of October 2009, there was a surge in sovereign risk premiums that is likely to continue during the coming quarters (Graph 48).

As stated in previous editions of this report, the fiscal measures that are aiding economic recovery and helping to stabilize the financial system in the short term, could threaten the macroeconomic stability of the developing countries and the strength of their currencies in the long term<sup>4</sup>. The latter would be happening in countries such as Greece and, to a lesser extent, in Ireland, Spain and Portugal. These economies, traditionally considered stable, would see their credit rating and risk premiums affected by the economic downturn and pressure on their internal revenue<sup>5</sup> (Graphs 49 and 50).

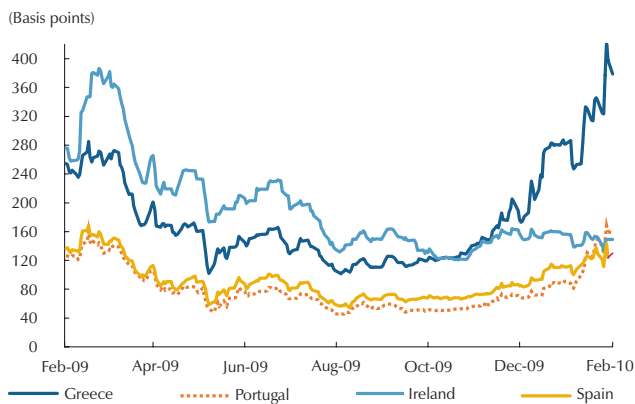
**Graph 49**  
Differential: Ten-year Sovereign Debt with Germany



Note: Data at January 31, 2010  
Source: Bloomberg.

As for the financial markets in the emerging countries, risk perception has declined as economic prospects have improved. In Latin America, although counter-cyclical fiscal policies were implemented by most governments, they did not seriously jeopardize government balance sheets. Consequently, risk premiums have remained stable and are where they were before Lehman Brothers failed (Graph 51). The vote of confidence received by the region would be explained by fewer macroeconomic imbalances, the limited exposure of its banking systems and less consumer, corporate and government borrowing. Much the same can be said for other emerging economies, such as those in Asia.

**Graph 50**  
Five-year Credit Default Swaps (CDS) of Western European Countries



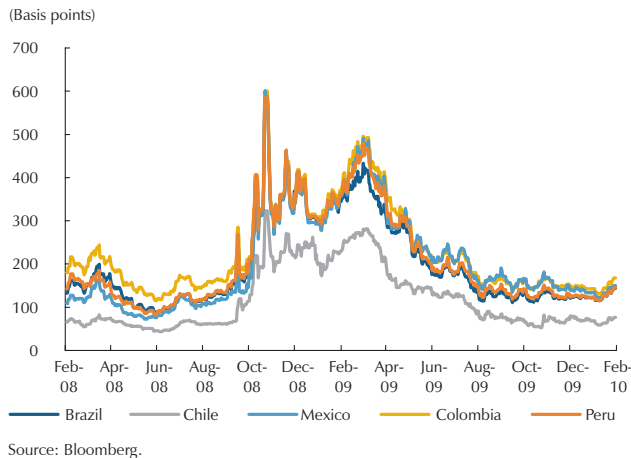
Source: Bloomberg.

In this environment, the stock markets in the emerging countries continued to recover in line

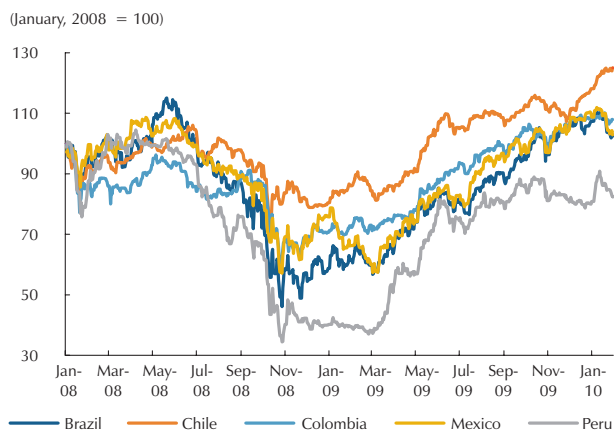
4 The euro depreciated against the dollar by about 9% between December 2009 and January 2010, having gone from approximately U.S. \$ 1.5 per euro to \$ 1.37.

5 In many countries, the economic crisis caused budget deficits in excess of the regulatory limit set by the European Commission (3%). Accordingly, the EC proposes setting deadlines to put a stop to this. The deficit of the Euro Zone countries was 0.8% of GDP in 2007 and 2.3% by 2008. Forecasts indicate it will triple this year (to 6.9%) and reach 7.5% in 2010. The Commission has urged Greece to act immediately since it has not done enough to close the gap. Greece is the most critical case; its deficit this year is expected to be around 13%, far more than was estimated previously.

**Graph 51**  
Five-year Credit Default Swaps (CDS) in Latin America



**Graph 52**  
Stock Market Indexes: Latin America



**Graph 53**  
Stock Market Indexes: Asia

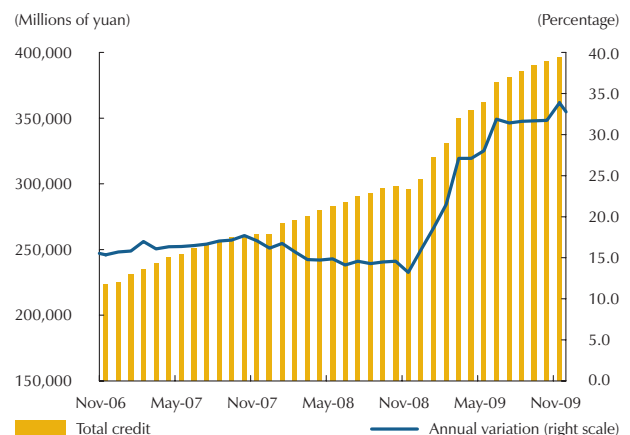


with the increased demand for worldwide equity instruments. The stock market gains in Asia and Latin America during the final quarter of 2009 were between 10% and 20% (Graphs 52 and 53.) The countries in the region that performed best were Brazil, Mexico and Colombia. As for the Asian countries, stock market growth in India and China was a high point.

However, as in the industrialized countries, the emerging stock markets experienced some important corrections during January 2010. The foremost case was in China, where fears of assets bubbles (in stocks and property prices) prompted monetary authorities to tighten the monetary regime a bit in late December 2009.<sup>6</sup> These measures are intended to reduce the amount of liquidity generated by the monetary stimulus packages to curb the excessive growth in credit in that economy (Graph 54). Even so, the intervention rate of the Central Bank of China was left unchanged. Apart from China, the setbacks in the stock markets of the emerging economies in the early weeks of 2010 have been less pronounced than was the case on the stock markets in the United States and Europe.

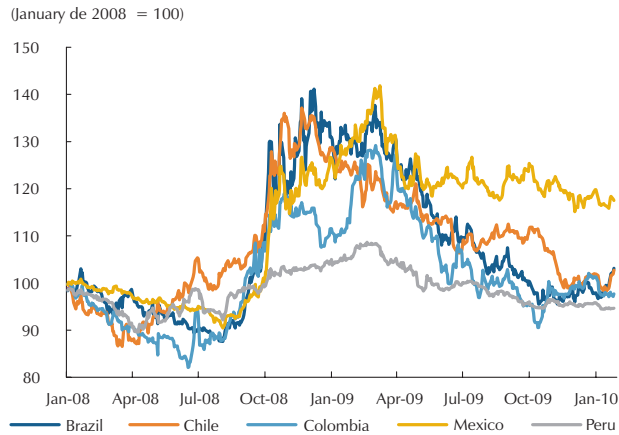
With respect to the emerging market currencies, there has been a generalized trend towards appreciation

**Graph 54**  
Total Credit in China



6 The Central Bank of China issued bonds and increased the amount of reserves private banks are required to maintain.

Graph 55  
Exchange Rate Index in Latin America<sup>a/</sup>



a/ Data at January 31, 2010.  
Source: Datastream

against the dollar as of March 2009, but with a period of stabilization in the last quarter (Graph 55). As for the countries of the region, this trend was more pronounced in Brazil and Chile. The Colombian peso appreciated 10% with respect to the dollar in 2009 and fluctuated slightly at around COP\$ 2,000 per dollar during the early weeks of 2010.

A noteworthy fact was the Venezuelan government's decision to devalue its exchange rate. As a result, Venezuela now has three exchange rates: \$ 2.6 bolivars per dollar for priority imports such as food and medicine, \$4.3 per dollar for non-priority exports and imports, and the exchange rate defined on the parallel market. The ideal level of international reserves for the Central Bank of Venezuela was

reduced as well. For the time being, it is US\$ 30 billion (b), after approximately U.S. \$ 7 billion were transferred in recent months to the National Development Fund (Fonden) for public works to be conducted at its discretion.

In short, although some financial conditions have improved a great deal in both the developed and emerging countries, there still is a degree of uncertainty about the markets. There also are the effects on risk premiums caused by the sharp increase in government debt in the developed economies. This probably will mean higher interest rates on government bond issues, provided those countries do not reduce their spending or their revenue does not increase within a reasonable period of time (perhaps no more than one year.) In the future, the developed economies' need for more financing could curb capital flows to the emerging markets and make their financing more expensive.

At the time this report was written, Greece's fiscal situation was causing an unusual amount of instability in the markets, with repercussions on the perception of risk posed by other European countries such as Spain, Portugal and Italy. It is crucial to keep an eye on how these events play out, as Europe's economic stability and that of other countries with huge debts may depend on the way they are resolved. The same can be said of the strength of their currencies, headed by the euro.

## B. DOMESTIC FINANCIAL MARKETS

The macroeconomic scenario in November 2009 would appear to suggest a new policy interest rate cut. To begin with, annual inflation slowed more than expected and was likely to end the year under 3%. The expectations for all time horizons were within the target range for long-term inflation. Most indicators of real productive activity did not show a more pronounced drop in economic activity, but neither did they denote generalized growth. Furthermore, the

slowdown in the loan portfolio denominated in domestic currency continued. In the external context, the global economy was recovering in an environment with monetary and fiscal stimuli, although Colombian exports to Venezuela plunged dramatically and forecasts for growth in Venezuela entered negative terrain. Consequently, the BDBR cut its benchmark interest rate by 50 bp in November to 3.50%. This move was intended to strengthen economic recovery and to reduce the negative effects of the drop in trade with Venezuela.

As illustrated in this chapter, the policy rate cut was passed through to interest rates on deposits and lending. The monetary aggregates and the loan portfolio showed signs of stabilization in December and early January, after slowing throughout the year. In fact, the mortgage loan portfolio continued to grow at a good pace, and there were some signs of recovery in consumer lending. Credit risk stabilized, and even consumer and mortgage lending improved in terms of portfolio quality. As for external borrowing by the private sector, the recovery in levels continued, although the annual variations are still negative.

The surveys done by Banco de la República with respect to credit supply and demand reflect better prospects for 2010. They show banks were more willing to extend loans; in fact, the indication is they will not raise their requirements for assigning new loans. In terms of the demand for credit, the surveys suggest most agents feel credit is readily available.

## **1. Monetary Aggregates**

Monetary aggregates, most of which decelerated sharply in late 2009 and early 2010, showed signs of stabilization in terms of annual growth at levels above inflation and close to nominal economic growth estimated for this year.

Base money, which usually experiences a seasonal peak at year's end, increased COP\$ 6.4 t in the fourth quarter and ended 2009 with a balance of COP\$ 39.5 t. This growth was equal to the liquidity generated by the reduction in national government deposits with Banco de la República. Moreover, as announced by the BDBR on October 23, Banco de la República supplied COP\$ 3 t in additional liquidity through TES purchases on the secondary market. This amount was offset by the reduction in the financial system's demand for expansion and contraction repo operations (Table 5).

Accordingly, the average monthly demand for base money in December 2009 showed an annual increase of 6.6%, which implies a build-up in this aggregate compared to the annual increase posted in October (2.8%). However, the increase in December was less than the average annual increase observed between June 2007 and August 2009 (15.2%),<sup>7</sup> a period when the reserve

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7 The reserve requirements were raised in 2007 and 2008.

Table 5  
Base Money Sources  
(Billions of pesos – Quarterly change)

Concept	2009				Total
	I Qtr.	II Qtr.	III Qtr.	IV Qtr.	
<b>I. Government</b>	(3.945)	(4.784)	2.474	6.424	169
Transfer of profits <sup>a/</sup>	0	0	0	0	0
Pesos	0	0	0	0	0
Deposits with Banco de la República	(3.945)	(4.784)	2.474	6.424	169
<b>II. Regulation TES</b>	(501)	(20)	(4)	2.968	2.444
Final purchases	0	0	0	3.000	3.000
Final Sales	(499)	0	0	0	(499)
Maturity	(1)	(20)	(4)	(32)	(57)
<b>III. Banco de la República Liquidity Operations</b>	1.698	5.438	(4.362)	(3.068)	(293)
Repos <sup>b/</sup>	1.194	4.484	(2.690)	(4.075)	(1.087)
Reverse repos	505	954	(1.672)	1.007	794
<b>IV. Currencies <sup>c/</sup></b>	(460)	369	354	0	264
Put options to control volatility	429	369	354	0	1.152
Call options to control volatility	(888)	0	0	0	(888)
Options to accumulate reserves	0	0	0	0	0
Direct purchase auction	0	0	0	0	0
Discretionary intervention	0	0	0	0	0
Sale of foreign exchange to the government	0	0	0	0	0
<b>V. Other <sup>d/</sup></b>	242	190	194	137	763
<b>Total variation in base money</b>	(2.965)	1.194	(1.343)	6.462	3.347
<b>Balance: base money</b>	33.228	34.422	33.078	39.540	39.540

a / Profits (U.S. \$ 320.4 m - COP\$ 818.6 b) were turned over to the government in dollars on February 27, 2009. U.S. \$ 533 m - COP\$ 1.186 b in government profits were transferred on February 28, 2007.

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

c / Does not include transactions with international organizations.

d / The item "Other" includes the monetary effect of Banco de la República's P & L, along with the monetary impact of debt and external portfolio deposits.

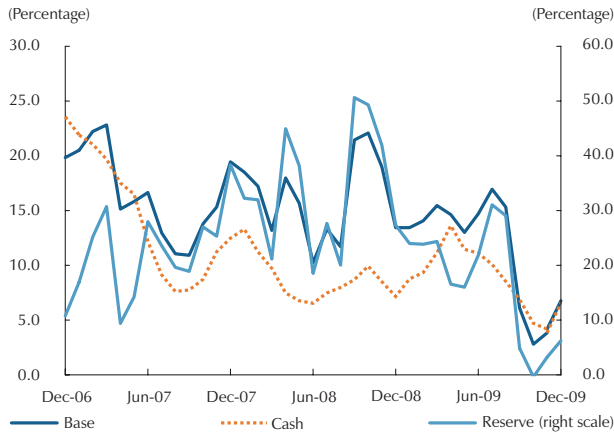
Source: Banco de la República.

requirements were higher. The slowdown in economic activity was other factor that contributed to the more moderate increase in base money (Graph 56).

With respect to the different components of base money, there was a slight build-up in the demand for cash and an increase in bank reserves, partly because of the shift in deposits. In effect, deposits with more reserve requirements<sup>8</sup> have been growing at higher rates since last September. By December, the monthly

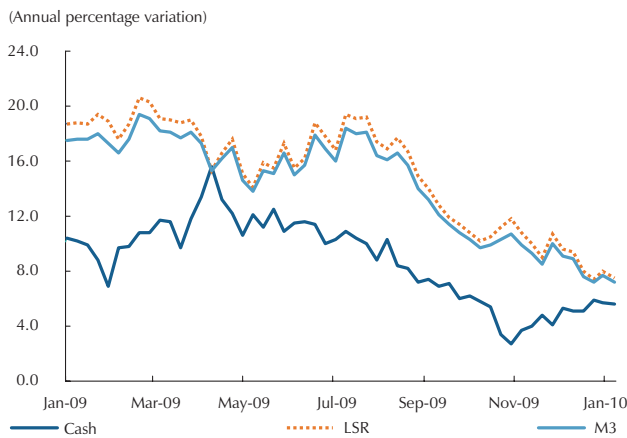
<sup>8</sup> Current reserve requirements (%): 11% for current accounts, savings and other sight deposits, and 4.5% for CDs and bonds under 180 days. BDBR External Resolution No. 011 of 2008.

**Graph 56**  
Base Money by Use  
(annual percentage change of monthly average)



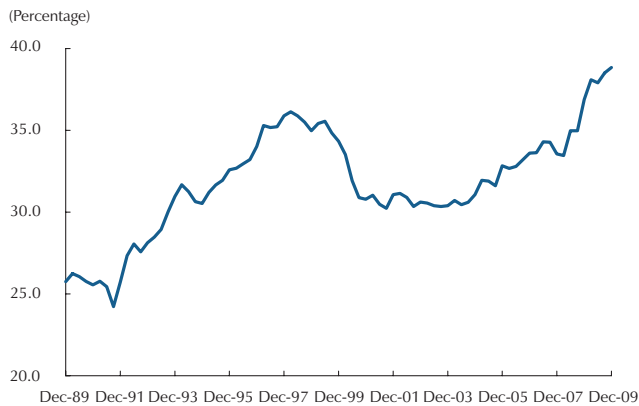
Source: Office of the Superintendent of Financial Institutions; Calculations by Banco de la República.

**Graph 57**  
M3, Total Deposits (LSR) and Cash: Weekly Data



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

**Graph 58**  
M3 to GDP: 1989-2009



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

average for savings and current accounts increased 12.5% and 10.2%, respectively, while deposits in the form of CDs and bonds did so at a rate of 5.6%.

The broad monetary aggregate (M3) declined from 16.9% in late June to 7.7% at the close of 2009. This performance was led by the main M3 components: liabilities subject to reserve requirements (LSR), which dropped from 17.8% to 8.0% during the same period. However, from mid-December up until the third week of January 2010, both LSR and M3 showed signs of stability, posting respective annual growth fluctuating around 7.7% and 7.4% respectively during this period (Graph 57).

The real annual variation in M3 during the second half of 2009 (excluding the non-food CPI) declined from 11.6% to 5.2%. Even so, the increase in M3 continued to surpass the growth in economic activity, and the M3/GDP ratio is at the highest level calculated since December 1989 (Graph 58).

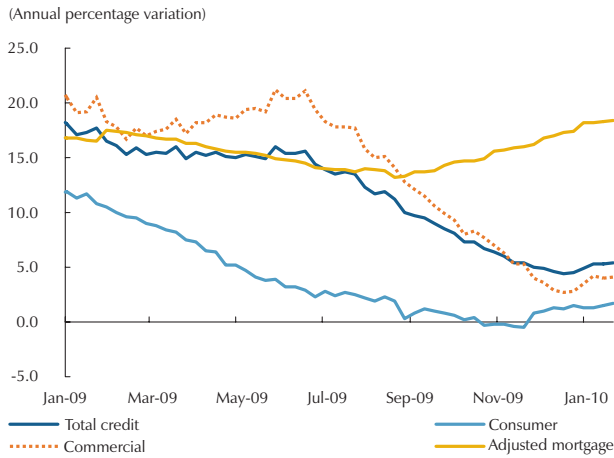
## 2. Credit

In December and the first three weeks of January, the increase in the peso-denominated gross loan portfolio, plus leasing, stabilized following the dramatic slowdown observed during the five months before. In fact, annual growth in the total gross loan portfolio went from 14.4% to 5.0% between June and November, and stabilized at around 4.9% between November 27 and January 22. This performance was led by the commercial loan portfolio, which was up 19.4%, 4.0% and 4.1% during the same period.

As for the different components of the loan portfolio, the rise in mortgage lending<sup>9</sup> offset the low growth in commercial and consumer loans. Between September and the third week of January, the annual increase in mortgage lending accelerated

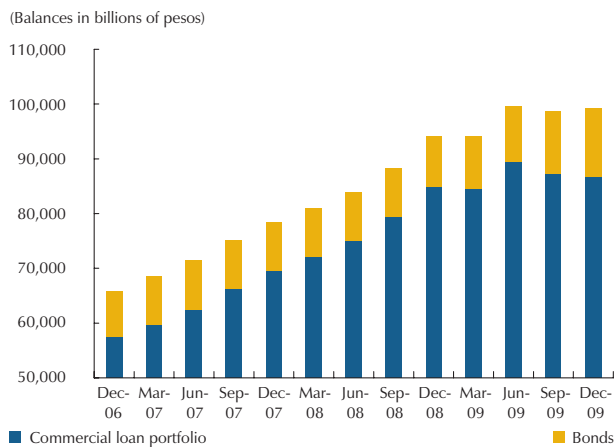
<sup>9</sup> Includes outstanding mortgage securitizations held by the banking system. Part of the momentum is associated with the interest rate subsidies provided by the government through Finance Ministry Decree 1143/ 2009.

**Graph 59**  
**Peso-denominated Gross Loan Portfolio with Leasing**  
**(Weekly data)**



a / Non-food CPI deflated  
 Source: Office of the Superintendent of Financial Institutions; calculations by Banco de la República.

**Graph 60**  
**Peso-denominated Commercial Loan Portfolio plus**  
**Corporate Debt**



Source: Office of the Superintendent of Financial Institutions; calculations by Banco de la República.

from 14.6% to 18.4%, while commercial lending declined from 9.3% to 4.1%, with a low of 2.7% in mid-December. Consumer lending continued to recover slowly, posting an annual variation of 1.7% on January 22 (Graph 59).

In real terms, the total loan portfolio declined from 10.5% to 1.6% during the second half of the year, while the commercial loan portfolio went from 15.6% to 0.5% and consumer lending from 1.7% to 0.6%. Mortgage lending increased from 8.2% to 12.1%.

Major companies floated a large amount of debt in 2009, which explains part of the slowdown in the commercial loan portfolio. The aggregate commercial loan portfolio outstanding, plus bonds,<sup>10</sup> remained relatively stable during the second half of the year, registering 5.3% and 2.9% nominal and real growth, respectively, in December (Graph 60).

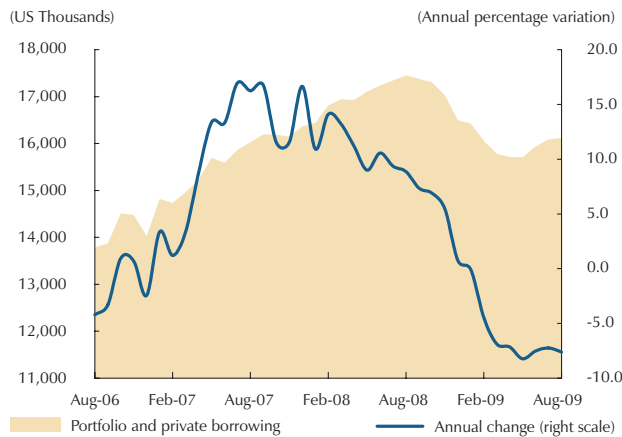
Growth in external lending to the sector private remained negative, but the level showed signs of recovery. The annual variation went from -7.5% to -7.6% between September and November 2009. As for amounts, total external credit was up by COP\$ 184 m during the same period. In December, the outstanding balance for local banks increased by U.S. \$ 56 m (Graph 61).

Despite the average slowdown in lending during 2009, its evolution was similar to that of economic activity. In fact, the ratio of aggregate lending (the portfolio denominated in domestic and foreign currency plus bonds issued by the productive sector) to GDP was stable during 2009 and remained at the maximum level observed during the current decade. The outcome is similar when credit is divided between loans extended to homes or businesses (Graph 62).

As for how lending is expected to evolve in 2010, the different surveys of those who supply and demand credit suggest there may be an improvement in this activity.

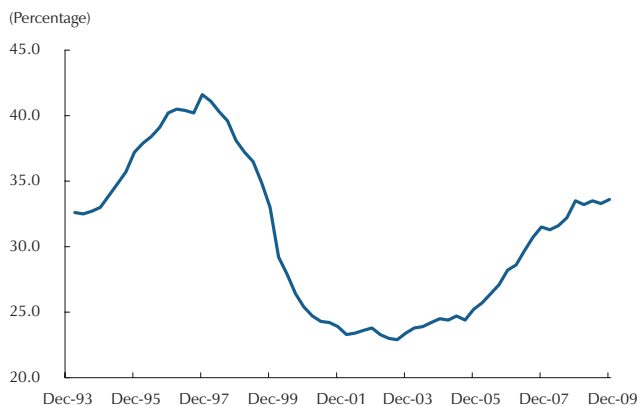
<sup>10</sup> The calculations were done by Banco de la República using figures from the Office of the Superintendent of Financial Institutions.

**Graph 61**  
Aggregate F/C Loan Portfolio and Non-financial Private Sector Borrowing



Source: Office of the Superintendent of Financial Institutions; calculations by Banco de la República.

**Graph 62**  
Total Portfolio with Bonds / GDP



Source: Office of the Superintendent of Financial Institutions; calculations by Banco de la República.

On the supply side, the quarterly survey of the financial system conducted by Banco de la República in December 2009 showed more willingness to loan. The most favored option for using surplus liquidity was to loan it out, particularly to companies that produce for the local market. This option replaced investment in TES, which had been the principal option since December 2008 (Graph 63). Those surveyed also said there will be no problem in satisfying the added demand for credit, and most indicated they do not believe lending requirements will have to be increased.

On the demand side, the survey of businessmen, major merchants, transporters and communication service providers, financial analysts, academics and trade unions also suggests that credit is readily available and probably will remain so for the rest of this semester (Graph 64).

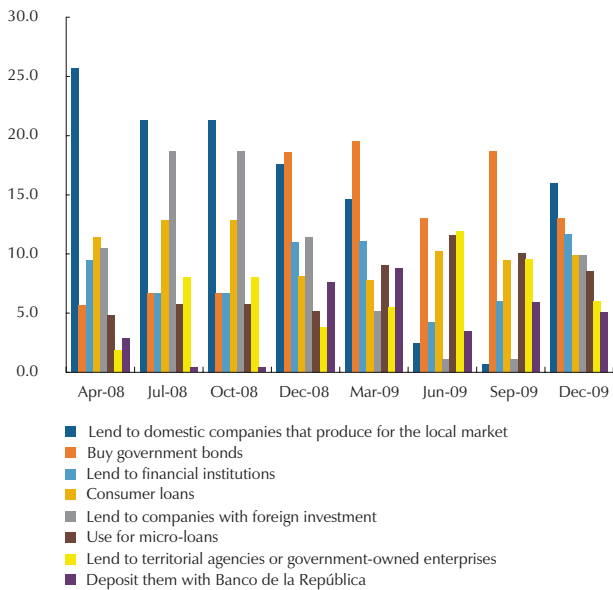
These answers are consistent with the build-up in the disbursement rate. With the exception of ordinary loans, all other new loans posted significant increases. In fact, by January 15, the order four moving average for disbursements on preferential, treasury and construction loans had increased at annual rates of 81.7%, 64.3% and 55.7%, in that order (Graph 65). As for ordinary disbursements that showed negative rates, they entered positive territory (7.5%) (Graph 65). In the case of households, disbursements for housing had increased 66.1% by the same date, while consumer plus credit card lending was up 25.6% (Graph 66).

### 3. Interest Rates

On November 23, the BDBR decided to lower the intervention rate by 50 bp, placing it at 3.5%. At the BDBR meetings in December 2009 and January 2010, the policy rate was left unchanged. Therefore, the cumulative reduction since December 2008 comes to 650 bp.

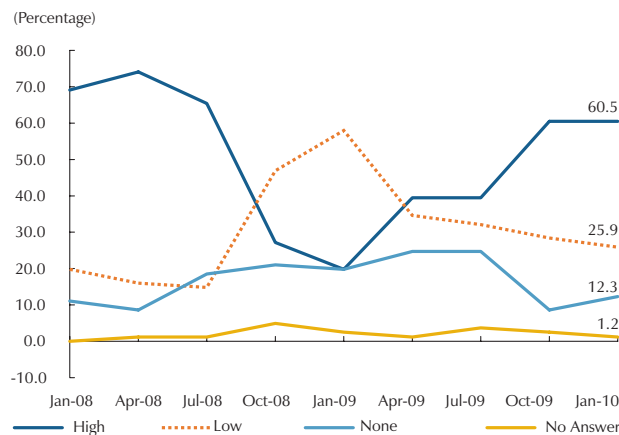
The intervention rate cuts were motivated by several factors, primarily i) a larger than expected slowdown in inflation and expectations of inflation within the long-term target range (2% to 4%), ii) less than anticipated economic growth and a loan portfolio that continued to slow, and iii) the drop in trade with Venezuela and the negative growth forecast for that country. Accordingly,

**Graph 63**  
 How would your financial institution be most likely to use surplus resources?  
 (Choose five options and list them in order of importance, with 1 being the most relevant)



Source: Banco de la República.

**Graph 64**  
 Current Perception of Credit Availability



Source: Banco de la República.

the new rate, as it now stands, should help to bolster economic recovery and to lessen the adverse effects of the collapse in trade with Venezuela.

The policy rate cut is still being passed through to interest rates on the interbank market and to those for deposits and lending. Overnight interbank rates declined and, by December, they were even 50 bp below the benchmark rate. Two reasons caused Banco de la República to again become a net debtor to the financial system, at least temporarily, and prompted the interbank interest rates to overreact. One was the decline in government deposits with Banco de la República, liquidity that ended up being part of the deposits with the financial system. The second was the constant expansion generated by Banco de la República through its purchase of TES on the secondary market. Nevertheless, so far during January, there has been less surplus liquidity and the TIB and IBR rates<sup>111</sup> have approached the policy rate, averaging 3.33% and 3.29%, respectively, during the third week of January (Graph 68).

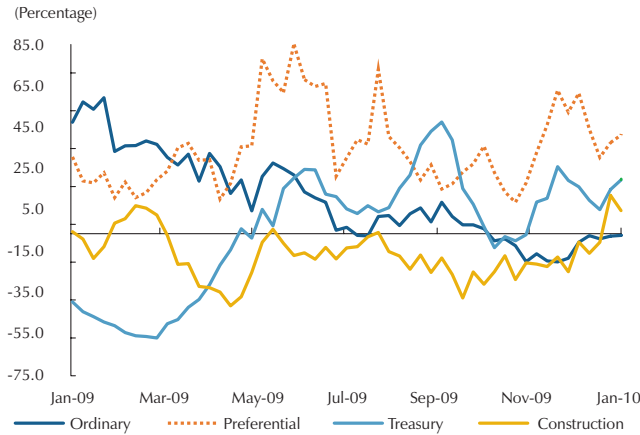
With respect to the deposit market, weighted interest rates for all CD, DTF and saving deposits in the last three months (from October 23, 2009 to January 22, 2010) were down 70 bp, 35 bp and 40 bp, in that order.

The same quarter saw a similar situation in terms of interest rates on loans. For most types of lending, they declined more than the 50 bp benchmark rate cut. The largest reductions in the commercial loan portfolio were in interest on preferential lending (-108bp) and ordinary loans (-83 bp), followed by treasuring lending (-42 bp) and loans to builders (-34 bp).

As for households, credit card lending rates declined 166 bp, while those on consumer loans were down -99 bp and mortgage loans, -57 bp (Table 6). The 171 bp reduction in the usury rate was another factor that contributed to the drop in interest rates on credit card lending and to the downturn in the consumer lending rate, although less so.

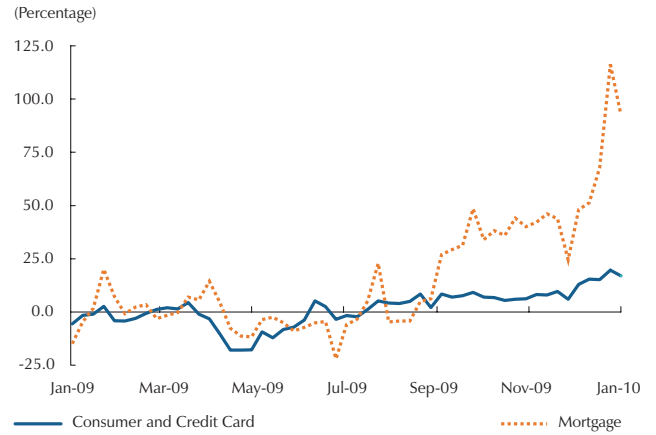
11 TIB: interbank rate; IBR: overnight benchmark rate.

**Graph 65**  
D/C Commercial Loan Disbursements, Annual Change in the Weekly Average (4th Order)



Source: Office of the Superintendent of Financial Institutions; calculations by Banco de la República.

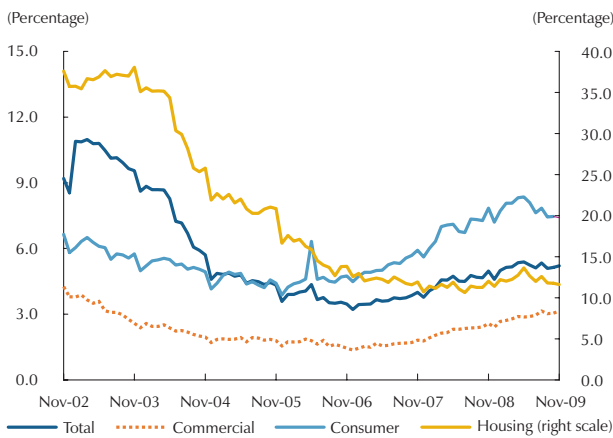
**Graph 66**  
D/C Household Loan Disbursements, Annual Change in the Weekly Average (4th Order)



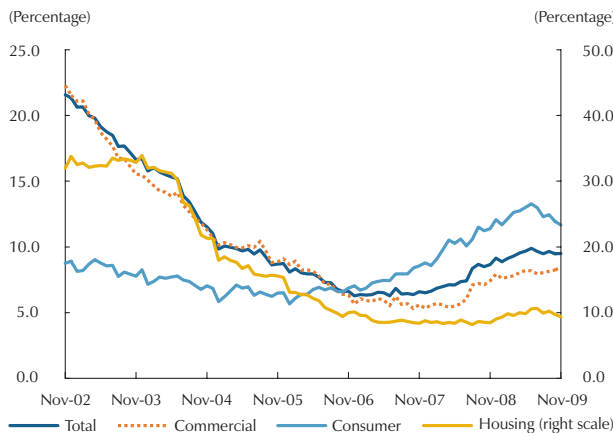
Source: Office of the Superintendent of Financial Institutions; calculations by Banco de la República.

**Graph 67**

**A. Nonperforming loans**

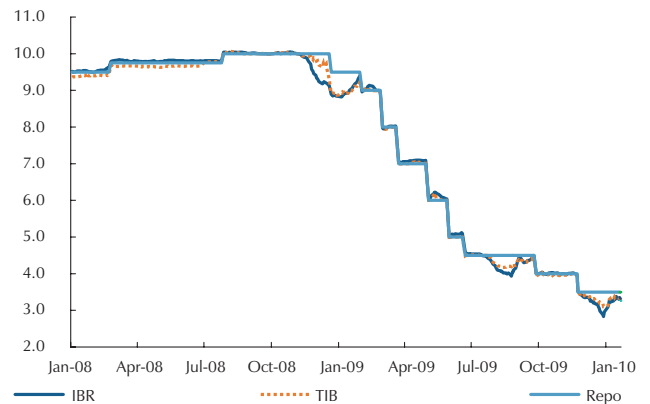


**B. Credit Risk**



Source: Office of the Superintendent of Financial Institutions; calculations by Banco de la República.

**Graph 68**  
Policy Rate, IBR and TIB



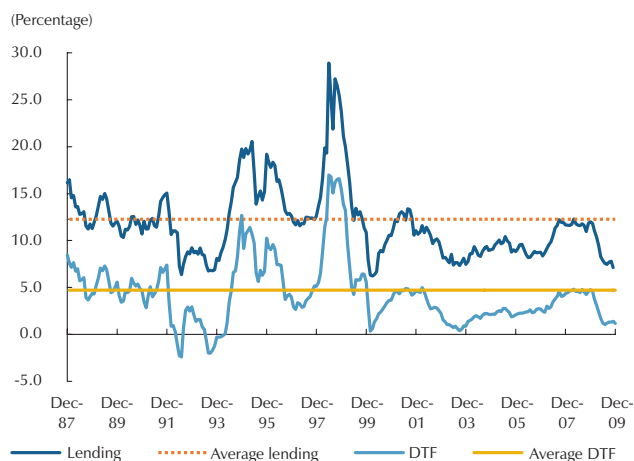
Note: Data on January 22, 2010.  
Source: Office of the Superintendent of Financial Institutions; calculations by Banco de la República.

When non-food inflation is deducted from the interest rates on deposits and lending, one sees the real rates are at historically low levels. By December, the real DTF and the real interest rate on lending were 1.17% and 6.81%, respectively (Graph 69).

**4. Other Assets**

The stock market continued to post gains during the fourth quarter of 2009 and ended the year with nearly 50% average valuation. This rebound

Graph 69  
Real Lending Rates and the DTF



Source: Banco de la República.

continued until January 19, when the Colombian Stock Market Index (IGBC in Spanish) hit a record high of 11,781 points. Similar performance was witnessed in several other emerging economies, also due to internal motives such as an expansive monetary policy, economic recovery and lower inflation. External factors such as recovery in the industrialized economies, higher raw material prices and less risk perception with respect to the emerging markets also contributed to the stock market valuation.

Government bonds, which gained value in October and November, reversed that trend, particularly

Table 6  
Nominal Interest Rates  
(Weekly Average)

	December 18, 2008	October 23, 2009 (percentage)	January 22, 2010	Variation (basis points)	
				Quarterly	Cumulative
<b>Interbank Market</b>					
Policy rate	10.0	4.0	3.5	(50)	(650)
TIB	9.3	4.0	3.3	(66)	(597)
IBR <sup>a/</sup>	9.1	4.0	3.3	(73)	(585)
<b>Deposit market</b>					
CDT	10.7	5.0	4.3	(70)	(640)
CDT - Corporate	11.2	5.2	4.3	(93)	(688)
CDT - Offices	9.8	4.7	4.2	(44)	(556)
DTF	10.3	4.5	4.1	(35)	(623)
Savings deposits	5.0	2.6	2.2	(40)	(274)
<b>Credit Market</b>					
Commercial loan portfolio					
Ordinary loans	17.8	11.5	10.6	(83)	(711)
Preferential loans	16.0	8.4	7.4	(105)	(865)
Treasury loans	15.8	7.8	7.4	(42)	(836)
Home construction loans	16.8	11.3	10.9	(34)	(590)
Household Portfolio					
Mortgage lending	17.3	14.2	13.6	(57)	(370)
Consumer loans	25.5	21.1	20.1	(99)	(548)
Credit card lending	31.0	25.6	23.9	(166)	(713)
<b>Usury rate</b>	<b>31.5</b>	<b>25.9</b>	<b>24.2</b>	<b>(171)</b>	<b>(732)</b>

a / Overnight benchmark rate.

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

Graph 70  
Interest Rates on Zero-coupon TES



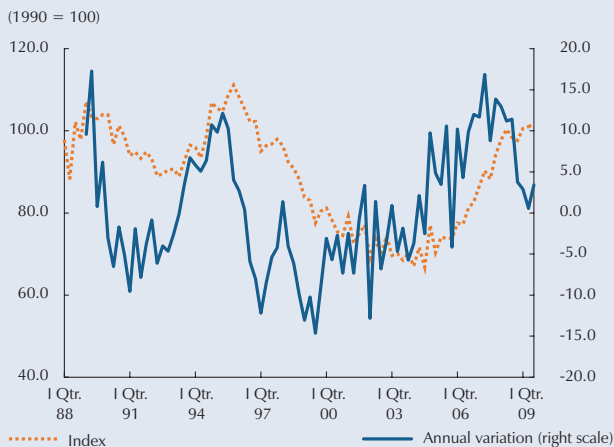
Note: Data at January 22, 2010.  
Source: Colombian Stock Market; calculations by Banco de la República.

in January. In addition to the recent increase in interest rates on TES, the yield curve remains steep, as was the case throughout 2009. Some of this performance could be explained by factors such as preference for the short end of the curve, coupled with the government's need for more financing (Graph 70). Other recent international factors with a negative impact on the domestic stock market and on government borrowing include: i) profit taking for fear of measures to cool the Chinese economy; ii) proposals for more regulation of the financial system in the United States; and iii) the growing perception of risk as a result of government debt in Greece, Portugal, Italy and Spain.

## USED HOME PRICES

The index of used home prices (UHPI) relative to the CPI continued to approach the record high observed in 1995, even though the real annual increase has slowed since mid-2007. In fact, while real annual growth in the UHPI between 2006 and 2008 averaged around 10%, it was 2.3% during the course of 2009 up to September (Graph A).

Graph A  
Used Home Price Index Relative to the Total CPI for  
Thirteen Cities, I Qtr. 88 to III Qtr. 09



Fuente: Banco de la República.

The current upward cycle in home prices is more prolonged than the cycle in the nineties, but the average real annual growth rates are similar. In the nineties, the largest increase in the UHPI occurred during two and half years (from June 1993 to December 1995), with 25% real cumulative growth and an annual average of 9.3%. The current expansion phase is now four years in the making (September 2004 to September 2009), with a cumulative increase of 50.2% in the UHPI and a real annual average of 10.3%.

Consequently, the UHPI is likely to enter a phase this year marked by stability or modest increases. Although the current level can be considered historically high, there are several reasons why a drop in the UHPI similar to the one observed at the end of the nineties is not realistic.

To begin with, the present recovery in home prices began at a historically low level for the index: 2004-Sept. IPVU = 66.8. The minimum in the nineties was higher: 1993-jun. IPVU = 88.9. This lower base of comparison lends further support to sharp increases in the indicator.

Another aspect to consider is the fact that the current expansion in housing has been achieved with less financing. Unlike the boom in the nineties, when home financing reached 80%, the amount of mortgage lending at present does not exceed 70% of the commercial value. Moreover, monthly installments go to pay interest and principal from the beginning, thereby preventing any real increase in the debt. The adjusted mortgage portfolio indicator as a proportion of GDP is far less than what it was during the last construction boom. In this context, the larger proportion of own funds in home purchase makes home prices more sustainable and less susceptible to external shocks, such as those witnessed in the late nineties, when an abrupt outflow of capital led to internal financing problems and higher interest rates, which contributed to the mortgage crisis.

Finally, despite the weak economy in 2009, revenue is less compromised than it was during the 1999 recession. Although unemployment is up, it is currently much lower than during mortgage crisis. Similarly, interest rates on loans in pesos have declined and can be classified, in real terms, as historically low. For UVR-indexed loans, the drop in inflation has meant relief in terms of the installment and a slower pace of adjustment in the debt.

### III. THE MACROECONOMIC OUTLOOK

**In the fourth quarter, the global economy continued** to recover, led by the emerging markets, particularly the Asian economies.

**Economic growth in Colombia during 2010 is expected** to be somewhere between 2% and 4%, but probably in the lower half of that range.

**Considering previous episodes of El Niño weather,** its impact on food and regulated prices is expected to be concentrated in the second and third quarters, but should decline again at the end of the year and into early 2010.

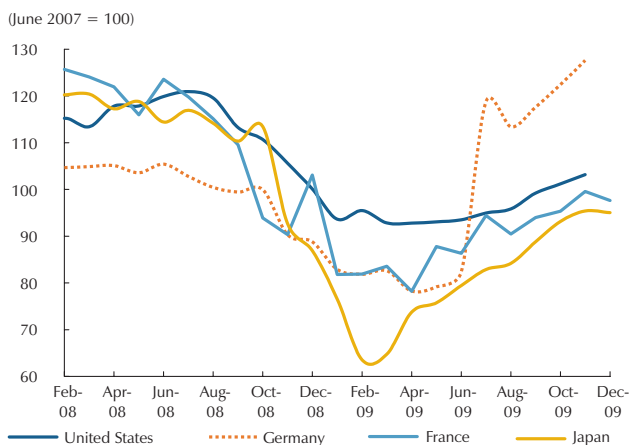
**The risk analysis summarized in the fan chart indicates** that inflation will likely end 2010 within the long-term target range set by the BDBR (between 2% and 4%).

#### A. THE INTERNATIONAL SITUATION

The global economy continued to recover, particularly due to the momentum in several of the Asian countries. Since mid-year, this revival has been reflected in the increase in international trade, which reached levels in some countries similar those of 2007.

In the case of the developed countries, although they began to see an increase in economic activity during the second half of 2009, the road to recovery is still uncertain. The data at December still shows mixed signals with respect to growth. Several indicators have improved as of late, especially those for foreign trade (Graph 71), the real estate market and others associated with the situation of companies, such as new orders. However, retail sales in most

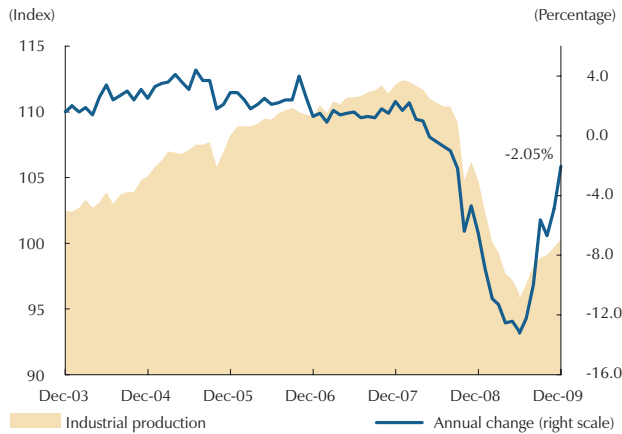
Graph 71  
Total Exports in Dollars: Developed Economies



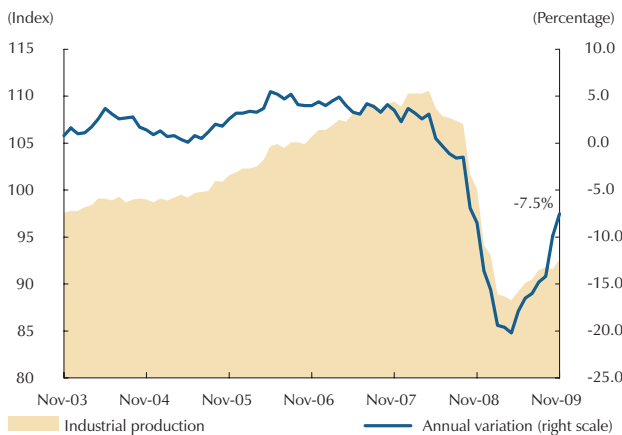
Source: Bloomberg.

Graph 72  
Industrial Production in the Developed Economies

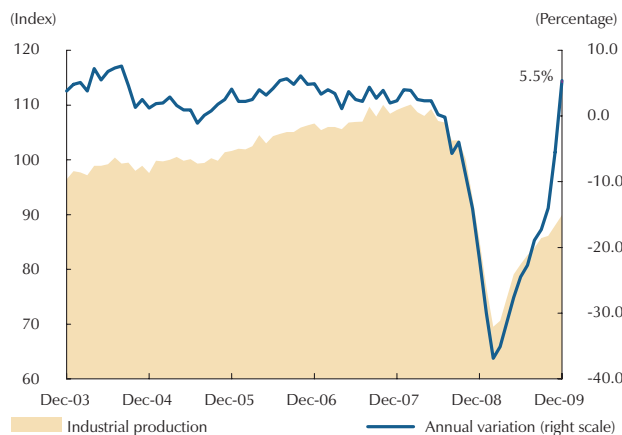
A. United States



B. Euro Zone



C. Japan



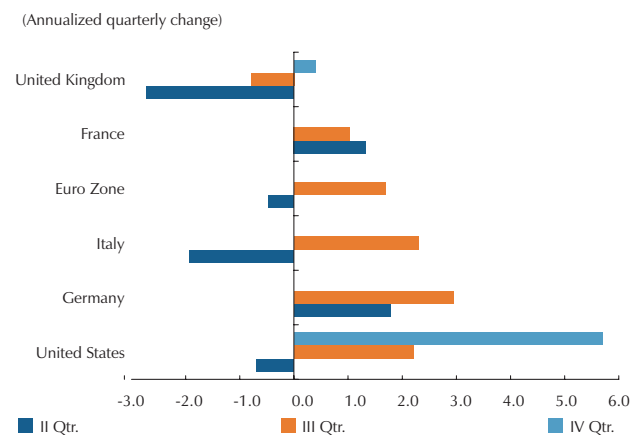
Source: Bloomberg.

industrialized countries remained at a standstill, with the exception of the United States, where there has been some recovery. Although industrial production continued to improve, the speed of that revival has slowed and there have been new setbacks, as was the case in the euro zone during October (Graph 72).

Given the preliminary figures for the fourth quarter, GDP in the United States grew 5.7%, annualized quarterly (a/q), following an increase of 2.2% (a/q) during the previous period. This was more than the market expected and more than was forecast in earlier editions of this report. If these figures are maintained, the U.S. economy would have contracted 2.4% in 2009. Meanwhile, the United Kingdom, which is the only developed country to register positive growth since beginning of the crisis, reported an increase of 0.4% a/q. As yet, there is no GDP data available for Japan and the euro zone with respect to this period, but the indicators at hand point, once again, to an increase in economic activity, although modest (Graph 73).

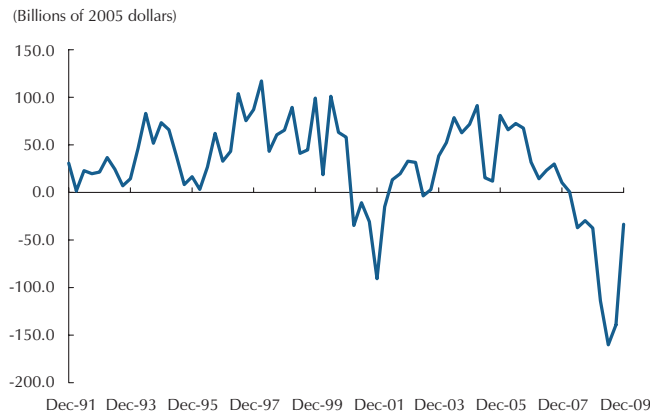
The surprising outcome for GDP in the United States is largely the result of inventory replacement. The abrupt drop in demand led to a sharp decline in inventories as of the second half of 2008. However, new purchase orders for companies began to increase in recent months. Coupled with better

Graph 73  
GDP of Developed Economies: Second, Third and Fourth Quarters of 2009



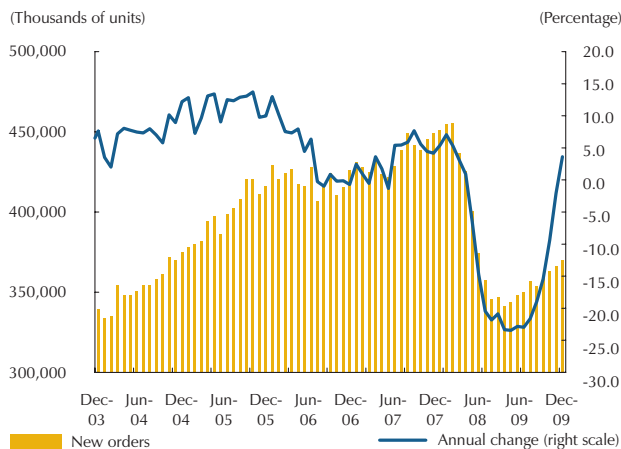
Source: Bloomberg.

Graph 74  
Change in Inventories in the United States



Source: Bloomberg.

Graph 75  
New Company Purchase Orders



Source: Bloomberg.

economic prospects, this should lead, once again, to an accumulation of inventory (Graphs 74 and 75).

The growth in exports was higher than the growth in imports; accordingly, net trade contributed positively to GDP in the fourth quarter. There were moderate increases in consumption and fixed investment: 2% and 3.5%, respectively. In the case of consumption, there was a rebound in spending on nondurable goods and services, while spending on durable goods contracted on the heels of a 20% increase during the third quarter. The latter was due to the fact that a number of economic stimulus programs came to an end between August and October.

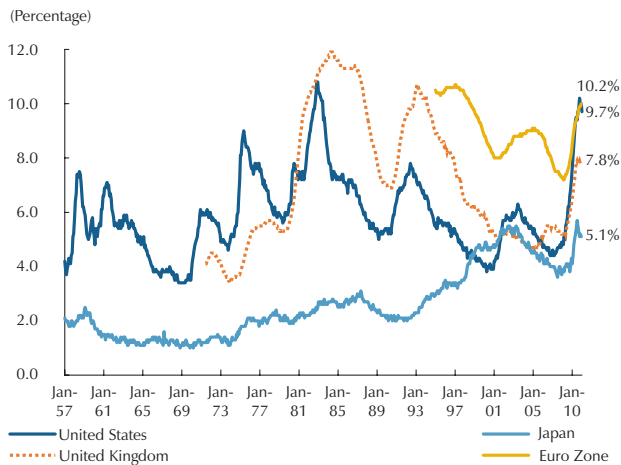
Despite positive growth in the United States, the forecast in this report is for a slow recovery in the coming quarters, although it is expected to be more dynamic than was forecast in earlier reports, thanks to the role inventory replacement could play. In Europe, the outlook is more complicated, because the prospects are even less favorable.

In general, the developed countries, including the United States, still face considerable risk. For instance, there is uncertainty as to whether economies can grow on a sustained basis in the absence of tax incentives, in addition to concern over macroeconomic stability due to the serious fiscal imbalances and the large government debt accumulated during the last two years.

The recovery in demand is complicated by the deteriorating job market and credit constraints (see Chapter II). At year's end, the situation does not seem to have improved, since jobs continue to be lost in most countries, even though there have been no further increases in the unemployment rate and it is even down slightly in some countries. Although the unemployment rate in the United States went from 10% in December 2009 to 9.7% in January 2010 (Graph 76), approximately 17,000 jobs were lost during those two months. Likewise, even though unemployment insurance claims have declined, the number is still high: about 460,000 claims in the fourth quarter.

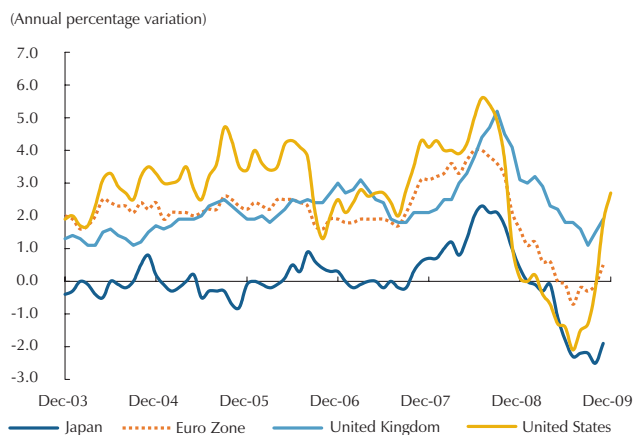
As for prices, although annual inflation rose in recent months in the industrialized countries, this is explained by the effect of a lower base of comparison in the second half of 2008 (given the drop in energy prices) (Graph 77). However, core inflation remained stable and even declined in some cases. In view of this situation and because growth is expected to be weak, the coming quarters

**Graph 76**  
Unemployment Rates in Several Developed Economies



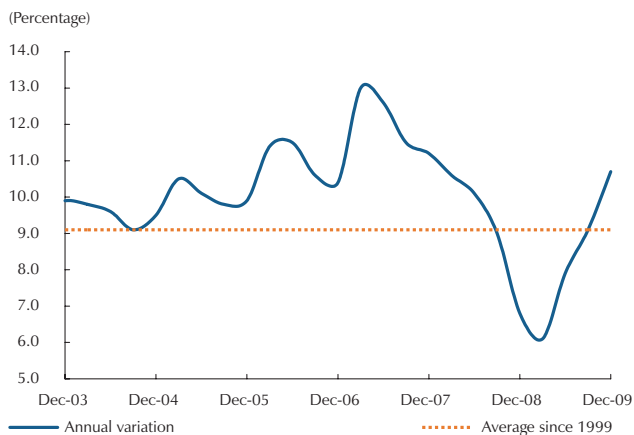
Source: Bloomberg.

**Graph 77**  
Total Inflation in Several Developed Economies



Source: Bloomberg.

**Graph 78**  
China's GDP



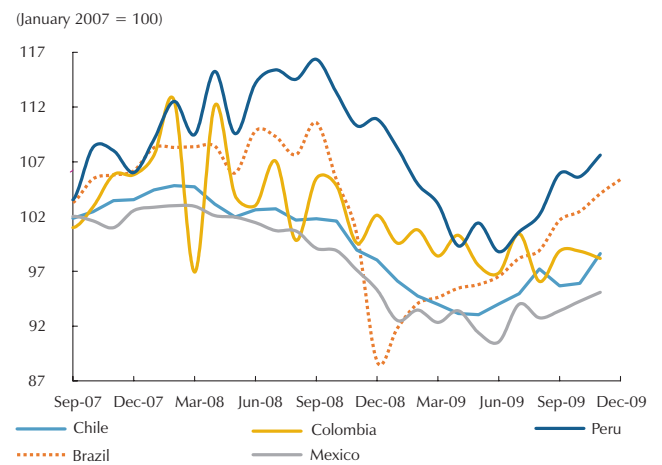
Source: Bloomberg.

should not see a great deal of inflationary pressure: the consensus of the market is that inflation in the United States will be 2.1% in 2010 and 2% in 2011. This would allow the central banks of the industrialized economies to keep interest rates near zero during 2010 (see Chapter II).

Economic recovery in the emerging markets has been led by countries in Asia, especially India and China. The latter's performance has been outstanding, with 10.7% annual growth in the fourth quarter and 8.7% for the year as a whole, which is well above the forecast at the start of the year (6.6%) (Graph 78). As for Latin America, countries such as Brazil and Chile already show clear signs of recovery, as seen in the indicators of industrial production and exports (Graph 79). During the third quarter, several countries in the region equaled the GDP levels reached in 2008. This has yet to occur in the developed countries. Generally speaking, medium and long-term prospects for the developing countries are more favorable than those of the advanced economies, since their financial systems were less exposed to the international crisis and consumers seem to have less debt.

Given the improvement in prospects worldwide, the economic growth forecasts presented in this report for Colombia's trading partners in 2010 were revised

**Graph 79**  
Industrial Production Index in Latin America



Source: Datastream.

upward. The GDP forecast range for the United States, developed by Banco de la República's technical team, is between 1.5% and 3% for 2010 (Table 7). It contemplates slow economic recovery in the United States, where the positive effect of the inventory cycle would waste away during the second half of the year, and consumption and investment throughout the year would be less than dynamic. It is important to note that the analysts are more optimistic than Banco de la República; in some cases they forecast a GDP growth above 3%.

Table 7  
Developments in Real Growth Forecasts for Colombia's Trading Partners

	Actual		Projections	
	2007	2008	2009 <sup>a/</sup>	2010 <sup>a/</sup>
<b>Main partners</b>				
United States	2.1	0.4	(2.4)	[1.5 and 3.0]
Euro area	2.7	0.7	[(4.2) and (3.8)]	[0.0 and 1.5]
Venezuela	8.4	4.8	[(3.6) and (2.2)]	[(1.5) and 1.5]
Ecuador	2.5	6.5	[(2.0) and 0.0]	[0.5 and 2.5]
<b>Other partners</b>				
Japan	2.4	(1.2)	(6.0)	1.7
China	13.0	9.0	8.7	[8.0 and 10.0]
Peru	8.9	9.8	1.5	4.3
Mexico	3.3	1.4	(7.1)	3.0
Chile	4.7	3.2	(1.5)	4.0
Argentina	8.7	6.8	(2.3)	2.2
Brazil	6.1	5.1	(0.1)	4.6
Bolivia	4.6	6.1	3.1	3.8
<b>Developed countries</b>	2.7	0.5	(3.2)	2.1
<b>Developing countries</b>	8.3	6.1	2.1	6.0
<b>World total</b>	5.2	3.0	(0.8)	3.9

a / The forecast range is based on an optimistic scenario (ceiling of range) and a pessimistic scenario (floor of the range).  
Sources: Datastream, Consensus, IMF and Banco de la República.

The forecast for the euro zone is -4.0% economic growth in 2009. The range for 2010 is between 0% and 1.5%, which is similar to the figure anticipated in the last edition of this report (Table 7). As for Venezuela and Ecuador, partners in the region, growth in 2009 would be -2.9% and -1%, respectively. The projections for 2010 are within a range of -1.5% to 1.5% for Venezuela and 0.5% to 2.5% for Ecuador.

The recovery in global demand (particularly demand in the Asian countries), a weak dollar and better liquidity conditions, combined with low interest rates, are some of the factors that enabled prices for certain commodities to rebound during the fourth quarter, in addition to allowing for cheap financing

to replenish raw material inventories.<sup>12</sup> This momentum favored terms of trade for the Latin American countries.

Given the latter, the forecasts for the raw materials exported by Colombia were raised slightly in this report. In the central forecast, WTI is expected to average U.S. \$ 75 / barrel in 2010, with a range of U.S. \$ 67 to U.S. \$ 83 (the central forecast in the last edition of this report was U.S. \$ 72). The forecasts for other commodities were increased as well, with the exception of coffee (Table 8). Consequently, oil and other commodity prices in 2010 are expected to exceed the average levels witnessed in 2009.

Table 8  
International Prices

Product	2007	2008	2009	Projection for 2010 <sup>a/</sup>	
				Scenario A <sup>b/</sup>	Scenario B <sup>b/</sup>
Café (ex dock) (dollars per pound)	1.30	1.44	1.65	1.34	1.74
WTI Oil (dollars per barrel)	72.3	99.9	62.0	67.0	83.0
Oil (dollars per barrel) <sup>c/</sup>	66.2	90.2	56.2	59.3	73.6
Coal (dollars per ton)	50.8	83.4	80.2	80.0	93.0
Ferronickel (dollars per pound)	5.5	3.4	1.9	1.9	2.3
Gold (U.S. dollars per troy ounce)	696.9	873.0	929.0	1.003.0	1.003.0

a / Balance of payments estimated in January 2010.

b / A and B correspond respectively to pessimistic and optimistic scenarios.

c / Average price of oil types exported by Colombia.

Source: Banco de la República.

In short, despite the rebound in economic conditions in the developed countries, at the financial level and in productive activity, the risks that influence growth remain high. Moreover, the signs of recovery are still partial. Although the counter-cyclical policies adopted by economic authorities have contributed to economic growth in the short term, they could threaten macroeconomic stability in the medium and long term. This being the case, we can expect the emergence of clear signs that the structural macroeconomic imbalances of the industrialized economies are closing, for the sake of a sustained recovery.

The developing countries are expected to recover quicker than the industrialized economies, especially the developing countries in Asia and Latin America. Commodity prices should remain historically high during 2010, favoring terms of trade for Colombia and other countries that export raw materials. There is always the possibility that more vigorous global demand would raise raw material prices even further, which could have an effect on global inflation. This was not taken into account for the forecasts in this report and would bring pressure to bear on monetary policy in the developed countries sooner than expected.

12 This occurred in an environment of extreme volatility marked by sharp declines since early December.

*Exports are expected to recover slowly, given the anticipated drop in sales to Venezuela and because substituting that market can take time.*

## B. BALANCE OF PAYMENTS

The balance of payments anticipated for 2009 includes the aforementioned assumptions with respect to the external context, which would imply -2.2% real growth for Colombia's trading partners; in other words, this is more of a drop than was forecast last quarter (-1.4%). Foreign trade during the final month of the year is expected to perform as it did in November, making the decline in cumulative imports higher than the drop in cumulative exports, despite the poor performance of sales to Venezuela. A cumulative 15% decline in workers' remittances is anticipated as well, given the poor performance of the economies where these resources originate (Spain and Venezuela, among others).

Based on these assumptions, the current account deficit for the entire year is expected to be 2.2% of annual GDP, which implies a larger external imbalance compared to the figure registered in the first three quarters of the year when the deficit was 2.1% of GDP. The added deficit anticipated for the fourth quarter of 2009 is due to less of a decline in current expenditures compared to the reduction in income, mainly from the remittance of oil-sector profits.

As for the capital account, income from net foreign direct investment in 2009 is expected to equal 2.6% of GDP, as the main source of external financing, together with capital flows for the public sector. This is akin to what was observed during the first three quarters of the year when the current account deficit was financed largely with US\$ \$ 6.446 b in incoming direct foreign investment and U.S. \$ 6.165 b in capital inflows to the public sector. The reduced capital account surplus anticipated for 2009 compared to the one in 2008 is the result of a decline in the net flow of foreign direct investment (due to larger capital reimbursements and Colombian investments abroad), larger debt payments and the acquisition of external assets by the private sector.

The forecasts for the balance of payments in 2010 contemplate a number of scenarios with respect to international prices for export products, as well as GDP in the United States, Venezuela and Colombia. These assumptions imply growth for our trading partners in a range of 1.4% to 1.7% (which is higher than the 1.3% forecast last quarter). A significant degree of foreign borrowing by the public sector is anticipated, but less so than in 2009, and the level of net direct foreign investment is expected to be more than it was the year before, given less Colombian investment abroad.

*The view is that sales to Venezuela will be seriously affected in 2010 as a result of zero economic growth forecast for that country, recent devaluation of the bolivar and the trade restrictions that have been imposed since mid-2009.*

Imports in dollars should increase during 2010, but at a lower rate compared to the one observed prior to the crisis, and exports are expected to recover slowly, given the anticipated drop in sales to Venezuela and because substituting that market can take time. The view is that sales to Venezuela will be seriously affected in 2010 as a result of zero economic growth forecast for that country, recent devaluation the bolivar and the trade restriction that have been imposed since mid-2009. The balance-of-payments forecasts include a 50% to 80%

*The current account deficit in 2010 could be between 2.6% and 3.3% of GDP.*

drop in exports to Venezuela, which means they could range between U.S. \$ 500 m and U.S. \$ 1.7 b annually.

Given the foregoing, the current account deficit in 2010 could be between 2.6% and 3.3% of GDP. It is expected to be financed largely with inflows of direct foreign investment and with external resources for the public sector.

### C. INTERNAL GROWTH IN 2010

Several factors emerged recently that had opposite effects on the outlook for growth in 2010. On the one hand, global demand has shown clearer signs of recovery than expected and Colombia's trading partners, such as the United States, should grow at a faster rate than was anticipated in the last edition of this report. This is compounded by the fact that interest rates and inflation ended 2009 at levels below those considered possible in previous reports, which means an additional stimulus to local demand.

On the other hand, in Venezuela, which is the country's second major trading partner, the extremely poor economic forecast for 2010 and devaluation of the bolivar, coupled with the restrictions on bilateral trade, will deal a heavier blow to Colombian exports than was anticipated initially. The spending cuts in the national budget announced for 2010 point in the same direction and were not considered in earlier reports.

Accordingly, three growth scenarios in 2010 were estimated for this report. They take into account different options for performance with respect to three main variables: 1) growth of our trading partners in the wake of the international crisis, 2) developments in trade with Venezuela and 3) the impact of Colombia's fiscal policy.

As for the external variables, namely, global growth, international prices and exports to Venezuela, among others, the three growth scenarios correspond to the balances of payments described in the previous section. For the fiscal variables, a more likely range is established that takes the following into account:

- For the ceiling: investment in civil works is expected to increase 11% (as opposed to 9.8% in the last report) while investment excluding civil works would be up 7% compared to 2009.
- For the floor: investment in civil works would increase by 1% and investment apart from civil works would expand by 1.3%.

*Demand in 2010 will be favored by more growth worldwide and lower interest rates, among other factors.*

The forecast for growth in government consumption was revised downward in this report to accommodate the budget cuts announced by the central government. However, there is a great deal of uncertainty surrounding these estimates, considering how difficult it is to gauge the impact on GDP.

*The financial system will remain sound and solvent throughout 2010. Generally speaking, the build-up in equity observed in the sector in recent years will help to keep the supply of funds and the credit channel active.*

*...In this way, the effects of the loose monetary policy will continue to pass through to the productive sector.*

*There will be some recovery in total investment, which will see positive growth following the sharp drop posted last year. The largest contribution to this aggregate is expected to come from investment other than civil works.*

In both scenarios, it is assumed the financial system will remain sound and solvent throughout 2010. Generally speaking, the build-up in equity observed in the sector in recent years will help to keep the supply of funds and the credit channel active. In this way, the effects of the loose monetary policy will continue to pass through to the productive sector.

Therefore, the increase in household consumption during 2010 is expected to be positive, but below its historical average. This moderate expansion is explained by several factors, such as the effect of low interest rates, which acts in two ways: first, by stimulating the demand for credit, and secondly, by reducing debt service for consumers and adding to the amount of income available for spending. The latter, in turn, helps to reduce the extent of household debt.

Similarly, the return of consumer confidence, which began to be evident as of the third quarter of last year, is expected to continue in 2010. All of the foregoing, coupled with slightly more of an increase in remittances than was anticipated three months ago, would help to bolster the purchase of goods and services, including consumer durables (which experienced sharp declines in 2009).

Public consumption also will contribute positively to GDP growth. However, as noted earlier, its input will be less than was anticipated in the last edition of this report. It is important to point out that a good portion of the cutbacks announced by the government will affect operating expenses, which are linked directly to consumption.

There will be some recovery in total investment, which will see positive growth following the sharp drop posted last year. The largest contribution to this aggregate is expected to come from investment other than civil works. As with private consumption, the annual increase in this demand would be favored by historically low interest rates and the important amount of DFI expected, particularly for oil sector.

However, private investment for the industrial sector is expected to be less in 2010 with respect to past years, given the considerable amount of surplus industrial productive capacity and the fact that the sector has lost foreign markets. As a result, much of the investment would go to the mining sector and natural resources in general, as well as commerce and home construction, particular low-income housing (LIH). In recent months, there has been news of a significant investment in these last two sectors.

As for investment in civil works, the forecast in this report is revised downwards compared to the one presented last quarter. This change was made in an attempt to account for the possible impact of the government's announcement to defer spending, which also affects public investment. At any rate, a positive increase in spending of this type is anticipated, due to regional investment associated with mass transit systems, aqueducts and roads.

*External demand, with the exception of demand originating in Venezuela, will propel growth in 2010, after playing a contractive role in 2009.*

External demand, with the exception of demand originating in Venezuela, will propel growth in 2010, after playing a contractive role in 2009. The renovation of coffee plants in 2009 would contribute to this performance, which will allow for a sizeable increase supply during 2010. Similarly, mining output will continue to expand at a high rate, propelled by past investment, while more external demand will pull up commodity prices, particularly for oil, thereby improving terms of trade.

In the case of exports to Venezuela, the forecasts include a major decline (as mentioned in the preceding section). Since most Colombian exports to Venezuela are from the manufacturing sector, the drop could affect that sector's recovery. The previous edition of this report anticipated a reduction in sales to Venezuela; however, given the sharp drop registered in late 2009, the already pessimistic assumptions were revised downward. Accordingly, the projections in this report include an additional negative impact given the poor performance forecast for Venezuela's GDP in 2010 and the bilateral trade restrictions.

This being the case, growth in total exports is expected to be positive but limited, which means their level in terms of real dollars would be similar to the figures on record for 2008. The momentum in imports is expected to be positive as well and would go hand in hand with the increase in consumption and investment.

In view of how the different sector indicators have behaved, the IMACO leading index (based on a method described in the June 2009 Inflation Report) anticipates an upward trend in GDP growth during 2010 (Graph 80). However, the variables used in that method may not fully reflect the impact of the drop in trade with Venezuela, as they do not directly include elements associated with foreign trade. At any rate, the IMACO, which forecast the break in growth trends during the second half of 2009, indicates that growth in 2010 will be considerably higher compared to the year before.

Taking into account the upside and downside risks in the scenarios under consideration, no change was made in the forecast range for GDP growth presented in the last edition of this report. Accordingly, the economy is expected to grow between 2% and 4% in 2010 (Graph 81). However, since the favorable circumstances outlined above would not fully offset the negative impact of fewer exports to Venezuela, there is more of a bias towards the bottom half of that range. The impact on Colombian GDP growth occasioned by a decline in exports to Venezuela, such as the one under consideration, is estimated at 1.0 to 1.5 pp.

*Taking into account the upside and downside risks in the scenarios under consideration, no change was made in the forecast range for GDP growth presented in the last edition of this report.*

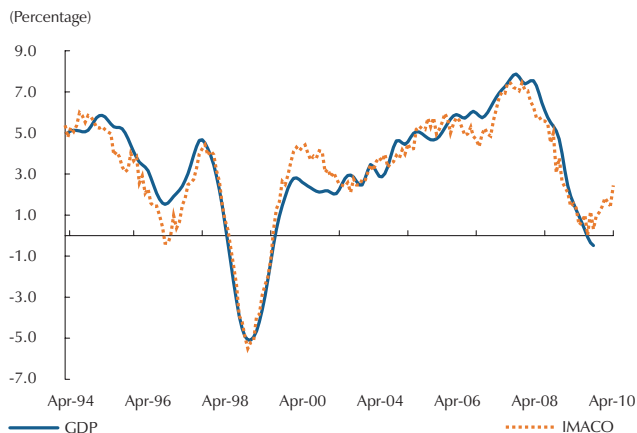
*Accordingly, the economy is expected to grow between 2% and 4% in 2010.*

## D. THE OUTLOOK FOR INFLATION

### 1. Forecast

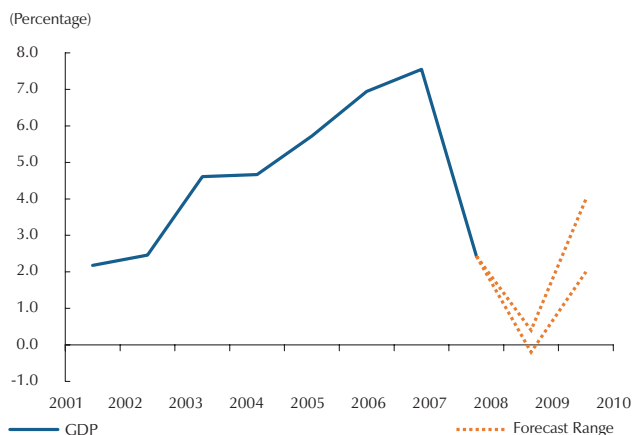
The central inflation forecast presented in this report has changed compared to the one in the September edition. To begin with, the temporary price

Graph 80  
IMACO (Leading Indicator of Five Months GDP) and  
Cumulative Four Quarter GDP Growth



Source: Calculations by Banco de la República.

Graph 81  
GDP Growth Forecasts for 2009-2010



Source: DANE; calculations by Banco de la República.

hikes caused by El Niño weather were taken into account on this occasion. Secondly, the upward shocks associated with indirect tax hikes and with adjustments in tariffs monitored by the government were included for the first time. Thirdly, in addition to the supply shocks, the forecasts also were affected by the decline in inflation expectations at the end of 2009, by less inflation inertia and by changes in conditions with respect to demand as a result of a more negative output gap.

In the last edition of this report, El Niño was assumed to be a risk and, as such, was included in the fan chart (risk assessment), but not in the central forecast. At the time, it was stated that although the presence of El Niño weather had already been confirmed, its intensity and its impact on prices were still highly uncertain and, therefore, not relevant to be included in the central forecast. In fact, in the past, not all episodes of El Niño weather resulted in higher inflation (see the September 2009 Inflation Report, Box 1, pg. 33).

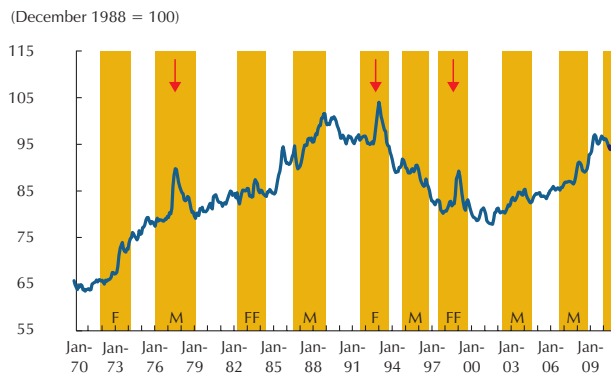
However, the impact of El Niño became more evident in the final months of 2009 and in early 2010, thanks to below-average rainfall, which ushered in an increase in the price of many perishable foods. The level of reservoirs began to decline beyond what is normal for that time of year. This, in turn, could raise the cost of generating electricity (see pg. 68).

Consequently, given the added certainty that now exists with respect to El Niño, its effects have been included in the central forecast presented in this report. This change affected food inflation and inflation in regulated prices; in the case of the latter, through larger adjustments in electricity, gas and water rates.

With respect to food, the shock is regarded as temporary, given the experience of past years when El Niño was similar to what it is now. In other words, 1) it appeared in June one year (2009) and ended in April or May the following year (2010), and 2) it occurred in the absence of other phenomena such as major increases in international prices for fuel and food, pressure on the exchange rate and an economy marked by strong growth.

El Niño weather under circumstances similar to those at present occurred in 1976-1977, 1991-1992 and 1997-1998. On those occasions, food inflation rose sharply during the first half of the second year and peaked between the

Graph 82  
El Niño Episodes and Relative Food Prices Deflated by Total Non-food CPI



Note: M: weak to moderate El Niño; F: strong El Niño, FF: very strong El Niño.  
Source: DANE; calculations by Banco de la República.

second and third quarters. In the fourth quarter, once the weather had returned to normal, food prices tended to stabilize or to fall, stimulated, in part, at their high levels in previous months. The decline continued even during the first months of the third year. This pattern in food inflation has affected relative prices, as illustrated in Graph 82.

Consequently, the new forecasts anticipate an increase in annual food inflation between the first quarter and midway through the third quarter of 2010. As of then, it should decline quickly, but only enough to place it within the upper part of the target range by December. Towards the first and second quarters of 2011, the decline should continue and food inflation

would converge with the long-term target. This being the case, the effects of El Niño weather on food prices will be temporary, and mostly during 2010, with an important impact in the second and third quarters, much of which will have disappeared by the end of the year.

Apart from food, this report includes - for the first time – several effects of El Niño weather on public utility prices: electricity, water and natural gas for residential use. In the case of electricity, the reduction in the level of reservoirs witnessed in recent months (see pg. 68), coupled with the declines that might occur during the first half of 2010, would force power-generating companies to make more intensive use of thermal power sources that are more expensive. This, in turn, could result in higher rates for electricity and natural gas.

In addition to El Niño weather, there are other shocks that could have a serious impact on public utility rates and on the price of tradable and non-tradable goods and services during 2010, shocks that were not foreseen in the last edition of this report. To begin with, the upward leveling of electricity rates in Antioquia and in central-eastern Colombia (including Bogotá) can lead to rate hikes in the two main cities. Secondly, the adjustments in taxes on beer, liquor and cigarettes, effective as of February to address shortfalls in the health care system, would have an impact of around 12 bp on annual inflation. This estimate was developed using the input-output matrix and the weights of the items in the CPI (1.25%), assuming a constant elasticity of demand. Lastly, some of the price hikes for education and health care that were not covered in the previous edition of this report were included for the short term in an effort to capture the adjustments authorized by the government that exceed the target for the year (between 2% and 4%).

*The adjustments in taxes on beer, liquor and cigarettes, effective as of February to address shortfalls in the health care system, would have an impact of around 12 bp on annual inflation.*

As in the last edition of this report, moderate hikes in international fuel prices are expected, but would have little impact on external food prices (see the previous sections in this chapter). In the absence of a strong trend towards peso depreciation, such increases should not seriously affect the domestic prices of these items, unlike what happened between 2007 and 2008.

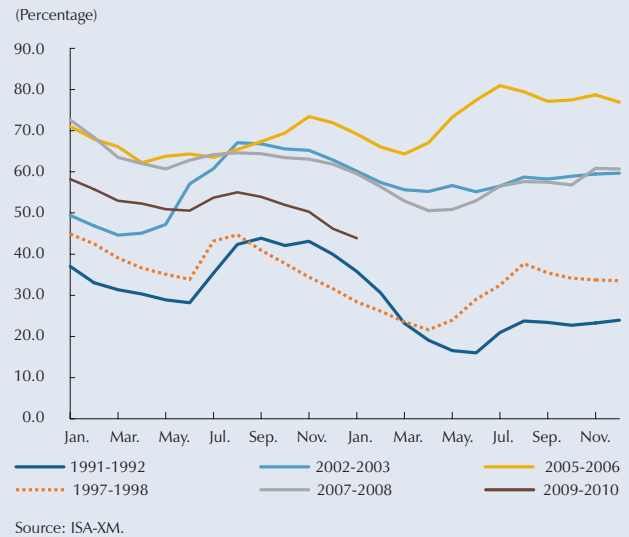
## ELECTRICAL ENERGY AND EL NIÑO WEATHER

In mid-1992, the average level for reservoirs nationwide dropped to 16%, leading to the legendary blackout of that year (Graph A). During 1998, the average reservoir level went to slightly below 25%. However, by then, the expansion of thermal energy generation in earlier years was sufficient to avert another widespread power outage.

According to industry experts, when the average level of Colombia's reservoirs falls below 60%, the situation merits a warning or energy saving. When this level is less than 25%, the country would potentially be crossing the threshold that would imply the possibility of generalized electricity rationing nationwide.

The current bout of El Niño weather has reduced rainfall and the water level of the rivers that feed the reservoirs in Colombia, so much so that, by January 2010, their average level had fallen to 44%. However, this episode of El Niño could intensify and continue for longer than initially expected.

Graph A  
Level of Reservoirs in Colombia



On the demand side, inflation in 2010 will be determined by factors similar to those identified during the last two quarters, although more pronounced. It is quite likely that growth in 2010 will not live up to its potential and, as a result, the surplus production capacity witnessed in 2009 would increase during 2010. Consequently, the output gap estimated for 2010 is more negative than the gap estimated for 2009, which was not the case in the previous report (see Chapter 1). It is, therefore, unlikely that demand will bring pressure to bear on prices. For example, the anticipated drop in exports to Venezuela could mean that a portion of the productive capacity in industry and agriculture will not be used to its full potential for some time, at least until new internal or external markets can be found.

*The existence of surplus productive capacity suggests, with a fair amount of certainty, that price hikes will be low for goods and services acutely sensitive to demand, such as those in the CPI basket of tradables and non tradables, excluding food and regulated prices.*

The existence of surplus productive capacity suggests, with a fair amount of certainty, that price hikes will be low for goods and services acutely sensitive to demand, such as those in the CPI basket of tradables and non tradables, excluding food and regulated prices. The same would be true for a number of processed and semi-processed food prices. Some of this was already evident at the end of last year and in early 2010, when beef prices declined sharply in response to less demand in Venezuela.

With respect to wage costs, it also is feasible to expect little pressure on prices, since the minimum wage increase approved in 2010 was within target range and

*Most of the structural factors that would determine long-term inflation favor consumer price increases that would be compatible with the official target (between 2% and 4% for 2010).*

given the limited wage hikes employers would be prepared to grant (according to the Bank's expectation surveys.) Moreover, the job market would remain slack if the forecasts for positive but low growth in output are confirmed. In a situation of that sort, it is unlikely that salaried jobs in the formal sector would be generated in sufficient numbers to halt the rise in the unemployment rate (see Box 1, pg. 37). Nor does it help that the labor supply (TGP) might increase in 2010 at a high rate similar to the one observed in the last two years.

Finally, thanks to lower inflation in the second half of 2009, expectations declined considerably and more than anticipated. In fact, the inflation forecasts in the last edition of this report overestimated the results for December 2009, as did the market forecasts. This information was not fully taken into account in the last edition of this report and further favors price stability in 2010, with adjustments within the target range.

This being the case, most of the structural factors that would determine long-term inflation favor consumer price increases that would be compatible with the official target (between 2% and 4% for 2010). However, early 2010 would see supply shocks that can temporarily affect the inflation forecast and would have some long-term impact if they manage to alter price formation by raising expectations.

Consequently, Banco de la República's models for 2010 forecast higher total annual inflation than was indicated in the previous report; however, it still would be compatible with the target. Specifically, consumer inflation would increase during the first three quarters of the year due to the effects of El Niño weather on food and regulated prices, and because of the other supply shocks described earlier, although to a lesser extent. However, provided the impact of El Niño on food and regulated prices is moderate (as in past experiences), inflation during this period could remain invariably within the target range. Otherwise, that is, if the impact is greater, inflation could be slightly above the ceiling, but only temporarily. In any case, for the fourth quarter and barring any significant increase in external prices or sharp depreciation of the peso, total inflation should fall on par with food inflation to a point somewhere within the target range. The downward trend should continue into the first half of 2011, following the usual pattern of relative prices in the presence of El Niño weather.

*Banco de la República's models for 2010 forecast higher total annual inflation than was indicated in the previous report; however, it still would be compatible with the target.*

As for non-food inflation in 2010, the models provide a lower forecast compared to the one in the previous edition of this report, given fewer pressures stemming from the exchange rate, a broader negative output gap, and inflation and expectations that began the year lower than expected. The most important change was in tradable inflation excluding food and regulated prices. The changes in non-tradable inflation are less, because of the anticipated shocks to education and health care. However, it is important to emphasize that price increases for highly indexed items are expected to be moderate, due to low inflation this year. Rentals are the prime example; their annual variation in

*The Fan Chart is calculated on the basis of a central forecast that already includes an intermediate impact from El Niño weather and other shocks, including the one concerning trade with Venezuela. There is still a good deal of uncertainty surrounding this forecast, as was the case with the forecast in the last edition of this report.*

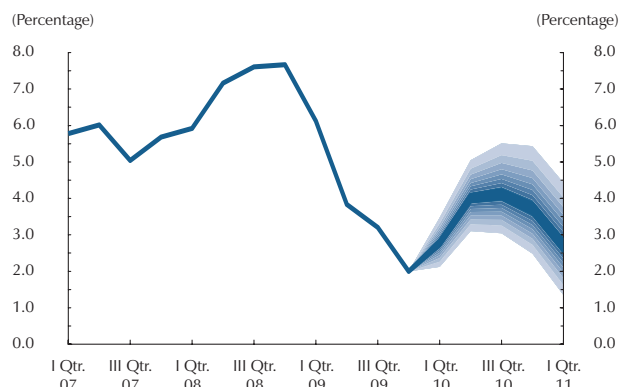
price should decline to levels near the middle of the target range (it was 3.9% in December 2009).

In 2010, upward pressure on the non-food CPI will come entirely from the basket of regulated items (public utilities, public transportation and fuel), given the reasons outlined above, including some increase in domestic fuel prices to keep them abreast with the international price. By the end of the year, the annual change in regulated prices could be above the ceiling of the target range.

## 2. Risk Balance

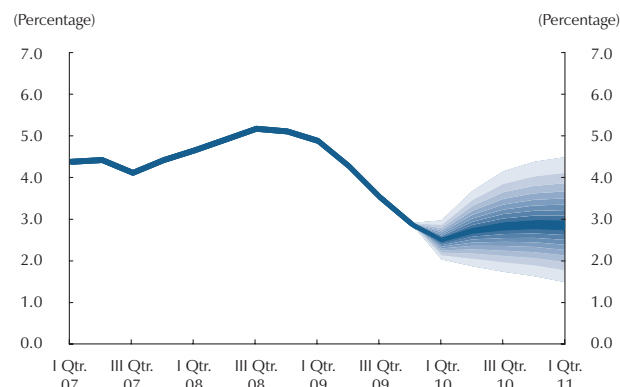
The risk balance (Fan Chart) with respect to total consumer inflation and non-food inflation is shown in Graphs 83 and 84. Although the Fan Chart is calculated on the basis of a central forecast that already includes an intermediate impact from El Niño weather and other shocks, including the one concerning trade with Venezuela, there is still a good deal of uncertainty surrounding this forecast, as was the case with the forecast in the last edition of this report, given the characteristics of the shocks.

Graph 83  
Fan Chart for Total Inflation <sup>a/</sup>



a / The forecasts are based on a monetary policy that is designed to ensure the long-term inflation targets will be met.  
Source: Calculations by Banco de la República.

Graph 84  
Fan Chart for Non-food Inflation <sup>a/</sup>



a / The forecasts are based on a monetary policy that is designed to ensure the long-term inflation targets will be met.  
Source: Calculations by Banco de la República

The balance presented in this report includes mainly the upside risks to total inflation in 2010, which are grouped as follows.

1. Added food and regulated-price inflation, coupled with higher expectations of inflation than were anticipated in the central forecast. This is the result of a more pronounced estimated impact on prices due to El Niño weather. However, food prices are expected to return to normal during the four quarters of this year, and total inflation should respond accordingly.

*The risk analysis indicates it is highly probable that inflation will end 2010 within the long-term range set by the BDBR (between 2% and 4%).*

2. Moreover, if international prices increase more than expected or the peso depreciates sharply, food and regulated prices could remain high for longer than anticipated.
3. More global growth than was forecast would lend more momentum to exports to countries other than Venezuela. At the same time, a faster substitution of the Venezuelan market could mean a quicker recovery for the export sector.
4. Finally, it is important to bear in mind that the latest growth figure for the United States (which was published at the time this report was being written) was better than expected.

As a result, analysts recently raised their forecasts for that country; however, that fact is not fully contemplated in this report.

The main downside risk is still the fact that trade restrictions imposed by Venezuela, less demand for exports in general and sharp devaluation of the *bolivar* have an added negative effect on the output gap in Colombia. The central forecast and the projections for the balance of payments include 0% economic growth for Venezuela during 2010; however, many analysts expect a further decline in GDP.

The central forecast assumes an active credit channel that facilitates the pass through of policy rate cuts to the market, which would mean lower interest rates for businesses and consumers. Evidence of this can be found in the quick pass through of Banco de la República's intervention rate to deposits and lending rates in the economy, coupled with the stabilization of credit indicators. This scenario would help the Colombian economy to recover from the current decline in productive activity without jeopardizing the objective of low and stable inflation.

Accordingly, the risk analysis indicates it is highly probable that inflation will end 2010 within the long-term range set by the BDBR (between 2% and 4%). As usual, the forecasts described above contemplate an active monetary policy.

# ATTACHMENT

## MACROECONOMIC FORECASTS BY LOCAL AND FOREIGN ANALYSTS

The following is a summary of the latest forecasts by local and foreign analysis with respect to the main economic variables for 2010 and 2011. At the time they were consulted, the analysts had access to data up to the first week of February 2010.

### 1. Forecasts for 2010

On average, the local analysts expect 2.4% economic growth, as opposed to 2.5% noted in the last edition of this report. The foreign firms consulted for this edition expect GDP growth to average 2.8%.

Table A1  
Forecasts for 2010

	Real GDP growth (percentage)	CPI Inflation (percentage)	Nominal Exchange Rate end of	Nominal DTF (percentage)	Fiscal deficit (% of GDP)	Unemployment in thirteen cities (percentage)
<b>Local Analysts</b>						
Alianza Valores	2.5	3.8	1,759	4.7	(3.9)	11.2
ANIF <sup>a/</sup>	2.3	3.5	n.a.	5.0	(3.6)	12.0
Banco de Bogotá	2.5	3.1	2,000	5.0	3.8	12.0
Banco Santander	2.1	4.1	2,170	5.2	(3.5)	12.6
Bancolombia	2.2	3.4	1,870	3.8	(3.7)	12.5
BBVA Colombia <sup>a/</sup>	2.4	3.8	2,070	4.2	(4.5)	14.2
Corficolombiana <sup>a/</sup>	2.0	3.5	1,945	5.0	(4.5)	n.d.
Corredores Asociados <sup>a/</sup>	3.5	4.1	2,100	4.9	(4.8)	12.5
Correval	2.0	3.5	1,890	5.3	(3.9)	11.4
Fedesarrollo	2.1	3.2	2,020	n.d.	(3.4)	13.5
<b>Average</b>	2.4	3.6	1,980	4.8	(3.2)	12.4
<b>Foreign Analysts</b>						
Citibank <sup>a/</sup>	2.5	3.9	2,050	5.9	(4.8)	12.4
Deutsche Bank	2.4	3.5	2,140	n.a.	n.a.	n.a.
Goldman Sachs	3.1	3.8	2,050	n.d.	(3.7)	n.a.
JP Morgan	3.0	3.8	2,000	3.5	(3.7)	n.a.
<b>Average</b>	2.8	3.8	2,060	4.7	(4.1)	12.4

n.a. not available

a/ The forecast deficit is for the central government.

Source: Electronic survey

As for the inflation forecasts, the local analysts anticipate an increase of 3.6% in prices by the end of the year, while the foreign analysts forecast 3.8% inflation, on average. These percentages are within the target range set by the Board of Directors of Banco de la República (BDBR) for 2010 (between 2.0% and 4.0%).

With respect to the exchange rate, the local analysts expect the representative market rate (TRM in Spanish) to average COP\$1,980 by the end of the year, as opposed to COP \$2,011 estimated in the survey done for the last edition of this report. The foreign analysts forecast a TRM near COP\$2,060 by the end of the year.

The local and foreign analysts expect the DTF benchmark rate to be 4.8% and 4.7%, respectively. In addition, the local analysts consulted for this edition are forecasting 12.4% unemployment.

## 2. Forecasts for 2011

As for 2011, the local analysts anticipate 3.7% growth compared to 3.6% forecast by the foreign analysts. The local analysts have a slightly higher inflation forecast than the foreign analysts (3.8% as opposed to 3.7%). With respect to the exchange rate, the national analysts forecast COP\$2,071 and the foreign analysts COP\$2,077, on average.

Table A2  
Forecasts for 2011

	Real GDP Growth (percentage)	CPI Inflation (percentage)	Nominal Exchange Rate End of
<b>Local Analysts</b>			
Alianza Valores	3.5	4.2	2,068
ANIF	4.0	4.0	n.a.
Banco de Bogotá	3.5	4.0	2,100
Banco Santander	2.7	3.6	2,454
Bancolombia	3.5	3.8	1,985
BBVA Colombia	3.5	3.4	2,003
Corficolombiana	4.0	3.2	1,970
Corredores Asociados	5.0	4.6	2,150
Correval	4.0	3.8	1,928
Fedesarrollo	3.6	3.4	1,985
<b>Average</b>	<b>3.7</b>	<b>3.8</b>	<b>2,071</b>
<b>Foreign Analysts</b>			
Citibank	3.5	3.6	2,000
Deutsche Bank	2.8	n.d.	2,220
Goldman Sachs	4.0	3.5	2,011
JP Morgan	4.0	4.0	n.a.
<b>Average</b>	<b>3.6</b>	<b>3.7</b>	<b>2,077</b>

n.a. not available  
Source: Electronic survey

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Translated by Sharon Terry de Navarro

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