

# INFLATION Report

June 2012\*

\* Presented by the technical staff to the Board of Directors, for the Board meeting on July 27, 2012.

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

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). 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.

#### COMMUNICATION AND TRANSPARENCY

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### **O**VERVIEW

In June 2012 annual inflation stood at 3.2%, down by 20 basis points (bp) from the figure of March, resuming its downtrend after remaining relatively stable in April and May.

From March to June, year-on-year change in the consumer price index (CPI) for food fell from 4.6% to 4.2%, accounting for nearly half the drop in second quarter inflation. The supply of perishable food products, which had been affected in 2011 by La Niña weather conditions, returned to normal, leading to a downtrend in food prices in the first half of 2012.

Non-food CPI also decreased year on year, from 2.95% in March to 2.8% in June, accounting for the other half of the drop in inflation. In March and in June the average of the four core inflation measures calculated by the Bank remained at 3%.

The regulated group of non-food CPI made the biggest contribution to the drop in inflation, by falling year on year from 4.9% in March to 3.9% in June. All components of this group decreased year on year, with fuel contributing the most by decreasing from 4.4% to 1.8% over the same period. In June non-tradable CPI was up by 3.6% year on year, 10bp lower than in March, though it continued to be subject to upward pressure from rising housing rents.

Tradable CPI excluding food and regulated items was the only group registering a higher year-on-year change: from 0.7% to 1%, driven mostly by vehicle prices, air fares, and charges for telephone services.

Monetary policy actions and lower-than-expected inflation helped to keep expectations of consumer-price rises on a downward trend. At June, breakeven inflation derived from two-, three- and five-year TES securities stood below 3%, while monthly surveys pointed to expectations of inflation running at 3.1% in December 2012 and 3.3% in July 2013.

Colombia's year-on-year GDP growth in the first quarter of 2012 was 4.7%, standing in the lower half of the range forecast by the Bank's technical staff. This

was the second consecutive quarter with loss of pace in GDP growth: from 7.5% in the third quarter of 2011 and 6.1% in the fourth.

By type of expenditure, the biggest slowdown in GDP growth occurred in investment, which declined from a year-on-year expansion of 14.2% in the last quarter of 2011 to 8.3% in the following quarter. The fall in civil works (8.1%), resulting from lower investment in the oil and mining sector, accounted for most of this behavior. Investments in machinery and transport equipment also slowed but still grew at high rates, above their averages since 2000. The only component of investment that accelerated was building construction.

Household consumption, too, grew at a slower pace but continued to be the spending item contributing most to GDP performance. Its growth rate of 5.9% in the first quarter of 2012 was 20bp lower than in the previous quarter but still higher than the average rate since 2000. Household consumption was mostly driven by nondurable goods and by services. Spending on semi-durable goods decelerated but continued to grow apace. Annual growth in consumption of durable goods was below its average since 2000 for the second consecutive quarter. Government consumption remained moderate, becoming the slowest growing component of demand.

Accordingly, the first quarter of 2012 saw domestic demand growing year on year by 6.1%, compared with 10.5% in the third quarter of 2011 and 8.0% in the fourth. Imports and exports also lost pace. The first quarter of 2012 saw external sales growing year on year by 6.3%, down from 16.2% in the previous quarter. Over the same period year-on-year growth in imports fell from 21.3% to 13%.

On the side of supply, the biggest contributors to year-on-year GDP growth in the first quarter were financial and leasing services, mining, and commerce, restaurants and hotels, in that order. Supply problems prevented mining from expanding at its potential. Growth in industrial GDP dropped from 3.9% in the last quarter of 2011 to 0.6% in the first quarter of 2012. Farming and construction also fell year on year, farming because of lower coffee production, and construction because of the behavior of civil works.

Regarding economic activity in the second quarter, much of the available information points to a slowdown. Consumption indicators, including retail sales, vehicle sales, imports for consumption, the household confidence index and consumer loans, suggest that family spending in the second quarter of 2012 grew more slowly than in the first.

With respect to investment, capital goods imports grew at a faster annual pace in April-May than in the first quarter. But, the situation is less certain for overall investment, since it will depend on the speed of recovery in civil works.

On the side of supply, available indicators suggest a year-on-year contraction in industrial GDP over the second quarter. From April to May the industrial production

index, excluding coffee threshing, contracted on average by 1.3%, continuing on a declining trend. At May, Fedesarrollo's orders and inventory indices showed downturns, while still remaining above their averages for the past twenty years. The business confidence index also fell, though to a slighter extent than growth in industrial production.

Available construction indicators do not suggest much strength either. From April to May, cement production fell on average by 0.8% year on year. Over the same period building licenses contracted at an average rate of 33% year on year, owing to atypically high levels in 2011.

In the farming sector, recovery in coffee production and increasing cattle slaughter in April and May are reasons for expecting the sector to reverse the negative growth shown in the preceding two quarters.

Figures on financial intermediation services indicate that this sector will be driving GDP growth in the second quarter. Although bank credit has lost pace, owing mainly to moderation in consumer lending, its rate of expansion to June was still high: 17% year on year.

In the external context, global economic activity became weaker than expected, largely because of high uncertainty created by the sovereign debt crisis in Europe. It is therefore more likely that the slowdown projected for 2012 will be deeper than expected. For 2013, the latest forecasts by the major international organizations still project a recovery, albeit at a slower pace than estimated in previous months

Indicators of real activity in the Euro area point to the likelihood that this economy will contract in the second quarter of 2012 by more than expected. Recession in the different peripheral economies has significantly affected business and consumer confidence across the area and has begun to sap Germany's momentum. Economic growth in Germany might not therefore be sufficient to offset lower

Weak global demand has lowered some international commodity prices, except for a number of farm products affected by climate phenomena. Nevertheless, commodity prices continue to be higher than their averages in recent years.

Global spare capacity and reduced inflationary pressure resulting from lower commodity prices (except for some farm goods) have led to the adoption of expansionary monetary policies in a great number of countries. In emerging economies, for example, the central banks of Brazil, China and South Korea have reduced their interest rates in an effort to counteract the impact of the slowdown in demand.

Lower global demand and the decline in the prices for Colombia's main exports were reflected in export behavior. In May export sales in dollars grew by 1.2% year on year, down from the average rate for January-April (17.6%). Mining and farm exports fell year on year by 1% and 12.4%, respectively. External sales of all

other goods, mostly industrial products (22% of total exports), rose by 14.6% year on year. Among this group, exports of chemicals, basic metals, electric appliances, and food and beverages were notably stronger.

This external context of lower global demand and lower commodity prices is likely to affect the Colombian economy. For this reason, and given the domestic developments mentioned earlier, second-quarter GDP growth in 2012 is expected to be in the range of 3.3% to 4.8%.

For the full year of 2012, the Bank's technical staff has revised down the GDP forecast range by one percentage point, to 3%-5%. The width of the range is due to uncertainty about the size of the global slowdown and its impact on Colombia's economy, and due also to uncertainty about recovery in civil works and overcoming a number of negative supply shocks that are affecting the industrial and mining sectors. Growth for 2013 is projected to be much the same as in 2012.

In conclusion, relative to the March Report actual inflation was less than expected, and inflation expectations at different horizons are around 3% or less. The external context deteriorated even more, and forecasts of Colombia's economic growth for 2012 have been revised down. Estimates for 2012 point to a narrower output gap and a less "tight" labor market; both of these trends might intensify in 2013.

In the setting described above, the Bank's Board of Directors analyzed the different risk scenarios for inflation and growth, and based thereon decided to leave the benchmark rate unchanged at 5.25% at the monthly meetings in April, May and June, and to lower the rate to 5% at the July meeting.

The Board has stated that the international situation, inflation behavior and projections, growth, and asset markets will continue to be monitored carefully, and reiterated that monetary policy will depend on new information as it becomes available.

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# I. EXTERNAL CONTEXT AND BALANCE OF PAYMENTS

**Uncertainty over the evolution** of the European crisis weakened more than expected the global activity in the second quarter of the year.

The global economic slowdown has lessened inflationary pressures around the world. However, a number of climate factors, such as drought in the United States, are expected to affect food prices in the second half of 2012, including those of the emerging countries.

**In general, economic growth forecasts** for Colombia's main trading partners were revised down and risks remained to the downside.

#### A. INTERNATIONAL CONTEXT

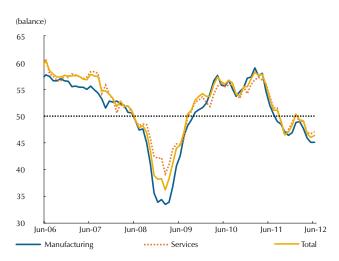
#### 1. Real activity

The second quarter of 2012 saw global economic activity grow weaker than expected, largely because of greater uncertainty caused by the European sovereign debt crisis. For this same reason it has become more likely in recent months that the global slowdown will deepen this year and in 2013. The relative optimism earlier this year about the evolution of the European crisis has begun to dissipate owing to renewed political, economic and financial tensions in the region, and greater contagion to other economies.

Thus, although in the first quarter of 2012 confidence stopped deteriorating and economic growth in some countries, such as German and Spain, rose surprisingly, in the second quarter real activity indicators for most advanced economies show symptoms of weakening. Moreover, the emerging countries' economic vigor has moderated as a result of a weaker momentum from global demand and, in some cases such as China and Brazil, because of moderation in domestic activity. In particular, there has been evidence in recent months of widespread weakening in manufacturing and foreign trade (see Box 1).

It has become more likely in recent months that the global slowdown will deepen.

Graph 1
Euro area business sentiment indices (PMI)<sup>a/</sup>



a/ Purchasing managers index Sources: Datastream and Bloomberg. The euro area avoided GDP contraction in the first quarter of 2012 with a 0% expansion, thanks to Germany's economic growth offsetting the poor performance of the indebted countries. Available information on the second quarter, however, provides evidence of continuing deterioration and probably contraction of economic activity in the euro area. Manufacturing and services sentiment indices (Graph 1) and the industrial output index remained in negative territory, with business and consumer confidence continuing subdued, despite announcements of new measures for containing the impact of the sovereign debt crisis.

In terms of economic growth, the most affected countries of the euro area continued to be those of the periphery: Greece, Spain and Portugal remained

in recession and their labor markets continued to deteriorate. According to Spain's National Statistics Institute, the country's economy contracted in April-June at a quarterly rate of 0.4%, faster than in the first quarter (0.3%). This information is consistent with IMF projections, which see the Spanish economy falling back by 1.5% in 2012 and 0.6% in 2013; these figures may prove understated, since they do not take into account the government's new fiscal adjustment plans, which might deepen the recession in the short term.

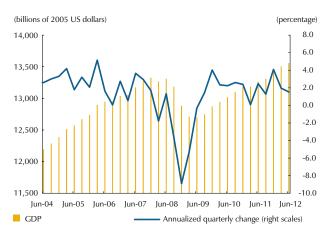
Germany and France may have also started to feel the impact of lower external demand, and their expansion in the second quarter may not be sufficient to offset the recession besetting other economies of the region. According to the Bank of France, the country's GDP contracted by 0.1% in the second quarter of 2012, having stagnated in the first three months of the year. In Germany, industrial output slowed, and business and consumer sentiment began to deteriorate.

To restore confidence and revive the region's economy, the European Council has continued to make headway on integration matters, particularly in the financial sphere, and is designing a growth plan based on increasing investment in infrastructure. However, implementation of these measures could take longer than necessary to restore confidence, making their impact on growth uncertain.

There are also worrying signs outside the euro area. Initial estimates of the UK's second-quarter GDP show that the economy contracted by 0.7%, making it nine months in a row of negative growth. Expansion in the US economy has continued to be modest, owing to weak consumer confidence, slower manufacturing activity, and moderation in global demand. Thus, in the second quarter of 2012 the country's GDP grew by 1.5% year on year, down from 2% in the first quarter (Graph 2). The decline was due to slower growth in consumption, from 2.45% year on year in the first quarter to 1.5% in the second,

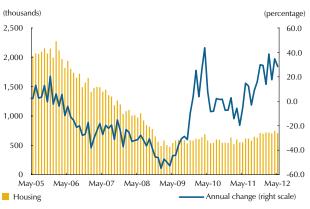
The crisis in the peripheral countries of Europe has begun to affect Germany and France.

Graph 2 US: real GDP



Source: Bureau of Economic Analysis.

Graph 3 US: housing construction



Source: Datastream.

and to further contraction in government spending (1.4%). In contrast, domestic investment and exports grew faster: at annualized quarterly rates of 8.5% and 5.3%, respectively.

The US economy's slower growth has affected the country's labor market behavior and would appear to be too weak to reduce the current levels of unemployment. Thus, in recent months the unemployment rate has stopped falling, and initial jobless claims and net job creation have deteriorated.

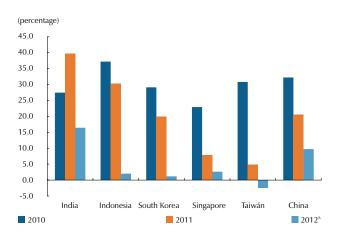
US consumer confidence has been dented mainly by slower labor market recovery and by greater global uncertainty; with the result that consumer spending has begun to moderate (as mentioned earlier). Nevertheless, the housing market has shown some positive symptoms, though its levels are still too low to signify faster production (Graph 3), and it is still too early to state that the trends of recent months are going to continue.

In Japan, although the economy expanded at a favorable pace in the first quarter of 2012 (4.7% year on year), industrial output weakened again on figures to June, as did the manufacturing sentiment index. Such weakening could be pointing to a new relapse in Japan's economy, which may be feeling the contagion of slowing external demand.

Regarding the emerging economies, China's GDP growth lost pace again in the second quarter of 2012, falling from a year-on-year rate of 8.1% in the first quarter to 7.6%. Slower output growth has led the Chinese authorities to take measures to boost real activity, which should begin to produce their effect in the second half of the year. Note that the Chinese economy's loss of pace is partly due to the slowdown in the euro area, one of China's major trading partners; but it is also attributable to domestic factors, such as decreasing expansion in the housing market.

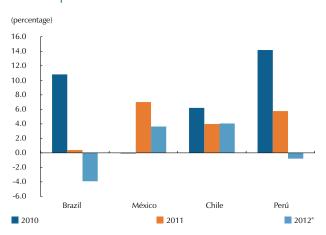
Real activity has also been moderating in the other emerging Asian economies. On information to the first quarter, economic growth in India, Indonesia, Singapore and Taiwan fell relative to the fourth quarter of 2011. Second quarter indicators show no change in that trend, since in general exports have continued to decelerate and industrial growth has stagnated. Specifically, South Korea, Indonesia, Taiwan and Singapore have seen their external sales shrinking year on year in some months (Graph 4), and their industrial output growing more slowly on average than last year.

Gráfico 4 Emerging Asian countries: average annual growth



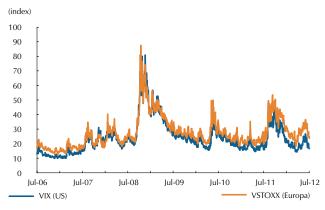
a/ Monthly average growth to June. Source: Datastream.

Graph 5 Latin American economies: average annual growth in industrial production



a/ Monthly average growth to May. Source: Bloomberg.

Graph 6 US and Europe: volatility indices



Source: Bloomberg.

Lastly, in Latin America, real activity has continued to weaken in Brazil despite the stimulus measures implemented since the end of 2011. Thus, Brazil's GDP expanded at an annual rate of 0.8% from January to March, and indicators point to greater deterioration in the second quarter. On figures to May, the country's industrial output continued to fall, in both monthly and annual terms, and the real activity index calculated by the central bank slowed again in May.

The situation has been less critical in other Latin American countries that are important to Colombia's foreign trade. On figures to the first quarter of 2012, year-on-year GDP growth accelerated in Mexico (4.7%), Chile (4.8%), Peru (6.0%) and Venezuela (5.6%). Second-quarter information points to real activity remaining in expansionary territory in Mexico and Chile but losing ground in Peru (Graph 5).

In the case of Venezuela, greater public spending in an election year is expected to continue to boost economic expansion. In Ecuador growth moderated, from a year-on-year rate of 6.1% in the last quarter of 2011 to 4.8% in the first three months of 2012.

#### 2. Financial markets

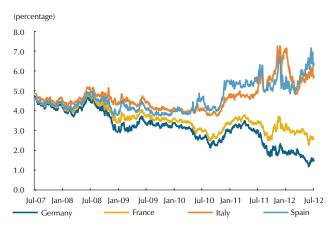
Uncertainty returned to international capital markets in May (Graph 6), at the same time as concern grew about the solvency of Spanish banks and about different political developments in Greece.<sup>1</sup>

In Spain, the commercial banks' high exposure to the real estate market (several years in crisis) forced the government to take over one of the country's major banks by assets, and to apply for resources from the euro zone rescue fund to rebuild the financial system<sup>2</sup>.

Specifically, the first round of Greek elections, in which none of the parties obtained majority support, increased the likelihood of the country leaving the monetary union. However, the June elections reduced such speculation when a conservative government was chosen that supported Greece's continued membership of the euro area.

<sup>2</sup> Up to late June the aid requested by Spain implied a considerable increase in the country's public debt, which could have raised it to 90% of GDP for this year. However, following the

Graph 7 European countries: interest on 10-year sovereign debt



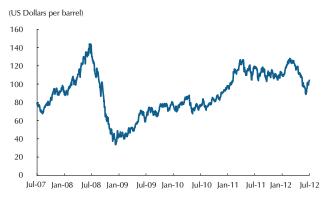
Source: Bloomberg.

Graph 8 Índice de tasa de cambio nominal para algunas economías de América Latina



Source: Bloomberg.

Graph 9 Latin American economies: nominal exchange rate indices



Source: Bloomberg.

Various rating agencies have downgraded their credit ratings for most Spanish banks because of the banks' weak balance sheets.

Despite the announced measures, Spain's public debt market has remained under pressure (Graph 7), owing to uncertainty about the conditions of the loans for commercial banks. A Statement by the Eurogroup on July 20, 2012 made it clear that the loans were to be guaranteed by the Spanish government. This means that, if any bank applying for help should become bankrupt, its loan would have to be repaid from public revenues, in which case the country's public debt would increase and jeopardize the fiscal deficit target.

Rising financial tensions in Spain have also affected the public debt market of other euro zone countries, such as Italy, and accelerated the euro's depreciation against other currencies. They have, moreover, led to drops in the major stock indices by increasing nervousness among investors.

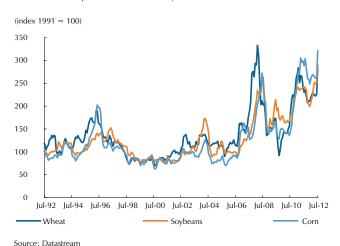
Note that in Latin America risk premiums have stayed relatively stable in recent months, with some increases occurring in May (from very low levels), owing to heightened global uncertainty. Lastly, nominal exchange rates have been fluctuating within a narrow range in Chile and Colombia, while in Brazil the devaluation cycle caused by capital control policies came to an end, and in Mexico the exchange rate has appreciated strongly (Graph 8).

#### 3. Inflación y política monetaria

The slowdown in global demand has lowered international commodity prices from their first-quarter levels. The average price of Brent oil has dropped from \$118.8 a barrel in January-April to \$102.7 in May-July (Graph 9). Similarly, according to FAO, international food prices have been falling steadily in

June 28-29 Brussels meeting, the European Council agreed that Spanish commercial banks should receive direct capitalization, subject to the creation of a bank oversight body on which the European Central Bank would sit; in the meanwhile, the funds were to be channeled through the Spanish government.

Graph 10 International prices for corn, soybeans and wheat



recent months. But they are expected to pick up in the coming months as a result of drought in the United States, which has affected harvests of corn, soy beans and wheat (Graph 10).

In this context, the inflationary pressures besetting some emerging and developed economies (such as China, India and the US) have eased in recent months. Thus, lower inflationary pressures, slowing global demand and high unemployment rates have lent support to the adoption of monetary stimulus policies in the major developed economies, whose central banks have kept their intervention rates at all-time lows and do not rule out implementing new policy measures. The European Central Bank reduced its intervention rate by 25 basis points (bp) on July 5, 2012; similarly, the US Federal

Reserve has extended its Operation Twist for a few more months and kept open the possibility of a third round of quantitative easing. Yet, no new stimulus measures were announced by the central banks of the euro area and the US at their respective meetings in August.

Inflation has also moderated in some emerging economies, to the extent that several central banks have altered their policy stance. Thus, the central bank of China cut is intervention rate by 31bp on July 21, 2012 and has also lowered its reserve requirements for commercial banks. Similarly, the central banks of India, Brazil, South Korea and Australia have reduced their intervention rates in recent months, in an effort to counteract the impact of the slowdown in global demand.

Drought in the US and other countries has caused international food prices to rise.

It is expected that over the rest of 2012 and in 2013 the interest rates of the major central banks will remain low and the developed economies will carry out programs to increase liquidity. This should keep market interests low.

#### 4. Forecasts by the Bank's technical staff

The Bank's technical staff, taking into account the full situation described above, has revised down in this *Report* the average economic growth forecasts for Colombia's trading partners. Thus, in the central scenario for 2012 their GDP growth should be 3.2% within a range of 2.6% and 3.6%. And in the central scenario for 2013 it should be 3.3% within a range of 2.0% and 3.8% (Table 1).

The growth scenarios for the rest of 2012 and for 2013 depend largely on the evolution of the euro area crisis and its impact on the global economy. In a scenario of business and consumer confidence gradually improving over the rest of the year and international capital market volatility not lasting beyond a few more months, growth in the euro area for the whole of 2012 is projected at 0.7%. In this case, market volatility is expected to continue having a negative effect on the euro area

Growth scenarios for Colombia's major trading partners depend largely on the evolution of the European crisis. and its main trading partners during the third quarter, by discouraging investment decisions and affecting demand. This deterioration should not, however, continue into the fourth quarter, so that the European economy will still be weak in 2013, but will not contract. The present *Report* considers this scenario to be still the most likely one.

Two other situations are envisaged besides that central scenario. The more favorable of the two assumes there will be rapid recovery in confidence (in the third quarter), with pressure on sovereign debt markets waning quickly and growth becoming reactivated, mainly in 2013. In the more pessimistic scenario, agents' confidence declines even more and the peripheral countries' funding costs rise to unsustainable levels. In this case, the euro zone crisis deepens, intensifying the recession there and producing serious consequences for the global economy. This scenario does not rule out the possibility of a peripheral country leaving the euro zone in the next year and a half.

According to the above scenarios, US growth in 2012 should be in the range of 1.3%-2.4%, standing most probably at 2.0%, up from 1.7% in 2011. For 2013 the central scenario gives a US GDP growth of 2.0%, within a range of 1.0%-2.5%. These figures are generally lower than those envisaged in the March *Report*.

Table 1 Growth forecasts for trading partners

			Forecasts for 2012	2	Forecasts for 2013			
Proyecciones de crecimiento	2011		Scenario		Scenario			
de los socios		Low	Central or most likely	High	Low	Central or most likely	High	
Main partners								
US	1.7	1.3	2.0	2.4	(1.0)	2.0	2.5	
Euro area	1.4	(1.5)	(0.7)	(0.3)	(3.5)	0.0	0.5	
Venezuela	4.2	4.0	5.0	6.0	2.0	3.0	4.0	
Ecuador	7.8	3.5	4.5	5.5	3.0	4.0	5.0	
China	9.2	7.5	8.0	8.5	7.0	8.0	8.5	
Other partners								
Japan	(0.7)		2.40			1.60		
Perú	6.9		5.60			6.00		
México	4.0		3.40			3.80		
Chile	6.0		4.00			4.30		
Argentina	8.9		3.30			3.70		
Brazil	2.7	1.5	2.5	3.5	3.0	4.0	5.0	
Developed countries	6.2							
Developing countries	1.6							
Global total	3.9							
Total trading partners	3.0	2.6	3.2	3.6	2.0	3.3	3.8	

Sources: Consensus Forecast, IMF and Banco de la República.

Forecasts for Latin American countries show Venezuela's performance improving slightly in 2012, based on actual first quarter data and on greater public spending during election periods. Brazil's weak results have led to its growth forecasts being revised down; its economy is projected to expand by 2.5% in 2012 and accelerate to 4.0% in 2013, when the stimulus measures are expected to produce greater effect.

Note that the scenarios described in this *Report* do not take into account additional risks to global growth such as fiscal adjustment difficulties in the US, and a sharp downturn in China caused by domestic factors (real estate market).

Regarding international benchmark prices for Colombia's commodity exports, lower demand pressures and the price movements recorded so far this year have led to forecasts being revised down relative to actual figures for 2011 and in general relative to projections made three months ago. For 2013, taking into account futures market movements and forecasts by some analysts, average prices may be expected to rise slightly for oil and coal and to fall for all other commodities. This *Report* provides forecasts of international benchmarks for oil (Brent), coal (Rotterdam), nickel (London Metal Exchange) and gold, as well as the price of Colombian coffee (Table 2). The benchmarks are taken into account in forecasting Colombian prices.

Table 2 Forecasts of benchmark prices for Colombian commodity exports

Main products	2011	Pro	ojections for 20 Scenario	012	Projections for 2013 Scenario			
Mulli produces	2011	Low	Central or most likely	High	Low	Central or most likely	High	
Coffee (ex dock) (US dollars per pound)	2.87	1.90	2.10	2.30	1.70	2.00	2.50	
Oil Brent (US dollars per barrel)	111.5	98	104	110	80	100	115	
Coal Rotterdam (US dollars per tonne)	121.8	84.7	93.2	99.8	75.5	97.1	107.9	
Nickel London Metal Exch. (US dollars per tonne)	22,865	18,821	20,389	22,026	17,957	19,521	21,085	
Gold <sup>a.</sup> (US dollars per troy oz)	1,573	1,750	1,630	1,580	1,800	1,600	1,500	

a. It is assumed that, gold being a safe-haven asset, its price will rise when there is greater uncertainty (worst-case scenario) Source: Bloomberg, Calculations by Banco de la República.

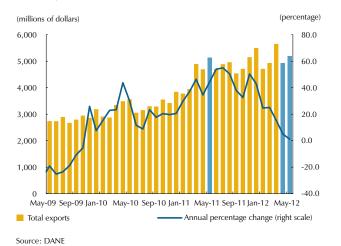
#### B. COLOMBIA'S BALANCE OF PAYMENTS

In the first quarter of 2012 the balance of payments showed a current account deficit of 2.0% of GDP (US\$1,761 million), down from 2.4% of GDP, or US\$1,859m, a year earlier. The deficit fell as a result of a favorable price context for the country's commodity exports and a slower pace of imports, accompanied by a year-on-year decrease in external funding resources.

The current account deficit in the first quarter of 2012 was 2.0% of GDP, lower than in 2011. In this respect, the first quarter's lower current account deficit was due in particular to a wider trade surplus, driven by growth in the export value of crude oil and its derivatives. The trade surplus was higher by US\$1,315m than in the first quarter of 2011, reflecting a growth of 21% in exports against 12% in imports. This result was partly offset by a 29% increase in net factor-income payments, which rose from US\$3,235m in the first quarter of 2011 to US\$4,185m a year later, and by a greater deficit in external services trade, with net payments rising by US\$241m year on year.

In the first three months of 2012 the current account deficit continued to be financed from the capital and financial account, which recorded a surplus of US\$2,237m, down by US\$676m on a year earlier, falling from 3.7% of GDP to 2.6%. The surplus reflected capital inflows consisting of US\$3,657m in foreign direct investment (FDI), US\$1,279m in foreign portfolio investment and US\$604m in external loans and other credit, which were partly offset by outflows of Colombian capital totaling US\$3,302m for acquiring assets abroad. Accumulation of gross international reserves over the first quarter of 2012 amounted to US\$827m.

Graph 11 Total exports (monthly)

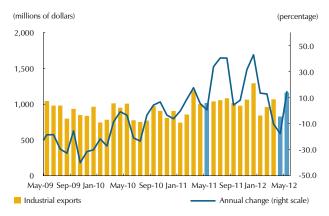


The trade balance's behavior in the second quarter of 2012 may be inferred from the above results and from information available up to May. According to information released by the National Statistics Office (DANE), the trade surplus accumulated in April-May came to US\$705m, 39% lower than the US\$1,154m surplus recorded over the same period in 2011. In April-May 2012 exports in dollars amounted on average to US\$5,071m, a year-on-year increase of 3.0% (Graph 11), and (FOB³) imports in dollars to US\$4,719m, a year-on-year growth of 8.6%. The robust growth shown by exports earlier in 2012 was affected by lower prices in April and May for Colombia's main export products, particularly oil prices, owing to the weakening of global demand.

By type of product, mineral exports (coal, ferronickel, gold, oil and its derivatives) grew by 6.9% year on year in April-May, accounting for 74% of total exports. This was a sharp slowdown for minerals relative to their 34% year-on-year growth in the first quarter and was mainly caused by falling oil prices, as mentioned above. The value of the main farm exports shrank on average by 26.7% year on year in April-May, largely because of lower exports of coffee and flowers (39% and 20% year-on-year average contraction, respectively).

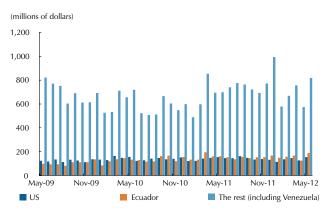
In contrast to the balance of payments measure of GDP, which takes into account the FOB value of imports, GDP based on national accounts uses CIF imports, which include freight and insurance. The average value of CIF imports in dollars was US\$4,953m in April-May 2012, a year-on-year increase of 8.4%.

Graph 12 Industrial and other exports<sup>a/</sup> (monthly)



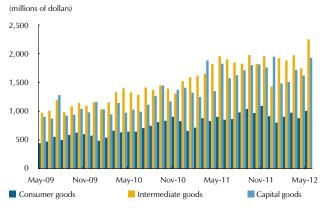
a/ Excluding oil and derivatives, coal, ferronickel, gold, coffee, bananas, and flowers Including other mining and farming goods.
Source: DANE.

Graph 13 Industrial exports excluding commodities, to US, Ecuador and the rest <sup>a/</sup>



 $\rm a/\ Excluding\ oil\ and\ derivatives,\ coal,\ ferronickel,\ gold,\ coffee,\ bananas,\ and\ flowers.$  Including other mining and farming goods. Source: DANE.

Graph 14 Goods imports (FOB)



Source: DANE.

Industrial exports,<sup>4</sup>, which accounted for 20% of total exports, contracted by 1.4% relative to the same period in 2011 (-17.6% in April and +14.5% in May) (Graph 12). By destination, in April-May 2012 industrial exports to the US and Ecuador fell on average by 6.9% and 2.4% year on year, respectively, but remained stable to all other countries. Note that, as in the first quarter of the year, exports to Venezuela continued to show robust growth, expanding by 56.6% year on year in April-May (Graph 13).<sup>5</sup>

Average growth in FOB imports in dollars during April-May 2012 stemmed mainly from higher capital-goods purchases, particularly for industry (18.2% year-on-year increase) and to a lesser extent for agriculture (9.7%). Consumer goods imports rose by 9% year on year, boosted mainly by nondurable goods (14.5% average year-on-year growth), while intermediate goods increased by 5.7% (Graph 14).

EIn the first half of 2012 remittances from Colombian workers abroad edged down by 0.7% year on year, partly because of weakening of the Spanish economy, an important source of such remittances. Moreover, information on the foreign-exchange balance<sup>6</sup> to June shows private-capital inflows (mostly FDI) continuing on a trend of rapid expansion. These inflows are being offset, however, by the private sector's foreign exchange outflows, largely from sources other than debt and financial or portfolio investment.

Forecasting of the balance of payments took into account the behavior described above and used the forecast intervals of external variables and domestic growth presented in various Sections of this *Report*. As usual, the estimation started with the described

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<sup>4</sup> Industrial exports do not include oil and its derivatives, coal, ferronickel, gold, coffee, bananas or flowers. Other mining goods and farm exports are included, and industrial exports represent 98% of the overall group

Industrial exports, excluding commodities and excluding external sales to Venezuela, Ecuador and the US, contracted in April-May by 11.2% year on year.

<sup>6</sup> Capital flows recorded in the foreign exchange balance refer to foreign currency inflows and outflow and do not coincide exactly with capital flows recorded in the balance of payments but do give some idea of their trend.

In the first half of 2012 remittances from Colombian workers abroad edged down by 0.7% year on year. scenarios regarding trading partners' growth assumptions and price movements for the country's main export products.<sup>7</sup> Thus, the balance of payments projected for 2012 shows the current account deficit widening slightly relative to 2011. The deficit could run in the range of 2.9% to 3.3% of GDP, with 3.1% as the most probable scenario.

In line with this result, the annual change in overall export earnings could be in the range of -0.6% to 10.0% (with 5% as the most probable scenario), while annual import growth, affected by lower domestic demand, could range between 1.4% to 15.1% (with a 7.5% as the central result). In this respect, import behavior for 2012 should be consistent with a slower pace of domestic growth than forecast in the March *Report*, offsetting in part the smaller increase in projected exports.

These trade balance projections should be accompanied by higher factor income outflows, amounting to some US\$16 billion for the whole of 2012. The outflows should consist mainly of interest payments (especially by the private sector) and be partly offset by a decrease in profit transfers consistent with lower oil price forecasts. Furthermore, net transfer income is projected to be lower than in 2011, owing to slower growth in the countries providing the biggest flow of such income (Spain and the United States) (Table 3).

It is estimated that in 2012 the current account deficit will continue to be financed, to a great extent from FDI funds. In the most probable scenario, FDI is projected to be greater in 2012 than it was in 2011. This projection is supported by investment levels in the oil sector, which should be much the same as in 2011, plus those that have continued to be recorded in the financial and hotel and tourism sectors. Heightened uncertainty in the international market is expected to affect decisions on Colombian investment abroad; hence outflows of such investment are projected to be less than in 2011, raising the net result of FDI in Colombia.

The projections for 2012 consider a higher level of public sector external funding than in 2011, consisting especially of external credit operations associated with specific investment projects, mainly in the hydrocarbon sector. Lastly, note that the balance of payments forecasting reflects a change in gross international reserves that is in line with the Bank's intervention announcements<sup>8</sup> and with the associated financial returns. The current account deficit is expected to decrease in 2013 and range between 2.5% and 3.1% of GDP. It should continue to be financed mainly from FDI inflows and public sector external resources.

The current account deficit for 2012 is projected to widen slightly relative to 2011.

The balance of payments is projected by constructing forecasts of average implicit prices for the main export products, based on the benchmark price ranges presented in the previous Section. Thus, for 2012 the average price projected for Colombian oil is US\$95.5/barrel, for Colombian coal US\$99/tonne and for ferronickel US\$2.99/lb, in the most probable scenario. The projections for gold and coffee coincide with the benchmark prices.

<sup>8</sup> The projection takes into account minimum daily foreign currency purchases of US\$20m until at least November 2, 2012.

Talbe 3 Colombia's balance-of-payments forecast (central or most probable scenario)

		(millio	ns of dollars)	(percentage of GDP) <sup>d.</sup>				
	2009	2010	2011 (pr)	2012 (proy)	2009	2010	2011 (pr)	2012 (proj)
I, Current account	(4,960)	(8,758)	(9,978)	(11,234)	(2.1)	(3.1)	(3.0)	(3.1)
A, Non-factor goods and services <sup>a.</sup>	(275)	(1,384)	851	(25)	(0.1)	(0.5)	0.3	(0.0)
B, Factor income	(9,298)	(11,849)	(15,767)	(16,018)	(4.0)	(4.1)	(4.7)	(4.4)
C, Transfers	4,613	4,475	4,938	4,810	2.0	1.6	1.5	1.3
II, Capital and financial account	6,254	11,814	13,369	14,836	2.7	4.1	4.0	4.1
A, Private sector: FDI and other capital inflows <sup>b.</sup>	(1,039)	7,025	10,547	8,927	(0.4)	2.5	3.2	2.5
B, Public sector	7,293	4,789	2,822	5,910	3.1	1.7	0.8	1.6
III, Errors and omissions	54	79	353	355	0.0	0.0	0.1	0.1
IV, Change in gross international reserves <sup>a</sup>	1,347	3,136	3,744	3,958	0.6	1.1	1.1	1.1

(pr): preliminary.
(proj): projected
a/ The balance of non-factor goods and services, and special trade transactions.
b/ Net flows of FDI, portfolio investment, and net external borrowings.
c/ Including contributions to the Latin American Reserve Fund (LARF).
d/ Real GDP growth for 2012 is an estimate by the Economic Studies Office.
Source: Banco de la República.

### Box 1 INTERNATIONAL TRADE AND INDUSTRY

Óscar Iván Ávila\*

The 2008-2009 financial crisis strongly affected international trade and industry, particularly in the developed economies. Global economic conditions started to improve in 2010, allowing some advanced countries and most emerging economies to recover pre-crisis output levels in foreign trade and industry. Nevertheless, growth in trade and industry moderated once more in the first half of 2012.

#### 1. International trade

From 1992 to 2007 the volume of global exports grew at an average annual rate of 7.1%, led by external sales from the emerging economies (Graph B1.1). This dynamic was disrupted by the financial crisis of 2008-2009, when monthly global exports contracted at an average annual rate of 4.5%, with the advanced economies being the most affected.

International trade began to recover in 2010 as a result of stronger growth in the emerging economies. Thus, in 2010 exports from this group of countries expanded at the highest average annual rate since 1992¹ fast retuning to precrisis volumes. The recovery in international trade was not homogeneous across the developed economies, for while

Graph B1.1
Annual growth in monthly volume of exports



a/ Year to May 2012. Source: CPB Netherlands Bureau for Economic Policy Analysis.

Professional, Macroeconomic Programming and Inflation Department, Economic Studies Office. The opinions expressed here are the responsibility of the author and do not necessarily reflect the views of the Banco de la República or its Board of Directors. the volume of foreign trade rose above 2007 levels in the US, it is still far from those levels in Europe (Graph B1.2).

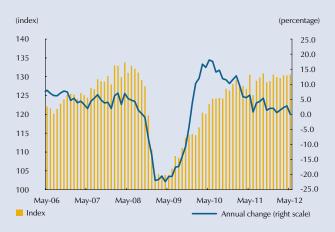
Global exports began to decelerate in 2011, and this trend intensified in the final months of the year, owing to poor growth of the advanced economies. This situation continued over the first half of 2012, except in Japan and some emerging economies. There is cause for concern in the case of the euro area, where external sales have begun to contract in annual terms.

#### Graph B1.2

#### A. Volume of global exports



#### B. Volume of exports from developed economies



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Global demand strengthened in 2010 and 2011, especially demand from Asian countries, improving the terms of trade for Latin American economies and boosting growth in their exports. In 2012, despite the global slowdown, international commodity prices have stayed relatively high, to the

advantage of external sales, particularly in the first quarter of the year.<sup>2</sup>

In spite of high international prices, the global slowdown in the second quarter of 2012 affected export growth in Latin America. Thus, in Peru real exports contracted in annual terms in April and May, while in Argentina, on figures to June, annual growth in the value of external sales decreased for the third consecutive month. Lastly, although Mexico's exports have continued to grow, they decelerated considerably in May and June.

#### 2. Industrial activity

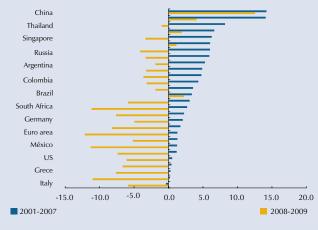
In the years before the 2008-2009 financial crisis there was good growth in industry, as in international trade, especially in the emerging economies. Thus, in China and India the average annual rise in industrial activity indices was higher than 10%, while in other Asian economies and some Latin American countries it was over 5% (Graph B1.3). Industrial expansion in some European countries was relatively good compared with their historical levels, though at a slower pace than in emerging economies.

The slowdown in global demand, caused by the 2008-2009 crisis, had a considerable impact on industrial activity in the world. This was reflected by most countries showing a much stronger industrial contraction than at any other time in recent decades.

In 2010, with the reactivation of global activity, industrial growth accelerated strongly in the emerging economies, particularly in Asia, at rates higher than the average for 2001-2007. In Latin America, too, industrial production indices showed favorable expansion in 2010 (Graph B1.4).

By 2011 growth in industrial activity began to moderate, except in some specific cases such as Chile and Colombia. This trend intensified in the first half of 2012<sup>3</sup> and is a cause of even greater concern in some European countries where industrial production has been decreasing for several months. In fact, annual change in the euro area's industrial production index (IPI) was in negative territory for six months up to May, owing to the poor performance of the peripheral economies and its contagion effect on other countries such as Germany and France. Annual growth in Greece's IPI has been negative since January 2008, contracting at an average annual rate of 6.75%. Although the situation is less serious

Graph B1.3 Annual growth in industrial production indices of various countries (2001-2009)



Source: Datastream

in Spain, Portugal and Italy, industrial production in these countries has been falling for several months.

In the course of this year the slowdown in industrial growth has also extended to the emerging economies. In China, industrial production has been losing pace for several months, while in India it has been contracting in annual terms for some months, as it has in Singapore, Taiwan and Thailand. Moreover, South Korea's average annual growth to June was 2.6%, down from 7% in 2011, indicating strong deceleration in industrial activity. In Latin America, the second quarter of

Graph B1.4 Annual growth in industrial-production indices of various countries (2010-2012)



a/ Average monthly growth to May 2012.

Source: Datastrear

<sup>2</sup> A clear example of this is the behavior of international prices for minerals and energy products, such as copper and oil, which were around their all-time highs.

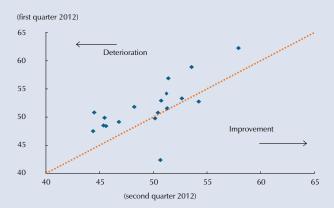
<sup>3</sup> In 2011 supply shocks were responsible for negative growth in the industrial production indices of Japan and Thailand.

2012 saw industry contracting in Brazil, Argentina and Peru, and continuing to lose pace in Chile and Mexico.

Lastly, manufacturing sentiment indices continued to deteriorate in the second quarter of 2012 in the major developed economies, possibly anticipating a new slowdown in industrial activity in those economies (Graph B1.5).

In conclusion, the slowdown in global demand has again affected international trade and industrial behavior and might continue to do so in the coming months, given the developed economies' loss of momentum. In this context, the Colombian economy has not been immune to these developments, and there is evidence of slower growth in the country's external sales and domestic industrial activity, as described in Chapter II of this *Report*.

Graph B1.5 Manufacturing sentiment index (balance)



Economies: Germany, France, US, Italy, China, Australia, Japan, Mexico, UK, Singapore, Switzerland, South Africa, Hungary, Israel, Norway, Canada, New Zealand and euro area.

Source: Datastream

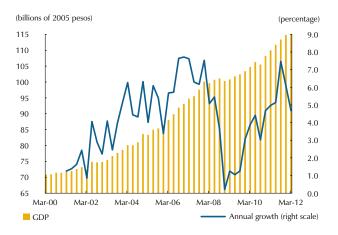
### II. Domestic growth: current situation and short-term outlook

**Colombia's economy slowed** by more than expected in the first quarter of 2012, owing to a weaker international context and to an unexpected fall in domestic civil works.

**Domestic demand continued to grow** but more slowly than in 2011. By economic activity, financial services, mining and commerce performed best.

**For the second quarter of 2012** the country's economy is forecast to grow by 3.3%-4.8%.

#### Graph 15 Gross domestic product (seasonally adjusted)



Source: DANE. Calculations by Banco de la República.

#### A. GDP IN THE FIRST QUARTER OF 2012

According to information published by DANE, Colombia's GDP grew at an annual rate of 4.7% from January to March 2012 (Graph 15). This figure stood in the lower half of the range estimated in the previous *Inflation Report*. It reflected the economic slowdown caused by a less favorable external context and was, moreover, in line with the loss of pace in important domestic sectors, such as investment in civil works. In quarterly terms, GDP rose by 0.3%, a significantly lower rate than in the preceding four quarters.

The main driver of the economy in the first three months of the year was domestic demand, which expanded at an annual rate of 6.1%, a lower rate than for the full year of 2011, but higher than the historical average since 2000. Annual growth was relatively

The 8.1% annual contraction in civil works occurred in highways, roads and mining construction.

strong in both consumption (5.2%) and investment (7.8%) but weaker than for the full year of 2011, especially in the case of investment, which had expanded by 16.7% in 2011 (Table 4).

Household consumption continued to grow faster than government spending, though both slowed slightly relative to the final quarter of 2011. The best performance was centered on semi-durable and nondurable spending. In annual terms, consumption of durable goods grew at a lower rate than in the fourth quarter of 2011; it was the lowest rate since the fourth quarter of 2009 and lower than the historical average for the past decade.

The biggest investment surprise came from civil works. This component's negative growth of 8.1% made it necessary to revise down GDP forecasts for 2012, as explained further below and in Chapter IV of this *Report*. The annual contraction in civil works investment occurred mostly in the group of highways, roads and mining construction. Other investment items also slowed relative to 2011. Thus, the annual rates of investment growth in machinery and equipment (16.7%) and in construction and buildings (4.5%) were lower than the average rates for 2011. Similarly,

Tlabe 4
Real annual GDP growth, by type of expenditure

	Q1	Q2	2011 Q3	Q4	2011 full year	2012 Q1	Contributions to annual growth (Q1 2012)
			٦)	percentage)			(percentage points)
Total consumption	5.1	6.8	5.9	5.4	5.8	5.2	4.2
Household consumption	5.5	7.8	6.6	6.1	6.5	5.9	3.8
Nondurable goods	2.9	5.9	4.8	3.6	4.3	5.5	1.2
Semi-durable goods	13.5	19.4	13.8	13.7	15.1	13.1	0.8
Durable goods	35.8	34.4	19.9	8.9	23.9	4.3	0.2
Services	3.8	4.4	4.9	5.1	4.6	4.6	1.5
Government final consumption	2.4	2.6	2.6	3.0	2.6	2.9	0.5
Gross capital formation	11.2	19.6	24.2	14.2	17.2	8.3	2.2
Gross fixed capital formation	12.9	14.2	24.0	15.7	16.7	7.8	2.0
Farming, forestry, hunting & fishing	2.5	2.6	1.6	1.8	2.1	4.7	0.0
Machinery and equipment	26.8	29.0	28.0	19.9	25.8	16.7	1.4
Transport equipment	52.1	52.3	40.7	38.6	45.2	23.5	0.9
Construction and buildings	1.1	5.2	12.8	1.8	5.1	4.5	0.3
Civil works	(6.4)	(9.6)	29.3	19.8	6.7	(8.1)	(0.5)
Services	5.0	5.8	9.4	1.2	5.3	3.5	0.0
Domestic demand	7.1	9.7	10.5	8.0	8.8	6.1	6.6
Total exports	10.1	7.6	12.0	16.2	11.4	6.3	1.1
Total imports	20.3	24.4	20.1	21.3	21.5	13.0	(3.3)
GDP	5.0	5.1	7.5	6.1	5.9	4.7	4.7

Source: DANE. Calculations by Banco de la República.

The financial services' strong GDP behavior made this sector the biggest contributor to the economy's expansion.

investment in services and in equipment and transport expanded at positive annual rates that were lower than the 2011 averages.

The contribution of net exports to output growth continued to be negative, albeit to a lesser extent than in 2011 because imports slowed faster than exports in the first quarter of 2012. However, in both cases the annual rate of expansion continues to be satisfactory.

On the side of supply, the economic activities that contributed most to annual GDP growth in the first quarter of 2012 were financial services, mining, and commerce, in that order (Table 5). In the case of financial services, loans expanded at a notable pace in the first quarter, thanks to good growth in credit supply and demand. As a result, value added by financial intermediation increased at annual rates of around 15%, similar to those observed in 2011. The financial services' strong GDP behavior, together with their 19% share in the economy as a whole made this important sector the biggest contributor to growth in the overall economy.

The mining sector continued to expand at double-digit rates, though more slowly than in the second half of 2011. This was because oil production fell back in quarterly terms for the first time since 2003, on account of factors including public order problems and crude transportation difficulties. However, production of coal and metal minerals grew at annual rates of over 14% and offset the loss of pace in oil GDP. Regarding the sector of commerce, although value added by the commercialization of goods slowed slightly because of the poor supply

Table 5
Real annual GDP growth, by economic activity

Sector	Q1	Q2	2011 Q3	Q4	2011 full year	2012 Q1	Contribution to annual growth (Q1 2012)
Farming, forestry, hunting & fishing	7.4	1.4	1.6	(1.8)	2.1	(0.4)	(0.0)
Mining and quarrying	9.6	11.0	19.1	18.2	14.5	12.4	0.9
Manufacturing	4.5	2.3	5.9	3.9	4.1	0.6	0.1
Electricity, gas and water	(1.0)	1.8	3.3	2.6	1.7	4.4	0.2
Construction	(1.5)	(3.7)	18.5	10.1	5.5	(0.6)	(0.0)
Buildings	1.4	5.0	12.1	1.1	4.8	3.5	0.1
Civil works	(5.6)	(10.7)	29.2	17.8	6.2	(8.1)	(0.2)
Commerce, repairs, restaurants & hotels	5.9	6.7	6.1	5.3	6.0	4.6	0.5
Transport, warehousing & communications	6.3	6.8	7.9	5.7	6.7	6.1	0.4
Financial, real-estate and corporate services	4.5	5.9	6.5	6.5	5.9	6.7	1.3
Social, community & personal services	2.5	3.1	3.8	3.3	3.2	3.4	0.5
Subtotal value added	4.5	4.4	7.3	5.8	5.5	4.3	3.9
Taxes less subsidies	9.9	13.0	10.1	9.2	10.5	9.1	0.9
GDP	5.0	5.1	7.5	6.0	5.9	4.7	4.7

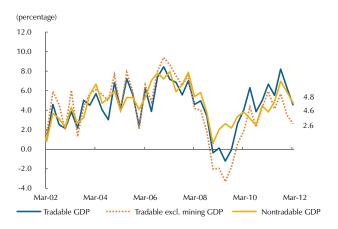
Source: DANE. Calculations by Banco de la República

The manufacturing sector's slowdown was caused by supply factors. of commercializable goods (especially from industry) and the performance of some retail sectors, its annual expansion continued to be considerable thanks to a domestic demand that is still growing at a positive and arguably high rate, allowing it to contribute significantly to annual GDP.

The manufacturing sector's behavior was fairly modest, in line with the performance of industry at the international level. Value added by the sector rose at an annual rate of 0.6%, the lowest since 2009. This slowdown was due in part to supply factors that caused delays in the subsectors of oil refining and chemicals, which account for 25% of overall industry. In the case of oil, the fall was connected with the scheduled closing of the major refineries for maintenance work, while the chemical industry was hampered by problems in the supply of raw materials. But, even if these two subsectors are excluded, the rest of manufacturing also slowed (from 4.3% at the end of 2011 to 3.1% in the first quarter of 2012). Own estimates indicate that about one fourth of the slowdown in overall industrial GDP may have been caused by the supply factors mentioned above, while the other three fourths are attributed to the loss of pace in exports.

Farming and construction were the worst performing sectors in the first quarter, recording negative rates of annual growth. Farming GDP contracted mainly because of a sharp fall in coffee production, which, seasonally corrected, stood

Gráfico 16 GDP of tradable sector, tradable sector excl. mining, and nontradable sector (annual growth)



Source: DANE. Calculations by Banco de la República.

at the lowest quarterly level in the past forty years. The fall in coffee production in the first quarter of 2012 and mediocre coffee expansion in 2011 were partly due to the impact of last year's rainstorms and the crop renewal program. The construction sector's GDP was affected by the strong annual fall back in civil works, as stated earlier.

Thus, in the first quarter of 2012 the non-tradable sectors' annual GDP growth (4.8%) was higher than the tradable sectors' (4.6%), for the first time in two years (Graph 16). The tradable sector lost pace faster because of poor performance in industry and farming, as described above. This becomes more evident if mining is left out, since excluding this sector results in an annual growth of the tradable GDP of only 2.6%.

#### B. SHORT-TERM GDP FORECAST

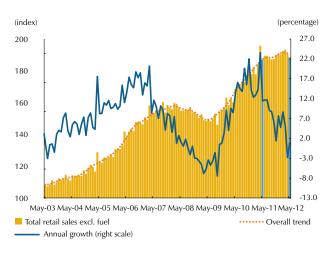
Recent information on the performance of the country's productive apparatus and local agents' spending in the second quarter of 2012, particularly information on industry and retail sales, suggests that growth in domestic demand may have moderated. In addition, there is a loss of pace in manufactured exports, which may be feeling the impact of a weaker international environment. All this

suggests that the Colombian economy's rate of expansion in the second quarter may have been lower than in 2011 and lower than forecast in previous *Reports*.

Turbulence in the international economy during the second quarter affected not only external sales but also confidence and the terms of trade. Business and consumer confidence decreased in Colombia in the second quarter, though these indicators still remain relatively high. The terms of trade also fell back in the second quarter, moving away from the historically high level reached at the end of 2011. Their recent behavior is due in large measure to lower oil prices, as explained in Chapter I. They stand now at a similar level as in mid-2011 and 4% lower than at the end of 2011.

Some indicators could provide valuable information about the path of domestic consumption in the second half of the year. Thus, according to DANE, retail sales

Graph 17 Monthly retail-trade sample (seasonally adjusted total retail sales excl. fuel)



Source: DANE. Calculations by Banco de la República.

Graph 18 Consumer confidence index



Source: Fedesarrollo

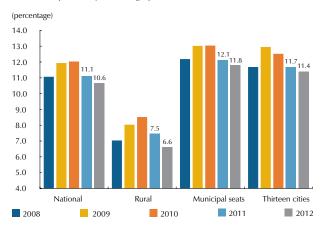
contracted in April and May at an average annual rate of 1% (the first annual fall in almost three years); adjusted for seasonal consumption patterns, that represents a lower level than in the first three months of the year (Graph 17). The contraction in retail sales was caused by a loss of pace in almost all its components, especially in food and durable goods, particularly cars. If the latter are excluded, sales become slightly positive on average (0.5%) in April and May.

Additional to the above, growth in consumer goods imports in dollars declined from 19% in the first quarter to around 8% in the following two months. The main products contributing to the decline were domestic appliances, furniture and vehicles.

Another factor that may have helped to slow the pace of household consumption may have been weaker consumer confidence. According to Fedesarrollo's monthly consumer opinion survey, household confidence fell in June, resulting in a lower average level in the second quarter than in the first (Graph 18). Confidence waned because of lower expectations about economic conditions for households and for the country in the short and medium term.

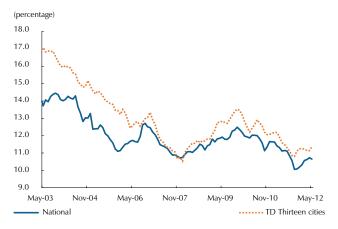
Recent labor market behavior could also be having a bearing on household expectations. Although the unemployment rate has been falling in annual terms, its falls have been increasingly smaller in recent months. In the moving quarter ended in May, the unemployment rate was 10.6% nationwide and 11.4% for the thirteen cities, lower in both cases than in the

Graph 19 Unemployment rate (March-April-May moving quarter)



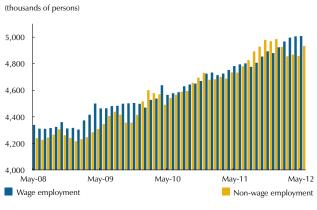
Source: DANE's Large-Scale Integrated Household Survey.

Graph 20 Unemployment rate (seasonally adjusted moving quarter)



Source: DANE's Large-Scale Integrated Household Survey. Calculations by Banco de la República.

Graph 21 Employment, by type of occupation (thirteen cities, seasonally adjusted moving quarter)



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

same period in 2011 (Graph 19). But analysis of the seasonally adjusted series shows that unemployment has stagnated around the levels of the first quarter (Graph 20).

In May the number of people with jobs increased at annual rates of around 4.5%, both in the thirteen cities and in the country as a whole. Discounting the seasonal effect shows that these series leveled off from November 2011 (Graph 21), owing to the fact that from that month faster growth in wage employment was offset by stagnation in non-wage employment. However, if wage employment (usually associated with greater stability and higher income) continues to expand at significant annual rates, labor conditions and employment could be expected to improve, possibly producing a positive impact on consumer confidence.

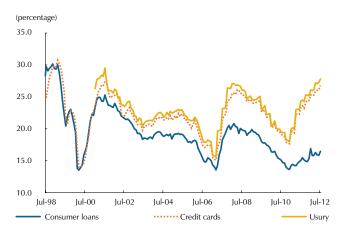
Slower growth in private consumption in the second quarter may also coincide with the loss of pace in consumer credit: from 25.1% in March to 21.2% in the first week of July. This loss of pace may be evidence of the effect of measures taken by the regulatory authorities to curb expansion in consumer loans. Note that real interest rates on consumer funding rose in the first quarter but were stable in the second, running below their averages since 2000, except in the case of interest on credit cards, which rose in line with the usury rate (Graph 22).

Thus, these domestic indicators suggest that household spending in the second quarter of 2012 may have grown by less than it did in the first quarter and last year. However, the slowdown in this important component of GDP may also be explained by a high base of comparison rather than by a fall relative to the first quarter, given that household spending in the second quarter of 2011 grew by 7.8%, one of the highest rates in the past decade.

Investment is expected to improve relative to the first quarter of 2012, although, as explained in Chapter IV, its growth for the full year could in fact be less than for 2011. The improvement could be driven by capital

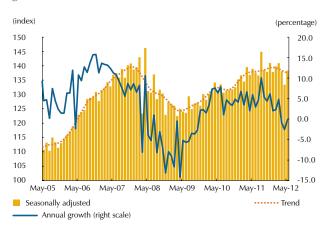
<sup>9</sup> See Financial Superintendence External Circular 026 of 2012.

Graph 22 Household real interest rates (deflated by non-food CPI)



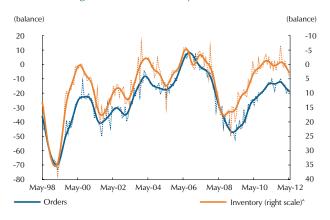
Source: Financial Superintendence of Colombia.

Gaph 23 Industrial production index, excl. coffee threshing (seasonally adjusted series, trend component and annual growth)



Source: DANE. Calculations by Banco de la República.

Graph 24
Manufacturing orders and inventory indices



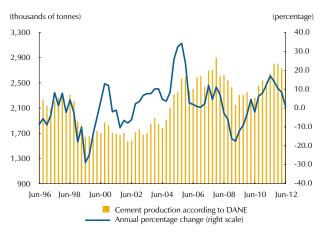
a/ Inverted scale. Source: Fedesarrollo. goods imports (CIF, in dollars), which increased year on year by 12% in April-May (up from 8% in the first quarter), which should result in good performance of investment, mainly in machinery and equipment. There is less information on investment in construction, buildings and civil works, but the possibility remains of faster year-on-year investment growth driven by housing construction and by a pick-up in civil works construction after the sharp fall in the first quarter of the year.

On the side of supply, the available indicators suggest that value added by industry may fall back in annual terms in the second quarter. In April and May, the industrial production index excluding coffee threshing contracted on average by 1.3%, remaining on a downward trend in terms of levels of production (Graph 23). A good part of the fall was due to the chemical sector, which continued to be hampered by problems of availability of raw materials, but even excluding this sector industrial production recorded a low figure in April-May (0.1% on average).

Other industrial sector indicators also performed weakly. Fedesarrollo's orders and inventory indices fell back in May but remained above their averages for the past twenty years (Graph 24), and the size of their falls was slighter than the slowdown observed in industrial production growth. Note that industrial weakening in the second quarter could have a negative impact on the sectors of land transportation and commerce, owing to the links between them; even so, these sectors are expected to continue to perform well in the second quarter.

Available indicators on construction suggest no significant growth either. Cement production rose by 0.8% in the second quarter, which indicates further deceleration, while production levels contracted for the second consecutive quarter (Graph 25). Construction permits decreased in April-May on average by 33% year on year, but the decrease was with respect to last year's atypically high April-May levels, which represented an accumulation of permits caused by changes to seismic-resistance standards. Month-on-month, there was no fall in the level of permits issued, at east in May.

Graph 25 Cement production (quarterly production and annual growth)



Sources: Colombian Institute of Cement Producers and DANE.

The farming and financial sectors are expected to perform well in the second quarter. In farming, coffee production recovered in the second quarter, expanding by 18% year on year, and cattle slaughter rose in April-May; based on these developments the sector is expected to reverse the negative growth recorded in the previous two quarters. The financial sector continues to expand at double-digit rates, despite the slowdown in bank credit to businesses in the second quarter (from about 20% in the first quarter to 17% in June), caused by moderation in commercial loans (especially in foreign currency) and consumer loans. Financial intermediation services should therefore continue to make a significant contribution to GDP.

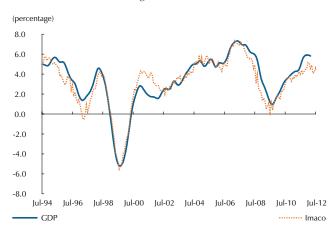
Available indicators suggest that the industrial sector may fall back in annual terms in the second quarter. Based on all the foregoing, the Colombian economy's growth in the second quarter of 2012 is projected to be in the range of 3.3% to 4.8%, most probably in the lower half of the range. This range does not envisage any quarterly GDP deceleration, so that even if the economy's second-quarter growth stands in the lower half of the range, it should be higher than GDP growth earlier in the year. Besides the projections for household consumption and fixed-capital formation discussed above, for the second quarter exports are projected to decelerate slightly and imports more markedly, in the case of exports because of lower external demand, and in the case of imports because of the slowdown in private consumption. In sum, the contribution of net exports to GDP is expected to be negative but smaller in size than in the first quarter.

By economic activity, the most dynamic sectors should be mining and financial services, as was the case in the first quarter, while the poorest performing sector should be industry. Although mining is expected to show relatively high positive growth, its forecast for the second quarter has been revised down for this *Report*, as well as the forecast for the rest of the year, as will be seen in Chapter IV. The reason is that actual oil production to June was less than expected, because transportation problems have continued to affect the oil companies and could continue to lower the pace of production growth for a longer time than initially planned. Note, however, that the monthly oil-production levels envisaged in the projection for the mining sector in the second quarter would have remained around the levels recorded in the second half of 2011, which were historically high.

The Colombian economy's growth in the second quarter of 2012 is projected to be in the range of 3.3% to 4.8%, most probably in the lower half of the range.

Lastly, the leading indicator Imaco, calculated from several sector variables on information to May, which in the previous quarter had anticipated a break in the growth trend, also shows a slowdown, in line with the above forecast (Graph 26). However, the lower level suggested by the indicator is still consistent with an economy growing at rates close to its average in recent years. Note that in the past three quarters this methodology has to some extent underestimated

Graph 26 Imaco: five-month leading indicator of GDP  $^{\rm a\prime}$ 



a/ Twelve-month accumulated annual growth. Source: Calculations by Banco de la República. the economy's actual expansion, at least as reported in the earlier publications. The reason for this may be the lack of representativity of the series that compose the indicator, especially for sectors such as mining.

# III. RECENT INFLATION DEVELOPMENTS

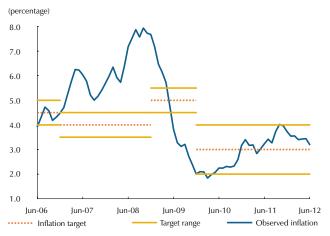
The behavior of consumer inflation in Colombia in the second quarter was better than expected, with core inflation staying around the long term target of 3%.

**Demand pressure remained contained,** and lower international prices for oil and other commodities helped to moderate price rises for various goods and services.

**There was some upward pressure on tradable CPI** in the second quarter, as a result of exchange rate depreciation in April and May.

**Good conditions for farm supply brought** lower price rises for perishable foods.

Graph 27 Headline consumer inflation



Sources: DANE and Banco de la República.

Annual consumer inflation slowed in the first half of 2012, falling from 3.73% in December 2011, to 3.40% in March, and standing at 3.20% in June, close to the long-term target set by the Bank's Board of Directors (Graph 27 and Table 6). The fall was concentrated in the regulated and food groups. The results were generally lower than expected by the market at the beginning of the second quarter and lower than forecast in the March *Inflation Report*.

A number of factors contributed to this behavior during the past three months. First, demand pressure remained contained, as suggested by the output gap estimates presented in Chapter IV. Second, inflation expectations decreased, according to different indicators.

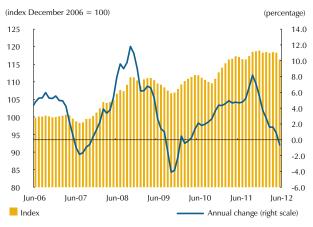
Table 6 Consumer-inflation indicators

Description	Dec-11	Mar-12	Apr-12	May-12	Jun-12
Headline inflation	3.73	3.40	3.43	3.44	3.20
Non-food inflation	3.13	2.95	2.81	2.94	2.80
Tradable	0.80	0.68	0.91	0.96	1.01
Non-tradable	3.64	3.71	3.77	3.74	3.62
Regulated items	5.81	4.94	3.83	4.42	3.92
Food inflation	5.27	4.56	5.01	4.72	4.22
Perishables	7.73	5.18	4.68	1.18	(2.04)
Processed foods	4.50	3.69	4.60	5.03	5.12
Eating out	5.59	5.87	5.92	5.81	5.52
Core-inflation indicators					
Non-food inflation	3.13	2.95	2.81	2.94	2.80
Core 20	3.92	3.76	3.90	3.82	3.56
CPI excluding perishable foods, fuel & utilities	3.18	2.99	3.19	3.28	3.23
Inflation excl. food and regulated items	2.38	2.38	2.51	2.52	2.48
Average of all indicators	3.15	3.02	3.10	3.14	3.02

Source: DANE. Calculations by Banco de la República.

The past three months also saw a significant reduction in international prices for fuel and some other commodities. The reduction began to be transmitted to the Colombian economy in the form of lower adjustments to production costs and prices for various regulated goods and services, including fuel and transportation, among others. Evidence of this is provided by the producer price index (PPI), which fell sharply year on year in the second quarter and stood in negative territory in June (Graph 28).

Graph 28 Headline PPI

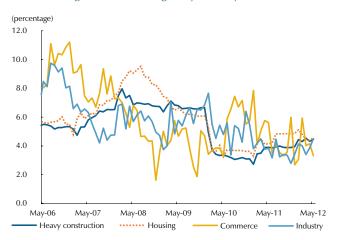


Source: DANE. Calculations by Banco de la República.

Moreover, the adequate behavior of food supply in this period precluded unusual food price rises. All these developments offset any upward pressures that may have arisen from the peso's depreciation at the end of 2011, and those that did occur transitorily last April.

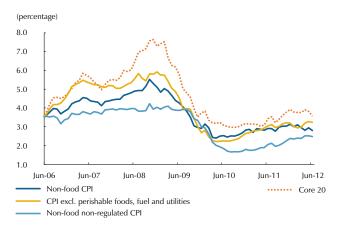
Nor was there any significant pressure from wage costs in the second quarter, despite the 5.8% rise decreed by the government in the minimum wage. In industry, commerce and construction, wages continued to be raised by about 4% (Graph 29). This rate may be considered compatible with meeting this year's inflation target, assuming a labor-productivity growth of about 1%, which may

Graph 29 Annual change in nominal wages, by industry



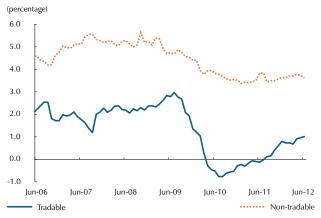
Source: DANE

Graph 30 Core inflation indicators



Source: DANE. Calculations by Banco de la República.

Graph 31 Annual tradable and non-tradable inflation, excl. food and regulated items



Source: DANE. Calculations by Banco de la República.

be regarded as usual. As indicated in the following Chapter, employment gap estimates do not suggest a tight labor market, which explains the favorable behavior of wages in relation to inflation.

#### A. CORE INFLATION

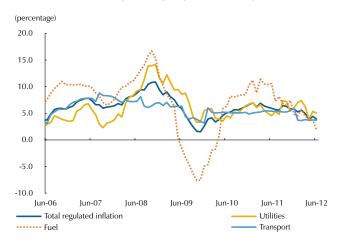
Core inflation, measured as the average of the four indicators monitored by the Bank, did not change markedly over the past three months, remaining very close to the 3% inflation target (Table 6). It had decreased slightly in the first quarter.

The behavior of the individual indicators, however, was not homogeneous. Core 20 fell significantly but is still the highest (3.6%). Non-food inflation also slowed, though to a lesser extent, dropping from 3.0% in March to 2.8% in June. In contrast, the other two core inflation indicators rose. The biggest rise was in CPI excluding food staples, fuel and utilities (to 3.2%), while the CPI excluding food and regulated items, despite an almost steady two-year-long uptrend, is still at the lowest level (2.5% in June) (Graph 30).

In the sub-basket of non-food CPI, the non-food, non-regulated tradable component was the only one that increased year on year in the second quarter: from 0.7% in March to 1.0% in June (Table 6 and Graph 31). This increase stemmed in part from the exchange rate depreciation recorded particularly in April and May, and it occurred despite lower pressures from international commodity prices and imported production costs. Items such as air fares, clothing and cleaning materials rose by more than 2.0% during those months, accounting for much of the component's increase. The prices of other items such as vehicles and communications equipment continued to drop.

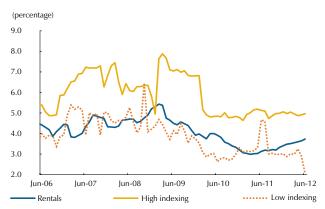
The other two components of non-food CPI (regulated items, and non-tradable goods excluding food and regulated items) decreased in the second quarter. The decrease in regulated CPI, in particular, was significant: from 4.9% in March to 3.9% in June; it was much greater than forecast

Graph 32 Annual inflation of regulated group and its components



Source: DANE. Calculations by Banco de la República.

Graph 33 Annual non-tradable inflation



Source: DANE. Calculations by Banco de la República.

in the previous *Inflation Report* and extended the downtrend observed since April 2011.

All regulated items tended to fall in the second quarter, but most particularly fuel CPI, which dropped year on year from 4.4% in March to 1.8% in June, in line with the fall in international prices. This situation made it possible for the level of domestic prices to be reduced in absolute terms in May and June (Graph 32). Similarly, utilities CPI tended to decrease, falling year on year from 6.2% in March to 5.1% in June. This subbasket has been favored by the reductions decreed by the Bogotá Mayor's Office in water and sewage rates for low-income households, <sup>10</sup> and also by reductions in gas rates, which are tied to movements in international oil prices.

The group of non-tradable goods excluding food and regulated items recorded a slight drop, mostly in June (to 3.6%). A small output gap (see Chapter IV), together with a growth in demand that may have moderated in the first half of the year, may have helped to disrupt the upward trend in this sub-basket. The slight drop at June was mainly concentrated in the segment of entertainment, culture and recreation and may, in part, have been statistically due to a low comparison base, which could reverse in July or August (Table 6 and Graph 33).

Previous Reports have asserted that developments such as providing free universal basic public education

and exercising tighter oversight of rising financial service charges could induce a reduction in non-tradable CPI's annual variation. Up to June, however, those predictions had not materialized. In fact, banking services recorded monthly rises throughout the first half of the year.

In the second quarter of 2012 housing rents, a non-tradable item that accounts for one-fifth of the CPI basket, were subject again to quite strong upward pressure. Rents have been going up gradually for over a year: in June they were 3.7% higher year on year, up from some 3.0% in June 2011. The latest information available from Fedelonjas (Federation of Real Estate Associations) confirms that new rents are being signed at rising rates, even higher than 4.0% in the first half of 2012.

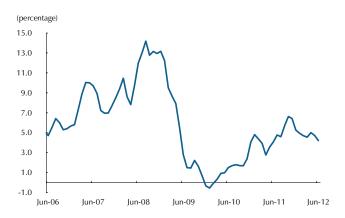
See Decree 064 dated February 15, 2012 issued by Bogotá Mayor's Office, or http://gustavo-petro.com/index.php/noticias/172-entra-en-vigencia-el-minimo-vital-de-6-metros-de-agua-mensual-gratis-para-estratos-1-y-2.

#### B. FOOD INFLATION

Year-on-year growth in food prices continued to decelerate in the second quarter (from 4.6% in March to 4.2% in June), helping considerably to reduce headline inflation (Table 6 and Graph 34). Both the Bank and the market had expected a higher result for food CPI.

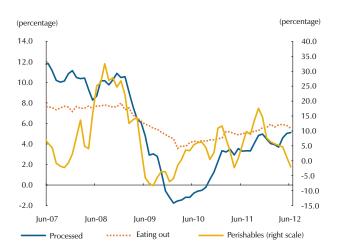
Perishable food prices and, to a lesser extent, the cost of eating out put downward pressure on CPI throughout the second quarter. Year-on-year change in perishable products plunged from 5.2% in March to -2.0% in June, thanks to an abundant supply of fruit and vegetables.

Graph 34 Annual food inflation



Source: DANE. Calculations by Banco de la República.

Graph 35 Food inflation, by group



Source: DANE. Calculations by Banco de la República.

Eating out stopped driving inflation, as it had been doing since early 2010, and edged down year on year from 5.9% in March to 5.5% in June. This performance may be associated with the long downtrend in cost pressures and with moderating growth in domestic demand, particularly household consumption (Chapter IV). In any case, expansion in eating out continues to be high relative to the target, which may be due in part to the 4.6% average increase in the minimum wage in the past two years. According to some studies, the minimum wage has a great bearing on eating-out price increases. Note that eating out accounts for 8.1% of the consumer basket in Colombia.

The group of processed foods increased year on year from 3.7% in March to 5.1% in June and was the only large component that put upward pressure on food inflation in the past three months (Graph 35). The increase was driven by rice and beef (18% and 3.0% in the quarter, respectively). The low supply of domestic rice, caused by a poor harvest, not only lifted the price but was a factor in the Ministry of Agriculture's decision in May to authorize an import quota of 35,000 tonnes of rice to avoid its scarcity. According to Fedearroz (National Federation of Rice Farmers), the shortage of domestic rice will begin to ease in the second half of the year as a result of harvesting on the Eastern Plains. In the case of beef, despite a good level of slaughter in recent months, the price has been rising because of demand pressure, both domestic and international, in the latter case led by the Venezuelan market, and also because of a policy of export diversification.

# IV. MEDIUM-TERM FORECASTS

**Growth forecasts for 2012 and 2013 have been reduced** in this Report, mainly because of deterioration in the international environment.

**Demand and cost pressures on prices are expected to be lower** than predicted three months ago, and therefore inflation forecasts for the end of 2013 have been revised down.

The balance of risks is still surrounded by heightened uncertainty, with a downside bias to both growth and inflation, largely because of the difficult external context.

#### A. ECONOMIC GROWTH

The forecasts for 2012 presented in this Section indicate that the Colombian economy should grow at a rate close to the average for the past thirty years, but lower than both the rate recorded last year and the rate projected in the previous *Report*. The chief reasons for revising down this year's growth estimate are connected with deterioration in the external economic situation, particularly in the euro area. Hence, a disincentive to investment decisions is to be expected for the coming months, together with a fall in external demand.

Demand for Colombian exports is expected to be lower than projected three months ago. Assuming the most probable trading partner growth rates forecast for 2012 and 2013 in Chapter I, demand for Colombian exports is expected to be lower than projected three months ago. The most probable scenario also envisages less favorable terms of trade for the rest of 2012 and for 2013 (in view of lower prices for oil and other commodities), which would have repercussions

Household consumption grew more slowly in 2012 than in 2011.

on public and private income. Moreover, a less favorable external situation would tend to affect the country's import growth, impair business and consumer confidence, and further moderate credit growth.

The following forecasts take into account the characteristics of the different external contexts and the balance of payments, as described in Chapter I. Furthermore, GDP is estimated as usual on assumptions about government consumption and civil works investment for 2012 and 2013. Public spending is projected to expand this year by 3%-4%, supported both by higher tax revenues expected by the central government, and by implementation of projects on the part of some sub-national entities. Government consumption is thus expected to accelerate relative to the 2011 growth rate (2.6%). Annual expansion in civil works investment is assumed to be in the range of -3.8% to -2.0%, figures consistent with the fall recorded in the first- quarter of this year. In both cases the above ranges are lower than those presented in the previous Report. For 2013, the growth range for government spending is projected at 3.0%-5.0%, and for civil works investment at 12.5%-16.5%.

On the above assumptions, the type of spending providing the biggest boost to GDP expansion is expected to be household spending, which, despite its loss of momentum in the past two years, should continue to contribute significantly to economic activity. Breakdown of this spending by component shows all components growing more slowly than in 2011, most particularly consumption of durable goods, which is projected to exhibit greater weakness than consumption of semi-durables and nondurables. This may be explained mainly by the effect of a high level of comparison,.<sup>11</sup> and to a lesser extent by the financial authorities' measures to moderate credit.

Investment, too, is projected to lose momentum, as a result of deceleration in the items of gross fixed capital formation, particularly investment in transport machinery and equipment. Growth rates for investment in buildings and in civil works are also expected to be lower. Nevertheless, projections of buildings investment do not imply an unfavorable outlook, for the government's announcements of social-housing construction, combined with more permits approved this year than last, should bring this type of spending to levels similar to all-time highs.

Recovery is expected in civil works over the rest of the year.

DCivil-works growth in the second half of 2012 should offset in part the poor performance recorded in the first, given that the investment projects that would determine the behavior of this type of spending over the rest of the year would include reconstruction of rainstorm-damaged roads, new road and airport-infrastructure projects, and recovery in oil-sector investment.

Annual growth rates for components of household consumption were singularly in 2011: 23.9% for durables, 15.1% for semi-durables, and 4.3% for non-durables.

The fastest-growing sectors in 2012 should be mining, the financial sector, and transport.

Note that these investment forecasts take into account slower FDI growth in 2012 than was predicted in the March Inflation Report. All the same, FDI should expand at significantly high rates.

Regarding foreign trade, exports are projected to make a modest contribution to GDP expansion, which is expectable given the scenario described. In view of the potential fall in external demand, export growth in 2012 is forecast to be higher only than it was in 2002 and 2009. Similarly, and in line with consumption and investment projections, imports should perform less well in 2012 than in 2011. The net result of imports and exports is expected to be a widening of the current account deficit for this year, and possibly a slightly smaller widening in 2013. These projections include the potential impact of the entry into force of the Free Trade Agreement with the United States, although the impact for 2012 is expected to be small, and the size of the response of imports and exports is not yet evident.

Regarding GDP from the supply side, in the most probable scenario the most dynamic economic activities in 2012 are expected to be mining, the financial sector, and the transport and communications sector. In mining, however, oil production is forecast to increase by less than predicted in the previous *Report*. The downside risks associated with crude transportation problems did materialize and resulted in lower-than-expected production in the first half of 2012. Nevertheless, oil production is projected to average at around 950,000 barrels a day for the year, which is an increase over last year's daily average. Coal production should grow at double-digit rates, up to some 95 million tonnes for the year. In this setting, mining GDP is forecast to expand more slowly than in the past four years.

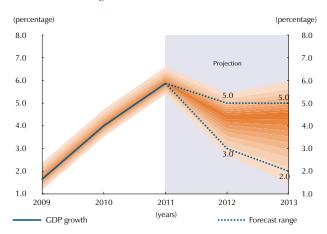
Financial sector GDP is expected to continue performing well, thanks to dynamic expansion in value added by financial intermediation, as a result of strong growth in bank credit. Although this credit behavior may tend to moderate in the second half of the year relative to the first, it will still be robust. In the transport and communications sector the biggest impetus should come from telecommunications, given the steady increase in internet and pay-TV subscribers. Lastly, forecasting for the farming sector assumes, in the most probable scenario, that coffee production will be higher than in 2011 by approximately 800,000 bags (60kg each).

The economic activities projected to perform most modestly in 2012 are industry and construction. Manufacturing would be affected by the expected slowdown in global demand, and by the influence of the supply shocks it suffered in the first half of the year. Its poor performance, which is consistent with industrial production recorded so far this year in different countries of the world, should have a partial bearing on other, linked sectors, particularly land transport and commerce. The low growth projected for construction is associated with investment in civil works, as mentioned earlier.

Forecasts of oil production have been revised down in this Report.

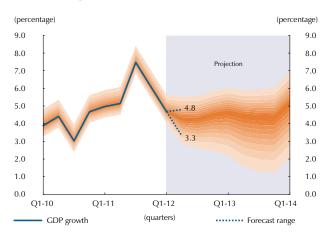
The above information has provided sufficient elements for modifying the previous *Report's* growth ranges for the Colombian economy for 2012 and 2013. Accordingly, the GDP growth-range for 2012 as a whole has been revised down

Graph 36 Fan chart of GDP growth



Source: DANE. Calculations by Banco de la República.

Graph 37 Fan chart of annual growth in quarterly GDP (annual average)



Source: DANE. Calculations by Banco de la República.

to 3.0%-5.0%. For 2013 the projection is in the range of 2.0% to 5.0%. The most probable path indicated by the balancing of risks is consistent with the central scenario and runs in the middle of the revised range for 2012, while for 2013 it runs in the upper half of the range (Graphs 36 and 37).

Note that the balance of risks envisages greater downside biases in this *Report* than in the March *Report*. For it reflects heightened uncertainty arising from the external context, and the likelihood of a more adverse scenario developing that involves a deeper and longer recession in the developed economies, particularly in Europe, and a sharp slowdown in both the world economy and the country's trading partners, as envisaged in the low scenario described in Chapter I.

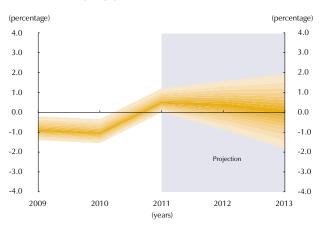
In addition to the downside risks arising especially from the international context, which would be transmitted through the channels of external demand, terms of trade, FDI and transfers, the current forecasting envisages a possible loss of momentum in domestic demand. In particular, spending by households and investors could decelerate even faster from the impact on confidence of greater external uncertainty. Upside risks are connected with cost reductions resulting both from lower regulated prices, and from imported commodity prices thanks to the Free Trade Agreement, among other things. Studies by the National Planning Department show that the FTA with the United States could increase

real exports by 2%-3% over and above their average growth rate in the past decade, and increase bilateral trade by 34%, thereby permanently expanding the Colombian economy by an additional 0.5%-1.0%.<sup>12</sup>

Based on the 2012 growth projections presented in this Chapter, the output gap is expected to be in positive territory, but smaller than in 2011. Similarly, for 2013 the gap is expected to be narrower than in 2012. Graph 38 shows that the gap for this year should be in the range of -0.9% to 0.3%, a slightly lower path than forecast in the March *Report*.

Studies and presentations on the effects of the Free Trade Agreement can be found in the following links http://www.dnp.gov.co/LinkClick.aspx?fileticket=xntFQi3lHdA%3D&tabid=1157 y http://www.tlc.gov.co/publicaciones.php?id=747

Graph 38 Fan chart of output gap



Source: DANE. Calculations by Banco de la República

The new estimates of the labor-market gap follow the same trend as was observed in the previous *Report*: a gap that narrowed in 2011, when unemployment stood below the rate consistent with stable inflation (Nairu). Given the lower prospects for growth discussed in this Chapter, the labor-market gap for 2012 is expected to be narrower than projected in the March *Report* and to remain in negative territory. A tighter labor market could lead to higher wage increases and these, in turn, to inflationary pressure. The impact, however, would be proportional to the absolute deviation of the unemployment rate from Nairu. And that deviation is projected to be smaller in this *Report*.

#### B. INFLATION

#### 1. Forecasts

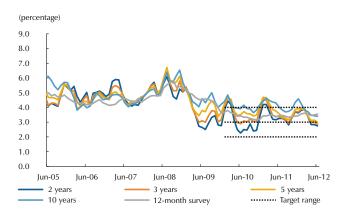
The external developments in the second quarter and the changes to world growth forecasts described above have tended to decrease pressure on domestic prices relative to the first quarter *Report's* projections, particularly for the medium and long term. The new central path of annual consumer inflation is therefore a downward revision of the previous forecast for a horizon of four to six weeks. Smaller changes have been made to projections for the rest of this year. Similar movements are expected in core inflation.

The forecast for inflation in four to six weeks' time has been reduced.

Deterioration of the international context relative to three months ago has brought two major changes to the inflation forecasts. The first is a much more moderate demand pressure than anticipated in March. As stated earlier, a weaker world demand and its implications for Colombian growth have led to estimates of the output gap being revised down. In a more probable scenario in which GDP stands at the mid-point of this year's expected range and in the upper half of next year's, there should be no demand pressure on prices. In this case, the output gap in the economy should stay close to 0% over the next six quarters, in part thanks to investment efforts made in the past. Forecasts for the CPI segments most influenced by demand have therefore been revised down.

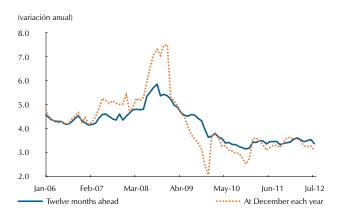
The forecasts for the CPI segments most influenced by demand have been revised down in this Report. The second change is that weaker world demand has reduced price forecasts for oil and other commodities. Accordingly, the new projections have lowered production and transport cost increases, resulting in an indirect downward impact on consumer prices. Lower international prices also have direct repercussions on the CPI basket's regulated items, mainly through smaller domestic price rises for gasoline, natural gas and urban public transport.

Graph 39
Breakeven inflation derived from TES securities (2, 3, 5 and 10 years ahead) (monthly average)<sup>a/</sup>



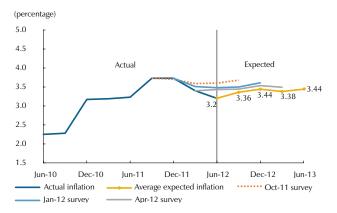
a/ Nelson and Siegel methodology. Source: Banco de la República.

Graph 40 Annual inflation forecasts by banks and stockbrokerage firms



Source: Banco de la República.

Graph 41 Observed and expected inflation (three, six, nine and twelve months ahead)



Sources: DANE and Banco de la República

Furthermore, a weaker external outlook, with a higher perception of risk to emerging economies, as predicted, combined with lower terms of trade and reduced capital inflows, leads to the assumption of greater shocks to the exchange rate and hence upward pressure on the prices of imported goods and services, and tradable items in general. Nevertheless, downward pressure from greater domestic weakness, slowing export growth, and lower commodity prices should eventually outweigh the upward influence of a depreciating exchange rate, as occurred in 2008-2009.

The new forecasting exercise has also taken into account the domestic factors that have helped to reduce the medium- and long-term projections of inflation. The most important factor has been the decline in inflation expectations, which may have been explained by the monetary policy implemented in 2011 and earlier this year. The downtrend in inflation expectations, already observed in the first quarter, persisted during the second to such a point that several of the indicators calculated by the Bank dropped below the long-term inflation target (3.0%).

In particular, inflation expectations in horizons of two, five and ten years estimated from interest on TES Treasury securities ran between 2.5% and 3.3% in July. In the March Report estimates exceeded 3.4% (Graph 39).

Similarly, year-end and twelve-months-ahead expectations obtained from the Bank's monthly and quarterly surveys have fallen, though by less than in the longer horizons. The monthly survey conducted in early July showed that respondents (mainly financial-market operators and agents) expected annual inflation to stand at 3.10% at the end of the year and at 3.37% in twelve months (down from 3.47% and 3.53%, respectively, in March) (Graph 40). In the quarterly survey of companies the results were 3.4% in both cases (down from 3.54% and 3.49% in March) (Graph 41); and the inflation target was expected to be met this year by 96% of respondents, the highest percentage since the Board's adoption of flexible inflation targeting in 2000 (see box 2).

Given the domestic growth projected for the next year and a half, the labor market should remain relatively loose. Employment will continue to grow, but at a moderate pace, in view of a more difficult external environment and a heightened perception of risk among local and foreign investors. Hence, although the unemployment rate may continue to fall, it will do so more slowly and without deviating significantly from what is considered the Nairu rate. Wage increases are therefore expected to continue to be made at much the same rates as recorded recently, which are consistent with the long-term inflation target.

Accordingly, the central path of this *Report's* inflation forecast assumes that wage-cost pressure on prices should remain contained in the short and medium term. In contrast, the two previous *Reports* expected to see wage increases rising and affecting some consumer prices in the course of 2012 and especially in 2013.

Lastly, the central path of the new inflation forecast assumes that domestic farm supply conditions will be normal for the rest of 2012 and in 2013, so that price increases for perishable foods should generate no upward pressure. Regarding imported foods, the central path envisages that international price rises will not differ from those recorded up to mid-July; they are expected to be transitory and to have limited impact on consumer inflation in Colombia.

Based on the foregoing, in this Report headline consumer inflation is projected to remain at he same levels as in June for the rest of 2012 and to end the year a little above the 3.0% long-term target. This is a downward revision of the March Report's forecasts for the second half of the year. Inflation should continue to fall in 2013 and in the first half of 2014 by more than predicted in the previous Report, running for a time below 3.0%.

Non-food inflation should run below headline inflation.

Non-food inflation should run a little below headline inflation during the rest of this year and the first half of next, converging toward headline inflation over the second half of 2013 and in 2014. This is a lower path than predicted in the March *Report* up to the end of 2012, but for part of 2013 it will run a little higher, owing to the behavior of the CPI of tradable goods excluding food and regulated items.

Regarding the sub-baskets of non-food CPI, the forecasts for non-tradable goods excluding food and regulated items and for the regulated group have been reduced. In the case of non-tradable, the reduction resulted from lower output-gap estimates, as stressed earlier. Annual change in non-tradable goods should remain around 4.0%, but then converge toward 3% in early 2013.

The fall in the regulated group is explained by lower projections of domestic gasoline and gas prices, resulting from downward revision of the oil-price forecast. As stated in Chapter I, in the most probable or central scenario, the average forecast for 2012 fell from \$124 per barrel of Brent in the March *Report* to \$104 in this Report. These falls are considered unlikely to outweigh a greater tendency for the peso to depreciate.

There is high uncertainty around food-price forecasts, for several reasons, including the possible occurrence of an El Niño climate event.

The new forecast for the regulated group also incorporates, in part, the decisions on public transportation in Bogotá that were announced after preparation of the March Report. Given the weight of Bogotá (42.5%) in the nationwide CPI, these decisions could lead to a reduction of the regulated public-transport service CPI in the second half of 2012. Note, however, that the ultimate impact could be greater than predicted here.<sup>13</sup>

This *Report's* projections for the regulated group do not envisage that any exceptionally high increases in household energy tariffs will be caused by shortage of rainfall and replacement of hydraulic generation by thermal generation. But such increases could arise if a strong El Niño climate event were to occur, as considered in the Section on the balance of risks.

Among the components of non-food CPI, the tradable goods excluding food and regulated items are the only group for which the forecasts have been raised. The reason for doing so is that the most probable scenario in this *Report* envisages a greater tendency for the peso to depreciate. Even so, the tradables' path should remain under 3.0% over the next four quarters.

As regards annual change in food CPI, assuming normal weather conditions and no further persistent increases in international prices, a moderate declining trend is expected for the rest of 2012, which should become more pronounced in 2013. However, there is great uncertainty around this, given the risks of an event of El Niño occurring and the problems connected with global food provisioning.

#### 2. Risk Balancce

The balance of risks estimated for headline consumer inflation and for non-food inflation is presented as a fan chart in graphs 42 and 43. In this *Report* the width of the forecast intervals remains large because of uncertainty about the international context. Moreover, the downside biases of the balance of risks are greater than those estimated in the March *Report*.

Specifically, the main downside risks envisaged in this Report are:

• A greater deterioration in the international context than predicted in the central path of the forecast. The world economy decelerated faster than expected in the first half of 2012, because of the European debt problems and

The main downside risk to the inflation forecast is the possibility of the world economy deteriorating sharply.

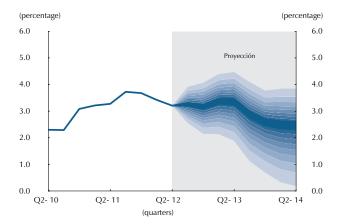
Detailed information on Bogotá public-transport price adjustments was released through Decree 356 dated July 23, 2012, when this Report's projections had already been made. The Decree sets forth new fares for the new Integrated Public Transport System (SITP), to be charged from August 1st. Different fares are to be charged according to the hours of the day (peak vs. off-peak hours) and days of the week (working days vs. weekends) as follows: peak hours 1,700 pesos, off-peak hours 1,400 pesos, peak-hour transfers 300 pesos, off-peak transfers no charge; weekends: Saturdays 1,700 pesos, Sundays 1,400 pesos. The new fare for the traditional urban transport system is to be 1,400 pesos, down from 1,750 pesos for the Transmilenio system and 1,450 pesos for the traditional bus system.

Consumer and investor confidence in Colombia could suffer more from external events than predicted.

the impact they have begun to have on advanced and emerging economies. There is a high risk that this trend may deepen, given that the solutions available to the European economic authorities are difficult to implement. Specifically, the fiscal adjustment programs are ambitious and may, in the short term, affect economic activity in Europe and elsewhere at a time when economies are already quite weak and their labor markets are deteriorating. It is not therefore unlikely that insufficient or untimely policy measures in Europe will intensify and prolong the downturn there, weakening the world economy, even into next year. The impact on Colombia's economy could be felt through several channels such as a significant and lasting fall in the terms of trade, lower demand for the country's exports, and a decline in business and household confidence that would affect domestic spending decisions. As a result, there would be downward pressure on tradable, non-tradable and regulated consumer prices in Colombia. This impact should outweigh the effect of greater pressure on the peso to depreciate, as occurred in the 2008-2009 crisis. If confidence in Europe continues to deteriorate, the likelihood of such a scenario occurring will increase further.

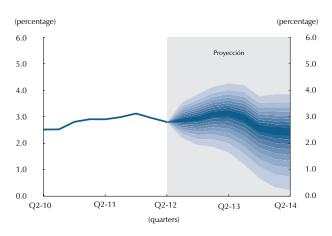
Consumer and investor confidence in Colombia could suffer more from external events than predicted. As a result, domestic demand could lose pace faster than is projected in the central path of inflation. As stated earlier, the different indicators of economic activity have shown that Colombia's economy has slowed in recent months. Although the central path assumes no worsening of the international context, the adverse effects of the current situation on investor and consumer confidence could be greater and persist for several months, discouraging spending decisions by more than expected. The output gap could thus narrow even more, creating downward pressure on non-tradable goods in particular, and to some extent also on tradable items.

Graph 42 Fan chart of headline inflation



Source: DANE. Calculations by Banco de la República

Graph 43 Fan chart of non-food inflation



Source: DANE. Calculations by Banco de la República.

• Lower prices resulting from the entry into force of the Free Trade Agreement with the United States (FTA). Lower tariffs introduced by the FTA on a great number of inputs and final goods could put further downward pressure on consumer prices, especially for tradable goods. All other goods and services of the basket may also be affected by lower input costs.

#### The main upside risks are:

- Greater and more persistent increases in international food prices. In recent months several major food-producing countries have begun to face reductions in the exportable supply of cereals, oilseeds and other products, owing to climate problems. In particular, drought in the United States has raised world prices for corn, wheat and soybeans; and something similar has happened with corn in Russia, owing to the strong impact of the summer. In Brazil the rainy season has brought more rainfall than expected, putting upward pressure on sugar. In some emerging countries this context has raised domestic food inflation. Although this has not occurred in Colombia up to mid-July, there is a risk that if external prices keep on rising food inflation will increase, especially at the end of this year and the beginning of 2013. These circumstances are transitory but they can have a lasting impact on inflation if they affect expectations
- The occurrence of a strong El Niño event. As this Report was being prepared the likelihood increased of an El Niño event occurring in the second half of this year and into early 2013. To judge by past events, its intensity would be weak or moderate at first, producing little impact on prices. But it is too early to rule out the occurrence of a strong El Niño, which would in fact have a significant impact on the country's farm supply and consumer prices. If it does occur, food prices could go up considerably, particularly between the first and third quarters of 2013. In this case, the greatest risk to meeting the long-term inflation target would also come from El Niño's impact on expectations and, through these, on negotiation of wage and price agreements.
- Higher public spending than envisaged in the central scenarios. Countercyclical policies might be implemented to smooth the effects of international uncertainty and the recent slowdown in Colombia's economy, thereby generating upward pressure through rising public demand.
- Greater depreciation than is projected in the central scenario. International uncertainty could lead to a persistent increase in the perception of risk regarding emerging economies such as Colombia's, with the result of affecting capital flows. In this event, the peso and other currencies of the region might tend to depreciate more strongly than is projected, and this would be transmitted to tradable and commodity prices.

Two major upside risks to inflation in 2013 are the possible occurrence of an El Niño event and a persistent rise in international food prices.

Although the weighing of the different risks in the fan chart reveals a downside bias, there is still a strong likelihood that headline inflation will stand within the target range in 2012 and converge toward the long-term target (3.0%) in 2013. This is also the case with the balance of risks for non-food inflation. Note that in both forecasting exercises monetary policy is assumed to be active, with the intervention rate being adjusted to move inflation to the long-term target of 3.0%.

#### Box 2

#### INFLATION TARGETING IN COLOMBIA: TARGET RANGE vs. POINT TARGET

Julián A. Parra Polanía\*

The practice of informing the public of inflation targets has been in force in Colombia since just before the Constitution of 1991 granted the Banco de la República's Board of Directors autonomy in conducting monetary and exchangerate policy (Gómez et al., 2002). In 1991, with inflation running at 26.8%—one of the highest rates in the country's recent history at the time—, an inflation target was announced for 1992. However, in the literature on empirical analysis of the monetary-policy system known as inflation targeting (e.g. Mishkin and Schmidt-Hebbel, 2001) Colombia is not regarded as a fully-fledged inflation targeter (FFIT) until 1999. The main reason for this is that the inflation target could not be considered as the sole nominal anchor until the prevailing exchange-rate band regime was eliminated in September of 1999 to be replaced by a free-floating system.

Colombia, like other developing countries, began to implement inflation targeting in a context of high inflation (over 25% in the early nineties) and relatively low monetary-policy credibility. Gómez et al. (2002) indicate that these were the reasons why a specific point target was set for inflation, that is to say, without defining a range around it. Setting a target range in a deflationary process with low credibility would have implied anchoring market expectations to the higher end of the range

In 2003, when the Bank had made significant progress in terms of both monetary-policy credibility and understanding of inflation targeting, it decided to start setting the inflation target as a range (Table B2-1). The following paragraphs indicate how common the use of a target range is among the fully-fledged targeters, explaining the advantages and drawbacks of targeting a range, and discussing the importance of communicating with the public to ensure that the target range is interpreted correctly.

The analysis of the fully-fledged targeters by Roger and Strong (2005) leads to the conclusion, based on data for the first half of the past decade, that it was then common to set a target range for inflation, either around a specific point or without specifying a particular point. Only three of the twenty-two countries analyzed set a point target. Present-day data lead to a similar conclusion. According to a Bank of England report published this year on the state of the art of inflation

Table B2.1 Inflation targets in Colombia since 1992 (percentage)

Year	Target	Year	Target	Year	Target
1992	22.0	1999	15.0	2006	4.0 to 5.0
1993	22.0	2000	10.0	2007	3.5 to 4.5
1994	19.0	2001	8.0	2008	3.5 to 4.5
1995	18.0	2002	6.0	2009	4.5 to 5.5
1996	17.0	2003	5.0 to 6.0	2010	2.0 to 4.0
1997	18.0	2004	5.0 to 6.0	2011	2.0 to 4.0
1998	16.0	2005	4.5 to 5.5	2012	2.0 to 4.0

Sources: Gómez et al. (2002) and Banco de la República.

targeting (Hammond, 2012), only five of the twenty-six fully-fledged targeters set a target point for inflation.<sup>1</sup>

Monetary policy should be able to respond with flexibility in the short term, without losing credibility with the public. This is particularly important according to Clavijo (2002) in countries where on the one hand inflation is close to its long-term target (because of high uncertainty about the level of inflation), and on the other hand transitory developments—arising for example from weather phenomena—, make it necessary to accommodate significant exogenous shocks to prices.

The usefulness of the target range for communication with the public has its limitations and drawbacks. High volatility in supply shocks may require setting a broader range. But a very broad range may be interpreted as a bad signal in

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<sup>1</sup> The five countries are: Hungary, Iceland, Norway, UK, and Sweden. In the UK, when inflation deviate from the target (2%) by more than 1% in either direction, the Bank of England has to provide an explanation in a public letter to the Chancellor of the Exchequer. This is a means of accountability, rather than a way of defining the target.

terms of the central bank's commitment to control inflation and may be counterproductive for the purpose of anchoring expectations. Some studies (e.g. Mishkin, 2001; Hammond 2012) suggest that when the variance of the shocks is very great, it may be a better strategy to use a point target and explain the reasons for deviations from it.

The usefulness of the target range is also diminished if the public simply focuses on whether or not inflation stands within the range, without attaching any importance to the size of its deviation from the mid-point. In this case, one end of the range (specifically the upper end when there is disinflation, as explained in the case of Colombia) becomes the final anchor, making it difficult to control inflation. At other times, as a result of wrong interpretation, the target range is used to justify requesting the monetary authority to refrain from taking any action, with the argument that the "target is being met". For example, if inflation stands within the range but near the top end, the central bank is requested not to raise the policy rate.

As explained by Freedman and Laxton (2009), the range should be thought of as an interval of uncertainty and imperfection in controlling inflation in the short term, rather than as an interval of indifference.<sup>2</sup> For this reason and to avoid the drawbacks of wrong interpretation, Mishkin (2007) suggests that in publishing the target range the central bank should lay particular stress on the mid-point.<sup>3</sup> It should thus be clear to the public that when the target range is 2% to 4%, the central bank aims to reach an inflation of 3%, and not an inflation close to one end or the other of the range (2% or 4%).

Regarding requests for inaction within the range, it is also worth pointing out a finding described by Medina and Valdés (2002). They review, among other cases, an atypical case in which the monetary policymaker's preferences are such that for him there is an optimal inflation range within which all values of inflation could generate the same level of usefulness, other things being equal. The authors find that not even preferences of this kind would imply inaction by the central bank within the range. The intuition from this

The Bank of Mexico, for example, explains on its website: "that the band around the inflation target is not a margin of tolerance. It is just an explicit way of representing the inaccuracy that inevitably surrounds meeting the target precisely. The inaccuracy arises from volatility in inflation and the indefinite relation between monetary-policy measures and their impact on inflation". (http:www....)

Using data from inflation forecasts Levin et al. (2004) show that long-term expectations are better anchored in countries where the emphasis is on a specific target value (e.g. Canada, New Zealand and Sweden), than in countries where, despite a clear desire to keep inflation low, no emphasis in placed on a particular value (US and the euro area). finding is that a shock is more likely to cause inflation to deviate from the range when inflation stands at the ends of the range than when it is near the mid-point. Accordingly, the optimal action is to keep inflation near the mid-point and avoid its being moved out of the target range by small but unexpected economic shocks. Furthermore, where the central bank feels some degree of concern about the output gap, any movement of inflation even within the range will be connected with changes in the output gap that will require some response.<sup>4</sup>

In conclusion, stress is laid again on the importance of informing the public clearly that the central bank makes its decisions with the main objective of reaching the mid-point of the range. It is also important that, in presenting the results, an explanation be given of the possible reasons why actual inflation has deviated from the mid-point, even though it stands within the set target range.

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<sup>4</sup> Given the negative relation between the monetary-policy rate and the output gap, there may be only two specific cases that could imply inaction for such atypical preferences. In the first case, the output gap is negative and inflation stands at the top end of the range. In the second, the output gap is positive and inflation stands at the bottom end of the range.

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# V. RISKS TO LONG-TERM MACROECONOMIC STABILITY

In the past five years high prices for oil and other commodities have raised the national income, boosted investment and consumption, and accounted largely for widening of the current account deficit. The widening has not been bigger owing to the current surplus of the mining and oil sector.

**Agents might continue to increase their spending** on the expectation that their income levels will remain high. If this expectation fails to materialize, the current account will be at risk of going into unsustainable territory.

In the second quarter of 2012 the real gross loan balance slowed but it is still growing at high annual rates. This growth has been attended by faster expansion of the balance of nonperforming loans, although the levels of this are still historically low.

In the first quarter of 2012 real prices for both new and used housing continued to record high rates of annual growth.

As explained in previous Inflation Reports, continuous and prolonged capital inflows into an economy can increase the country's capital stock and improve its competitiveness. Yet, history shows that these inflows have also coincided with the presence of imbalances in important macroeconomic variables such as the current account, credit, and asset prices. A large accumulation of these imbalances will eventually lead to a period of recession.

In a broader inflation-targeting context it is, therefore, important to monitor such variables to identify possible macroeconomic imbalances. This monitoring will provide agents with greater information for making decisions and help to reduce the likelihood of a future crisis.

In 2005-2010 the current account deficit widened, mainly as a result of falls in the saving rate and historically high levels of private sector investment.

As explained further below, in 2005-2010 the current account deficit widened,<sup>14</sup> mainly as a result of falls in the saving rate and historically high levels of private sector<sup>15</sup> investment. In the same period the government's<sup>16</sup> saving rate was lower than the average since 1971, while its investment rate remained relatively stable and higher than the saving rate. All other sectors (non-financial public-sector companies<sup>17</sup>) maintained a current account surplus (except in 2009), helping to reduce the overall public-sector deficit. The breakdown for 2011 is not yet available, but preliminary estimates suggest that the level of the deficit resulted from similar causes.

So far this year annual growth in credit has moderated but continues to be stronger than the nominal GDP expansion estimated for 2012. The biggest slowdown has occurred in commercial loans, particularly those extended in foreign currency. The fastest expansion has been in consumer loans, followed by mortgage loans. The foregoing has gone hand in hand with deterioration in loan quality, though the levels of the loan quality indicator are still low compared with the average for the series.

Regarding asset prices, to March 2012 new and used housing price indices continued to record substantial annual growth and stood at high levels.

For 2012, deterioration in the external sector caused by the European crisis, and the expected deceleration in domestic demand are likely to contribute to the current-account deficit being similar to last year's as a proportion of GDP. For 2013 the deficit could be smaller. This scenario would also be consistent with greater moderation in credit growth, which is a fundamental variable in import funding. For these reasons, the forecast ranges for the current account presented in this *Report* show smaller deficits than those estimated in the previous quarter.

#### A. THE CURRENT ACCOUNT

This Section first describes movements in the current account from the perspective of the balance of payments, to determine which economic sectors generate the current-account deficit, and the sources and terms of funding. It then proceeds to analyze the current account according to the national accounts, to see whether the deficit's widening has resulted from a fall in saving or from acceleration in investment. Lastly, an exercise is conducted to evaluate the economy's

According to the balance of payments the deficit as a proportion of GDP widened from -1.3% in 2005 to -3.0% in 2010; according to the national accounts it did so from -0.6% to -4.1%.

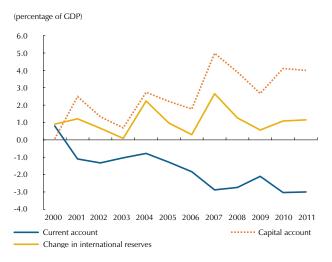
<sup>15</sup> Households and private sector financial and nonfinancial companies. No estimate for 2011 is available for this breakdown.

The central government, sub-national entities and social-security funds.

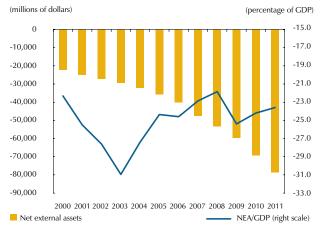
<sup>17</sup> Ecopetrol has a 70% stake in non-financial public-sector companies.

#### Graph 44

#### A. Balanza de pagos



#### B. Activos externos netos (AEN)



Source: Banco de la República.

vulnerability in the presence of a shock of uncertain duration to the terms of trade.

# 1. Behavior of the current and financial account according to the balance of payments

Since 2001 the current account has been characterized by a persistent deficit, as a proportion of GDP, with a tendency to widen in the past five years. From 2001 to 2005 the deficit remained stable at around 1%, rising up to nearly 3% in 2011 (Graph 44-A). Thus, net external assets in dollars deteriorated, in the context of rising Colombian investment abroad and accumulation of international reserves. This notwithstanding, in the past five years the ratio of net external assets to GDP has remained relatively stable, thanks to strong growth in nominal GDP in dollars (Graph 44-B).

On the funding side, the capital and financial account has also been on a rising trend. The funds are mostly long-term resources and have come through FDI and to a lesser extent through portfolio investment and loans (Graph 45-A). But short-term liabilities gained momentum in 2010 and 2011 and represented, on average, about 25% of the total flow of external liabilities (Graph 45-B).

Breakdown of the current account into three groups (public sector; mining, energy and oil sector; and the rest of the economy<sup>18</sup>) shows that the behavior and funding of each group has been different (Graph 46). Since 2000 the country's overall current account has been the result

of a persistent deficit in the group designated as "rest of the economy", which has recorded a substantially rising negative balance in the past four years. This growing negative balance has been partly offset by the surplus in the mining and energy sector. The public sector's current deficit as a ratio of GDP has been decreasing.

The mining, energy and oil sector

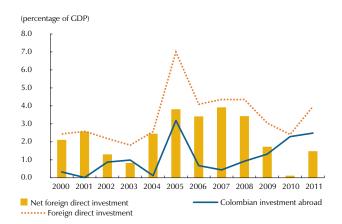
In 2010 and 2011 the mining, energy and oil sector recorded faster growth in the current account surplus together with net capital inflows<sup>19</sup> (Graph 47). The

This group includes current transactions of the manufacturing, commerce, transport and communications, financial, and farming sectors, and net current transfers.

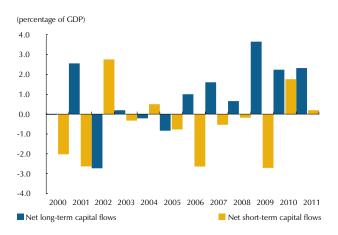
The mining, energy and oil sector has received an increasing flow of external liabilities, of which an average of 90% consists of FDI and the remaining 10% of long- and short-term loans.

#### Graph 45

#### A. Flujos de inversión directa



#### B. Otros flujos de capital



Source: Banco de la República.

sector's current account surplus expanded thanks to higher international prices and a greater volume of exports, more than offsetting rising payments in respect of profits transferred abroad by firms with foreign capital engaged in these activities. Part of that positive overall external balance constituted capital income, which went to cover local-currency costs of business operation,<sup>20</sup> while another part of it was used to acquire assets abroad.

#### The public sector

The current account deficit of the public sector (excluding Ecopetrol, the state oil company) dwindled from 1.7% of GDP in 2003 to 0.8% in 2006, and then remained stable at around 0.9% of GDP (Graph 46). The decrease resulted from lower foreign-debt interest payments as a ratio of GDP, owing to lower interest rates on loans acquired in recent years, and to the substitution of domestic debt for external debt, which resulted in lower foreign currency interest payments.<sup>21</sup>

On the side of capital operations, the public sector received capital inflows from external borrowing,<sup>22</sup> allowing it to finance its debt-servicing operations. From 2001 to 2009 long-term flows predominated, whereas in 2010 and 2011<sup>23</sup> the share of short-term funding increased, particularly in respect of purchase of TES securities and loans from non-residents.

#### Rest of the economy

From 2005 to 2011 the widening of this group's current-account deficit from 3.3% to 9.0% (Graph 46) resulted mainly from the behavior of the goods and services trade balance and, to a lesser extent, from lower transfer income, particularly workers' remittances. Over the same period factor income remained relatively stable within a range of 0.5% to 1%, as a percentage of GDP (Graph 48).

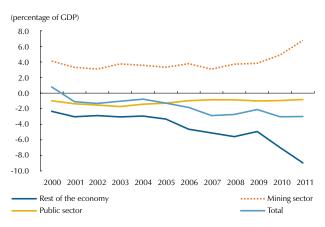
The mining, energy and oil sector has received an increasing flow of external liabilities, of which an average of 90% consists of FDI and the remaining 10% of long- and short-term loans.

<sup>21</sup> El sector público también obtiene recursos mediante endeudamiento interno y las utilidades transferidas por Ecopetrol. Estas últimas fuentes permitieron cubrir el remanente del déficit corriente que no se financió con pasivos externos. De 2000 a 2011 se incrementó de 55% a 70% la participación de la deuda interna en el total de la deuda del GNC.

Debt securities, loans and other external credit.

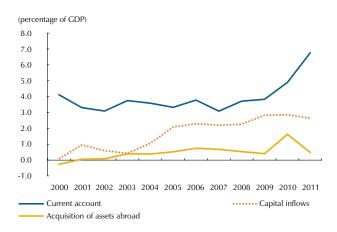
<sup>23</sup> SExcluding external liabilities intended for purchasing assets abroad, and excluding Ecopetrol.

Graph 46
Balance of payments current account, by sector



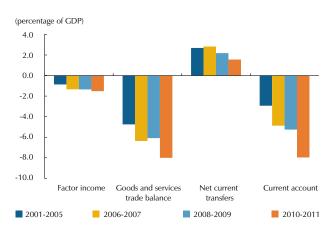
Source: Banco de la República.

Graph 47 External transactions of the mining, energy and oil sector



Note: Including crude oil and derivatives, coal, gold and ferronickel. Source: Balance of payments estimated by Banco de la República (provisional figures)

Graph 48
Current account of the rest of the economy, by component



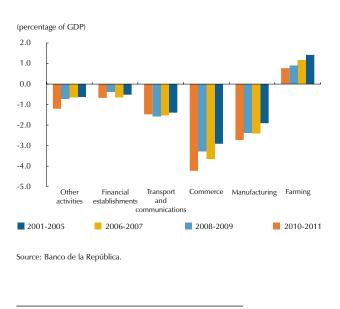
Source: Banco de la República.

By sector, widening of the current-account deficit was caused by commerce and manufacturing.<sup>24</sup> In addition, the farming sector's surplus decreased steadily (Graph 49). The transport and communications sectors and the financial sector recorded relatively stable current deficits as a proportion of GDP.

From 2000 to 2011 intermediate goods were the main imports in commerce and industry, though capital and consumer goods expanded their respective shares from approximately 6% of the sector's GDP in 2000 to nearly 10% in 2011 (Graph 50). Part of the current account deficit in commerce and industry could, therefore, be associated with the purchase of raw materials or machinery, which may have increased productivity. No such increase can be inferred from the data on imports of consumer goods.

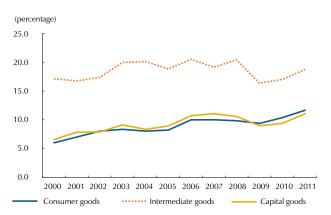
Two other factors that had a bearing on widening of the rest of the economy's current-account deficit were smaller transfers received by households, and foreign companies' transfer of profits abroad. For sectors other than commerce, manufacturing and farming, the factor income deficit grew increasingly larger, mainly from

Graph 49 Current account of the rest of the economy, by sector



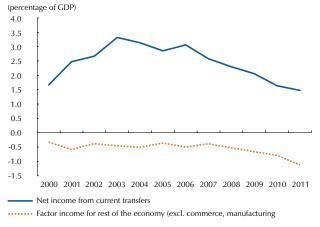
Note that part of the commerce sector's current deficit stemmed from goods imports intended for other sectors, such as industry and farming, and for household consumption

Graph 50 Imports of the commerce and manufacturing sector (percentage of commerce and industry GDP)



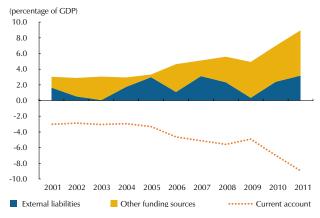
Source: Banco de la República.

Graph 51
Transfers and factor income of sectors other than commerce, manufacturing and farming



Source: Banco de la República.

Graph 52 Rest of the economy's current-account deficit and its funding



Source: Balance of payments calculated by Banco de la República.

2008 on, because of greater profits obtained by resident companies that have foreign capital (Graph 51). Notably larger profits were made by foreign subsidiaries engaged in the sectors of finance, electricity, gas and water, and construction, which specifically serve the domestic market and receive no significant current external income to offset payments in respect of income on investments.

Funding of the rest of the economy's current account is divided into external liabilities usable for financing this group's deficit spending,<sup>25</sup> and funding from other sources (Graph 52). The results show that the current deficit has been greater than external resources, making it necessary for the group to obtain funding from other sources. Since 2006, on average only 33% of the funding has come from external liabilities and the other 67% from other sources.

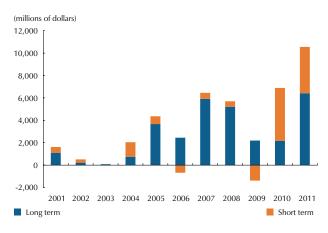
Among funding sources other than external liabilities, a decisive role was played by domestic resources obtained by companies through different means, for example, self-generated resources, local-currency borrowing from local banks, and obtaining funds through the domestic securities market. This local-currency funding allowed the rest-of-the-economy group to acquire the necessary foreign exchange in the currency market to finance the group's current external spending. <sup>26</sup> A considerable part of the foreign currency required by the group was provided by the mining and oil sector.

External liabilities usable for funding the current account underwent some structural changes in terms of maturity and type of liability. Up to 2009 most external liabilities had long maturities, whereas in 2010 and 2011 short-term liabilities became important (Graph 53). The long-term liabilities consisted mainly of FDI,

<sup>25</sup> The rest of the economy's [external] liabilities are defined as total external liabilities, less those used for acquiring external assets and hence not available for funding the group's current account

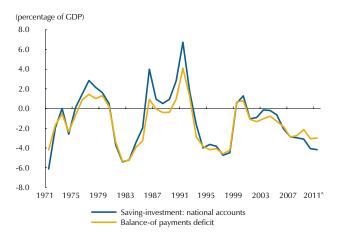
The rest of the economy's preference for domestic funding may be connected with the origin of the companies' operating income. The main source of their income is in pesos from operating in the local market. They therefore prefer to obtain local-currency debt and not acquire external liabilities, thereby avoiding potential losses from currency mismatches.

Graph 53
Balance of payments: liabilities by maturity



Source: Balance of payments calculated by Banco de la República.

Graph 54 Colombia's current-account deficit: national accounts and balance of



a/ Estimated by Banco de la República. Sources: DANE and Banco de la República. portfolio investment and leasing. The increase in shortterm liabilities came in particular from expansion in loans and portfolio investment obtained in the local market. This development coincided with the country's recent import growth.

# 2. The current account and the saving and investment balance according to national accounts

The national accounts have a greater coverage than the balance of payments, which is why the current-account deficit, as a percentage of GDP differs between the two methodologies<sup>27</sup> The historical behavior of the two measures is, however, quite correlated (Graph 54).

According to the national accounts, from 2000 to 2011 the Colombian economy's investment rate grew faster than the saving rate, 28 particularly in the past five years. In 2011 the investment rate was 24% of GDP, 10pp higher than in 2001, while the saving rate rose by 6pp over the same period, to stand at 19% last year (Graph 55).29

From 2001 to 2005 the deficit was under 1%, with the government<sup>30</sup> presenting a marked imbalance between saving and investment, which was attenuated by the surplus of households and businesses. In the following six years (2006-2011) the deficit widened in an environment in which the government's imbalance

For example, the national accounts include transfers between households in respect of smuggling and illegal crops, whereas the balance of payments does not. They include also some different sources of items (e.g. current international cooperation).

The investment-saving deficit is calculated by adding up the saving and investment balances of all institutional sectors participating in the economy, as measured by the national accounts: households, financial and non-financial companies, the central government, and non-profit institutions serving households. The national-account figures for the institutional sectors are definitive for 2008, preliminary for 2009 and provisional for 2010. For 2011 they are estimates made by the Bank using current-price figures from DANE's national accounts.

These figures differ from those presented in the Medium-Term Fiscal Framework for two reasons. First, the Framework combines the two methodologies to derive saving, by using the current account from the balance of payments and taking investment from the national accounts. In contrast, the Bank uses only the national accounts as a source. Second, the Ministry of Finance uses constantprice series for all estimates, while the Bank uses current-price series.

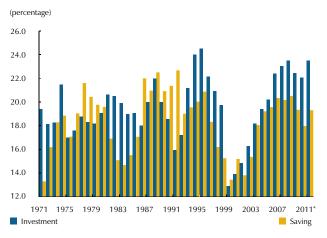
<sup>30</sup> The government sector includes the central government, sub-national entities and social-security funds

According to the national accounts, from 2000 to 2011 the Colombian economy's investment rate grew faster than the saving rate.

remained around 1.3%, and households and businesses began to have an increasingly high deficit.

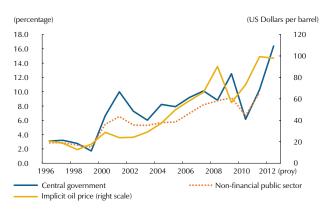
In those six years the government's deficit was accompanied by rising fiscal revenues from oil, owing to higher oil prices and, in a smaller measure, to higher volumes. These fiscal revenues rose from accounting for nearly 7% of the central government's overall income in 2005 to approximately 14% of it

Graph 55 Saving and investment as percentages of GDP



a/ Estimated by Banco de la República. Sources: DANE and Banco de la República

Graph 56
Ratio of oil fiscal revenues to total income



Note: For the central government, the sum of Ecopetrol profits and income tax paid by oil companies. For NFPS, the previous figure plus royalties.

Sources: Ministry of Finance and Banco de la República.

in 2011. In real terms, revenues from both income tax paid by the oil and gas extraction sector, and royalties and dividends paid by Ecopetrol have been on a steep uptrend, broken temporarily in 2009 by the international crisis and its resulting impact on oil prices (Graph 56).

To focus more clearly on private-sector behavior, we separate nonfinancial companies into publicand private-sector firms. Thus, the current account is divided into imbalances of the government (central government, plus sub-national entities, and social-security funds), imbalances of public-sector nonfinancial companies (Ecopetrol, ISA and others <sup>31</sup>), and the imbalance of the private sector, which includes households, plus private-sector nonfinancial companies and financial firms<sup>32</sup> (Graph 57-A).

The above division leads to several conclusions. Since 2005 the current-account deficit's widening has been mainly associated with the private-sector saving and investment balance. Except in 2009 nonfinancial public-sector companies<sup>33</sup> have maintained a current-account surplus thanks to the positive oil-price shock, which in turn helped to maintain the government's current deficit. The private-sector deficit's strong widening has stemmed from greater absorption, in part as a result of improvement in the national income. This was reflected in the decline in saving observed since 2005, owing to strong growth in consumption. Investment, for its part, has remained high (Graph 57-B).

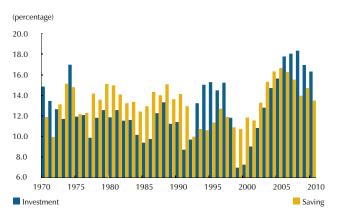
<sup>31</sup> DANE defines public-sector companies as those in which the government's ownership stake is greater than 50%.

No estimate is available for the private-sector breakdown for 2011.

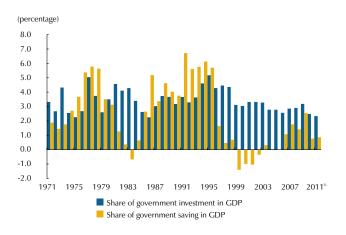
<sup>33</sup> Ecopetrol has corresponds to approximately 70% of the non-financial public-sector companies.

Graph 57

### A. Private-sector saving and investment as ratios of GDP

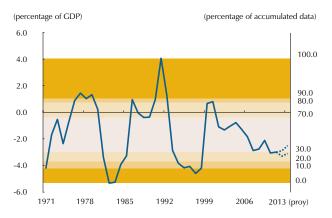


#### B. Government saving and investment as ratios of GDP



a/ Estimated by Banco de la República. Source: DANE and Banco de la República.

Gráfico 58 Current account gap and its percentiles



(proj): projected. Source: Banco de la República.

## 3. The current account in 2012 and 2013 and medium-term risks

As explained in Chapter I, the current account forecasts for 2012 assume slower growth for the country's trading partners, consistent with the prospects of contraction in the euro area. In addition, the US economy is projected to expand by less than its historical average, while the emerging countries are expected to moderate their rate of expansion. The foregoing implies a decline in external demand that should curb the strongly rising increase in Colombian exports recorded in 2011.

International prices for the country's main exports are forecast to be lower on average in 2012 than in 2011, reflecting weak performance of the world economy. Imports, too, are projected to grow more slowly than in 2011, as a result of lower-than-expected domestic demand. In this respect, import behavior should offset in part the loss of pace projected for exports. The above estimates have resulted in revisions of the current account's forecast ranges into a territory of smaller deficits (Graph 58).

As is clear from the previous Sections of this Chapter, the widening of the current account deficit stemmed largely from higher prices for oil and other commodities, which increased the terms of trade. As a result, not only did the surplus of the mineral, energy and oil sector increase, but the national income rose, boosting absorption, particularly in terms of investment and to a lesser extent consumption. Acceleration in consumer spending, supported also by domestic credit, led the saving rate to be insufficient to moderate the deficit's rising trend.

The above analysis needs to mention also a number of risks surrounding the current account projections, and the sustainability of this variable in the long term. Its evolution will depend largely on whether agents perceive the shock to income to be transitory or persistent, and whether these expectations eventually materialize.

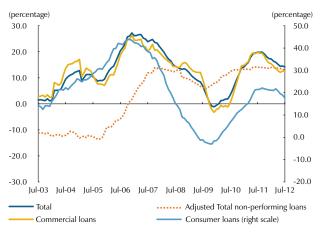
The exercises conducted by the technical staff draw attention to the above risk, that is, the risk of a transitory increase in the terms of trade (resulting in higher If a transitory increase in the terms of trade is mistaken for a more persistent increase, agents might be obliged to reduce their consumption and investment strongly.

income) being mistaken for a more persistent increase. Then, if the terms of trade unexpectedly fall sharply, agents might be obliged to reduce their consumption and investment strongly, because they have spent in advance expected higher income, which has not materialized. In this scenario, output could fall and the current account could become sharply narrower.

In contrast, if there is a fall in the terms of trade but it is anticipated, agents could increase their saving, generating a less volatile and sustainable current account.

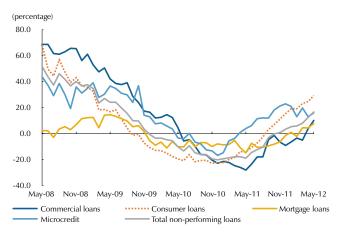
They could thus enjoy the beneficial effects of higher income for a longer time. In general, anticipating the shock allows agents to smooth their spending relative to higher income, so that the growth rates of the variables will not change much compared with long-term rates.<sup>34</sup>

Gráfico 59 Real growth in total loan portfolio (annual change, monthly average, non-food CPI)



Source: Financial Superintendence of Colombia and Banco de la República.

#### Gráfico 60 Real growth in non-performing loans (annual change, non-food CPI)



Sources: Financial Superintendence of Colombia and Banco de la República.

#### B. CREDIT

In the second quarter of 2012 the real gross loan portfolio continued to grow year on year at high average rates (14.5%), though more slowly than in the first quarter (16.5%). The slowdown was caused mainly by the growth in foreign currency loans plunging from 20.8% in the first quarter to 0.9% in the second. Growth in local currency loans decreased by 9pp from April to June, to stand at 15.4%.

By type of loan, the biggest contribution to the slowdown was made by loss of pace in commercial loans, from 14.5% in the first quarter to 12.3% in the second. Growth in consumer loans moderated by 1.8pp, and in mortgage loans (adjusted for securitizations) by 0.4pp (Graph 59).

Lending growth has been accompanied by expansion in non-performing loans (Graph 60), which have increased faster than total loans: to May real growth in non-performing loans was 20%. Thus, the delinquency indicator rose from 2.8% in December to 3.3% in June, although there was no significant change in loans at risk. By type of loan, consumer loans accounted for much of the increase in non-performing loans, but in

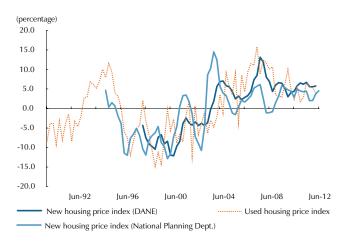
<sup>34</sup> Changes to the policy rate were also small. See the March 2011 Inflation Report p. 68 in Spanish version.

#### Gráfico 61

#### Housing prices relative to CPI



#### B. Annual change in housing prices relative to CPI



Sources: DANE, National Planning Department and Banco de la República.

historical terms the loan-quality indicators may be said to be low.

#### C. HOUSING PRICES

In the first quarter of 2012 the different house price indices continued on the rising trend that had started in the middle of the previous decade (Graph 61-A). Thus, to March of this year the new and used house price indices, both relative to CPI, rose year on year by 5,8% and 4.0%, respectively, in real terms. On second-quarter information up to May, the asking price index for housing in Bogotá, reported by the National Planning Department, recorded a real growth of 4.6% year on year. The only index that fell in quarterly terms was the used house price index (Graph 61-B); it is worth mentioning that the series of this index is highly volatile, so that quarterly variations do not necessarily represent a trend change.

Housing price movements differ from one city to another. For Bogotá the price indices for both used and new housing (the latter provided by the National Statistics Agency - DANE) have risen substantially in the past four years, on average by 5.8% and 6.4%, respectively, far exceeding the sector's pre-crisis rates (Graph 62-A).

In Medellín although the levels of the indices have differed significantly in recent years, their trends are

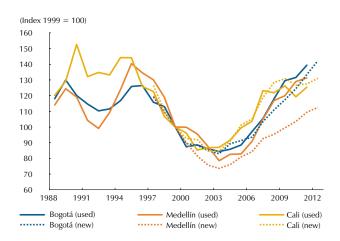
similar. Since 2009 both indicators have recorded real annual average growth of approximately 4%, with the used housing index approaching its highest historical level. In contrast, the used housing index for Cali is still far from its peak level, growing recently at real annual rates of around -1%, compared with 0.5% for the new housing index.<sup>35</sup> In cities for which only information on new housing is available (from DANE), the past four years have seen notably high rates of expansion in Barranquilla (6.9%) and Bucaramanga (8.9%) (Graph 62-B).

As mentioned in previous Reports, the main risk in the housing sector is that expectations of further increases in house prices do not materialize. In a context of high confidence, good growth in domestic demand, a favorable labor market and strong capital inflows, agents may think that property prices will continue to rise

The used house price index for Medellin for 2011 was 7% lower than the peak value of the series (1995), while for Cali the level for 2011 was 22% lower than the maximum historical level (1990).

#### Gráfico 62

#### A. Housing price indices relative to CPI



#### B. Average annual growth, 2009-2012a/



a/ For 2012, the annual change recorded in the first quarter is used. Sources: DANE and Banco de la República.

over the long term. This thought may lead families to increase their borrowing considerably, in the form of both mortgage and consumer loans. If a sharp fall occurs unexpectedly in housing prices or in some variable that reduces family income, an unsustainable situation may arise, leading to non-payment of loans and creating instability in the financial system.

## ANNEX

## LOCAL AND FOREIGN ANALYSTS' MACROECONOMIC PROJECTIONS

This Annex provides a summary of local and foreign analysts' most recent projections for the economy's main variables for 2012 and 2013, based on information to July 2012.

#### 1. **Projections for 2012**

On average, local analysts expect an economic growth of 4.3%, compared with 4.9% estimated in the previous Inflation Report. The foreign entities consulted also forecast an average expansion of 4.3% in GDP.

Table A1 Projections for 2012

	Real GDP growth (percent	CPI inflation age)	Nominal exchange rate (year end)	Nominal DTF deposit rate	Fiscal deficit (% of GDP)	Unemployment rate. 13 cities (percentage)
Local analysts						
Alianza Valores	4.0	3.0	1,850	5.2	(1.8)	10.5
ANIF (national association of financial institutions)	4.5	3.0	n.a.	5.0	(2.8)	10.3
Banco de Bogotá	4.2	2.8	1,780	5.0	(0.9)	11.2
Banco Santanderb,	4.4	2.9	1,900	5.0	(2.0)	11.0
Bancolombia <sup>a,</sup>	4.2	3.1	1,840	4.7	(2.3)	10.4
BBVA Colombia <sup>a,</sup>	4.1	3.0	1,800	5.0	(2.5)	10.7
Corficolombiana <sup>a,</sup>	4.4	3.1	1,750	5.0	(2.4)	10.6
Corredores Asociados	4.5	3.0	1,796	4.7	(1.2)	9.8
Correval	4.6	3.2	1,850	4.9	(1.5)	9.9
Davivienda <sup>a,</sup>	4.1	2.8	1,805	5.0	(2.4)	10.4
Fedesarrollo	4.4	3.0	1,792	5.0	(0.9)	10.9
Interbolsa	4.6	3.0	1,975	5.0	(2.2)	10.0
Ultrabursátiles	4.5	3.2	1,820	5.3	n.a.	10.5
Average	4.3	3.0	1,830	5.0	(1.9)	10.5
External analysts						
Citi <sup>a,</sup>	4.0	3.2	1,850	5.0	(2.5)	11.0
Deutsche Bank	4.8	3.4	1,750	n.a.	(1.9)	9.4
Goldman Sachs	4.7	3.4	1,800	n.a.	(3.0)	n.a.
JP Morgan	3.5	3.2	n.a.	4.5	(2.2)	n.a.
Average	5.1	3.5	1,783	5.4	(2.1)	9.7

al The deficit forecast corresponds to the one of the central government. b/ Average unemployment rate for the year.

Source: Banco de la República (electronic surveys).

Table A2 Projections for 2013

	Real GDP growth( (percent	CPI inflation age)	Nominal exchange rate (year end)
Local analysts			
Alianza Valores	4.4	4.2	1,830
Anif	4.8	3.3	n.a.
Banco de Bogotá	5.0	3.0	1,768
Banco Santander	4.4	3.3	1,852
Bancolombia	4.5	3.2	1,780
BBVA Colombia	4.4	3.2	1,810
Corficolombiana	4.8	3.3	1,700
Corredores Asociados	4.9	3.4	1,800
Correval	5.3	3.3	1,850
Davivienda	4.4	3.2	n.a.
Fedesarrollo	4.3	3.0	1,790
Interbolsa	5.3	3.2	1,796
Ultrabursátiles	4.5	3.2	1,800
Average	4.7	3.3	1,798
External analysts			
Citi	4.5	3.2	1,850
Deutsche Bank	4.8	3.1	1,730
Goldman Sachs	5.1	3.0	1,850
JP Morgan	4.5	3.5	n.a.
Average	4.7	3.2	1,810

n.a. Not available Source: Banco de la República (electronic surveys).

Regarding inflation, local analysts see prices rising by 3.0% by the end of the year, while the foreigners expect an average rise of 3.3%.

For the exchange rate ('representative market rate'), local analysts project an average value of \$1,829 pesos to the dollar at the end of 2012, compared with \$1,798 pesos forecast in the March Report. Foreign analysts expect the rate to be close to \$1,800 pesos to the dollar at year end.

Local analysts' projections for the deposit rate (DTF) come to an average of 5.0%, and they expect unemployment to stand at 10.5%.

#### 2. **Projections for 2013**

For 2013, both local and foreign analysts forecast an economic growth of 4.7%, on average. Local analysts see inflation running at 3.3%, compared with 3.2% projected by the foreigners. On average, the exchange rate is projected at \$1,789 pesos to the dollar by local entities and at \$1,810 pesos by external entities.

