# Inflation Report

September 2015*

* Submitted by the technical staff to the Board of Directors for its meeting on October 30, 2015.
*Banco de la República* - Bogotá, DC, Colombia

Banco de la República
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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 growth in output near its long-term trend. 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 *Banco de la República* (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 change in the consumer price index (CPI) is the inflation measurement used.

## THE DECISION-MAKING PROCESS

Monetary-policy decisions are based on an analysis of the current state of the economy and its prospects for the future, and on an assessment of the forecast for inflation in light of the targets. If the assessment suggests, with enough certainty, that inflation will deviate from its target under current monetary-policy conditions and within the time horizon where the policy operates and that deviation is not be due to temporary shocks, the BDBR modifies its policy stance. For the most part, this is done by changing the benchmark interest rate (charged by *Banco de la República* on short-term liquidity operations).

## COMMUNICATION AND TRANSPARENCY

Decisions on monetary policy are announced after meetings of the Board of Directors. This is done in a press bulletin posted immediately on *Banco de la República's* website (www.banrep.gov.co).

Inflation reports are published quarterly and are intended to 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 agents in the economy to form their own expectations about future developments with respect to inflation and growth in output.

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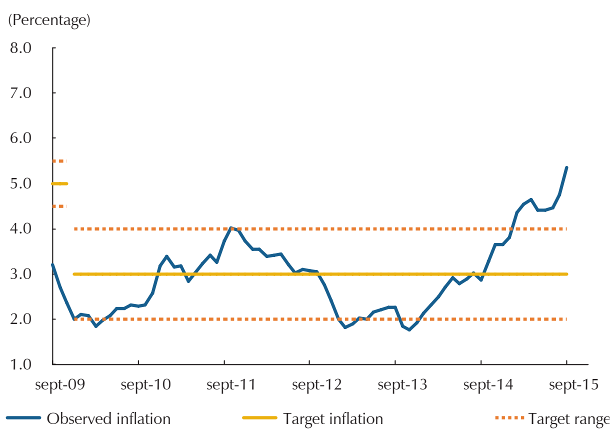
Graph A
Total Consumer Inflation




Sources: DANE and *Banco de la República*

Annual consumer inflation increased reaching 5.35% by September. The average of the four core inflation indicators also increased, reaching 4.89%. Much of the acceleration in inflation so far this year (Graph A) is explained by the pass-through of nominal depreciation to consumer prices, by higher costs for imported raw materials and by a lower dynamism in the food supply.

The forecasts of the technical staff at *Banco de la República* suggest inflation will surpass the current figure by the end of 2015. It is expected to remain there during the first half of 2016 and then begin to converge toward the 3.0% target. Convergence towards the target for inflation is slowed by the pass-through of part of the peso depreciation to consumer prices and by the severe *El Niño* weather phenomenon, given the direct impact both these phenomena have on prices and inflation expectations, as well as the possible activation of indexing mechanisms.

However, it is important not to lose sight of the temporary nature of the inflation rate increase. While oil prices could remain low, the impact their drop has on the exchange rate is limited. This means pressures on prices resulting from devaluation of the Colombian peso has a limit and will weaken over time. On the other hand, weather conditions are expected to normalize by the end of the second quarter of 2016. This will prompt a drop in food prices, which could be substantial if past experience is any indication. This reaffirms the temporary nature of inflationary pressures, provided inflation expectations do not become a mechanism that feeds into those pressures. This underscores the importance of keeping inflation expectations anchored to the target by means of a monetary policy that preserves its credibility. In any case, due to the extent of the shocks and the risks to the external context, the uncertainty surrounding these forecasts is unusually high. Analysts expect inflation to be 4.1% and 3.5% at one and two years ahead, and expectations derived from government debt at two, three and five years are above 4%.

In the external context, the figures on economic activity continue to reflect an external demand that is weak and lower than it was in 2014. Economic growth in the United States was moderate during the third quarter, while the Federal Reserve made no changes in the benchmark interest rates. The euro zone is slowly recovering, and economic activity in China continued to decelerate. Latin America's largest economies are experiencing low growth or declines in output, and their risk premiums remained higher than in 2014.

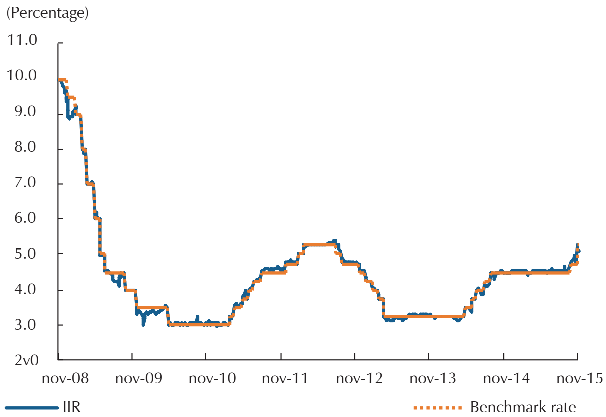
Colombian exporters have faced weaker demand than was estimated a quarter ago. International prices for oil and other commodities the country exports remained low. Consequently, the drop in the terms of trade experienced throughout the year has undermined national revenue and largely explains the higher exchange rate against the dollar.

In Colombia, the latest figures for the second quarter suggest that growth might be more than expected. Indicators for retail sales, manufacturing output and coffee, and electricity consumption, among others suggest so. The momentum in construction and civil works is expected to be good. Investment expectations indicate that this expenditure in areas other than civil works would have continued to deteriorate, although less so than in previous quarters. Therefore, compared to the last edition of this report, *Banco de la República's* technical staff revised its most likely growth forecast for all of 2015 from 2.8% to 3.0%, within a range of 2.4% to 3.4%. For 2016, growth is expected to be similar (3.0%), but within a wider range (1.5% to 4.0%).

In short, the new data show the sharp increase in prices for goods that are most affected by peso depreciation and by adverse weather conditions, continues to push up inflation, in a temporary manner. Prices for other goods and services also posted larger variations. This may be a reflection of indexation mechanisms, expectations of higher inflation in the future or cost pressures in these sectors. The behavior of these prices does not seem to indicate the existence of a significant deterioration of aggregate demand. In this context, inflation expectations have increased and the risk of a slowdown in domestic demand, beyond what is consistent with the drop in national revenue, has declined.

In this economic environment, the Board of Directors of *Banco de la República* raised the benchmark interest rate by 25 bp in September and 50 bp in October, placing it at 5.25%. The Board reiterates its commitment to the inflation target and will continue to keep a close eye on economic activity and inflation in Colombia, asset markets and the international situation (Graph B).

Graph B
*Banco de la República's* Benchmark Interest Rate and the Interbank Interest Rate (IIR)
(2008-2015)[a/]




A/ The figures pertain to data on business days; the last figure is for November 3, 2015.
Sources: Superintendencia Financiera de Colombia and *Banco de la República*

The Board of Directors also announced that call options would be auctioned to temper unwarranted increases in the exchange rate. This mechanism can help to unanchor inflation expectations and provide liquidity to the foreign exchange market when significant liquidity shortages arise. The auctions will be called for USD $500 million, once the representative market rate of exchange is 7 pp above its order 20 period moving average. Options are valid for one month from the date of the auction and can be exercised subject to compliance with that same condition.

**Jose Dario Uribe**
**Governor**

# Inflation Report

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# I. External Context and Balance of Payments

**The forecasts for growth of Colombia's trading partners in** 2015 and 2016 were lowered in this report.

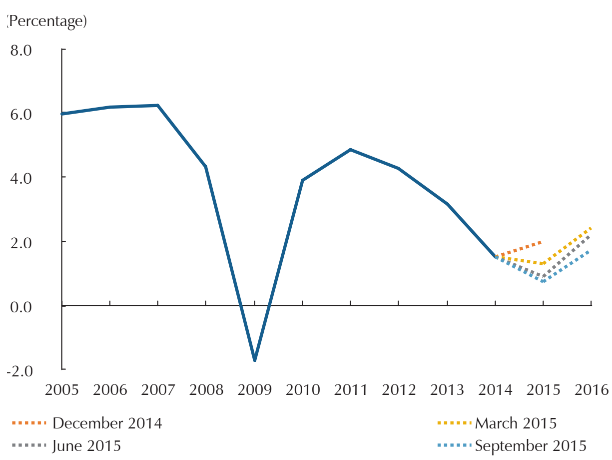
**International oil prices declined further during the third quarter.** As a result, Colombia's terms of trade remained at the lowest levels on record since 2009.

**The country's trade balance continues to be affected by** the sharp drop in exports and a slower adjustment in imports. For all of 2015, a larger external imbalance as a percentage of GDP is anticipated compared to 2014.

## A. THE INTERNATIONAL SITUATION

### 1. Real Activity, Inflation, and Monetary Policy

Graph 1
Average Growth of Trading Partners and Forecasts from Earlier Editions of the *Inflation Report*

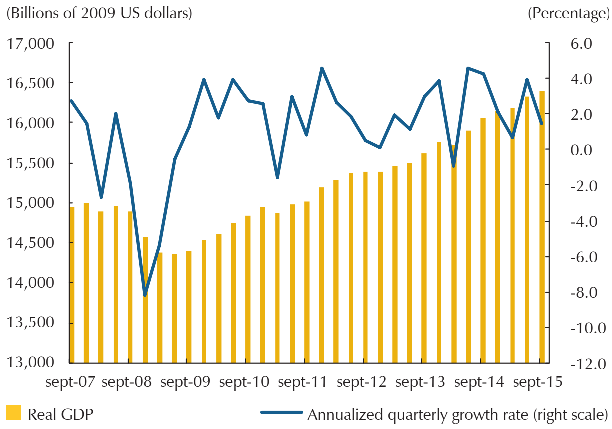



Source: International Monetary Fund, Calculations and forecasts by *Banco de la República*

The figures on record for real activity in the third quarter indicate economic growth for Colombia's main trading partners would have been less than was forecast in previous editions of the Inflation Report and would be the lowest since 2009 (Graph 1). This performance is due mainly to low growth in the emerging economies, especially those in Latin America, which was not offset by the modest growth observed in the United States and in the euro zone.

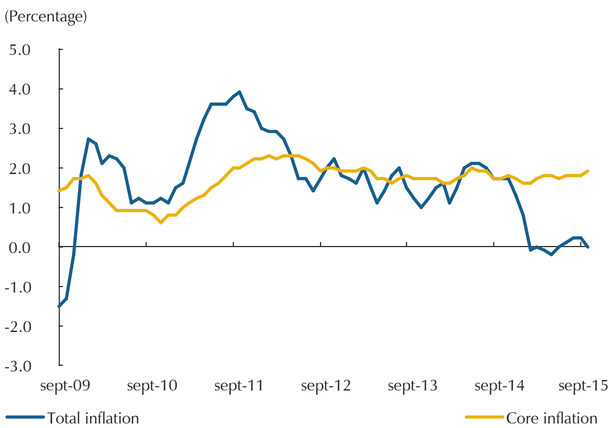
In the case of the United States, the third quarter figures show a slowdown in that country's eco-

Graph 2
Real GDP in the United States




Source: Bureau of Economic Analysis.

Graph 3
Indicators of Total and Core annual Inflation in the United States




Source: Bloomberg.

nomic activity after the strong recovery witnessed between April and June. GDP growth fell from an quarter annualized (q.a) rate of 3.9% (revised upward from 2.3% q.a) in the second quarter to 1.5% q.a three months later (Graph 2). This weaker performance was explained largely by a substantial fall in inventories, which subtracted 1.4 percentage points (pp) from growth. In addition, non-residential investment slowed with respect to the second quarter, while net exports subtracted from GDP growth. In contrast, household consumption continued to post increases and has become the main engine of growth in the American economy.

The pace of job creation slowed during the third quarter following positive figures registered three months earlier. The average monthly increase in non-farm payrolls went from approximately 231,000 between April and June to 167,000 in the third quarter. Even so, the unemployment rate fell to 5.1%, while the other indicators monitored by the Federal Reserve such as long-term unemployment[1] and the sub-employment rate[2] continued to improve.

As for inflation, the annual change in the consumer price index (CPI) stayed relatively stable at low levels (around 0.2%) during the third quarter, largely because of fuel prices. Excluding volatile items such as food and energy, annual inflation showed no major changes and remained near 1.8%, slightly below the target set by the Federal Reserve (Fed) (2.0%) (Graph 3).

As for monetary policy in the United States, the Fed decided at its September meeting to leave the benchmark rate unchanged. This was in response to limited inflationary pressures faced by the economy and an external outlook that is still complicated. Even so, the median of the survey of the members of the Federal Open Market Committee (FOMC) suggests the benchmark

1 The number of people who have not found work in more than 27 weeks, as a proportion of the total number of unemployed.

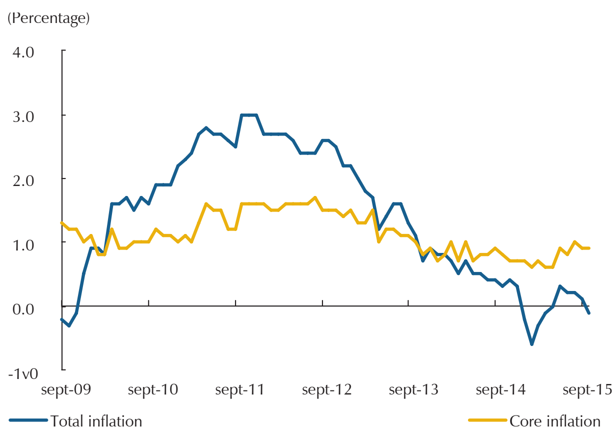
2 Total number of unemployed, employees with part-time jobs who report wanting to work full time, and those outside the labor force who are willing to work if they can find a job (marginally attached to the job market), as a proportion of the workforce.

rate will be raised 25 basis points (bps) in December 2015, followed by gradual increases during the next two years.

The available figures on real activity and confidence in the euro zone during the third quarter suggest the region's economy continued to grow sluggishly, after posting a 0.4% quarterly increase in GDP in the second quarter. The retail sales data suggest household spending would have continued to recover, due to a gradual re-establishment of the credit channel and a higher household disposable income. Although net exports would have continued to contribute to economic expansion in the region, thanks to increased competitiveness generated by a weak euro, they would have been hard hit by less demand worldwide.

Annual inflation in the euro zone was again in negative terrain during the third quarter, registering -0.1% in September. The further reduction in fuel prices explains, in large part, the low annual price changes. Annual inflation, excluding food and energy, remained relatively stable at around 0.9%. This is well below the target set by the European Central Bank (ECB), which it defined as inferior, but close to 2.0% (Graph 4).

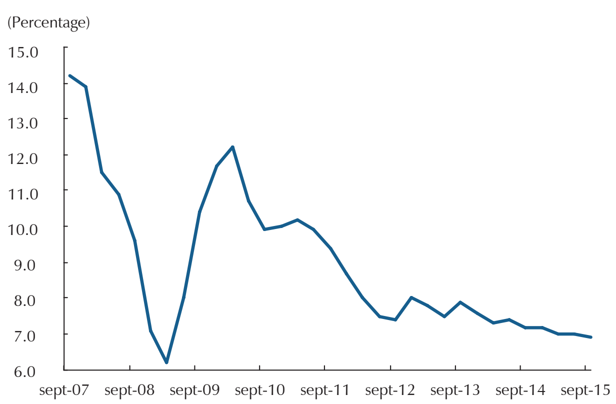
Graph 4
Indicators of Total and Core annual Inflation in Europe




Source: Bloomberg.

In this context of low inflation and modest economic growth, the ECB has continued to pursue a highly expansionary monetary policy. In recent months, it kept interest rates at historically low levels, maintained its long-term refinancing operation (LTRO), and continued its quantitative easing program with EUR 60 billion in monthly purchases of sovereign bonds, asset-backed securities and covered bonds. In addition, at its meeting in October, the ECB indicated it could expand the monthly amount purchased or postpone the date to end its quantitative easing program.

Graph 5
Annual Real GDP Growth in China



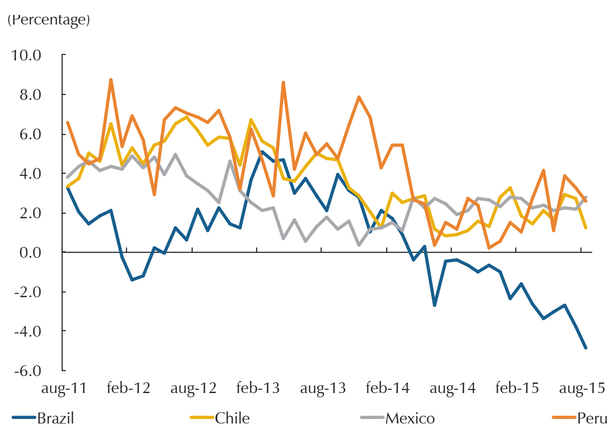

Source: Bloomberg.

As for emerging countries, the gradual loss of momentum in China's economy continues. Its GDP growth in the third quarter was 6.9%, which is less than it was three months ago (7.0%) and in all of 2014 (7.3%) (Graph 5). This relatively modest performance compared to China's average growth in recent decades is associated with a slowdown of fixed asset investment and a reduction in foreign trade. The latter is due to slow global growth and a stronger yuan against most of the world's currencies. Meanwhile, inflation remained low and was 1.6% in September.

In this context, China's central bank reduced its benchmark rate once again and relaxed certain regulatory requirements in an effort to temper the country's economic slowdown. Additionally, in early August, it amended the mechanism that sets the exchange rate of the yuan against the US dollar; the result was 1.6% average quarterly depreciation. According to an official bulletin, this measure is intended to make the exchange rate more responsive to movements in international financial markets, within the context of gradual liberalization of the country's financial system. However, some analysts interpreted this devaluation as an additional stimulus and as a sign of further weakness in the economy.

In the case of Latin America, the figures for real activity by August suggest the economies in the region continued to grow at lower rates during the third quarter compared to the average of the last decade. However, the outlook for the different countries is mixed (Graph 6).

Graph 6
Annual Growth in Monthly Economic Activity Indexes for Several Latin American Economies



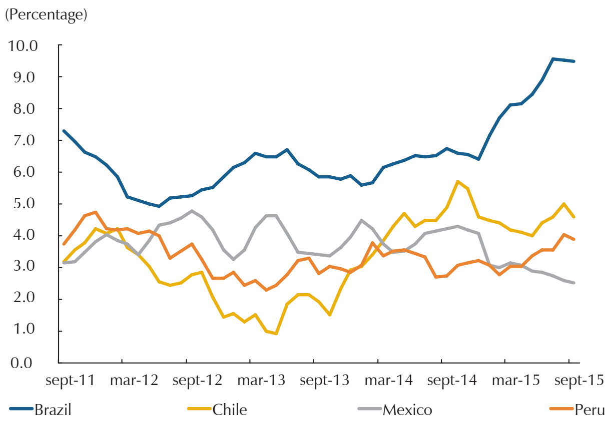

Source: Datastream.

On the one hand, Chile, Mexico and Peru have shown certain signs of economic recovery, although much less than anticipated in the June edition of the Inflation Report. Their recovery is still affected by the shock to their terms of trade, less external demand and slow growth in consumption and investment.

Brazil, on the other hand, would have descended deeper into the recession that began late last year when business and consumer confidence plunged to historic lows due to loss of the investment grade and the fiscal adjustments undertaken by the government. Meanwhile, the economy in Ecuador has experienced a sharp slowdown, primarily due to the dramatic decline in the country's terms of trade and because dollarization of the Ecuadoran economy has made it difficult to absorb that shock. Also, despite the lack of official data, there are indications that the strong contraction in the Venezuelan economy continues as a result of the drop in oil prices, that adds to the country's various structural problems.

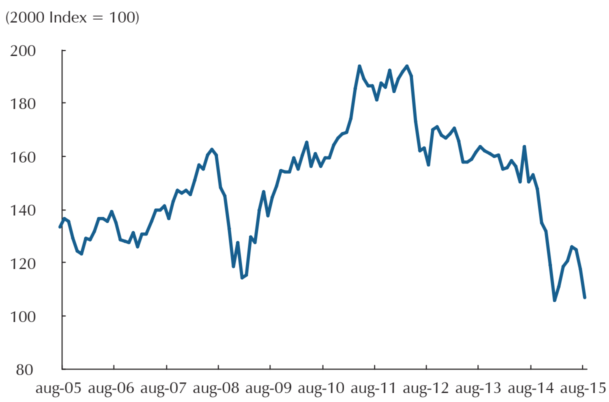
As for inflation in Latin America, there has been a predominance of upward trends (Graph 7), prompting several central banks in the region to raise their benchmark rates. This is the case in Peru and Chile, where inflation rose during the third quarter and remained above the target range, affected largely by the depreciation of their currencies. Between June and October,

Graph 7
Annual Inflation in Several Latin American Economies




Source: Datastream.

Graph 8
Terms of Trade Index (Commerce Methodology)




Source: *Banco de la República*.

the benchmark rate in Chile increased from 3.0% to 3.25%, while the hike in Peru was from 3.25% to 3.5%. Meanwhile, annual inflation in Brazil remains high (9.5% in September). This has forced the central bank to continue to raise its intervention rate. In contrast, September annual inflation in Mexico was still at the bottom of the target range set by the central bank; accordingly, that institution has kept its rates at relatively low levels.

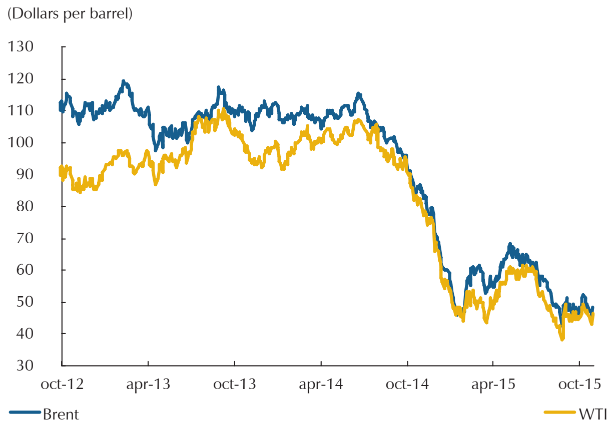
## 2. Terms of Trade and Commodity Prices

In addition to the shock generated by the lower demand from Colombia's major trading partners, external revenue in the nation's economy continues to be affected by the sharp downturn in its terms of trade. During the third quarter of 2015 (with figures to August), the terms-of-trade indicator (based on the trade methodology)[3] posted a further decline relative to the one observed in the previous quarter and remains at the lowest levels recorded since 2009 (Graph 8).

Much of this behavior is explained by international oil prices, which fell again during the third quarter (Graph 9). As a result, the international price of crude (Brent reference) averaged USD $50.9 per barrel between July and September 2015, which is 18.6% less than the average on record for second quarter (USD $62.5 per barrel ) and 50.4% below the same period in 2014 (USD $102.6 per barrel). This new reduction largely reflects the prospect of less demand for oil, particularly from China, following signs of a further economic slowdown in that country. However, this contraction oil prices also was influenced by large inventories, historically high production levels by the members of the Organization of Petroleum Exporting Countries (OPEC), and the fact that oil extraction in the United States is declining more slowly than the major specialized agencies had anticipated.

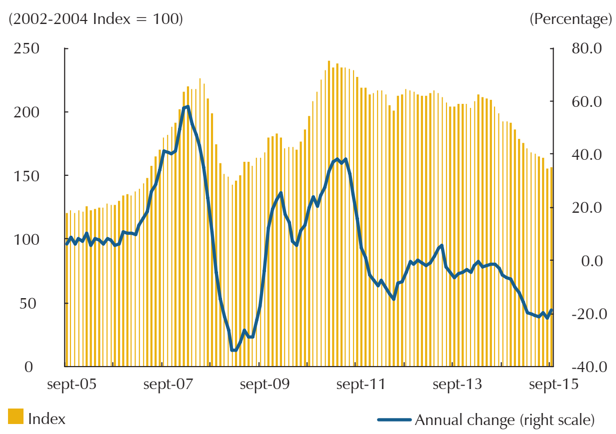
3 With the trade methodology, terms of trade are measured using administrative records as a source of export and import data (DIAN and DANE). Pursuant to international recommendations (on the volatility of the series, standardization of unit values, etc.), implicit prices are calculated for each tariff item and then weighed in a chained Paasche-type price index.

Graph 9
International Oil Prices (Brent and WTI)




Source: Datastream.

Graph 10
International Food Prices




Source: United Nations Food and Agriculture Organization

The prices of other commodities Colombia exports also fell during the third quarter compared to three months earlier, exacerbating the deterioration in the terms of trade. For example, coffee averaged USD $1.42 per pound between July and September. This represents a quarterly decline of 7.1%, largely due to reversal of the supply shocks that affected production in recent months. In addition, international prices for nickel and coal saw respective quarterly reductions of 18.8% and 4.2%, mainly because of less overall demand for these products, particularly from the emerging economies.

The prices of certain agricultural commodities imported by Colombia also fell during the third quarter, as seen in the food price index compiled by the United Nations Food and Agriculture Organization (FAO) (Graph 10). Combined with the price reductions observed for a number of intermediate and capital goods (also imported), this would have led to reductions in Colombia's import price index and helped somewhat to lessen the drop in terms of trade.

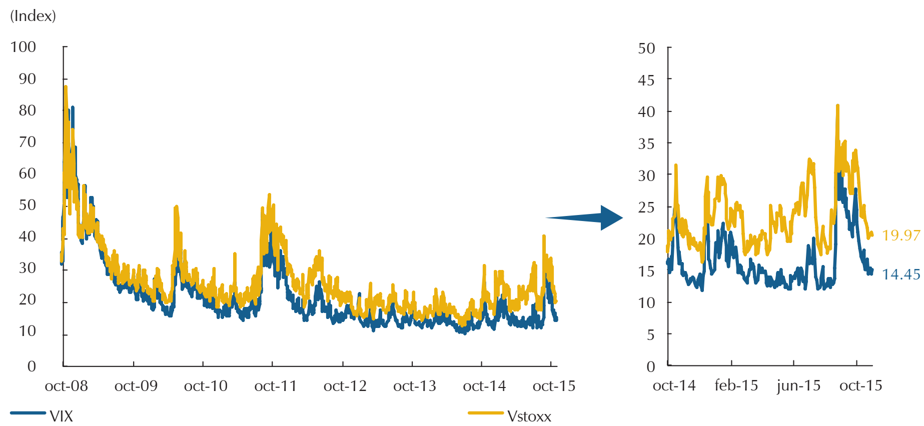
## 3. Financial Markets

Much of the third quarter witnessed a significant increase in financial volatility indexes, due to an increase in global risk aversion (Graph 11). This, in turn, would have been associated mainly with the effects of the possibility of the decision by the Fed at its September meeting to raise the benchmark rate and its effects on the financial markets; and with fears of a stronger-than- expected slowdown in the Chinese economy, following the depreciation of the yuan and the sharp drop in China's major stock indexes.

However, the Fed's decision to leave its benchmark rate unchanged and the adoption of several stimulus measures by the Central Bank of China helped to calm financial markets. The result was a drop in financial volatility indicators during late September and October.

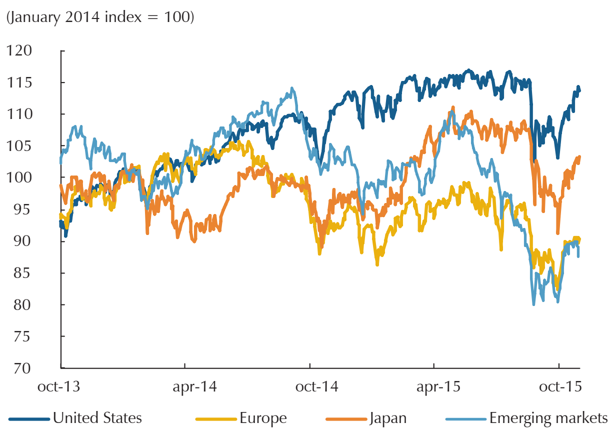
In this context, the leading global stock indexes declined sharply throughout most of the third quarter, before recovering partially at the end of September

Graph 11
Financial Volatility Indexes



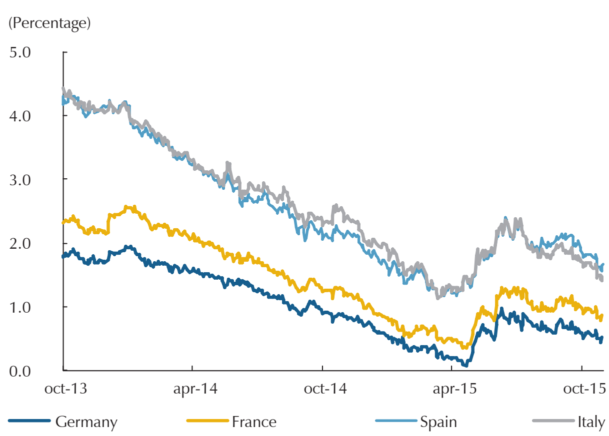

Source: Bloomberg.

Graph 12
Global Stock Indexes




Source: Bloomberg.

Graph 13
Rates on ten-year sovereign bonds for some economies in the euro zone




Source: Bloomberg.

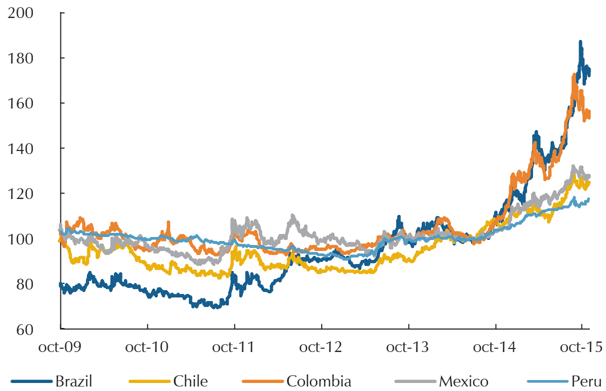
and in October (Graph 12). Rates on long-term US bonds and those of the major countries in the euro zone rose somewhat during the early part of the quarter, but the increases were reversed in the months thereafter. In the case of European Union bonds, the drop became more pronounced in October (Graph 13), following the ECB's announcement of a possible expansion in its quantitative easing program.

As for the financial markets in Latin America, early in the third quarter there was a strong tendency for the major currencies in the region to depreciate against the dollar (Graph 14), causing risk premiums to rise (Graph 15).This movement was particularly striking in Brazil, largely because of added fears about the country's fiscal position after the major rating agencies took away its investment grade. However, similar to what was observed on the global financial markets, this movement was partially reversed towards the end of September and in October.

The Colombian peso did not escape these fluctuations. It weakened dramatically from COP $2,499 per dollar, on average, in the second quarter to COP $2,948 in the third, which amounts to 18.0 % depreciation. This trend peaked in late August (at COP $3,261 per dollar). However, it partly reversed late in the third quarter and early in the fourth, and the exchange rate in October averaged

Graph 14
Exchange Rate Indexes for Several Latin American Countries

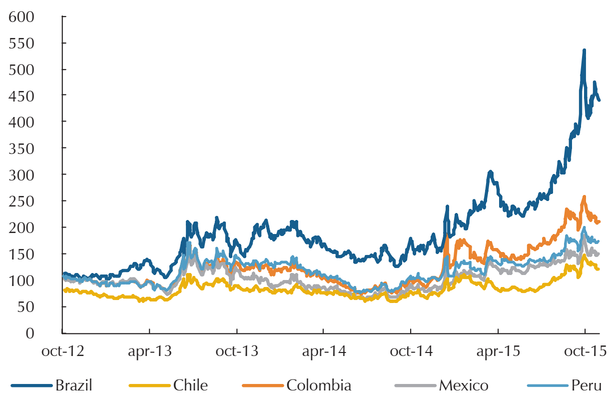
(January 2014 index = 100)




Source: Bloomberg.

Graph 15
Five-year Credit Default Swaps (CDS) for Several Latin American Countries

(Basis points)




Source: Bloomberg.

COP $2,924 per dollar. Year to date (with the figure at October 30), the Colombian peso has depreciated 21.9%.

## 4. Forecasts by *Banco de la República's* Technical Staff

The economic growth forecasts for Colombia's major trading partners were revised downward in this report compared to those presented in the June edition. On this occasion, the projection for average annual GDP growth (non-traditional trade-weighted) was lowered from 0.9% to 0.7% for 2015 and from 2.2% to 1.7% for 2016 (Table 1).

The revision largely reflects the fact that economic performance in Latin America would be weaker by the end of 2015 and in 2016 than was anticipated in the June edition of the Inflation Report. The recovery in Chile, Mexico and Peru is likely to be slower than expected, because commodity prices would stay low, demand from the major trading partners of these countries would be modest, and business and consumer confidence would remain low. In the case of Brazil, the contraction in its economy would be more pronounced and would last until next year, given the fiscal adjustments the country must make, its loss of investment grade, and low levels of investor and consumers confidence. In Ecuador, the drop in its terms of trade and the subsequent deterioration in its fiscal accounts would plunge the economy into stagnation for the remainder of 2015 and in 2016. Venezuela would remain in a deep recession due to low international oil prices and its precarious fiscal and external position.

In the case of the United States, the growth forecast for 2015 as a whole was slightly revised upward, following better-than-expected performance during the first half of the year. The factors that determine consumption are expected to stay favorable for the rest of the year and in 2016, so household spending would remain as the main engine of economic growth. Moreover, investment would continue to expand, although at modest rates. Accordingly, domestic demand should perform better; this would offset the weakness

Table 1
Growth Forecasts for Trading Partners

| Growth forecasts for trading partners | 2014 | Forecasts for 2015 | | | Forecasts for 2016 | | |
|---|---|---|---|---|---|---|---|
| | | Scenario | | | Scenario | | |
| | | Minimum forecast | Baseline forecast | Maximum forecast | Minimum forecast | Baseline forecast | Maximum forecast |
| **Main partners** | | | | | | | |
| United States | 2.4 | 2.2 | 2.5 | 2.8 | 2.0 | 2.6 | 3.0 |
| Euro Area | 0.8 | 1.0 | 1.4 | 1.8 | 0.8 | 1.4 | 1.8 |
| Venezuela[a/] | (4.0) | (10.0) | (8.0) | (6.0) | (6.0) | (3.0) | 0.0 |
| Ecuador | 3.8 | (0.3) | 0.3 | 0.8 | (1.0) | 0.5 | 1.0 |
| China | 7.3 | 6.6 | 6.8 | 7.0 | 6.0 | 6.4 | 6.8 |
| **Other partners** | | | | | | | |
| Brazil | 0.1 | (3.5) | (3.0) | (2.5) | (1.5) | (0.5) | 0.0 |
| Peru | 2.4 | 2.3 | 2.8 | 3.3 | 2.8 | 3.7 | 4.3 |
| Mexico | 2.1 | 2.0 | 2.3 | 2.6 | 2.5 | 3.0 | 3.5 |
| Chile | 1.8 | 1.9 | 2.3 | 2.5 | 2.0 | 3.4 | 4.0 |
| **Total trading partners (non-traditional trade-weighted)** | **1.5** | **0.2** | **0.7** | **1.2** | **0.8** | **1.7** | **2.4** |
| **Developed countries[b/]** | **1.8** | | **2.0** | | | **2.2** | |
| **Emerging and developing countries[b/]** | **4.6** | | **4.0** | | | **4.5** | |
| **Total worldwid[b/]** | **3.4** | | **3.1** | | | **3.6** | |

a/ There are no 2014 figures available for Venezuela. The forecast published in the December edition of the *Inflation Report* is used to calculate the growth of Colombia's trading partners.
b/ IMF forecasts at October 2015
Source: Calculations by *Banco de la República*

in exports, which would suffer from the effects of less global growth and a strong dollar against the major world currencies.

The figures of job creation in the United States should be consistent with the favorable performance expected of its economy, in which case the labor market would continue to recover gradually. Existing supply surpluses would, therefore, continue to be eliminated and some gradual upward pressure on wages would begin to emerge. This would prompt an upward trend in US inflation towards 2016, which would converge slowly in the direction of the Fed's long-term target. The assumption in this report is that hikes in the benchmark rate, which are expected to begin this year in December and continue quite gradually throughout 2016, would pass-through into market rates in an orderly fashion.

The recovery in the euro zone would continue slowly, as anticipated in the previous edition of the Inflation Report. The measures adopted by the ECB have allowed for a recovery in confidence and have restored the credit channel to some extent, which should boost private consumption and investment. Moreover, household disposable income would continue to benefit from low fuel prices. However, exports outside the European Union are

*China's economic growth in 2016 will continue to slow down, after the high rates observed in past years.*

expected to subtract from the region's growth, given the weakness in global demand.

Inflation in the euro zone would remain low during the latter part of this year and in 2016, thanks to dwindling fuel prices, limited demand-pulled pressures and modest inflation expectations. In this context, the ECB is expected to adopt further monetary stimulus measures and to expand its quantitative easing program.

In the case of China, the baseline forecast in this report indicates growth would continue to slow insofar as the extent that investment in fixed assets and the expansion in lending continue to decline from the high levels witnessed in previous years. Exports would detract from the momentum in growth because the yuan is still relatively strong against most of the world's currencies and global demand remains weak. Nevertheless, the stimulus measures adopted by the government and the central bank would keep the slowdown from becoming even more pronounced.

There are still important downside risks in this scenario. The main one is the possibility of a disordered reaction by international financial markets to the Fed's interest rate hikes. In that case, far more appreciation of the dollar is expected, along with a drop in stock market indexes and a rapid increase in long-term interest rates. This could jeopardize real activity in the United States. Also, capital would flow out of the emerging countries, with potentially adverse effects on their economies.

A sharper slowdown in China and slower growth in commodity-exporting emerging markets is another major risk. In the case of China, this would be due to problems associated with its financial stability, given the high degree of borrowing and the imbalances that have accumulated in its financial system in recent years. In the countries that export commodities, as do most of those in Latin America, this would occur due to a further decline or a slower recovery in their terms of trade.

*The forecasts for oil prices in 2015 and 2016 were revised downward in this report.*

As for Colombia's commodity exports, the baseline forecast assumes the average price of oil (Brent) will be slightly above USD $50 a barrel during the final quarter of the year; this would mean an average price of USD $54.5 per barrel in all of 2015. The price of oil is expected to recover slightly in 2016, averaging USD $55 per barrel that year (Table 2). This represents a downward revision in the forecast compared to the prediction in the June edition of the Inflation Report, largely due to fewer prospects for global growth and because the drop in oil production in the United States has been less than expected.

Table 2
Benchmark Price Forecasts for Colombia's Commodity Exports

| Major products | 2014 | Forecasts for 2015 Scenario | | | Forecasts for 2016 Scenario | | |
|---|---|---|---|---|---|---|---|
| | | Minimum forecast | Baseline forecast | Maximum forecast | Minimum forecast | Baseline forecast | Maximum forecast |
| Colombian coffee (*ex dock*; dollars per pound) | 1.97 | 1.50 | 1.60 | 1.70 | 1.45 | 1.65 | 1.85 |
| Brent oil (dollars per barrel) | 99.2 | 52.0 | 54.5 | 57.0 | 40.0 | 55.0 | 70.0 |
| Coal (dollars per ton) | 72.6 | 62 | 64 | 66 | 48 | 56 | 64 |
| Nickel on the London exchange (dollars per ton) | 16,898 | 11,570 | 12,342 | 13,113 | 10,799 | 13,113 | 15,427 |
| Gold[a/] (dollars per troy ounce) | 1,266 | 1,200 | 1,170 | 1,140 | 1,300 | 1,150 | 1,000 |

a/ Gold is assumed to be a safe haven asset, because its price increases when there is more uncertainty (a pessimistic scenario)
Sources: Bloomberg; calculations by *Banco de la República*

However, there is still a great deal of uncertainty about how the oil sector will perform. On the one hand, a more pronounced decline in production in the United States or new outbreaks of geopolitical conflict in the Middle East would push up prices. On the other, factors such as weaker growth worldwide, expanding inventories of crude oil, return of the sale of Iranian oil to international markets, and further appreciation of the dollar pose important downside risks.

With respect to other export commodities, coffee, coal, and nickel prices are expected to remain low during the final quarter of this year and in 2016, due to weaker global growth. In this context, Colombia's terms of trade are expected to stay at levels similar to those observed in the first part of 2009, which are well below the price levels witnessed in recent years.

## B. BALANCE OF PAYMENTS

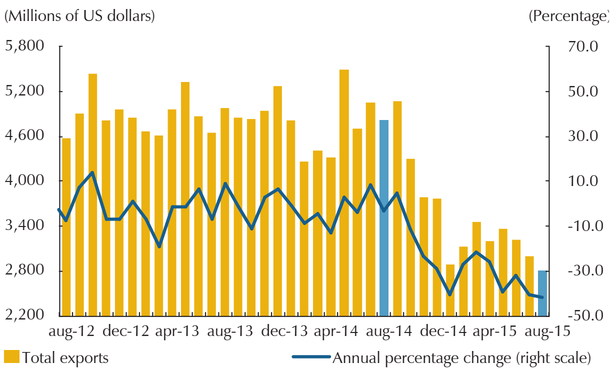
The current account deficit in the second quarter of 2015 came to USD $4,319 m (5.5% of GDP), which is slightly higher in dollars than the deficit observed during the same period the year before (USD $4,218 m, 4.4% of GDP). This implies a major widening in terms of GDP, given the impact of the strong depreciation against the dollar on the value of nominal GDP in that currency.

*The trade balance continued to deteriorate in the second quarter due to the sharp contraction in exports. Meanwhile, there were reductions in net outlays for services and in factor income.*

The external balance in the second quarter reflects an important decline in the trade balance from the previous year, due to a contraction in the dollar value of exports (-31.2% per year) and a fall in imports (-16.4%). This was offset by less of a deficit in the non-factor services balance, particularly by a reduction in imports of transport and business services. Likewise, lower net outflows in factor income, given the general reduction in profits associated with foreign direct investment, lessened pressure on the deficit.

As to financing, net capital inflows in the second quarter (excluding reserve assets) came to USD $4,206 m (5.3% of GDP). This is USD $949 m less than the figure on record for the same period a year ago and reflects an annual reduction of 21.1% in net direct investment and fewer net inflows of capital in the form of net portfolio investment (-11.1% per year). Specifically, foreign direct investment (FDI) in the oil sector saw a 44.7% annual decline in the second quarter and FDI in mining (other than oil) was down by 59.5%, while FDI in the other sectors rose 6.8%. Resources from other investments (loans and other receivables) also declined during this period (17.4%) because of less net borrowing, both public and private.

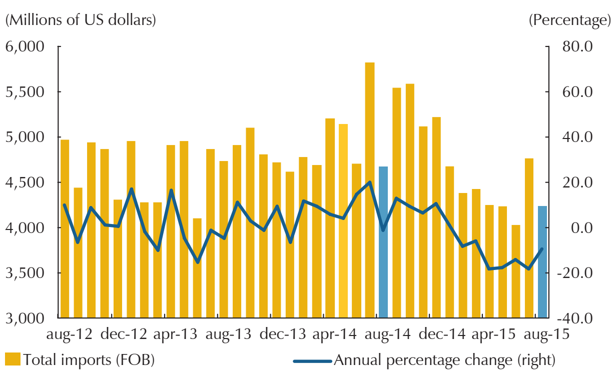
Graph 16
Total Exports
(Monthly)




Sources: DANE; Calculations by *Banco de la República*

When comparing the external balance to the first-quarter results, it is important to underscore the fact that the current account deficit, in dollars was USD $829 m less during the second quarter. This is explained by a reduction in net outflows in the balance of goods and non-factor services, mainly because of fewer imports. The deficit in factor income was slightly higher than during the previous quarter. In addition, the deficit in the external balance during the second quarter was larger than estimated in the last edition of the Inflation Report, implying a slower correction in the external imbalance than was anticipated during the year.

Graph 17
Total Imports (FOB)
(Monthly)




Sources: DANE; *Banco de la República*'s calculations

The available figures on foreign trade for July-August suggest the trade deficit would have grown during the third quarter due to a larger-than-expected drop in exports in a scenario of further unexpected reductions in commodity prices and trade restrictions imposed by some of the country's trading partners. Specifically, total exports in dollars during those two months fell by 42.8%, on average, over the previous year (Graph 16), mainly because of fewer sales of mining products (oil: -60.5%; coal: -37.4%; refined products: -70.4%, and ferronickel: -37.4%), coupled with reductions in other items (of agricultural origin: -5.3%, and industrial products: -10%). At the same time, the FOB value of imports[4] fell 14.3% in annual terms (Graph 17) (See the shaded section on page. 27).

4 Unlike the balance-of-payments measurement, which takes into account imports FOB (free on board), GDP calculated according to the national accounts considers imports CIF, which include

## EXPORTS AND IMPORTS IN US DOLLARS FOR THE SECOND QUARTER OF 2015 AND SO FAR DURING THE THIRD

Total exports fell 32.6% in the second quarter of 2015 over the previous year, due to fewer exports of mining, agricultural, and industrial goods, which declined 43.3%, 13.9% and 3.0%, respectively. In the first group, there were widespread reductions in the value of exports of all products, the sharpest being in the group of refined petroleum products, with an annual variation of -49.9%, largely because of the drop in oil prices. Oil exports were down 44.4% annually because of the plunge in international prices (the average annual contraction registered during this period was 43.7%). On the other hand, the decline in exports of agricultural goods reflects fewer sales of all products of this group (-17%, -16.3% and -10.5% for flowers, bananas and coffee, in that order).

Industrial exports[1] were influenced primarily by fewer exports of meat, textiles, leather manufactured goods and non-metallic minerals. The destination affected the most was Venezuela, with an annual decline of 27.7% in industrial exports to that country, while sales to Ecuador and the United States were down 10.4% and 0.4%, respectively. In contrast, exports to other destinations posted an annual increase of around 3.7% during the second quarter.

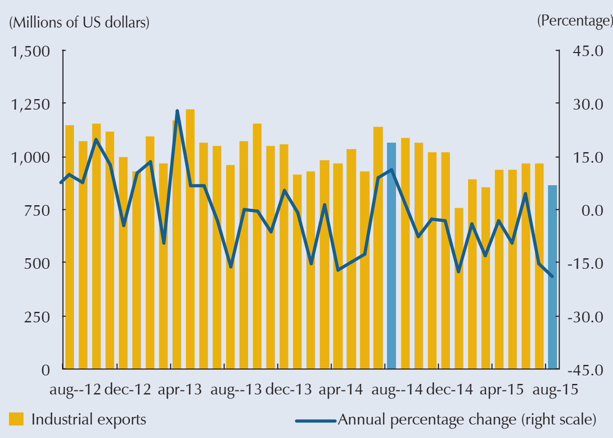
Imports in dollars dropped 16.9% annually in the second quarter due to fewer foreign purchases in all product groups. Imports of intermediate goods fell 19% annually, given the sharp drop in the value of purchases of fuels and lubricants (-35.2%), added to the decline in raw materials for industry (-14. 3%) and for agriculture (-3.8%). Imports of consumer goods registered an annual decline of 12.8%, with a drop in durable and non-durable goods (16.7% and 8.5%, respectively). Imports of capital goods fell 16.7% annually, thanks to fewer purchases of transport equipment (-25.7%), building materials (-16.4%) and capital goods for industry and for agriculture (-12.6% and -6.1% respectively).

Exports in dollars fell sharply again in July-August 2015 (-41.1%), owing to a general reduction in foreign sales in all groups of goods. The significant drop witnessed in mining exports during this period (-53.1%) as a result of low international prices for these products, is a particularly important aspect. Specifically, there were declines in exports of refined petroleum products and crude oil (-61.3% and -58.8%, respectively), ferronickel (-43.4%), coal (-37%) and gold (- 18.6%).

Industrial exports were down 16.9% annually between July and August (Graph A). This reflects the drop in non-traditional exports to all destinations, except the United States. Exports to that country rose 8.7% annually (Graph B). Sales of industrial products to the United States during July and August accounted for 17.6% of all exports in this group. The annual reductions in exports to Venezuela (-50.1%) and Ecuador (-34.9%) during that same period are significant.

Agricultural exports fell 2.7% annually during the two months in question. The value of exports of all products in this group declined, with the exception of coffee, which rose 2.5%. In contrast, exports of bananas and flowers were down 16.3% and 6.4%, respectively.

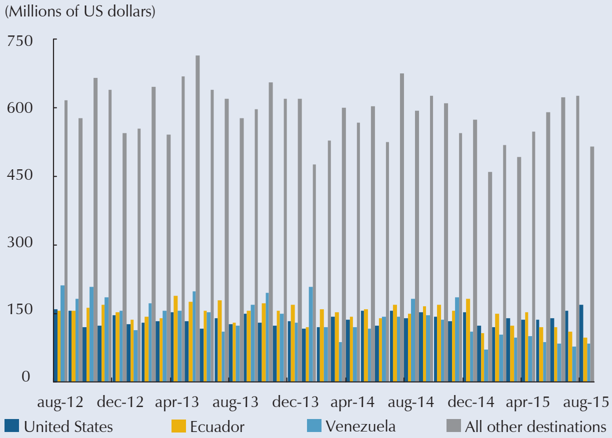
Graph A
Industrial Exports and Others[a/]
(Monthly)




a/ Not including oil or derivatives thereof, coal, ferronickel, gold, coffee, bananas or flowers. Includes other mining and agricultural goods.
Source: DANE, *Banco de la República's* calculations

1 These exports do not include oil or derivatives thereof, coal, ferronickel, gold, coffee, bananas or flowers, and account for 29% of all exports during the period in question. Exports from the manufacturing industry represent 95.4% of this group.

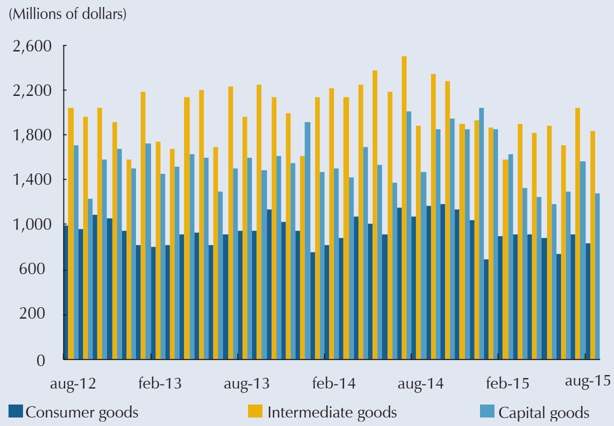
Graph B
Non-commodity Industrial Exports to the United States, Ecuador, Venezuela and Other Destinations[a/]
(Monthly)




a / Does not include coffee, oil derivatives, ferronickel, gold, bananas or flowers.
Sources: DANE; Calculations by *Banco de la República*

The annual contraction in FOB imports in dollars during the same period came to 14.3%. This reduction is associated with declines in the value of all types of goods. Foreign purchases of consumer goods fell 18.2% annually, due to a 27.7% contraction in durable goods and 7.3% for non-durables. The trend in imports of durable goods was largely the result of reductions in machinery and devices for domestic use (-37.2%) and vehicles (-20.3%). In the case of non-durable goods, the main contribution came from fewer imports of food products (-18.2%) and apparel (-22.1%). Imports of intermediate goods were down 10.5%, partly because of the decline in prices for fuels and lubricants. Purchases of capital goods fell 16.5%, due to fewer imports of transportation equipment (-31.2%), capital goods for industry (-10.5%) and construction materials (-7.9%) (Graph C).

Graph C
Imports, by Type of Goods (FOB)




Sources: DANE; Calculations by *Banco de la República*.

As observed in the first half of the year, the third quarter is expected to experience a continuation of the downward trend in the non-factor services deficit (a reflection of the lower costs associated with international trade) and in net outlays for factor income. The latter is due to the impact on oil profits occasioned by a further drop in oil prices and the supply shocks suffered by the sector during the third quarter. Added to this is the impact the sharp depreciation during the period had on profits in the other sectors. On the other hand, the last few months saw a significant increase in net income from current transfers, propelled by an important recovery in worker remittances (30.7% in the third quarter), especially from the United States and the euro zone.

freight and insurance. The average total value of the latter, in dollars, came to US $ 4,703 million in July-August 2015. This amounts to an annual reduction of 14.4%.

The figures on capital flows taken from the exchange market balance[5] suggest FDI resources entering the country continued to decline in the third quarter, especially those for the oil sector. An even greater reduction was seen in foreign portfolio investments in the private sector compared to a year ago, when these resources increased considerable due to the re-weighting in the JP Morgan emerging market bond index. However, this reduction is less than the one estimated a quarter ago, thanks to an important influx of portfolio flows in August. The third quarter also saw the addition of external resources for the public sector, through the placement of USD $1,500 m in government bonds.[6]

So, the estimated current account deficit for all of 2015 is higher in this report than the deficit forecast three months ago. As a percentage of GDP, it still exceeds the current account deficit registered in 2014, and the largest projected shortfall is associated primarily with a more-than-expected increase in the goods trade balance. Therefore, in the most likely scenario, the current account deficit would be around 6.2% of GDP (Table 3). Im-

Table 3
Balance of Payments
Annual Flows (Millions of US dollars)

| | 2011 | 2012 | 2013 (pr.) | 2014 (pr.) | 2015 (proj.) |
|---|---|---|---|---|---|
| **Current account (A+B+C)** | **(9,710)** | **(11,306)** | **(12,367)** | **(19,580)** | **(18,441)** |
| **Percentage of GDP** | **(2.9)** | **(3.1)** | **(3.3)** | **(5.2)** | **(6.2)** |
| A. Goods and services | 935 | (858) | (2.763) | (11.268) | (16.211) |
| B. Primary income (factor income) | (15,479) | (15,027) | (14,198) | (12,670) | (7,529) |
| C. Secondary income (current transfers) | 4,834 | 4,579 | 4,594 | 4,358 | 5,300 |
| | | | | | |
| **Financial account (A+B+C+D)** | **(8,925)** | **(11,754)** | **(11,845)** | **(19,640)** | **(17,994)** |
| **Percentage of GDP** | **(2.7)** | **(3.2)** | **(3.1)** | **(5.2)** | **(6.0)** |
| A. Direct investment (ii-i) | (6,228) | (15,646) | (8,557) | (12,252) | (9,422) |
| i. Foreign investment in Colombia (FDI) | 14,648 | 15,039 | 16,209 | 16,151 | 12,963 |
| ii. Colombian investment abroad | 8,420 | (606) | 7,652 | 3,899 | 3,542 |
| B. Portfolio investment | (6,090) | (5,690) | (6,978) | (11,654) | (6,820) |
| C. Other investment (loans, other types of credit and derivatives) | (349) | 4,176 | (3,257) | (170) | (2,147) |
| D. Reserve assets | 3,742 | 5,406 | 6,946 | 4,437 | 395 |
| **Errors and omissions (E & O)** | **785** | **(448)** | **522** | **(59)** | **447** |

(pr.) preliminary
(proj.): projected
Source: *Banco de la República*
Observation: The results presented in this table follow the recommendations outlined in the sixth edition of the Balance of Payments Manual proposed by the IMF. For additional information and changes in methodology, see http://www.banrep.gov.co/balanza-pagos

5 Although the capital flows registered in the exchange balance do not coincide exactly with what is entered in the balance of payments, since they refer to the inflow and outflow of foreign exchange, they do offer some idea of the trend.

6 On September 21, the nation obtained financing for 2016 through the issue and sale of USD $1,500 in new ten-year global bonds that mature in January 2026, with a 4.50% coupon and a rate of 4.653%.

*The current account deficit for all of 2015 is higher than the estimate three months ago, given the larger trade imbalance observed so far this year.*

plicit in this figure is a reduction in the deficit to USD $18,441 m (compared to USD $19,580 m in 2014), which is offset by the effect of 1.6 pp GDP valuation in dollars, given average estimated depreciation for the year.

This outcome is consistent with the scenarios outlined in the previous section concerning the growth of our trading partners and commodity prices, and with the estimates of domestic demand detailed later in this report. The downward revision in the average price of coffee and ferronickel for the year accentuated the drop in traditional exports for the entire year, compared to the estimate last quarter.[7] The forecast for exports of industrial products was revised downward as well, taking into account the possible impact of trade restrictions imposed by some of Colombia's trading partners. Accordingly, total exports (in dollars) in the baseline forecast would decline by 29.5%.

Imports are expected to fall sharply, above all in the fourth quarter, due to less momentum in domestic demand and a generalized reduction in international prices for imported items, especially intermediate goods (fuels and derivatives), as observed in the available data on trade through August. In this context, the decline in imports in dollars for all of 2015 would come to about 16%.

The reduction in foreign purchases will be accompanied by less of a deficit in the services balance, thanks to the positive effects of the exchange rate on those types of exports and the decline in imports associated with freight services and tourism. Fewer net outflows of investment income, reflecting the decline in profits for the mining and energy sector, and the effects of depreciation and economic slowdown on the other sectors are also contributing factors.

*Despite the momentum in FDI so far this year in certain sectors other than oil and mining, 2015 as a whole is expected to see a sharp reduction in investment of this type due to shocks in the oil and mining sectors.*

As for the financial account, FDI flows to the mining and energy sector remain low compared to past years. Resources for direct funding in the other sectors would continue to moderate because of the economic slowdown, with the exception of certain sectors that showed momentum during the first half of the year (manufacturing, trade, restaurants, hotels and construction). In addition, the second half of the year is expected to see less net direct investment, given announcements of major Colombian investments abroad during that period. So, resources from net direct investment are estimated at USD $9,422 m for the entire year. This reflects an annual decline of 19.7%

7 An increase in export volume is anticipated for oil and coffee (1.0% and 10.2%, respectively), consistent with the forecasts for growth in their output. In the case of coffee, the production forecast is higher than it was three months ago. The estimate for coal export volume in 2015 was revised downward, and a contraction of 4.3% is expected. As a result, exports of the major products would be down by 38% (in dollars) in the central forecast.

*The current account deficit in 2015 is expected to be somewhere between 5.7% and 6.8% of GDP. The most likely figure is 6.2%.*

in FDI, which is partially offset by less direct Colombian investment abroad compared to the figure on record a year ago.

Portfolio investment flows would remain stable during the second half of the year compared to the first six months, which means less financing for this purpose in relation to 2014, when the weights in the JP Morgan market bond index were changed in favor of Colombian debt. This will be offset, in part, by higher revenue from other investments, including loans to the non-financial public sector.

Alternative scenarios to the baseline forecast for the balance of payments in 2015 are presented in this report, based on different assumptions concerning the terms of international financing and the conditions for domestic growth. If these terms and conditions remain broad, with economic growth near the ceiling of the forecast range, the current account deficit would be 6.8% of GDP. On the contrary, with less international financing and reduced economic growth (near the floor of the forecast range), the deficit would be 5.7% of GDP.

The current account deficit is expected to be smaller in 2016, both in dollars and as a percentage of GDP (around 5.8%). This would be related primarily to less of a goods trade deficit, coupled with a somewhat more favorable outlook for the major export prices, a recovery for our most important trading partners, and the impact on fuel exports and imports when the Cartagena Refinery (Reficar) begins operating at full capacity. In fact, Reficar recently announced it plans to resume operations on November 10. According to that announcement, production at the refinery will increase gradually, reaching full capacity in March 2016. In this scenario, reopening of the refinery with its new production system, is expected to have a positive net impact of about USD $800 m on the trade balance for 2016. The deficit would be financed mostly with FDI resources, which are expected to be somewhat higher than the forecasts in 2015, thanks to a slight recovery in oil revenue and some additional resources associated with the start-up of infrastructure projects that are part of the so-called fourth-generation concession program (4G). A further reduction in the flow of portfolio investment, loans and other investments is anticipated as well.

## Box 1:
## COLOMBIA'S NON-TRADITIONAL EXPORTS: FACTS, TRENDS AND HYPOTHESIS

Juan Pablo Cote
Juan Sebastian Rojas
and Jhon Edwar Torres*

### 1. Introduction

One of the consequences of the 2008 financial crisis was a generalized contraction in international trade. In the case of Colombia, export volume indexes and its annual growth rates declined between 2008 and 2009,. Although post-crisis indicators for Colombia showed an important recovery, the figures suggest average growth rates in recent periods are lower than those witnessed prior the crisis, and this sluggishness is more pronounced in the case of non-traditional exports.[1] The pattern of this performance is similar to the one observed in the quantities exported worldwide. The general trends in Colombian exports before and after the crisis, based on export volume indexes, are outlined in this section. The exercise emphasizes in non-traditional exports and explores several possible explanations as to why they did not recover completely during the post-crisis period.

### 2. A Comparative Analysis of Trade in Colombia and Worldwide Before and After the Crisis

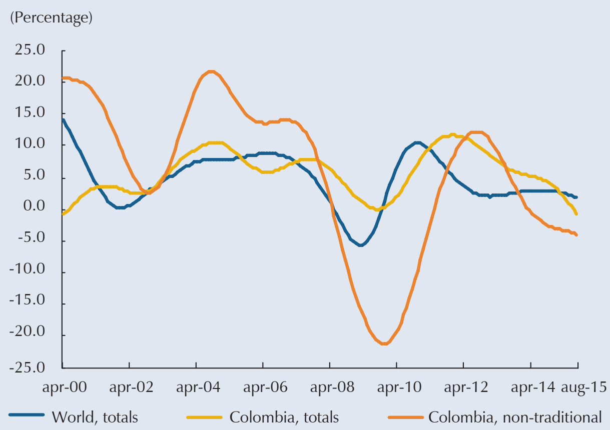
Average annual growth in the index of the volume of Colombian exports between January 2005 and January 2007 came to 6.5%. During the economic crisis (January 2008-January 2010), that rate fell to an average of 2.0%.

In the aftermath of the crisis, the rates of growth in Colombia's export volumes tended to recover relatively quickly. In Graph B1.1, which shows the trend[2] in the annual variation in the export volume index, one sees growth in export volume accelerated between mid-2009 and late 2011. On the other hand, non-traditional export growth, which was affected far more by the economic crisis than total exports, showed a more pronounced upward trend between early 2010 and mid-2011, as illustrated in the same Graph.

However, the figures for more recent periods do not show a full recovery in trade. Colombian exports grew at an average rate of 3.6% between January 2014 and August 2015. The rate for non-traditional exports was -3.2%, which is well below the average annual growth rate for exports in this group between January 2005 and January 2007 (13%). Therefore, the average growth rates in more recent years are significantly lower than those registered prior to the crisis.

The trend in global export volumes was similar. Between January 2005 and January 2007, before the crisis, the average annual growth in total export volume was 7.4%. However, it was -3.9% in the period between January 2008 and January 2010 (during the economic crisis).[3] The volume of global trade recovered a lot after the crisis, as shown in Graph B1.1. But that recovery was followed by a slowdown in export-volume growth during subsequent months. For a more recent window, between January

Graph B1.1
Trend in Annual Export Volume Growth




Observation: The trend was computed using a Hodrick-Prescott filter.
Source: Netherlands Bureau for Economic Policy Analysis and DANE; Calculations by *Banco de la República*

* The authors work with the Department of Programming and Inflation. The opinions and findings presented in this section imply no commitment whatsoever on the part of *Banco de la República* or its Board of Directors.

1 Total exports without mining and agricultural products.

2 Obtained from a Hodrick-Prescott filter applied to the original series.

3 The lowest annual rate of growth in the global export volume index during the last decade was posted on 29 January 2009, at -20.1%.

2014 and August 2015, the increase was 2.7%. These figures show world trade is growing at lower average rates now than before the crisis at the end of the last decade. This trend is similar to that of Colombian exports.

In addition, export volumes broken down by sector can be analyzed for the Colombian case. This exercise indicates that the recovery in total export levels was tied to export volumes in the mining sector. In contrast, sales in the agricultural sector showed no significant recovery, while non-traditional exports reached levels only comparable to those in 2004 (Graph B1.2).

### 3. Performance of Non-traditional Exports in Colombia

The following is a detailed analysis of how the indexes of non-traditional export volume have evolved. This variable is separated by sectors and destinations in an effort to find an explanation for the performance observed after the crisis[4]. These volume indicators were constructed by deflating exports in dollars with a specific chained index of implicit prices for each sector[5].

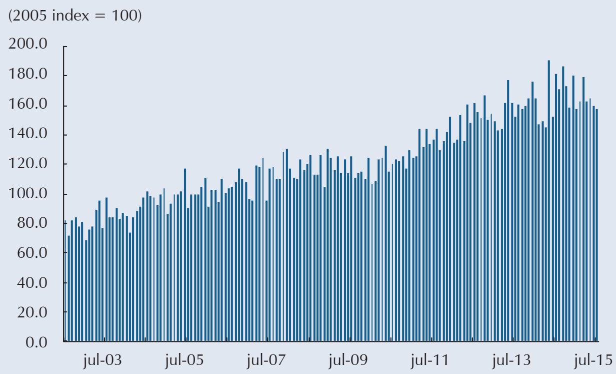
The low volume of industrial exports was reflected in most of the sectors during recent years. The situation in textiles and clothing stands out; exports of these products after the crisis were even lower than the levels on record in 2001 and are stuck there. Leather manufactured goods are another sector with a similar performance. However, there are sectors such as food and beverages, non-metallic minerals and metal manufactured goods where export volumes have recovered slightly, but they still remain at levels comparable only to those of the beginning of the last decade. The figures

4 The results for different destinations, per groups, can be found at the link provided in the statistical annex to Box 1.

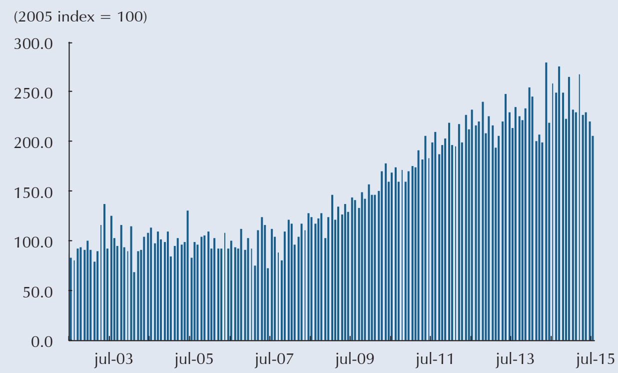
5 The details on the construction of price indexes can be found in Garavito et al (2011).

Graph B1.2
Export Quantity Indexes

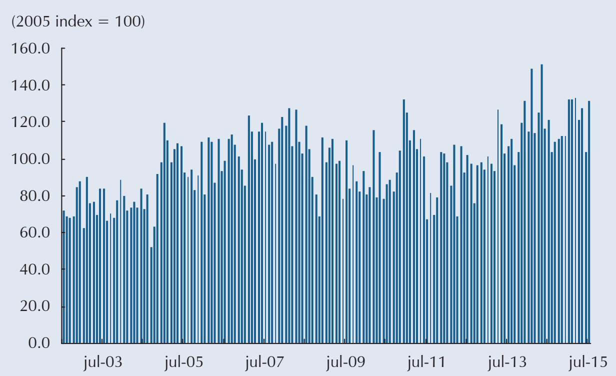
A. Total



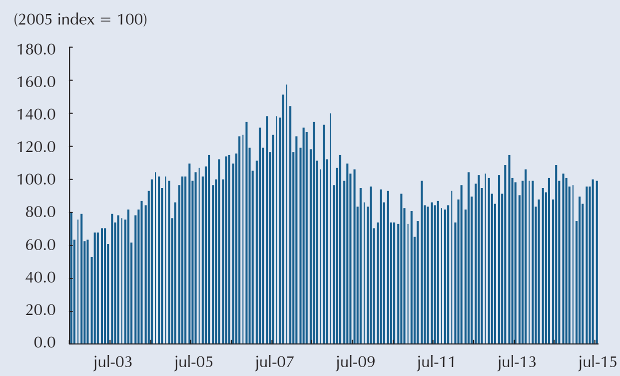

B. Mining




C. Agricultural




D. Non-traditional




Source: DIAN-DANE; Calculations by *Banco de la República* on automobiles reflect the commercial boom with Venezuela before the crisis, and the subsequent extraordinary sales to Mexico and Argentina.

In terms of export destinations, it is particularly important to analyze the development of indicators of sales to Venezuela, the United States, and Ecuador, given their relevance in Colombia's non-traditional foreign trade.

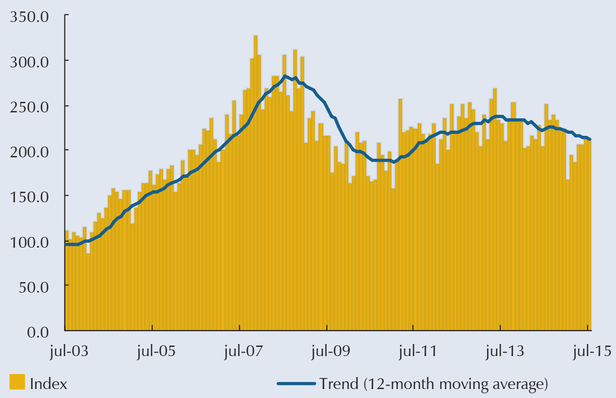
The case of Venezuela is particularly dramatic, since the trade restrictions that were imposed affected most of the sectors that export to that country. In fact, there appears to have been a recovery only in chemical exports, while other sectors show stagnation or have experienced extremely short-lived recoveries.

With respect to the United States the outlook is not favorable either. The figures show stagnation at low levels after the crisis for most sectors, and only in some cases, there is a recovery to pre-crisis levels (rubber and plastic and products chemicals).

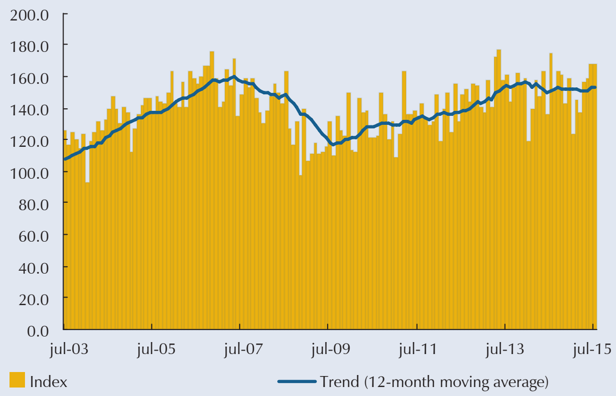
As for Ecuador, the situation in terms of export quantities is one of general stagnation, and the momentum in clothing and textiles is particularly limited. However, sales of chemicals and machinery and equipment are an exception, thanks to good performance after the crisis. Nevertheless, it is important to point out that exports to Ecuador have been affected recently by non-tariff barriers; accordingly, sales to that destination are not expected to recover in the short term.

Graph B1.3
Colombian Non-traditional Export Quantities Index

A. Including Venezuela




B. Excluding Venezuela




Source: DIAN-DANE; Calculations by *Banco de la República*

## 4. Possible Explanations for this Performance

The restrictions imposed by Venezuela in early 2008 on trade with Colombia are the main reason why non-traditional exports have not returned to their pre-crisis levels. Graph B1.3 shows the non-traditional export volume index with and without that country. When Venezuela is excluded, one sees the quantities of non-traditional exports recovered in 2012 to 2006 levels and then remain at a standstill.

One hypothesis that could explain the stagnation in Colombia's non-traditional exports in recent years is that sales to Venezuela were not replaced by those to other destinations. According to Montes et al. (2008), many industries in 2006 had put all their effort into serving the Venezuelan market, leaving them exposed to the cycle of Venezuelan demand. In fact, as those authors indicated, Venezuela's share in Colombian exports (in dollars) went from 9.9% in 2000 to 15.3% in September 2007. A breakdown by product shows the sectors most dependent on the Venezuelan market in 2006 were textiles, clothing, food, beverages and automobiles; all have exhibited low growth or stagnation in recent years. On the other hand, Esguerra et al. (2010) say that commercial relationship was unsustainable in the long-term, since the companies that established commercial ties with Venezuela generally had no export experience. They began selling to Venezuela just to take advantage of the benefits it offered as an export destination and particularly its cycle of high demand propelled by high oil prices. In other words, these were companies that focused on production for the domestic market and lacked the ability to export their products to new destinations in the wake of this shock.

Another likely explanation for the lack of momentum in non-traditional exports, besides the situation with Venezuela, concerns the possible substitution of Colombian goods for imports from other countries.[6] Table B1.1 offers a comparison of the averages before and after the global financial crisis with respect to imports from Colombia as a percentage of the total imports from each of these economies, excluding non-traditional Colombian exports. The data at hand suggest this has been the case in Ecuador and Peru, although there are no major variations with the other trading partners. A breakdown, by product, in countries where non-traditional Colombian exports have experience some substitution shows food and textile manufactured goods explain most of this phenomenon, while the share of these goods from other countries in Latin America (especially Brazil, Argentina and Chile) and from China, as countries of origin for these imports, has increased. In view of the fact that Ecuador recently imposed restrictions on trade with Colombia, this trend could intensify in the months ahead.

An additional hypothesis assumes that non-traditional Colombian exports have been affected by weaker external demand due to less economic growth worldwide in the years after the crisis, compared to what was observed in the first part of the century. This behavior was witnessed in both emerging markets and developed economies (Graph B1.4). When analyzing the average growth of Colombia's trading partners (non-traditional trade-weighted), we see average growth was 4.3% between 2001 and 2007, as opposed to 3.6% between 2010 and 2014. Accordingly, the slowdown in global economic activity should pose an obstacle to Colombian exports. Inasmuch as the growth forecasts for our trading partners in the years ahead are relatively low (0.7% for 2015 and 1.7% for 2016), this factor will hamper the recovery in non-traditional exports.

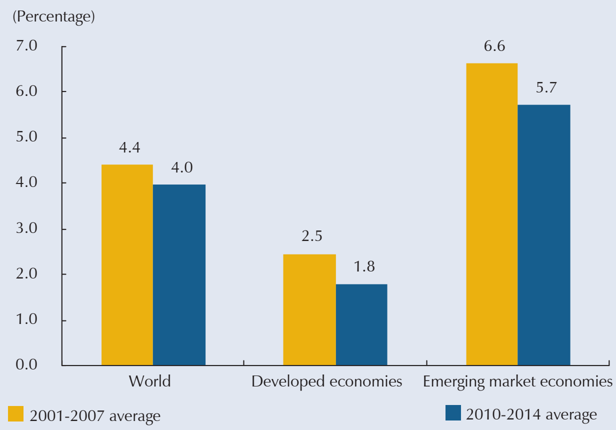
Table B1.1
Imports from Colombia as a Share of Total Non-traditional Imports for Different Destinations

| Trading Partners | 2001-2007 Average | 2010-1014 Average |
|---|---|---|
| Venezuela | 9.1 | 4.3 |
| Ecuador | 14.1 | 10.7 |
| Peru | 5.2 | 3.5 |
| United States | 0.2 | 0.1 |
| Euro Area | 0.0 | 0.0 |
| Mexico | 0.2 | 0.2 |
| China | 0.0 | 0.0 |
| Chile | 1.2 | 1.8 |

Source: United Nations (Commerce Data Base – UN Comtrade) Calculations by *Banco de la República*

Another element that might help to explain the recent low momentum in non-traditional exports is the tendency in real exchange rate for the Colombian peso against the currencies of our main trading partners.

Graph B1.4
Average Real GDP Growth




Source: International Monetary Fund

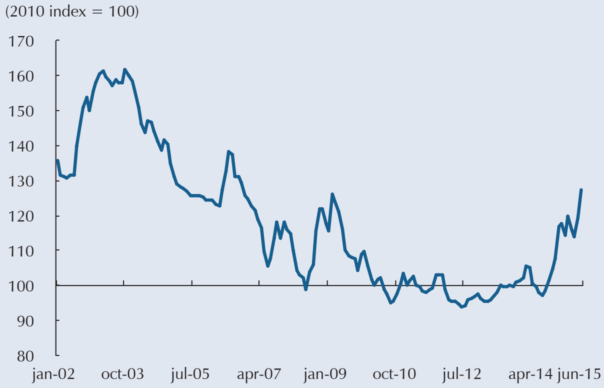
Graph B1.5 shows there was a prolonged period of appreciation after the crisis, which could have been an obstacle when attempting to replace the Venezuelan market. This fact, coupled with the impact of the crisis, could have affected the productive capacity and competitiveness of Colombia's export industry. However, depreciation of the Colombian peso in the past year is expected to provide somewhat of a boost to non-traditional exports in the medium term.

## Conclusions

The financial crisis had a significant effect on the quantities exported worldwide and by Colombia. Although the trade indexes reflect important recovery during the post-crisis period, the figures in Colombia indicate this recovery has been no more than partial in the case of non-traditional exports. A breakdown of non-traditional exports, by destination, shows the low levels are due

6 An alternative explanation along the same line is that goods imported from Colombia were substituted in these countries with local production. However, this hypothesis cannot be examined in greater depth with the data at hand and, therefore, is not explored in this section.

Graph B1.5
Multilateral Real Exchange Rate Index (CPI)




Source: *Banco de la República*.

largely to the trade restrictions imposed by Venezuela on Colombian goods and the difficulty producers had in replacing that country as an export destination. Moreover, when excluding Venezuela, we see non-traditional exports have stagnated in recent years, especially those to the United States.

One possible explanation for the partial recovery in the volumes exported by Colombia after the crisis is import substitution at the destinations where it sells its products. This is supported by the figures on imports by Ecuador and Peru. Appreciation of the peso after the crisis is another probably cause, which could have affected the country's productive capacity and its competitiveness. One last potential reason for this fact is the decline in foreign demand caused by weak economic growth on the part of Colombia's trading partners after the crisis.

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# II. Domestic Growth: the Current Situation and Short-Term Outlook

**Colombia's GDP increased 3.0% annually during the second quarter** of the year over the same period in 2014. This is somewhat higher than was forecast by the technical staff at *Banco de la República*.

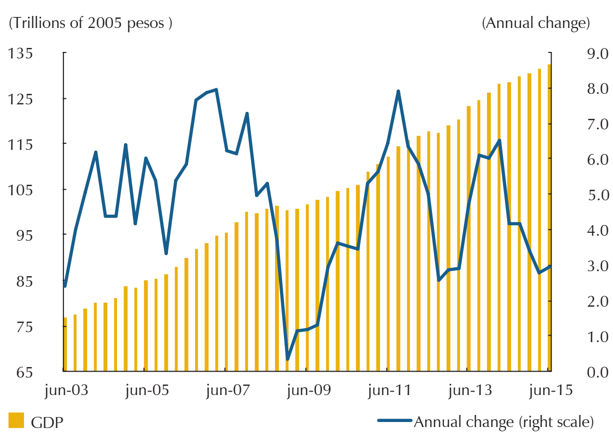
**Domestic demand and foreign trade performance reveal a gradual** slow-down stage in the Colombian economy that is consistent with new levels in terms of trade and the nominal exchange rate.

**Growth in real activity during the third quarter is** expected to be similar to what it was in the first half of the year. Domestic demand would contribute to GDP growth, while net exports would have been less favorable.

**Coffee and retail would have been the most dynamic** sectors. Mining, in contrast, would have performed less favorably.

## A. GDP IN THE SECOND QUARTER OF 2015

Graph 18
Gross Domestic Product
(Seasonally adjusted)




Sources: DANE; Calculations by *Banco de la República*.

The latest published data on the national accounts, produced by the National Bureau of Statistics (DANE), show gross domestic product (GDP) rose at an annual rate of 3.0% (Graph 18). This figure, which was slightly above the middle of the forecast range outlined by *Banco de la República's* technical staff in the last edition of the Inflation Report (between 2.0% and 3.5%, with the most likely figure being at the midpoint of the range), meant a slight acceleration compared to the figure on record for the first three months of the year. The increase between quarters was 0.6%, implying 2.4% annualized growth.

As indicated in previous editions of this report, these results confirm the Colombian economy is in a gradual slowdown stage and is adjusting to a new reality that is consistent with a new level in terms of trade. This is in response to the macroeconomic conditions resulting from the drop in raw material prices, its effect on national revenue, and its impact on the levels and volatility of the nominal exchange rate.

Accordingly, the pace of growth in domestic demand was less than during the first three months of the year, given a deceleration in consumption and a significant adjustment in investment in tradable capital goods. In contrast, investment in construction (which can be classified as non-tradable) accelerated, growing at a faster pace than the other GDP components (Table 4).

An analysis of how the components of domestic demand behaved shows both private and public consumption grew less than in the second quarter. The reduced momentum in household consumption was related mainly to the slowdown in purchases of semi-durable goods and the decline in pur-

Table 4
Real Annual GDP Growth, by Type of Spending

| | 2014 | | | | 2014 | 2015 | | Contribution to Annual Growth (II Qtr. 2015) |
|---|---|---|---|---|---|---|---|---|
| | I Qtr. | II Qtr. | III Qtr. | IV Qtr. | Full year | I Qtr. | II Qtr. | |
| Total consumption | 5.2 | 4.4 | 4.4 | 4.9 | 4.7 | 3.5 | 2.9 | 2.4 |
| Household consumption | 4.1 | 3.8 | 4.1 | 5.3 | 4.4 | 4.0 | 3.4 | 2.2 |
| Non-durable goods | 3.6 | 3.1 | 3.9 | 4.8 | 3.8 | 3.8 | 3.6 | 0.8 |
| Semi-durable goods | 3.8 | 4.0 | 3.4 | 7.2 | 4.6 | 4.2 | 1.9 | 0.1 |
| Durable goods | 4.2 | 5.1 | 8.1 | 12.8 | 7.6 | 3.0 | (0.4) | (0.0) |
| Services | 4.8 | 4.1 | 4.1 | 4.2 | 4.3 | 4.1 | 4.1 | 1.4 |
| Government consumption | 9.4 | 6.7 | 5.3 | 3.8 | 6.2 | 2.2 | 1.8 | 0.3 |
| Gross capital formation | 14.6 | 13.8 | 10.2 | 8.5 | 11.7 | 7.0 | 1.5 | 0.5 |
| Gross fixed capital formation | 13.3 | 8.6 | 11.8 | 10.1 | 10.9 | 5.9 | 1.9 | 0.5 |
| Agriculture, forestry, hunting and fishing | 3.1 | 3.0 | 4.5 | 7.9 | 4.6 | (2.0) | (1.2) | (0.0) |
| Machinery and equipment | 14.4 | 7.8 | 14.6 | 12.2 | 12.2 | 1.5 | (5.0) | (0.5) |
| Transport equipment | 5.2 | 11.1 | 14.9 | 16.6 | 12.1 | 30.3 | (8.9) | (0.3) |
| Construction and buildings | 7.1 | 1.2 | 15.4 | 7.4 | 7.8 | 2.2 | 9.4 | 0.6 |
| Civil works | 25.8 | 13.7 | 6.6 | 3.7 | 12.1 | 6.7 | 8.1 | 0.7 |
| Services | 5.9 | 1.7 | 5.1 | 1.3 | 3.5 | 1.8 | (0.6) | (0.0) |
| Domestic demand | 7.7 | 6.1 | 5.8 | 5.8 | 6.3 | 4.2 | 2.5 | 2.8 |
| Total exports | 2.6 | (11.5) | 4.1 | (0.5) | (1.7) | 1.6 | (2.0) | (0.3) |
| Total imports | 8.9 | 5.2 | 8.3 | 14.2 | 9.2 | 8.6 | (1.8) | 0.5 |
| GDP | 6.5 | 4.2 | 4.2 | 3.4 | 4.6 | 2.8 | 3.0 | 3.0 |

Sources: DANE; Calculations by *Banco de la República*.

*The increase in government consumption was less than it was a quarter ago.*

chases of durable goods. These results likely obey the pass-through of a higher exchange rate, reflected in the increase in domestic prices for these products, since an important part of the volume of this type of goods is imported. In the case of government consumption, growth was below the figure on record for the first three months of the year. This, in turn, confirms the adjustment in the nation's fiscal accounts due to the shock to terms of trade.

Gross fixed capital formation was mixed. On the one hand, investment in capital goods such as machinery and transport equipment declined, while construction (both buildings and civil works) contributed positively to GDP growth. The outcome for investment in capital goods was consistent with what was anticipated in the previous edition of the Inflation Report, evidencing an adjustment in this type of expenditure to the depreciation of the peso against the dollar and the decline in investment in the oil sector. In contrast, investment in the construction of buildings and civil works grew at a higher rate than the rest of the economy, as will be discussed later in detail.

With regard to exports and imports, a contraction was witnessed in both cases. However, net exports contributed positively to GDP growth (Table 4). The drop in real exports was associated with the poor performance of foreign sales of oil, coal, metallic minerals, and refined petroleum products. Most export products in the non-traditional category also experienced a setback, partly due to some of the trade barriers Colombian products faced on international markets and to less external demand from our trading partners. In the case of imports, the main reductions were in machinery and electrical equipment, and in transportation equipment, reflecting the behavior observed in investment in tradable capital goods.

As for the different branches of activity, the sectors that grew the most during the second quarter of 2015 were construction (8.7%) and mining (4.2%) (Table 5). Industry was the only branch to report a decline (-1.3%). The sharp slowdown in transport activity and less momentum in financial services and in social, community and personal services were important elements, since they had been contributing substantially to GDP growth.

*Construction and mining were the most dynamic sectors in the second quarter.*

The highlights in the construction sector were building construction (9.1%) and civil works (8.7%), as explained earlier. The strong performance in building construction was due to non-residential buildings, which continued to increase at significant rates (19.6%), in contrast to the 0.6% drop in residential buildings. In the second group, roads (8.6%), mining and pipelines (4.4%) and other engineering works (23.9%) contributed greatly to the expansion in civil works. It is important to note that payments from territorial

Table 5
Real Annual GDP Growth, by Branch of Economic Activity

| Sector | 2014 | | | | 2014 | 2015 | | Contribution to Annual Growth (II Qtr. 2015) |
|---|---|---|---|---|---|---|---|---|
| | I Qtr. | II Qtr. | III Qtr. | IV Qtr. | Full year | I Qtr. | II Qtr. | |
| Agriculture, forestry, hunting and fishing | 6.2 | 0.3 | 1.9 | 0.8 | 2.3 | 1.7 | 2.5 | 0.2 |
| Mining and quarrying | 5.4 | (2.3) | (1.0) | (2.7) | (0.2) | 0.5 | 4.2 | 0.3 |
| Manufacturing industry | 4.6 | (1.6) | (1.1) | (0.8) | 0.2 | (2.2) | (1.3) | (0.2) |
| Electricity, gas and water | 4.6 | 3.8 | 4.0 | 2.9 | 3.8 | 2.3 | 1.6 | 0.1 |
| Construction | 14.1 | 8.7 | 10.9 | 6.1 | 9.9 | 4.7 | 8.7 | 0.6 |
| Buildings | 7.0 | 1.0 | 14.1 | 7.3 | 7.4 | 2.1 | 9.1 | 0.3 |
| Civil works | 24.4 | 14.8 | 6.6 | 4.2 | 12.0 | 6.7 | 8.4 | 0.3 |
| Retail, repairs, restaurants and hotels | 5.4 | 4.2 | 4.4 | 4.4 | 4.6 | 5.0 | 3.8 | 0.5 |
| Transport, storage and communication | 4.8 | 4.4 | 4.2 | 3.2 | 4.2 | 2.9 | 0.5 | 0.0 |
| Financial, real estate and company services | 5.4 | 5.5 | 4.5 | 4.1 | 4.9 | 4.2 | 3.6 | 0.7 |
| Social, community and personal services | 7.7 | 5.5 | 4.9 | 3.8 | 5.5 | 3.0 | 2.5 | 0.4 |
| Subtotal – added value | 6.5 | 3.9 | 4.0 | 3.1 | 4.4 | 2.7 | 2.9 | 2.7 |
| Taxes minus subsidies | 7.4 | 8.6 | 7.3 | 8.0 | 7.8 | 4.3 | 3.5 | 0.3 |
| GDP | 6.5 | 4.2 | 4.2 | 3.4 | 4.6 | 2.8 | 3.0 | 3.0 |

Sources: DANE; Calculations by *Banco de la República*.

agencies in the group comprised of roads and other engineering works rose significantly: 41.5% and 21.6%, respectively.

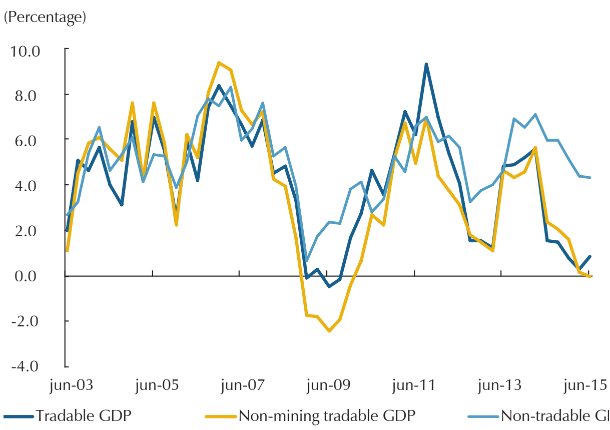
With regard to mining, despite an important recovery from 0.5% growth in the first three months of the year to 4.2% in the second quarter, sharp contrasts were observed in this branch of the economy. While oil and gas production and the extraction of non-metallic minerals increased 5.4% and 15.1%, respectively, coal production and the mining of metallic minerals declined 1.5% and 2.3%, in that order .

Despite the slowdown in retail sales during the second quarter, retail continued to grow at a favorable pace. This was largely because of hotel and restaurant services, which were up by 5.5%. Financial services account for a high share of GDP (19.7%) and continued to contribute a lot to economic growth, thanks mainly to the acceleration in real estate services. However, although this sector is expanding more than the economy as a whole, its growth is below the average since 2000 (4.5%) and has tended to slow.

Industry was the worst performing of the productive activities in Colombian GDP (-1.3%). This was partly because of the sharp drop in petroleum refining (-6.4%) due to the temporary closure of Reficar. It was shut down last year to revamp and modernize its facilities in order to expand production and generate more value added. Excluding this branch, the rest of industry also reported less of a decline than the drop in the aggregate (-0.6%).

The sector remains highly diverse. While petroleum refining (-6.4%) and yarns and textiles (-12.4%) saw major reductions, other branches, such as the manufacture of coffee products (18.7%) and machinery and electrical supplies (3.9%), grew significantly. Furthermore, the results for the second quarter occurred in a context where manufacturing exports fell 3.0% in dollars. Apparently, the effect of actual depreciation, which should have helped to improve the profitability of manufacturing and the competitiveness of locally produced goods over imported products, has been annulled by weak growth on the part of Colombia's trading partners, especially those in the region, where a significant percentage of those exports go. The trade safeguards imposed by Ecuador in 2015 also explain this deterioration.

Graph 19
GDP in the Tradable, Non-mining Tradable and Non-tradable Sectors
(Annual growth)




Sources: DANE; Calculations by *Banco de la República*.

In that environment, although GDP in the tradable sectors accelerated slightly (from 0.3% to 0.9%), the increases were still smaller than those for the economy as a whole and below the average since 2000 (3.8 %). GDP in non-tradables maintained its rate of growth (from 4.4% to 4.3%) and continued to expand at a rate above that of the economy as a whole (Graph 19).

## B. THIRD QUARTER GDP - 2015

The data at hand for the third quarter suggest the pace of growth in the Colombian economy would have been similar to the rate observed during the first half of the year. The increase in private consumption during this period would have been near the average calculated since 2001 (4.0%), while the performance of public consumption would have been mediocre once again. The outcome for investment would have been mixed. Gross capital formation in machinery and transport equipment would have experienced new annual setbacks (but less so than in the previous quarter), while investment in the construction of buildings and civil works would have increased at a higher rate than the other GDP items. The latest figures suggest real exports shrank again. Imports are expected to do the same (consistent with the behavior of domestic demand for imported goods), but less so than in the case of exports.

International prices for oil dropped again, falling to levels between July and September that were below those observed, on average, for the second

*External demand would not have favored the increase in GDP during the third quarter.*

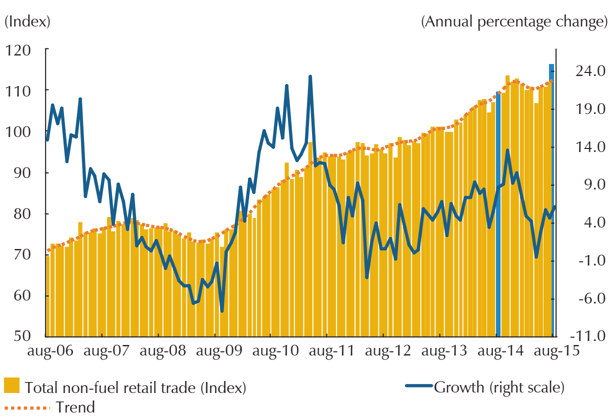
quarter. In this context, and amid high volatility, the exchange rate for the Colombian peso against the dollar soared to record high levels. The figures available for our trading partners indicate growth during this quarter and for the remainder of the year will be weaker than was forecast in previous editions of this report. Coupled with the trade barriers Colombia faces in several international markets, this suggests foreign demand during the third quarter of 2015 would not have been favorable to GDP growth.

Even so, most of the indicators associated with the behavior of domestic demand in the third quarter show an improvement compared to the figures on record for the second. This suggests the real effects of the new shock to terms of trade on disposable household income would have been less in the third quarter than was contemplated in the previous Inflation Report or have yet to materialize.

It is also possible that other factors have played a compensatory role. For example, the figures in dollars for current transfers (net) in the form of worker remittances have increased significantly. Combined with high depreciation in the nominal exchange rate, this has improved the nominal income of families who receive remittances. Moreover, the drop in international prices for imported goods has alleviated, to some extent, the sharp contractions in prices for oil, coal, and other commodities exported by Colombia.

The Monthly Retail Trade Survey (EMCM) conducted by the National Bureau of Statistics (DANE) shows retail trade rose 6.2% in August compared to the same month in 2014. This represents an increase over the figures on record for the second quarter (Graph 20). When discounting vehicle sales, the increase in the resulting aggregate was even higher, confirming the good momentum in retail trade. It is important to point out that several companies in the sector say the good behavior in August occurred in a context of discounts and sales, which is why the good performance that month is identified as atypical compared to the records for previous years.

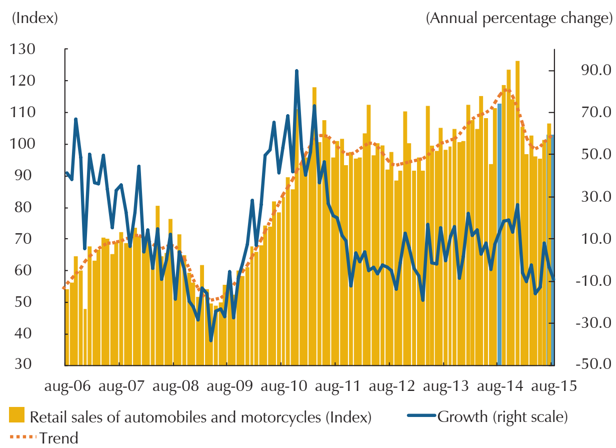
Graph 20
Monthly Retail Trade Survey: Total Non-fuel Sales, Seasonally Adjusted




Sources: DANE; Calculations by *Banco de la República*.

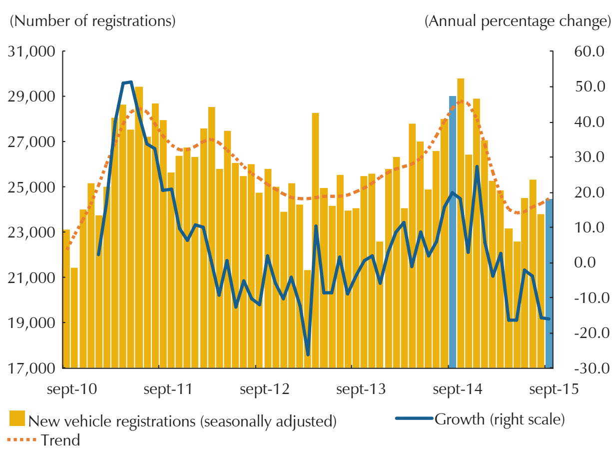
Sales of vehicles and motorcycles are having a difficult time and were down 9.2% annually by August, according to DANE's Monthly Retail Trade Survey. This implies a 6.6% contraction for July-August with respect to the same period last year. Even so, the decline is less compared to what it was in the second quarter (-7.7% annually). The trend component of this series points to a recovery from the levels observed in previous months (Graph 21). The figures on retail vehicle sales and

Graph 21
Monthly Retail Trade Survey:
Automobile and Motorcycle Sales, Seasonally Adjusted




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

Graph 22
New Vehicle Registrations
(Seasonally adjusted)




Source: Comit (ANDI, Fenalco and Econometría); Calculations by *Banco de la República*

vehicle registration published by the Colombian Automotive Committee (CAC)[8] confirm this performance: declines throughout the third quarter, but higher than those on record between April and June (Graph 22).

Other auxiliary indicators with a high historical correlation to the rate of growth in private consumption show mixed signals. On the one hand, the sales balance from the monthly survey of economic expectations (EMEE) conducted by *Banco de la República* suggests the behavior in household consumption would have been better than it was in the first two quarters of the year. This confirms the trends revealed in the DANE retail trade survey (Graph 23).

In contrast, the Fedesarrollo consumer confidence index (ICC), with figures up to September, indicates the slowdown in household consumption observed during the second quarter would have continued between July and September. The average of the index for the third quarter was well below those calculated for the first half of the year and since 2001 (Graph 24).

Job market performance in recent months was less favorable than the situation described in the previous edition of the Inflation Report. However, the unemployment rate (UR) in August was still low, at the levels reached in earlier months, and does not suggest major increases during the remainder of 2015, even though job creation continued to slow.

Specifically, the UR for the moving quarter ending in August was down in annual terms with respect to the same period last year for the nationwide total, urban capitals and the thirteen major metropolitan areas (8.7%, 9.4%, and 9.5%, respectively). It increased slightly in the rural areas, registering 6.2% for the same period (Graph 25). As for the nationwide total and the thirteen major metropolitan areas, the seasonally adjusted UR series have

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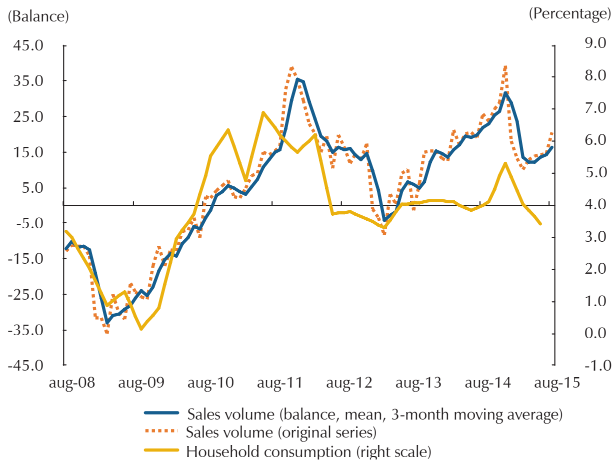
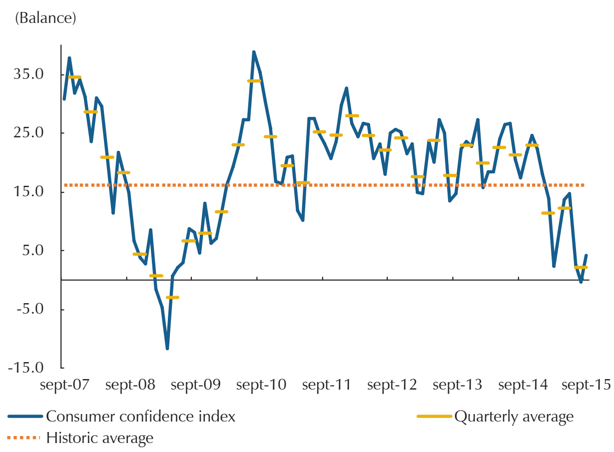
8 The committee is comprised of the National Association of Colombian Entrepreneurs (ANDI), the National Federation of Merchants (FENALCO) and Econometrics.

Graph 23
Sales Volume and Household Consumption
(Annual change)



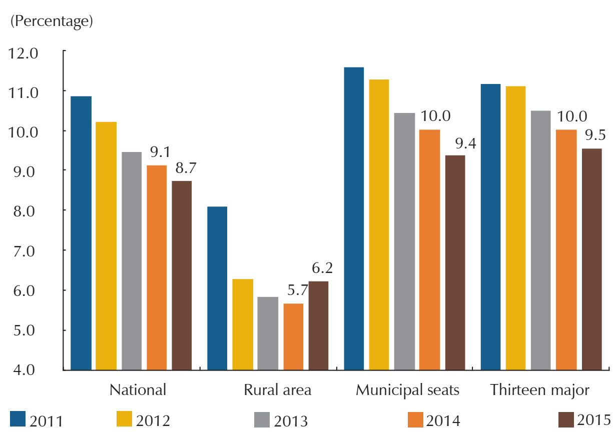

Source: DANE and *Banco de la República* (EMEE)

Graph 24
Consumer Confidence Index and Quarterly Average




Source: FEDESARROLLO.

Graph 25
Unemployment Rate (UR)
(June-July-August quarter)




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

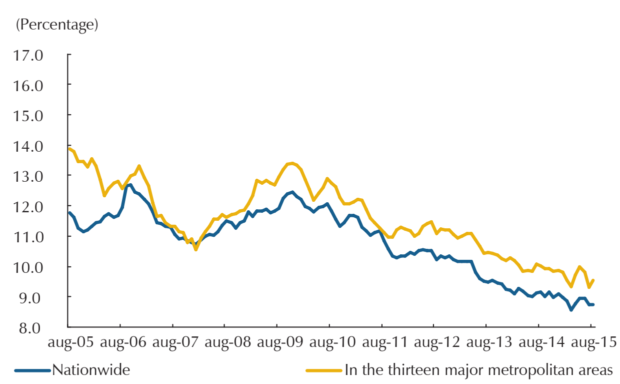
shown no definite trend, which means they could have ceased to decline (Graph 26).

This is explained largely by the steady slowdown in employment, as reflected in the number of employed. There was an annual increase of 2.2% in employed persons during the June-August moving quarter with respect to the nationwide total and 1.9% in the 13 major metropolitan areas. These values are lower than those observed during 2014. Furthermore, when analyzing the seasonally adjusted employment series one sees stagnation for several months in both geographic domains (Graph 27).

The reduced momentum in employment can be attributed to less of an increase in salaried employees, which had bolstered employment significantly in recent months. The number of salaried workers rose at an annual rate of 3.0% during the moving quarter ending in August, while non-salaried workers increased at a rate of 0.6%. This last figure represents a considerable slowdown over the previous year. As with aggregate employment, the seasonally adjusted series show several months of stagnation in salaried employment (Graph 28).

This being the case, the situation on the job market does not point to a further slowdown in private consumption during the third quarter. Its recent behavior supports the view that GDP growth be-

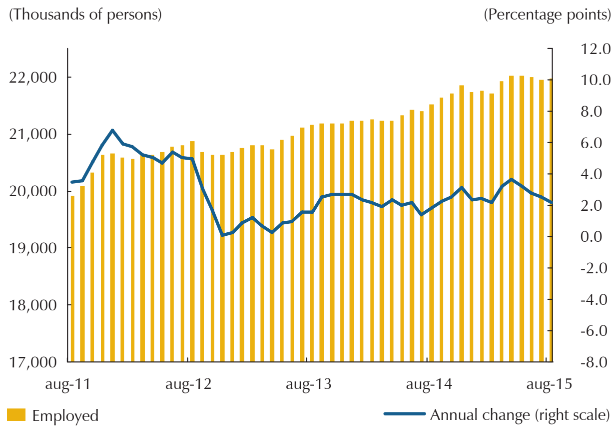
Graph 26
Unemployment Rate (UR)
(Seasonally adjusted moving quarter)



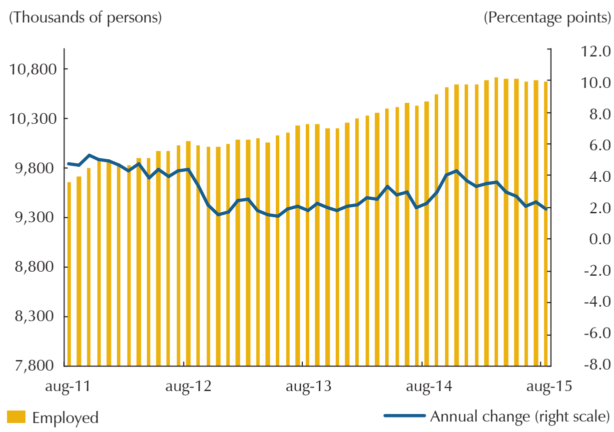

Source: DANE (GEIH); Calculations by *Banco de la República*

Graph 27
Number of Employed and Annual Change

A. Nationwide total

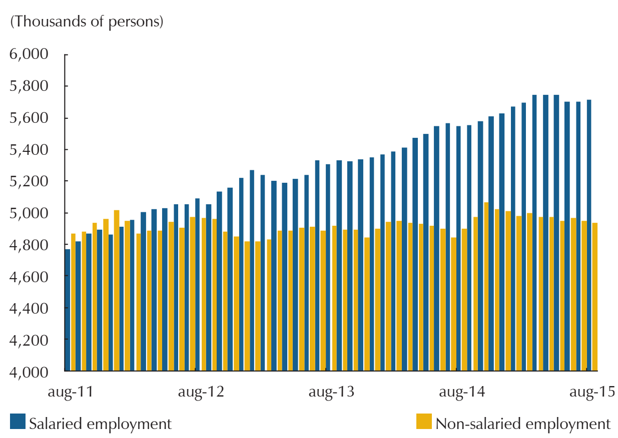



B. Thirteen major metropolitan areas




Sources: DANE (GEIH); Calculations by *Banco de la República*

Graph 28
Employment, by Type of Occupation
(Thirteen major metropolitan areas, seasonally adjusted moving quarter)




Sources: DANE (GEIH); Calculations by *Banco de la República*

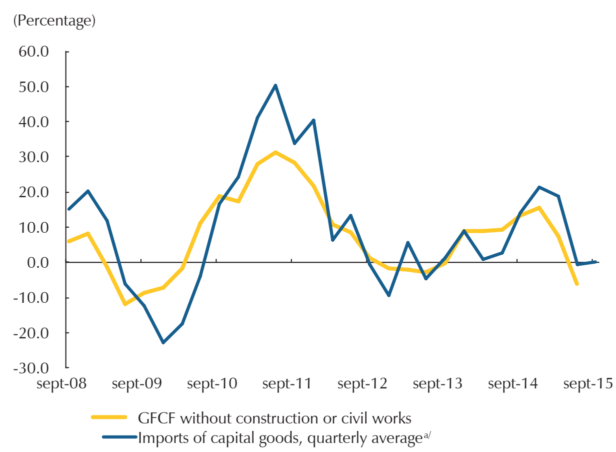
tween July and September would have continued at the rates observed during the first half of the year.

As for investment, a number of indicators suggest the third quarter would have seen a further decline in investment in machinery and transport equipment, although not as profound as the decline witnessed during the second quarter. In principle, imports of capital goods in dollars dropped significantly in July and August, somewhat more than during the second quarter. However, the international prices indexes for capital goods (in dollars) show a recent downward trend, which helps to alleviate the drop in real terms (Graph 29).

Similar conclusions can be drawn from the results of the EMEE conducted by *Banco de la República*. The balance of medium-term investment expectations improved slightly in August compared to the levels witnessed in the second quarter (Graph 30). This suggests gross fixed capital formation, other than GFCF in the construction of buildings and civil works, would have contracted somewhat less than it did between April and June.

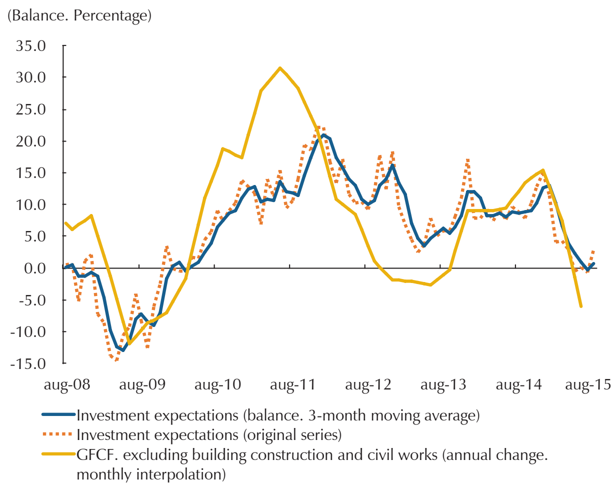
With respect to foreign trade, the figures published by DANE on exports in dollars up to Au-

Graph 29
IImports of Capital Goods for Industry and Transport Equipment (Real) and GFCF Excluding Construction of Buildings and Civil Works
(Annual change)




Observation: The third-quarter figure is for July-August.
a / Figures expressed in real terms, as calculated by *Banco de la República*.
Sources: DANE (national and foreign trade accounts); Calculations by *Banco de la República*

Graph 30
Expectations for Investment and GFCF, Excluding Building Construction and Civil Works
(Balance, percentage)



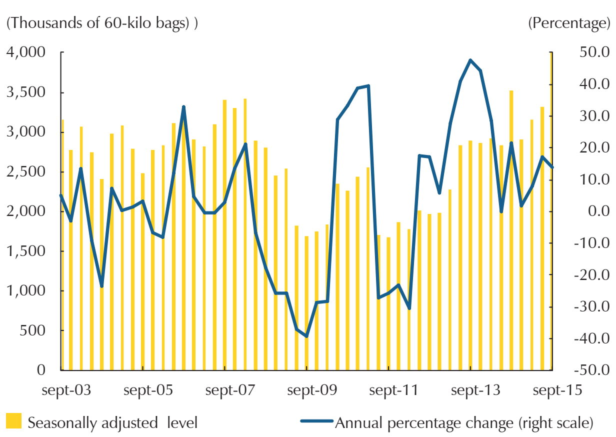

Sources: DANE; Calculations by *Banco de la República*

gust suggest this GDP item would have declined in real terms, due to poor foreign sales of mining products and weaker external demand, as mentioned earlier. In the case of imports, the same source suggests they would have contracted, in real terms, but less so. This situation is consistent with the forecast for investment in machinery and transport equipment, as well as for consumer durables and semi-durables. It also is important to point out that the projected decline in this category would be influenced by a high base of comparison in the same quarter of 2014. Even so, an increase in levels is expected compared to those observed during the second quarter.

On the supply side, the indicators at hand suggest mixed performance in economic activity for the third quarter of 2015. However, they also indicate the pace of GDP growth will remain close to what it was in the first half of the year. The most favorable news comes from the coffee sector and retail, and from the momentum in energy demand and manufacturing. However, performance in the mining sector was less satisfactory.

According to the National Federation of Coffee Growers, coffee production continued to perform well and increased 14.7% annually between July and September 2015, following an expansion of 17.8% in the second quarter (Graph 31). Year-to-date production came to 10,031 thousand 60-kilo sacks, which meant an increase of 13.5% over the same period last year. Cattle slaughtering recovered, increasing 1.1% annually in July-August after having contracted 1.2% in the second quarter.

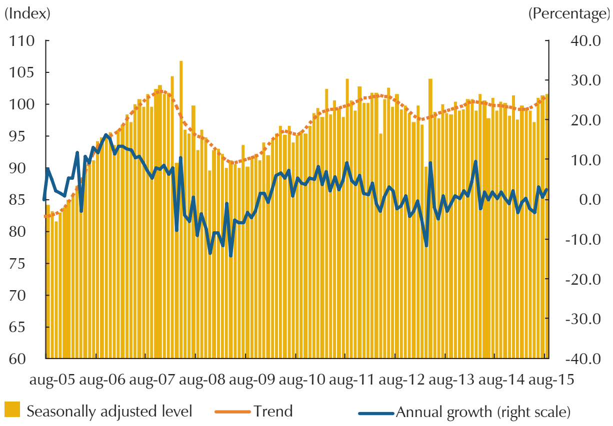
Graph 31
Coffee Production
(Quarterly and annual growth)




Sources: Federación Nacional de Cafeteros; Calculations by *Banco de la República*

Public utilities, financial services, and retail are other sectors that also showed favorable performance. The annual increase in energy demand went from 3.3% in the second quarter to 4.8% in the third. As for the financial sector, lending performed similar as it did in the first half of the year; therefore, its contribution to growth in total GDP is expected to continue, since it accounts for a large share. Specifically, the figures up to September show consumer loans and household mortgages increased 12.49% and 14.23% annually, in nominal terms. Retail has exhibited important momentum, and continues to contribute to job creation. Therefore, according to DANE, retail was

Graph 32
Total Real Industrial Production
(Seasonally adjusted series, trend component and annual growth)

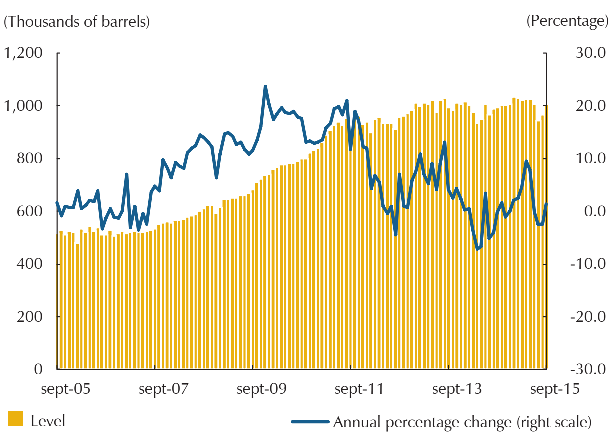



Sources: DANE; Calculations by *Banco de la República*.

responsible for an annual increase of nearly 4.6% in the number of employed personnel, including an increase of 5.2% in permanent employees.

With figures to August, industry surprised in a positive way by posting more of a recovery than was anticipated in the baseline forecast in the Inflation Report for the last quarter. According to DANE's Monthly Manufacturing Survey (EMM), the sector as a whole grew 2.6% that month and 2.8% if oil refining is excluded. Nevertheless, during the year to date, industry overall was down 0.4% and would have grown by only 0.6% if oil refining is excluded. The trend component of both series showed a significant increase and suggests the recovery could continue throughout the remainder of the year (Graph 32). On the other hand, with the data from the Fedesarrollo business opinion survey in September, indicators of orders and inventory for industry improved slightly from the first quarter. However, production expectations three months ahead are less encouraging and have been highly volatile. Moreover, according to the ANDI Business Opinion Survey, utilization of installed capacity is at levels slightly below its historical average and the business climate has improved marginally. This situation could be reversed with the reopening of Reficar, which is scheduled for December 2015.

Graph 33
Oil Production
(Level and annual growth)




Sources: Agencia Nacional de Hidrocarburos (ANH); Calculations by *Banco de la República*

The figures released by the Colombian Mining Association[9] show that mining output during the year to August came to 54.7 million tons. This implies an annual reduction of 1.6%. However, production rose 5.8% in July-August over the same period in 2014. This contrasts with figures on export volumes produced by DANE, which show foreign sales of these products down 24.9% in July-August and 10.8% during the year to date. On the other hand, oil production in the third quarter was affected by attacks on oil infrastructure; the result was production under one million barrels per day (972.7 mbd versus 1,019 a quarter ago) and an annual drop of 1.1%, following an increase of 5.8% reported between April and June (Graph 33).

9 This association consolidates the figures for 92% of the companies in the sector.

In light of all these factors, *Banco de la República's* technical staff anticipates annual GDP growth during the third quarter would have been somewhere between 2.3% and 3.5%, with a 2.9% being the most likely figure. The amplitude of the forecast range is due to the uncertainty associated with items such as government consumption and investment in civil works. There are no indicators to shed light on their performance during the quarter.

# III. Recent Developments in Inflation

**Annual consumer inflation continued to rise during the third** quarter of 2015, going far beyond the forecasts outlined in the previous edition of this report.

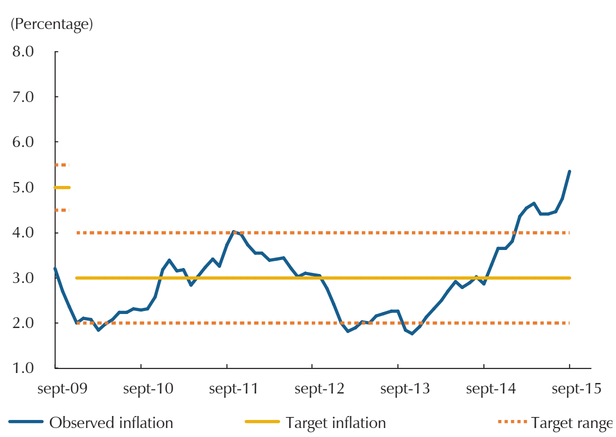
**The average for core inflation indicators increased as well.** By September, it was well above the ceiling of the target range set by the Board of *Banco de la República*.

**Upward pressures from accumulated depreciation of the peso and** the supply shock associated with the presence and intensification of *El Niño* weather phenomenon were more pronounced in recent months.

**It is likely these shocks, temporary in principle, are** having an effect on prices other than those of tradable goods and food, through higher inflation expectations and the activation of indexation mechanisms.

Annual consumer inflation resumed an upward trend in the third quarter of 2015, after changing very little between May and July. The recent increase has been more pronounced than in the past and was not fully anticipated in the previous edition of this report or by market analysts. The September figure was 5.35%, the highest since May 2009. Accordingly, the indicator rounds out one year above the 3.0% target and eight months above the ceiling of the target range (2.0% to 4.0%) (Graph 34 and Table 6).

Graph 34
Total Consumer Inflation




Sources: DANE and *Banco de la República*

The increase in the CPI between January and September came to 4.76%, which is high compared with the print for the same period last year (3.08%). Moreover, taking the price shocks into account, it is very unlikely the remainder of the year will see negative monthly variations in the CPI that bring inflation closer to the target.

Table 6
Consumer Inflation Indicators
(At September 2015)

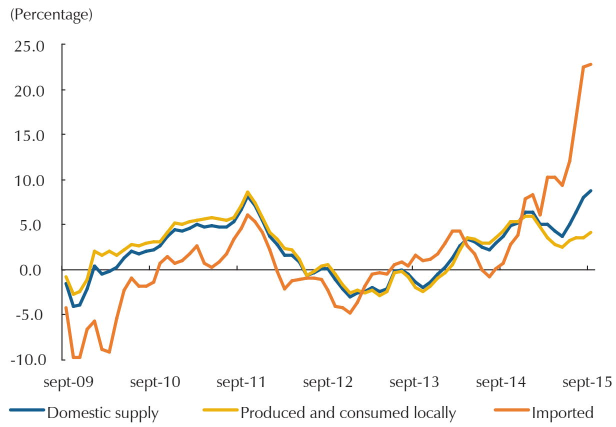
| Description | Dec-14 | Mar-15 | Jun-15 | Jul-15 | Aug-15 | Sep-15 |
|---|---|---|---|---|---|---|
| **Total** | **3.66** | **4.56** | **4.42** | **4.46** | **4.74** | **5.35** |
| **Excluding food** | **3.26** | **3.46** | **3.72** | **3.98** | **4.20** | **4.58** |
| Non-tradables | 2.03 | 3.46 | 4.17 | 4.69 | 5.23 | 5.90 |
| No transables | 3.38 | 3.56 | 3.98 | 3.95 | 4.02 | 4.27 |
| Regulated items | 4.84 | 3.25 | 2.55 | 2.99 | 3.08 | 3.30 |
| | | | | | | |
| **Food** | **4.69** | **7.37** | **6.20** | **5.67** | **6.11** | **7.30** |
| Perishables | 16.74 | 21.57 | 10.73 | 7.99 | 9.86 | 14.95 |
| Processed | 2.54 | 5.99 | 6.00 | 5.71 | 6.06 | 6.71 |
| Eating out items | 3.51 | 3.59 | 4.45 | 4.51 | 4.45 | 4.73 |
| | | | | | | |
| **Core inflation indicators** | | | | | | |
| Non-food inflation | 3.26 | 3.46 | 3.72 | 3.98 | 4.20 | 4.58 |
| Core 20 | 3.42 | 3.70 | 4.24 | 4.20 | 4.28 | 4.73 |
| CPI excluding perishable food, fuel and utilities | 2.76 | 3.95 | 4.54 | 4.64 | 4.83 | 5.28 |
| Inflation excluding food and regulated items | 2.81 | 3.52 | 4.06 | 4.26 | 4.53 | 4.95 |
| | 2.93 | 3.59 | 4.00 | 4.17 | 4.41 | 4.82 |
| **Average of all the indicators** | **3.06** | **3.65** | **4.14** | **4.27** | **4.46** | **4.89** |

Sources: DANE; Calculations by *Banco de la República*.

The acceleration in annual inflation between December 2014 and September 2015 is largely attributable to shocks in agricultural supply, which would be affected by the early occurrence of *El Niño* weather phenomenon and sharp depreciation of the peso against the dollar and other currencies in the past 18 months. Both these factors triggered increases in prices for food and tradable goods and services (excluding food and regulated items), which were more pronounced in recent months.

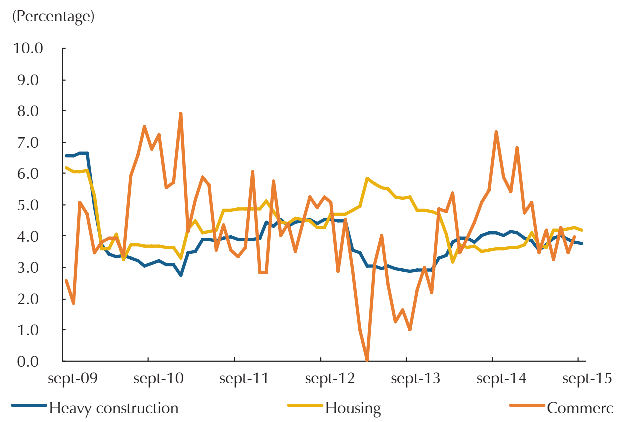
Additionally, increases in non-wage costs, also caused by the aforementioned phenomena, along with higher inflation expectations and the activation of indexing mechanisms, would explain much of the build-up in the annual change in the non-tradable CPI, which also is contributing to the rise in inflation since the beginning of the year, including the third quarter. On the other hand, the reduction in consumer fuel prices and the low adjustments in electricity rates, even now, have offset the sharp hikes in other regulated items in the CPI, preventing this basket from becoming a major source of inflationary pressure so far this year. However, this situation could change in the fourth quarter, as will be mentioned in Chapter IV.

Graph 35
PPI, by Origin of goods
(Annual change)




Source: DANE.

Graph 36
Nominal Wages
(Annual percentage change)




Sources: DANE; Calculations by *Banco de la República*.

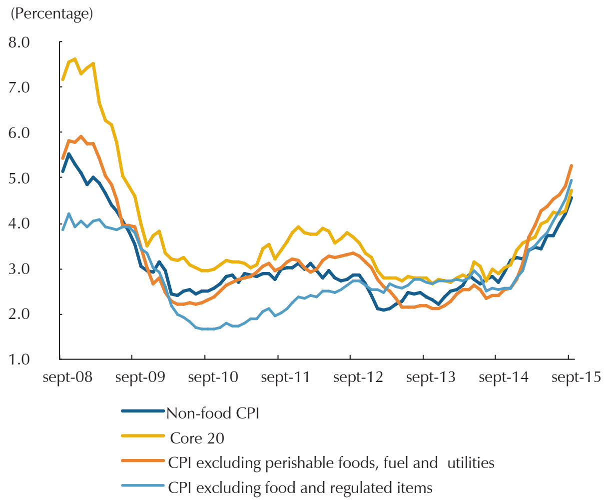
Non-wage costs have increased at increasing rates, as suggested by the annual change in the PPI for domestic supply, which approximates those costs. The variation was 8.7% by September, which is higher compared to the figure last June (5.0%) (Graph 35). Upward pressure continued as well, particularly from peso depreciation, but more recently from supply constraints in agricultural products. Therefore, it was the imported component of the PPI that contributed the most to the total increase in the PPI during the third quarter, with an annual variation going from 12.1% in June to 22.4% in September. The annual change in the local component went from 3.2% in June to 4.2% in September, with increases in manufactured goods (including sugar), and those of agricultural origin (mainly vegetables). In contrast, the PPI for mining continued to show negative annual variations (closing at -5.5% in September versus -3.5% in June); these are associated with the drop in international fuel prices.

Wage costs do not appear to have pushed up prices in recent months. By the end of the third quarter of 2015, wage adjustments were still compatible with the target range for inflation. In September, those for housing remained stable at 4.2%, compared to the hikes observed in June, but increased slightly from last March and December. Those in retail had risen 4.0% a year by August, which is less than the adjustment observed in June and December. The situation with salaries in the heavy construction industry was similar, with an annual increase of 3.8% by September (Graph 36). Overall, the recent momentum in wage adjustments would not jeopardize compliance with the inflation target set by *Banco de la República* for 2015.

## A. CORE INFLATION

The average of the four core inflation indicators was 4.89% by September, completing one year of uninterrupted expansion. This is the highest level observed since April 2009 (4.98%). All the indicators surpassed the target range for inflation and all increased compared to June, with the CPI excluding staple foods, fuel, and utilities rising the most (5.28% vs. 4.54% in June). The lowest increase was in the non-food CPI; it came to 4.58% in September versus 3.72% in June (Table 6, Graph 37).

Graph 37
Core Inflation Indicators



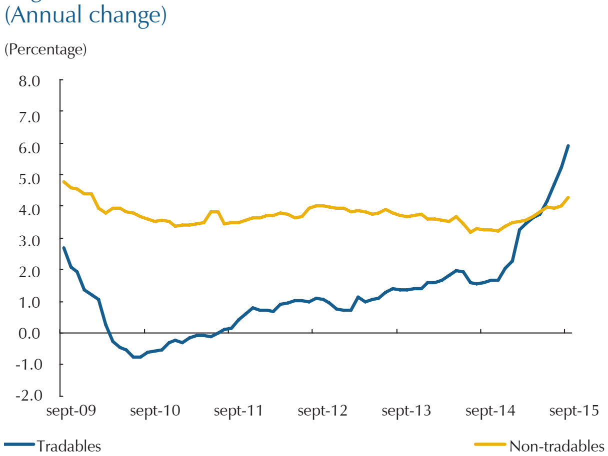

Sources: DANE; Calculations by *Banco de la República*.

As with total inflation, most of the increase in core inflation can be attributed to accumulated depreciation of the peso. Added to this are the hikes in non-labor costs outlined above. Demand, in contrast, would not have brought upward pressure, given its slowdown in recent quarters. Accordingly, the output gap for the first half of 2015 was estimated as being near zero and would have begun to enter negative terrain towards the second half of the year.

The yearly changes in the three major sub-baskets that make up the non-food CPI trended upward during the third quarter (Table 6). The tradable CPI excluding food and regulated prices has increased since August 2014 and ended the third quarter of 2015 with a 5.9% annual increase, which is more than in June (4.2%) and in December of last year (2, 0%) (Table 6, Graph 38).

This figure was considerably higher than the forecast outlined in the last Inflation Report, partly because depreciation of the peso in recent months was higher than expected. However, the possibility that movement in the exchange rate is being passed through to consumer prices faster than contemplated in *Banco de la República's* models cannot be ruled out. Furthermore, other factors such as the added impact of rising inflation expectations and more indexation are likely at play and explain the forecast errors. The exchange rate accumulated an increase of 65.4% against the dollar between July 2014 and September 2015, while the cumulative price increase in the tradable CPI excluding food and regulated items was 6.1% during the same period. In the third quarter, the increases in this sub-basket were again widespread, particularly for vehicles and certain appliances and toiletries, which rose sharply and ended September with annual changes above 8.0%.

Graph 38
CPI for Tradables and Non-tradables Excluding Food and Regulated Items
(Annual change)

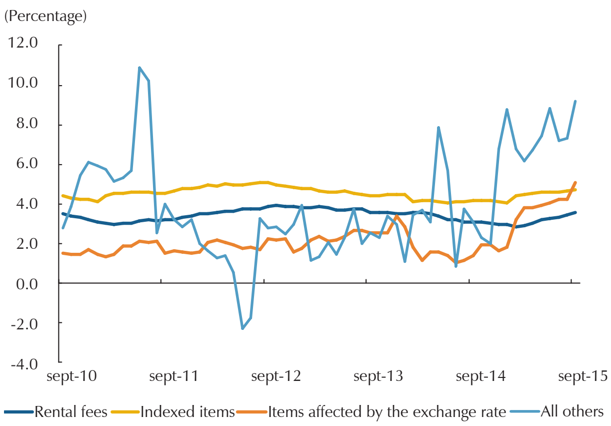



Sources: DANE; Calculations by *Banco de la República*.

As with tradables, the annual non-tradable CPI excluding food and regulated items has risen throughout the year, although at a much slower pace. While the annual increase was 3.4% by December, it was 4.0% in June and 4.3% in September (Graph 38). In principle, this hike has occurred in the absence of additional pressure from demand, given the slowdown in growth in demand and the existence of an output gap near zero for most of the year to date, as mentioned earlier.

Consequently, factors other than demand pressures would explain the upward trend in the annual CPI for non-tradables. One of them is the depreciation of the peso, which had little direct or indirect impact on these prices in the past (via costs), but may have gained importance, given the fact that the weights in the DANE consumer basket were updated a few years ago and the Colombian economy has become more exposed to the global economy (see Box 2 in the June 2015 edition of the Inflation Report). Accordingly, the annual change in those non-tradables most directly affected by the exchange rate went from 4.1% in June to 5.1% in September.

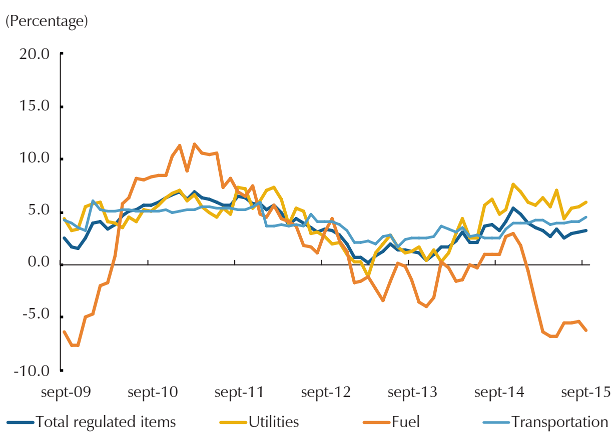
Graph 39
CPI for Non-tradables Excluding Food and Regulated Items
(Annual change)




Sources: DANE; Calculations by *Banco de la República*.

Indexation to past inflation is another upward factor in the non-tradable CPI excluding food and regulated items (Figure 39), and would be gaining prominence because of its increase. This phenomenon would be captured mainly by prices for rent and certain services. The annual increase in rent went from 3.3% in June to 3.6% in September, sharply boosting the change in the aggregate due to the considerable weight it carries in this sub-basket (61.0%). The upward pressures on non-tradables also might be due to the temporary shocks that continue to occur, particularly the one-time but significant increase in soccer ticket prices.

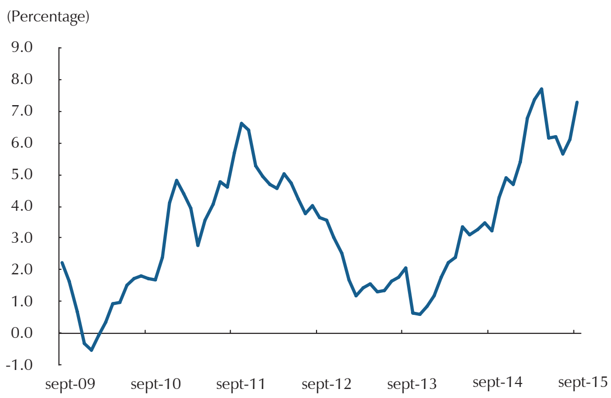
Graph 40
CPI for Regulated Items and Components Thereof
(Annual change)




Sources: DANE; Calculations by *Banco de la República*.

The regulated CPI also helped to raise annual consumer inflation during the third quarter. Lower fuel prices earlier in the year caused this sub-basket to exert downward pressure on the overall CPI during the first six months (Figure 40). However, this influence waned in the third quarter and upward pressure from the sharp price hikes for residential natural gas (with an annual increase of 11.1% by June and 22.0% in September) prevailed, as did - to a lesser extent – the change in rates charged for water and public transportation. Annual inflation in the latter went from 4.0% in June to 4.6% in September, probably in response to higher operating costs (other than fuel costs), given the strong dollar since last year.

Graph 41
Food CPI
(Annual change)




Sources: DANE; Calculations by *Banco de la República*.

## B. FOOD INFLATION

After a decline in the second quarter, the annual change in the food CPI rose considerably during the third, beating the forecasts outlined in the last Inflation Report. The level by September was 7.3%, which is 110 bps higher than the rate observed in June and similar to the figure on record for March, when this basket was affected by price hikes for certain perishable foods and rice (Graph 41).

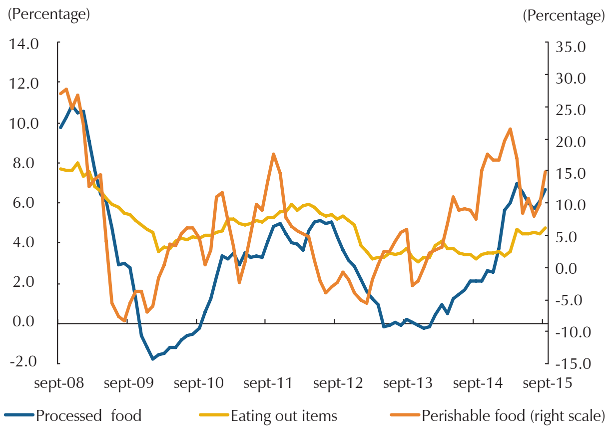
The surge in this indicator in recent months can be attributed to the effects caused by the emergence and intensification of *El Niño* weather phenomenon. Its classification as severe became much more likely in recent months, according to meteorological agencies around the world. Added to this is the pressure exerted by accumulated depreciation of the peso on prices for foods with a high imported component.

As for the different sub-baskets, processed foods, which usually are affected the most by peso depreciation, saw annual hikes that went from 6.0% in June to 6.7% in September. There are a number of price increases in this group that can be explained by the higher exchange rate, particularly those for fats and oils, cereals, sugar and chicken. In contrast, lower international prices for cereals and oils compared to last year and the recent drop in these prices have prevented the pass-through of peso depreciation to consumer prices from being even higher.

Annual inflation in the perishable food group went from 10.7% in June to 15.0% in September. In fact, it was the component that contributed the most to the annual change in food prices. This segment of the CPI has been affected by less rain throughout much of Colombia due to *El Niño* weather phenomenon, which would have lowered productivity in the agricultural sector. However, it also is possible that fears of the effects of *El Niño* have discouraged or delayed the planting crops and continue to do so, all of which tends to raise prices. The items hardest hit in the last three months up to September, judging from their annual variations, were vegetables, tubers and fruits.

Lastly, annual inflation in prices for meals outside the home increased to 4.7% in September, after being relatively stable at around 4.5% between May and August. These items likely have begun to incorporate the recent price hikes for food, rent and utilities (especially gas) (Graph 42).

Graph 42
Food CPI, by Groups
(Annual change)




Sources: DANE; Calculations by *Banco de la República*.

# IV. Medium-Term Forecasts

**The impact of the drop in terms of trade** on growth in 2015 would be less than expected. More of an adjustment in expenditure is anticipated as of 2016.

**As a result, *Banco de la República*'s technical staff** revised the GDP growth forecast slightly upward for this year, but downward for 2016.

**A good portion of the upside risks to inflation** identified in previous reports would be occurring.

**Consumer price inflation would remain above the ceiling of** the long-term target range for several quarters and converge towards 3% more slowly than was forecast in the June report.

## A. ECONOMIC GROWTH FOR THE REST OF 2015 AND IN 2016

The data at hand suggest the adjustment of the real economic activity would be more gradual and prolonged than was forecast last quarter. This would occur in an environment where external financing is still widely available and disposable income in the private sector has yet be hard hit by the drop in the terms of trade, which is why spending in the economy has not been seriously affected. Consequently, GDP growth for all of 2015, which would be less than the actual figure for 2014, was revised slightly upward compared to the forecast in the last Inflation Report. However, the outlook for 2016 appears to be less promising than was presented in previous editions of this report. According to estimates by the technical staff at *Banco de la República*, the Colombian economy next year will have to adjust to less favorable international conditions, with less optimistic commodity prices and external financing than anticipated. In a scenario marked by recent adjustments in the stance of Colombia's monetary policy, all this would have more of an impact on the behavior of real domestic demand than was contemplated earlier. Consequently, the forecast for GDP growth in 2016 was revised downward, as will be explained later.

*In this report, GDP growth was revised upward slightly for 2015, but downward for 2016.*

*The Colombian economy is expected to grow by about 3.0% in 2015 and 2016.*

In this report, the new data available for 2015 permits a narrower forecast range for the current year, with the floor and ceiling at 2.4% and 3.4%, in that order, but with the most likely figure being around 3.0%. A quarter ago, the range was between 1.8% and 3.4%, and the most probable point was 2.8%. The new forecast for 2015 is presented in a context where GDP results for the second quarter were better than expected. The preliminary figures for the third quarter also suggest somewhat more momentum in economic activity than was forecast in the past.

The upward revision of the forecast for GDP growth in 2015 is consistent with a scenario where the shocks to terms of trade described in previous chapters would have less of an impact on real activity than was anticipated in the last quarterly report. On this occasion, the risk of a more pronounced slowdown in economic growth has waned, at least for the remainder of the year, even though the growth forecasts for our trading partners, for international prices on major export commodities and for the production of various mining products were revised downward (as indicated in Chapter I of the report).

As mentioned in Chapter I of this report, the 2015 forecast for the current account deficit as a proportion of GDP increased due to these changes. The larger deficit is associated with more financing for the expansion in domestic demand than was anticipated a quarter ago; this is consistent with the latest figures on capital inflows. The latter would be in the form of additional resources of portfolio investment, which would be channeled to the real sector, through the financial system, and would allow the adjustment in consumption and investment to be softer than anticipated in the previous edition of the Inflation Report.

Also, and as explained in the second section of Chapter II, the latest figures on imports in dollars show they are trending downward. This allows for a slower real adjustment in imports than was expected a quarter ago and is, therefore, consistent with more demand for consumer goods and capital from abroad. Accordingly, the drop in the terms of trade during 2015 would have been greater if the sharp decline in prices for exported goods had not been partly offset by the contraction in imports prices, especially during the second half of the year. Moreover, disposable household income has benefited from a sizable increase in current transfers (net) in the form of workers' remittances from abroad. The value of these remittances, in pesos, is even greater thanks to accumulated depreciation of the Colombian currency against the US dollar.

*The drop in export prices would be offset by a decline in import prices, generating less of an impact on terms of trade in 2015.*

These events suggest the impact of the shocks to terms of trade had on real activity would be felt more strongly by government income than by pri-

*Growth in government consumption is expected to be slightly less during the second half of 2015 compared to the average increase on record for the first part of the year.*

vate income. The actual performance in government consumption during the first half of the year reflects this. The slowdown in this item has been evident throughout the year, and somewhat smaller increases than those registered on average during the first and second quarters are anticipated for the remainder of 2015. This would mean less of an expansion in this GDP item for the aggregate in 2015 than was observed over the last decade.

In the case of private consumption, such a profound slowdown was neither observed nor expected in the second half of the year, although the fourth quarter may witness more lackluster performance than in the third. The last edition of this report contemplated a scenario where the adjustment in household spending was due to less momentum in the consumption of durable and semi-durable goods, partly because of the effect exchange rate depreciation would have on the purchasing power of household income measured in dollars. However, retail sales of these goods so far this year do not suggest the adjustment is occurring as expected. Employment had not deteriorated by the third quarter, although it was growing more slowly. Even so, that report forecast further deterioration in job market conditions during the coming quarters.

In the case of gross capital formation, adjustments were expected to be concentrated on investment in machinery and equipment, transport apparatus and, above all, investment in mining and oil. However, the figures so far this year on imports of capital goods for industry and transportation equipment suggest this GDP category could perform less negatively in all of 2015. As explained earlier, the increase in capital flows that have entered the country this year would be meeting the financing needs required by this type of spending. Likewise and despite the high exchange rate, international prices for the capital goods Colombia imports also show a recent downward trend. Hence, the demand for these goods could be reacting better than was forecast a quarter ago.

*Investment in construction, both civil works and buildings, is expected to remain dynamic during the coming quarters.*

Investment in the construction of buildings and civil works is another factor. In this case, the forecast is for growth in both these items during the remainder of 2015 at rates above those for the other GDP components. This performance would be similar to the figures on record for the first half of the year. An important contribution to the construction of non-residential building projects is anticipated, although interest rate subsidies and the government's other low-income housing programs are expected to continue to contribute to growth in the residential sector. In the case of civil works, there is still the prospect of this sector contributing positively to economic growth, although less so than in 2014. This suggests a good degree of budget spending by regional and local administrations, as well as a good investment performance in a number of infrastructure projects (airports and roads). In both cases, the resources invested would be those earmarked al-

*Industry is expected to see some recovery at the end of 2015 and in 2016.*

ready by the public sector, which is why the real adjustments in these items likely would transfer into 2016 and thereafter.

On the supply side, the sectors that would contribute most to GDP growth in 2015 would be construction, retail, and financial services. Some recovery in industry is expected towards the end of 2015, with production increasing at higher rates than in 2014. The agricultural sector is expected to recover, backed by good coffee production. Some slowdowns are expected in the other sectors, especially for non-tradable activities.

Also, as already mentioned, local government spending on infrastructure and the boost to non-residential building construction remains one of the engines of economic growth in Colombia. Financial services would still contribute actively to expansion of the country's economy, due to their major share in the sector (19.6%) and to portfolio growth, which would continue to perform well despite a bit of a slowdown. Moreover, real interest rates, despite the recent hikes in the benchmark rate, would remain relatively low compared to their historical averages. This, in turn, would help the performance of lending. Finally, despite actual devaluation, the drop in confidence and the slowdown in domestic demand, retail has surprisingly performed well in the second half of the year. Hence, it should close out 2015 with a positive balance.

In addition, the technical staff at *Banco de la República* changed the forecast range for 2016 and the most likely figure for GDP growth. On this occasion, the range is between 1.5% and 4.0%, while the most likely figure is 3.0%. In the previous report, the values were between 2.0% and 4.0%, with 3.4% being the most likely figure. The extent of the range is evidence of the uncertainty surrounding the forecasts for growth of the Colombian economy next year, while the bias is related to the perceived increase in downside risks to economic performance in 2016.

As for the international context and according to the section on forecasts in Chapter I, the most likely balance-of-payments scenario, in principle, is a recovery in external demand compared to the expectations for 2015 (although less than was forecast three months ago). This would be due mainly to better performance by the United States and by some of our trading partners in the region. Also, prices for the commodities exported by Colombia would recover slightly with respect to the levels at which they would close out 2015. Consequently, the latter assumes a context for the coming year with no additional reductions in terms of trade.

*There is a great deal of uncertainty and downward biases surrounding GDP growth in 2016.*

However, the balance-of-payments forecasts outlined in Chapter I also mean less external financing in 2016. Rate hikes by the Fed likely will make

The rise in interest rates by the Fed could increase the cost or limit international financing for the Colombian economy.

international financing for the Colombian economy more expensive or limit it. If so, the current account deficit would be less than at the end of this year.

Moreover, as explained already, the downward revision of the forecast for growth next year is consistent with a scenario where the actual impact (direct and indirect) on private demand and disposable household income from the shock to terms of trade registered in the second half of 2014 would continue to be evident in 2016, although more clearly. Domestic demand would not perform much differently from the situation in 2015. However, the contribution from each of its components would change. In principle, growth in government consumption is expected to be low, similar to what would be experienced in 2015, while the adjustments in private consumption would be moderate. This is because consumer inflation will remain relatively high throughout most of 2016 (as illustrated in Section B of this chapter), affecting the purchasing power of household income, and the labor market would be less dynamic in terms of job creation. Furthermore, an increase in market interest rates is expected, given the recent changes in *Banco de la República's* policy stance. This, in turn, would slow the growth in lending.

The forecast for investment is surrounded by considerable uncertainty. If the economy's export sectors perform better, the expectation is that private sector investment will help to expand this item. A low base of comparison in 2015 would help in that respect. In addition, slightly more income from FDI is anticipated for 2016 compared to the forecast for 2015. This increase in capital flows would be directed not so much towards the oil sector (despite the slight recovery in prices expected for crude) as to other sectors. For example, capital to finance the early stages of infrastructure projects that are part of the so-called fourth-generation concession program (4G) is likely to enter the country in 2016. Accordingly, the good momentum in the construction of civil works is expected to continue, although less so than what would be observed this year. Similar performance is forecast for building construction. The resources from the second version of the Plan to Promote Employment and Productivity (PIPE 2.0) would allow for decent growth in investment in low-income housing, although less than was forecast for 2015.

Furthermore, the startup of operations at the Cartagena Refinery (Reficar) would help to increase exports of petroleum products, while substituting certain fuel imports. This would somewhat lower the trade deficit observed in the national accounts throughout the decade.

Initiation of operations at Reficar would help to increase exports of oil products and substitute fuel imports.

As for the different branches of economic activity, 2016 is forecast to see a more balanced growth, similar to what is anticipated for 2015, with actual and expected devaluation in the central scenarios possibly generating a recovery in the tradable production branches. Construction would continue to

*The baseline forecast for 2016 points to more balanced sector growth in which observed and forecast devaluation generate a recovery in tradable sectors.*

advance economic growth. In particular, start-up of the 4G concession contracts awarded so far will maintain considerable momentum in civil works construction, and building construction is expected to perform favorably due to the impact the PIPE 2.0 programs are likely to have on home building, as discussed in previous sections.

With respect to the mining sector, this report contemplates a recovery in coal production during 2016, following the cutbacks witnessed in the first half of 2015. However, growth in this branch of the economy would be moderate, burdened by the effects of problems with law and order and transportation that complicated its production chain in past years. Mining companies also would face an environment where coal prices would still be relatively low. On the other hand, the assumption for oil production in 2016 is still at around 1,000,000 barrels per day, on average, as anticipated three months ago. Accordingly, the years ahead are expected to see moderate growth that is a long ways from the double-digit rates observed during the mining boom at the end of the last decade.

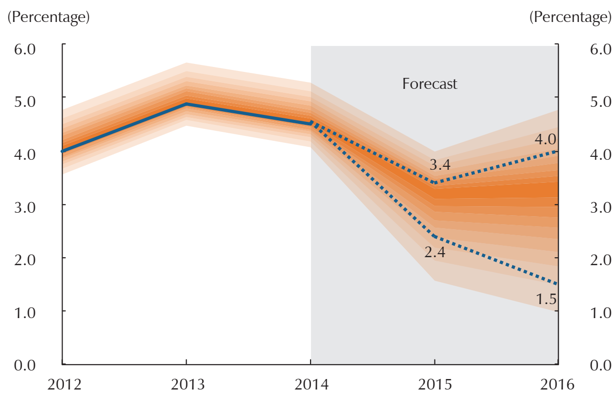
As for the industry, the outlook for 2016 signals a recovery based on a variety of factors, such as investment efforts in past years, the diversification of products and export markets, and the effect of recent peso depreciation on competitiveness. It should be noted that the reopening of Reficar towards the end of 2015 and its operation at full capacity by March 2016 imply a major leap in the production of petroleum derivatives, which account for around 12% of industrial GDP. In the central forecast, the technical staff estimates the reopening of Reficar would contribute about 5.2 pp to growth in industrial GDP and 0.6 pp to total GDP in 2016.

*Although the agricultural sector is expected to see moderate growth, downside risks exist due to the impact that El Niño could have on the supply of agricultural products and on the slaughter of livestock during the fourth quarter of 2015 and the first half of 2016.*

Considerable momentum is expected in the agricultural sector, although less so than in 2014 and not as much as anticipated for 2015. Productivity would continue to fuel the sector in an important way, thanks to the renovation in coffee plantations and investments made in past years. Although moderate growth is forecast for all other agricultural products and for the group comprised of animals and animal products, there are downside risks due to the impact *El Niño* might have on agricultural supply and the slaughter of cattle.

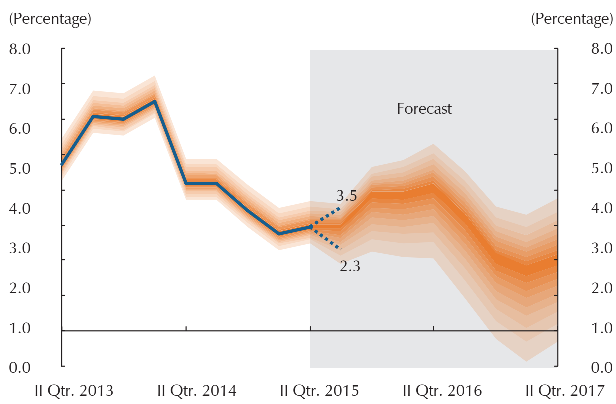
Accordingly, despite the increase in the baseline forecast for 2015 and the reduction for 2016 compared to the forecast outlined in the last quarterly report, the risk balance is tilted to the downside, given the high degree of uncertainty in the international environment and the second- round effects on income from shocks associated with the plunge in oil prices in previous quarters, since volatility remains high (Graph 43 and 44).

Graph 43
Fan Chart of Annual GDP Growth




Sources: DANE; Calculations by *Banco de la República*.

Graph 44
Fan Chart of Annual Growth in Quarterly GDP




Sources: DANE; Calculations by *Banco de la República*.

The main downside risks are associated with less government consumption and investment, particularly if civil works prove not to be as dynamic as anticipated in the central forecast, which assumes the 4G concession projects will have an important impact, and if our trading partners demonstrate less growth, which could affect Colombia's non-traditional exports (Table 7).

Based on the figure for actual growth in 2014 and the projections for 2015 and 2016, the estimation of the output gap suggests it would have been positive in 2014 and would be near zero in 2015 and negative in 2016. For 2015, the models show a somewhat higher value than the one presented in the June edition of the Inflation Report. The likelihood of this indicator being negative is 70% for 2015 and 89% for 2016 (Graph 45).

The increase in the estimated gap for 2015 is explained partly by less potential for GDP growth. The latter has been affected by the negative shock to terms of trade, mainly through reduced investment in productive capital and less growth anticipated for 2016.

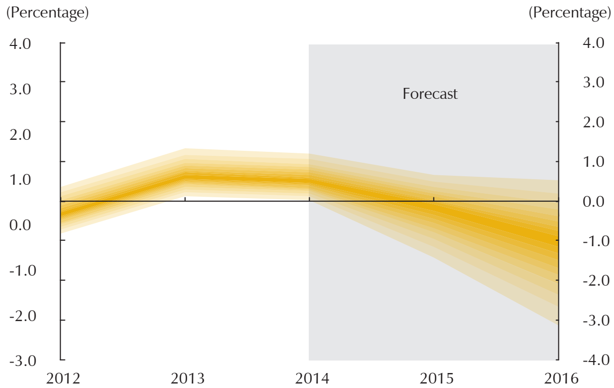
With regard to the labor market, the models suggest the unemployment rate (UR) in 2015 would

Table 7
Probability Ranges in the Fan Chart of Annual GDP Growth
(Percentage)

| Range | 2015 | 2016 |
|---|---|---|
| < 3.0 | 56.0 | 50.9 |
| 3.0-4.0 | 41.0 | 32.4 |
| 4.0-5.0 | 2.9 | 14.5 |
| 5.0-6.0 | 0.0 | 2.0 |
| 6.0-7.0 | 0.0 | 0.1 |
| > 7.0 | 0.0 | 0.0 |
| Between 2 & 4 | 82.0 | 61.5 |
| Between 1.5 & 3 | 50.2 | 44.6 |

Source: Calculations by *Banco de la República*

Graph 45
Fan Chart of the Output Gap




Sources: DANE; Calculations by *Banco de la República*.

be very close to the level consistent with stable inflation (NAIRU). However, the reduced prospects for economic growth have increased the risk that unemployment will rise and be above NAIRU towards 2016.

In short, the results for the output gap and NAIRU suggest some inflationary pressures that have been low so far in 2015, and would remain so during 2016.

## B. INFLATION

### 1. Forecasts

The Colombian economy was confronted by a variety of shocks in the last three months. Although they were contemplated in the risk balance outlined in previous reports, they were not considered in the central forecasts for inflation. To begin with, and as noted in various sections of this document, the price of oil fell sharply, above and beyond the plunge observed in previous quarters. This led to a downward revision in the forecasts for the remainder of the year and for 2016. A similar situation occurred with the prices of other raw materials Colombia exports.

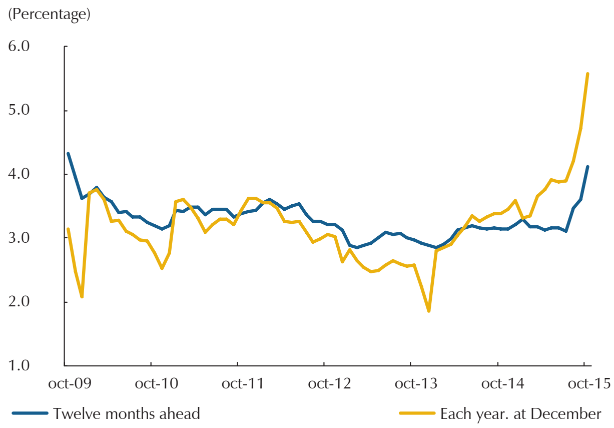
On the other hand, our major trading partners, especially the emerging market economies, grew less than expected, lowering the projections for growth in the relevant external demand for the Colombian economy. This occurred in the midst of an increase in volatility on international financial markets, for the reasons that were discussed in Chapter I of this report, coupled with significant depreciation of the Colombian peso against the dollar and other currencies, which was not anticipated in past editions of the Inflation Report.

Meanwhile, on the domestic front, the economy did better in the second quarter than expected, mainly thanks to satisfactory performance by private consumption. In addition, the figures available for the third quarter suggest this pace would continue throughout the year. Therefore, the forecasts for growth for the remainder of 2015 were raised in this report, as explained in the first section of this chapter.

*The risk that inflation expectations might unanchor from the target has increased.*

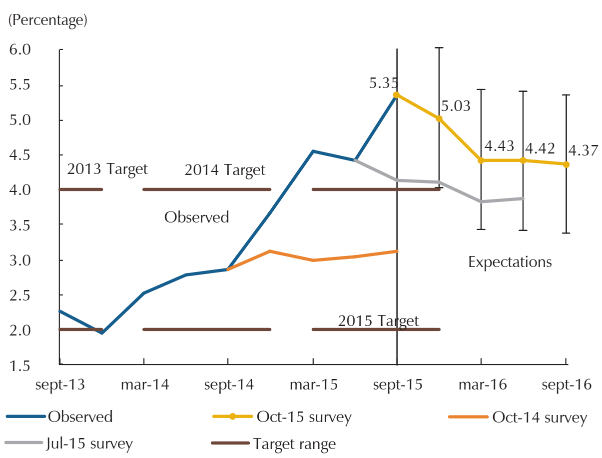
So, the upside risks to inflation in the second half of 2015 that were identified in the June report largely materialized in the last three months. These circumstances, coupled with the sharp price hikes observed in September,

Graph 46
Annual Inflation Forecasts by Banks and Brokerage Firms




Sources: *Banco de la República*.

Graph 47
Observed Inflation and Inflation Expectations
(At three, six, nine and twelve months)
(Annual inflation)




Source: *Banco de la República*.

placed inflation expectations above the ceiling of the target range, thus increasing the risk that they will become unanchored.

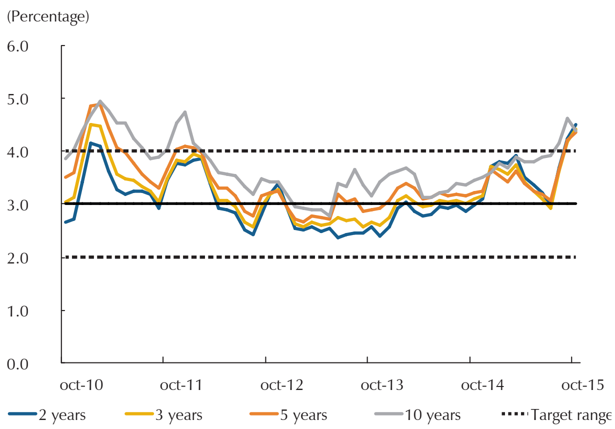
In fact, the monthly survey of financial market operators conducted in early October shows inflation is expected to be 5.58% by December of this year and 4.12% twelve months ahead. In both cases, these figures are higher than those reported in June (3.9% and 3.1% respectively) (Graph 46). For a two-year horizon, the same survey shows 3.46% is expected (vs. 3.19% three months ago). In the case of *Banco de la República's* quarterly business survey, also from early October, the expectation is 5.03% in December and 4.37% twelve months out (Graph 47). The estimates based on TES interest rates during the year to October show inflation expectations for two, three and five years would have increased to 4.51%, 4. 44% and 4.38%, in that order (Graph 48).

With rising expectations that exceed the BDBR target at medium horizons, the shocks stemming from peso depreciation and higher prices for perishable foods, which are usually temporary in principle, would have a permanent impact on future inflation. This situation is being considered in *Banco de la República's* models and is the main reason for the rise in the baseline forecast for inflation eight quarters out.

Specifically, the baseline forecast in this report, which was obtained from the Bank's central models, shows annual consumer inflation would converge more slowly towards the middle of the target range than was anticipated in the June report. It is important to point out that the new estimates contemplate a shock from a severe *El Niño* weather phenomenon as part of the central forecast, and not just in the risk balance, as was the case in previous reports. Consequently, projected total annual inflation for December this year and for March 2016 increased above the levels experienced in September.

Annual consumer inflation would remain above 5% for the next four quarters, peaking between March and June as a result of the effects of *El Niño* weather phenomenon, primarily on prices for food and public utilities.

Graph 48
ES-derived Inflation Expectations
(At two, three, five and ten years)
(Monthly average)




Observation: The respective standard deviation is presented for each expectation.
Source: Banco de la and DANE

According to the evidence on similar situations in the past, most of the impact of less rainfall on prices of perishable foods and their annual variation, will take place between the first and second quarters of next year would be seen, to the extent that agricultural productivity is affected and planting and harvesting are delayed. However, high prices, coupled with a return to normal weather conditions by the second half of 2016, should allow their decline, that could extend into the first half of 2017. A winding down of the shock to food prices would help to lower annual inflation during the second half of 2016 and would enable it to converge towards the BDBR's long-term target (3.0%) between the first and second quarters of 2017.

Consequently, the forecast for annual food inflation over the next four quarters rose considerably between the previous report and the current one. Annual food inflation, fueled by prices for fresh and perishable foods, is expected to peak in the second quarter of 2016 and then descend, first slowly, and later more sharply at the end of the year and in early 2017.

In addition to the upward pressure stemming from perishables, consumer inflation, including core inflation, will continue to rise for a few months, due to the pass-through of the accumulated peso depreciation. As for the forecasts outlined in the June report, the projected annual change in tradables excluding food and regulated prices was revised upward on this occasion, since the considerable depreciation observed in the third quarter of this year was not anticipated in the last report.

*The forecast for the yearly change in food prices was raised substantially in this report.*

It is worth noting that the central inflation forecast in this report contemplates a higher exchange rate than the one used previously. To the extent that a significant percentage of the depreciation observed in the third quarter is regarded as permanent, the impact on prices for tradables should extend into the fourth quarter of 2015 and early 2016. Furthermore, the effects of depreciation also would have a direct impact on prices for a number of nontradable goods and services, as explained in the previous report (see Box 2 in the June 2015 edition of the Inflation Report, p. 53), and on the prices of imported foods, even though international prices for these items would be lower than a year ago. According to various estimates, direct pass-through of changes in the exchange rate to consumer prices tends to lag one or two quarters behind.

*Part of the increase in forecast for non-tradable CPI is due to the rise in inflation expectations and the operation of indexing mechanisms.*

The forecast for the non-tradable CPI excluding food and regulated items, implicit in the baseline scenario, also increased at a relatively long horizon. Now, the annual change in this index is expected to remain near the top of target range throughout 2016 and in early 2017. Apart from the moderate impact of further accumulated depreciation would have, as explained already, there are other factors supporting this revision of the forecast. The two most important ones deal with rising expectations and the operation of automatic indexing mechanisms at a time when inflation is trending sharply upward and above the target range. Both these factors are particularly important for this group of goods and services, and provide considerable inertia to the changes in price.

The third factor deals with the revision of the output gap, which is expected to be less negative in the second half of 2015 and throughout 2016 than was contemplated in the June report. This is due to the higher forecast for growth during the remainder of 2015 and despite the lower forecast for next year (as discussed in the first section of this chapter). However, the output gap estimated in this report is still more negative; in the long run, this is a factor that helps the annual change in non-tradable and total inflation to get back on target (3.0%). However, in the current estimates, this happens more slowly than was calculated in previous reports.

The increase in the revised forecasts also includes the regulated CPI, given the constraints facing the supply of natural gas, coupled with the impact of *El Niño* weather phenomenon. In the case of natural gas, the country currently has a tight supply that restricts its use for generating thermal power at a time when the lack of rainfall caused by *El Niño* reduces the capacity to generate hydroelectric power. Insofar as thermoelectric plants have to operate with liquid fuels as a substitute for gas, operating costs rise and the increase tends to be transferred to the consumer in a variety of ways.[10] On the other hand, the rise in inflation in such a short time also impacts water rates. Hikes expected in October and November, since 3 pp had accumulated by September from the adjustments made at the beginning of this year. The increases would occur in accordance with the regulations governing this subsector.

*However, in the long term, a more negative output gap helps the annual change in non-tradable CPI to converge towards 3.0%.*

Finally, consumer inflation will be also subject to upward pressures coming from the indirect effect of accumulated depreciation on non-wage production costs towards the fourth quarter of 2015 and by 2016. Similarly, the relatively high figure expected for inflation later this year will affect wage

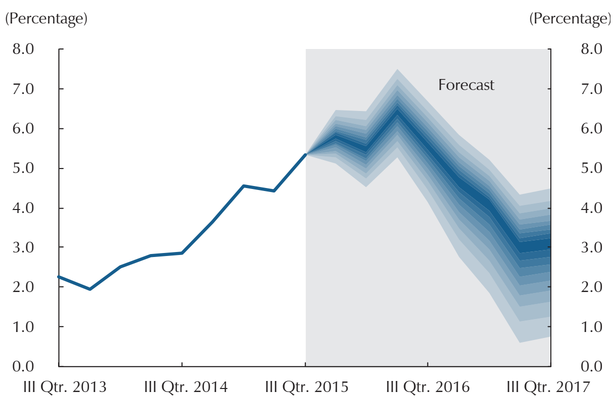
10 In late October, the Ministry of Mines and Energy increased the kilowatt per hour by COP $7 to acknowledge the higher costs associated with thermal power generation, due to the limited availability of natural gas and the need to make more use of liquid fuels. The adjustment would begin to felt by the end of the year.

negotiations for 2016, bringing upward pressure to bear on labor costs and, therefore, on consumer prices.

## 2. The Risk Balance

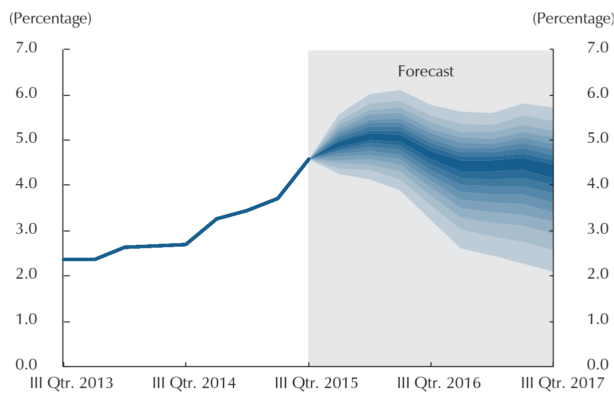
The risk balance estimated for total consumer inflation and non-food inflation is shown in the fan Graphs (Graphs 49 and 50). On this occasion, there is more uncertainty than in the previous balance, a fact associated with the possible effects of the presence of a severe *El Niño* weather phenomenon can have on food and regulated prices. Moreover, there is still a great deal of uncertainty about how our trading partners will perform and how oil prices and the exchange rate will evolve. As mentioned earlier, some of the risks identified in the last report have materialized in recent months, particularly the increase in the exchange rate, higher inflation expectations and higher food prices as a result of *El Niño*. The baseline forecast for inflation increased, as explained earlier; however, given the considerations outlined below, a downward bias to this baseline forecast over the next eight quarters is justified.

Graph 49
Fan Chart of Total Inflation




Source: *Banco de la República*.

Graph 50
Fan Chart of Non-food Inflation




Source: *Banco de la República*.

The following are the main downside risks.

Less external demand than anticipated in the central forecast: The baseline scenario in this report takes into account a significant decline in the assumptions of economic growth for our trading partners in 2015 and 2016. However, there are still several risk factors that could result in even less momentum in those economies. The first concerns the possible direction raw material prices might take in the coming quarters, which could be less than the one envisaged in this report, given the risk of oversupply facing global markets for such goods. Added to this is the risk of more of an impact on the

*Low oil prices could have more of an effect on consumption and investment than is contemplated in the baseline forecast in this report.*

region's economies from the drop in terms of trade observed already. Other economies that are also important trading partners for Colombia might face further political uncertainty that would end up jeopardizing added growth.

Outside Latin America, in the case of China, the downside risks are important. They are linked to potential problems with financial stability, in addition to the weak performance of China's trade balance, and could lead to a sharper economic slowdown than expected.

If any or several of these risks materialize, Colombia could face less external demand and less investor and consumer confidence, which also would affect the momentum in domestic demand and exert downward pressure on consumer inflation, especially in 2016.

Less domestic growth than envisaged in the baseline scenario, due to domestic factors: Low oil prices could have more of an effect on local consumption and investment, and the potential for their recovery in the years ahead is highly uncertain. Also, risks concerning the possibility of being able to access the financing needed to carry out a number of projects for infrastructure and building construction cannot be ruled out. In fact, this last sector could lose momentum more rapidly than expected if real estate prices languish or begin to drop. These risks are higher in the office and retail space segment in cities where there is now some indication oversupply.

On the other hand, the public sector likely will have to cut back on spending or raise taxes to ensure fiscal stability, given the drop in government revenue because of lower oil prices. This will punish disposable household income, with consequences for private consumption. The mere announcement of such decisions can generate adverse expectations that end up affecting spending in advance.

Less domestic demand would imply less upward pressure on inflation, which would help inflation to converge faster than anticipated in the central forecast. Or, at least, it would offset upward pressures that might emerge.

Sharply unwinding prices for perishable foods: The supply of agricultural products in late 2016 and early 2017 could respond more forcefully than expected to the price hikes that would be observed during the rest of the year and in early 2016 as a result of *El Niño* weather phenomenon. This would spark a faster and more pronounced downward adjustment in food inflation than envisaged in the central forecast.

In turn, it might cause total consumer inflation to converge more quickly towards the 3.0% target in 2016 and to fall below that level in 2017, espe-

*The baseline forecasts expected a strong El Niño.*

cially if it helps to reduce inflation expectations and lower the impact of indexing.

The following upside risks are considered in this report.

Higher than expected prices for food and regulated items: The baseline forecast for inflation takes into account the impact of severe *El Niño* weather. A number of meteorological agencies say it would last until the end of the first quarter. Its impact on prices was estimated in light of similar episodes in the past, when *El Niño* significantly affected perishable food prices. However, the changes that might have occurred in agriculture in recent years and the added access producers have to information on the weather can modify the response in terms of supply, for instance, by changing the planting and harvesting schedule. Therefore, it is important to remember that food prices still pose an upside risk to the central forecast, especially towards the end of 2015 and in the first half of 2016.

In addition to the impact on food prices, *El Niño* weather can increase energy rates more than expected. Given the high degree of regulation in the sector and the numerous changes that have been made, it is difficult to forecast what impact *El Niño* will have based on previous episodes.

Unanchored inflation expectations: Annual inflation has been above the ceiling of the long-term target range during the three quarters observed this year, and is expected to continue as such for several more quarters, but with a downward trend beginning in the second half of 2016. Although, in principle, this situation is due to temporary shocks, agents have adjusted their expectations upward and could keep doing so. In these circumstances, the risk of expectations becoming unanchored could materialize quickly, which would have a persistent effect on inflation, especially core inflation.

*El Niño could lead to higher adjustments in energy prices than those contemplated in the baseline forecast.*

Considering all these factors, and after weighing the different risks reflected in the fan Graph, it is estimated that the probability of total inflation in 2016 being within a 2%-to-4% range is 33% (Table 8). It is important to point out that the baseline forecast presented in this report assumes an active monetary policy, with interest rates that are adjusted to ensure compliance with the long-term target for inflation.

Table 8
Probability Ranges in the Fan Chart of Total Inflation
(Percentage)

| Range | 2015 | 2016 |
|---|---|---|
| < 2.0 | 0.0 | 1.3 |
| 2.0-2.5 | 0.0 | 2.5 |
| 2.5-3.0 | 0.0 | 5.5 |
| 3.0-3.5 | 0.0 | 10.1 |
| 3.5-4.0 | 0.0 | 15.5 |
| > 4.0 | 100.0 | 65.2 |
| | | |
| Between 2 & 4 | 0.0 | 33.5 |

Source: cálculos del *Banco de la República*.

# V. Risks to Macroeconomic Stability

**The Colombian economy has maintained positive growth rates in** the middle of severe external shocks.

**The adjustment in the current account has been slower** than expected, despite the sharp depreciation of the peso.

**Private sector borrowing continues to grow more than nominal** GDP, and housing prices have slowed.

Colombia has faced several external shocks this year. The first was the plunge in terms of trade occasioned by the drop in international prices for our major exports, particularly the decline in oil prices. The second is the economic slowdown experienced by our trading partners, especially those in Latin America, which used to be the main destination for Colombian manufactured goods. These shocks occurred amid a global slowdown that may be causing a general stagnation in trade (see Box 1) and suggest the prices for our exports could remain low for some time. The third shock concerns uncertainty about when monetary policy in the United States will return to normal and the possible consequences this could have on financing for emerging markets, such as the Colombia economy.

In this context, the peso depreciated 65% against the US dollar between July 2014[11]and September 2015 and 47% against the average of the currencies of our major trading partners (between 29% and 43% in real terms, depending on the deflator used). The adjustment in the trade balance has been asymmetrical and slower than expected, as noted in Chapter I.

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11 This is the month when the peso exchange rate for the US dollar reached its lowest value in 2014.

In fact, the dollar value of exports fell 33.8% during the course of the year to August; imports did the same by 11.8% during that period. This fact was reflected in a larger current account deficit.

Meanwhile, the country has continued to receive foreign financing. The figures show the downturn in direct investment in the oil sector has been partly offset, by an increase in portfolio investment and foreign loans. This has allowed the economy to adjust gradually, despite the sharp decline in national income occasioned by the drop in terms of trade.

The dynamic in financing in pesos has not deteriorated sharply. The data at hand suggest companies have replaced loans in foreign currency (F/C) with loans in pesos, reducing their exposure to exchange risk. On the other hand, lending to households (consumer and mortgage loans) shows signs of slowing, but is still dynamic. Meanwhile, prices in the housing market are beginning to slowdown.

As mentioned in previous editions of this report, the availability of external financing, the behavior of domestic demand, and the ability to generate revenue to replace fewer raw material exports are the factors that determine the level and speed of adjustment to the new external conditions. However, there is still the risk that the adjustment will not be orderly. Accordingly, it is important to continue to monitor developments and prospects for certain variables such as the current account, the real exchange rate, borrowing and housing prices. The macroeconomic imbalance index (IDM) is included in this report to supplement the analysis of each of these variables.

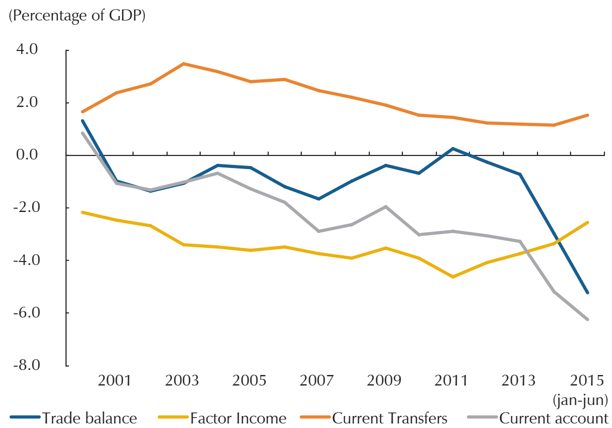
## A. THE CURRENT ACCOUNT AND THE REAL EXCHANGE RATE

The current account deficit as a percentage of GDP has grown steadily in recent years (Graph 51). The trend in the current account, in terms of its components, is determined largely by the balance of trade in goods and services, which has been extremely one-sided, since exports have declined more than imports. Goods exports fell from 17.7% of GDP in the first half of 2011 to 13.6% in June 2015, while imports continued to trend upward, reaching their highest level in the accumulated figure for the first half of 2015 (17.4% of GDP) (Graph 52). This increase in the trade deficit largely explains why the current account deficit rose from 2.9% in 2011 to 6.2% between January and June 2015.

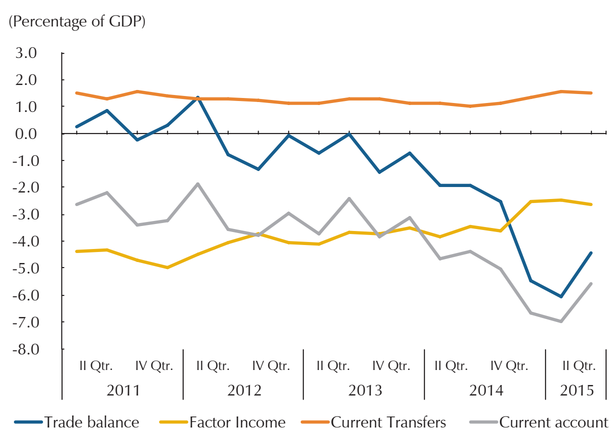
As mentioned in Chapter I of this report, both exports and imports have declined during the past year, but particularly exports. Low prices for Colombia's major exports have had an impact on their value. At the same time,

Graph 51
Current Account and Components Thereof

A. Annual



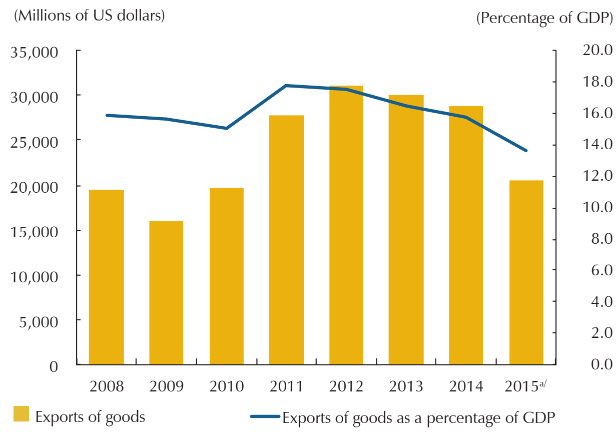

B. Quarterly



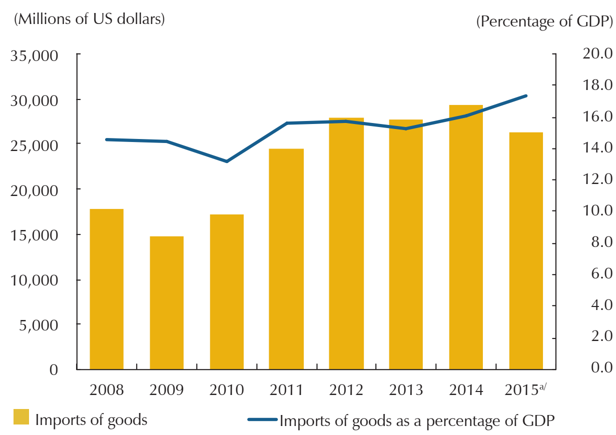

Source: *Banco de la República*

Graph 52
Exports and Imports of Goods
Accumulated January-June

A. Exports




B. Imports



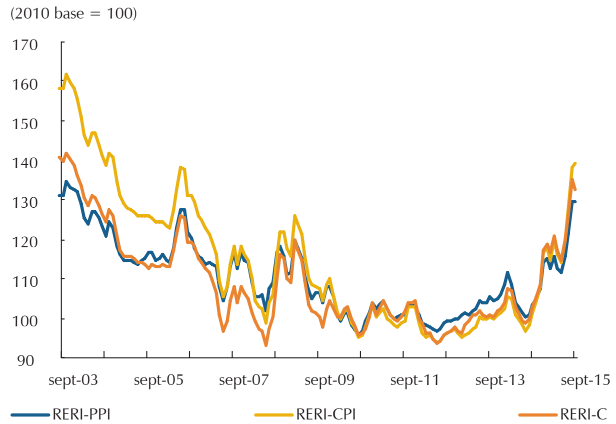

Sources: *Banco de la República*

less dynamic in world trade and a weak demand in a number of the markets for most of our industrial exports have mitigated the positive impact sharp real depreciation of the peso should have had on foreign sales.

As of mid-2014, the real exchange rate has depreciated against the currencies of Colombia's major trading partners and returned to levels similar to those registered in 2006 (Graph 53). In the January-September average compared to the same period in 2014, real peso depreciation was generalized and particularly sharp against the currencies of Ecuador, Argentina, Panama, China and the United States (Graph 54).

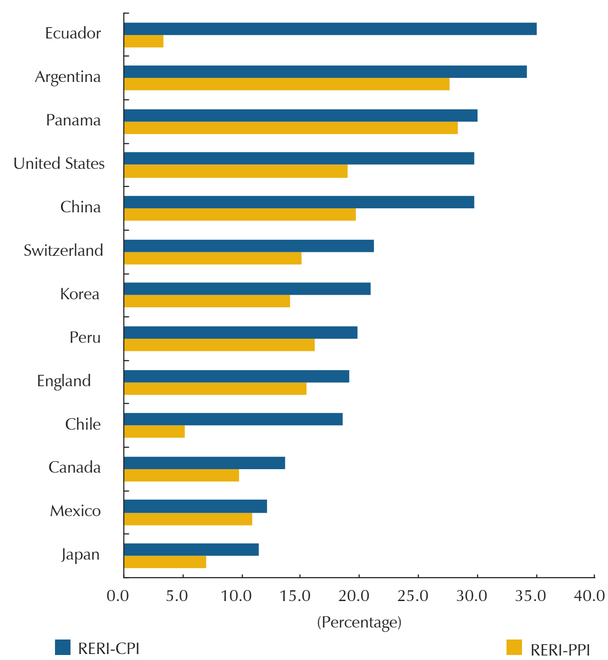
Most of the real depreciation is due to the plunge in terms of trade. As explained in Chapter I of this report, international prices for Colombia's major exports have experienced important reductions; these have been offset,

Graph 53
Real Exchange Rate Indexes




Observation: The RERI -PPI and the RERI-CPI compare the purchasing power of the Colombian peso to the currencies of twenty of the country's major trading partners, using the PPI and CPI as deflators, in that order. In the RERI-C for competitiveness, the comparison is to our main competitors in the United States, specifically in that country's markets for coffee, bananas, flowers and textiles.
Source: *Banco de la República*

Graph 54
Annual Real Depreciation Compared to Several of Colombia's Major Trading Partners[a/]




a/ Includes major trading partners with more than 10% change in the RERI-CPI and RERI-PPI in the January-September 2015 average.
Source: *Banco de la República*

in part, by lower prices for imported goods. Other variables, such as the risk premium, also would be affected by changes in the real exchange rate.

Despite the deterioration in national revenue, the country still has good access to external borrowing. So far this year, the bulk of these resources continue to come from direct investment, followed by portfolio investment and foreign debt. Portfolio investment during the course of 2015 to June was the second highest in history. [12] Foreign credit and other types of external borrowing have been less dynamic, but are near the average for the period between 2007 and 2015 (-0.6% as a percentage of GDP) (Graph 55).

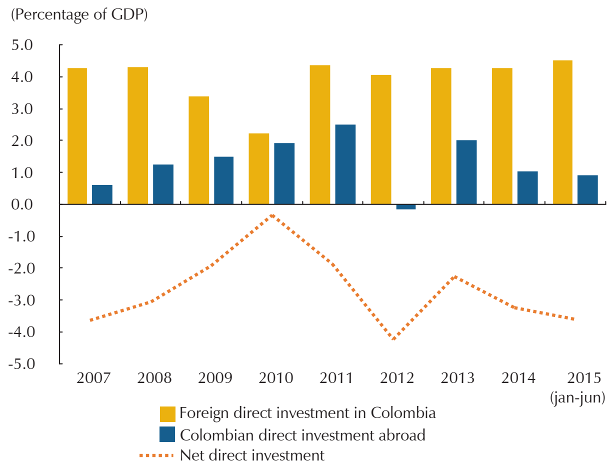
If the elevated levels of external financing continue and help to keep the current account deficit high, the Colombian economy would become more vulnerable to adverse external shocks. This type of scenario would be feasible if the country's public and private agents believe the current decline in national revenue is temporary and, therefore, do not adjust their spending and resort to financing. The vulnerability would be greater if the source of that funding is largely portfolio investment or loans, which are more susceptible to revert in the face of adverse external shocks.

At any rate, the possibility of a sharp contraction in external financing, which might trigger an abrupt adjustment in the current account deficit, is a risk to consider in the medium term. Factors such as further reductions in the price of oil, major interest rate hikes in the developed economies or larger increases in risk premiums due to domestic factors could help this risk to materialize.

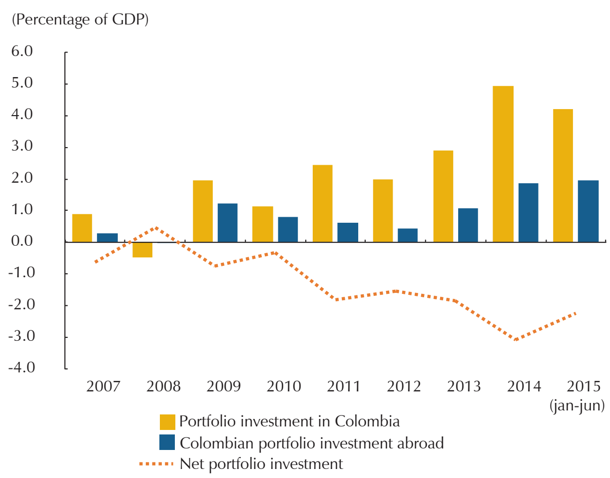
12 The highest amount on record since 1970 was in 2014, which saw large inflows of portfolio investment due to the rebalancing of public debt weights in the JP Morgan local-currency emerging market bond index.

Graph 55
External Financing Flows (Main components)

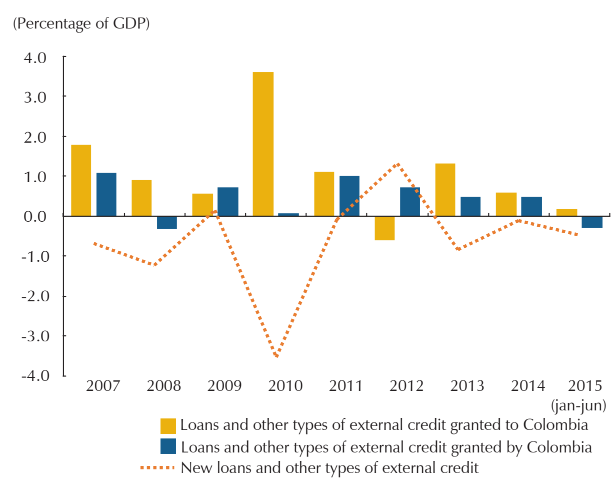
A. Direct investment




B. Portfolio investment




C. Loans and other types of credit




Source: *Banco de la República*, DIAN and DANE

## B. INDEBTEDNESS

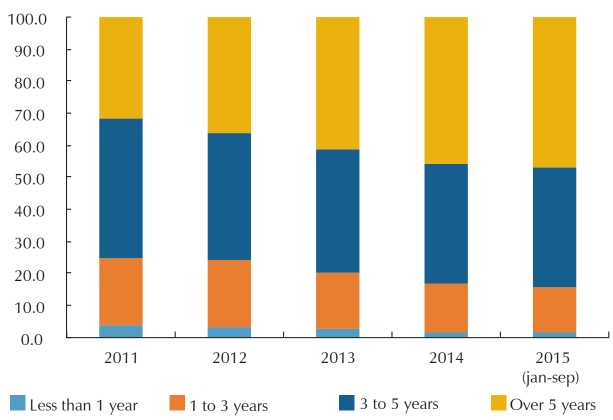
The increase in private sector borrowing during the third quarter of 2015 continued to surpass nominal GDP growth. As for corporate debt, credit extended in pesos by lending agencies accelerated recently, posting annual growth rates near 16% by September. Some of this surge may be due to the substitution of financing in foreign currency (F/C) for loans in pesos, as reported by banks in the June 2015 edition of the Survey of Foreign Borrowing and Credit Limits. In that survey, banks indicated that companies in the real sector are replacing financing in F/C for financing in pesos, so as not to assume currency risk and given the reduction in export volume. However, direct foreign borrowing from foreign lenders and suppliers continues to grow at a good pace (9% annually, in dollars). On the other hand, bond issues on the local market increased by only 3% in the third quarter.

In a situation like the one at present, where the peso has depreciated sharply, it is natural to wonder about the impact this phenomenon could have on the balance sheets of companies with F/C debt and on the financial system. Although a significant portion of the debt is in the non-tradable sectors, the exercises conducted by *Banco de la República* with the data at hand, show no warning signs up to now (see section on Foreign Currency Borrowing in F/C in the September 2015 edition of the Financial Stability Report).

As for household borrowing, the annual increase in the consumer portfolio has stayed at around 13% so far this year, while mortgage lending has slowed (from nearly 18% annually to 14% in the third quarter). Household borrowing has seen several years of growth in excess of the expansion in household income.[13] However, lower interest

13 According to the GEIH, household income would have grown 5.5% annually (in nominal terms), on average, in the last five years.

Graph 56
Consumer Loan Disbursements, by Maturity




Source: Superintendencia Financiera de Colombia; Calculations by *Banco de la República*

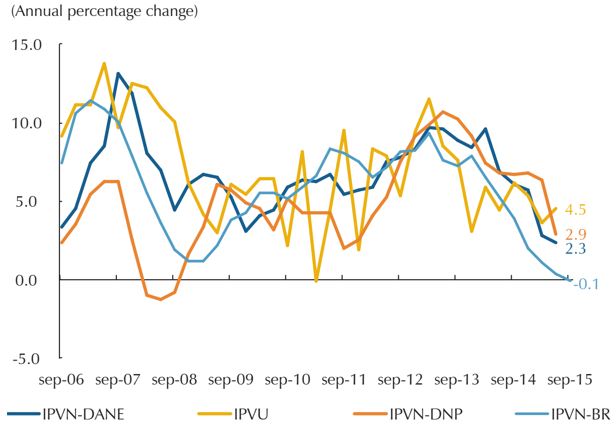
rates on loans in recent years and longer maturities have softened the increase in the financial burden on households (Graph 56).

Although there has been no reduction in financing up to now, several factors suggest the momentum in credit will weaken. First of all, in the latest edition of the Report on the Credit Situation, banks said they have increased their loan requirements but have seen an increase in applications (except for home loans). On the other hand, the higher cost of external and domestic borrowing, due to the interest rate hikes anticipated in the United States and increases in *Banco de la República's* benchmark rate, should discourage the demand for credit. Ultimately, it is to be expected that both supply and demand for credit would be less dynamic in an environment marked by economic slowdown.

## C. HOME PRICES

The figures at hand for 2015 show home prices have slowdown. Yet, in general, they still post higher annual growth rates than consumer inflation. In nominal terms, the new and existing home price indexes calculated by *Banco de la República* (IPVN-BR and IPVU) up to the second quarter show respective annual variations of 4.9%[14] and 9.2%, while the annual change was 7.0% in the DANE new home price index for the same period and 7.5% in the DNP new home price index for Bogotá. Given the recent hike in consumer inflation, the slowdown is greater if one looks at the figures relative to the CPI (-0.1%, 4.5%, 2.3% and 2.9%, respectively) (Graph 57).

Graph 57
Home Prices in Colombia (Relative to the CPI)[a/]



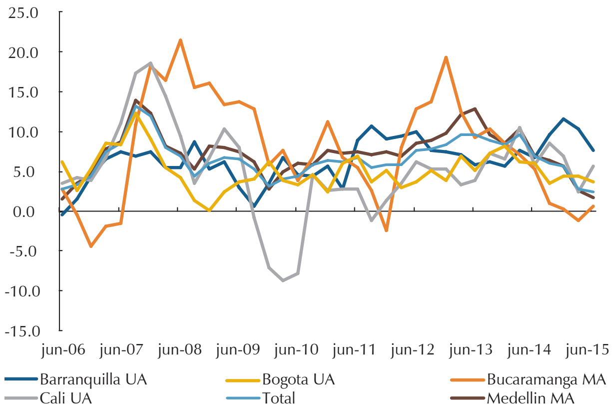

a/ The data for IPVN-DANE, IPVU and IPVN-DNP is up to the second quarter of 2015. The latest data for IPVN-BR is up to the third quarter of 2015.
Sources: DANE, DNP and *Banco de la República*

The data published by DANE with a breakdown for the major urban and metropolitan areas show the variations (relative to the CPI) are still significant in cities as Barranquilla and Cali (with annual increases of 7.6% and 5.6% by June). In the case

14 4.8% for new homes by September.

Graph 58
Home Prices in Colombia[a/]

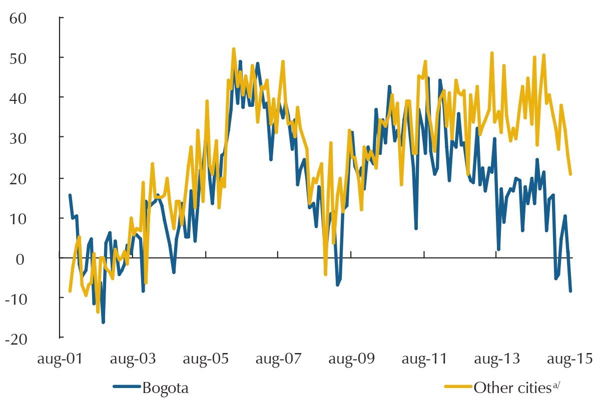
(Annual percentage change)




a/ Relative to the CPI for each city
MA: Metropolitan area
UA: Urban area
Source: DANE; Calculations by *Banco de la República*

Graph 59
Home Purchase Willingness in the Fedesarrollo Consumer Confidence Index

(Balance)




a/ Includes Medellin, Cali and Barranquilla. Does not include Bucaramanga.
Source: Fedesarrollo; Calculations by *Banco de la República*

of Bogotá, which is the largest market,[15] the slowdown in prices continues (Graph 58).

The moderation in price increases is expected to continue. Figures released by Camacol show that, although sales remain high (in units) compared to the averages witnessed since 2008 in various parts of the country, the number of new homes for sale has tended to increase in the major cities .

There are also factors on the demand side that indicate there may be less pressure on prices. The most important ones; namely, the economic slowdown and a possible deterioration in employment indicators, should affect household decisions to invest in this type of asset. In fact, willingness to buy a home, measured with an indicator calculated by Fedesarrollo, has declined considerably. In the case of Bogotá, it is the lowest since 2003, and has begun to weaken for the rest of the country (Graph 59).

The decline in willingness to buy a home may also be a reflection of less expected return on this type of investment compared to other assets. In fact, the downturn in prices and the prospect of higher domestic and foreign interest rates may be making other assets more attractive as an investment alternative. With respect to an increase in the domestic interest rate, although the Colombian government has announced subsidized interest rates in 2016 and 2017 for buyers of low-income and non-low income housing (VIS and non VIS), under the PIPE 2.0 program,[16] nothing was known at the time this report was written about how the subsidy for the purchase of non VIS would operate (the subsidy for VIS purchases is part of the Mi casa ahora Program).

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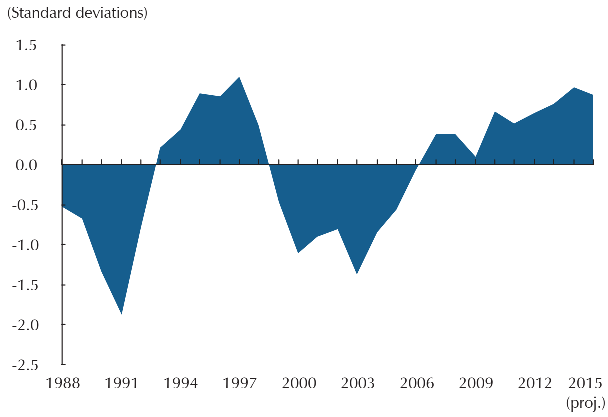
15 According to figures released by Camacol, Bogota and Soacha account for nearly 25% of all home sales nationwide (over 40% between 2008 and 2010).

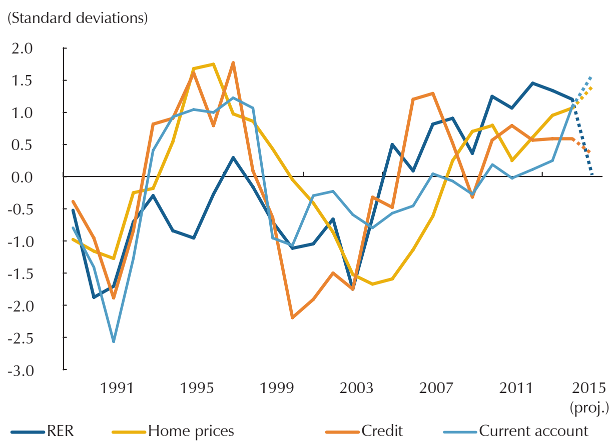
16 The announcements indicate the Colombian government will expand Mi casa ahora (for buyers of low-income or so-called "social interest" housing) to include an additional 30,000 openings and will provide 50,000 openings for the purchase of homes priced between 135 and 335 times the minimum monthly wage (between approximately COP $90 and COP $216 million) at subsidized interest rates.

Graph 60
Macroeconomic Imbalance Index




Proj.: Projected
Source: Calculations by *Banco de la República*

Graph 61
Gaps in the Current Account, Real Exchange Rate, Home Prices and Credit[a/]




(Proj.) Projected
a / The gaps are calculated as the difference between the observed value and the estimated long-term value.
In the case of the RER, its negative is presented. This means positive imbalances, in all cases, indicate gaps.
Source: *Banco de la República*

Third, as mentioned in the previous section, the level of household indebtedness has increased in recent years and this may limit access to financing for the purchase of a home. In fact, the Survey on the Credit Situation in Colombia indicates the applicant's ability to pay has become a more relevant problem in granting new loans.

## D. THE MACROECONOMIC IMBALANCE INDEX

According to the information in the previous sections, the figures at hand point to an increase in the current account deficit, a sharp real depreciation and somewhat of a slowdown in housing prices during 2015 as a whole. On the other hand, the trend in indebtedness appears to continue.

The estimates developed by *Banco de la República's* technical staff suggest the aggregate imbalance in the economy would have declined slightly compared to the previous year, largely because of the sharp correction in the exchange rate gap. The current account is still the main source of vulnerability, followed by home prices (Graphs 60 and 61). According to the forecasts outlined in this report, a continued correction of some of these imbalances is the most likely scenario for 2016.

## Box 2
## BORROWING IN FOREIGN CURRENCY BY COLOMBIAN COMPANIES AND ITS IMPORTANCE TO THE DOMESTIC FINANCIAL SYSTEM

Viviana Alfonso
Luis Hernán Calderón
Sergio Restrepo
and Gloria Sarmiento *

### 1. Introduction

The last fifteen years have seen a considerable increase in the outstanding external debt in the private sector. On the one hand, corporate external borrowing doubled,[1] going from USD $11,334 million (m) in December 2000 to USD $25,005 m in June 2015. On the other, the external debt in the Colombian bank system rose by more than 800%, from USD $1,461 m USD $12,925 m. The Peso appreciation over a number of years, as well as low foreign interest rates (compared to those for loans in pesos), provided an incentive for this to happen.

Generally speaking, the real sector demands loans in foreign currency (F/C), either from foreign lenders or the domestic financial system, to finance working capital, foreign trade or to purchase assets. The financial sector, for its part, operates primarily as an intermediary. In other words, it uses its lines of credit abroad to grant loans in F/C to its customers and, in recent years, to acquire financial institutions in other countries.

The floating exchange rate regime adopted by Colombia in 1999 contributes to the country's financial stability by helping to avoid excessive foreign exchange risk-taking in the real sector. Likewise, many of the regulations governing the financial system are intended to limit its currency exposure. However, after more than 50% depreciation of the Colombian peso against the US dollar since July 2014, companies with debts in F/C and no hedging could be exposed to a substantial increase in their financial costs and detriment to their equity.

This section offers a characterization of companies in the real private sector that have F/C debt and shows the importance of these loans on the balance sheets of lending institutions. Also included are the main results of the exercises outlined, in detail, in the September 2015 edition of the Financial Stability Report with respect to the possible impact of default on the financial obligations of companies that are indebted in F/C to domestic banks.

Ms. Alfonso works with the Technical and Economic Data Department. Mr. Calderón, Mr. Restrepo and Ms. Sarmiento work with the Programming and Inflation Department. The opinions expressed in this section imply no commitment whatsoever on the part of *Banco de la República* or its Board of Directors.

### 2. Real Private Sector Debt in Foreign Currency

The outstanding F/C debt in the real corporate sector has grown considerably during the course of this century. Particularly since 2006, there has been a steady increase in borrowing from lending institutions in Colombia, and from foreign agents as well (except during the global financial crisis). Average growth in the F/C debt has exceeded that of nominal GDP in dollars since 2008. By June 2015, the F/C debt in the real private sector was estimated to be nearly 10.5% of GDP[2] (Graph B2.1).

#### a. Debt Contracted with Foreign Agents

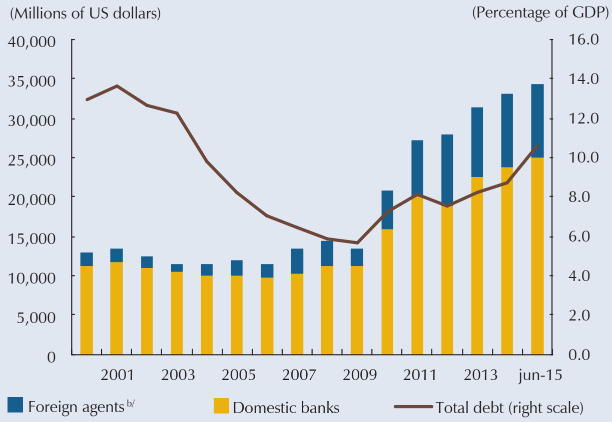
According to the F/C borrowing reports companies submit to *Banco de la República*, the external debt in the private sector was USD $25,005 m by June 2015. It is concentrated in the transport and communications sector (USD $8,652 m, 35%), trade(USD $6,124 m, 24%),

* The authors are, respectively, professional at the Technical and Economic Information Department, and expert professionals at the Programming and Inflation Department. The opinions expressed do not compromise *Banco de la República* or its Board of Directors.

1 This includes loans, financial leasing, bonds and commercial credit with agents. It does not include third-party portfolios managed by trusts companies, financial vehicles, financial institutions or pension funds, nor does it contemplate any agency in the public sector.

2 Pertains to the sum of the real private sector debt to foreign agents, as reported to *Banco de la República* (pursuant to External Circular DCIN-83) and the F/C portfolio of lending institutions (about 98% of the portfolio by December 2014 was comprised of commercial loans and 95% went to the private sector).

Graph B2.1
Real Private Sector Debt in foreign currency a/




a/ Pertains to the foreign-currency denominated portfolio granted by lenders in Colombia. At December 2014, approximately 98% of that portfolio was in commercial loans and 95% of them were granted to the private sector.
b/ Includes loans, leasing, bonds issued abroad and commercial loans of the real private sector that are denominated in foreign currency.
Source: *Banco de la República*

industrial manufacturing (USD $3,448 m, 14%) and mining (USD $2,891 m , 12%) (Table B1.1). Based on the number of firms, the branches with the most loan recipients are retail and manufacturing (52% of the total). However, transportation and telecommunications[3] and electricity, gas and water are the sectors with the largest average balance.

3 An important part of the corporate debit in this sector pertains to air transport.

In most sectors (except mining and agriculture), companies with foreign debt have a foreign-trade-operations deficit. The agricultural sector is known for having a large natural hedge, with exports worth nearly three times the balance of its debt; other sectors, such as retail, have considerable debt and their non-tradable vocation means they export very little. However, some companies in these sectors receive a significant portion of their income in F/C (e.g. air transport companies). Furthermore, a considerable percentage of debtor firms in all the sectors have foreign direct investment, particularly in the case of electricity, gas and water, and mining.

### b. Debt in F/C with Lending Institutions

As illustrated in Graph B2.1, approximately 27% of the debt in F/C is contracted directly with lending institutions in Colombia. This share increased significantly between 2002 and 2012, with several interruptions in 2006 and 2009. In June 2015, the F/C loan portfolio of lending institutions came to USD $9,263 m.

Most of this loan portfolio is in the form of commercial loans to the private sector, which are characterized as being used mainly to finance foreign trade operations and working capital. On a sector basis, the debt is concentrated in manufacturing, trade, and electricity, gas and water.

## 3. Importance of the F/C Loan Portfolio on the Balance Sheet of Lending Institutions

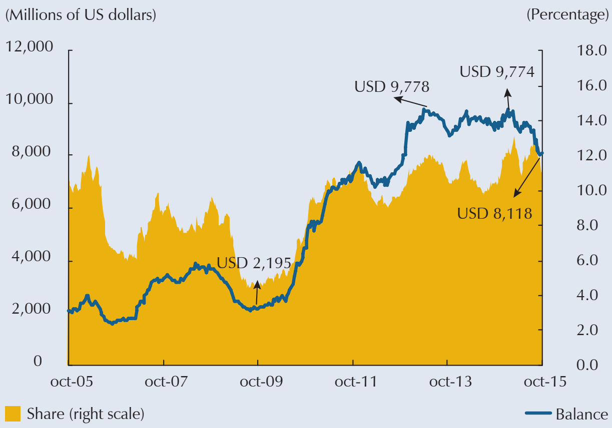
Graph B2.2 shows the evolution of the total F/C portfolio held by lending institutions and its share of the overall

Table B2.1
Characterization of Real Private Sector Companies with Foreign Debt at June 2015

| Sector | Sector Balance in Millions of US Dollars | FOB value of Exports (Millions of US Dollars)a/ | CIF Value of Imports (Millions of US Dollars)a/ | Percentage of Companies with FDI b/ |
|---|---|---|---|---|
| Agriculture | 304 | 838.0 | 54.9 | 45.5 |
| Retail | 6,124 | 185.9 | 3,028.6 | 49.1 |
| Construction | 749 | 2.6 | 29.8 | 49.1 |
| Electricity, gas and water | 1,030 | 3.6 | 20.5 | 79.3 |
| Manufacturing industry | 3,488 | 1,968.9 | 3,942.5 | 54.7 |
| Mining | 2,891 | 1,227.9 | 97.4 | 76.1 |
| Transport and Communications | 8,652 | 7.0 | 995.3 | 56.6 |
| Unclassified | 1,766 | 16.0 | 262.5 | 27.4 |
| Total | 25,005 | 4,249.8 | 8,431.5 | |

a/ The January-June 2015 accumulated figure for operations of companies with foreign debt.
b/ Firms with more than 10% of their proprietary capital held by foreign shareholders.
Source: *Banco de la República*

Graph B2.2
Commercial loan Portfolio in foreign currency: Balance and Share of the Total Commercial loan Portfolio




Source: Superintendencia Financiera de Colombia; Calculations by *Banco de la República*

commercial loan portfolio. The balance of loans in F/C went from nearly USD $2,200 m to a record high of USD $9,778 m between October 2009 and April 2013, and their share of the commercial loan portfolio increased from 4.4% to about 11. 8%.

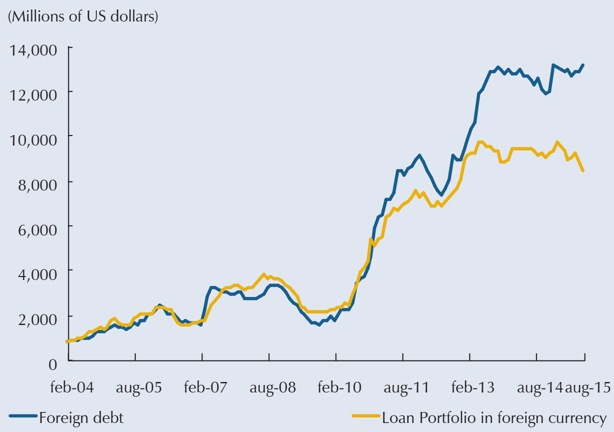
The loan portfolio in F/C has declined steadily since late January 2015 and even more so in recent months. By October 23 (the latest data available when this section was written), it came to USD $8,118 m, with an annual contraction of 12.1% and an 11.1% share of the total commercial loan portfolio (6. 5% of the total portfolio). Generally speaking, this reduction has occurred with no changes in the financial conditions (in terms of the interest rate and credit limits) foreign banks place on domestic banks.

According to the June 2015 edition of the Survey of Foreign Borrowing and Credit Limits, Colombian banks perceive the demand for F/C loans in the real sector as being low, due to uncertainty about how the exchange rate will evolve. They also have the impression that loans in F/C are being replaced by those in pesos. In fact, commercial lending in domestic currency has accelerated in recent months (from 12.9% annual growth earlier this year to 16.3% in October)[4] and is oriented towards preferred loans (to debtors with bargaining power). In turn, this type of credit was disbursed at longer maturities. Therefore, despite the increase in loans, it is possible to conclude the F/C loan portfolio in the last few years has accounted for a relatively small share of the loan portfolio held by domestic banks. And, even that share has declined recently as well.

4 Series adjusted to eliminate the statistical effects of the IFRS.

In most cases, when granting loans in F/C, lending institutions in Colombia act only as intermediaries, borrowing from international banks to lend in F/C. So, the ratio of their portfolio to their debt denominated in F/C is very narrow (Graph B2.3). However, the series diverge as of 2011, mainly because some of the acquisitions and expansions made by Colombian banks in Latin American countries and in Central America were done with funding from foreign lenders.

Graph B2.3
Loan Portfolio and Debt in foreign currency of Credit Institutions




Source: *Banco de la República*

The narrow ratio between the F/C debt series and the F/C loan portfolio is due largely to foreign exchange regulations. As part of these regulations, FX market intermediaries were authorized to raise capital in F/C so as to provide loans in F/C, or in pesos, through hedging with a financial derivative and, in both cases, at equal or less maturity than the financing obtained.[5]

Currency exposure also is limited by the regulations on FX net open position.[6] FX market intermediaries must maintain a FX net open position or total net position (rights minus obligations in F/C, including derivatives

5 Resolution 8/ 2000 (Article 59) also authorized operations such as export leasing and operations to supply liquidity in F/C in clearing systems in the event of default by a participant. In general, active operations in F/C and in pesos have been allowed since October 30, 2015 (with respective hedging), but on the condition that maturity is less than or equal to that of the financing obtained.

6 See External Resolution 9/ 2013 and External Circular DODM-139 for specific definitions and greater detail. The provisions in External Resolution 15/ 2015 on indicators of short-term exposure on the part of foreign exchange market intermediaries were not yet in force at the time this report was written.

and on- and off-balance sheet contingencies) between 5% and 20% of their regulatory capital, and a cash position (considering F/C assets and liabilities, excluding derivatives) that is positive[7] and less than 50% of their regulatory capital. The amount of financial derivatives is also limited by the regulations on gross leveraged position (the sum of future and term rights and obligations and the sum of contingencies) to 550% of regulatory capital.

Accordingly, the financial system does not take, in principle, foreign exchange risk in its activity as an intermediary (except in cases where it has used resources obtained abroad for purposes other than lending).

However, a possible default on obligations (including those denominated in pesos) by companies with F/C debt is one way lending institutions can be affected. The September 2015 edition of the Financial Stability Report contains estimates of the financial system's exposure to companies with F/C liabilities[8] (to domestic or foreign lenders) and to firms which are net importers.

While the financial system's exposure to borrowers of this type rose slightly compared to June 2014,[9] the quality indicators for these groups in terms of risk and arrears remained lower than those of all the others (there is evidence of some increase in the quality indicator for arrears compared to December 2014). Also, with additional deprecation,[10] as occurred between August and September, a small percentage of commercial loans (3.2%) would pertain to companies that would see their equity deteriorate significantly (over 30%).[11] Furthermore, the stress tests presented in that report consider, among other things, a deterioration in loan quality for companies in the private sector with F/C debt that are not engaged in foreign trade or are net importers (such as those involved in trade ).

## 4. Conclusions

The balance of the private debt in F/C increased considerably during the last decade in both the real sector and the financial sector. A look at the data by June 2015 shows that much of the real private sector debt in F/C is owed by companies in the non-tradable sectors. Debtor companies in mining and agricultural, on the whole, are the ones with a trade balance surplus. On the other hand, a number of the companies with foreign debt have foreign direct investment.

The financial sector does not appear to be especially exposed to possible deterioration in the equity capital of those institutions with F/C debt. The foreign exchange regulation and controls of FX net open position that have been in effect for the last few years have helped to prevent the financial system from taking on excessive exchange risk. F/C denominated loans did not account for a major share of its balance sheet and, at June, the risk indicators for debtors who could have been affected by the depreciation of the peso were better than those for other borrowers.

7 The lower limit was changed to -20% of regulatory capital in September 2015, effective as of October 2015.

8 This group considers only companies that are not engaged in foreign trade. Since export companies receive operating income in foreign currency, they have a natural hedge against depreciation. Importers are considered in a separate group.

9 The debts these companies have with lending institutions increased from 28.6% of the balance of commercial loans granted to the private corporate sector to 30.7%, and from 4.4% to 4.8% of private corporate debtors.

10 The impact on corporate equity that 40% depreciation would have, given the representative market rate of exchange on 30 June 2015, is simulated.

11 This last exercise is partial, since it pertains to a simulation on equity at December 2014 for a smaller group of companies (those that report their financial statements to the Superintendency of Corporations).

# Attachment

## Macroeconomic Forecasts by Domestic and Foreign Analysts

The latest forecasts by domestic and foreign analysts for the major economic variables in 2015 and 2016 are summarized in this section. At the time they were consulted, the analysts had access to data up to October 19, 2015.

### 1. Forecasts for 2015

The domestic analysts expect 2.877% economic growth, on average. This is 29 basis points less than was estimated in the Inflation Report for the previous quarter. The foreign analysts who were consulted are forecasting 2.875% GDP growth, on average.

Table A1
Forecasts for 2015

| | Real GDP Growth (Percentage) | CPI Inflation (Percentage) | Nominal exchange rate end of: | Nominal DTF (Percentage) | Fiscal deficit (Percentage of GDP) | Unemployment Rate in the Thirteen Major Metropolitan Areas (Percentage) |
|---|---|---|---|---|---|---|
| Local Analysts | | | | | | |
| Alianza Valores | 2.00 | 5.75 | 3,000 | 4.75 | 3.20 | 10.10 |
| ANIF | 2.80 | 5.80 | n. d. | 5.20 | 2.50 | 9.80 |
| Banco de Bogotá[a/] | 3.00 | 5.75 | 2,750 | 5.10 | 3.00 | 9.70 |
| Bancolombia[a/] | 3.10 | 5.70 | 2,960 | 5.30 | 3.30 | 9.20 |
| BBVA Colombia[a/] | 2.70 | 5.90 | 3,000 | 4.97 | 3.00 | 10.30 |
| BGT Pactual | 3.00 | 5.53 | 2,900 | n. d. | 3.00 | 9.50 |
| Corficolombiana | 3.00 | 5.60 | 2,750 | 5.00 | 3.00 | 9.00 |
| Corpbanca[b/] | 3.00 | 6.06 | 3,000 | 5.10 | 3.10 | 8.40 |
| Corredores Davivienda[c/] | 2.80 | 5.72 | 2,950 | 5.14 | n. d. | 9.92 |
| Credicorp Capital[d/] | 3.00 | 5.50 | 2,600 | 5.10 | 2.60 | 9.00 |
| Davivienda[a/] | 2.80 | 5.72 | 2,900 | 5.22 | 3.10 | 9.50 |
| Fedesarrollo[a/] | 3.00 | 5.80 | n. d. | 5.50 | 3.10 | n. d. |
| Ultraserfinco[e/] | 3.20 | 5.73 | 3,100 | 4.95 | n. d. | 8.90 |
| Average | 2.88 | 5.74 | 2,901 | 5.11 | 2.99 | 9.4 |
| Foreign Analysts | | | | | | |
| Citi | 2.90 | 5.60 | 3,780 | 5.40 | 3.00 | 9.4 |
| Deutsche Bank | 3.00 | 4.80 | 3,000 | n. d. | 3.00 | n. d. |
| Goldman Sachs | 2.80 | 4.90 | 3,050 | n. d. | 3.20 | n. d. |
| JP Morgan | 2.80 | 5.70 | 3,000 | n. d. | 3.00 | n. d. |
| Average | 2.88 | 5.25 | 3,208 | 5.40 | 3.05 | 9.4 |

n.d. Not available
a/ The projected deficit pertains to the national government.
b/ Formerly Banco Santander
c/ Formerly Corredores Asociados
d/ Formerly Correval
e/ Formerly Ultrabursátiles
Source: Electronic survey
Source: encuesta electrónica.

Table A2
Forecasts for 2016

| | Real GDP Growth (Percentage) | CPI Inflation | Nominal Exchange Rate End of: |
|---|---|---|---|
| Local Analysts | | | |
| Alianza Valores | 1.50 | 3.27 | 3,400 |
| ANIF | 2.50 | 3.50 | n. d. |
| Banco de Bogotá | 3.20 | 3.74 | 2,850 |
| Bancolombia | 2.80 | 3.70 | 3,130 |
| BBVA Colombia | 2.40 | 3.70 | 2,701 |
| BGT Pactual | 2.40 | 3.75 | 3,016 |
| Corficolombiana | 2.80 | 3.60 | 2,600 |
| Corpbanca[a/] | 2.90 | 4.00 | 2,800 |
| Corredores Davivienda[b/] | 2.60 | 3.64 | 2,850 |
| Credicorp Capital[c/] | 2.50 | 3.50 | 2,500 |
| Davivienda | 2.90 | 3.64 | 2,800 |
| Fedesarrollo | 2.70 | 4.00 | n. d. |
| Ultraserfinco[d/] | 3.30 | 3.78 | 2,850 |
| Average | 3.27 | 3.14 | 2,502.2 |
| Foreign Analysts | | | |
| Citi | 2.60 | 4.00 | 3,126 |
| Deutsche Bank | 3.20 | 3.20 | n. d. |
| Goldman Sachs | 3.40 | 3.50 | 3,333 |
| JP Morgan | 2.20 | 3.30 | 3,000 |
| Average | 2.85 | 3.50 | 3,153.0 |

a/ Formerly Banco Santander
b/ Formerly Corredores Asociados
c/ Formerly Correval
e/ Formerly Ultrabursátiles
n. d.: Not available
Source: Electronic survey

The domestic analysts are expecting 5.74% inflation, while the foreign analysts anticipate prices will have increased 5.25% by the end of the year. Both projections are outside the 2015 target range set by the Board of Directors of *Banco de la República* (BDBR) (between 2.0% and 4.0%).

In terms of the exchange rate, the domestic analysts expect the representative market rate (TRM) to end the year at COP $2,900.91, on average, compared to COP $2,594.7 estimated in the survey contemplated in the previous report. The foreign analysts project a TMR close to COP $3,207.5 by the close of the year.

As for the interest rate on time deposits (DTF), the domestic analysts forecast 5.11%, on average, 61 bp higher than the estimate in the previous edition of this report. They also expect the unemployment rate to be 9.44%.

## 2. Forecasts for 2016

The domestic analysts forecast 2.65% economic growth in 2016, while the foreign analysts expect it to be 2.85%. With regard to inflation, domestic and foreign analysts are predicting 3.68% and 3.50%, respectively. In terms of the nominal exchange rate, the domestic analysts are forecasting COP $2,863.36, on average, while the foreign analysts expect it to average COP $3,153.

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