Inflation Report

July 2015*

* Submitted by the technical staff to the Board of Directors for its meeting on July 31, 2015.

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 would 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 through a press bulletin posted immediately on Banco de la República's website (www.banrep.gov.co).

Inflation reports are published quarterly and 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.

Contents

Developments in Inflation and Decisions on Monetary Policy 9

I. The External Situation and the Balance of Payments 13
A. The International Situation 13
B. Balance of Payments 23

II. Domestic Growth: The Current Situation and Short-term Outlook 30
A. GDP – First Quarter 2015 30
B. GDP - Second Quarter 2015 34
Box 1: Impact of the Drop in Terms of Trade on Real Gross National Disposable Income: The Case of Chile, Colombia and Peru 41

III. Recent Developments in Inflation 47
A. Core Inflation 49
B. Food Inflation 51
Box 2: What explains the acceleration in the CPI for Non-tradables, Excluding Food and Regulated Items? 53

IV. Medium-term Forecasts 56
A. Economic Growth in the Rest of 2015 and in 2016 56
B. Inflation 62
Box 3: Major Aspects of the Medium-term Fiscal Framework for 2015 69

V. Risks to Macroeconomic Stability 73
A. The Current Account and the Real Exchange Rate 74
B. Borrowing 78
C. House Prices 79
D. The Macroeconomic Imbalance Index 79

Attachment: Macroeconomic Forecasts by Local and Foreign Analysts 81

Graphs

Graph 1	Terms of Trade Index for Colombia	14
Graph 2	International Oil Prices	14
Graph 4	Real GDP in the United States	15
Graph 4	PIB real de los Estados Unidos	15
Graph 5	Total and Core Inflation in the United States (annual rates)	16
Graph 6	Total and Core Inflation in Europe (annual rates)	17
Graph 7	Real Annual GDP Growth in China	
Graph 8	Annual Growth in Monthly Economic Activity Indexes for Several Latin American Economies	17
Graph 9	Volatility Indexes	18
Graph 10	The Shanghai Stock Exchange Composite Index	19
Graph 11	US Dollar Exchange Rate Index	19
Graph 12	Exchange Rate Indexes for Several Latin American Countries	19
Graph 13	Five-year Credit Default Swaps (CDS) for Several Latin American Countries	20
Graph 14	Total Exports	24
Graph 15	Total Imports (FOB)	24
Graph 16	Gross Domestic Product	30
Graph 17	GDP in the Tradable, Non-Mining Tradable and Non-tradable Sectors	34
Graph 18	Monthly Retail Trade Survey	35
Graph 19	Retail Sales of Automobiles and Motorcycles	35
Graph 20	New Vehicle Registration	36
Graph 21	Unemployment Rate (March-April-May Moving Quarter)	36
Graph 22	Unemployment Rate (UR) (Seasonally Adjusted Moving Quarter)	36
Graph 23	Number of Employed and Annual Change	37
Graph 24	Employment, by Type of Occupation	37
Graph 25	Consumer Confidence Index and Quarterly Average	37
Graph 26	Imports of Capital Goods for Industry and Transport Equipment (Real) and GFCF Excluding Building Construction and Civil Works	38
Graph 27	Expectations for Investment and GFCF Excluding Building Construction and Civil Works	38
Graph 28	Oil Production	39
Graph 29	Coffee Production	39
Graph 30	A. Total Real Industrial Production	40
	B. Industrial Production Excluding Real Oil Refining	40
Graph 31	Headline Consumer Inflation	47
Graph 32	PPI, by Origin of goods	48
Graph 33	Nominal Wages	49
Graph 34	Core Inflation Indicators	49
Graph 35	CPI for Tradables and Non-tradables, Excluding Food and Regulated Items	50
Graph 36	CPI for Non-tradables, Excluding Food and Regulated Items, by Groups	50
Graph 37	CPI for Regulated Items and Components Thereof	51
Graph 38	Food CPI	51

Graph 39 Food CPI, by Groups 51
Graph 40 Fan Chart of Annual GDP Growth 57
Graph 41 Fan Chart of Annual Growth in Quarterly GDP 61
Graph 42 Fan Chart of the Output Gap 61
Graph 43 Annual Inflation Forecasts by Banks and Brokerage Firms 65
Graph 44 Actual Inflation and Inflation Expectations 65
Graph 45 TES-derived Inflation Expectations 65
Graph 46 Fan Chart of Total Inflation 66
Graph 47 Fan Chart of Non-food Inflation 66
Graph 48 Current Account and Foreign Capital Inflows (Liabilities) 75
Graph 49 Current Account and Components Thereof 75
Graph 50 Current Account by economic sector 76
Graph 51 Public and Private Savings and Investment Rates 76
Graph 52 Representative Market Exchange Rate and the Real Exchange Rate 76
Graph 53 Assets and Liabilities in the International Investment Position (First Quarter of 2015) 77
Graph 54 Non-performing loans and Risky loans Indicators for Lending Institutions 78
Graph 55 House Prices in Colombia (Relative to the CPI) 79
Graph 56 Macroeconomic Imbalance Index 79
Graph 57 Gaps in the Current Account, Real Exchange Rate, House Prices and Credit 80

Tables

Table 1 Growth Forecasts for Colombia's Trading Partners 20
Table 2 Benchmark Price Forecasts for Colombia's Commodity Exports 22
Table 3 Balance of Payments 27
Table 4 Real Annual GDP Growth, by Type of Spending 31
Table 5 Real Annual GDP Growth, by Branch of Economic Activity 33
Table 6 Consumer Inflation Indicators 48
Table 7 Probability Ranges in the Fan Chart of Annual GDP Growth 62
Table 8 Probability Ranges in the Fan Chart of Total Inflation 68

Developments in inflation and monetary policy decisions

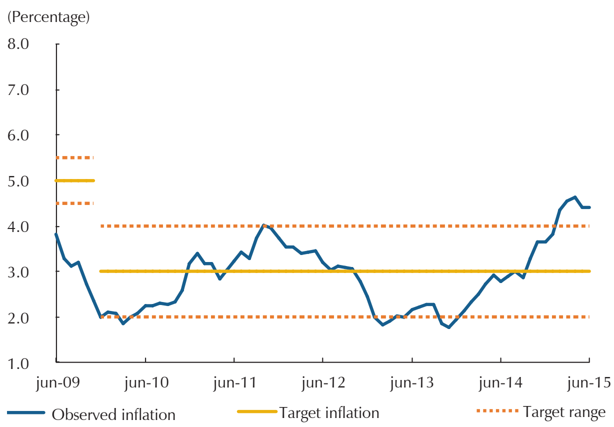
The momentum in global economic activity during the first half of 2015 was weaker than expected. Growth in the United States economy eased during that period and recovery in the euro zone and Japan was sluggish. China´s economy slowed somewhat more than anticipated, while the larger Latin American economies posted low or negative growth rates, below the estimates. These results led to weaker foreign demand for Colombian products than was estimated earlier.

The US dollar continues to gain strength and the Federal Reserve is expected to raise interest rates in the United States sometime between now and the end of the year. The international price of oil fell, as did prices for other commodities exported by Colombia, causing a drop in terms of trade. The negative effect this had on national income played a role in increasing the country's risk measurements. All this partly explains the sharp devaluation of the peso against the dollar, which will help to cushion some of the negative impact on growth caused by lower terms of trade.

Under these conditions, domestic spending in Colombia is adjusting to the decline in national income. As for the second quarter of 2015, the indicators of retail, consumer and business confidence, economic expectations, imports of capital and consumption goods show domestic demand slowed. In view of the foregoing and with the trend observed in foreign demand for domestic goods and services, Banco de la República's technical staff estimates that economic growth in the second quarter of 2015 would have been similar to the figure on record for the first quarter. The most likely forecast for GDP growth in all of 2015 was revised downward from 3.2% to 2.8%, within a range of 1.8% to 3.4%. This revision, in terms of the April forecast, was due mainly to expectations of lower growth for our trading partners, less government consumption and building construction.

In June, annual consumer inflation (4.42%) remained relatively stable and the average of the four measures of core inflation (4.14%) increased for the ninth month in a row (Graph A). The build-up in inflation witnessed so far this year is explained largely by a reduced food supply, pass-through of nominal depreciation to consumer prices, and higher costs for imported raw materials.

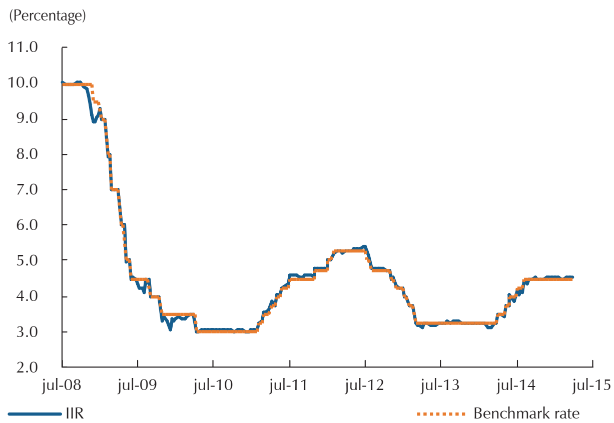
Graph A
Total Consumer Inflation



Sources: DANE and Banco de la República

Graph B

Banco de la Republica'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 July 31, 2015.
Sources: Superintendencia Financiera de Colombia and Banco de la República

The forecasts developed by the technical staff at Banco de la República suggest inflation by the end of 2015 will be near the current levels and should begin to converge towards the target (3%) in 2016. So far, the available indicators of inflation expectations show market agents also perceive the increase in consumer prices as a temporary phenomenon. This is evident in analysts' inflation expectations one and two years forward, and in those derived from TES at two, three and five years, which are still at around 3%.

However, there is a risk that necessary movement in a relative price such as the exchange rate, combined with other supply shocks, might unanchor inflation expectations at horizons of more than one year. There is also the risk that the extent of the adjustment in spending might not be consistent with macroeconomic stability. According to the economic situation described above, inflation is likely to stay above the top of the target range during the remainder of the year and domestic spending in the economy will continue to adjust gradually to the slowdown in national income. The temporary prices shocks are expected to reverse sometime within the horizon for monetary policy action, in an environment of inflation expectations that are anchored to the target. Under these conditions, the Board of Directors considered it appropriate to hold the interest rate at 4.5% (Graph B).

The Board of Directors will continue to monitor inflation and inflation expectations, the extent of the adjustment in domestic spending and its coherence with macroeconomic stability. It also reiterated its commitment to keeping inflation and inflation expectations anchored to the target, while acknowledging the temporary build-up in the pace of price hikes.

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Governor and General Manager

INFLATION REPORT

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I. The external situation and balance of payments

Colombia's terms of trade in June 2015 were the lowest since 2009.

The growth forecasts for Colombia's trading partners in 2015 and 2016 were revised downward in this report.

The current account deficit in the first quarter of 2015 increased as a percentage of GDP. The external imbalance is expected to adjust during the remainder of the year; however, for all of 2015, it will be larger as a percentage of GDP than in 2014.

A. THE INTERNATIONAL SITUATION

1. Terms of Trade and Commodity Prices

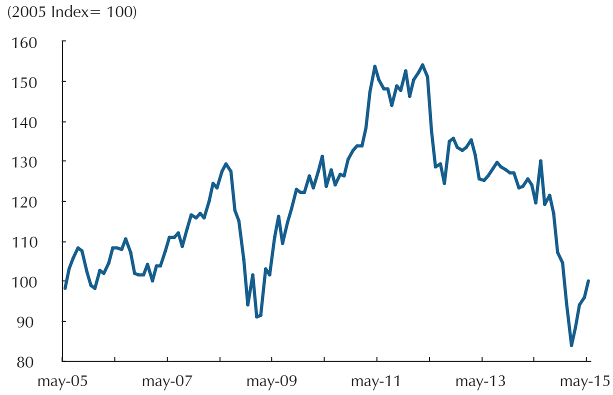
Terms of trade remains at the lowest levels witnessed since 2009, adversely affecting the momentum in national income.

The most relevant international event for the Colombian economy so far this year has been the sharp decline in terms of trade, which negatively affected the momentum in national income. During the second quarter of 2015 (with data up to May), the terms of trade indicator (according to the commerce methodology)[1] showed a drop of 19. 6% from the same period in 2014 and is still at the lowest levels witnessed since 2009, even though the sharp downturn as of mid-year has come to a halt (Graph 1).

This behavior is explained largely by the course of international oil prices, which plunged dramatically between June 2014 and January 2015, then re-

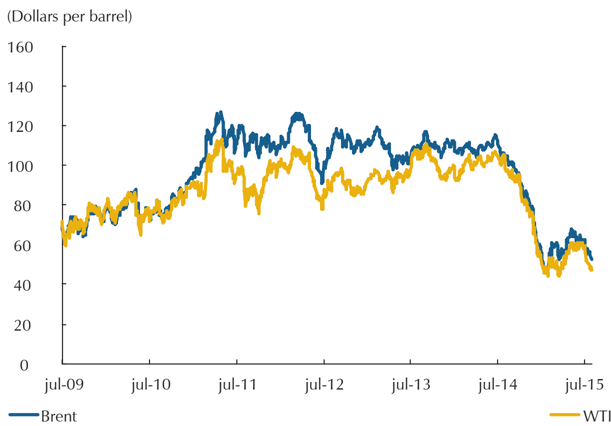
1 With the commerce methodology, terms of trade are measured using administrative records as a source of export and import data (DIAN and DANE). Pursuant to international recommendations (on the volatility of the series, standardization of unit values, etc.), implicit prices are calculated for each tariff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

Graph 1
Terms of Trade Index for Colombia
(Commerce methodology)



Note: See Box 2 in the September 2013 edition of the Inflation Report for more information on the methodology used.
Source: Banco de la República

Graph 2
International Oil Prices
(Brent and WTI)



Source: Datastream.

mained relatively stable at low levels [2] (Graph 2). Accordingly, during the second quarter of 2015, the international price of crude (Brent reference) averaged USD 62.5 per barrel, which is 43.2% less than the price on record for the same period last year (USD 110.0 per barrel). This decline is due mainly to an ample supply of crude oil worldwide, leading some analysts to believe that much of the downturn would be permanent.

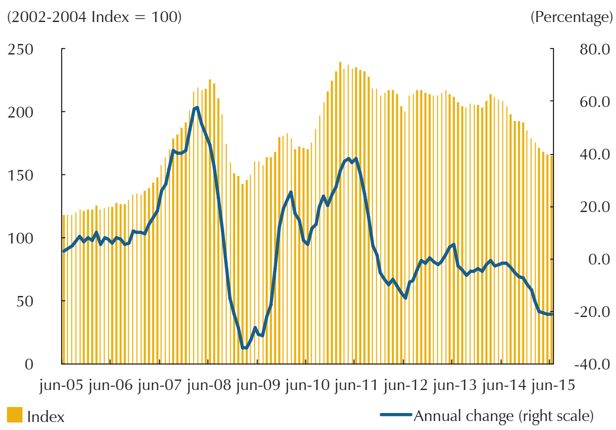
Oil prices went down again in July, dropping to USD 56.8 per barrel, on average. The latest change in prices is attributed mostly to the prospect that the world will continue to have a large supply of oil because of several factors. For instance, the members of the Organization of Petroleum Exporting Countries (OPEC) have increased their output to historically high levels, the United States is continuing to expand its oil production, and Iran will have renewed access to world markets in the coming months. In addition to the large inventory of crude oil, global demand is weak and the dollar has appreciated.

The prices of the other commodities Colombia exports also weakened in the second quarter of 2015, compared to those observed during the same period last year, thus aggravating the downturn in terms of trade. Coffee, in particular, averaged USD 1.53 per pound between April and June. This amounts to an annual decline of 26.9%, mainly due the reversal of climate-induced shocks that affected coffee production in Brazil last year. In addition, international prices for nickel and coal saw annual reductions of 29.3% and 16.6% in the second quarter, reflecting less global demand for these products, especially in the emerging economies. This performance continued during July, keeping down the prices of Colombia's export commodities.

The prices for some of the foods imported by Colombia also fell during the second quarter, as evidenced by the food price index of the Food and Agriculture Organization of the United Nations (FAO) (Graph 3). However, the July average prices for corn, wheat and soybean rose from the

2 See "Determinantes de la disminución reciente del precio del petróleo, evaluación de pronósticos y perspectivas" (Determinants of the Recent Decline in Oil Prices, Assessment of Forecasts and Prospects) in the December 2014 edition of the Inflation Report.

Graph 3
International Food Prices



Source: Organización de las Naciones Unidas para la Alimentación y la Agricultura.

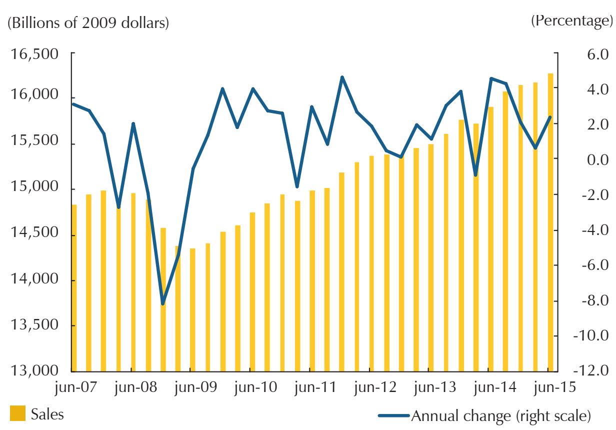
low levels witnessed in previous months, after several specialized agencies reported lower-than-expected inventories and areas under cultivation in North America.

2. Real Activity, Inflation and Monetary Policy

Besides the shock to its terms of trade, the Colombian economy is facing less demand for its exports due to weak economic performance by several of its major trading partners. The records on global economic activity available for the second quarter indicate Colombia's most important trading partners would see less economic growth in 2015 relative to the year before and to the forecast presented by Banco de la República's technical staff in the March 2015 edition of the Inflation Report.

In the case of the United States, the latest figures show a recovery in the country's economy, following a sharp slowdown between January and March. GDP growth went from an annualized quarterly (a.q.) rate of 0.6% (revised upward from -0.2%) in the first quarter to 2.3% three months later (Graph 4). This was due, in large part, to a revival in both private consumption and exports, which offset the slowdown in non-residential investment. However, it is important to point out that US economic performance in the first half of the year was less than what was forecast by Banco de la República's technical staff in the March edition of the Inflation Report.

Graph 4
Real GDP in the United States

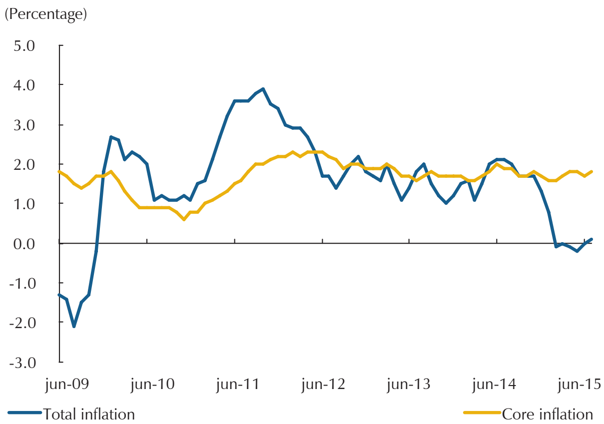


Source: Bureau of Economic Analysis.

Job market performance in the United States was favorable, once again. The second quarter saw improved job creation, following somewhat of a slowdown in the first three months of the year. The average monthly increase in non-farm payrolls went from about 195,000 workers between January and March to 221,000 three months later. As a result, the unemployment rate dropped to 5.3% in June. In addition, other indicators monitored by the Federal Reserve (Fed), such as the long-term unemployment rate[3] and the rate of

3 This is the number of persons who have not found work in more than 27 weeks, as a portion of the total number of unemployed.

Graph 5
Total and Core Inflation in the United States (annual rates)



Source: Bloomberg.

underemployment,[4] have continued to improve and suggest that surplus capacity in the job market continues to decline.

As for inflation, the annual change in the consumer price index (CPI) remained relatively stable during the second quarter, primarily because of low fuel prices. When volatile items such as food and fuel prices are excluded, one sees no significant variation in annual inflation, which stayed slightly below the Fed's target (2.0%)(Graph 5).

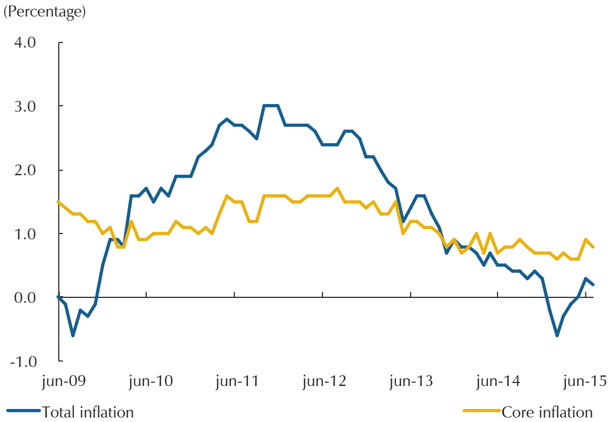
In this context, an interest rate hike by the Fed, which leading analysts were forecasting for the middle of this year, would be postponed until the end of 2015. The median of the latest projections by the Federal Open Market Committee (FOMC) suggests the benchmark rate would be somewhere between 0.50% and 0.75% by December 2015, which is 50 basis points (bps) up from the current level. The same source points to gradual increases over the next two years.

The figures available for the second quarter on real activity and confidence in the euro area imply the region's economy continued to expand at a slow pace and the growth rate for this period would be similar to what it was during the first three months of the year. Still, this means an improvement compared to the lackluster performance of the previous year and is largely due to the increase in exports, which have become more competitive due to depreciation of the euro against the dollar. The demand for credit also rose, as did disposable household income. The latter is thanks to low fuel prices. In addition, the uncertainty created by the recent events in Greece would not have had a major impact on confidence and real activity.

Meanwhile, annual inflation in the euro area remained low during the second quarter and was 0.2% by June. The decline in fuel prices largely explains the small annual change in prices. Annual inflation, excluding food and fuel items, remained relatively stable at around 0.8%, although well below the European Central Bank's target (defined as below, but close to 2%) (Graph 6). Even so, inflation expectations displayed a clear upward trend between April and June, mitigating the risk of deflation that emerged towards the end of last year.

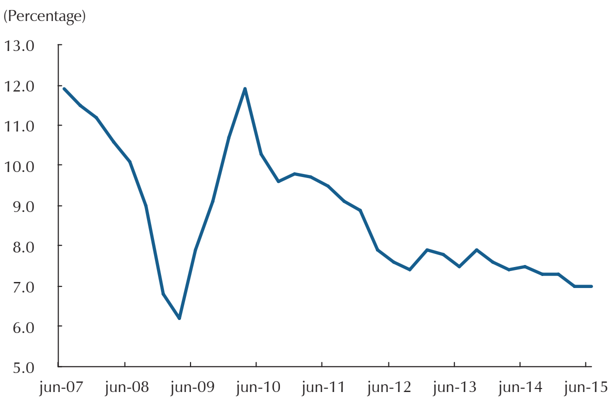
4 This refers to the total number of persons who are unemployed, employees with part-time jobs who want to work full-time, and those outside the labor supply who would be willing to work if they find a job (marginally linked to the job market), as a portion of the workforce.

Graph 6
Total and Core Inflation in Europe (annual rates)



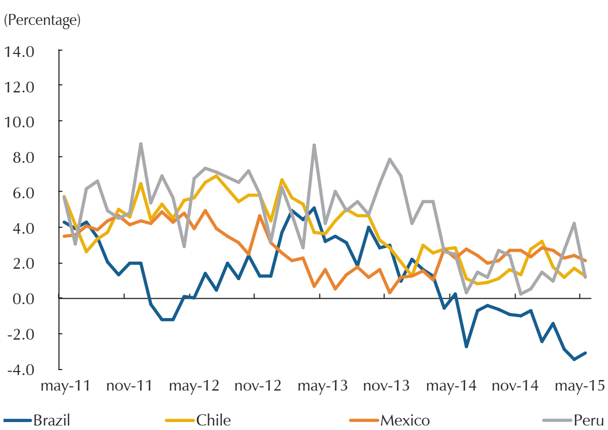
Source: Bloomberg.

Graph 7
Real GDP Growth in China



Source: Bloomberg.

Graph 8
Annual Growth in Monthly Economic Activity Indexes for Several Latin American Economies



Source: Datastream.

The ECB continues to implement a highly expansive monetary policy in this context of low inflation and modest economic growth. It has kept interest rates at historically low levels, continued to stimulate the supply of credit through targeted longer term refinancing operations (TLTRO), and maintained its quantitative easing program in which it purchases 60 billion euros a month in sovereign bonds, asset backed securities and covered bonds.

The weakening of Chinese economy was the most prominent event among the emerging countries. China's GDP growth during the second quarter came to 7.0%, as was the case three month earlier. This came on the heels of 7.4% in 2014 and is well below the pace of expansion witnessed in previous years (Graph 7). The cause of this relatively modest performance is associated with a loss of momentum in domestic demand, especially in investment, and a decline in foreign trade due to a stronger yuan and slow economic growth worldwide. Inflation remained low and was 1.4% in June. Accordingly, the Central Bank of China lowered its benchmark rate, once again, and relaxed certain regulatory requirements in an effort to ease the slowdown in the country's economy.

In the case of Latin America, the figures for real activity by May suggest the countries in the region continued to experience low growth rates during the second quarter compared to the average for the last decade. However, the outlook for individual countries is mixed (Graph 8). On the one hand, the economies of Chile, Mexico and Peru have shown some signs of recovery, albeit with little momentum. They continue to be affected by several factors; namely, the shock to their terms of trade, less external demand, and the slow increase in consumption and investment. On the other hand, the recession in Brazil that began last year would have deepened as a result of the government's efforts towards fiscal adjustment and due to low levels of business and consumer confidence. Moreover, although no of-

Economic growth in Latin America remains extremely sluggish, although performance at the country level is mixed.

ficial figure are available, the sharp economic setback in Venezuela as a result of the plunge in oil prices is expected to have continued, in addition to the country's range of structural problems.

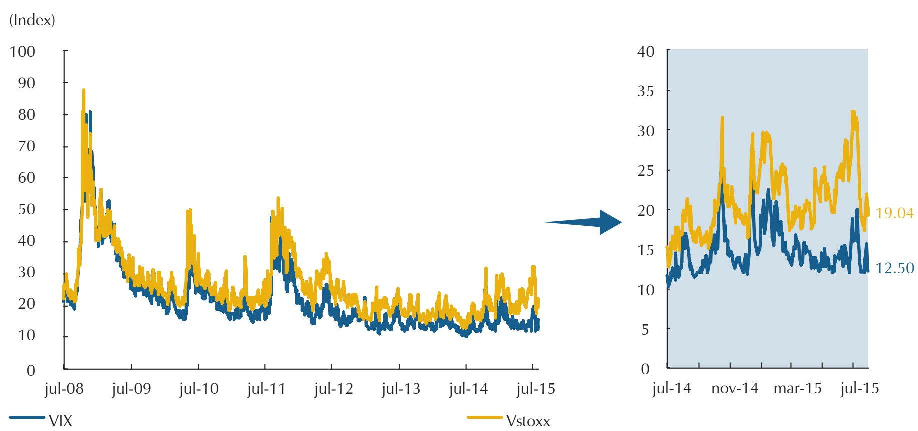
As for inflation and monetary policy in Latin America, it has also seen a mixed performance across countries panorama. In Mexico, the annual change in prices considering the figures at June remained close to the central bank's target, so it kept rates at relatively low levels. In Peru and Chile, inflation rose and was above the target range, having been affected by the depreciation of the currencies of those countries. Even so, inflation expectations are still anchored to the targets set by their central banks, which enables monetary authorities to keep their benchmark rates in expansionary territory. On the contrary, the annual change in prices in Brazil remains high and reflects a clear upward trend, which has forced the central bank to raise its intervention rate sharply.

3. Financial Markets

With regard to the international financial markets, the latter part of the second quarter and early July saw a significant increase in financial volatility indexes (Graph 9). This is largely the result of the increase in global risk aversion associated with the problems Greece faced to reach an agreement with its creditors. However, by mid-July, with the Greek government's acceptance of the conditions for a new financing plan, the international financial markets tended to stabilize.

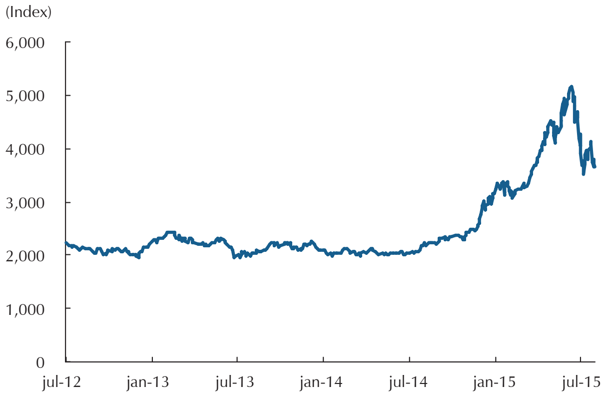
Even so, at the time this report was being written, the financial markets seemed to be under renewed pressure, this time from the collapse of China's major stock indexes compared to the highs reached months earlier (Graph 10). Many analysts believe the impact this has on China's econom-

Graph 9
Volatility Indexes



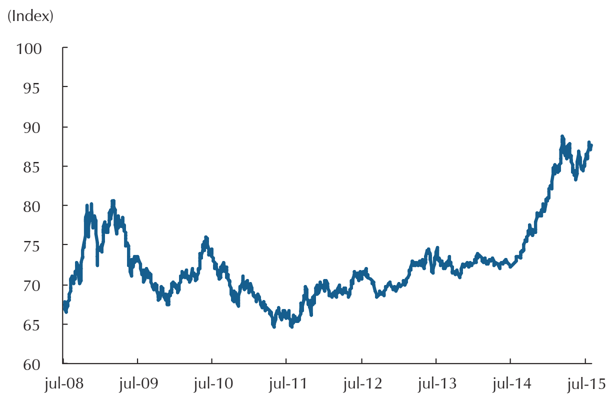
Source: Bloomberg.

Graph 10
Shanghai Stock Exchange Composite Index



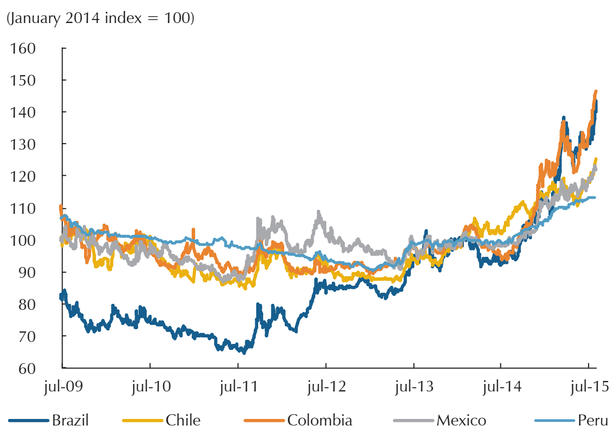
Source: Bloomberg.

Graph 11
Dollar Exchange Rate Index
(Trade-weighted)



Source: Bloomberg.

Graph 12
Exchange Rate Indexes for Several Latin American Countries



Source: Bloomberg.

ic activity is limited, since these assets do not represent a large share of household wealth and companies make little use of stocks as a source of corporate financing. Nevertheless, the possibility that further deterioration in these indexes might spread to other segments of China's financial system and threaten their stability cannot be ruled out.

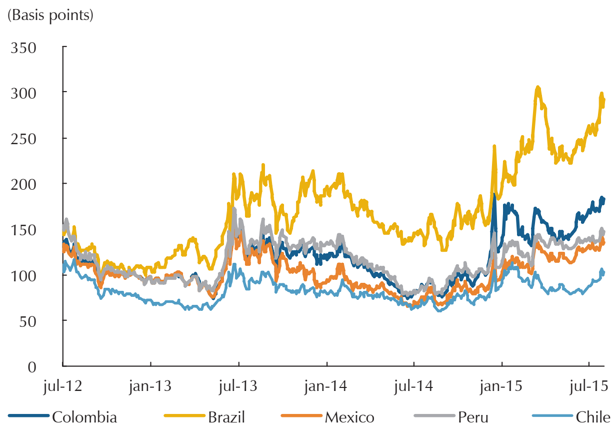
Recent movement in the dollar and in long-term rates in the major developed countries suggests that financial market agents might be expecting a benchmark rate hike from the Fed sometime towards the latter part of the year. In June and July of this year, the dollar exchange rate (trade-weighted) again began to appreciate sharply against the currencies of the major developed countries, continuing the trend begun in late 2014 (Graph 11), while bond rates in the United States and in major countries in the euro area were higher, on average, during the second quarter than those observed earlier in the year.

As Latin America's financial markets, a strong tendency for the currencies of the major countries in the region to depreciate against the dollar (Figure 12) was observed early in the third quarter, along with an increase in risk premiums (chart 13). Both these trends were more pronounced in Colombia and Brazil. In the case of the latter, the sharpest movements were due to a greater perception of risk in the Brazilian economy, aggravated by the announcement that the fiscal target set earlier this year will not be met. In Colombia, this trend responds to the additional drop in oil prices, which will have a negative impact on the country's income, particularly in the public sector, and is sure to be accompanied by a decline in capital inflows to the country.

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 the predictions outlined in the March edition. Average annual GDP growth

Graph 13
Five-year Credit Default Swaps (CDS) for Several Latin American Countries



Source: Bloomberg.

forecast for the country's trading partners (non-traditional trade-weighted) went from 1.3% to 0.9% for 2015 and from 2.4% to 2.2% for 2016 (Table 1).

In the case of the United States, the forecast for growth in all of 2015 was revised downward, given to the sluggishness observed during the first quarter and the slow recovery witnessed in the second. However, consumer fundamentals are expected to remain favorable during the rest of the year and in 2016, thereby consolidating household spending as the main engine of economic growth. Additionally, investment in the oil sector would cease to subtract from economic growth, insofar as most of the adjustment in this category would have been in the first half of the year. So, domestic demand is expected to perform better. This would offset weak exports, which would be affected by appreciation of the dollar against the major world currencies and by slower growth for US trading partners.

Table 1
Growth Forecasts for Colombia's Trading Partners

Growth forecasts for trading partners	2014	Forecasts for 2015 Scenario			Forecasts for 2016 Scenario		
		Minimum forecast	Central forecast	Maximum forecast	Minimum forecast	Central forecast	Maximum forecast
Main partners							
United States	2.4	2.0	2.4	2.8	2.0	2.8	3.6
Euro Area	0.8	0.8	1.3	1.8	0.0	1.4	1.8
Venezuela[a/]	(4.0)	(8.0)	(6.0)	(4.0)	(4.0)	(1.0)	2.0
Ecuador	3.8	0.2	1.2	2.2	1.0	2.0	3.0
China	7.4	6.4	6.7	7.0	6.0	6.5	7.0
Other partners							
Brazil	0.1	(2.0)	(1.5)	(1.0)	0.2	1.0	1.8
Peru	2.4	2.5	3.5	4.0	3.0	4.5	5.5
Mexico	2.1	2.3	2.7	3.3	2.5	3.2	4.0
Chile	1.8	2.3	2.8	3.3	2.5	3.5	4.5
Total trading partners (non-traditional trade-weighted)	**1.5**	**0.1**	**0.9**	**1.6**	**1.1**	**2.2**	**3.3**
Developed countries[b/]	**1.8**		**2.1**			**2.4**	
Emerging and developing countries[b/]	**4.6**		**4.2**			**4.7**	
Total worldwide[b/]	**3.4**		**3.3**			**3.8**	

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 July 2015
Source: Banco de la República's calculations

This report assumes the Fed will begin to raise its benchmark rate towards the end of the third quarter and the hike will pass-through into market rates in an orderly fashion.

The job creation figures in the US are likely to be consistent with the improvement forecast for the economy, which means the labor market would continue to recover. Therefore, existing surplus capacity would continue to be eliminated and some upward pressure on wages would begin to emerge, allowing inflation to rise in 2016 and converge slowly towards the Fed's long-term target. The benchmark rate hike, which would come late in the third quarter and continue at a very gradual pace throughout 2016, would pass through into market rates in an orderly fashion.

Recovery in the euro area would continue slowly, as was forecast in the previous edition of the Inflation Report. The measures adopted by the ECB have enabled confidence to recover and have restored the credit channel to some extent, which would encourage private consumption and investment. The weaker euro would continue to boost exports to destinations outside the European Union. Additionally, the geopolitical conflict in Eastern Europe and the uncertainty created by the recent events in Greece are not expected to have a major impact on consumer and business confidence.

In the case of China, the central forecast in this report indicates the country's growth would continue to abate insofar as investment in fixed assets and credit growth continue to back off from the highs witnessed in previous years. Exports also would take away some of the momentum in growth, since the yuan has gained strength against most currencies in the world and global demand remains weak. However, the stimulus measures adopted by the government and central bank would prevent the slowdown from becoming more pronounced.

Performance in Latin American is expected to be mixed. On the one hand, Peru and Chile are expected to see some recovery in the second half of 2015 and in 2016, thanks to stimulus from the public sector and the reversal of several supply shocks. Similarly, Mexico would be helped by a more dynamic economy in the United States. However, Brazil's economy would continue shrinking during the remainder of 2015, due to fiscal consolidation and low levels of business and consumer confidence. Some recovery would be observed by 2016. In the case of Venezuela, the economy is expected to contract sharply throughout 2015.

The Chinese economy is expected to continue to slow down during the second half of 2015 and in 2016.

This baseline forecast still contains important downside risks. The main one is the possibility of a disorderly reaction by the 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 rates. This could jeopardize real activity in the United States. There also would be capital outflows from the emerging countries, with potentially adverse effects on their economies.

A sharper slowdown in China and in commodity-exporting emerging economies is another major risk. In the case of China, this would be due to problems associated with its financial stability, given the high levels of borrowing and the imbalances in the stock and housing markets that have accumulated in recent years. In the case of commodity-exporting countries, such as most of those in Latin America, a sharp decline in their terms of trade could have a further impact on their economies.

With respect to Colombia's commodity exports, the central forecast assumes the average price of oil (Brent) will be slightly above USD 60 a barrel during the second half of the year; this implies an average price of $ 59 per barrel in all of 2015. A recovery in global demand and less oil production in North America during 2016 would allow for some price increases, bringing the average for the entire year to US$ 65 per barrel (Table 2).

However, there clearly is still a great deal of uncertainty about how the oil sector will perform. On the one hand, a quicker decline in production in the United States or new outbreaks of geopolitical conflict in the Middle East would push up prices. On the other, low growth worldwide, expanding inventories of crude oil, re-establishment of the sale of Iranian oil to international markets, and further appreciation of the dollar would lower prices.

As for other export commodities, prices for coffee, coal and nickel are forecast to recover during the second half of 2015 and in 2016, although they are expected to remain below the averages witnessed in recent years. In this context, the terms of trade for Colombia are expected to stay at levels similar to what was observed in the first part of 2009, which is well below those in recent years.

Table 2
Benchmark Price Forecasts for Colombia's Commodity Exports

Major products	2014	Forecasts for 2015			Forecasts for 2016		
		Scenario			Scenario		
		Minimum forecast	Central forecast	Maximum forecast	Minimum forecast	Central forecast	Maximum forecast
Colombian coffee (ex dock; dollars per pound)	1.97	1.55	1.65	1.80	1.60	1.80	2.10
Brent crude (dollars per barrel)	99.2	54	59	64	45	65	75
Coal (dollars per ton)	72.6	56	62	65	54	60	63
Nickel on the London exchange (dollars per ton)	16,898	13,890	14,363	15,428	12,851	15,119	17,387
Gold[a/] (dollars per troy ounce)	1,266	1,250	1,200	1,150	1,400	1,250	1,100

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

The country's current account deficit in the first quarter of 2015 was 7.0% of GDP. This was due to a sharp decline in the trade balance and the impact of the peso depreciation on the GDP expressed in US dollars.

B. BALANCE OF PAYMENTS

In the first quarter of 2015, the country's balance of payments posted a current account deficit equal to 7.0% of GDP (USD 5,136 m), which is higher than in the same period last year (4.6% of GDP; i.e., USD 4,032 m). As a share of GDP, , 1.1 percentage points (pp) of this increase, , is explained by the larger deficit in dollars and 1.3 pp by the effect of peso depreciation on the dollar measurement of nominal GDP.

In dollars, the increase in the deficit is due mainly to the sharp drop in the trade balance, which is a reflection of the fall in prices for the country's main exports and less external demand for other products. Exports were 26% below than those recorded a year ago, while some imports declined slightly during the period (-4.3%). This was partly offset by a significant reduction in outlays for profit remittances from the oil sector and others as well.

In terms of financing, net capital inflows amounted to USD 4,796 m for the first three months of the year: USD 558 m more that the figure for the same period last year. In net terms, this outcome reflects a decline in direct and portfolio investment, which was offset by an increase in resources for other investments (loans), particularly those in the public sector. As expected, foreign direct investment (FDI) during the first quarter was down at an annual rate of 25.9% due to the sharp cutback in resources for the oil sector (-22.6%) and for all others (-26.8%). Colombian direct investments abroad also declined during this period, partially offsetting the slump in FDI. Similarly, net inflows for portfolio investment also weakened compared to the first quarter last year, especially inflows of resources for the local debt market. Contrary to this situation, funds from other investments were up significantly by March 2015, particularly due to long-term debt contracted by the nonfinancial public sector.

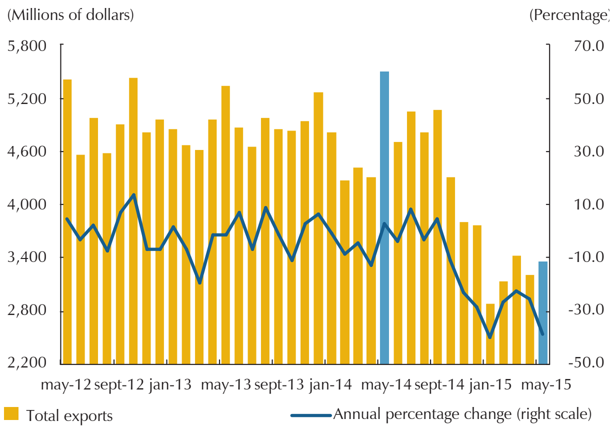
The first-quarter current account deficit in dollars was USD 1,213 m less than in the fourth quarter of last year, thanks to fewer net outlays for nonfactor services and factor income, compared to a trade balance that remained at levels similar to those posted last quarter. The forecast in this report is for the external balance to continue to adjust to the shock in terms of trade and the subsequent reduction in external income. In fact, the second quarter is expected to see a less negative trade balance in dollars.[5]

The deterioration in the trade balance was offset, in part, by lower outlays for profit remittances from the oil sector and all others.

The data at hand on foreign trade in goods for April-May 2015 indicates the trade balance would be less negative than it was the first quarter, but higher than a year ago. Specifically, total exports in dollars during that

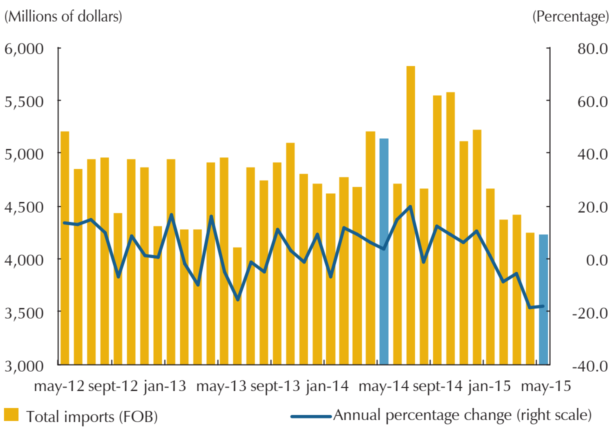
5 However, the trade balance as a percentage of GDP will be greater than it was in the second quarter last year, due to a lower exchange rate used to calculate GDP in US dollars for that period, as well as less economic growth

Graph 14
Total Exports (Monthly)



Sources: DANE; Banco de la República's calculations

Graph 15
Total Imports (FOB)
(Monthly)



Sources: DANE; Banco de la República's calculations

two-month period were down by an average of 33% over the previous year (Graph 14), affected largely by fewer sales of mining products (oil: -42.3%; coal: -46 5% refined petroleum products: -52.3%, and ferronickel: -42.8%), coupled with reductions in other products (those of agricultural origin: -12.6%, and industrial goods: -6.4%). The value of imports (FOB),[6] on the other hand, fell 18% in annual terms (Graph 15) (See the shaded section on pg. 25).

As observed in the first quarter of the year, further declines in the deficit in non-factor services (reflecting lower costs associated with international trade) and net expenses for factor income are expected in the second quarter. The latter is due to the impact declining income in the mining-energy sector and peso depreciation is likely to have on profit remittances. The amount of net income from current transfers would be similar to what it was in previous quarters, boosted by a slight recovery in remittances from workers in the United States and the euro area.

6 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 freight and insurance. The average total value of the latter, in dollars, was US $ 4,450 million in April-May 2014. This amounts to an annual reduction of 18.2%

EXPORTS AND IMPORTS IN DOLLARS DURING THE FIRST AND SECOND[1] QUARTERS OF 2015

Total exports fell 30% during the first quarter of 2015 in relation to the previous year. This was due to fewer exports of mining goods and industrial products, which were down by 41.5% and 11.6% annually, in that order. The first group experienced a generalized decline in the value of all exports, except coal and ferronickel. The sharpest reduction was in refined oil products, with an annual variation of -63.4% because of the supply shock occasioned by closure of the refinery in Cartagena (Reficar).[2] Oil exports dropped 48% annually, given the plunge in international prices (which fell 49.6% annually during this period).

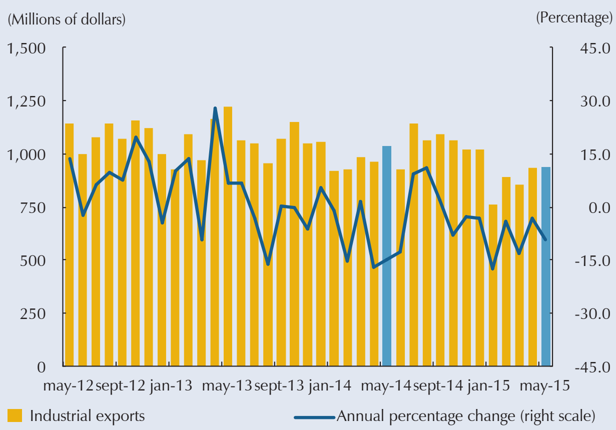
Industrial exports[3] were affected largely by fewer foreign sales of meat, textiles, apparel and products from the graphic arts sector. The destination affected the most was Venezuela, with a 35.2% annual reduction in industrial exports to that country, while sales to Ecuador were down 11.7%. In contrast, exports to the United States rose 1.2% during the first quarter. Those to other destinations were down by about 8.4% annually. Agricultural exports rose 24.5% annually during the same period, thanks mainly to a considerable increase in the value of coffee exports, which rose 50.6% during the first three months of the year, due to higher volumes.

Imports, on the other hand, fell 4.4% annually in dollars during the first quarter, primarily because of fewer foreign purchases of intermediate goods. This group posted an annual decline of 16.1%, given the sharp drop in the value of imported fuels and lubricants (-44.7%), plus that observed with respect to imports of raw materials for industry (-3.6 %). In contrast, imports of consumer goods rose at an annual rate of 2.2%, with an increase of 7.7% in non-durable goods and a 2.7% drop in durable goods. Imports of capital goods increased 8.2% annually, bolstered largely by added purchases of transport equipment (47.3%), which were offset partly by generalized reductions in imports of construction materials (-1 5%) and capital goods for industry and agriculture (-7.9% and -20.3% respectively).

Exports in dollars were down again in April-May 2015 (-33%), owing to a general reduction in external sales in all product groups. Mining exports, in particular, continue to decline sharply as a result of low international prices for these items. Accordingly, there were fewer exports of oil and petroleum products (-42.3% and -52.3%, respectively), coal (-46.5%), ferronickel (-42.8%) and gold (-28%).

Industrial exports declined at an annual rate of 6.4% between April and May (Graph A).This reflects a reduction in non-traditional exports to all destinations (Graph B), especially in trade to Venezuela, which continues to plunge (-20.4%). Sales to the United States, Ecuador and other destinations also shrank during those two months (6.5%, 9.4% and 2.9%, respectively). Agricultural exports also experienced an annual reduction of 12.6% in the same two-month period, with an generalized drop in the value of exports of all products in this group (-11.3%, -11.1 %

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



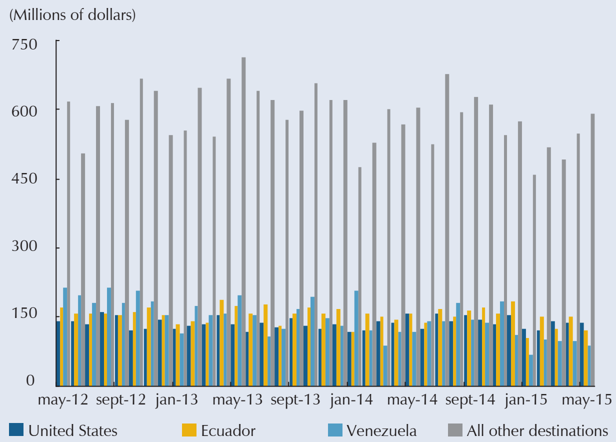
a/ Does not include petroleum and derivatives thereof, coal, ferronickel, gold, coffee, bananas or flowers. It does include other mining and agricultural goods.
Source: DANE; Banco de la República's calculations

1 The figures for the second quarter are shown with the data up to May.

2 The decline in oil derivatives exports is explained largely by the closure of Reficar at the end of the first quarter in 2014 and also by the drop in hydrocarbon prices.

3 These exports do not include oil or derivatives thereof, coal, ferronickel, gold, coffee, bananas or flowers, and represent 26.5% of all exports during the period. Exports from the manufacturing industry account for 95.2% of this group.

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

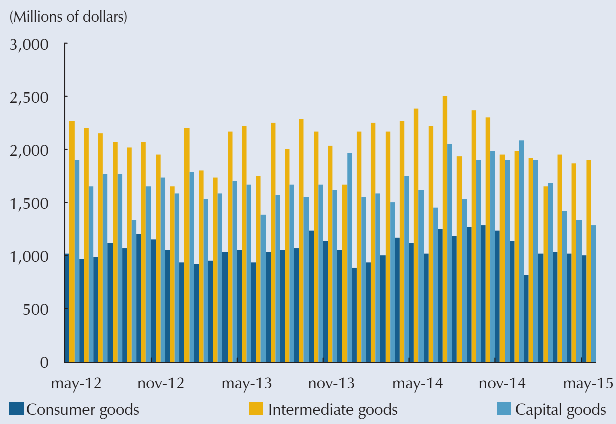


a / Does not take into account coffee, petroleum derivatives, ferronickel, gold, bananas or flowers.
Sources: DANE; Banco de la República's calculations

and -14.1% for bananas, flowers and coffee, respectively). The decline in coffee exports was mainly the result of lower prices on the international market.

During that same period, FOB imports in dollars contracted 18% annually. This reduction is associated with less exported value for all types of goods. Foreign purchases of consumer goods fell by 11.6% annually and intermediate goods, 19.1%, partly because of lower prices for fuels and lubricants. Imports of capital goods were down 21.9% (Graph C).

Graph C
Imports, by Type of Goods (FOB)



Source: DANE; Banco de la República's calculations

The available information on capital flows from the exchange balance[7] shows the trend towards a slowdown in FDI inflows continued during the second quarter, particularly with respect to FDI for the oil sector. Even more of a decline is observed in resources for foreign portfolio investment by the private sector from a year ago, when there was a significant increase in these resources due to the rebalancing in the JP Morgan indices for emerging markets sovereign bonds. Added to this are the external resources directed to the public sector in the second quarter, due to the issuance of USD 1,500 m in bonds by Ecopetrol.

The estimated current account deficit for all of 2015 is somewhat higher than was forecast three months ago and it is still above the figure for 2014, as a percentage of GDP. Therefore, in the most likely scenario, the current account deficit would be around 5.6% of GDP (Table 3).This reflects a decline in the deficit in dollars to USD 17,214 m (from USD 19,549 m in

7 Although the capital flows registered in the exchange balance do not correspond exactly to 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.

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)**	**(19,549)**	**(17,214)**
Percentage of GDP	**(2,89)**	**(3,06)**	**(3,25)**	**(5,17)**	**(5,61)**
A. Goods and services	955	(839)	(2,745)	(11,222)	(13,524)
B. Primary income (factor income)	(15,499)	(15,046)	(14,216)	(12,685)	(8,213)
C. Secondary income (current transfers)	4,834	4,579	4,594	4,358	4,523
Financial account (A+B+C+D)	**(8,925)**	**(11,754)**	**(11,845)**	**(19,745)**	**(16,874)**
Percentage of GDP	**(2,66)**	**(3,18)**	**(3,12)**	**(5,22)**	**(5,50)**
A. Direct investment (ii-i)	(6,228)	(15,646)	(8,557)	(12,358)	(10,543)
i. Foreign investment in Colombia (FDI)	14,648	15,039	16,209	16,257	12,042
ii. Colombian investment abroad	8,420	(606)	7,652	3,899	1,500
B. Portfolio investment	(6,090)	(5,690)	(6,978)	(11,654)	(3,546)
C. Other investment (loans, other types of credit and derivatives)	(349)	4,176	(3,257)	(170)	(2,557)
D. Reserve assets	3,742	5,406	6,946	4,437	(228)
Errors and omissions (E & O)	**785**	**(448)**	**522**	**(196)**	**340**

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

2014), which is offset partly by the effect of peso depreciation on the value of GDP in US dollars, which comes to 1.3 pp.

This outcome is consistent with what was indicated in the previous section about the international environment and the estimates of domestic demand detailed below. Accordingly, income from exports of goods will continue to be affected by low international prices for Colombia's major export products in contrast to what was observed in 2014. However, given the performance witnessed in the second quarter, the estimates for the average export prices of oil and coal were revised upwards, thereby slightly reducing the drop in mining exports versus the estimate last quarter.[8] On the contrary, the poor performance of foreign demand for industrial goods prompted a downward revision of the forecast for these exports, and their export value in 2015 as a whole is expected to contract as a result. Therefore, in the central forecast, total exports (in dollars) would be down by about 24%.

A sizeable reduction in imports is anticipated as well, given the sharp drop in capital goods purchased for the mining-energy sector, less momentum

8 Growth in export volume is anticipated for most commodities, consistent with the forecasts for an increase in their production. However, that growth would be less than expected three months ago for oil and coal, and more for coffee (1.2% for oil, 3.0% for coal and 6.7% for coffee).

The current deficit in dollars for 2015 is expected to be less than it was the year before. This is the result of further adjustment in current outlays in response to the dramatic decline in current income.

in domestic demand, and a generalized decline in international prices for imported items, especially intermediate goods (fuels and derivatives), as suggested by the April-May trade data released by the National Bureau of Statistics (DANE). Under these circumstances, imports in dollars would contract by about 16% during 2015 as a whole.

In addition to this variation in the value of imports of goods, the deficit in the non-factor services balance is expected to be less in 2015. This would be the result of more revenue, favored by an environment of increased competitiveness in sectors such as tourism and personal services, thanks to depreciation of the peso, and lower external costs, particularly those associated with commercial shipping. Furthermore, net outflows of factor income are expected to be less than in 2014, given the forecast for fewer profits remitted from the mining-energy sector (as explained already) and others as well, owing to reduced prospects for economic growth and the extent to which sharp depreciation of the peso has impacted the dollar value of remitted profits. Net income from transfers would recover during 2015, thanks largely to better conditions in the United States and Spain, which are important sources of worker remittances.

As for the financial account, the decline in funding from direct and portfolio investment is expected to continue during the remainder of the year, amidst a scenario of slowing economic activity in Colombia and possible progress towards monetary policy normalization in the United States by the end of 2015. In this regard, a further reduction in net FDI is expected in 2015, compared to the forecast outlined in the previous edition of this report, given confirmation in the first quarter of the cuts in financial flows to the oil sector and the added reduction in resources for other sectors associated with the increased impact of depreciation on the reinvestment of profits and reduced prospects for economic growth. The estimate for net direct investment during the entire year is USD 10,543 m. This reflects an annual decline of 25.9% in FDI resources, which is partially offset by less direct investment by Colombians abroad.

Nevertheless, the current account deficit, as a percentage of GDP, will be higher than in 2014, given the impact of the peso depreciation on the value of GDP in dollars. A deficit equal to 5.6% of GDP is forecast for 2015.

There also is expected to be less financing with investment portfolio resources in 2015 compared to the previous year, since the flow of foreign capital to the local public debt market is expected to decline, despite the increase in external bonds sold in the first half of the year by Ecopetrol and the private sector. This will be offset, in part, mainly by additional resources from loans to the non-financial public sector and by a decline in assets constituted abroad by the private sector.

This report considers alternative scenarios to the central forecast for the balance of payments in 2015, based on different assumptions about the conditions for international financing and domestic growth. If international financing remain ample, with economic growth near the top of the forecast range, the current account deficit would be 6.4% of GDP. However, *The remainder of 2015 will see a further decline in resources to finance the current account deficit, particularly resources for FDI in the oil sector and for portfolio investment.*

with less international financing and a lower rate of economic growth (at the bottom of the range), the deficit would come to 4.8% of GDP.

The current account deficit, in dollars and as a proportion of GDP, is expected to be less in 2016 (around 5%). Primarily, this would be due to less of a trade deficit, coupled with a more favorable outlook for the prices of Colombia's main exports, a recovery in economic growth on the part of its major trading partners, and the impact start-up of production at Reficar would have on fuel imports. The deficit would be funded mainly with FDI resources, which are expected to be somewhat more than was forecast for 2015, due to a slight recovery in oil revenue and a few additional resources associated with the onset 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 expected.

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

The Colombian economy grew at an annual rate of 2.8% during the first three months of the year. This figure is in line with the estimate developed by the technical staff at Banco de la República.

Domestic demand slowed and net exports contributed negatively to GDP growth, although less so than in past quarters.

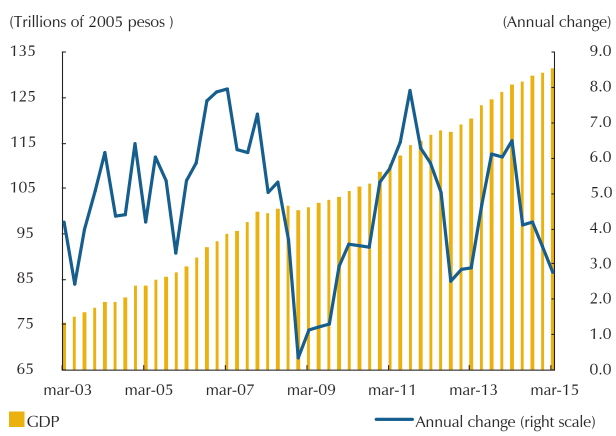
On the supply side, the best performing sectors were commerce, construction and financial services. In contrast, manufacturing industry and mining saw annual contractions.

According to the data at hand for the second quarter of the year, the evidence suggests economic activity would have increased at a pace similar to that on record for the first three months of 2015.

A. GDP in the first quarter of 2015

The latest figures for the national accounts, published by the National Bureau of Statistics (DANE), show the Colombian economy grew at an annual rate of 2.8% during the first three months of the year (Graph 16). This momentum is consistent with what was forecast by the technical staff at Banco de la República in the previous edition of the Inflation Report and implies a new slowdown in annual GDP growth. The variation between the quarters was 0.8%, which means an annualized growth rate of 3.3%.

Graph 16
Gross Domestic Product
(Seasonally adjusted)



Source: DANE; Banco de la República's calculations

With the drop in international oil prices to levels well below those witnessed in mid-2014 and the adverse effect this had on gross national disposable income in the first quarter, the momentum in domestic demand during the first quarter of the year was less compared to what it was late last year. Coupled with the depreciation of the nominal exchange rate, this led to less growth in real imports during the same period (although superior to most of the items that make up GDP).

Exports in constant pesos grew at a lackluster pace, following a slight decline in this GDP category during the fourth quarter of last year. This occurred in a context of weak external demand, as explained in Chapter I of this report.

A look at the individual performance of the components that make up domestic demand shows a general slowdown in the three major categories, more so for public consumption than private consumption and investment (Table 4). The reduced growth of household consumption was associated mainly with the loss of momentum in spending on durables and semi-durables. The consumption of semi-durables might have been discouraged by the pass trough of accumulated depreciation to domestic prices for these goods. Also, the XIV Automobile Show in November 2014 would

Table 4
Real Annual GDP Growth, by Type of Spending

	2014				2014	2015	Contribution to Annual Growth (I Qtr. 2015)
	I Qtr.	II Qtr.	III Qtr.	IV Qtr.	Full year	I Qtr.	
Total consumption	5.3	4.3	4.4	4.9	4.7	3.3	2.7
Household consumption	4.2	3.8	4.1	5.3	4.4	3.9	2.5
Non-durable goods	3.7	3.0	3.9	4.8	3.8	3.4	0.7
Semi-durable goods	4.0	3.6	3.4	7.3	4.6	4.2	0.3
Durable goods	4.1	4.9	8.1	13.0	7.6	3.0	0.1
Services	5.0	4.1	4.0	4.1	4.3	4.0	1.3
Government consumption	9.5	6.6	5.3	3.8	6.2	2.3	0.4
Gross capital formation	14.5	13.3	10.4	8.8	11.7	7.2	2.1
Gross fixed capital formation	13.3	8.6	11.8	10.1	10.9	6.0	1.8
AAgriculture, forestry, hunting and fishing	3.6	3.0	4.7	7.1	4.6	(2.3)	(0.0)
Machinery and equipment	14.4	7.8	14.6	12.2	12.2	1.5	0.2
Transport equipment	5.2	11.1	14.9	16.6	12.1	30.3	0.9
Construction and Structures	7.1	1.2	15.3	7.5	7.8	2.2	0.2
Civil works	25.9	13.6	6.6	3.6	12.1	6.9	0.6
Services	5.9	1.7	4.9	1.5	3.5	1.8	0.0
Domestic demand	7.8	6.0	5.9	5.8	6.3	4.2	4.6
Total exports	3.1	(12.1)	4.2	(0.6)	(1.7)	1.3	0.2
Total imports	9.0	5.0	8.1	14.4	9.2	8.1	(2.3)
GDP	6.5	4.1	4.2	3.5	4.6	2.8	2.8

Source: DANE; Banco de la República's calculations

The performance of investment in transport equipment and civil works construction during the first quarter is highlighted

have meant a high level of private spending on durable goods during the fourth quarter of last year, thereby slowing its rate of growth in the first three months of 2015. In the case of non-durables, the slowdown in this line of private spending occurred in a scenario of sharp increases in food prices. On the other hand, services grew at a good pace, similar to the average calculated since 2001.

As for gross fixed capital formation, the behavior of investment in transport equipment and, to a lesser extent, investment in the construction of civil works was a high point. In the first case, the annual increase came to about 30.0%, bolstered by aircraft purchases on the part of several cargo and passenger carriers. In the second case, the annual increase of around 7.0% was related to capital expenditure to build waterways, ports, and water and sewage systems, in addition to other infrastructure projects.[9] This was the result of good budget implementation by regional and local administrations, specifically in terms of the resources turned over to municipal governments in the form of royalties. Added to this is what the national government spent on modernizing and upgrading of ports and airports, and for a number of highway projects throughout the country.

However, there was a slowdown in investment spending on machinery and equipment and building construction. The effect on income occasioned by the shock to terms of trade, depreciation of the peso against the dollar and the sharp decline in investment in the oil sector (according to industry reports) explains the poor performance of real investment in capital goods during the first three months of the year. Less growth in investment in construction was the result of a drop in the residential sector; however, it was offset to some extent by spending in the non-residential sector.

Net exports contributed negatively to GDP growth, although less so than in past quarters.

Net exports contributed negatively to GDP growth, although not as much as in previous quarters. In principle, imports increased more than most of the items that make up GDP, but less so than towards the end of last year. On the one hand, imports of goods and services were led by air transport equipment, reflecting what was said earlier about how investments of this type performed. On the other, the purchase of capital goods for industry and durable goods performed poorly, similar to investment in machinery and equipment, and investment in the consumption of durable goods. However, the growth in imports in real pesos (8.1%) contrasts with the decline of this aggregate in dollars (-4.3%), as reported in Chapter I of this report. This points to a drop in prices for imported goods, which would offset some of the price reductions for goods exported by Colombia, thus avoiding a greater fall in terms of trade.

9 Sports facilities, parks, environmental protection works, hospitals, schools and marketplaces.

Exports grew somewhat more than in the fourth quarter of 2014, although only at 1.3% annually. This poor performance would have been motivated by mediocre sales of oil and petroleum derivatives and weak growth of Colombia's major trading partners.

On the supply side, the highest growth rates observed during the first three months of the year were for commerce (5.0%), construction (4.9%) and financial services (4.4 %)(Table 5). On the contrary, industry (-2.1%) and mining (-0.1%) posted annual contractions (Table 5).

Despite the slowdown in retail sales during the first quarter, commerce maintained an important amount of momentum. This was due, in part, to hotel and restaurant services, which went from 3.3% growth in the final three months of 2014 to 5.9% during January-March 2015. Financial services, which account for a major share of GDP (19.8%), continued to make an important contribution to economic growth, thanks largely to real estate services.

Civil works were the best performer in the construction industry (7.0%), as explained earlier. The building sector also reported positive growth (2.1%).

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

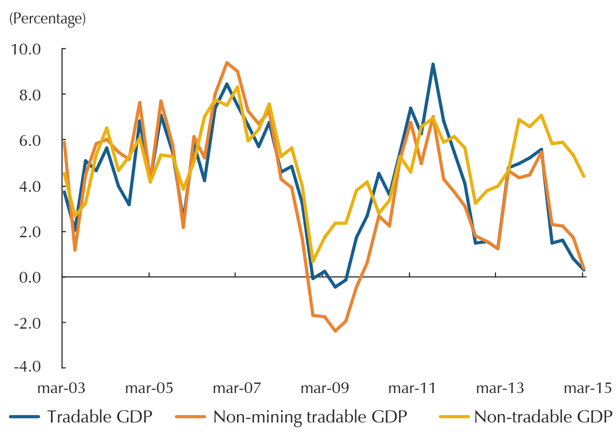
Branch	2014				2014	2015	Contribution to Annual Growth (I Qtr. 2015)
	I Qtr.	II Qtr.	III Qtr.	IV Qtr.	Full Year	I Qtr.	
Agriculture, forestry, hunting and fishing	6.1	0.4	2.0	0.7	2.3	2.3	0.1
Mining and quarrying	6.0	(2.1)	(1.2)	(3.3)	(0.2)	(0.1)	(0.0)
Manufacturing industry	4.0	(1.7)	(0.7)	(0.5)	0.2	(2.1)	(0.2)
Electricity, gas and water	4.5	3.7	4.0	3.0	3.8	2.0	0.1
Construction	14.0	8.7	10.9	6.1	9.9	4.9	0.3
Buildings	7.0	1.0	14.2	7.3	7.4	2.1	0.1
Civil works	24.5	14.6	6.7	4.2	12.0	7.0	0.3
Commerce, repairs, restaurants and hotels	5.4	4.1	4.4	4.4	4.6	5.0	0.6
Transport, storage and communication	4.9	4.3	4.2	3.2	4.2	2.8	0.2
Financial, real estate and company services	5.4	5.5	4.5	4.1	4.9	4.4	0.9
Social, community and personal services	7.4	5.4	4.7	4.4	5.5	3.0	0.5
Subtotal – added value	6.3	4.0	4.1	3.2	4.4	2.7	2.5
Taxes minus subsidies	7.5	8.2	7.4	8.2	7.8	4.3	0.4
GDP	6.5	4.1	4.2	3.5	4.6	2.8	2.8

Source: DANE; Banco de la República's calculations

Industry performed the worst of the productive activities in Colombia's GDP (-2.1%). This was mainly because of the sharp drop in oil refining (-11.2%) due to the temporary closure of Reficar, which was shut down last year to modernize its facilities and allow for more production and greater value added. When this sub-branch of industry is excluded, the remaining branches also report less of decline than the one noted for the aggregate (-0.8%). Diversity within the sector remains high: sub-branches such as oil refining (-11.2%) and yarns and textiles (-10.7%) registered important reductions; others such as the manufacture of beverages (6.8%) and dairy products (5.0%) grew considerably. Moreover, the outcome for the first quarter occurred in a context where exports of manufactured goods fell 7.3% in dollars.

Apparently, the effect of actual depreciation, which should help to improve the profitability of manufacturing and the competitiveness of locally produced goods over imported items, has been annulled by the weak growth of Colombia's trading partners, especially those in the region, where a considerable percentage of these exports are sold. It is important to point out that companies exporting to Ecuador, one of Colombia's main markets for manufactured goods, have faced commercial safeguards in recent months that imply paying a higher tariff than in the past (in increments of 5% to 45%, depending on the type of product). In that environment, GDP for tradables (0.3%) continued to post increases below those of the economy as a whole and less than its average since 2000 (3.8%); GDP for non-tradables (4.4%) maintained a growth rate slightly below average (4.7%) (Graph 17).

Graph 17
GDP in the Tradable, Non-mining Tradable and Non-tradable Sectors
(Annual growth)



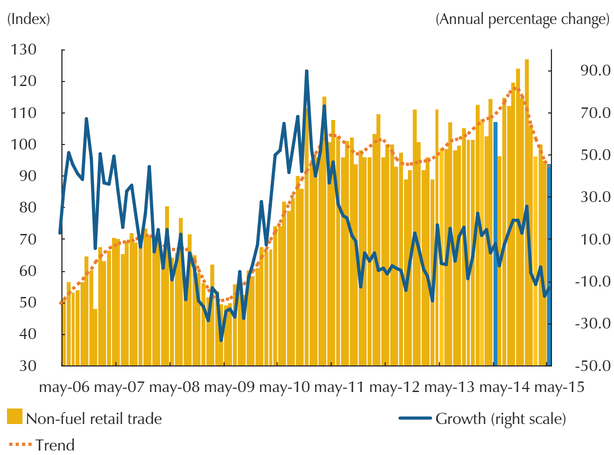
Source: DANE; Banco de la República's calculations

B. GDP IN THE SECOND QUARTER OF 2015

According to the data available for the second quarter, there is evidence to suggest that economic activity would have increased at a pace similar to that observed in the first three months of 2015. Some of the downside risks considered in the last edition of this report materialized in recent months. To begin with, the economies of Colombia's major trading partners showed more weakness than was predicted three months ago, while events in international financial markets have increased the perception of uncertainty for emerging economies. Furthermore, as explained in Chapter I of this report, the FDI (especially for the oil sector) and portfolio investment capital inflows would have slowed during the quarter from April to June. Additionally, the evolution in international commodity prices suggests that terms of trade remained low; this, in turn, jeopardizes the country´s national disposable income (see Box 1, pp. 41-46). All these elements signal a slowdown in consumption and private investment during the second quarter of 2015. The vast majority of economic indicators point in that direction.

In fact, the monthly retail survey published by DANE (EMCM by its acronym in Spanish) shows total retail sales rose 2.7% during May (Graph 18), brining growth to 1.1% in April-May. This represents a slowdown compared to the figure for the first quarter, when annual growth averaged 5.5%. Discounting vehicle sales, this aggregate increased 6.1% in May and 4.7% in April- May. Once again, and when comparing these figures to the momentum in retail sales during the first three months of the year (8.1%), one sees a slowdown.

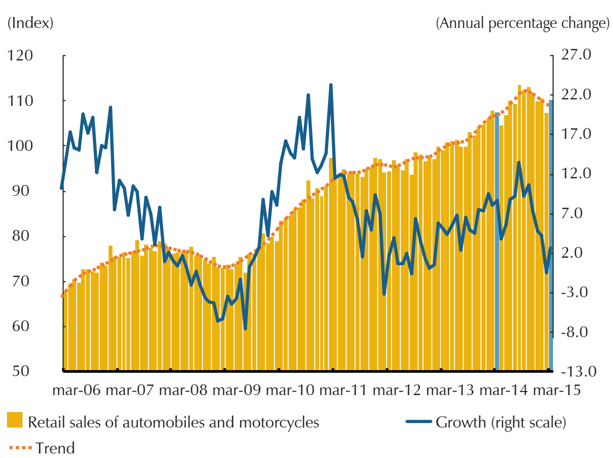
Graph 18
Monthly Retail Trade Survey
(Total non-fuel retail trade, seasonally adjusted)



Source: DANE; Banco de la República's calculations

The outlook for consumption of durables during the second quarter is more pessimistic. According to the same survey, retail sales of vehicles were down 12.9% in May. This implies an annual drop of 14.7% for the aggregate in April-May (Graph 19), which is a more negative figure than the one for the first quarter, when an annual decline of 6.7% was observed. Additionally, records of new vehicle registrations published by the Colombian Automotive Committee[10] show a 12.0% drop in the aggregate during the second quarter (Graph 20).The trend component of both series suggests the poor performance of vehicle sales might be a phenomenon that could extend into the second half of the year.

Graph 19
Retail Sales of Automobiles and Motorcycles
(Seasonally adjusted series)



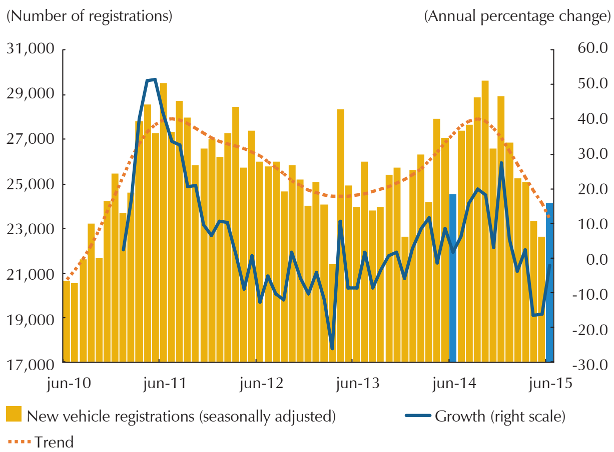
Source: DANE (EMCM); cálculos del Banco de la República.

Other indicators that point to mediocre performance for private consumption in the second quarter and for the remainder of 2015 are related to the situation in the job market. Its momentum during the first six months of 2015 has been less favorable than that described in the previous edition of this report. The decline in the unemployment rate (UR) has been slower than in past years and employment growth is sluggish.

The UR for the moving quarter ended in May was down in annual terms for the nationwide total and the rural areas, reaching 9.1% and 5.1%,

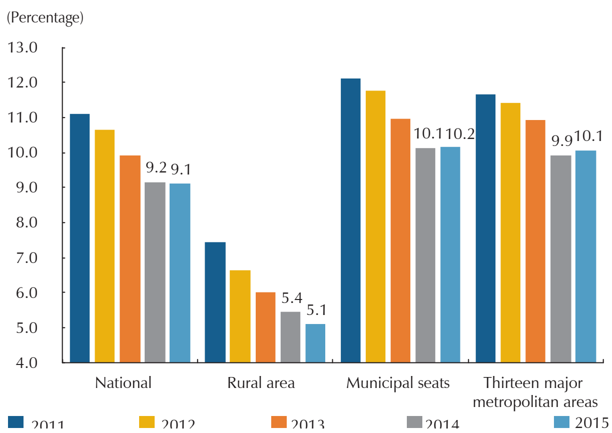
10 The committee is comprised of the National Association of Colombian Entrepreneurs (ANDI), the National Federation of Merchants (FENALCO) and Econometrics.

Graph 20
New Vehicle Registration
(Seasonally adjusted series)



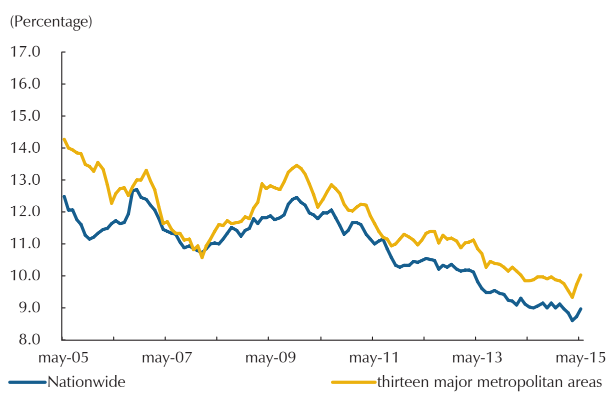
Source: Comité Automotor Colombiano (ANDI, Fenalco y Econometría); cálculos del Banco de la República.

Graph 21
Unemployment Rate
(March-April-May moving quarter)



Source: DANE (GEIH); cálculos del Banco de la República.

Graph 22
Unemployment Rate (UR)
(Seasonally adjusted moving quarter)



Source: DANE (GEIH); cálculos del Banco de la República.

respectively. On the other hand, a slight rise was observed in the urban capitals and the thirteen major metropolitan areas, with the UR at 10.2% and 10.1%, in that order (Graph 21). The seasonally adjusted UR series also showed some very slight increases in May (Graph 22).

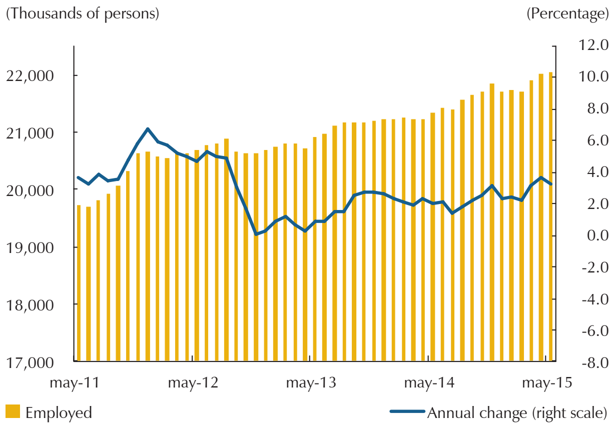
Smaller adjustments in the number of employed, which was up 3.2% annually in the national total and 2.7% in the thirteen areas during the December-February moving quarter, were behind this performance. This last indicator has witnessed a sustained slowdown in job creation during 2015 (Graph 23).

Employment growth continues to be driven by wage employment, which increased at an annual rate of 4.5% during March-May in the thirteen major metropolitan areas, while non-wage employment was up 0.7 %. Although salaried employment continues to expand at favorable annual rates, its seasonally adjusted levels have seen a slowdown in recent months (Graph 24).

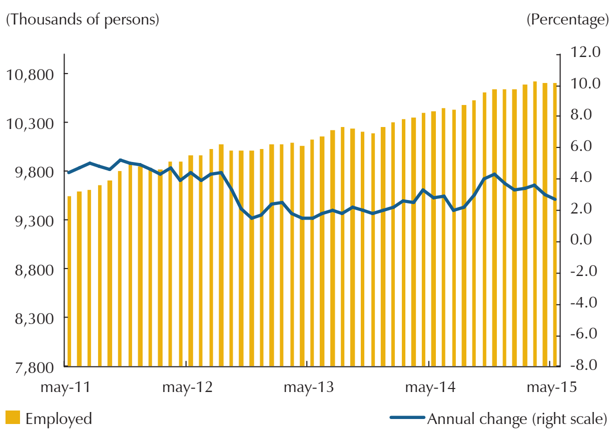
Even so, some indicators that have a high historical correlation to the momentum in household consumption, but are not used directly by DANE to calculate quarterly national accounts, suggest the slowdown in private consumption would have been less than what is implied by the sales indexes presented earlier, or even that this category could have grown at a pace similar to that of the first quarter. According to the consumer confidence index (ICC by its acronym in Spanish) published by Fedesarrollo with data up to June, the indicator improved slightly compared to the figures for April and May. The average of the CCI for the second quarter was similar to the average calculated for the aggregate in the first three months of the year. However, the levels of this series were well below those on record for the second quarter of 2014 and are still below the average calculated since 2001 (Graph 25). Moreover, according to Banco de la República's Monthly Survey of Economic Expectations (EMEE by its acronym in Spanish), based on information up to May, the sales balance suggests private consumption

Graph 23
Number of Employed and Annual Change

A. Nationwide total

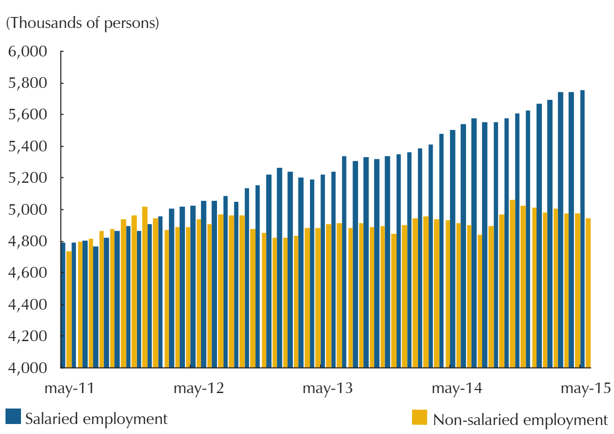


B. Thirteen major metropolitan areas



Sources: DANE (GEIH); Banco de la República's calculations

Graph 24
Employment by Type of Occupation
(Thirteen major metropolitan areas, seasonally adjusted moving quarter)



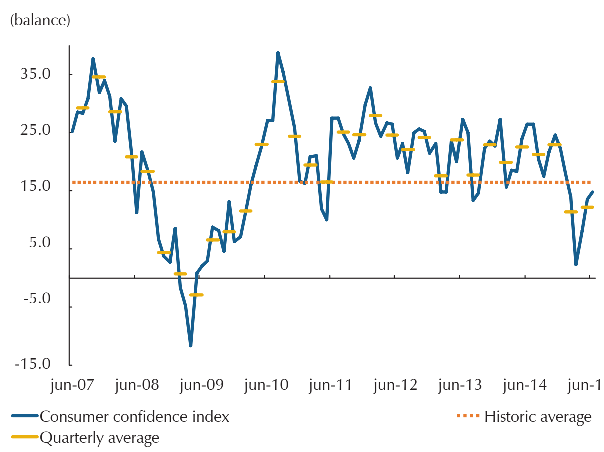
Sources: DANE (GEIH); Banco de la República's calculations

would have grown at a moderate pace during the second quarter, similar to the rate observed earlier this year.

As for investment, spending on capital goods would have slowed during the second quarter. The figures on imports of transport equipment and capital goods for industry show these purchases were down 22.1% in dollars; in real terms, this would have meant less growth than in the first quarter (Graph 26). The balance of investment expectations reported in the EMEE by May, with respect to gross fixed capital formation other than building construction and civil works (Graph 27), points in the same direction.

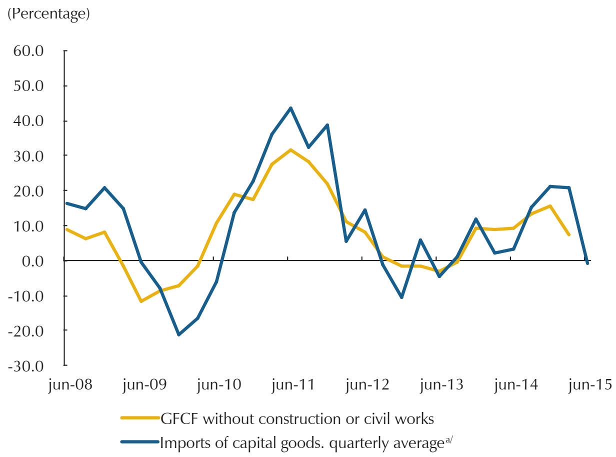
Net exports contributed negatively to GDP growth, although less so than in previous quarters. On the one hand, as suggested by the information available up to May, exports of goods and services have grown at a faster pace than during the first quarter, thanks to better performance on the part of traditional exports as a result of larger export volumes of oil and coffee. However, setbacks in the production of coal (sold mostly abroad) prevented more momentum in the aggregate. On the other hand, with respect to non-traditional exports, weak growth on the part of Colombia's major trading partners would not have allowed for a real increase in foreign sales of these goods and services. Additionally, given

Graph 25
Consumer Confidence Index and Quarterly Average



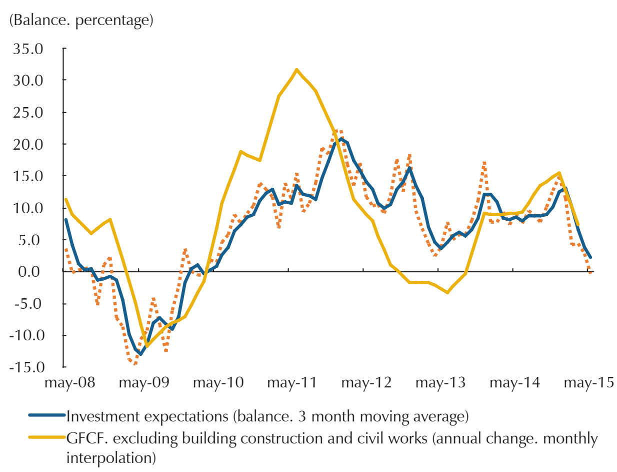
Source: FEDESARROLLO.

Graph 26
Imports of Capital Goods for Industry and Transport Equipment (Real) and GFCF Excluding Construction and Civil Works
(Annual change)



Note: The second-quarter figure pertains to April-May.
a / Figures expressed in real terms, as calculated by Banco de la República.
Sources: DANE (national and foreign trade accounts); Banco de la República's calculations

Graph 27
Expectations for Investment and GFCF, Excluding Building Construction and Civil Works



Sources: DANE; Banco de la República's calculations

the information at hand, there is still no evidence that accumulated depreciation of the nominal exchange rate has enabled goods produced in Colombia to gain competiveness on international and domestic markets. Real imports would have slowed considerably. This is consistent with expectations for gross fixed capital formation in machinery and equipment and transport equipment, as well as for the consumption of durable goods.

On the supply side, most available indicators point to uneven performance during the second quarter of 2015, but suggest the GDP growth rate would remain close to what was observed in the first quarter. The best news comes from oil and coffee production, energy-demand and financial sector, which are offset by sectors such as commerce, industry and coal.

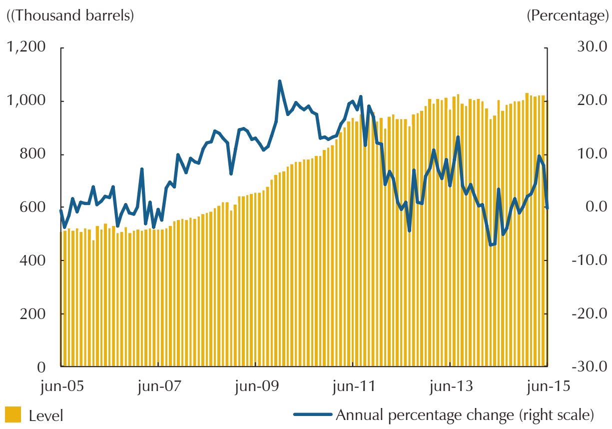
As for mining, performance in the oil and coal industry is mixed. Oil production in the second quarter stayed at around 1,019 thousand barrels per day (tbd), on average, implying 5.8% annual growth for that period (Graph 28). In contrast, coal continues to post annual declines. This is according to data released by the Colombian Mining Association, which reported production fell 3.6% to 42 million tons,[11] prompting a decline of nearly 1% during the second quarter. This downturn is confirmed by the figures on export volume published by DANE (-34.4% in April-May and -3.8% so far this year).

The National Federation of Colombian Coffee Growers says coffee production continued to perform well and was up 17.8% between April and June, after increasing 7.3% in the first quarter (Graph 29). Year-to-date production stood at 6,246 thousand 60-kg sacks, which meant 12.8% growth over the same period in 2014.

Utilities and financial services also performed well. Growth in the demand for energy remained at 3.3%; the regulated component is up by 4.6%, as opposed to 1.2% for unregulated component. In the financial sector, credit performed much as it did in the first three months of the year. Therefore,

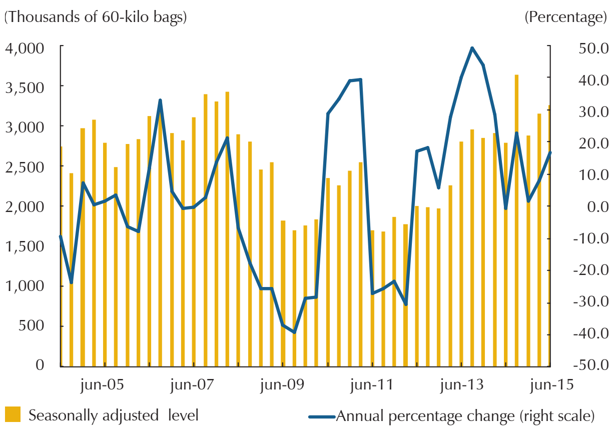
11 This association consolidates the figures on 92% of the companies in the sector.

Graph 28
Oil Production
(Level and Yearly Growth)



Sources: Agencia Nacional de Hidrocarburos (ANH); Banco de la República's calculations

Graph 29
Coffee Production
(Quarterly and annual growth)



Sources: Federación Nacional de Cafeteros; Banco de la República's calculations

its contribution to total GDP growth is expected to continue, given its high share. Considering the figures at June, consumer loans and home mortgages increased 13.1% annually and 14.9% in nominal terms.

Manufacturing industry continued to report a great deal of deterioration during the second quarter. Taking into account the figures up to May from the DANE Monthly Manufacturing Survey (EMM by its acronym in Spanish), the sector shrank 3.9% annual in that month. The decline during the year to date comes to around -2.6%. Excluding oil refining, with 16.1% implicit participation in May, the rest of industry would have declined during that month and so far this year (-3.7% and -0.3%, respectively). The trend component of total manufacturing industry shows a setback for several quarters (Graph 30, panel A). When refining is excluded, one sees a standstill in the trend (Graph 30, panel B).

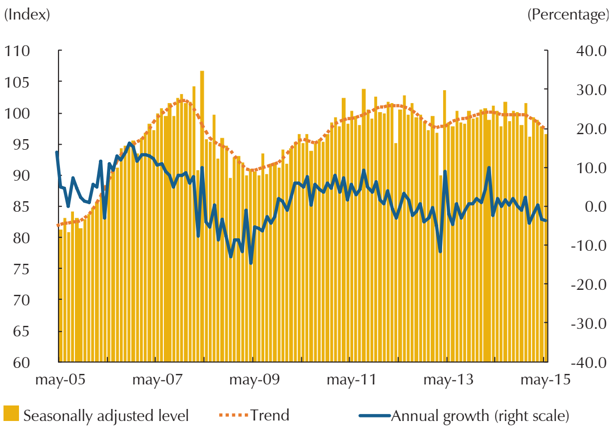
On the other hand, information from the June edition of the Fedesarrollo Business Opinion Survey shows indicators of orders and inventories improved slightly from the first quarter, but the trend components of each one do not suggest significant changes. This is also the case with expectations three months ahead. In addition, according to the ANDI Business Opinion Survey, use of installed capacity was at levels slightly below the historical average, and the business climate is slightly better.

Manufactured goods exports continued to decline, falling 6.4% in dollars and 0.7% in volume for the April-May aggregate. In those months, the booster effect of depreciation would have been offset considerably by the weak growth of Colombia's trading partners, for the reasons stated in the first section of this chapter.

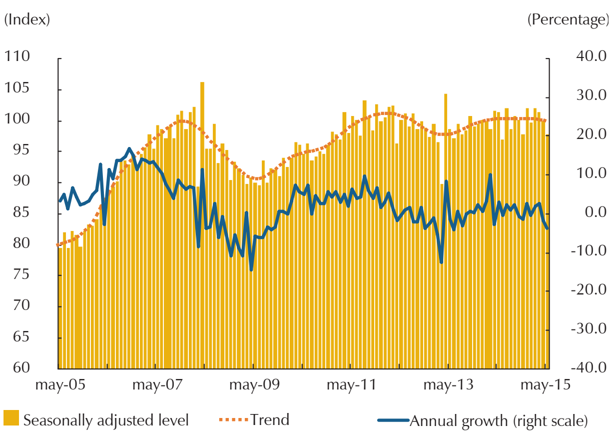
Other sectors that have exhibited less dynamic behavior are commerce and cattle slaughtering. Commerce has slowed significantly, pursuant to the deceleration in retail sales mentioned earlier. On the other hand, the cattle retention cycle that began several months ago produced another decline in slaughtering, which was down 2.9% in April-May.

Graph 30

A. Total Real Industrial Production
(Seasonally adjusted series, trend component and annual growth)



B. Industrial Production Excluding Real Oil Refining
(Seasonally adjusted series, trend component and annual growth)



Source: DANE; Banco de la República's calculations

Considering all these factors, the technical staff at Banco de la República expects annual GDP growth during the second quarter would have been somewhere between 2.0% and 3.5%, with 2.7% being the most likely figure. The size of the forecast range is due to the uncertainty associated with the performance of items such as government consumption or investment in civil works; there are indicators that shed light on their performance during the quarter.

Box 1

IMPACT OF THE DROP IN TERMS OF TRADE ON REAL GROSS NATIONAL DISPOSABLE INCOME: THE EXPERIENCE OF CHILE, COLOMBIA AND PERU

Camilo Alberto Cárdenas
and Maria Alejandra Prieto *

For a small open economy that receives external funding and is obliged to adapt to international credit and liquidity conditions, besides being an intensive producer and exporter of commodities (as is the case of Colombia and many other countries in the region), it is very important to analyze the momentum in terms of trade (TT) and how it affects gross national disposable income (GNDI). Doing so is important to ensuring good economic policy in terms of how it is planned, designed and implemented. The significance of this relationship lies with the fact that changes in terms of trade have a real impact on the economy, particularly on national income. For instance, agents will have more spending power when the ratio of export prices to import prices for goods and services is favorable. The opposite also applies: if that ratio is unfavorable, the economy will have to adjust its spending levels, which would imply a decline in the collective welfare of the country. Moreover, depending on the nature of the TT shock, which might be temporary or persistent, an economy can be temporarily or permanently richer or poorer.

The past decade saw historically high prices for the commodities exported by most economies in the region. Coupled with an international environment marked by a relative abundance of liquidity, this allowed national disposable income in countries such as Chile, Colombia and Peru to grow at a good pace. It also led to significantly higher rates of investment and public and private consumption.

However, raw material prices follow a cyclical pattern. It is possible that high-price phase, which would have lasted about ten years, is being followed by a prolonged period of low prices. In the case of Chile and Peru, countries where prices for their exports began to fall as of late 2011 (well before the drop in oil prices), there were real changes of considerable magnitude in the growth of output and its components.[1] Annual GDP growth in these countries during 2015 was only 1.9% and 2.4%, respectively. In both cases, these figures are explained by a sharp decline in investment and private and public consumption. In Colombia, the adverse effects of the drop in oil prices are already evident: a moderate slowdown in consumption and investment, relatively less so in the case of the latter, was observed in the fourth quarter of 2014 and the first three months of 2015. However, the extent to which this shock will affect economic performance in the coming quarters is still unclear, partly because the level at which the price of oil and other commodities will stabilize is not yet known.

Although the economies of Chile, Colombia and Peru have distinguishing characteristics that set them apart from one another, this section offers a comparative calculation of the contribution of TT to real GNDI growth in each of these countries in recent years. The results suggest the negative TT shocks had a considerable impact on the purchasing power of real GNDI in all three cases. Additionally, we show different metrics proposed in the literature to calculate the real effect a drop in TT has on GNDI, as there is no consensus on what deflator should be used to measure the extent of that shock. Finally, we present an econometric exercise that reveals the differences between countries in terms of how the GNDI and domestic demand (DD) respond to a shock to TT quarterly growth.

1. Calculating the Impact of Terms of Trade on Real Gross National Disposable Income

To estimate the impact of TT on real GNDI, it is best to start with the identities of GDP and gross domestic income (GDI). In current terms and market prices, they are equivalent:[2]

* Mr. Cardenas is a specialized professional with the Department of Programming and Inflation. Ms. Prieto is a student intern with the same department. The authors wish to thank Adolfo Cobo and Aaron Garavito for their comments. The views and findings presented in this section imply no commitment whatsoever on the part of Banco de la República or its Board of Directors.

1 It is important to point out that this slowdown occurred in a less favorable external context and was not due solely to the decline in raw material prices.

2 See Lora (2008) for a more detailed explanation.

$$GDP = C + G + I + X - M = GDI$$

GNDI is obtained once the nominal values of net factor payments (NFP) and net current transfers (NCT) are incorporated. The sum of the last two components is known as net income from abroad (NIA). As such:

$$GNDI = GDI + NFP + NCT = GDI + NIA$$

To convert the expressions of GDP and GDI to constant prices, each of the components is deflated by its respective price index. For private consumption, public consumption, investment and imports (C, G, I and M, in that order), the deflators used are the same in both identities. In the case of exports, the deflator is different for each identity. When calculating real GDP, exports are valued at their own prices. For real GDI, the import price index is used. This assumes the real value of exports is measured in terms of the goods and services they can acquire abroad; so, the deflator used is the import price index. However, in this section, we introduce other metrics with different underlying assumptions related to the purchasing power of exports.

Different alternatives are found for the NIA deflator as well. In this exercise, we deflate the nominal NFP and NCT series with the domestic demand price index, which implicitly assumes their purchasing power is valued at the prices of goods and services (both consumer and investment) in the domestic market.

With the foregoing, the constant value of the amounts stated (in italics and lower case) is given by the following expressions:

$$gdp = \frac{C}{P_C} + \frac{G}{P_G} + \frac{I}{P_I} + \frac{X}{P_X} - \frac{M}{P_M} = c + g + i + x - m$$

$$gdi = \frac{C}{P_C} + \frac{G}{P_G} + \frac{I}{P_I} + \frac{X}{P_M} - \frac{M}{P_M} = c + g + i + \frac{X}{P_M} - m$$

$$gndi = gdi + \frac{NFP}{P_{NFP}} + \frac{NCT}{P_{NCT}} = gdi + nfp + ntc$$

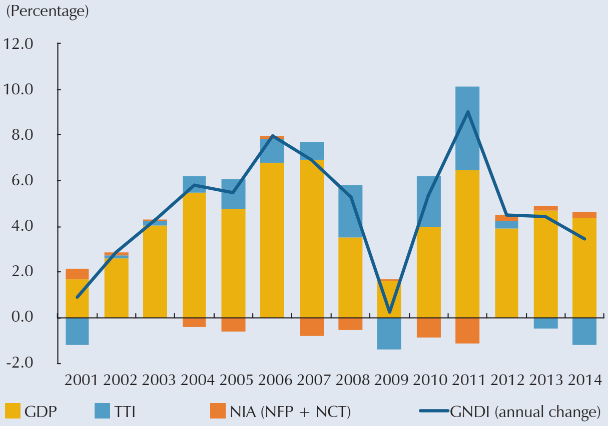
Discounting the real GDP on both sides of the last equation, gives us:

$$gndi = gdp + nfp + ntc + x\left(\frac{P_X}{P_M} - 1\right)$$

The term at the end of the equation represents the real impact of terms of trade (TTI) on real GNDI; that is, the perceived gain or loss in the purchasing power of income due to the change in the terms-of-trade ratio.

Graph B1.1 shows the contribution of each component to the change in GNDI in Colombia. One sees a favorable TT ratio (the blue bar) contributed to the expansion in GNDI throughout much of the last decade. The contribution was negative in 2013 and 2014, albeit in relatively small amounts. For the economies of Chile and Peru, the real impact of the drop in the TT was greater (Graph B1.2, panels A and B).

Graph B1.1
Annual Change in Gross National Disposable Income (GNDI) in Colombia – Contribution by components



TTI: real effect of the terms of trade.
NFP: net factor payments.
NIA: net income from abroad.
NCT: net current transfers. Sources:
DANE and Banco de la República; authors' calculations.

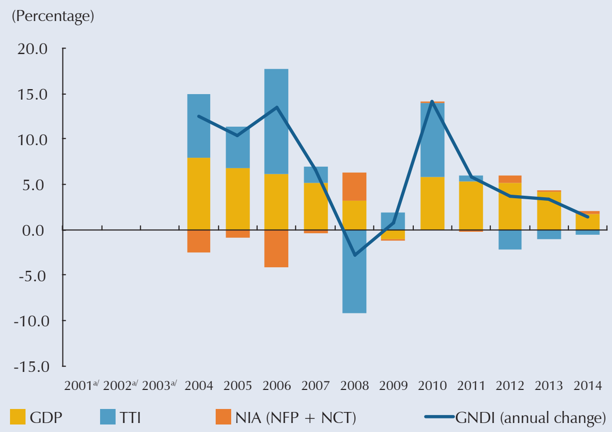
2. Alternative Metrics to Measure TTI against Real GNDI

There is broad debate about the appropriate deflator to measure the impact of TT shocks, and a consensus has yet to be reached on which one is best. However, alternative deflators generally calculated as follows are suggested in the literature to measure the TTI.

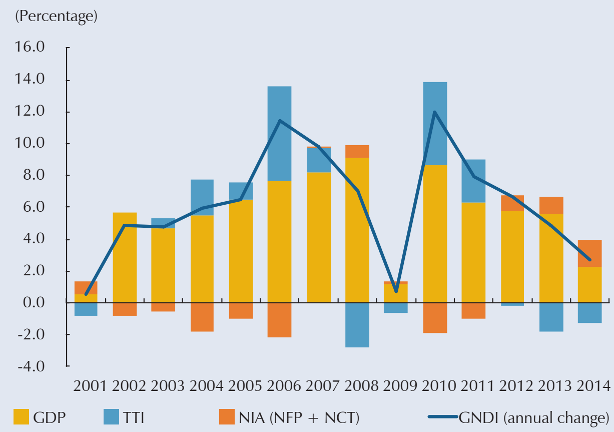
$$TTI = x\left(\frac{P_X}{P^*} - 1\right) + m\left(1 - \frac{P_M}{P^*}\right)$$

Graph V1.2
Contribution, by Components, to the Annual Change in Gross National Disposable Income (GNDI)

A. Chile



B. Peru



a/ No available data
TTI: real effect of the terms of trade.
NFP: net factor payments.
NIA: net income from abroad.
NCT: net current transfers .
Sources: Central banks and statistics bureaus; authors' calculations

where Px and PM are the export and import price indices, respectively; x and m are the real quantities of exports and imports; and P * is one of the deflators shown in Table B1.1, as compiled in Gutierrez (1987).

With the Geary-Nicholson formula (Alternative 1), the real gains or losses in TTI, due to changes in relative prices, affect the country's capacity to acquire imports, since it assumes the additional income from exports is used to purchase goods and services the country normally acquires abroad. In other words, the TTI is equivalent to the purchasing power of exports in terms of imports for a given period, which is why P M is the deflator used.

Geary and Burge (Alternative 2) adopt the foregoing criteria, but differentiate a trade deficit from a trade surplus. In the event of a trade surplus (nominal), the TTI represents the fraction of exports not used to purchase imports, in which case the export price index is the deflator used. In the case of a trade deficit, they opt for the import price index.

Geary (1959) proposes using a simple average of the export and import price indexes as a deflator (Alternative 3). Courbis and Kurabayashi (Alternative 4) recommend a measure that considers the relative importance of each of these items, formulating a linear combination of Px and PM weighted by the share of real exports and imports in the trade balance as a deflator.

Another measure for P * that was presented in Stuvel (1959) (Alternative 5) suggests the GDP deflator be used to ensure that all components of the identity

Table B1.1

Alternative	Authors	Deflator (P^*)
1.	Geary (1961), Nicholson (1960); Stuvel (OECD); SCN-1 (commonly used)	P_M
2.	Geary and Burge (1957)	P_X, $si\ X - M > 0$ P_M, $si\ X - M < 0$
3.	Geary-2 (1959)	$\frac{(P_X + P_M)}{2}$
4.	Courbis (1964), Kurabayashi (1971)	$\frac{(X + M)}{(x + m)}$
5.	Stuvel (1959)	$\frac{PIB}{pib}$
6.	SCN-2	$\frac{DI}{di}$

Source: Gutiérrez (1987).

reflect changes in purchasing power in terms of the output of the economy. Similarly, the United Nations System of National Accounts suggests the domestic demand price index be used as a deflator (Alternative 6).

Graph B1.3 shows the annual values of TTI (as a percentage of GNDI) for Chile, Colombia and Peru, using the described metrics. In all cases, the results are conclusive and point in the same direction. To make the results comparable among countries, we take all the price indexes to the same base year (2005). According to our calculations, the TTI impact represented between 6.5% and 7.0% of GNDI in the three countries, for the average 2012-2014.

3. An Econometric Approach

In the previous section, we calculated the contributions of TTI to national income in Chile, Colombia and Peru. Now, we want to quantify the impact of a TT-index shock on the momentum of several macroeconomic aggregates in these economies. To do so, we estimate vector autoregressive models (VAR) in each case, with three endogenous variables: the terms-of-trade index (TT), gross national disposable income (GNDI) and domestic demand (DD). Using the results, we calculated the relevant impulse-response functions (IRF).

The series used are constructed with information from the national accounts and the balance of payments of each of the countries, on a quarterly basis and for the following periods: I Qtr. 2000 to I Qtr. 2015 for Colombia and Peru, and I Qtr. 2003 to I Qtr. 2015 for Chile. They are expressed in real terms and the seasonal component is removed, as required.

In the case of GNDI, we use six different series calculated from an equal number of measures for the component involving the real TTI on income. These were described in the first part of this section. This makes it possible to estimate at least six models per country, by varying the GNDI and maintaining the TT and DD series.

For correct specification, the unit root tests suggest that all the series in log differences are stationary in level and variance. In addition, and after estimating the VAR by ordinary least squares (OLS), the optimal number of lags is determined based on a set of criteria; namely, information, model stability and normality of residuals. After assessing these criteria, we calculate the GNDI and DD response to an impulse in TT.

The results (Graph B1.4) are similar for each of the six measures, which is why only the first one is presented. In addition, the estimated IRF are scaled to comparable magnitudes between the countries: in all cases, the results are interpreted as the impact of a shock of 1% per quarter in TT on GNDI and DD.

As shown in Graph B1.4, all GNDI and DD responses to (positive) shocks in TT go in the expected direction, are statistically significant in one of the first four periods following the shock, and are less than proportional in magnitude. Also, convergence of all the IRF before the ninth post-shock period is shown, which is related to the stability of the model.

So, with to a quarterly variation of 1% in TT for one single period, the response of GNDI and DD in the first period after the shock is 0.27% and 0.025%, respectively, in the case of Chile; and 0.58% and 0.5% for Peru. The results for Colombia suggest this impulse translates into quarterly changes on the order of 0.17% and 0.04% in the first period after the shock for GNDI and DD, respectively.

Conclusions

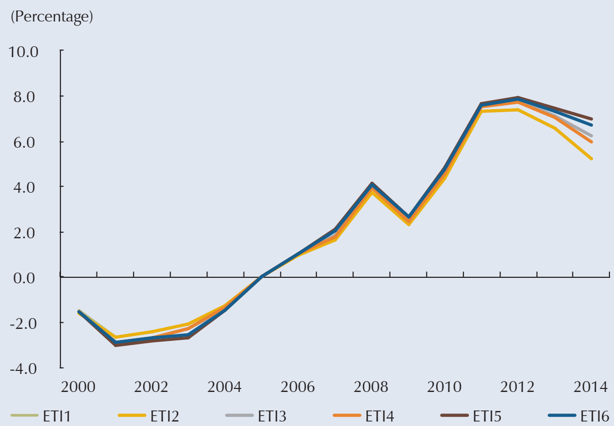
We explore the real impact of the drop in the TT on gross national disposable income and domestic demand for different countries in the region. Quantitative results for the impact of the described shock on the relevant variables are presented by using different metrics and estimating an econometric exercise. The empirical results support the hypothesis that movements in TT have a real impact on GNDI and, therefore, on DD in Chile, Colombia and Peru, countries with small, open and commodity-exporting economies.

The differences between the metrics suggested in the literature depend on the deflator used to assess the nominal figures. However, these are not significant for the countries in question.

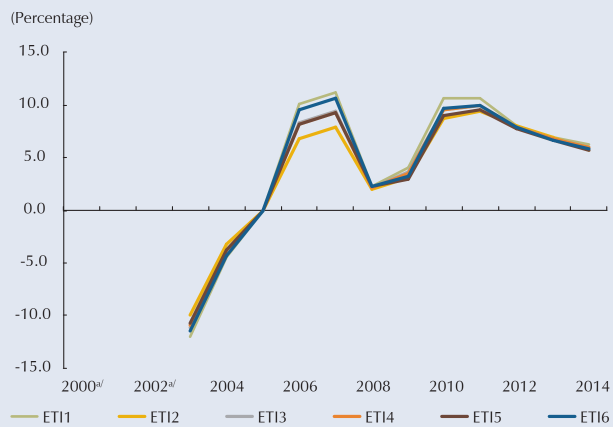
The results of the IRF highlight several aspects; namely, i) the shock observed in the Chilean economy was more persistent; ii) the GNDI and DD responses in Peru were more pronounced, and iii) the impact of the TT shock (from only one period) on GNDI and DD in Colombia is significantly very different from zero only in the first period after the shock, does not persist in time and is limited in size. This last point suggests that a shock of this kind does not pass through entirely to the

Graph B1.3
Measurements of the Real Impact of Terms of Trade (TTI) as a Percentage of Gross Disposable National Income (GNDI)

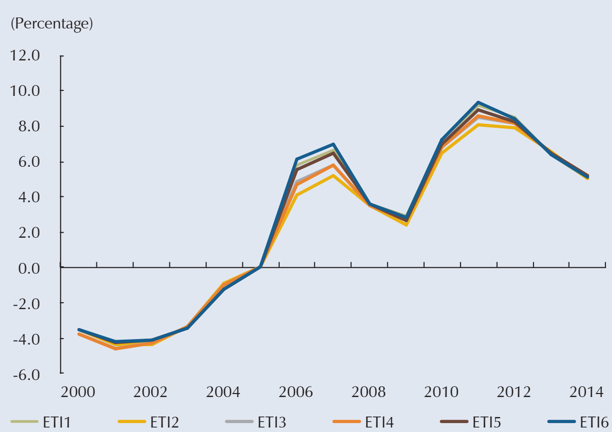
A. Colombia, 2005 base year



B. Chile, 2005 base year



C. Peru, 2005 base year



a/ Not available
Source: Central banks and statistics bureaus; authors' calculations

performance of the country's main macroeconomic aggregates. The differences in the results for the countries may be due to a variety of factors (such as the ownership structure of firms producing raw materials or the degree of trade openness in each country),[3] but that explanation is beyond the scope of this study.

This conclusion might not be valid if the nature of the shock is permanent, as seems to be the case in the current situation. We recommend further and more in-depth study concerning the impact of permanent declines in TT on GNDI and DD, considering how important this variable is to the country's welfare and wealth.

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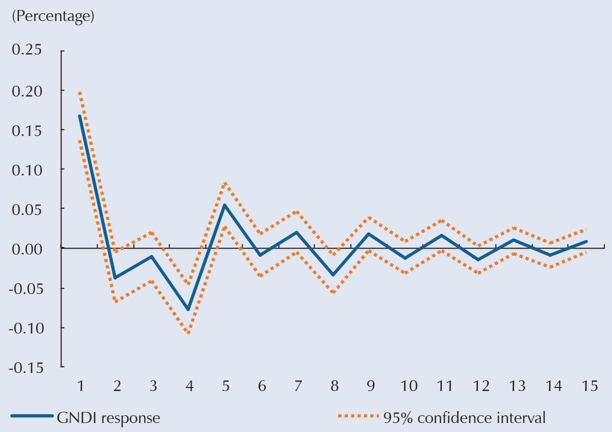
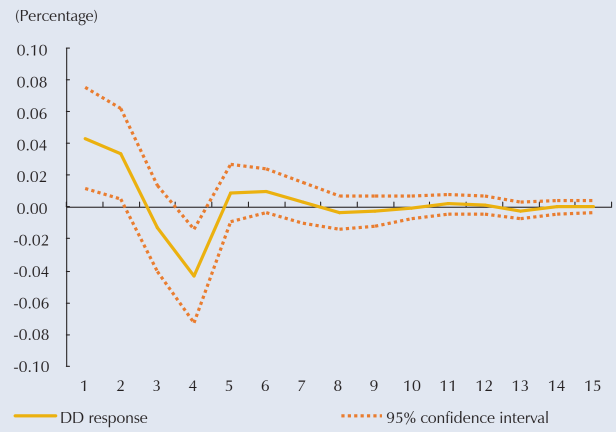
3 In 2014, real exports accounted for 16.0% of GDP in Colombia, as opposed to 35.9% in Chile and 24.9% in Peru.

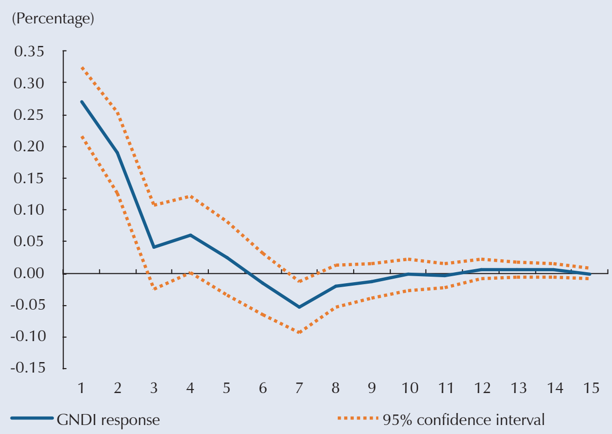
Graph B1.4
Gross Disposable National Income (YNBC) and Domestic Demand (DI) response to a 1% Shock to Quarterly Growth in Terms of Trade

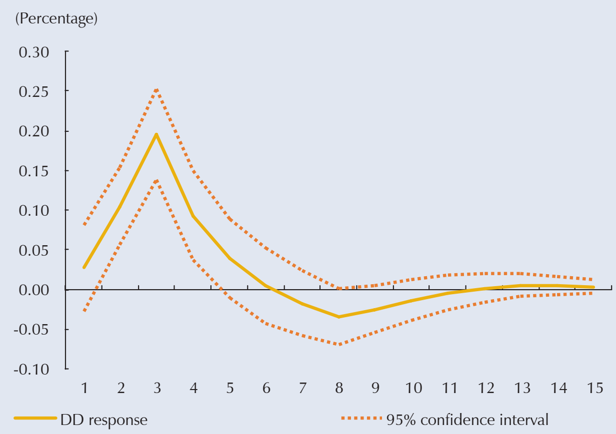
A. Colombia



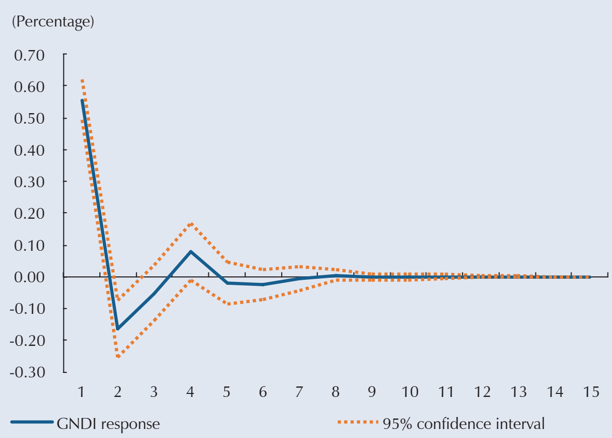


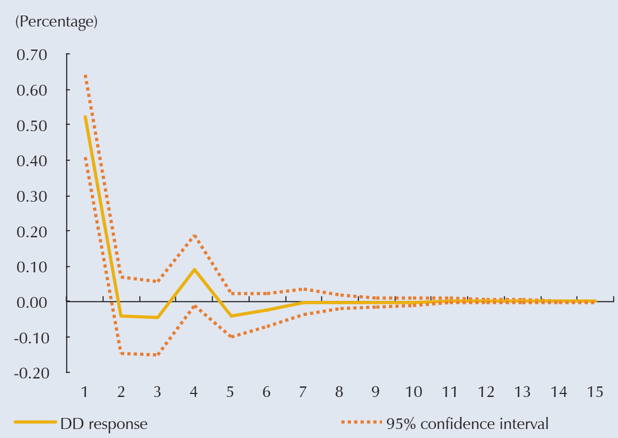
B. Chile





C. Peru





Source: Authors' calculations

III. Recent Developments in Inflation

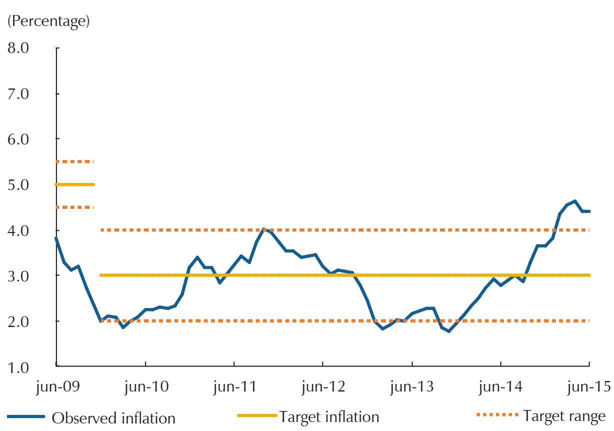
Consumer inflation in the second quarter of 2015 interrupted the upward trend observed since the start of 2014. Even so, it remained above the top of the target range.

Core inflation continued to rise during this period, surpassing the upper limit of the target in June.

Most of the upward pressure on prices came from accumulated depreciation of the peso and the indexing mechanisms that were activated. These hikes were offset by the drop in prices for certain perishable foods.

Annual consumer inflation was 4.42% at the end of the second quarter in 2015. This was slightly less than in first quarter (4.56%) and interrupted the upward trend observed since October of last year. Since February of this year, annual inflation has exceeded the target range set by the Board of Directors of Banco de la República (2% to 4%), and has surpassed the long-term target (3.0%) since October 2014 (Graph 31 and Table 6). Inflation accumulates 3.33% so far this year, which is more than during the same period in 2014 (2.57%).

Graph 31
Headline Consumer Inflation



Sources: DANE and Banco de la República.

As expected, the slowdown in annual inflation during the last three months was largely due to lower prices for perishables and to lower adjustments in the regulated CPI. However, the CPI excluding food and regulated items continued to rise during that period, as it has since September 2014, due to accumulated depreciation of the exchange rate. The weakening of the peso, which started in July of last year, has had a gradual effect on prices in this segment of the CPI and is expected to continue to do so in the months ahead, given the lag with which it operates.

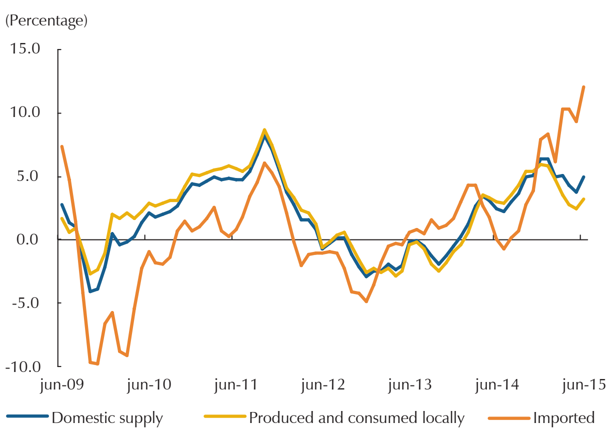
Table 6
Consumer Inflation Indicators
(At June 2015)

Description	Mar-14	Jun-14	Sept-14	Dec-14	Mar-15	Apr-15	May-15	Jun-15
Total	**2.51**	**2.79**	**2.86**	**3.66**	**4.56**	**4.64**	**4.41**	**4.42**
Non- food inflation	**2.62**	**2.66**	**2.70**	**3.26**	**3.46**	**3.44**	**3.72**	**3.72**
Tradables	1.65	1.94	1.59	2.03	3.46	3.64	3.74	4.17
Non-tradables	3.55	3.45	3.26	3.38	3.56	3.67	3.83	3.98
Regulated items	2.21	2.14	3.25	4.84	3.25	2.68	3.45	2.55
Food inflation	**2.23**	**3.11**	**3.25**	**4.69**	**7.37**	**7.70**	**6.16**	**6.20**
Perishables	3.17	8.92	7.61	16.74	21.57	16.99	8.34	10.73
Processed foods	0.92	1.44	2.14	2.54	5.99	7.00	6.55	6.00
Eating out	4.13	3.52	3.23	3.51	3.59	4.68	4.45	4.45
Core inflation indicators								
Non-food inflation	2.62	2.66	2.70	3.26	3.46	3.44	3.72	3.72
Core 20	2.86	3.04	2.89	3.42	3.70	3.97	4.06	4.24
CPI excluding perishable food, fuel and utilities	2.53	2.53	2.39	2.76	3.95	4.29	4.39	4.54
Inflation excluding food and regulated items	2.74	2.81	2.55	2.81	3.52	3.65	3.79	4.06
Average of all indicators	**2.69**	**2.76**	**2.63**	**3.06**	**3.65**	**3.84**	**3.99**	**4.14**

Source: DANE; Banco de la República's calculations

An additional boost to inflation came from the non-tradable CPI excluding food and regulated items. This would have been associated with depreciation (directly and indirectly through higher costs) and occasional supply shocks, more than demand-pulled pressures.

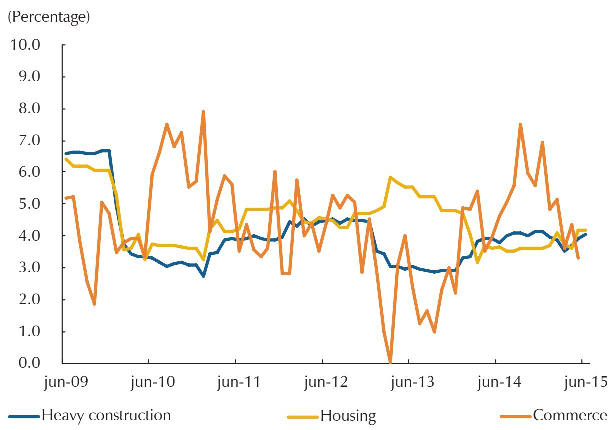
Graph 32
PPI, by Origin of goods
(Annual change)



Source: DANE.

Peso depreciation continued to translate into upward pressures on production costs that most likely are being passed through gradually to consumer prices. Annual inflation in the PPI for domestic supply, a proxy for non-wage costs of production, remained relatively high in June (5.0%), similar to what it was in March (5.1%) and with signs of picking up (Graph 32). The imported component posted increasing annual changes that amounted to 12.1% by the end of the quarter. These pressures were offset by a lower annual variation in the local component, thanks to falling prices for a number of agricultural products (potatoes, rice, vegetables and citrus fruits).

Graph 33
Nominal Wages
(Annual percentage change)



Source: DANE; Banco de la República's calculations

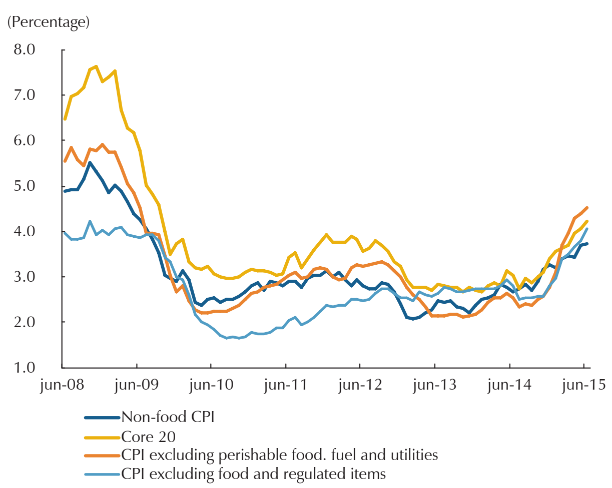
Wage adjustments in the first half of the year were consistent with the target range for inflation. Those in the house building sector rose to 4.2% annually by June, slightly above the rates observed in March (3.7%) and December of last year (3.6%). Wage inflation in commerce during May (3.3%) was down a bit compared to March (3.6%) and even more so with respect to last December (6.9%). On the other hand, annual wage adjustments in the construction industry closed out the first half of the year at 4.0%, slightly above the rate observed in March (3.6%) (Graph 33).

A. CORE INFLATION

The average of the four core inflation indicators monitored regularly by Banco de la República stayed on an upward trend during the second quarter, reaching 4.14% in June. This marked nine consecutive months of price hikes, and the indicator surpassed the ceiling of the target range for the first time since February 2009.

All the core inflation indicators were up. The CPI excluding staple foods, fuel and utilities was still the highest of the indicators, climbing to 4.54% in June from 3.95% in March. The CPI excluding food and regulated items ended the first half of the year at 4.06%, while Core 20 was 4.24%. The non-food CPI, at 3.72%, registered the lowest level in June, surpassing the figure for March by 26 bp (Table 6 Graph 34). All the indicators, except the non-food CPI, are over the top of the target range for inflation.

Graph 34
Core Inflation Indicators



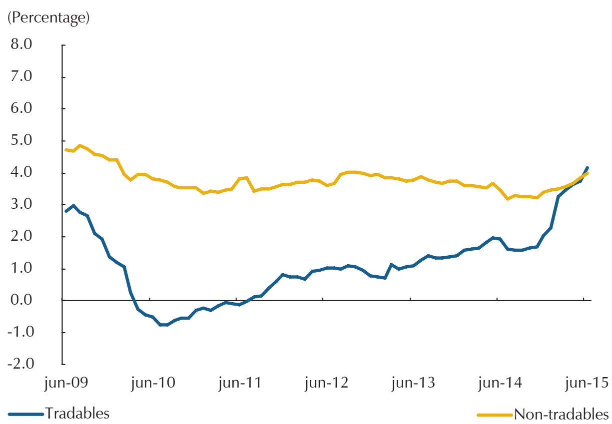
Source: DANE; Banco de la República's calculations

As was the case with total inflation, the rise in core inflation indicators during the second quarter of this year, including the non-food CPI, was linked closely to accumulated depreciation of the peso. This phenomenon has been especially hard on the tradable CPI, which includes the prices that are most sensitive to movements in the exchange rate.

For instance, the annual change in the tradable CPI excluding food and regulated items accelerated on the heels of an important increase during the two previous quarters. By June, this indicator was 4.2% or 71 basis points more than in March (Table 6 Graph 35). These price hikes were widespread between March and June, but those for vehicles, appliances in general and some toiletries were particularly predominant. In the case of vehicles, which account for 4.4% of the CPI, making it the third most important item after rent and meals outside the home, the accumulated change in prices came to 8.5% in the first six months of the year.

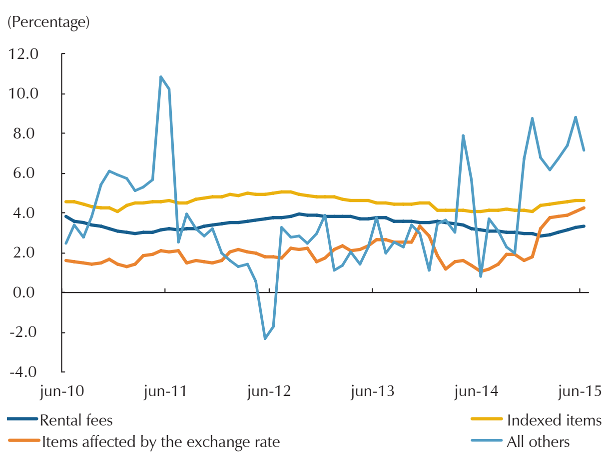
The second source of inflationary pressure during the last three months was concentrated in the non-tradable CPI excluding food and regulated items, with results that exceeded the forecasts outlined in previous editions of this report. The annual change in this segment of the CPI was 4.0% by the end of the second quarter, compared to 3.6% in March (Graph 35). The build-up in this variable during the first half of the year occurred despite less momentum in consumption and the fact that estimates of the output gap indicate it is in negative territory, as explained in Chapter IV of this report.

Graph 35
CPI for Tradables and Non-tradables Excluding Food and Regulated Items
(Annual change)



Source: DANE; Banco de la República's calculations

Graph 36
CPI for Non-tradables Excluding Food and Regulated Items, by Groups
(Annual change)

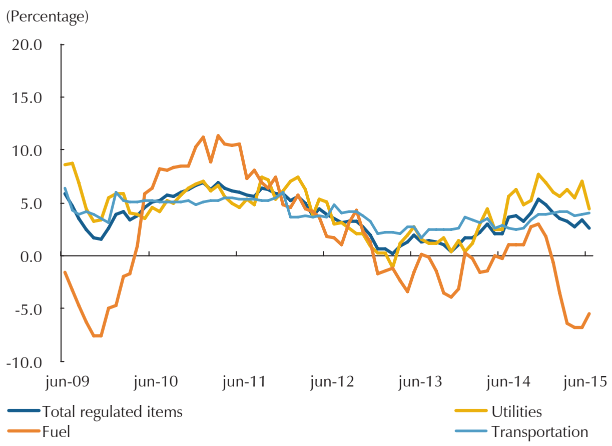


Source: DANE; Banco de la República's calculations

The price hikes in this sub-basket, despite the absence of demand-pulled pressure, would be explained by factors other than growth. To begin with, the indexing mechanisms that continue to persist in the price formation of several markets are passing on the increase in consumer inflation late last year and in early 2015 to current prices. This could be happening with the CPI for rentals; the annual change in these prices began to accelerate in recent months and was 3.3% in June. This is an increase of 37 bp compared to the figure on record in March (Graph 36). Other areas such as services, education and health could be experiencing a similar phenomenon. Secondly, the higher exchange rate also is responsible for price increases in this group, either through costs or because the prices of some non-tradables are more sensitive to movements in the dollar. A third factor is the presence of several specific shocks, which are temporary in nature, that have affected the CPI for entertainment, cultural and recreational services (primarily through higher priced soccer tickets) (See Box 2, pp 53-55).

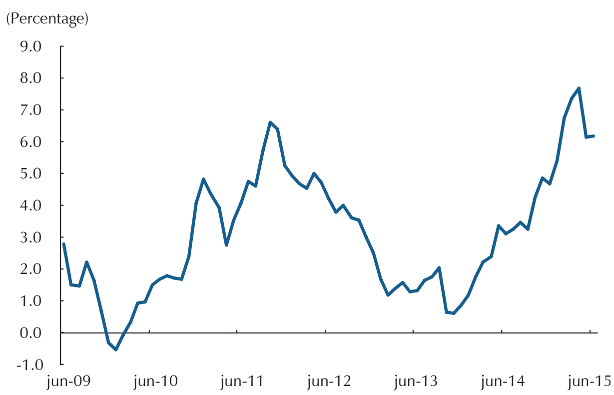
Regulated items were the only component in the non-food CPI to exert downward pressure on inflation between March and June. Except in May, annual inflation in this group has declined steadily since last December (4.8%) and was 3.3% in March and 2.6% in June (Graph 37). All the major components of this sub-basket experienced reductions during the second quarter. Utilities moderated their annual price increases from 6.3%

Graph 37
CPI for Regulated Items and Components Thereof
(Annual change)



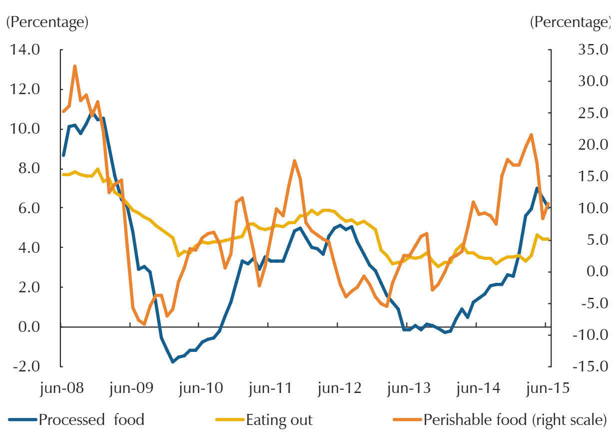
Source: DANE; Banco de la República's calculations

Graph 38
Food CPI
(Annual change)



Source: DANE; Banco de la República's calculations

Graph 39
Food CPI, by Groups
(Annual change)



Source: DANE; Banco de la República's calculations

in March to 4.4% in June. The reductions were led by rates for electricity and gas; however, these items have undergone sharp changes in the last few years, so the recent movement does not necessarily signal a trend.

Transportation also helped to ease the annual rate of inflation in regulated items in June (4.0%), compared to the level observed in March (4.2%). Such is not the case with fuels, which have been affected by a higher-priced dollar. Although it remains in negative territory, the annual change in fuel prices went from -6.4% in March to -5.5% in June.

B. FOOD INFLATION

As mentioned earlier, food was the component of household basket that had the most impact on the decline in inflation during the second quarter of this year: the annual change in this index went from 7.4% in March to 6.2% in June (Graph 38). In line with the forecasts in previous reports, the drop was concentrated in perishables, which posted 10.7% annual inflation in June compared to 21.6% in March (Graph 39). The supply of some of these products, especially potatoes, has recovered since last April, allowing their prices to decline. However, it is important to point out that this phenomenon was neither widespread nor sustained over the past three months. For example, the prices of various vegetables and legumes have increased since June.

In June, the CPI for processed food registered the same annual rate of inflation as in March (6.0%). Prices tended to decline in May and June, following the hikes observed in the first four months of the year to April. This was due mainly to rice. Initially, the increases in the price of rice were associated with factors such as the drop in production caused by the announcement of a new bout of El Niño weather, stockpiling of inventories by some millers, and the fact that rice imports became more expensive due to a higher-priced dollar. However, as expected, the rice supply tended to recover in the last two months, thanks to a new harvest and government intervention to control speculation with rice inventories. These circumstances led to some price declines, but they are still small compared to the hikes witnessed earlier this year.

A major portion of the other components in the processed-food group (especially eggs, cereals, oils and flour) started or continued to incorporate peso depreciation into their prices during the second quarter. This pass-through would have been delayed because lower international prices in previous quarters, compared to last year, would have offset the effects of depreciation. However, this would no longer be the case.

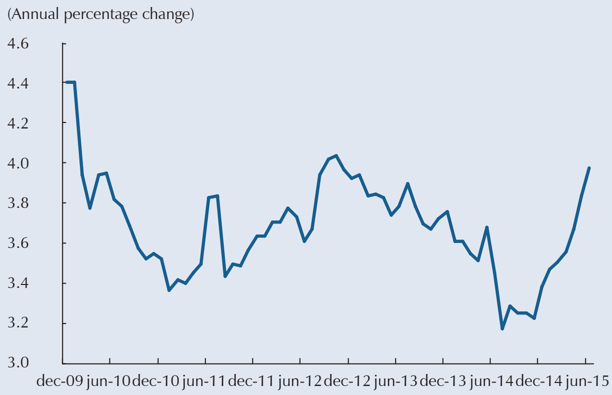
Finally, annual inflation in prices for eating out rose from 3.6% in March to 4.5% in June, reflecting the increase in costs, especially for food and rent.

BOX 2
WHAT EXPLAINS THE ACCELERATION IN THE CPI FOR NON-TRADABLES, EXCLUDING FOOD AND REGULATED ITEMS?

Edgar Caicedo Garcia and Nicolas Martinez Cortes *

Since July last year and after several quarters of steady declines, the annual change in the consumer price index (CPI) for non-tradables, excluding food and regulated items (NT-EFR), tended to stabilize up to November 2014, then adopted a rising trend that became more pronounced at the start of 2015 (Graph B2.1).This occurred at the same time as economic growth and aggregate demand experienced a setback and with an output gap that has entered negative territory, according to the estimates shown in Chapter 4 of this report.

Graph B2.1
Non-tradable CPI Excluding Food and Regulated Items



Source: DANE; Banco de la República's calculations

Price increases for non-tradable goods and services are usually attributed to demand-pulled pressures. However, in the absence of such pressures, the question is: Why the upward trend in NT-EFR? Finding an answer requires looking at other variables that might be affecting inflation in this segment of the CPI. A new classification for NT-EFR is proposed in this section to explain that behavior, one with more economic meaning, to help identify the factors that are influencing its performance.

In the absence of demand-pulled pressures, prices in this segment of the CPI should be responding to other relevant economic variables, such as depreciation of the peso, indexing to past inflation and to wages, and temporary supply shocks. With this in mind, the CPI for NT-EFR was broken down into the following subgroups:

1. Rental fees: These consist of basic rental expenses, effective and imputed. As a whole, they constitute the sub-basket that represents the largest share of NT-EFR (18.59% of total CPI and 60.9% of NT-EFR). In addition to being affected by demand, this sub-basket also responds to legislation,[1] to indexing factors such as actual inflation in the recent past, and to the inflation target. This component also is indirectly related to the momentum in the price of houses and land since, technically, it is accepted that leases tend to reflect a percentage of home prices. In this case and considering its weight in the CPI, a separate subgroup was created for rental fees.

2. Indexed items (other than rent): These are influenced by the momentum in demand, but they also tend to form their prices based on actual inflation, the inflation target and wages. Their weight in the total CPI is 8.14%, which is equivalent to 26.7% of NT-EFR.

3. Items affected by the exchange rate: These account for 7.5% of NT-EFR and 2.29% of the CPI overall. They are items with prices that are affected directly (by being imported or exported) or indirectly (through production costs and investment financing) by the momentum in the nominal exchange rate against the dollar. The country's increased exposure to foreign trade in

* Mr. Caicedo García is a senior expert on inflation and Mr. Martinez Cortes is a student intern. Both work with the Inflation and Programming Department at Banco de la República. Their opinions imply no commitment whatsoever on the part of Banco de la República or its Board of Directors.

1 Pursuant to Law 820/2003, Article 10, the increase in rental prices stipulated in leases signed after July 10, 2003 may not exceed inflation in the CPI for the preceding year. The adjustment for leases entered into prior to July 10, 2003 may not exceed the midpoint of the target range that is in force, as determined by Banco de la República´s Board of Directors. Some exceptions apply in special cases.

the last fifteen years has made prices for a number of tradables far more sensitive to changes in the exchange rate than in past decades, when price sensitivity was very low.

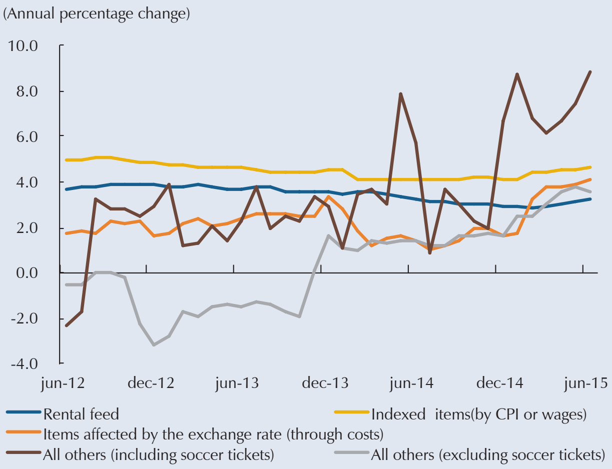
4. All others: These include all the other items that do not respond in a clear and unique way to the factors outlined above. Entertainment services are a particularly important component of the subgroup, as they make it highly volatile and very much affected by the price of soccer tickets (especially in the final stages of national and international competition involving Colombian teams). The weight of this subgroup comes to 1.51% in the overall CPI and 4.9% in the NT-EFR basket.

As illustrated in Graph B2.2 and Table B2.1, the subgroup "all others" is the one most responsible for the build-up in annual inflation in NT-EFR since the start of the upward trend in the CPI-NT-EFR since July 2014 (3.17%) and up to June (3.98%), followed by those items affected by the exchange rate, indexed items and, to a lesser extent, rent.

The "all other" segment, which includes entertainment services (which, in turn, includes soccer tickets), is highly volatile due to the professional soccer finals involving Colombian teams. This subgroup was responsible for 48.0% of the acceleration in annual inflation during the period in question, with the annual change in the subgroup having gone from 0.83% in July 2014 to 8.8% in June 2015. Annual variations in this segment of the CPI reflect the sharp fluctuations caused by the end of the Colombian soccer season. For example, the annual increase in this subgroup came to 1.97% in November 2014 and 6.74% one month later.

More recently, the Colombian soccer finals in June brought the annual change in the "all other" subgroup to 8.8%, which is more than in May (7.4%) and March (6.2%). Therefore, the high volatility observed in this segment during the last two quarters is linked closely to how the soccer season ended in 2014 and the start of the tournament in 2015, respectively. When teams from the big cities, with considerable weight in the CPI, reach the finals, especially if they are from the nation's capital city (as in the tournament of the

Graph B2.2
Non-tradable CPI Excluding Food and Regulated Items, by Groups



Source: DANE; Banco de la República's calculations

Table B2.1
Contribution to the Acceleration in the Annual Change of the Non-tradable CPI Excluding Food and Regulated Items

Description	Share in the CPI	Annual change (Percentage)		Contribution		Contribution to the acceleration	
		Jul-14	Jun-15	Jul-14	Jun-15	Percentage points	Percentage
Non-tradables excluding food and regulated items	30.52	3.17	3.98	1.02	1.28	0.26	100.00
Rental fees	18.59	3.17	3.27	0.61	0.63	0.02	7.43
Indexed items	8.14	4.11	4.62	0.37	0.42	0.05	19.58
Items affected by the exchange rate	2.29	1.03	4.06	0.02	0.09	0.07	25.02
All others	1.51	0.83	8.80	0.01	0.14	0.13	47.97

Source: DANE; Authors' calculations

first half of 2014), the hikes usually are very abrupt. As such, the upward pressures from the "all others" group could be akin largely to temporary pressures that would tend to disappear between late this year and the end of 2016.

The NT-EFR segment, which has been affected by the exchange rate, via costs, accounts for 25.0% of the surge in inflation during the period in question. The annual change to this subgroup went from 1.03% in July 2014 to 1.61% in December, ending at 4.06% in June. This pattern can be attributed to the impact the depreciation of the Colombian peso against the dollar has had on these prices. It started strongly in July 2014, but did not begin to pass through to prices noticeably until the end of last year.

Finally, in the case of rental fees, with lower annual changes during the second half of last year and indexed items being relatively stable in the final six months of 2014, it is confirmed these subgroups began to pressure the prices of non-tradables as of early this year. This explains the build-up in the annual changes in NT-EFR to 7.4% and 19.6%, respectively, during the period in question (Table B2.1). The annual variation in rental fees was 3.17% in July 2014, fell to 2.86% in February and ended June at 3.27%. This upward behavior in the group that carries the most weight in the total CPI (18.59%) would be associated with added indexing of new items that were updated to reflect inflation last year, which was high (3.66%), and the inflation target for year (3.0%) (See footnote 1). Indexed items were boosted by higher inflation last year and by the increase in the minimum wage (4.6%). They have followed an upward trend so far this year, after remaining stable at around 4.1% between June 2014 and January 2015, and ending the first six months at 4.62%.

IV. Medium-Term Forecasts

The downside risks to growth are greater in this edition of the Inflation Report. Specifically, there is more uncertainty about how external demand and raw material export prices will behave in the future.

The forecast for growth in 2015 was revised downward, once again, in this report. The annual increase in GDP is expected to be 2.8%, within a range of 1.8% to 3.4%. A slight recovery in economic activity is anticipated for 2016.

The forecasts for inflation increased, due partly to cumulative depreciation of the peso. Convergence towards the target will be slower than previously expected.

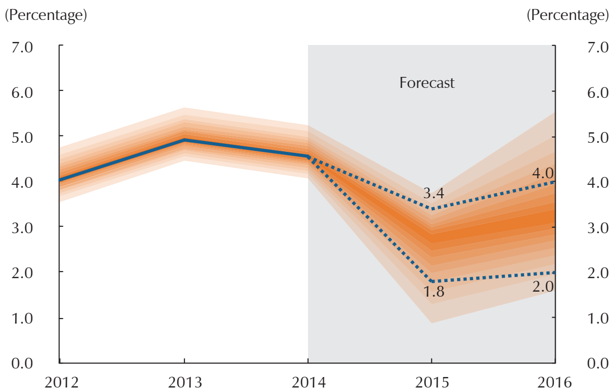
A. ECONOMIC GROWTH DURING THE REMAINDER OF 2015 AND IN 2016

According to the latest information at hand, some of the risks considered in the previous edition of this report became a reality on the domestic scene and internationally, causing the technical staff to lower its economic growth forecast for 2015. The new GDP growth forecast obeys several factors, the most important being: i) a further reduction in the growth projected for our major trading partners, in particular those in the region; ii) less momentum in the production and export of traditional goods than was forecast previously, particularly in the case of oil and coal, and iii) a level of public spending that continues to contribute to GDP growth, but less than was expected three months ago. There is still a great deal of uncertainty associated with these forecasts. This is reflected in the width of the range and is included in the risk-assessment exercise for the fan chart of GDP growth (Graph 40).

The technical staff lowered its forecast for GDP growth in 2015, given weaker-than-expected external demand and more of a reaction from domestic demand to the drop in terms of trade.

As explained in Chapter I of this report, the technical staff at Banco de la República lowered its growth forecasts for most of Colombia's trading partners in 2015. Accordingly, external demand is expected to be weaker

Graph 40
Fan Chart of Annual GDP Growth



Source: DANE; Banco de la República's calculations

this year than in 2014, especially in Venezuela and Ecuador, which are important markets for Colombia's non-traditional exports. On the other hand, several trade safeguards were set in motion in Ecuador during the first quarter of 2015, involving an increase in tariffs on a number of Colombian products. The decline in non-traditional exports in dollars so far this year confirms that the positive effects of the mechanism whereby sales of this type of goods benefit from depreciation of the nominal exchange rate would have been offset by the slowdown in global demand and by trade restrictions.

In this report, it is considered more likely that the United States Federal Reserve will raise interest rates during the second half of the year. This tends to strengthen the dollar and depreciate other currencies (such as the Colombian peso). It also can increase the risk premiums of emerging economies, and raise relevant external interest rates for the Colombian economy, since a change in the monetary stance of the United States is a sign of less global liquidity in the future.

Furthermore, the drop in terms of trade is likely to have a quite a negative impact on national income. By the same token and according to the balance-of-payments forecasts outlined in Chapter I, the reduction in FDI (especially for the oil sector) and current transfer inflows is expected to be more than it was last quarter. However, this would be offset, in part, by lower profits remitted abroad, providing some relief for the decline in national income.

All of the above suggests the slowdown in national income will force a change in domestic demand. One of the items affected the most, in this sense, would be gross fixed capital formation (other than construction and civil works), particularly in the mining and energy sector. Added to this is the potential negative effect devaluation of the exchange rate could have on the purchase of capital goods, since most of them are imported. If the business community keeps its expectations about the direction of the national economy, this implies that investment in capital goods throughout 2015 would be considerably less than in 2014. In addition, there still is expected to be a significant decline in investments in capital goods for the mining and energy sector, consistent with lower oil prices and less oil exploration and drilling.

Investment would be one of the items most affected by the shock to terms of trade, particularly investment in the mining-energy sector.

In contrast, investment in construction is expected to increase at a good pace, although less so than in 2014. The biggest boost would come from residential building, particularly to continue the social-interest projects started by the government several quarters earlier. Moreover, the fact that

The momentum in construction investment would come from the low-income housing projects being carried out by the national government and from the implementation of PIPE 2.0.

a second version of the Plan to Enhance Productivity and Employment (PIPE 2.0, by its acronym in Spanish) has been launched makes this forecast reliable, since PIPE 2.0 would extend the subsidies on mortgage interest rates for middle and low income buyers.

Less growth in national income also affects household consumption, although not as much as investment, because it is more inflexible. In addition, accumulated depreciation of the exchange rate tends to discourage the consumption of durable and semi-durable goods, since it lowers purchasing power of household income in dollars. Also, the labor market series show modest progress towards reducing the unemployment rate and creating jobs. All these factors signal restrained momentum in household consumption during the remainder of 2015.

A slowdown in domestic demand from the government is expected as well, considering how important the mining and energy sector is to total government revenue (for profits, as much as for taxes and royalties). With the drop in oil prices, the Ministry of Finance and Public Credit (MHCP by its acronym in Spanish) revised the budget for the current year and the next. As stated in the Medium Term Fiscal Framework (MFMP by its acronym in Spanish), the projected deficit of the central government (GNC by its acronym in Spanish) is 3.0% of GDP for 2015 and 3.6% for 2016, which implies an increase compared to 2014 (-2.4%). This figure is derived from a lower forecast for revenue from taxes and oil dividends, while spending would be adjusted only in part, by postponing several items in the budgets for 2015 and 2016 (see Box 3, pp 69-72). This being the case, the technical staff at Banco de la República anticipates a slowdown in government consumption, in real terms, compared to what was observed in 2014. It is important to point out that 2015 is the last year of the term in office for elected officials at the local and regional levels, a time when there usually is more government spending (despite the Assurances Act being in force).

A slowdown in real government consumption is forecast for 2015 and 2016, compared to what was observed in 2014.

As for government investment, spending on the construction of civil works is expected to play a bigger role in 2015. To begin with, resources from royalties are being widely used throughout the country for strategic regional development projects. Secondly, spending on roads and airport infrastructure has progressed at a good pace for several quarters and is likely to continue. As a result, civil works GDP would perform well, once again, although less than in 2014 when double-digit growth rates were recorded. However, in this report, the technical staff reduced its forecast for civil works in 2015 compared to what was estimated three months ago, since the impact of the 4G projects on the national accounts would shift into 2016.

The foreign trade accounts are expected to move in the same direction as the forecasts outlined earlier with respect to the external and internal envi-

Investment in civil works is expected to perform well in 2015.

ronment. On the one hand, exports in real pesos would see positive growth, after a setback in 2014, but it would be less than was anticipated in the previous edition of the Inflation Report. The downward revision applies to both traditional and non-traditional exports. In the case of the former, the increase in oil and coal production is expected to be weaker than was forecast three months ago. These downward adjustments are related to the adverse effects of law and order incidents that occurred during the first half of the year, less production due to cutbacks in the current investment plans of oil companies, the closure of several financially unprofitable wells, and the change in coal production targets that were initially too optimistic. In the case of non-traditional exports, as explained already, the slowdown in foreign sales of intermediate and manufactured goods is associated with weaker external demand and a less dynamic response to depreciation of the exchange rate in terms of the production of such goods, compared to what was anticipated previously. Non-traditional exports also would be affected by the trade restrictions mentioned earlier. Imports, on the other hand, would shrink in the face of weaker domestic demand for consumer durables and capital goods.

GDP is expected to perform somewhat better in 2016, compared to this year. According to the forecasts developed by the technical staff at Banco de la República, private consumption would expand at a better pace than in 2015, while public consumption would be a bit below the growth rate for this year. The latter due to announcements by the government and the MHCP to the effect that certain budget items would be frozen and adjustments would be made in operating and investment expenses for this year and the next. The prognosis for 2016 also envisages some recovery in spending on gross fixed capital formation, partly due to added investment in public works, especially those associated with the 4G road projects. In sync with this, the contraction in imports in real pesos would end, while the momentum in exports would remain moderate. These forecasts assume the price of oil would average around US $ 70 per barrel in 2016, which is more than the forecast for 2015. Colombia's main trading partners also are expected to see their economies improve. All this is consistent with the baseline scenario for the 2016 balance of payments outlined in Chapter I of this report.

The forecasts for GDP growth in 2016 contemplate a better performance for the private consumption compared to 2015 and some recovery in spending on gross fixed capital formation.

On the supply side, the sectors that would contribute the most to GDP growth in 2015 would be construction, social, community and personal services (akin to what was described in previous paragraphs), and financial services. The sectors that suffered supply shocks last year, such as mining and manufacturing industry, are expected to recover and see growth rates by the end of 2015 that are above those observed in 2014, although still below the average on record since 2000. Several slowdowns are forecast for other sectors, especially in non-tradable activities. Growth is expected to be more balanced between branches in 2016, with a recovering in the tradable sectors due to the observed and expected

The most dynamic sectors in 2015 would be construction, social, community and personal services, and financial services. Mining and manufacturing industry would see some recovery by the end of the year.

depreciation of the peso (according to the baseline scenario). Financial services would make an active contribution to Colombia's economic growth, as in the past. This is attributed to the large share of the sector (19.6%) and to the loan portfolio growth, which would continue at a good pace, despite some slowdown. Moreover, real interest rates are expected to stay relatively low in relation to their historical averages, which would help the momentum in lending.

As for the mining sector, this report anticipates a recovery in coal production during in the remainder of 2015 and in 2016, following the downturn observed in the first half of the year. However, the expansion reported for this branch would be moderate, as the industry is burdened already by law and order incidents and transport problems that complicated its production line in 2013 and 2014. These companies also face an environment with lower coal prices. In the case of oil, the forecast for production was reduced compared to the outlook three months ago, going from around 1.02 million barrels per day, on average, to 1 million. This forecast was updated to reflect new information received in May with the publication of the Finance Ministry's MFMP. The path anticipated for production in the years ahead also is akin to the scenarios outlined in this report (see Box 3, pp 69-72). Moreover, it is important to point out that investments made in past years to improve the infrastructure to transport these products should help to enhance their growth rates.

With regard to manufacturing industry, the forecast for 2015 and 2016 signals a recovery based on several factors; namely, the investments made in previous years, the diversification of products and export markets, and the contribution the recent depreciation of the peso makes in terms of competitiveness. In addition, the reopening of Reficar towards the end of the year and its operation at full capacity by March 2016 [12] imply a major leap in the production of petroleum derivatives, which account for around 12% of industrial GDP. However, according to the perception reported by business people in the ANDI surveys, some branches would continue to face competition from imports.

The forecast for 2015 includes a recovery in industry.

Agricultural performance is expected to be uneven in 2015 and balanced in 2016. Coffee production would continue to contribute significantly to increase added value in the sector, although less so than in 2014. Production is forecast at 12.8 million 60-kg sacks, which is similar to what the National Federation of Colombian Coffee Growers expects. This would imply 5.4% growth. Field productivity would be maintained in 2016, thanks to plantation renewal and investments made in previous years. Nevertheless, the momentum in coffee production would be offset by cattle slaughtering

12 http://www.portafolio.co/negocios/ecopetrol-reficar. Taken from the August 6, 2015 edition of Portafolio.

in 2015, due to continuation of the cattle retention cycle and the moderate impact the weather could have on that activity.

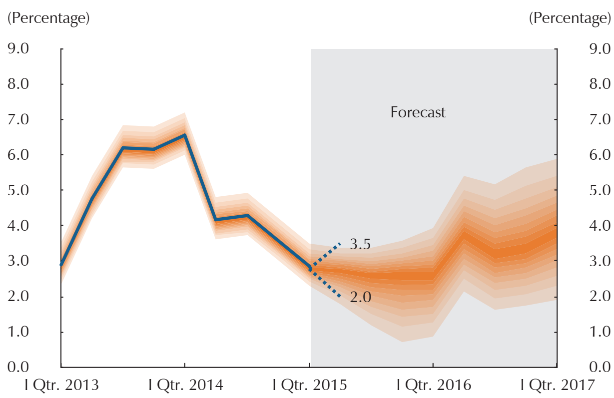
Based on the above, the forecast for GDP growth in the most likely scenario stands at 2.8% for 2015, with 1.8% to 3.4% being the most probable range. As in the previous edition of the Inflation Report, the range is wide because there is a lot of uncertainty about the local situation and the international environment. A rebalancing of growth between tradable and non-tradable activities is expected (acceleration in the first and decline in the latter). The floor and ceiling of the forecast range are related to the low and high scenarios for the international context, as outlined in Chapter I.

The risk balance is tilted to the downside. This is due to the high degree of uncertainty surrounding the international environment, which affects financing and the growth of our trading partners. There is also the possibility that the drop in terms of trade might have more of an impact on national income than is predicted in the central forecast (Graph 41 and Table 7). Furthermore, despite the government's efforts to stimulate the economy, public spending might be less than anticipated in the baseline scenario. On the contrary, the main upside risks are associated with more of a recovery in tradable production and added momentum in investment in civil works.

The latest output gap estimates in the central forecast suggest this variable would have been positive during 2014 and would be negative in 2015. For the current year, the models show a slightly lower figure than the one in the March report, pursuant to the new projections for growth. Therefore, according to the risk balance, the probability of the gap being negative is 90% for 2015, and 71% for 2016 (Graph 42).

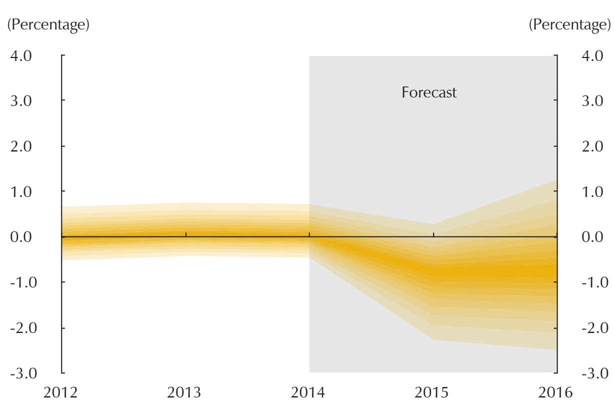
Banco de la República's models suggest the unemployment rate in 2014 would have been near the level consistent with stable inflation (NAIRU). However, unemployment might cease to decline because of the slowdown forecast for the economy. So, it is possible the UR would be above the NAIRU in 2015. Therefore, inflationary pressures originating in aggregate demand and the job market would have been low in 2014, and would continue as such in 2015.

Graph 41
Fan Chart of Annual Growth in Quarterly GDP



Source: DANE; Banco de la República's calculations

Graph 42
Fan Chart of the Output Gap



Source: DANE; Banco de la República's calculations

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

Range	2015	2016
< 3.0	76.5	33.9
3.0-4.0	22.3	32.1
4.0-5.0	1.2	21.9
5.0-6.0	0.0	9.2
6.0-7.0	0.0	2.4
> 7.0	0.0	0.4
Between 3 y 5	23.5	54.0
Between 2 y 4	65.4	57.3

Source: Banco de la República's calculations

B. INFLATION

1 Forecasts

Annual consumer inflation observed in June exceeded the forecasts outlined in the previous edition of this report. Some of the upside risks identified for tradables and non-tradables excluding food and regulated items began to emerge in recent months. For this and other reasons stated below, the central forecast for inflation four and eight quarters ahead, based on the central models used by Banco de la República (MMT and Patacon) was raised above the forecast in March. Prices for non-tradable goods and services (excluding food and regulated items) were one of the main sources of forecast error. Since early this year, they have tended to increase more than the models predicted. Ironically, this underestimate comes in an environment of weak aggregate demand, which, in principle, should mean more moderate price changes in this category.

These circumstances point to the existence of other phenomena that would not be captured entirely by the long-term models. First, the extent to which sharp depreciation of the peso is being passed through to the non-tradable CPI (excluding food and regulated), both indirectly (via input costs) and directly, is more than was anticipated. For example, Colombia's increased exposure to foreign trade in the last ten years has made the prices of many non-tradables (home furnishings, auto insurance, etc.) more sensitive to changes in the exchange rate. In the past, pass-through was minimal or nonexistent.

By June, consumer inflation was higher than expected by Banco de la República.

Secondly, the rise in consumer inflation above 3.0% by the end of 2014 and its upward trend this year, placing it above the ceiling of the target

The increase in the inflation forecasts is partly due to the assumption of a more depreciated path for the peso against the US dollar

range, would be passing through to a number of non-tradable items via the legal or informal indexing mechanisms that remain active. This would be happening to a greater extent than was predicted in previous editions of this report and would explain the growing hikes in rental fees and prices for items such as education and health services. In the case of rental fees, indexation is often a slow process that occurs in so far as leases are renewed, whereas changes in the price of services tend to be concentrated at the beginning of the year.

Furthermore, the non-tradable CPI would have been subjected to several temporary upward supply shocks that could not be anticipated and were focused on the subgroup comprised of entertainment, cultural and recreational services, as explained in Box 2 (pp. 53-55). The impact of these price increases would last until the third quarter of this year and should fade between the fourth quarter of 2015 and the first of 2016.

In addition to the revised estimate for the non-tradable CPI excluding food and regulated prices, another factor that raised the inflation forecast at different horizons was the assumption of a more depreciated path for the peso against the US dollar compared to the one considered a few months ago. As explained in Chapter I herein, this decision was influenced by further deterioration in external conditions for Colombia, with less growth on the part of our trading partners and an external imbalance that would become more pronounced in the coming months than was foreseen initially.

As a result of this change, the forecasts for the prices of tradable goods and services during the remainder of the year and throughout 2016 have been raised. In the case of the tradable CPI excluding food and regulated items, this would mean annual inflation above 5.0% by the end of the year and near the ceiling of the target range next year. It should be noted, however, that the peso has not depreciated against the currencies of other countries from which Colombia imports, as much as it has against the dollar. This should help to mitigate some of the upward pressure on domestic prices.

The decline in international prices for some commodities would not be enough to offset the upward effects of peso depreciation.

Depreciation is expected to continue to pass through to consumer prices, both directly (via prices for imported or tradable goods) and indirectly (through the cost of imported raw materials, capital goods and transport costs). International prices for some commodities have declined, although not enough to offset entirely the upward effects of peso depreciation. Consequently, the imported component of production costs is expected to increase in the coming quarters.

As in the March edition, the expectation in this report is that prices in Colombia to face little upward pressure from demand throughout the rest of the year. By 2016, these pressures would be declining and would help to channel inflation within the target range. Although, as noted, the output gap is now negative. The models indicate it will have an impact on the

No upward demand pressure is expected during the rest of 2015 or in 2016.

prices of tradables and non-tradables only towards the end of this year and particularly in 2016, offsetting the upward pressure coming from peso depreciation and indexing.

The central forecast points to growing adjustments in regulated pricesI during the remainder of 2015, owing to the impact further depreciation of the peso would have on prices for gasoline and natural gas. Given the assumptions on international oil prices, as outlined in Chapter I of this report, and the prediction on the exchange rate, the forecast for domestic fuel prices was revised upward, with some hikes expected in the second half of the year, contrary to the forecast last quarter. Additional changes in these items are anticipated for 2016, and they would be passed through to fares for certain types of public transportation. Accordingly, the annual change in regulated prices would stay above 4.0% throughout much of the year.

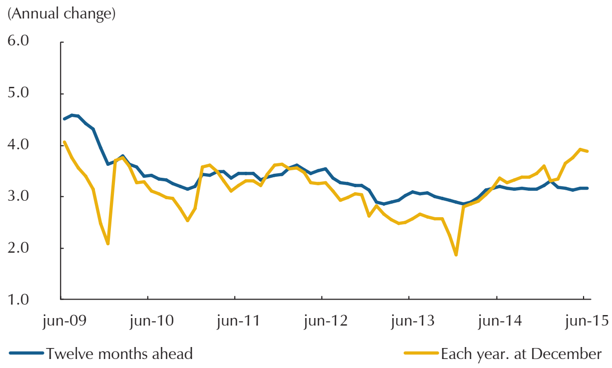
Food prices should help to reduce inflation towards the end of the year and especially in the first half of 2016. A return to normal in the supply of rice and other perishable foods will help to lower these prices, particularly between December and March. The annual change anticipated for the food CPI is similar to what it was forecast in the March edition of the Inflation Report, although at a somewhat higher level because of the impact increased depreciation would have on the prices of imported foods. These forecasts do not include supply shocks caused by extreme weather.

As for the coming quarters, inflation expectations at horizons of one year or more are not expected to deviate significantly from the long-term target set by the Board of Directors of Banco de la República. This will help inflation to converge towards 3.0% in the future, which would temper wage adjustments and restrain price indexing to inflation. It is important to point out that in June and mid-July, when this report was being written, expectations still were anchored to the target. Although the monthly survey of analysts showed a relatively high expected rate of inflation by December (3.9%), a sharp reduction is anticipated at a one-year horizon: 3.1%. The quarterly survey of entrepreneurs shows inflation is expected to be 3.9% at twelve months ahead. This is still within the target range, although somewhat higher than the expectations surveyed last quarter. Finally, the expectations derived from TES (break-even inflation) by mid-July were close to 3.0% for horizons of two, three and five years (Graphs 43, 44 and 45).

Food prices should help to lower inflation towards the end of 2015 and during the first half of 2016, provided weather conditions are not extreme.

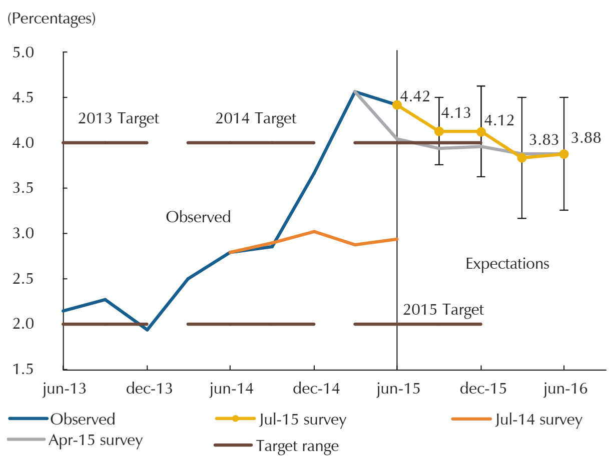
Given the above, Banco de la República's models projected a path for annual inflation in the second half of the year that would be similar to the levels reached in June. Peso depreciation will push up inflation, but the increase will be offset by reductions in food prices, particularly by the fourth quarter.

Graph 43
Annual Inflation Forecasts by Banks and Brokerage Firms



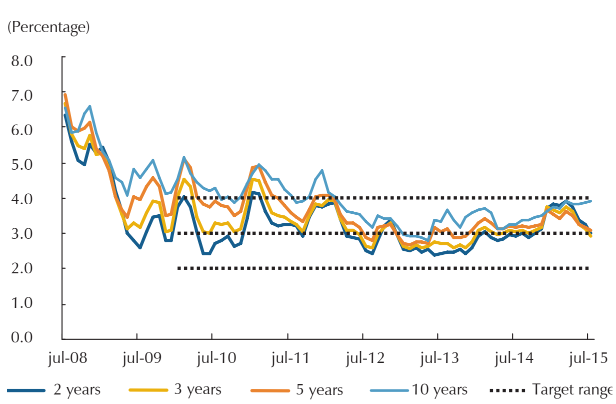
Source: Banco de la República.

Graph 44
Actual Inflation and Inflation Expectations
(At three, six, nine and twelve months)
(Annual inflation)



Note: The standard deviation is presented for each expectation.
Sources: Banco de la República (Quarterly Survey of Expectations) and DANE

Graph 45
TES-derived Inflation Expectations
(At two, three, five and ten years)
(Monthly average)[a/]



a / Nelson and Siegel method
Source: Banco de la República

Inflation should begin to converge towards 3.0% by 2016, moving into the target range once again. Lower food prices would allow this trend to consolidate, thanks to a return to normal in agricultural output, coupled with downward pressure on the tradable and non-tradable baskets fueled by an output gap that would remain in negative territory. Even so, the convergence will be slower than was anticipated in the previous editions of this report, due to continued upward pressure caused by accumulated depreciation of the peso.

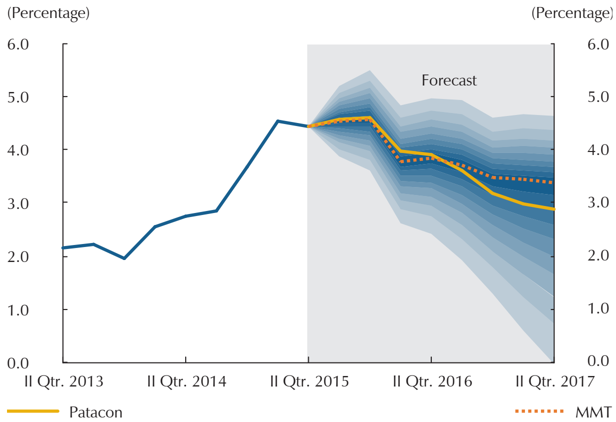
2. Risk Balance

The risk balance estimated for total consumer and non-food inflation is shown in the fan charts (Graphs 46 and 47). On this occasion, the width of the previous balance is maintained because it takes into account the high degree of uncertainty about the economic performance of Colombia's trading partners and the momentum in domestic demand and food prices, among other factors. As mentioned earlier, some of the upside risks identified in the previous edition of this report have emerged in recent months. In addition, the central forecast for inflation has increased, all of which justifies a change in the bias for the rest of 2015, which is slightly upward. However, it is still downward for 2016.

The following are the main downside risks.

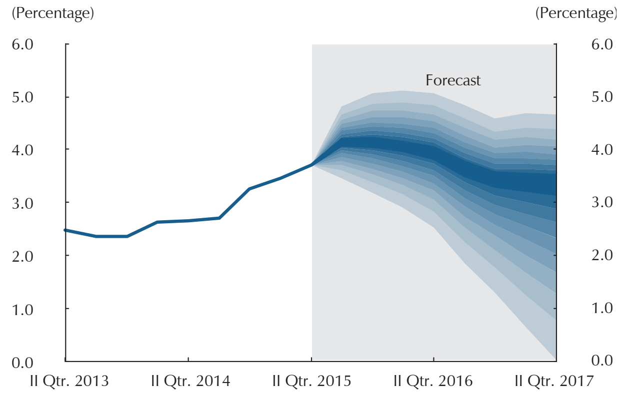
- Less external demand than anticipated in the central forecast: This report notes an important downside risk associated with less dynamic economic performance worldwide. Consequently, although the baseline scenario already takes into account a sharp decline in the assumptions of economic growth for our trading partners in 2015 and 2016, there continue to be risk factors that could result in even less momentum in those economies.

Graph 46
Fan Chart of Total Inflation



MMT: Modelo de Mecanismos de Transmisión (Pass-through Mechanisms Model)
Patacon: Policy Analysis Tool Applied to Colombian Needs (dynamic stochastic general equilibrium model)
Source: Banco de la República

Graph 47
Fan Chart of Non-food Inflation



Source: Banco de la República.

To begin with, the impact of the drop in commodity prices on terms of trade for countries in the region might be greater than expected, particularly if the downward price trend becomes more pronounced. There are major downside risks looming over other economies as well. In the case of China, for example, high levels of indebtedness pose a challenge the country's financial stability; added to this is the weak performance of its trade balance, which could lead to a sharper economic slowdown than expected.

Economic activity in the United States also was less favorable than was anticipated for the year to date. Although the leading indicators show some recovery, driven largely by private consumption, one cannot rule out the possibility that further deterioration in China and other emerging economies might impact US economic performance and lower its growth prospects for the coming quarters. Added to this is the fact that the euro area continues to show a downside risk related to the uncertainty created by Greece's debt problems, which still could have a major impact on the confidence of economic agents.

In the case of Colombia, the emergence of one or more of these risks could result in weaker external demand and lower investor and consumer confidence, affecting the momentum in domestic demand and exerting downward pressure on consumer inflation, particularly towards 2016.

- Less domestic growth than is contemplated in the baseline scenario, due to internal factors: Although the central forecast for growth in 2015 assumes the momentum in public and private consumption will be less than it was the year before, these aggregates continue to support much

Foreign and domestic demand in the coming quarters might be weaker than anticipated, generating downside risks to inflation.

of the country's economic growth. However, there is a major downside risk looming over this forecast. To begin with, the decline in oil prices has a serious impact on government revenue, reducing it substantially. This, in turn, could imply cutbacks in resources for a number government projects. If this is combined with the possible risk of less foreign financing, it might be difficult to obtain the projected resources. Private investment also could decline more than expected, owing to the reduced outlook for domestic growth and an eventual shock to the confidence indicators. Less domestic demand would imply less pressure on inflation, which could converge quicker, in this situation, than is envisioned in the central forecast.

The following are some of the upside risks considered in this report.

- An increase in tradable inflation due to further depreciation of the exchange rate: The risks associated with more-than-expected depreciation, such as lower oil prices and an interest rate hike by the Fed, may imply higher inflation for the tradables, due to additional pass-through as well as higher depreciation in and of itself. Moreover, although these factors are regarded as temporary, they can exert a permanent effect through expectations and indexing. In addition, the effect of depreciation on inflation in non-tradables was surprising and, considering the risk of further depreciation, we could see more of a pass-through to this basket.

- Higher food prices than expected: The central forecast for inflation does not assume El Niño weather will be extreme. Recently, however, this risk has become much more likely. If it occurs, perishable food prices would tend to rise, especially in late 2015 and early 2016, as happened during similar events in the past. It also could push electricity rates, which is not contemplated in the central forecast.

- Unanchoring inflation expectations: There was a major spike in inflation last quarter, when it exceeded the ceiling of the long-term target range. In addition, as mentioned, inflation is likely to continue at these levels for much of the current year. Although these hikes are due to temporary shocks, there is the risk that agents might perceive them as lasting and overreact by raising their expectations considerably. This would create permanent upward pressure on prices that is not contemplated in the central forecast presented in this report.

The upside risks to inflation come from the possibility of intense El Niño weather and inflation expectations unanchoring from the target.

Considering all these factors and after weighing the different risks in the fan chart, the probability that inflation will be above 4% in 2015 is estimated at 83%, while the likelihood of overall inflation being within a range of 2% to 4% in 2016 is estimated at 68% (Table 8). It is important to note that the central forecast presented in this report assumes Colombia will follow an active monetary policy, with interest rates being 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	17.5
2.0-2.5	0.0	13.0
2.5-3.0	0.3	17.1
3.0-3.5	3.0	19.6
3.5-4.0	13.2	18.0
> 4.0	83.5	14.8
Between 2 & 4	16.5	67.7

Source: cálculos del Banco de la República.

Box 3
MAIN ASPECTS OF THE MEDIUM TERM FISCAL FRAMEWORK FOR 2015

Yurany Hernandez
Victor Manuel Mendez
and Jorge Enrique Ramos *

1. Introduction

The consolidated public sector (SPC by its acronym in Spanish) closed out 2014 with a deficit equal to 1.8% of GDP. However, the target was 1.6% of GDP, according to the Medium Term Fiscal Framework (MFMP by its acronym in Spanish) for that year. While the central government (GNC by its acronym in Spanish) had a deficit equivalent to 2.4% of GDP, the decentralized sector (SD by its acronym in Spanish) registered a surplus equal to 0.7% of GDP (Table B3.1).

* Ms. Hernandez and Mr. Mendez are professionals with the Technical Information Department. Mr. Ramos is the Public Sector Section Chief of that department. The opinions offered in this section imply no commitment whatsoever on the part of Banco de la República or its Board of Directors.

The drop in international oil prices, the loss of economic momentum, both domestically and internationally, and regulatory changes in temporary taxes are the events that marked the end of the previous fiscal year and influenced the national government's fiscal projections. Although Colombia is not a major player in the international oil market, its fiscal situation is sensitive to changes in the oil price and the amount of oil produced, mainly because of tax collections, royalties and the dividends paid by Ecopetrol.

This being the case, the Government and Congress adopted a series of measures in late 2014 to offset the effect of the plunge in oil prices on public finances, to stimulate growth and to generate earnings in the future. First of all, a tax reform bill (Law 1739/ 2014) was passed to finance the 2015 budget by collecting COP12.5 trillion (t) in revenue. This reform extended the tax on financial transactions (GMF by its acronym in Spanish), raised the so-called "income tax for equity" (CREE by its acronym in Spanish) by one point,

Table B3.1
Consolidated Public Sector Fiscal Balance

Item	Billions of COP			Percentage of GDP		
	2014	2015[a/]	2016[a/]	2014	2015[a/]	2016[a/]
1. Non-financial public sector	(13,264)	(18,914)	(21,119)	(1.8)	(2.3)	(2.4)
Central government (GNC)	(18,356)	(23,881)	(30,995)	(2.4)	(3.0)	(3.6)
Decentralized sector	5,092	4,968	9,877	0.7	0.6	1.1
Social security	4,002	3,694	5,796	0.5	0.5	0.7
National-level companies	(2,680)	(187)	(277)	(0.4)	(0.0)	(0.0)
Local-level companies	606	266	414	0.1	0.0	0.0
Regional and local	3,164	1,195	3,943	0.4	0.1	0.5
2. Banco de la República's quasi-fiscal balance	(1,129)	(1,057)	(74)	(0.1)	(0.1)	(0.0)
3. Fogafin's balance	625	898	723	0.1	0.1	0.1
4. Financial restructuring costs	39	24	24	0.0	0.0	0.0
5. Statistical discrepancy	83	-	-	0.0	0.0	0.0
Consolidated public sector	(13,724)	(19,096)	(20,493)	(1.8)	(2.4)	(2.4)

a/ Projected
Source: Ministerio de Hacienda y Crédito Público (MHCP)

created a surcharge on that tax, and replaced the tax on net worth with a wealth tax, which was extended up to 2018. Secondly, the government announced the postponement of COP5.9 t in budget spending, with an adjustment of COP1.7 t in operating costs, COP 0.2 t in debt service and COP 4 t in investment.[1] Finally, in an effort to stimulate economic growth and job creation, the government launched the second version of its Plan to Promote Prosperity and Employment (PIPE 2.0 by its acronym in Spanish). Among other objectives, PIPE 2.0 is designed to strengthen investment in transport infrastructure and education, broaden subsidized interest rates on mortgages, boost tourism and stimulate the export sector with zero-tariff policies for raw materials and capital goods.

2. The Fiscal Scenario in 2015 and 2016

According to the government's estimates, public finances would suffer in 2015-2016, mainly due to the loss of revenue from the oil industry. The bulk of the impact will come in 2016, since a portion of income tax collections and Ecopetrol dividends will be based on operations this year, which have been severely affected by low international prices for crude oil.[2] These estimates were based on an expected GDP growth rate of 3.6% in 2015 and 3.8% in 2016. The government also assumed the long-term price of Colombian crude would be USD74 dollars a barrel in the first year and $ USD70 in the second, with production at one million barrels.

a. 2015

According to the MFMP, the SPC deficit will amount to 2.4% of GDP in 2015, with a 3% of GDP imbalance in GNC operations compared to a surplus in SD finances equal to 0.6% of GDP. The fiscal projections in this last sector are characterized by a deficit reduction for domestic companies and less of a surplus in the territories, due to the increase in spending that usually comes during the final year in office for mayors and governors (Table B3.1).

GNC finances posted a larger deficit because of the drop in oil revenue. However, it is important to mention that taxes will increase slightly as a share of proceeds, thanks to the tax reform bill passed late last year. As noted earlier, that legislation maintained the tax on financial transactions and created a wealth tax to replace the net worth tax. In terms of expenditure, 2015 will see an increase in interest payments on the debt that would be offset by a reduction in operational and investment payments (Table B3.2).

Financing for the GNC deficit will come from COP43.1 t in loans, including COP30.6 t from the sale of TES (government bonds) and COP12.6 t in external disbursements. The GNC also will use an estimated COP 2.6 t in Treasury resources from the operation of the National Single Account System.

b. 2016

The MFMP estimates a deficit equivalent to 2.4% of GDP for the consolidated public sector in 2016, with an imbalance in GNC finances equal to 3.6% of GDP, plus a 1.1% of GDP surplus in the SD (Table B3.1). Within the SD, regional finances are expected to improve and a better fiscal situation is forecast for social security, mainly due to reduced payments from the National Pension Fund for Local Authorities (Fonpet).

There will be more of a gap in GNC finances, mainly because of fewer dividends from Ecopetrol, which will be severely affected by low international prices for crude oil. According to official estimates, there should be no major changes in tax revenue during the year, thanks to an anti-evasion program currently being implemented by the National Tax and Customs Bureau (DIAN). GNC revenue overall, as a percentage ofGDP, is expected to go from 16.3% in 2015 to 15.6% in 2016. Expenditure will account for 19.1% of GDP, which is similar to the percentage observed in recent years (Table B3.2).

The central government deficit in 2016 will be funded largely with loans, including COP 15 t in external disbursements and COP 31.1 t in domestic debt issues. The Treasury operations will amount to COP 4.2 t.

3. The Medium Term Fiscal Situation

According to the estimates in the MFMP, the SPC will see its finances improve gradually in the years ahead, reaching a surplus by 2020. This trend is based on how central government's operational performance evolves. Its deficit will increase in 2015 and 2016, then fall to around 1% of GDP as of 2021 (Graph B3.1). The of-

1 A similar measure was announced with respect to the draft budget for 2016. In this case, investment was cut by COP5 t, and a freeze was put on overhead and personnel expenses in the executive branch. The defense and justice sectors were an exception.

2 According to the current estimates, the dividends Ecopetrol transfers to the government would decline from COP10.8 t in 2014 to COP 4.1 t in 2015 and COP2.4 t in 2016.

Table B3.2
Central Government (GNC) Fiscal Balance

Item	Billions of COP			Percentage of GDP		
	2014	2015[a/]	2016[a/]	2014	2015[a/]	2016[a/]
Total revenue	125,904	131,316	134,171	16.7	16.3	15.6
Tax revenue	108,343	116,846	126,229	14.3	14.5	14.6
Non-tax revenue	616	481	514	0.1	0.1	0.1
Special funds	1,569	2,223	2,377	0.2	0.3	0.3
Capital resources	15,377	11,765	5,050	2.0	1.5	0.6
Total Expenditure	144,260	155,197	165,166	19.1	19.2	19.1
Interest	16,979	20,885	24,455	2.2	2.6	2.8
Operation and investment b/	127,292	134,297	140,695	16.9	16.6	16.3
Net lending	(11)	16	16	0.0	0.0	0.0
Total balance	(18,356)	(23,881)	(30,995)	(2.4)	(3.0)	(3.6)
Structural balance	(17,406)	(18,106)	(18,504)	(2.3)	(2.2)	(2.1)

a/ Projected
b/ Operational and investment spending includes payments and floating debt
Source: Ministry of Finance and Public Credit (MTFF; 2015)

ficial estimates were calculated taking into account strict enforcement of the so-called Fiscal Rule Act, which sets quantitative targets for the central government's structural deficit: 2.3% of GDP in 2014, 1.9% of GDP in 2018 and 1% of GDP as of 2022 (Table B3.3).

The projection for the central government considers the cycle of economic activity and mining, calculated with data on potential GDP and the long-term price of oil. This information was supplied by independent technical committees established under the law. Specifically, the assumption is that GDP growth will increase gradually from 4.2% in 2017 to 5% in 2020, then decline to 4.3% in 2024, when it will converge to potential GDP growth. As for the oil industry, it is assumed the long-term price of crude will decline from USD65 per barrel in 2017 to USD58 in 2019, then increase to USD64 between 2023 and 2026. Oil production is expected to stay at one million barrels per day until 2022, and then decline to 940,000 barrels/day in 2026. According to these assumptions, the cyclical component of the deficit will close in 2020 and the projected deficit over the next five years will be higher than the structural deficit. This will enable the government to increase its borrowing. [3]

3 That establishes a declining structural balance for the central government that is less than or equal to -2.3% of GDP in 2014, -1.9% in 2018 and -1.0 in 2022.

In the medium term, GNC finances are expected to see a change in total revenue, down from 16.7% of GDP in 2014 to 15.7% by 2026, given lower revenue from the oil industry. However, it is important to point out that the projections in the MFMP assumes a tax reform bill will be passed to replace the temporary income derived from the financial transaction tax and the levy on wealth, which are set to expire in 2022 and 2018, respectively. As for expenditure, the MFMP foresees a gradual reduction in total payments from 19% of GDP in 2014 to 16.7% of GDP in 2029, with a change of more than 2 pp throughout the period analyzed. The biggest cuts are in operating expenses. These include personnel costs, which the MFMP says should not increase more than inflation. However, the estimates on spending do not consider new regulatory changes in the General System of Participation (SGP by its acronym in Spanish), and that investment expenses remain stable throughout the period at 1.8% of GDP.

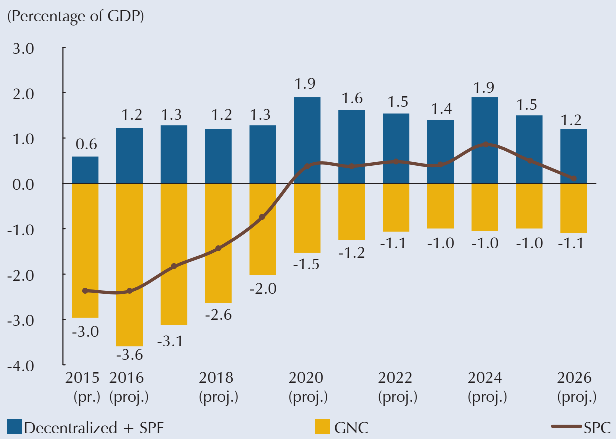
Given the projections in the MFMP for 2015, the balance of the GNC's gross debt would amount initially to 39.9% of GDP in 2016, then decline gradually to 29.8% of GDP in 2026. This trend reflects the downward trend in the fiscal deficit, which - with strict adherence to the rule – should be close to 1% of GDP as of 2022 (Graph B3.2).

Table B3.3
Central Government (GNC) Fiscal Balance

Item	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total revenue	15.7	15.8	15.8	16.2	16.4	16.3	16.1	16.0	15.8	15.7
Tax revenue	14.8	14.9	14.8	15.4	15.5	15.4	15.2	15.1	14.9	14.8
Non-tax revenue	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Special funds	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Capital resources	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
Total Expenditure	18.8	18.4	17.8	17.8	17.6	17.3	17.2	17.0	16.9	16.7
Interest	2.7	2.8	2.7	2.7	2.5	2.5	2.4	2.4	2.2	2.1
Operation	14.3	13.8	13.3	13.3	13.3	13.0	13.0	12.8	12.9	12.8
Investment	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Total balance	(3.1)	(2.7)	(2.0)	(1.5)	(1.2)	(1.1)	(1)	(1)	(1)	(1)
Primary balance	(0.4)	0.1	0.7	1.2	1.3	1.4	1.4	1.3	1.2	1.1
Structural balance	(2.0)	(1.9)	(1.6)	(1.4)	(1.2)	(1)	(1)	(1)	(1)	(1)

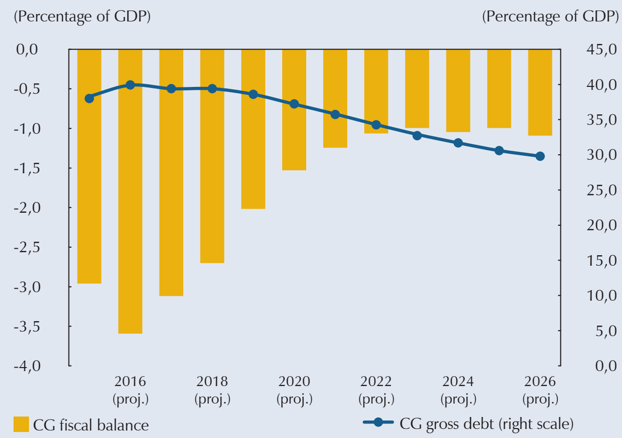
Source: Ministerio de Hacienda & Crédito Público(MFMP; 2015)

Graph B3.1
Consolidated Public Sector (SPC) Fiscal Balance



(pr.) Preliminary
(proj.) Projected
Source: Ministerio de Hacienda y Crédito Público (MHCP)

Graph B3.2
Consolidated Public Sector Fiscal Balance



(proj.) Projected
Source: Ministerio de Hacienda y Crédito Público (MHCP)

V. Risks to macroeconomic stability

The country is facing several external shocks that are having different effects on the economy. In addition to the decline in terms of trade, due to the drop in prices for crude oil and other mining products exported by Colombia, the economies of our trading partners have slowed and the Federal Reserve is expected to raise interest rates in the United States.

The Colombian economy is adjusting to the new international situation and to lower national income. The exchange rate flexibility contributed to this adjustment process and cushioned part of the external shocks.

The country has an economic policy framework that enables it to deal with these shocks effectively.

Colombia is facing several external shocks that are having different effects on the national economy. In addition to the decline in terms of trade, due to the drop in prices for crude oil and other mining products exported by Colombia, the economies of our trading partners have slowed and the Federal Reserve is expected to raise interest rates in the United States. As indicated throughout this report, these shocks have had implications and could continue to do so, primarily for the external sector, domestic demand, the public sector and inflation.

So far, the consequences of these negative shocks have been evident in a drop in mining exports in dollars and weak external demand for manufactured goods produced in the country. Risk measurements have increased, the peso has depreciated, and the value of imports in dollars has fallen. On the domestic scene, confidence has deteriorated, domestic demand has slowed, prices for tradable goods have risen, and the government announced spending cuts.

External shocks have had implications and could continue to do so, primarily for the external sector, domestic demand, the public sector and inflation.

The Colombian economy is adjusting to these new external conditions. Consequently, this year and next year will likely be a period of correction for some of the macroeconomic imbalances that might have accumulated in the past. An orderly and timely adjustment is indispensible to prevent these kinds of imbalances from forming or becoming even worse. Hopefully, the slowdown in domestic demand will be consistent with the loss of momentum in national income and help to reduce the country's current account deficit. The deterioration in income and the real depreciation of the currency can also be compatible with less demand for non-tradable investment, which would mean less pressure on house prices and the credit market. The public sector faces the challenge of implementing measures that enable it to offset the decline in oil revenue and, at the same time, ensure the sustainability of public finances.

As mentioned in previous editions of this report, the country has a policy framework that allows it to cushion these external shocks. Exchange rate flexibility is a prime example. It encourages the reallocation of resources toward the tradable sector and helps to ease the current account deficit. Colombia also has an inflation targeting strategy that is intended to keep price stability and sustainable GDP and employment growth in the long run. Added to this is the increase in the balance of international reserves and a flexible credit line with the IMF; together, they enable the country to deal with international liquidity constraints. The fiscal rule, which is being implemented to ensure the sustainability of the public sector, is an important aspect, as is the regulatory framework to provide for financial stability.

It is important to continue to monitor the economy in an effort to detect additional macroeconomic risks and imbalances.

For these reasons, recent developments in the current account, the real exchange rate, borrowing and house prices are monitored in this section. These variables are defined in the literature as being crucial to detecting possible macroeconomic imbalances. An indicator of the aggregate imbalance (the macroeconomic imbalance index or MII)[13] is presented as well. It combines the imbalances estimated for these variables into a single indicator.

A. THE CURRENT ACCOUNT AND REAL EXCHANGE RATE

Colombia had a broad foreign financing in 2014 (Graph 48) that boosted imports of goods and services. This meant a current account deficit at around 4.5% of GDP (Graph 49) for the first two quarters of the year.[14] As the current surplus in the mining-oil industry declined (Graph 50), due to the drop in prices for its exports, the current account deficit of the rest of the economy increased, given the high expenditure on imports. As a result, the negative balance in the total current account rose to 5.2% of GDP for 2014 as a whole, and 7% of GDP for first quarter of 2015 (Graph 49).

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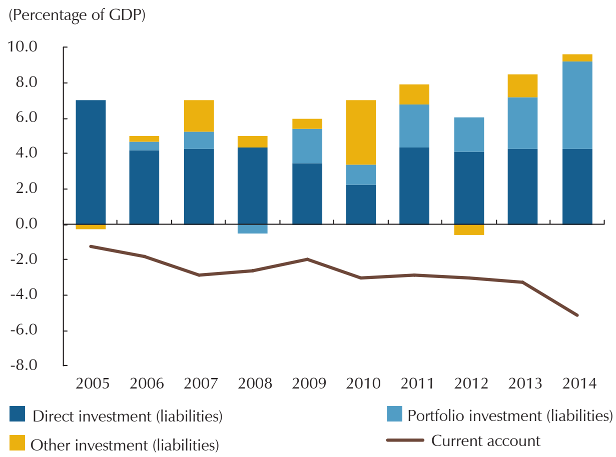
13 See Arteaga, C.; Huertas, C.; Olarte, S. (2012). "Indice de desbalance macroeconómico," Borradores de Economía, Vol. 744, Banco de la República.

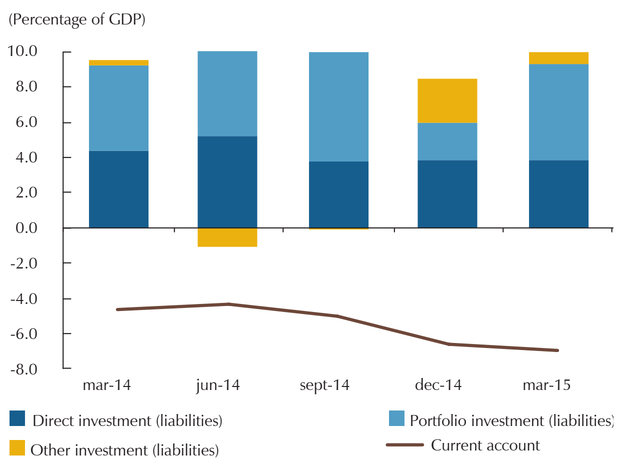
14 Even though prices for crude oil were high up to that point.

Graph 48
Current Account and Foreign Capital Inflows (Liabilities)

A. Anual



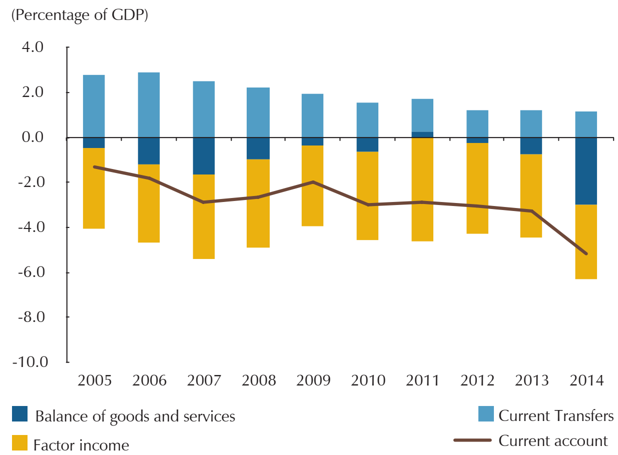
B. Quarterly



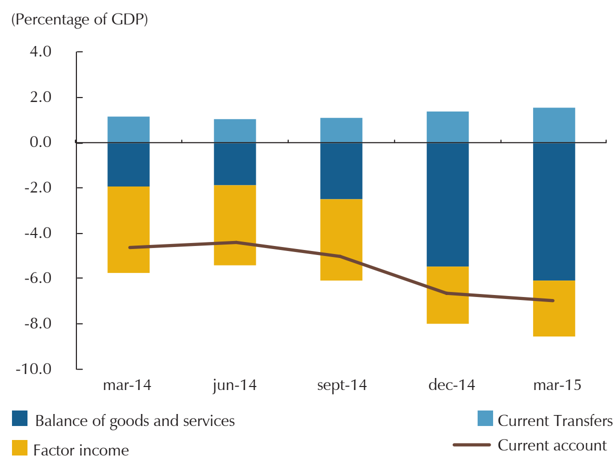
Source: Banco de la República.

Graph 49
Current Account and Main Components Thereof

A. Anual



B. Quarterly



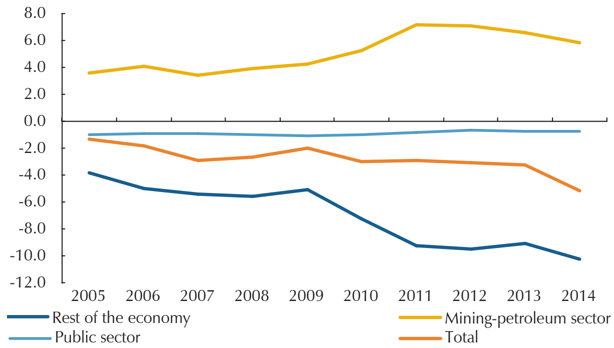
Source: Banco de la República.

The figure on record for 2014 was the result of a higher rate of investment and government spending (Graph 51), which meant domestic demand grew more than national income. For all of 2015, the information at hand points to a lower current deficit in dollars and a gradual adjustment that would continue into 2016.

As mentioned in the last edition of this report, the change in the current account deficit will depend, in part, on the momentum in foreign financing, the performance of domestic demand, and the generation of revenue to substitute the lower exports of raw materials. In turn, several risk scenarios were suggested. One of them is the possibility of a sharp decline in foreign financing that would bring about an abrupt change in the current account deficit. This could happen if oil prices plunge even further, the risk premium increases considerably, and there are unexpected and substantial hikes

Graph 50
Current Account by economic sector

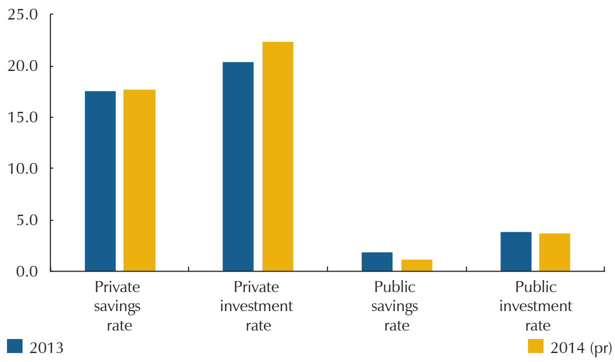
(Percentage of GDP)



Source: Banco de la República.

Graph 51
Public and Private Savings and Investment Rates

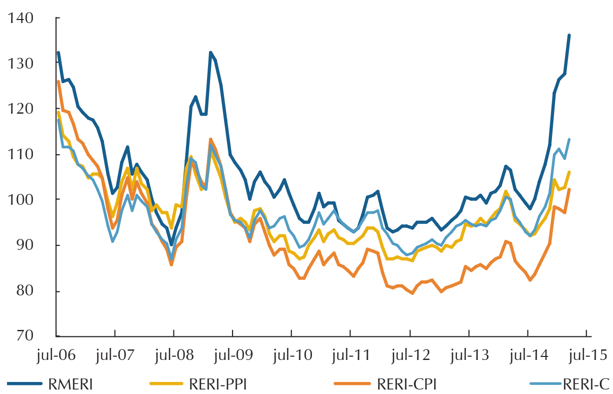
(Percentage of GDP)



(pr.) Preliminary
Source: Banco de la República

Graph 52
Foreign Exchange Rate COP/USD (TRM)* and the Real Exchange Rate

(2009 TRMI and RERI = 100)



TRMI: TRM Index *Corresponds to the Representative Market Exchange Rate (TRM, by its acronym in Spanish)
RERI: Real Exchange Rate Index; PPI: Producer Price Index; CPI: Consumer Price Index
C: competitiveness.
Note: 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.
Sources: Superintendencia Financiera de Colombia and Banco de la República

in international interest rates. In this scenario, the slowdown in the national economy would be even more pronounced.

There also is the possible risk that the current account deficit will remain high, despite the drop in national income, a situation that would worsen the macroeconomic imbalances. Several factors could prompt this sort of a scenario, such as the postponement of interest rate hikes in the United States, an expansionary monetary policy in other developed economies, or because the private or public sector in Colombia believes the drop in the income is temporary and continues to spend at a high rate. This risk could increase in the medium term, insofar as the financing for the current account deficit turns to portfolio investments or foreign debt.

Annual nominal and real depreciation in the exchange rate so far this year, up to July, was 29% and 14%,[15] in that order (Graph 52). This movement was due to the trend in international prices for oil and other mineral products, the perception of country risk and the outlook for the national economy. Although a strong dollar has been a phenomenon worldwide, the Colombian peso is one of the most depreciated currencies in the region.

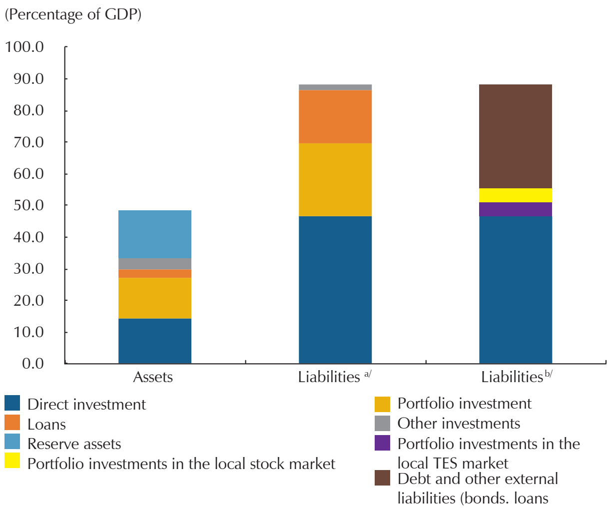
As a result of the larger current account deficit coupled with the depreciation of the peso, which lowered nominal GDP calculated in dollars, Colombia's net international investment position[16] (NIIP) went from -27% of GDP at the end of 2013 to -39.5% [17] in March 2015, a figure equivalent to USD -121.2 b. The evolution and structure of the NIIP show the current account deficit has been financed with the acquisition of external li-

15 The average of depreciation in the different real exchange rate indexes (RERI-PPI, RERI-CPI and RERI-C).

16 Calculated as the difference between the country's external financial assets (including international reserves) and liabilities.

17 The GDP figures are calculated with the GDP forecasts in dollars for all of 20115.

Graph 53
Assets and Liabilities in the International Investment Position
(First Quarter of 2015)



a/ Broken down into direct investment, portfolio investment, loans and other investments
b/ Broken down into direct investment, portfolio investment in the local stock market, portfolio investment in the local TES market, and debt and external liabilities.
Source: Banco de la República

abilities and there also has been an increase in the assets Colombians own abroad.

The make-up of the liabilities (USD 269,9 b) in the NIIP (Graph 53) shows that most are focused on FDI (53%), followed by portfolio investment (26%), loans (19%) and other investments (2%). The major share of FDI has several advantages in the face of external shocks, such as those now confronting the country. To begin with, FDI is less volatile than other investments, given its lower liquidity and project development objectives in the medium term. Moreover, since the investor assumes the foreign exchange and financial risks of the business, profitability and even the value of these investments in dollars is reduced during a cycle of economic slowdown, depreciation in the exchange rate and falling raw material prices. In that type of scenario, fewer profits remitted by foreign companies and the depreciation of investments help to adjust the country's current account deficit and its NIIP.

On the other hand, portfolio investment and loans are more volatile and dependent on external conditions (World Bank, 2013).[18] This subset also can be broken down into external debt and portfolio investments in the domestic government bond market and stocks. The latter represent 39% of portfolio investment and are equivalent to 8.9% of GDP (10.1% of total liabilities). They also are susceptible to value losses related to the depreciation of the exchange rate.

When external assets are compared to external liabilities, excluding direct investment in both cases, the NIIP is reduced from USD -121.2 b to USD -21.4 b, a figure equivalent to -6. 9% of GDP.

The external debt accounts for about 32% of GDP.[19] According to the Boletin Mensual de Deuda Externa (The Monthly Bulletin on the External Debt), 60% is public and 40% is private, while 13% is short term and 87%, long term. Approximately 7% of the long-term portion is leasing, a type of liability that has collateral associated with the financial instrument itself. It is estimated that external debt amortization will come to about USD 23.130 b in 2015.

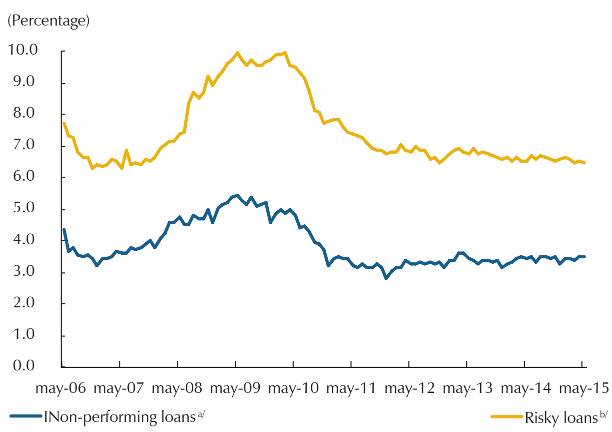
External assets amounted to USD 148.7 b (48.5% of GDP) and are concentrated in more liquid instruments such as international reserves (31.5%), portfolio investments (26.5%), loans, deposits and others (12.8%). FDI

18 World Bank (2013). "La desaceleración en América Latina y el TTpo de cambio como amortiguador" (The Slowdown in Latin America and the Exchange Rate as a Buffer), Semi-annual Report, Office of the Chief Regional Economist, Washington, D.C.

19 Does not include loans between related companies.

plays a less relevant role than in the case of liabilities, accounting for 29.2%. When external assets are compared to external liabilities, excluding direct investment in both cases, which is the least liquid, the NIIP is reduced from USD -121.2 b to USD -21.4 b, a figure equivalent to -6.9% of GDP.

Graph 54
Non-performing loans and Risky loans Indicators for Lending Institutions



a/ non-performing loans (more than 30 days in arrears) over total loans.
b/ Risky loans (other than A-rated) over total loans.
Sources: Superintendencia Financiera de Colombia; Banco de la República's calculations

B. BORROWING

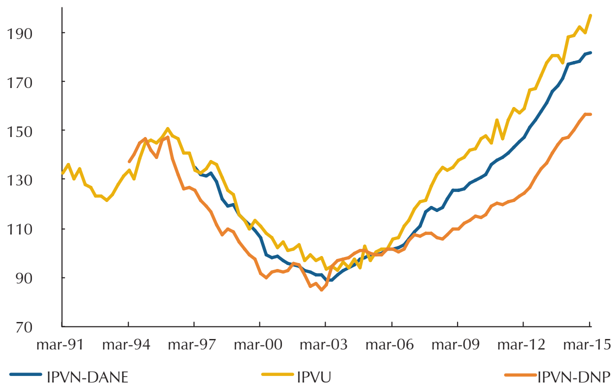
The indicators for lending institutions continue to show signs of strength. In fact, the non-performing loans and risky loans indicators for the first five months of 2015 (Graph 54) are below the average for the past decade. However, non-performing consumer loans and non-performing mortgages increased. Provisioning for the non-performing and risky portfolio exceeds the average for the last ten years, and the capital adequacy ratio is still above the mandatory level. Added to this is the increase in earnings for lending institutions. As noted in previous editions of this report, in light of the drop in oil prices and depreciation of the peso, the exercises performed by Banco de la República show no signs of systemic risks in the financial system. Indeed, the sample of companies in the oil sector and those exposed to the effects of currency depreciation represent a relatively low portion of the commercial loan portfolio of lending institutions. In its latest report to Congress, the Board of Directors indicated a capital adequacy stress test of lending institutions up to March 2015 showed none of them would have had solvency indicators below the required minimum in a scenario of default on financial obligations involving a sample of firms whose net worth has been seriously devaluated due to depreciation of the peso.

Developments in the financial system must continue to be monitored, given the slowdown in the economy and possible changes in conditions for foreign financing. It is particularly important to keep an eye on the momentum in employment and its impact on the quality of the loan portfolio of lenders. The financial system's willingness and capacity to extend credit must be monitored as well. This is in an environment where huge infrastructure projects requiring a considerable amount of domestic and foreign financing will be carried out. For that reason, it is essential to track the impact this might have on other sectors that need credit.

Graph 55
House Prices in Colombia (Relative to the CPI)

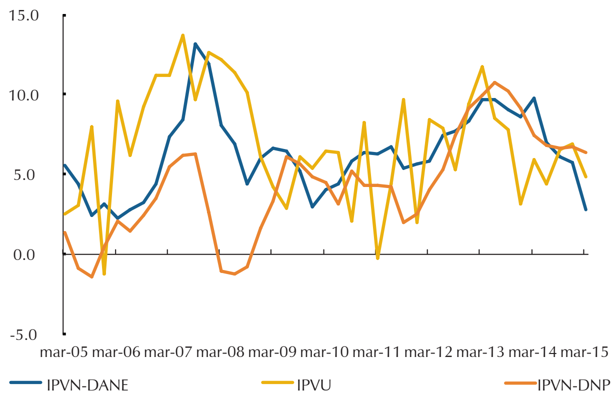
A. Indexes

(2005 Index = 100)



B. Annual change

(Percentage)



Sources: DANE, DNP and Banco de la República.

C. HOUSE PRICES

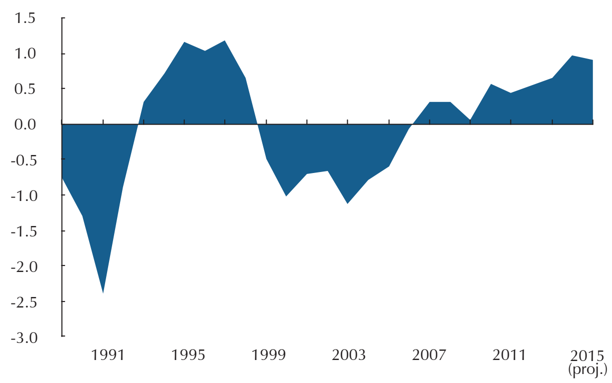
Home prices during the first three months of 2015 continued to rise more than inflation (Graph 55). The annual increase in prices for new houses was between 2.8% and 6.4%, continuing the slow-down observed in recent quarters. According to DANE, the reduced pace of price hikes relative to the CPI is widespread in Bogota, Medellin, Cali and Bucaramanga.

Part of this momentum can be explained by factors such as a perception of lower profitability, due to the deceleration in real growth in rental fees. Expectations of further depreciation of the peso also reduce the demand for non-tradable goods such as houses. The slowdown in the economy and the end of certain subsidies, which means higher costs for home ownership in certain segments of the market, are important factors as well. Regarding this last point, the effects of the subsidy programs contemplated in the PIPE 2.0 will have to be taken into account going forward. According to the Ministry of Housing, the plan calls for allocating 50,000 subsidized mortgages, valued between COP 87 m and COP 215 m, and 30,000 additional slots in the “Mi Casa Ya” (“My House Now”) Program.

Latin American countries such as Chile and Peru, which also have been affected by external shocks similar to those of concern to Colombia, have not seen a decline in housing prices. On the contrary, they continue to grow at a good pace.

Graph 56
Macroeconomic Imbalance Index

(Standard deviations)

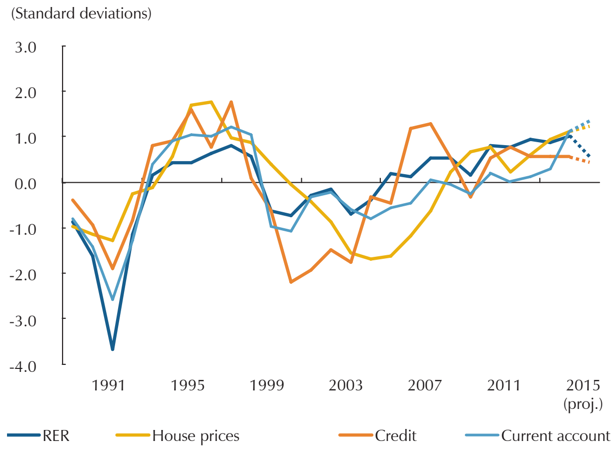


Source: Banco de la República.

D. MACROECONOMIC IMBALANCE INDEX (MII)

The technical staff’s calculations for 2015 show a slight decline in the MII relative to the year before (Graph 56). This indicator still is relatively high compared to the level observed between 2005 and 2013. However, the results are less than those estimated, on average, for the years prior to the 1999 crisis. However, this indicator does

Graph 57
Gaps in the Current Account, Real Exchange Rate, House 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 so that positive imbalances, in all cases, indicate gaps.
Source: Banco de la República

not directly include the imbalances in the public sector, which are relevant to the current situation.

In terms of individual variables, there is now less of a gap between the real exchange rate (RER) and its long-term values, thanks to real depreciation of the peso. In contrast, the gap in the current account has grown due to the slight annual increase expected in the current account deficit as a proportion of GDP for this year (Graph 57).

Attachment

Macroeconomic forecasts by domestic and foreign analysts

The latest forecasts by domestic and foreign analysts on the major economic variables for 2015 and 2016 are summarized in this section. At the time they were consulted, the analysts had data up to July 17, 2015.

Forecasts for 2015

The domestic analysts expect to see 3.17% economic growth. This is 16 basis points less than the estimate in the Inflation Report for the previous quarter. The foreign analysts who were consulted forecast 3.1% GDP growth, on average.

Table A2
Forecasts for 2015

	Real GDP Growth (Percentage)	CPI Inflation (Percentage)	Nominal exchange rate (end of the year)	Nominal DTF (Percentage)	Fiscal deficit (Percentage of GDP)	Unemployment Rate in the Thirteen Major Metropolitan Areas (Percentage)
Local Analysts						
Alianza Valores	2.00	3.60	2,900	4.15	3.00	9.80
ANIF	3.40	3.90	n, d,	4.70	(2.40)	9.90
Banco de Bogotá[a/]	3.30	3.84	2,500	4.51	(3.00)	4.51
Bancolombia	3.40	3.85	2,540	4.53	3.00	9.10
BBVA Colombia[a/]	3.10	4.10	2,596	4.61	3.00	9.60
BGT Pactual	3.00	3.99	2,750	n. d.	3.00	9.40
Corficolombiana	3.50	3.80	2,250	4.50	3.00	9.00
Corpbanca[b/]	3.20	3.99	2,600	4.60	3.60	8.40
Corredores Davivienda[c/]	3.10	4.20	2,650	n. d.	n. d.	n. d.
Credicorp Capital[a/ d/]	3.70	3.70	2,500	4.30	3.00	9.00
Davivienda[a/]	3.10	4.20	2,650	4.50	3.00	9.50
Fedesarrollo	3.00	4.00	2,600	4.70	3.10	n. d.
Ultrabursatiles	3.40	4.00	2,600	4.40	n. d.	9.10
Average	**3.17**	**3.94**	**2,594.7**	**4.50**	**2.03**	**8.85**
Foreign Analysts						
Citi	3.20	3.80	2,800	4.60	3.00	9.70
Deutsche Bank	3.20	4.20	2,802	n. d.	(2.80)	7.80
Goldman Sachs	3.00	4.00	2,800	n. d.	(3.20)	n. d.
JP Morgan	3.00	4.50	2,525	n. d.	(3.20)	n. d.
Average	**3.10**	**4.13**	**2,731.8**	**4.60**	**(1.55)**	**8.75**

a/ The projected deficit pertains to the national government.
b/ Formerly Banco Santander
c/ Formerly Corredores Asociados
d/ Formerly Correval
n. a.: Not available
Source: Banco de la República (electronic survey)

Table A2
Forecasts for 2016

	Real GDP Growth	CPI Inflation	Nominal Exchange Rate (End of the year)
	(Percentage)		
Local Analysts			
Alianza Valores	1.50	2.75	3,400
ANIF	3.40	3.20	n. d.
Banco de Bogotá	3.50	3.00	2,600
Bancolombia	3.70	3.12	2,440
BBVA Colombia	3.10	3.10	2,503
BGT Pactual	2.60	3.30	2,860
Corficolombiana	3.50	3.00	2,250
Corpbanca[a/]	3.60	3.20	2,650
Corredores Davivienda[b/]	2.70	2.54	n. d.
Credicorp Capital[c/]	3.00	3.20	2,350
Davivienda	2.80	2.54	n. d.
Fedesarrollo	3.00	3.30	2,652
Ultrabursatiles	3.50	3.25	2,500
Average	**3.07**	**3.04**	**2,620.5**
Foreign Analysts			
Citi	3.00	3.40	2,684
Deutsche Bank	3.00	3.00	n. d.
Goldman Sachs	3.40	3.00	2,828
JP Morgan	2.30	3.00	n. d.
Average	**2.93**	**3.10**	**2,756.0**

a/ Formerly Banco Santander
b/ Formerly Corredores Asociados
c/ Formerly Correval
n. a.: Not available
Source: Banco de la República (electronic survey)

The domestic analysts are expecting 3.94% inflation, while the foreign analysts anticipate prices will have increased 4.13% by the end of the year. This last forecast is outside the target range set by the Board of Directors for 2015 (between 2.0% and 4.0%).

As for the exchange rate, the domestic analysts expect the representative market rate of exchange (TRM) to end the year at COP 2,595, on average. The forecast in the survey included in the previous edition of this report was COP 2,518. The foreign analysts expect the TRM to be near COP 2,732 by the end of the year.

With respect to the interest rate on time deposits (DTF), the domestic analysts who were consulted forecast 4.5%, on average. They also expect 8.85% unemployment.

Forecasts for 2016

The domestic analysts forecast 3.07% economic growth in 2016, while the foreign analysts expect it to be 2.93%. With respect to inflation, the domestic and foreign analysts are predicting 3.04% and 3.1%, respectively. In terms of the nominal exchange rate, the domestic analysts are forecasting COP 2,612, on average, while the foreign analysts expect it to average COP 2,756.

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