INFLATION REPORT

December 2017*

* Submitted by the technical staff to the Board of Directors for its meeting on 29 January 2018.

Banco de la República
Bogotá, D. C., Colombia

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 that of maximum sustainable growth in output and employment. In this way, 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 the target for the annual rate of inflation. BDBR's policy initiatives are designed to meet that target and to provide for long-term inflation at around 3.0%. The annual change in the consumer price index (CPI) is the benchmark that is used for inflation targeting.

THE DECISION-MAKING PROCESS

Monetary-policy decisions are adopted 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 predefined targets. If that assessment suggests, with enough certainty, that inflation will deviate from its target under current monetary-policy conditions and within the time horizon

in which the policy operates, and that such deviation is not due to temporary shocks, the BDBR modifies The Inflation-Targeting Strategy in Colombia its policy stance by changing its benchmark interest rates (those charged by *Banco de la República* on short-term liquidity operations). The Inflation-Targeting Strategy in Colombia

COMMUNICATION AND TRANSPARENCY

Monetary policy decisions are announced after the Board of Directors meetings. This is done in a press bulletin posted immediately on *Banco de la República*'s website (www.banrep.gov.co). The Inflation Report is a quarterly publication that is intended to lend transparency to the Board's decisions. It also contributes to a better understanding of monetary policy and helps to enhance its credibility. Specifically, the report: i) lets the public know how the Board of Directors and the Technical Governor of the Bank view recent and anticipated developments in inflation and its short- and midterm determinants; ii) explains the implications of those determinants for monetary policy management within the scope of inflation targeting; iii) describes the situation and analysis justifying the monetary- policy decisions made during the quarter; and iv) provides information that helps agents in the economy to form their own expectations about future developments with respect to inflation and output growth.

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INFLATION DEVELOPMENTS AND MONETARY POLICY DECISIONS

Graph A
Headline Consumer Inflation

(Percentage)

| | Observed Inflation | Inflation target | Range +/- 1 pp |

Sources: DANE and *Banco de la República*.

During the last two months of 2017, inflation increased somewhat more than expected, closing the year at 4.09%. This behavior is explained by the acceleration of the consumer price index (CPI) excluding food, whose annual variation to December stood at 5.01%. Within this last group, all large groups (tradables, non-tradables, and regulated items) recorded higher rates of increase, ending the year at annual rates exceeding the 3.0% target.

As did the CPI excluding food, the other measures of core inflation also accelerated in the last two months of 2017. To October, these measures had exhibited a downward trend, although they remained above the target as a result of the indexation of prices, the persistence of inflation, and the transitory effect of the new indirect taxes from early last year. The average of core inflation indicators drifted more from the target, standing at 4.66%.

The forecast of the Central Bank's technical staff suggests that annual inflation will decline significantly, although to a rate somewhat higher than projected in the *last Inflation Report*. According to the new forecast, in the first quarter of 2018, inflation will stand close to 3.6% instead of the 3.4% figure projected in October. This increase is explained mainly by the price of oil, which has increased so far more than the appreciation of the peso. Should this situation continue, the CPI for regulated items would be pushed upwards. It is also explained by a minimum wage increase well above the

inflation target, which would exercise labor cost pressures, particularly in the production of certain goods and services intensive in labor with this type of remuneration (e.g., meals outside the home, building management services, household cleaning services, etc.).

Regarding inflation expectations for 2018 and 2019, the survey to analysts and those embedded in public debt bonds exhibited slight increases and range between 3.2% and 3.6%. The quarterly survey applied to companies, unions, and academics suggests that inflation to December this year and the next could reach 3.8%.

The previous behavior of inflation and inflation expectations was recorded along with a weak dynamics of the economy and a negative output gap. The forecast for GDP growth for all 2017 (1.6%) did not change, remaining below the figure for potential growth of the economy. According to these projections, by the end of 2017, domestic demand would have slowed down, and its growth would have been less than output growth. In the same period, external demand would have driven growth due to the favorable behavior of exports.

The figures for the balance of payments also reflect an economy that is adjusting in an orderly manner. In the past quarter, exports in US dollars accelerated due to the increase of external sales of oil, coal, and non-traditional products. The annual increase in imports would have been negative, partly because of a high basis for comparison and by a weak domestic demand. Higher revenues generated by the significant growth in workers' remittances would be added to the lower trade deficit. With this, the technical staff reduced its estimate of the current account deficit for 2017 from 3.7% to 3.5% of GDP, and projected that it would continue falling to 3.3% of GDP in 2018.

As for the credit market, the figures for December reflected a portfolio in real terms that is recovering slowly, with a behavior determined largely by commercial credit (including foreign currency, direct external credit, and bonds). The households' loans portfolio is still slowing down, but it still records high real rates of increase. These behaviors take place from historically high levels of debt relative to output, both for households as for enterprises.

The reductions in the benchmark interest rate would be contributing to the recovery of credit. These reductions have been transmitted to the interest rates on loans, mainly to the commercial and mortgage rates, and to a lesser extent, to consumption rates. To December, in real terms, the policy interest rate stood below its average calculated since 2000, as well as the real rates on ordinary, mortgage, and consumer loans (except credit cards).

Regarding the labor market, in the moving quarter to November, the unemployment rate for the 13 metropolitan areas increased and continued with a growing trend, a behavior that has been taking place for over a year. Despite this deterioration in the unemployment figures, the indicators of wages in various sectors of the economy were adjusted to rates higher than the inflation target, which is explained, to a large extent, by its indexation to the high inflation figure for 2016 (5.75%). It is likely—and desirable—that wage negotiations for 2018 (other than the minimum wage) will take into account the sharp decline registered in the past inflation figure and the one expected in the near future, much closer to our long-term 3.0% target. Additionally, estimates of the Central Bank's technical staff indicate slack in the labor market, which will contribute to reduce labor cost pressures on prices.

With all of the above, the technical staff maintained the growth forecast at 2.7% for 2018. In addition to the higher external demand expected and the recovery projected in the terms of trade, other reasons suggest that the output for this year will be higher than in 2017. Firstly, the reductions in policy interest rates carried out so far and a lower inflation should bring about a greater dynamics for household credit, investment, and expenditure. Additionally, investment in 2018 would be driven by a larger implementation of civil works (particularly 4G), and it is likely that, should the price of oil continue at high levels, foreign direct investment in this sector continues recovering. In any case, the GDP dynamics would be lower than its potential (3.3%), with which the excesses of installed capacity of the economy would widen once more.

As for the expected behavior of consumer prices in 2018, several factors should contribute to the convergence of inflation to its 3.0% target. Firstly, if the food supply remains at good levels, the prices of this group could continue adjusting with increases below the target. In addition, the direct effect of value added tax (VAT) on headline inflation should have faded completely in the second quarter. Also, the most sticky prices, as well as wages different from the minimum wage, are expected to be indexed to a lower inflation than in previous years. Similarly, a more negative output gap and a more slack labor market should contribute to the deceleration of inflation.

In all, in the last quarter of 2017, headline inflation and core inflation remained above the target. The forecasts for inflation and inflation expectations suggest that inflation will decline significantly in 2018, albeit at a level that would still exceed 3.0%. In the same sense, the labor market is slack and will possibly contribute to reduce labor cost pressures on prices. The economic growth forecast for 2017 and 2018 remained unchanged, suggesting that the negative output gap will continue to widen this year.

Graph B
Banco de la República's Benchmark Interest Rate and
Interbank Interest Rate
(2009-2017)[a]
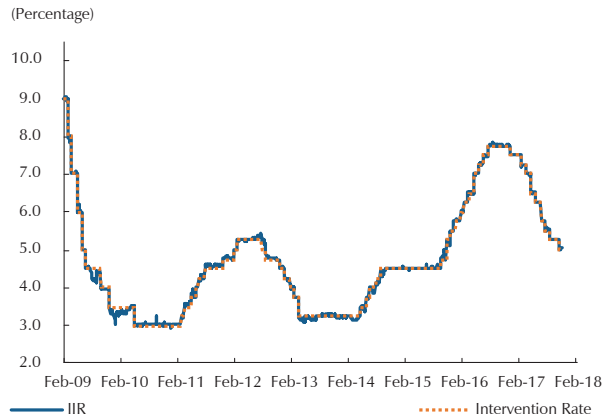
(Percentage)

Within this macroeconomic scenario, during the past three months, the Board of Directors of the Central Bank assessed the risk balance, considering the high levels of excess capacity along with an expected recovery of the economy, and the pace of convergence of inflation to its target. With this assessment, in November 2018 and January 2019, the Board decided to reduce the benchmark interest rate by 25 bp, placing it at 4.5%. With the information available, the Board considers that the reduction cycle of the benchmark interest rate has been completed.

Juan José Echavarría
Governor

REPORT
INFLATION

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1. Foreign Situation And Balance Of Payments

The forecast for the average growth of Colombia's trading partners in 2018 was raised slightly in this report. A recovery in foreign demand, though at a pace that is slower than its historical average, is still expected.

In the baseline scenario, a better average price for oil, although lower than what has been observed throughout the year, is now expected for 2018.

Until September 2017, the country's current deficit as a share of the GDP stood at 3.7%, which is below the one registered last year. For 2017 as a whole, an adjustment in the foreign imbalance, both in US dollars and as a percentage of GDP, is estimated. This is expected to continue in 2018.

A. INTERNATIONAL CONTEXT

The foreign context that Colombia faces improved at a rate that was better than had been expected in the previous *Inflation Report*. The available results for the gross domestic product (GDP) have revealed a more favorable outlook for several of the countries monitored than the one forecasted: notably, the United States, the euro zone, China, Brazil, and Ecuador. Likewise, the information available on the fourth quarter suggests that this trend may have continued.

The main change in the foreign context has been the significant increase seen in the international prices for crude oil since August of last year. This phenomenon is due in particular to the better outlook for economic growth that stimulates the demand for this product. In addition, even though oil production has risen (especially in the United States) the increase has been offset by the greater compliance with the agreement on production limits signed by the Organization of Petroleum Exporting Countries (OPEC). The frigid winter season in the northern hemisphere, in turn, has also stimulated the demand for electricity.

In the last few months, there has been a significant increase in the international prices of crude oil mainly because of the better outlook for demand.

At present, a faster normalization of the monetary policy is expected in the advanced economies than had been in the previous report. This is based on the greater expected growth. Nevertheless, this normalization will probably continue

gradually over the forecast horizon. Therefore, just as was the case a quarter ago, the central forecast scenario presented here does not foresee this process affecting foreign financing conditions for Colombia or other emerging economies.

1.   Productive Activity, Inflation, and Monetary Policy

The data available for the fourth quarter suggest that economic activity in the United States has continued its positive trend. At the statistical close of this *Report*,[1] the real GDP of the United States had grown 2.6% in the fourth quarter compared to the 3.0% expected by the market. Compared with the third quarter, this represents a slowdown that was due to a reduction in the growth of inventory build-up. Thus, the GDP for the entirety of 2017 grew 2.3%, which is in line with the high growth forecast scenario for the trading partners in the September *Inflation Report*. Going forward, the market is anticipating a boost from the passage of the tax reform at the end of the year, which includes cuts in taxes for corporations and households.

In the euro zone, the growth of third quarter output was 2.8% yearly thus continuing the upward trend that has been seen since the beginning of 2016. This was supported by both domestic demand and net exports. The information available as of the fourth quarter suggests that the recovery is continuing at a higher rate than previously expected.

In the last few months, the upward trend of inflation in the advanced economies has moderated. Inflation in the United States registered 2.1% per annum in December while the various measurements of core inflation remained below 2.0%. Specifically, the Federal Reserve's (Fed) preferred measurement, the implicit consumption deflator, showed an annual change of 1.5% in November. Likewise, core inflation in the euro zone remains well below 2.0% in spite of the fact that it rose slightly in the last few months. In December, total inflation was 1.4% annually, while core inflation registered 0.9% on a yearly basis (Graph 1).

Graph 1
Indicators of Total Annual Inflation in the United States and the Euro Zone

(Annual change)
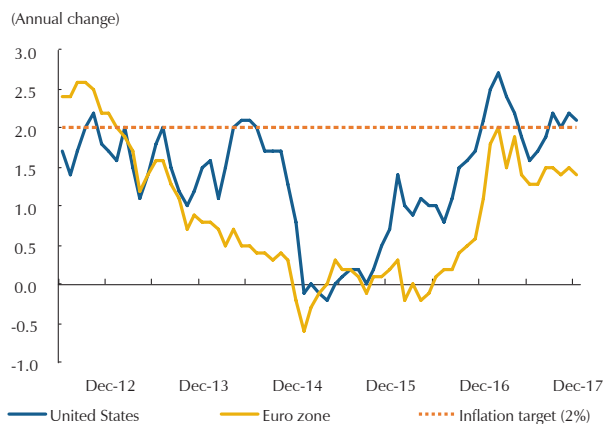
Source: Bloomberg.

2.   Prices of Commodities

With respect to the prices of the goods that Colombia exports, the significant increase seen in the one for crude oil should be noted. Various factors

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1   Monday, January 29, 2018

Graph 2
International Oil Prices (Brent and WTI)

(US dollars per barrel)

WTI — Brent —
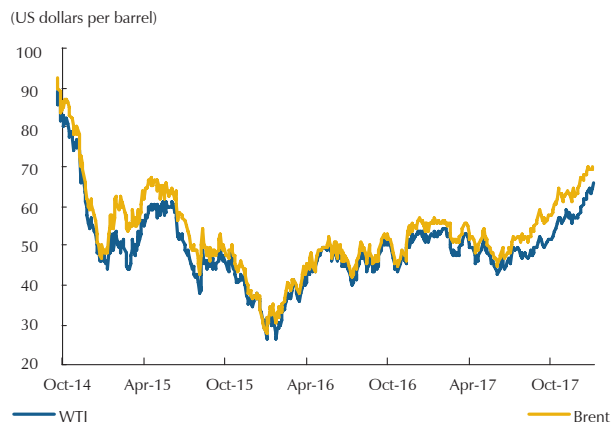
Source: Bloomberg.

Graph 3
Terms of Trade Index
(foreign trade methodology)

(2005 = 100)
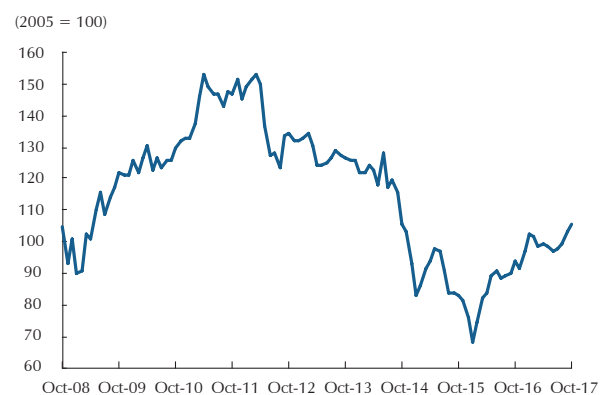
Source: *Banco de la República*.

Graph 4
Interest Rates on 10-year Sovereign Bonds for Some Advanced Economies

(Percentage points)

Germany — France — United States —
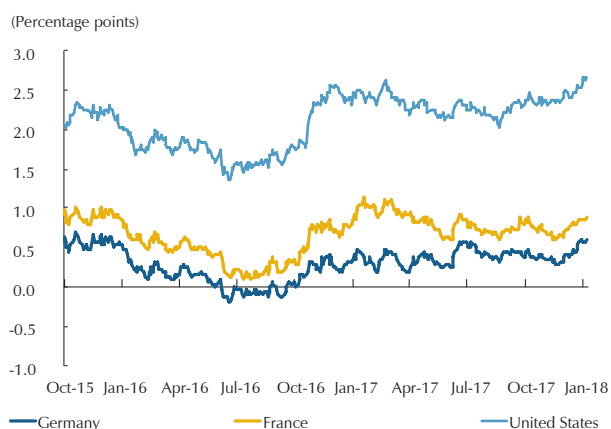
Source: Bloomberg.

contributed to this increase (Graph 2). First of all, the expectation of a higher global growth implies a higher demand for oil. In addition, even though there has been a slight increase in the supply, this has been offset by the compliance with the OPEC agreement on production limits. These ceilings have probably made it possible for the market to absorb the greater production of countries such as the United States. However, winter has been worse than usual in the northern hemisphere and this has put upward pressure on the demand for electricity.

Therefore, during the second quarter, the country's terms of trade continued to show a recovery with respect to 2016. As of October 2017, they stood at levels that had not been seen since 2014 (Graph 3).

3. Financial Markets

In the last few weeks, there has been an upward trend in the long-term interest rates in advanced economies associated with the expectation of more growth and a less expansionary monetary policy in the United States and the euro zone. However, they are still at low levels in comparison to their historical ones (Graph 4).

Thus, a notable stability in the global financial markets is still being seen which is reflected in the low levels of the volatility indices (Graph 5). Therefore, a strong appetite for risk continues to be seen which keeps the risk premia at low levels.

In Latin America these premia, measured by the *credit default swaps*, continued their declining trend (Graph 6). This has been reflected in continuous capital flows into economies in the region.

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

Considering the information available, the economic growth forecast for Colombia's trading partners for the entirety of 2018 showed a slight rise with respect to the September *Report*.

Graph 5
Financial Volatility Indices

(2005 = 100)
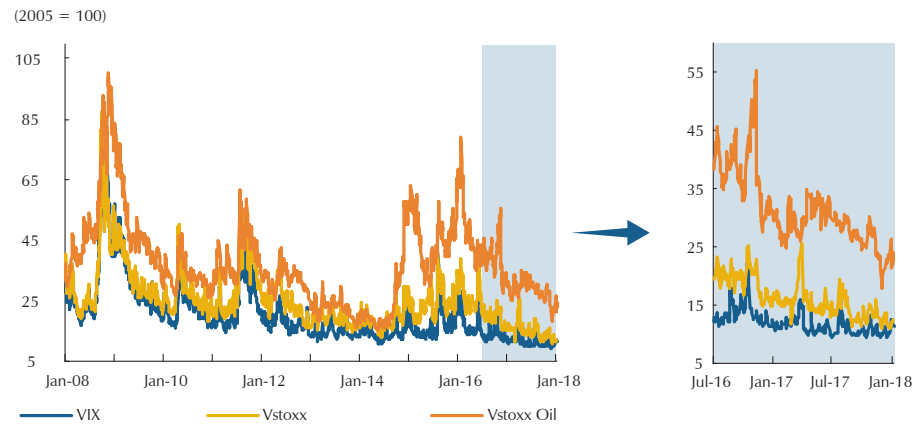
Source: Bloomberg.

Graph 6
Credit Default Swaps (CDS) to five years for some Latin American Countries

(Basis points)
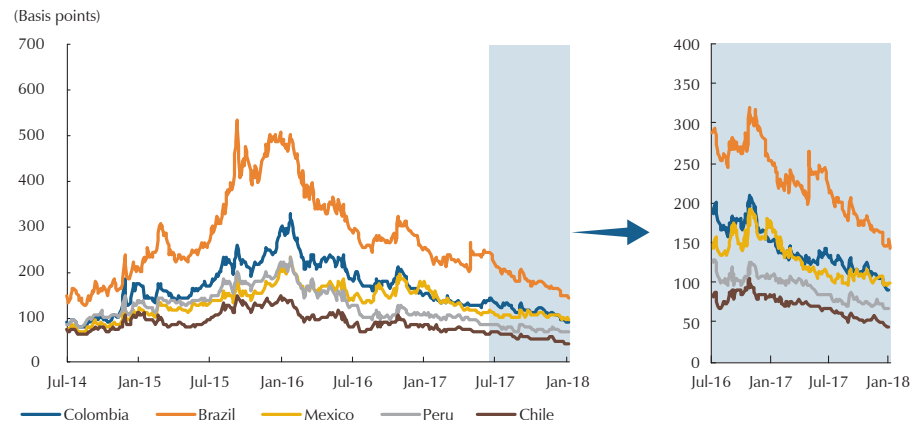
Source: Bloomberg.

Graph 7
Average Growth of Trading Partners
(weighted by non-traditional trade)

(Annual change)
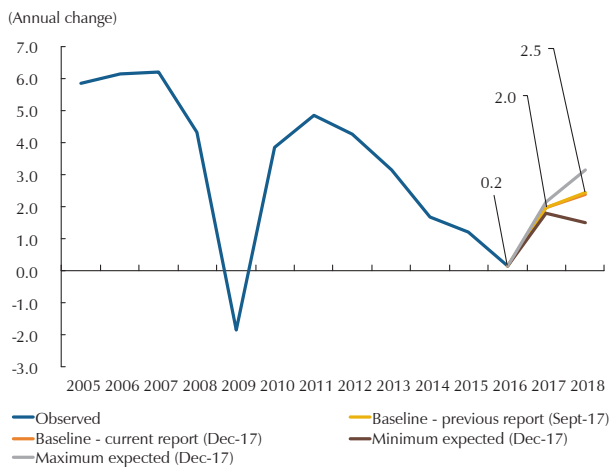
Source: calculations and projections by *Banco de la República*.

Domestic demand is expected to continue to be the engine of growth in the advanced economies at least during the forecast horizon. A recovery is anticipated in the emerging economies supported by global demand and the prices of commodities. Thus, a surge in growth for our trading partners in 2018 is still being expected in comparison to 2017.

An economic expansion (weighted by non-traditional trade) of 2.0% per annum for 2017 and 2.5% for 2018 is projected for our country's trading partners (Graph 7). The following were the revisions to the baseline scenario's individual forecasts with respect to the previous *Report* (Table 1).

Table 1
Growth Projections for Trading Partners

| Growth Projections for Trading Partners | 2016 | Projections for 2017 | | | Projections for 2018 | | |
| | | Scenario | | | Scenario | | |
		Minimum expected	Baseline	Maximum expected	Minimum expected	Baseline	Maximum expected
Main trading partners							
United States[a/]	1.5	2.1	2.2	2.3	1.6	2.6	3.4
Euro Zone	1.8	2.1	2.3	2.5	1.5	2.3	2.9
Venezuela[b/]	(15.7)	(12.0)	(10.0)	(8.0)	(8.0)	(5.0)	(2.0)
Ecuador	(1.6)	1.8	2.1	2.4	0.0	1.5	2.5
China[c/]	6.7	6.7	6.8	6.9	5.5	6.5	7.0
Other trading partners							
Brazil	(3.5)	0.7	0.9	1.1	1.0	2.4	3.4
Peru	4.0	2.5	2.7	2.9	2.8	4.0	4.8
Mexico	2.9	1.8	2.1	2.3	1.3	2.2	3.0
Chile	1.6	1.2	1.5	1.8	1.4	2.7	3.4
Total trading partners (weighted by non-traditional sales)	0.5	1.8	2.0	2.2	1.5	2.5	3.2

a/ The data on GDP growth in the United States for the fourth quarter were published on 26 January. These data were part of the set of information used by the Board of Directors of *Banco de la República* for their January 29th decision; however, the forecasts presented here did not incorporate this new information.
b/ The 2016 data for Venezuela are an estimate.
c/ The data on GDP growth in China for the fourth quarter were published on January 18. These data were part of the set of information used by the Board of Directors of *Banco de la República* for their January 29th decision; however, the forecasts presented here did not incorporate this new information.
Source: Bloomberg, projections and calculations by *Banco de la República*.

- In the United States, growth in 2017 was revised slightly upward.[2] This is due to the fact that the negative effect expected in the third quarter as a result of climate events did not materialize. The effect on production was less than had been expected and was offset by favorable dynamics in some sectors. The revision was upward for 2018 since the available data suggest that the stronger growth that has been seen would persist during the next few quarters with a slight additional boost due to the recent tax cut.

- In the euro zone, growth for 2017 and 2018 was revised upward once again due to the fact that the data on their economic activity turned out to be better than expected.

- China's growth for 2018 was revised slightly upward since their data were higher than expected. Looking ahead, this economy could be favored by the greater global demand projected. In addition, the orderly process of conversion to an economy that is more dependent on domestic consumption will probably continue. The latter implies a continuing slowdown of growth that goes beyond the forecast horizon.

- Regarding the previous report, growth in 2017 for Latin America was revised upwards for four of the countries monitored by the technical

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2   The data on the growth of the GDP in the US during the fourth quarter were published on January 26. These data were part of the set of information used by the Board of Directors of *Banco de la República* for their decision on 29 January; however, the forecasts presented here did not incorporate this new information.

staff: Brazil, Ecuador, Mexico, and Chile; and downwards again for Peru and Venezuela. As for 2018, the growth forecasts for Brazil and Ecuador rose. However, the expectations for Venezuela, Peru, and Mexico were revised downward while those for Chile remained unchanged.

The central growth scenario presented here again includes an inflation in the advanced economies that has a slight upward trend. This expectation implies an increase in prices that is somewhat higher than the one in the September *Report*.

The above will probably lead to three increases in the Fed's policy rate during 2018. Thus, towards the end of 2018, its upper limit will likely be 2.25%. Nevertheless, even if the above-mentioned occurs, the fact that the interest rate will probably remain at historically low levels must be kept in mind (Graph 8). Furthermore, increases in the policy rate of the European Central Bank are not expected.

Graph 8
Export and Import of Services
(quarterly)

A.   Exports of Services

(Millions of US dollars)   (Percentage)

| Level | Trend | Annual Change in the Level (right axis) |

B.   Imports of Services

(Millions of US dollars)   (Percentage)

| Level | Trend | Annual Change in the Level (right axis) |
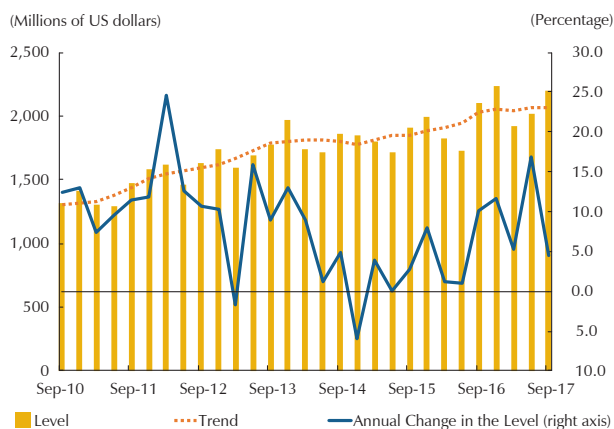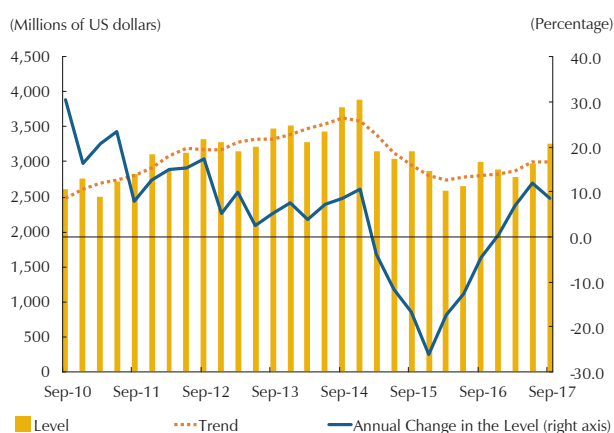
Source: *Banco de la República*.

A slight positive effect on the economic growth of the United States derived from the tax reform adopted in December is incorporated into the baseline scenario. However, significant effects on economic growth arising from other international events were not considered.

Regarding the predictions for prices of raw materials, the most important change in the baseline scenario had to do with crude oil (Table 2) which was revised upward for 2018. This was because of the higher level of international prices seen for it in recent months. This forecast assumes that global economic growth will probably continue to stimulate demand and that the production limits established by OPEC are complied with at least until the middle of the year. An increase in the supply is expected in response to high prices which would lead to a reduction in their prices going into the second half of the year.

The main downward risks considered in this report are:

- *A correction in the global financial markets:* in recent months, there have been significant increases in asset prices in an environment of low volatility. This could result in a downward correction that could affect growth and confidence.
- *High levels of indebtedness*: the levels of leverage continue to represent a risk for

Table 2
Forecasts for the Reference Prices of Basic Commodities exported by Colombia

	2017	Projections for 2018		
		Scenario		
		Minimum expected	Central	Maximum expected
Brent Crude (US dollars per barrel)	55	50	60	70
Coal (US dollars per ton)	70	54	66	81
Colombian coffee (ex dock) (US dollars per pound)	1.52	1.30	1.56	1.90
Nickel London stock market (US dollars per ton)	10,469	10,000	11,500	13,000
Gold[a/] (US dollars per troy ounce)	1,258	1,500	1,280	1,100

a/ The assumption for the gold prices is that gold is a value haven because of the fact that its price rises when there is greater uncertainty (pessimistic scenario).
Source: Bloomberg, calculations by *Banco de la República*.

global financial stability. The possibility that this phenomenon could lead to lower than expected growth cannot be ruled out.

- *Less investment in the United States than in the baseline scenario*: a large part of the expectations of greater growth in the U.S. rest on the assumption that the tax reductions will generate a stimulus for investment. However, the above may not materialize or some kind of substitution effect of residential for non-residential could occur that would not imply major growth in this sector.

- *Adverse geopolitical events*: again, a variety of events could have a negative effect on the growth of the country's trading partners. Some could be: an unsuccessful renegotiation of the North American Free Trade Agreement (Nafta); adverse news in relation to the negotiation of Brexit; higher tensions on the Korean peninsula, and a deterioration of the political situation between Spain and Catalonia.

The main upward risk considered is:

- *A larger-than-expected cyclical recovery of global economy:* again, the data on economic activity have turned out to be better than what was expected by the market and what had been presented in the September *Report*. If this trend continues, growth could be better than was described in the baseline scenario.

B. BALANCE OF PAYMENTS

1. Results for the Third Quarter of 2017

During the first three quarters of 2017, the current account of the country's balance of payments registered a deficit of USD 8.363 b. In US dollars, this is lower than it was a year ago when it stood at USD 9.677 b. As a share of the GDP, it stood at 3.7%, which meant a reduction of 1.05 percentage points (pp)

As of September
2017, the deficit in
the current account
of the balance of
payments was USD
1.314 b lower than in
2016.

compared to the 4.8% seen during the same period in 2016. Note that part of the reduction of the deficit as a percentage of the GDP is the result of the effect of the appreciation of the peso with respect to the US dollar on the nominal GDP measured in US dollars.

The lower current deficit in US dollars was primarily explained by the lower trade deficit in goods (USD 2.691 b), which offset the increase in the net outflows due to factor income (USD 1.649 b) and the increase in the services deficit (USD 283 m). The higher current transfers (USD 555 m) also contributed to the decline in the foreign deficit. As a result of the improvement in the country's terms of trade due to the upswing in export prices, current income registered a growth of 14.1%, a rate that is higher than the one observed in the expenditures (8.5%).

The decline in the trade deficit in merchandise occurred because of the USD 3.928 b (16.2%) growth in exports, which more than offset the increase in imports (USD 1.237 b, 3.9%). The increase in foreign sales occurred in an environment of higher prices for the main commodities, especially crude oil and coal. Moreover, sales of industrial products registered levels that were higher than the ones seen a year ago (+6.3%). Furthermore, the increase in the country's purchases from abroad as of September reveals the slight recovery in consumption of durables and greater imports of transportation equipment (particularly aircraft) and of goods for industry (both raw materials and capital goods including goods for the mining sector).

With respect to the deficit in the services account, this rose USD 283 m during the same period. In the area of imports, the higher expenditures associated with payments for financial services and insurance as well as the higher outlays caused by Colombians' trips abroad are notable. In the area of exports, the rise in income due to the increase in non-resident travelers and their spending in the country as well as from sales of business services (advisory and consulting services, *call centers*) was the most outstanding.

From the beginning of the year to September, there was an increase of USD 1.649 b in net outflows for factor income which is attributed, on the one hand, to the higher profits of the oil and mining firms in this country with foreign investment and, on the other, to the higher interest payments associated with foreign loans and debt securities.

The higher prices
for the main
commodities,
especially oil and
coal, have also
been reflected in an
increase in transfers
of profits from the
firms with FDI.

With respect to the net current transfers, these rose 13.3% per annum due, above all, to the growth of workers' remittances. For this last item, the most significant rises were seen in the remittances sent from the United States and some Latin American countries.

With respect to financing from abroad, net inflows of USD 7.644 b in capital were seen from the beginning of the year to September 2017. These are lower than those from a year ago, when they stood at USD 10.261 b. During this

period, net direct investment (USD 7.354 b) decreased 7.3% mainly because of the lower inflows of foreign direct investment (FDI) as a result of the base effect from the sale of Isagen in 2016. The inflows received by companies belonging to the communications and mining-energy sectors were the ones that contributed the most to the increase in FDI.

The country received inflows of USD 6.024 b in foreign portfolio investments at the same time as it set up USD 3.694 b in financial assets abroad. The funds received came mostly from the purchase of government bonds (TES) on the part of foreign investors and, to a lesser extent, from the placement of long-term debt securities, the majority of which were issued by the government, on the international markets.

Regarding other capital flows, the country registered net outflows of USD 1.668 b mainly as a consequence of the high debt payments. During the period under analysis, the international reserves rose USD 373 m through balance of payment transactions largely due to the revenue from the net yield on the portfolio. As of September 2017, the balance of Colombia's net international reserves came to USD 47.515 b.

2. Forecasts

a. *Estimates for the Fourth Quarter of 2017*

Graph 9
Total Exports of goods (FOB)
(monthly)
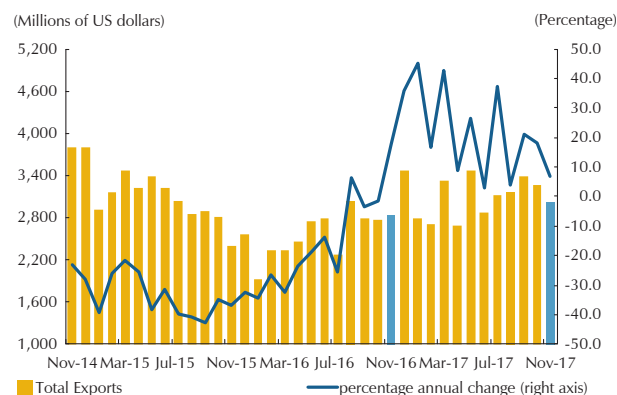
Source: DANE, calculations by *Banco de la República*.

According to the information available, a reduction of the deficit in the current account, both in US dollars and as a share of the GDP, is projected for the fourth quarter of 2017 compared to the same period in 2016. As a share of the GDP, this would be close to 3.0%, which is lower than the 3.4% for the same period a year ago. With respect to foreign trade in goods, the data available show that, in the October-November 2-month period, the total exports in US dollars rose USD 687 m (12.3%) in comparison to the previous year (Graph 9) mainly due to the higher exported value of coal and crude oil. Regarding free on board (FOB) imports,[3] these rose USD 128 m (1.7% in annual terms) during that period due, to a large extent, to the increased acquisition of capital goods. The purchase of supplies for industry and of non-durable consumer products from abroad also

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3   Unlike the measurement of the balance of payments, which takes into account the FOB value of imports, the calculation of the GDP based on national accounts considers the cost, insurance and freight (CIF) of imports which include the value of the freight and insurance. During the October-November 2-month period, CIF imports totaled USD 7.927 b, which represents a growth of 1.9% on a yearly basis.
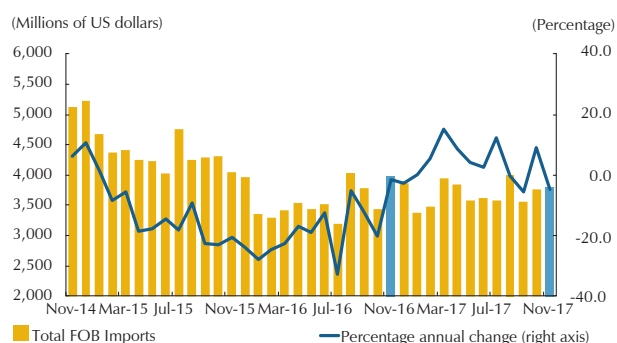
Source: DANE, calculations by *Banco de la República*.

contributed positively to the growth of total imports (Graph 10) (see the shaded portion on pg. 25).

For the fourth quarter, the deficit of non-factor services, in turn, is expected to be higher than what was registered for the same period a year ago, and net outflows for factor income could rise. The latter is due to the increase in the profits of the firms with FDI which work in the mining-energy sector. The payment of interest on loans and debt securities is also anticipated to continue to be a significant source of pressure on the current account deficit just as was seen in 2016 and from the beginning of 2017 to September.

Regarding capital flows, during the fourth quarter of 2017 FDI funds are estimated to have been similar to those seen during the same period a year ago due to the funds received by companies in the manufacturing and in the mining and oil sectors. However, the information available on capital flows from the foreign exchange balance shows that between October and December there was an annual reduction in funds from the private sector foreign portfolio investment.[4] Funds from the placement of bonds on the part of banks and companies in the private sector and, to a lesser extent, external credit with multilateral banks (obtained especially by the government and other public sector entities) could be added to the above.

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4   Although the capital inflows registered in the foreign exchange balance do not correspond exactly to what is recorded in the balance of payments, given that the former refers to the entry and exit of foreign currency, they offer some idea of the trend.

US DOLLAR-DENOMINATED EXPORTS AND IMPORTS OF GOODS FOR THE THIRD QUARTER OF 2017 AND TO DATE IN THE FOURTH QUARTER

Third quarter of 2017:

During the third quarter of 2017, a growth of 19.3% was registered for the total exports of goods in FOB dollars compared to the same period the previous year with the support of higher sales abroad in all sectors. The rise (27%) in agricultural exports after they had declined during the previous quarter and the 20.3% growth for the mining companies with coal exports, which expanded 53.8% in comparison with 2016, in the forefront are all noteworthy (Table A).

This performance is consistent with the rise in the price index for total exports (12.2%), especially with the one for mining products, which rose 19.4% compared to the third quarter of last year. This was reflected in better quantities exported.[1]

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1   In addition, an upswing of 11.1% and 44.8% in the international prices for coal and Brent benchmark crude respectively were registered during the quarter.

Table A
Dollar-denominated Exports and Imports of Goods for the Third Quarter of 2017(FOB)
(percentage)

Group	Annual percentage change	Items with important contributions to the annual variation	
		Item	Annual percentage change of the item
Total exports	**19.3**		
Mining products	20.3	Coal, lignite and peat	53.8
		Crude oil	15.9
Remaining exports a/ (non-traditional)	14.6	Food, beverages, and tobacco (excluding coffee)	39.5
		Non-metallic minerals and base metals	35.0
		To the rest of Aladi[b/]	25.9
		To Asia	46.9
		To Ecuador	21.4
Bienes de origen agrícola	27.0	Agricultural products	37.3
		Coffee	37.3
		Bananas	5.5
Total imports	**1.4**	Flowers	
Capital goods	4.4	Capital goods for industry	3.4
		Construction materials	10.4
Intermediate goods	(0.5)	Raw materials for agriculture	(13.8)
		Raw materials for industry	0.50
Consumer goods	1.4	Non-durable Goods	2.9
		Durable Goods	(0.5)

a/ This group does not include petroleum nor its derivatives, coal, nickel-iron, gold, coffee, bananas, nor flowers. It includes other mining and agricultural products. The majority are manufacturing exports. b/ ALADI excluding Venezuela, Ecuador, Peru, and Mexico
Source: DANE, calculations by *Banco de la República*.

Regarding exports of non-traditional products, which expanded 14.6% yearly, the most notable items are food, beverages, and tobacco (excluding coffee) and the segments of non-metallic minerals and base metals, which grew 39.5% and 35.0% respectively.

Sales of these exports abroad towards all destination groups listed here except Venezuela (-28.5%) grew. The most important growth was in the trade with the rest of Aladi[2] (25.9%), Asia (46.9%), and the European Union (38.8%). Regarding our main trading partner, the United States, in turn, there was an increase of 3.5% (Graph A).

Following a second quarter of decreases, exports of agricultural goods rose 27.0%, thus registering the largest expansion of the three groups of products exported. The positive performance is explained by increases in three items with a significant upturn in foreign sales of coffee

and bananas, which grew 37.3% thus correcting for the low expansion registered during the previous quarter due to the basis for comparison.

As for FOB imports in US dollars, an increase of 1.4% per annum was seen in the third quarter compared to the 5.1%[3] registered in the second quarter. The quarterly growth was due to upswings in purchases abroad of capital goods (4.4%) and consumer goods (1.4%) partially offset by a fall in the purchases of intermediate goods (-0.5%) (Graph B). The large contribution made by acquisitions of capital goods to total imports (1.3 pp) is notable, especially the contribution of those going to industry, which grew 3.4% during the quarter thus adding 0.6 pp.

After having shrunk the previous quarter, imports of consumer goods grew in annual terms for the quarter supported by the recovery of purchases of non-durable goods, clothing, and other textile products in particular,

2   Latin American Integration Association excluding Venezuela, Ecuador, Peru, and Mexico.

3   Data include corrections made by DANE.
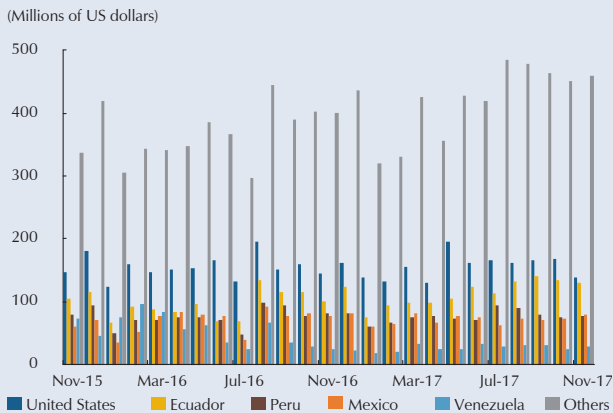
from abroad. The imports of durable goods, in turn, continue to decline but less than they did the previous quarter (-0.5% compared to -4.5%). The segment of private transportation vehicles, which holds the highest quarterly share, decreased 5.7%.

October-November 2017 2-month period:

The 12.3% growth of total exports registered during the October-November 2-month period is the result of the significant growth in mining exports followed by non-traditional goods while agricultural exports did not present a relevant variation in comparison to the same 2-month period last year. Specifically, sales abroad were spurred by the better international prices for oil and coal and, to a lesser extent, those for nickel-iron. The better sales abroad of non-traditional goods such as food, chemical products, and beverages and tobacco (excluding coffee) also helped.

Sales of flowers abroad are also notable in the agricultural sector. These continued to show a positive performance due to an increase in the quantities exported while exports of bananas declined because of a drop in both prices and quantities.

Non-traditional exports continued to grow at a good rate (8.7%) outpacing food products, beverages and tobacco (excluding coffee) (Graph C). Based on the destinations, the growth in foreign sales of these to Ecuador, the European Union, and the rest of the Aladi (Table B) are notable. A better rate of growth for those going to the United States was seen compared to the previous
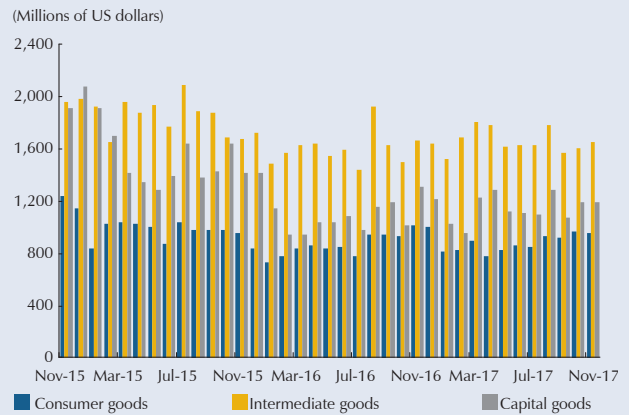
2-month period (1.3% vs. 0.3%) while the sales abroad to Peru and Mexico declined 4.2% and 3.5% respectively.

Regarding FOB imports, a 1.7% expansion was observed in the October-November two-month period from the growth of the intermediate goods and capital goods and a fall in the group of consumer goods. The downtrend in imports of durable goods, private transportation vehicles in particular (20.6%), explains the majority of the decline in consumer goods. The higher growth of capital goods for both industry (11.5%) and agriculture (6.0%) during the 2-month period is notable.

January to November 2017:

Total exports of US dollar-denominated goods grew 19.6% per annum over the course of the year as a result of the upswings in the three groups of products exported. In line with the yearly growth of the quarter and two-month period, mining exports are the ones that are growing the most (29.4%) thus contributing 15.9 pp of total growth. The international prices for crude oil, coal, and nickel-iron continue to be the primary engine behind the rise in total exports.

In the group of agricultural goods, the better sales prices abroad for coffee and flowers also favor exports. In contrast, the lower prices for bananas offset part of the increase seen in the quantities exported. Last of all, the recovery of the non-traditional goods group, which grew 6.6% over the course of the year, is notable after it presented a decline during the first quarter of the year followed by a significant recovery.

Table B
Dollar-denominated Exports and Imports of Goods for October and November of 2017 (FOB)
(percentage)

| Group | Annual percentage change | Items with important contributions to the annual variation | |
		Item	Annual percentage change of the item
Total exports	**12.3**		
Mining products	17.0	Coal, lignite, and peat	50.6
		Crude oil	15.4
Remaining exports a/ (non-traditional)	8.7	Food, beverages, and tobacco excluding coffee	27.2
		Chemical products	6.2
		To Ecuador	22.3
		To the European Union	24.5
		To the rest of Aladi b/	8.2
Agricultural products	0.0	Flowers	8.2
		Coffee	0.0
		Bananas	(11.7)
Total imports	**1.7**		
Capital goods	2.7	Capital goods for industry	11.5
		Transportation equipment	(18.1)
Intermediate goods	3.3	Raw materials for industry	4.9
		Fuel, lubricants, and related items	(3.3)
Consumer goods	(2.0)	Non-durable Goods	4.3
		Durable Goods	(9.0)

a/ This group does not include petroleum nor its derivatives, coal, nickel-iron, gold, coffee, bananas, nor flowers. It includes other mining and agricultural products. The majority are manufacturing exports.
b/ ALADI excluding Venezuela, Ecuador, Peru, and Mexico
Source: DANE, calculations by *Banco de la República*.

Graph C
Exports of Non-traditional Goods FOB a/
(monthly)

(Millions of US dollars) (Percentage)

■ Non-traditional exports —— Percentage annual change (right axis)
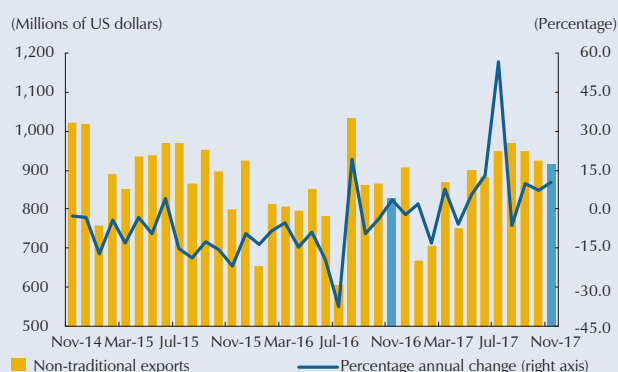
a/ Excluding petroleum and its derivatives, coal, nickel-iron, gold, coffee, bananas, and flowers. It includes other mining and agricultural products. The majority are manufacturing exports.
Source: DANE, calculations by *Banco de la República*.

With respect to US dollar-denominated FOB imports, these have grown 3.9% over the course of the year with upswings in purchases abroad of three groups of goods, capital goods in particular (6.4%). The contribution from imports for industry (0.9 pp) and transportation equipment (0.7 pp) stand out in this latter group. Among the intermediate goods, in turn, purchases abroad of raw materials for industry are notable with an annual rise of 4.4% (contributing 1.5 pp to the total growth).

b.   *Estimate for all of 2017 and 2018*

Using the growth projections for the country's trading partners and for the terms of trade presented in the first part of this chapter, the forecasts made for this *Report* indicate that the deficit in the current account has probably continued its adjustment in 2017 in both US dollars and terms of the GDP. In the most probable scenario, the current deficit for the full year will probably be around USD 10.901 b, which corresponds to 3.5% of the GDP and ranges between 3.3% and 3.7% (Table 3).

For the entirety of 2017, the trade balance is anticipated to continue to show a deficit, albeit lower than the one registered in 2016 due to some of the terms of trade which, averaged for the year, are likely to be higher than the ones registered a year ago. Much like the projection presented a quarter ago, significant growth in the value of the major mining exports is anticipated, which will be driven more by the increase in their prices than the amount exported. In addition, the forecast for the growth of the remaining exports (other than the main mining and agricultural products) was maintained as a result of the performance shown throughout the year and of the higher growth rates of our main trading partners in the last quarter of the year.

As regards imports of goods, an annual growth of 2.4% is estimated for the entirety of 2017. This rise may have been spurred by the expected strength of some of the investment components and, to a lesser extent, by the larger purchases of supplies and intermediate goods for industry from abroad. In view

Table 3
Balance of Payments
Annual flows (millions of US dollars)

	2013	2014	2015 (pr)	2016 (pr)	2017 (proj.)
Current Account (A + B + C)	(12,503)	(19,765)	(18,775)	(12,393)	(10,901)
Percentage of the GDP	(3.29)	(5.22)	(6.44)	(4.38)	(3.50)
A. Goods and Services	(3,160)	(11,862)	(18,556)	(13,098)	(9,975)
B. Primary Income (factor income)	(14,230)	(12,525)	(5,650)	(5,118)	(7,562)
C. Secondary Income (current transfers)	4,887	4,622	5,430	5,823	6,636
Financial Account (A + B + C + D)	(11,738)	(19,289)	(18,159)	(12,584)	(10,182)
Percentage of the GDP	(3.09)	(5.10)	(6.23)	(4.45)	(3.27)
A. Direct Investment (ii-i)	(8,557)	(12,265)	(7,414)	(9,225)	(9,442)
i. Foreign in Colombia (FDI)	16,209	16,164	11,632	13,743	13,189
ii. Colombian Abroad	7,652	3,899	4,218	4,517	3,748
B. Portfolio Investment	(7,438)	(11,565)	(10,283)	(3,718)	(2,106)
C. Other Investments (loans, other credit and derivatives)	(2,690)	104	(877)	194	837
D. Reserve Assets	6,946	4,437	415	165	529
Errors and Omissions (E and O)	765	476	616	(191)	719

(pr): preliminary; (proj): projected.
Note: the results presented follow the recommendations of the IMF in its Balance of Payments Manual sixth version. For further information and methodological changes consult http://www.banrep.gov.co/balanza-pagos.
Source: *Banco de la República*.

of the forecast made in the previous report, the assumed growth of imports was revised downwards, especially because of greater slowdown that these have shown so far in the fourth quarter of the year. This latter was partly due to the base effect of the last few months of 2016 resulting from the automobile fair and anticipation of the value added tax (VAT).

Larger net outflows are expected in 2017 for factor income due to the increased profits earned by foreign companies operating in the mining-energy sector and consistent with the higher export prices. Larger interest payments on the foreign debt are also anticipated due, to a great extent, to the increase in foreign interest rates and their impact on the outstanding debt.

The deficit in non-factor services is expected to reach an amount in 2017 that is greater than what was seen a year ago. This is due to the growth in outflows anticipated from higher spending of Colombian travelers abroad and an increase in payments for financial services. Higher payments for freight and increases in the imports of services linked to the oil industry are also considered although to a lesser extent. However, growth of income associated with tourism and other business services is estimated (advisory and consulting services and *call centers*).

Finally, higher net income from transfers is expected, especially due to how dynamic the worldwide economy has become (see section A in this chapter).

With respect to capital flows, direct investment funds are expected to be the main source of financing for 2017 followed by portfolio investment (Table 3), inasmuch as loans and other credit from abroad will probably register net amortizations. In spite of the capital companies in the communications sector received in 2017, FDI flows into Colombia will probably register an annual slump of 4.0% resulting from the base effect of the funds from the sale of Isagen in 2016. In addition to this, net capital inflows from portfolio investments are expected, largely associated with the purchase of TES on the part of foreigners and with the placement of bonds by the government.

For 2018, a deficit in the US dollar-denominated current account is projected that is slightly lower than what was estimated for 2017, and this implies a reduced share of the GDP since it will stand at close to 3.3%. A reduction in the merchandise trade deficit is anticipated in 2018 due, in large part, to the larger exports of oil and of industrial goods compared to the moderate growth of imports. The growth of sales abroad will probably be driven in large part by the performance of the international price for crude oil and the effect of the recovery of demand abroad on manufactured Colombian goods. With respect to foreign purchases of the country's products, these will probably continue registering positive rates of growth in line with the greater economic activity predicted for next year. In addition to this, higher income from current transfers and a higher deficit for non-factor services and factor income are expected.

II. Domestic Growth: Current Situation And Short-Term Outlook

As had been predicted, the Colombian economy surged in the third quarter in comparison to what had been registered at mid-year.

The better performance was possible because of exports, added to which there was a slowdown in imports. With this, net foreign trade made a significant contribution to the expansion.

By branches of activity, the best growth figure was seen in agriculture and financial services. In contrast, mining, construction, and industry showed significant setbacks.

Although the information available for the fourth quarter suggests that economic activity is still weak, it is expected that the figure could be higher than what was observed in the first half of the year.

A. PERFORMANCE OF THE GDP DURING THE THIRD QUARTER OF 2017

According to the economic growth figures published by the National Bureau of Statistics (DANE in Spanish), the GDP registered an annual growth of 2.0% during the third quarter of 2017 (Graph 11).

Graph 11
Gross Domestic Product
(seasonally adjusted)

(Trillions of 2005 pesos)   (Annual change)
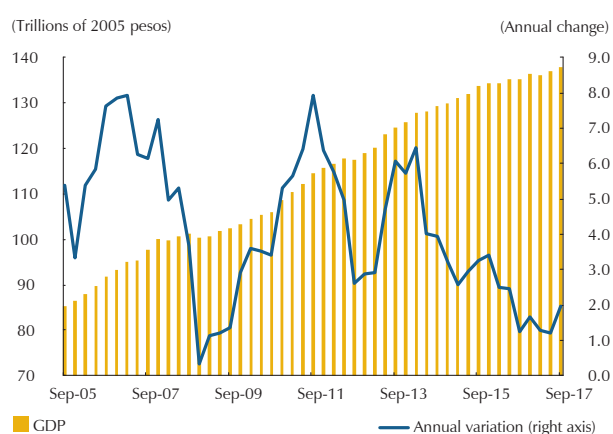
Source: DANE, calculations by *Banco de la República*.

 As had been predicted, this result meant a rise with respect to what had been seen during the first half of the year even though it stood in the lower part of the forecast range presented in the September *Inflation Report* (between 1.8% and 2.8% with 2.3% as the most probable figure). The increase between quarters was 0.8%, which in annualized terms corresponded to 3.2%.

The result of the GDP for the third quarter suggests that the slowdown in economic activity bottomed out during the first half of 2017 as had been stated previously in the September *Report* and in accordance with the market expectations. The better performance was possible due mainly to

exports and added to this was the slowdown in imports. With this, net foreign trade made a significant contribution to the expansion. Domestic demand, in turn, presented a slight slowdown with respect to the second quarter although its annual growth rate was substantially better than what was seen in 2016 (Table 4).

The itemized analysis of the various segments the expenditure GDP consists of shows that the growth of total consumption was similar to that of the previous quarter and a bit higher than what was seen in the first half of the year on average. Just as in the previous two quarters, consumption was mainly driven by public spending rather than by the private sector at this time. In both cases, higher increases than those from the aggregate of the first half of the year were seen, but the upswing for the public component was greater. By type of product, the only item that registered negative rates of growth was consumption of semidurables. The rest contributed positively to the expansion of household spending.

Gross capital formation, in turn, expanded slightly in annual terms (0.2%), which is below what was seen in the second quarter, but at positive rates for the year as a whole. This marks a stark contrast with the sharp contraction seen

Table 4
Real Annual GDP Growth by Type of Expenditure

	2016				2016	2017		
	Q1	Q2	Q3	Q4	Full year	Q1	Q2	Q3
Total Consumption	**3.0**	**2.3**	**0.9**	**1.8**	**2.0**	**1.8**	**2.1**	**2.1**
Household Consumption	2.8	2.1	1.0	2.1	2.0	1.4	1.7	1.7
Non-durable Goods	3.5	2.4	1.1	1.2	2.1	1.2	2.6	2.9
Semi-durable Goods	1.3	1.1	(1.5)	(0.8)	0.0	(4.0)	(3.4)	(1.5)
Durable Goods	(4.6)	(5.6)	(3.9)	11.4	(0.8)	7.8	(1.8)	3.6
Services	3.4	3.1	1.9	2.4	2.7	1.4	2.0	1.5
Final government consumption	3.8	3.0	0.3	0.4	1.8	2.9	3.6	3.9
Gross Capital Formation	**(4.1)**	**(4.8)**	**(6.1)**	**(3.1)**	**(4.5)**	**0.1**	**1.2**	**0.2**
Gross Fixed Capital Formation	(4.0)	(4.0)	(3.5)	(2.9)	(3.6)	(0.7)	1.0	0.2
Agriculture, Forestry, Hunting, and Fishing	6.2	7.0	4.0	(0.2)	4.2	4.6	(6.2)	(0.5)
Machinery and Equipment	(15.2)	(12.4)	(18.7)	(13.8)	(15.1)	(3.7)	2.8	6.4
Transportation equipment	(20.6)	(7.2)	(14.7)	(4.7)	(11.9)	8.2	(0.4)	(5.0)
Construction and Buildings	10.7	1.1	10.7	0.6	5.6	(7.5)	(7.9)	(15.8)
Public works	(1.1)	0.8	3.8	6.1	2.4	3.8	7.3	8.9
Services	2.9	(1.7)	5.1	1.0	1.8	4.2	0.3	(1.0)
Domestic demand	1.3	0.5	(1.1)	0.5	0.3	1.6	1.9	1.6
Total Exports	1.2	2.3	(4.8)	(2.4)	(0.9)	(4.6)	(1.5)	4.5
Total Imports	(5.9)	(3.7)	(10.7)	(4.2)	(6.2)	(0.4)	3.3	2.5
GDP	**2.5**	**2.5**	**1.2**	**1.7**	**2.0**	**1.3**	**1.2**	**2.0**

Source: DANE, calculations by *Banco de la República*.

over the course of 2016. The weak growth was the result of falls in the areas of investment in transportation equipment and construction of buildings, which were barely offset by the upswings in the rest of the areas (in public works in particular). During that quarter, the sharp contrast between the performance of the construction of buildings (-15.8%) and that of public works (+8.9%) was maintained. In the first case, the poor performance continued to be related to the accumulation of available supply and a weakening of demand, especially in the segments of offices, storefronts, warehouses, and high-income housing. In the area of public works, the surge may have again been related to the expenditures on exploration and development in the mining sector as well as the proper implementation of local infrastructure projects by the regional governments and the disbursements of resources for tertiary and fourth-generation (4G) roads.

With respect to foreign demand, exports registered a significant expansion which was above their average calculated since 2001 (3.8%) after four consecutive quarters of setbacks. This was the result of the better performance of sales abroad of commodities (crude oil and coffee) mainly. Imports also increased, albeit at a slower rate. Their growth was concentrated in the purchase of capital goods for industry.

In the area of supply, the branches of activity that presented the most outstanding trends during the third quarter of 2017 were, as follows, agriculture (7.1%) and financial services (3.2%) (Table 5). In contrast, there were severe reductions in mining activity (-2.1%), construction (-2.1%) and, to a lesser extent, in industry (-0.6%). The rest of the branches showed expansions that were below their historical averages since 2000.

The positive performance in agriculture is the result of the very strong production of coffee (21.2%) and other agricultural products (6.0%) and of the segment of living animals and various animal products (5.0%). According to the *Federación Nacional de Cafeteros* (National Federation of Coffee Growers), coffee bean production stood at, on average, close to 1.3 million bags during the third quarter of the year; with that, the beginning of the year to September shows a 4.1% expansion in production. In the case of other agricultural products, perennial crops presented an outstanding performance (10.8%). Last of all, in the group related to animal agricultural production, the performance of dairy products (9.6%), poultry (8.5%), and eggs (9.4%) was notable.

Within the group of financial services, positive performance was seen in the sub-branches of financial intermediation services, and real estate and rental of housing activities, all of which grew 6.8%, and 2.7% respectively. In contrast, the activities associated with business services and rentals showed a significant slowdown as they went from 3.2% in the second quarter to 0.4% in the third. In fact, in quarterly terms this item showed a decline of 1.9%, the second greatest decline since 2009 after the international financial crisis. Last of all, it should be noted that, given the sector's large share of the GDP (20.7%), said activity continued to contribute significantly to supporting the growth of the Colombian economy.

With respect to the branches of GDP activity that presented setbacks in the third quarter, mining and quarrying, which had a significant drop, are the most notable. This sector was affected by the poor performance of coal (-10.6%) and metallic (-9.8%), and non-metallic mineral (-4.0%) production. These declines offset the slight recovery of oil production (1.4%).

Something similar occurred within the construction industry which showed a significant decrease in construction of buildings (-15.9%) which offset the positive performance of public works (8.8%). In the case of buildings, the slump is explained by both the setback in residential construction (-4.5%) and in non-residential building (-27.4%). In public works, in turn, the recovery of investment in infrastructure for mining (18.1%) and the sustained growth of the other engineering projects (32.4%) offset the fall in works related to railways (-19.7%) and highways (-5.5%).

Finally, the manufacturing industry also presented a deterioration in the third quarter as it shrank 0.6% in annual terms. Excluding oil refining, the fall is more marked (1.4%). Note the high heterogeneity that is seen within this group; for example, while the manufacturing of basic metal products (-10.2%), textiles and garments (-9.9%), and of other non-metallic mineral products (-3.5%) show significant declines, other activities such as the manufacturing of products from oil refining (5.3%), of paper and cardboard (5.0%) and oil

Table 5
Real Annual GDP Growth by branches of Economic Activity

	2016				2016	2017		
	Q1	Q2	Q3	Q4	Full year	Q1	Q2	Q3
Agriculture, Forestry, Hunting, and Fishing	(0.3)	0.6	(0.6)	2.2	0.5	7.8	4.0	7.1
Mining and Quarrying	(4.6)	(6.8)	(6.6)	(8.3)	(6.5)	(9.1)	(5.7)	(2.1)
Manufacturing Industry	4.0	5.4	1.4	1.0	3.0	0.4	(3.4)	(0.6)
Electricity, Gas, and Water	2.8	(0.6)	(1.4)	(0.6)	0.1	(0.5)	1.3	1.9
Construction	5.3	0.8	7.1	3.1	4.1	(0.8)	0.3	(2.1)
Buildings	11.1	1.7	11.7	0.3	6.0	(7.1)	(7.7)	(15.9)
Public works	(0.5)	1.0	3.8	5.2	2.4	4.0	7.0	8.8
Commerce, Repairs, Restaurants, & Hotels	2.8	1.9	0.7	1.8	1.8	(0.4)	1.0	1.4
Transportation, Warehousing, and Communications	1.0	0.2	(1.5)	(0.2)	(0.1)	(0.8)	0.7	0.2
Financial, Real Estate, and Business Services	4.3	5.2	4.8	5.4	5.0	4.7	3.8	3.2
Social, Community, and Personal Services	3.5	3.5	1.1	0.9	2.2	2.8	2.9	3.2
Subtotal value added	**2.6**	**2.3**	**1.3**	**1.5**	**1.9**	**1.2**	**1.1**	**1.6**
Taxes minus subsidies	1.3	3.9	0.6	2.8	2.2	2.7	3.3	5.0
GDP	**2.5**	**2.5**	**1.2**	**1.7**	**2.0**	**1.3**	**1.2**	**2.0**

Source: DANE, calculations by *Banco de la República*.

(Percentage)
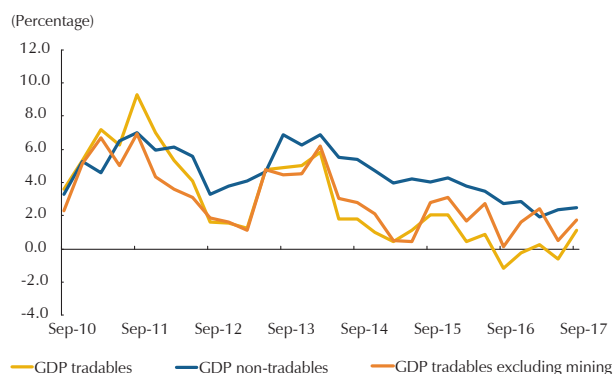
preparation (4.3%) grew at annual rates that were above those of the economy as a whole.

In this setting, the GDP for tradable goods showed a slight recovery and grew 1.1% after having fallen 0.6% one quarter before. When mining is excluded, the GDP for the remaining tradable sectors showed a larger expansion – close to 1.8% annually. In addition, the GDP for non-tradables surged a little when it grew 2.5% for the same period, a figure that is higher than the one seen a quarter ago (2.4%). It should be mentioned that the expansions shown by the GDP for both tradables and non-tradables are below the averages they have had since the year 2000 (Graph 12).

B. THE GDP FOURTH QUARTER OF 2017 AND THROUGHOUT 2017

As can be inferred from the information available on productive activity, the growth of the GDP may have slowed down slightly during the fourth quarter of 2017 compared to what was seen in the third. Thus, in this *Report* the technical staff at *Banco de la República* project an expansion of 1.8% per annum for the GDP in the last quarter of the year based on which, a growth of 1.6%, the same as what was reported in the September *Report*, is estimated for 2017 as a whole. The slowdown in the last three months could largely be the result of a wider basis of comparison in the same period of 2016 due to specific circumstances that favored the performance of the economy at that time. Added to that are the adverse effects the aviation transportation strike may have had on different sectors of the economy.

Note that the forecasts of GDP growth presented in this section still assume that the macroeconomic adjustment would have bottomed out during the first half of the year but that the recovery of the potential growth of output would still take time.

In the fourth quarter of 2017, there was an impetus towards growth on the part of fundamental factors in the foreign context. The economies of our main trading partners and of the majority of the countries in the region continued to recover as revealed by the figures on productive activity. Furthermore, the international prices for the main commodities exported by Colombia rose between October and December, and this had a positive effect on the country's terms of trade. Last of all, international liquidity conditions during that period remained ample as suggested by the reduction in the country risk premia for Colombia (Chapter I).

The GDP for tradable goods showed a slight recovery, and the GDP for non-tradables rose slightly.

With respect to the domestic context, the decline in inflation to levels barely above 4.0% stood out in the last quarter of 2017. This figure represents the roof of the range of +/1 percentage points (pp) around *Banco de la República*'s

inflation target (3.0%). This should have represented a relief for the purchasing power of available household income even though the results were somewhat higher than expected. Another important fact which contributed to the expansion of GDP was that the declines in the benchmark rate continued to be transmitted to the market rates. This may have allowed domestic demand to continue expanding although at rates below its historical average.

The estimates of GDP growth for the fourth quarter of 2017 anticipate some slowdown of the absorption, which, for the most part, could be explained by more sluggishness in the gross capital formation process. In this respect, the building construction and transportation equipment investment areas have probably registered a mediocre performance that may not have been completely offset by the expansion of investment in machinery and public works as will be noted later.

Total consumption, in turn, will probably also have registered a slight slowdown. The private component will probably have shown lower growth, especially because of what happened to the durable and semi-durable consumer items while public consumption may have also slowed down although to a lesser extent.

Rises are projected for the foreign trade segments, though the ones for exports are expected to be larger than those for imports. This is the reason net foreign demand is expected to have contributed positively to the GDP expansion.

The short-term indicators give support to the scenario described for that period. In November, the index of total retail sales (excluding fuel) from the *Monthly Survey of Retail Trade* (EMCM in Spanish) published by DANE fell 1.9% in comparison to the same month in 2016 (Graph 13). The aggregate for the October-November two-month period declined 1.3%, which contrasted with the 1.2% registered for the third quarter of the year. When sales of vehicles are ruled out, the index for the remaining aggregate grew 1.4% annually. Nevertheless, there was a 0.04% yearly fall for the two-month period and it also exhibited a slowdown when compared to the 1.4% for the July-September quarter (Graph 14).

Car sales, in turn, registered a significant drop in November, which could even have continued into December. According to EMCM index of vehicle sales, the downswing was -17.1% per annum during that month. The aggregate for the 2-month period

Graph 13
Monthly Retail Survey
(total retail excluding fuel,
seasonally adjusted)
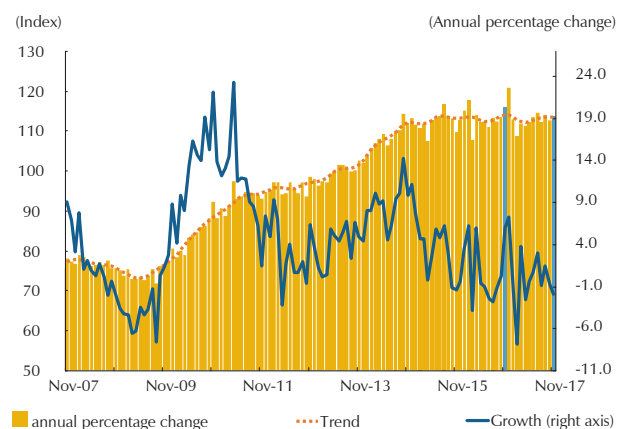
Source: DANE, calculations by *Banco de la República*.

Graph 14
Monthly Retail Survey
(Total Retail trade excluding fuel and motor vehicles,
seasonally adjusted)

Source: DANE, calculations by *Banco de la República*.

(Index)   (Annual percentage change)

Retail trade in vehicles   ·····Trend   —Growth (right axis)
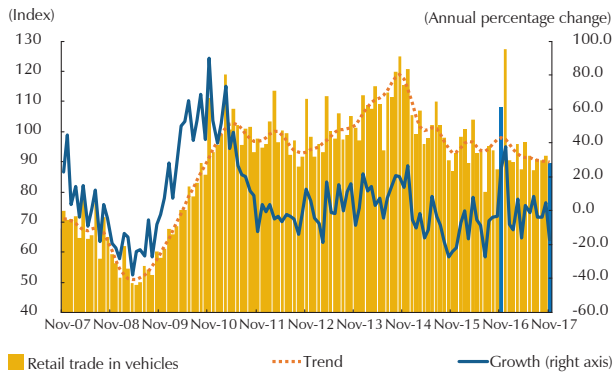
Source: DANE, calculations by *Banco de la República*.

Graph 16
Consumer Confidence and Quarterly Average Indices

(Balance sheets)

—Consumer Confidence Index   ·····Historical average   —Quarterly average
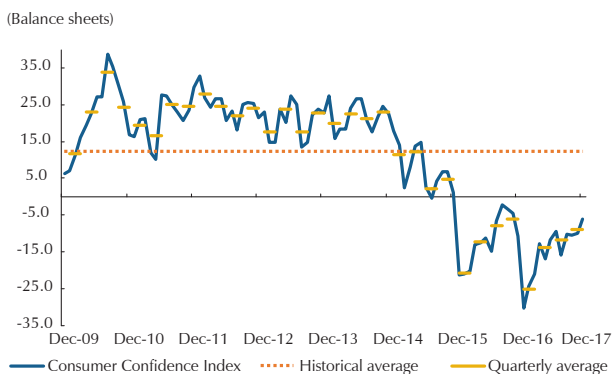
Source: Fedesarrollo.

shrank 8.0% compared to the same period last year and also had a lower performance compared to what was seen for the third quarter (-0.02% per annum). It should be noted that this is largely because of the high basis of comparison for the months of November and December in 2016 (Graph 15) since the figures for the fourth quarter last year are influenced by the effect of the 15th Motor Show in Bogotá.

Other auxiliary indicators also make it possible to project a moderate growth in private consumption. In December, the consumer confidence index (CCI) improved a little with respect to what was registered in November and October and, with that, the aggregate average for the fourth quarter was somewhat higher than the one for the third. Even so, its level remains significantly below the average that has been calculated since November 2001 (Graph 16). Furthermore, as of November the seasonally adjusted sales balance from *Banco de la República*'s *Monthly Survey of Economic Expectations* (EMEE in Spanish) continued to suggest that the performance of household spending during that month was sluggish. Similarly, the rate of household indebtedness moderated mainly due to the lower growth of consumer credit. The high levels of household indebtedness (relative to the GDP) and the recent behavior of the labor market (see the shaded page XX) could be limiting the expansion of this type of loan portfolio and, consequently, expansion of private consumption.

LABOR MARKET PERFORMANCE DURING THE FOURTH QUARTER OF 2017

During the fourth quarter of 2017, the deterioration in the unemployment rate (UR) continued in the cases of both the national total and the thirteen major metropolitan areas. With the seasonally adjusted series (quarterly moving average), the UR for the former stood at 9.5% on average between October and December while for the thirteen areas it stood at 10.7%. A year ago, the average UR in these domains was 9.1% and 10.1% (Graph A). The yearly increase in the UR for the thirteen areas was due to a fall in the employment rate (ER) that was more pronounced than the one in the overall participation rate (OPR) over the past year (Graph B).

In the quarterly moving average ending in December, the UR without the seasonal adjustment rose in all of the geographical areas except for the rural one. In the thirteen areas, this rate continued to present a significant deterioration (Graph C).

Regarding employment, the seasonally adjusted figures for the last few months point to decreases on the margin in the number of people employed in the country and the thirteen areas. For the quarterly moving average ending in December, employment registered a growth of barely

Graph A
Unemployment Rate (UR)
### (seasonally adjusted quarterly moving average)

(Percentage)

Source: DANE (GEIH).

employment was 0.9% in the quarterly moving average which ended in December while the rate for non-salaried employment was -2.9% (Graph E). For the quarterly moving average ending in November, formal and informal employment registered annual reductions of 0.3% and 1.7% respectively (Graph F).

The slowdown in employment and the increase in the UR, which are now observed on the national level and in the thirteen areas, are consistent with the economic downturn seen during 2017. Nevertheless, the expected recovery of economic activity over the next few quarters should contribute to a more dynamic labor market.

Graph B
Overall Participation Rate (OPR) and Employment Rate (ER)
(seasonally adjusted, thirteen areas)

(Percentage)   (Percentage)
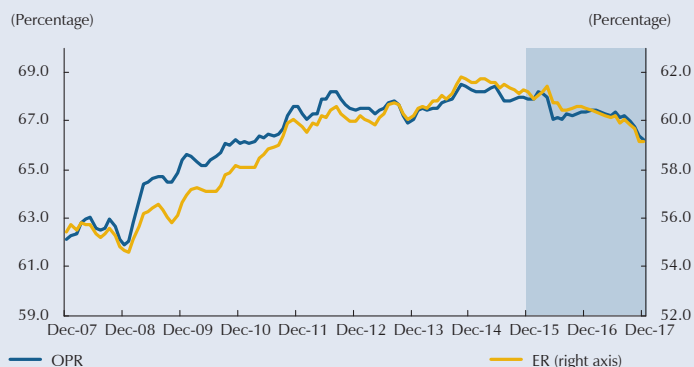
Source: DANE (GEIH).
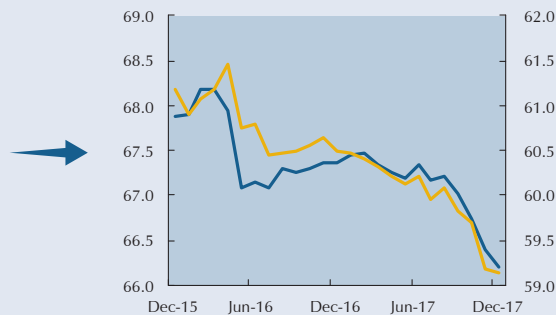
0.1% for the national total and a reduction of 0.8% in the thirteen areas (Graph D, panels A and B).

The indicators of employment quality presented mixed results in the thirteen areas during the last quarter: while the number of salaried workers grew marginally during this period, the number of formal employees[1] showed a slight decrease. During this same quarter, declines in non-wage and informal employment were registered. On a yearly basis, the rate of growth for wage-paying

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1   Based on DANE's definition, which is founded on the resolutions of the International Labor Organization (ILO), which is affiliated with the United Nations, employers and workers in companies that have up to five workers, unpaid family workers, unpaid workers in other household companies or businesses, domestic workers, day laborers or peons, and independent workers who work in establishments that have up to five people with the exception of independent professionals are informal (DANE, 2009).

Graph C
Unemployment Rate
(quarterly moving average October-November-December)

(Percentage)
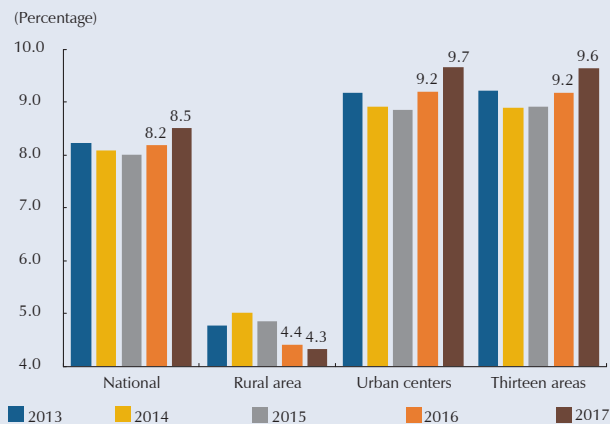
Source: DANE (GEIH).

Graph D
Number of People Employed
(seasonally adjusted and annual change)

1.   National Total

(Thousands of people)   (Percentage)

■ Employed   ── Annual change (right axis)
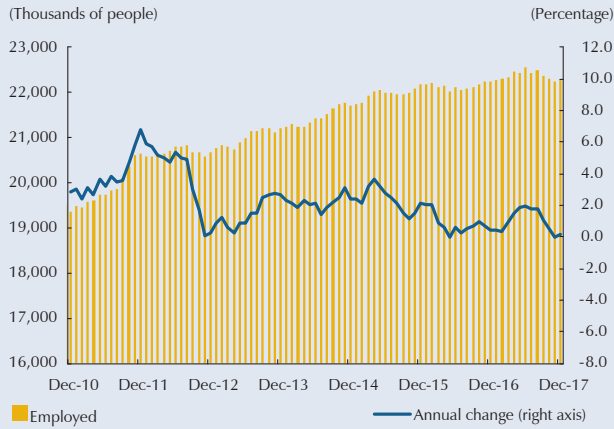
2.   Thirteen Main Metropolitan Areas

(Thousands of people)   (Percentage)

■ Employed   ── Annual change (right axis)
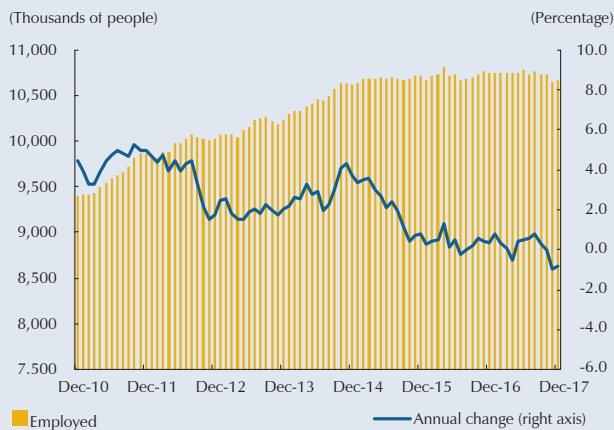
Source: DANE (GELH) and calculations by *Banco de la República*.

Graph E
Employment by Type of Occupation
(Thirteen areas, seasonally adjusted quarterly moving
average)

(Thousands of people)

■ Wage earners   ■ Non-wage earners
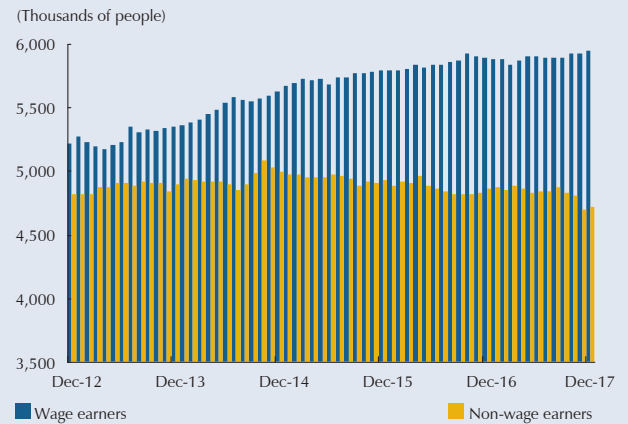
Source: DANE (GELH) and calculations by *Banco de la República*.

Graph F
Employment by Formality
(thirteen areas, seasonally adjusted quarterly moving average)

(Thousands of people)

■ Formal   ■ Informal
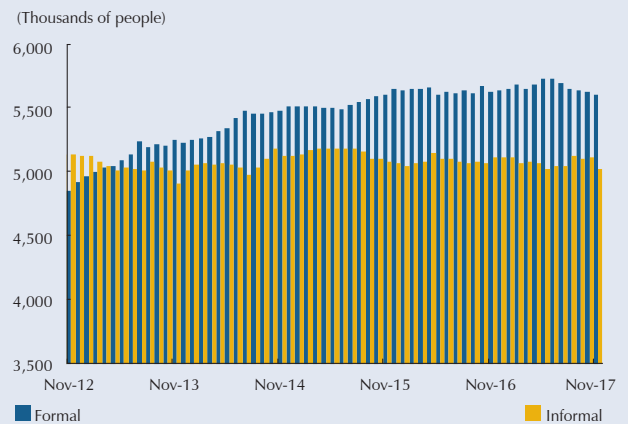
Source: DANE (GELH) and calculations by *Banco de la República*.

Graph 17
Imports of Capital Goods (real) and Gross Fixed Capital
Formation in Machinery and Equipment, Transport Equipment

A.   Imports of Capital Goods for Industry and GFCF in
        Machinery and Equipment

(Percentage)

— Investment in machinery and equipment
— Imports of capital goods for industry(real)ᵃ/
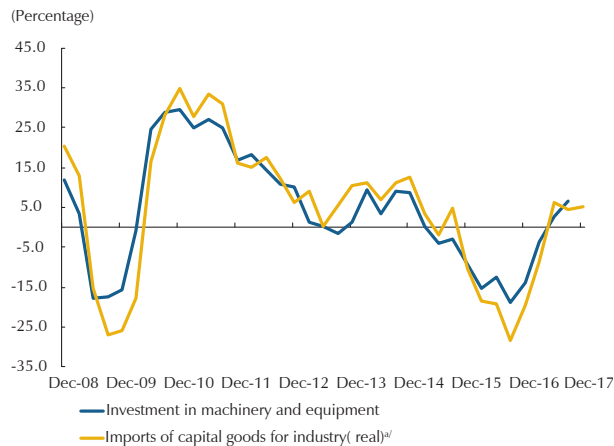
B.   Imports of Transportation Equipment and GFCF in
        Transportation Equipment

Investment in transportation equipment

— Investment in transportation equipment
— Imports of transportation equipment (real)ᵃ/

a/ figures converted to real terms.
Note: The data from December correspond to a projection using the preliminary figures
from DIAN.
Source: DANE (national accounts and foreign trade) and DIAN, calculations by *Banco
de la República*.

With respect to gross capital formation, when the DANE figures on US dollar-denominated imports of capital goods as of November together with the preliminary indicators from the National Revenue and Customs Bureau (DIAN in Spanish) as of Decem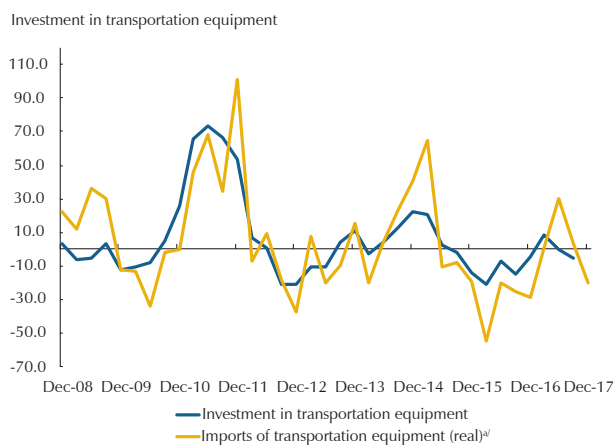ber are converted into constant pesos, it will be possible to know if investment other than construction and public works has grown at a slower rate than what was seen during the third quarter. This downturn is probably more a result of lower growth in spending for investment in transportation equipment than in machinery and equipment (Graph 17, panels A and B). In addition, the balance of the EMEE investment expectations for November suggests that this GDP segment was also quite sluggish during the fourth quarter of 2017.

A new decline for investment in building construction has been forecast for the fourth quarter of 2017. As has been seen throughout the entire year, the sluggishness of construction in the non-residential segment as well as the accumulation of available supply and the weakening of the demand for high-income housing may have continued to reduce the growth of this segment of gross capital formation. In contrast, significant growth is expected in the case of public works, which is similar what was registered in the previous quarter. This performance could be related mainly to the greater implementation of funds for infrastructure projects on the part of the regional and local governments as well as the disbursements for tertiary roads and, to a lesser degree, for 4G.

Finally, with regard to foreign trade, when the US dollar figures published by DANE and contained in the DIAN bulletins are converted into real pesos, the resulting exercise makes it possible to project growth for exports and a reduction in real imports. In the first case, the recovery would have probably been driven by sales of mining products, coal and oil in particular. As was reported for imports, their poor performance may have been due to a reduction in purchases of mainly capital goods (transportation equipment) and consumer durable goods. That being the case, foreign demand will probably have contributed positively to the expansion of the GDP during the fourth quarter.
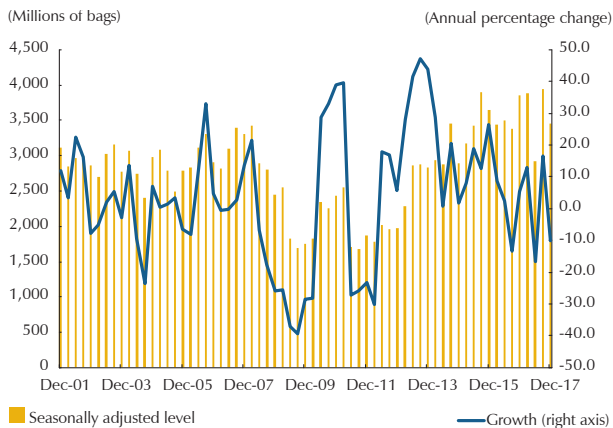
By branches of activity, the indicators available also point to a somewhat smaller expansion of the GDP than was registered in the third quarter but higher

Graph 18
Oil Production
### (monthly and annual growth)

(Thousands of barrels daily)   (Annual percentage change)

■ Level   ── annual percentage change
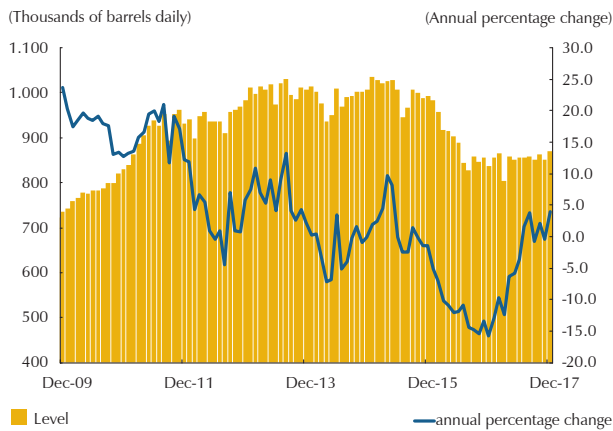
Source: ANH, calculations by *Banco de la República*

Graph 19
Coffee Production
(quarterly and annual growth)

(Millions of bags)   (Annual percentage change)

■ Seasonally adjusted level   ── Growth (right axis)

Source: Federación Nacional de Cafeteros (National Federation of Coffee Growers), calculations by *Banco de la República*

Graph 20
Real Industrial Production, excluding oil refining
(seasonally adjusted, trend component, and annual growth)

(Index)   (Annual percentage change)

■ Seasonally adjusted level   ···· Trend   ── Growth (right axis)
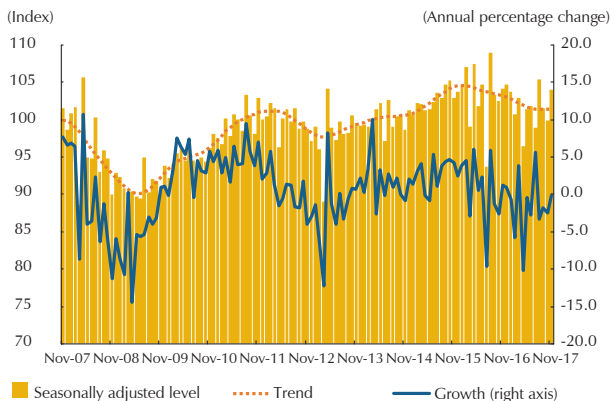
Source: DANE, calculations by *Banco de la República*.

than the one in the first half of the year. With respect to mining, a small recovery in the sector is expected for the fourth quarter after nine consecutive quarters in which annual declines were seen. Using the figures as of December, crude oil production was at 861.7 thousand barrels per day (mbd), which meant an annual expansion of 1.9% (Graph 18). Although a drop of 10.6% was seen in the production of coal during the third quarter, the positive performance of exports suggests that production may have stopped falling. Exports of coal, in particular, expanded 23.2% in volume during the October-November 2-month period. Something similar can be seen in US dollar-denominated exports that grew nearly 50% for the two-month period.

In contrast, a slowdown is expected for the agricultural GDP. The *Federación Nacional de Cafeteros* (National Federation of Coffee Growers) reported a contraction in coffee bean production during the fourth quarter of 2017 (-8.9%); based on information as of December, production stood at 14,194,000 bags which represents a slight decrease of 0.3% compared to 2016 (Graph 19). Cattle slaughter likewise declined although the rate of annual reductions decreased: there was a 2.2% slump in the October-November 2-month period after having dropped 3.2% during the third quarter. The performance of other agricultural products is estimated to have helped offset the sector's weakness since these other activities have been growing at rates that are above their historical averages.

With respect to industry, according to the DANE *Monthly Manufacturing Survey* (EMM in Spanish), the sector total grew 0.3% in November. However, when oil refining is excluded, the decline for the remaining manufacturers was 0.3%. Note that so far this year, industry as a whole has declined 0.7% and excluding oil refining, it has fallen 1.9%. The trend in both series shows a weakening of the sector (Graph 20). Hopefully, for this quarter and going forward, industry can begin a recovery process supported by the gradual recovery of both domestic and foreign demand.

Graph 21
Industry Confidence Index (Fedesarrollo)

(Index)

Seasonally adjusted level ···· Trend
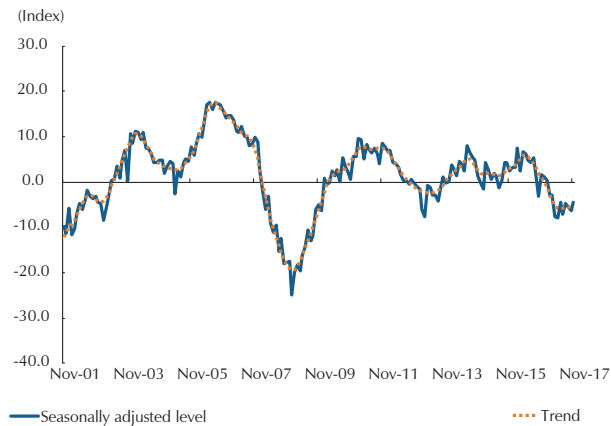
Source: Fedesarrollo, calculations by *Banco de la República*.

In addition, even though the Fedesarrollo *Business Opinion Survey* for the industrial sector with data as of December showed slight improvements in both the indicator for orders and the one for inventory with respect to the averages for the third quarter, the results still point to sector weakness and are below the historical averages. Something similar has occurred with expectations for production three months from now. With all of that, industrial confidence during the fourth quarter continued to present a deterioration (Graph 21). According to the Association of Colombian Business owners (ANDI in Spanish) *Business Opinion Survey*, the industrialists are reporting the following as the main problems they have: low demand, the exchange rate, and the cost of raw materials.

Considering the performance of the various supply and demand indicators and the normal uncertainty surrounding the GDP estimates, the technical staff at *Banco de la República* think that the central forecast for growth presented at the beginning of this chapter (1.8% annually) could be accompanied by an interval of between 1.3% and 2.3%. In particular, the breadth of the forecast range is consistent with the uncertainty related to the performance of consumption by the government and public works projects as well as to the different scenarios for the implicit balance of payments for the quarter.

These figures imply a 1.6% projected growth of the GDP for the entirety of 2017 within a range of between 1.4% and 1.8% (a little more constricted than the one in the previous *Inflation Report*: between 1.3% and 1.9%). The central point, floor, and ceiling of the forecast range are also consistent with the balance-of-payments scenarios for 2017 as a whole presented in Chapter I of this *Report*.

This forecast takes into account the partial correction that is expected in the external imbalance at the close of 2017 compared to what was seen in 2016. The deficit in the current account may have been lower largely due to a significant recovery in the level of the terms of trade. However, this improvement was nominal and was not completely reflected in the performance of actual exports. In this respect, the mediocre performance of foreign demand may have limited the possibilities for this GDP item to expand. Imports registered increases over the course of the year although they were low. This was consistent with the performance of the intense domestic demand for goods from abroad.

It is relevant to point out that the growth seen for the domestic demand throughout the year would be evidence that its adjustment had bottomed out in 2016 but also that other supply shocks would not have allowed demand to expand at a faster rate. On the one hand, the negative effects that the 2014

shock to the terms of trade had on available income in the economy have probably dissipated but, on the other, the tax reform went into effect (and the increase in the VAT in particular) and this could have affected the purchasing power of households.

Thus, private demand declined in comparison to what was seen in 2016 in contrast with what happened to its public counterpart. In this respect, household consumption was more sluggish at the same time that investment in transportation equipment and building construction declined. In contrast, public consumption and expenditures on investment in public works projects surged and contributed to the expansion of output more than they did last year.

Box 1

OVERVIEW OF LIH AND NON-LIH HOUSING

Isleny Johana Carranza
Celina Gaitán
Maria Alejandra Prieto*

The housing market is central to the monitoring of real and financial activity due to their links with the rest of the economy, primarily with the credit market, investment (impact on the gross domestic product [GDP] from the area of supply through construction and from demand through gross fixed capital formation), and the labor market, since its current share is 6.0% of total employment, and this has a direct impact on households.

The performance of housing prices, moreover, has direct implications for inflation and its outlook since rentals, which are directly related to the movement of housing prices, represent 18.6% of the basket of the consumer price index (CPI). Furthermore, given the characteristics of the international financial crisis, monitoring the housing market became even more relevant because the literature has identified this market as one of the variables that can warn us of the presence of macroeconomic vulnerabilities and prevent future crises.

In view of the above and in a context of high growth in housing prices and the recent moderation in the sector, the purpose of this box is to develop a description of the current state of the housing market in Colombia and the outlook for it in 2018. Since a large part of the recent dynamics are related to government programs, it is pertinent to analyze the performance of low income housing (LIH) separately (including the priority housing segment (PH), at which most of the programs have been targeted) from the non-LIH that encompasses the highest priced housing.

Recent Price Dynamics

Housing prices relative to the CPI have shown a sharp growth since 2006 and, in 2015, they reached the highest level registered since 1993. Starting in December 2015, there was a change in the trend, first with a stabilization

of the growth in prices and, subsequently, its slowdown during 2017 which included even records of growth that were below inflation (*Banco de la República's* housing price index Graph B1.1).

Graph B1.1
Index of Housing Prices (Relative to the CPI)
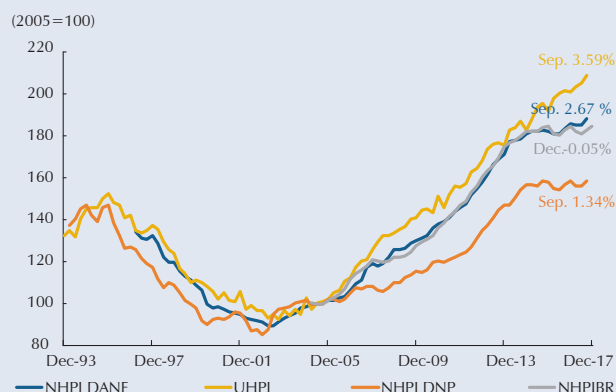
Sources: DANE, DNP, and *Banco de la República*

The sharp growth of prices since 2006 was associated with the upward phase of the economic cycle spurred by the high prices for commodities, especially petroleum. In this context, there was a high level of investment and greater liquidity for investment projects. This phenomenon, accompanied by greater demand due to the increase in disposable income, was transmitted positively to the sector in terms of units sold and higher prices. The fall in the price of petroleum since the middle of 2017 translated into a slowdown in the rate at which housing was appreciating.

The transmission of the high prices of exported goods to the prices of assets is not exclusive to the Colombian economy. With the increase in the price of copper in particular, the prices of housing in Chile and Peru also surged (Graph B1.2). In line with that, the lower international prices for this commodity meant a slowdown in housing prices in those countries. Note that in the case of Peru, the prices have even fallen relative to inflation and so far have not meant a collapse of the housing market.

Units Supplied and Sold

Recently, the moderate growth and the adjustment of the economy following the slump in petroleum prices led to sluggishness in the housing sector. The housing segment

(2005=100)
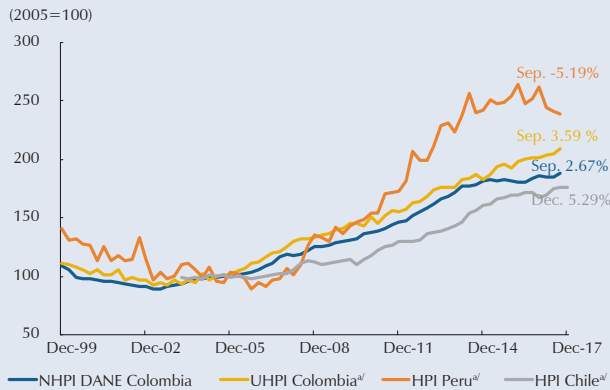
a/ Includes new and used housing.
Sources: Bank for International Settlements, DANE, *Banco de la República*, and the Chilean Chamber of Construction

Graph B1.3
New Housing: Sales (twelve months cumulative) and Placed on the Market (12-month average)[a/]

(Thousands of units)   (years)

a/ Includes information on the thirteen regional areas
Source: Camacol, calculations by *Banco de la República*.

with the highest prices (higher than 435 legal minimum monthly salaries in effect [SMMLV]) has been the hardest hit by the downturn in the sector while low income housing is showing a better performance in this adverse context supported, above all, by the government housing programs.

The slowdown of the economy has hit the demand for new housing first of all. The cumulative sales throughout the year in this segment declined at an average rate of 0.9% each month between January and November 2017 which is 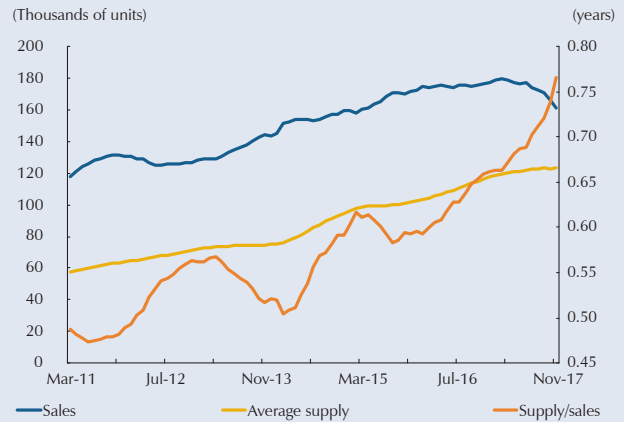equivalent to an 8.9% reduction compared to 2016. This was the largest drop in sales during the registration period (Graph B1.3).

Given the worsening performance in sales, the supply of new housing began to slow down starting in March 2017 although it continues to expand (10.3% in annual terms). The leading indicators show that the correction in the supply was probably more pronounced in the months afterwards: the number of housing units put on the market went from 183,900 in August 2016 to 160,200 during the same month in 2017 (-13%) with the largest setbacks being seen in Bogotá and Cundinamarca; in Antioquia, in turn, based on the licenses granted, the construction area decreased 11% compared to October 2016.

The correction in the supply has not been able to offset the sharp fall in sales and, therefore, the indicator of supply to sales has rebounded and stood at 0.73 in August 2017 compared to 0.64 in the same month in 2016. In other words, one more month is required to sell the total number of new housing units offered for sale throughout the year as compared to 2016, and three more months if compared to 2015 (Graph B1.3).

LIH Segment

The low income housing segment showed a positive performance in the first half of 2017 followed by a slowdown in the second half of the year. The sharp drop in the under 70 SMMLV segment due to the end of the *Mi Casa Ya* free housing program and the lower growth in sales of the 70 to 135 SMMLV segment in recent months explains the lower performance. With the culmination of the government's 100% subsidized housing program, which included a total of one hundred thousand housing units in the country, most of the demand in this segment was satisfied (Table B1.1). The downturn in sales that has been seen since 2016 intensified in the second half of 2017 with a slump of 59% in annual sales (Graph B1.4). Although other existing programs still provide benefits for this segment, a larger correction is expected to the degree in which the effect of the free housing program is no longer seen in the cumulative totals for the year.

In the higher priced LIH segment (70 to 135 SMMLV), the sales have been slowing down since September, but they are still expanding significantly in annual terms (16%) (Graph B1.5). Here, a large part of the growth of demand comes from government programs, primarily the one that subsidizes the interest rate (Table B1.1). In Cali, Barranquilla, Bucaramanga, Manizales, and Pereira, sales continue to grow favorably thanks to the possibility of starting up new developments to meet the demand. In other major cities, sales of LIH declined because of the difficulty of increasing the supply due to problems such as: availability and cost of land in Bogota, the effect of specific regulations in Medellín, and the availability of water in Santa Marta.

Table B1.1
Description of Housing Programs

Program	Objective	Advance	Beginning of the program	End of the program	Segment benefited (Values in SMMLV)
100% subsidized housing (first stage)	100,000 housing units	Finalized	2012		
100% subsidized housing (second stage)	30,000 housing units	Up to 2017: 12,612	2016	In effect	
Down Payment	88,000 homes	55,107 homes	2015	In effect	PH-LIH (70-135)
Savers	5,993 subsidies	Finalized	2013	2017	PH
Subsidy at non-LIH interest rate		As of 2014: Coverage for 66,203	2013	Expansion of the program	Non-LIH (135-335)
Subsidy at LIH interest rate		As of 2014: Coverage for 134,114	2013	Expansion of the program	PH-LIH (70-135)
Subsidy at non-LIH interest rate (second generation)	Subsidies extended by 40,000	Coverage for 22,174	2017	In effect	Non-LIH (135-435)
Subsidy at LIH interest rate (second generation)			2017	In effect	PH-LIH (70-135)

Source: Ministry of Housing

Graph B1.4
New Housing: Sales (twelve months cumulative) and
Supply (12-month average)
(Price that is less than 70 SMMLV: PH)

(Thousands of units) (years)

— 12-Month Cumulative Sales   — Supply   — Supply/sales

Source: Camacol, calculations by *Banco de la República*.

Graph B1.5
New Housing: Sales (twelve months cumulative) and Supply
(12-month average)
LIH

(Thousands of units) (years)

— 12-Month Cumulative Sales   — Supply   — Supply/sales

Source: Camacol, calculations by *Banco de la República*.

Non-LIH Segment

In the non-LIH market there is a more accentuated slowdown in sales than in the LIH market. The indicator of supply to sales has expanded rapidly (to 0.96), which is due to a sharp drop in sales and an insufficient response on the supply side. The lower economic growth, the rise in unemployment in urban areas, the low levels of confidence, and the high mortgage interest rates in the first few months of 2017 have been reflected in the housing sector through this segment.

In annual terms, the sales grew at an average rate of 3.2% in the first quarter of 2017. Starting in May, a period of

decline began that reached a maximum drop of 12% per annum in November (Graph B1.6). The decrease in sales was greater for higher priced housing: 15% in the over 435 SMMLV segment (Graph B1.7), 11% for the 335 to 435 SMMLV segment and 10% for the 235 to 335 SMMLV one. The 135 to 235 SMMLV segment was the only one that presented a positive change (9.0%).

The sluggishness in this segment is, above all, the result of demand factors possibly associated with agents postponing the decision to buy in response to two factors: first of all, a lower growth in housing prices that could create the idea that these assets will appreciate less than they did in the past, and secondly, the fact that in a scenario in which the

Graph B1.6
New Housing: Sales (twelve months cumulative) and Supply
(12-month average)
Non-LIH

(Thousands of units)   (years)
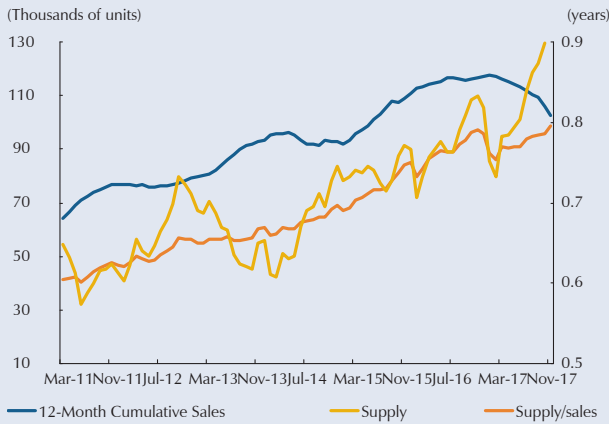
Source: Camacol, calculations by *Banco de la República*.

Graph B1.7
New Housing: Sales (twelve months cumulative) and
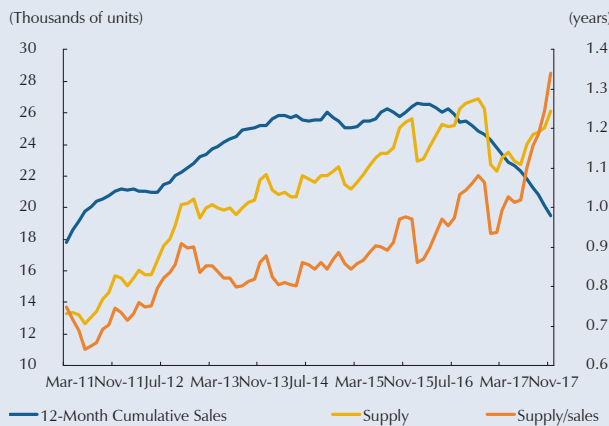Supply (12-month average)
Price greater than 435 SMMLV: Non-LIH excluding subsidy

(Thousands of units)   (years)

Source: Camacol, calculations by *Banco de la República*.

Central Bank is lowering interest rates, the agents would be willing to postpone the purchase of a home with a mortgage loan until the point where they think that the cycle of decline in interest rates has come to an end, and the interest rates are as low as they will possibly get.

In the non-LIH segment, specifically the one with prices higher than 335 SMMLV, the drop off in sales is accompanied by a reduction in the housing supply. While the number of new construction projects in the LIH segment increased 20% per year on average during 2017, this same figure dropped 6% for the non-LIH. The consistent trend in the number of housing projects put on the market per segment (a 10% increase in the LIH in 2017 on average compared to -12% for the non-LIH)

indicates that the correction in the total supply was mainly due to the non-LIH segment. In spite of the weakness in the supply, sales have been declining at a faster rate, a fact which will continue to keep the sector sluggish.

Outlook by Segment

By price segment, the greatest growth is expected to be in housing priced between 135 and 335 SMMLV and the least in those that are less than 70 SMMLV and more than 335 SMMLV. The PH housing in particular (<70 SMMLV) was the one that benefited the most from the government free housing programs.

- Since these programs have come to an end, significant rises in the number of homes sold in the segment are not expected nor in the startup of new projects.

- The 70 to 135 SMMLV segment will continue to be favored by the *Mi Casa Ya* program in the subsidy for interest rates modality. If, in addition, the factors that have curbed the supply are overcome, 2018 could be much better or, at least, not deteriorate due to the government programs that are focused on this sector and still have available housing.

- Housing in the range of 135 to 435 SMMLV will be favored by the extension in the range of prices for which the *Mi Casa Ya* program will cover a subsidy for the interest rate and for which forty thousand housing units are available. In this range, the program could spur the growth of lower-priced housing sales and revive the sales of higher-priced ones.

- The largest rise in sluggishness is seen in the higher-priced non-LIH segment due primarily to the weakness of demand. It is possible that the transmission of the reductions in interest rates to mortgage rates, the increased purchasing power due to the moderation of prices, and greater willingness to buy housing may allow the segment to recover. Nevertheless, no significant correction is expected in the short term.

III. Recent Developments In Inflation

Annual consumer inflation fell significantly at the close of 2017 with respect to the information seen at the end of 2016, although it remained above the inflation target of 3.0%.

The decline in annual consumer inflation was concentrated in the first seven months of the year. During the fourth quarter, it remained a little above 4.0%.

Core inflation also decreased in 2017, although it exhibited a slight rebound at the end of the year with a figure that remained above 4.0%.

In 2017, consumer inflation received one-time upward shocks as a result of the increase in indirect taxes. Furthermore, the persistence of the mechanisms for indexation to past inflation and wages continued.

In addition, other specific price increases related to transitory supply shocks were observed at the end of the year.

Annual consumer inflation ended the year at 4.09%, a figure that is significantly lower than the one seen a year ago (5.75%) and close to what had been anticipated in the reports and by the market expectations at the beginning of the year. However, it is a little higher than the estimates that had been made in the past three months. In spite of this substantial decline, inflation remained above the target of 3.0%.

As was anticipated, annual consumer inflation during 2017 showed two trends: first a sharp fall between December 2016 (5.75%) and July (3.40%) and afterwards, a moderate rise starting in August and continuing until the end of the year (Graph 22 and Table 6).

The first downward phase is linked to the recovery of agricultural supply once the effects of *El Niño* and of the 2016 strikes in freight transportation and agriculture had disappeared. It is also related to the weakness of demand, which has been limiting the

Graph 22
Headline Inflation

(Percentage)

| | Observed Inflation | Inflation target | Range +/- 1 pp |

Sources: DANE and *Banco de la República*.

Table 6
Consumer Inflation Indicators
(as of December 2017)

Description	Weight	Dec-16	Mar-17	Jun-17	Sept-17	Oct-17	Nov-17	Dec-17
Total	**100.00**	**5.75**	**4.69**	**3.99**	**3.97**	**4.05**	**4.12**	**4.09**
Excluding food	**71.79**	**5.14**	**5.13**	**5.12**	**4.71**	**4.70**	**4.80**	**5.01**
Tradables	26.00	5.31	5.59	4.41	3.41	3.38	3.64	3.79
Non-tradables	30.52	4.85	5.33	5.21	5.21	5.23	5.27	5.49
Regulated items	15.26	5.44	4.05	6.01	5.68	5.61	5.58	5.86
Food	**28.21**	**7.22**	**3.65**	**1.37**	**2.22**	**2.51**	**2.52**	**1.92**
Perishables	3.88	(6.63)	(13.09)	(14.72)	(0.32)	3.20	5.89	5.84
Processed	16.26	10.74	6.28	3.29	0.84	0.52	(0.15)	(0.91)
Eating out	8.07	8.54	8.94	7.62	6.01	5.78	5.75	5.21
Core Inflation Indicators								
Excluding food		5.14	5.13	5.12	4.71	4.70	4.80	5.01
Core 20		6.18	6.01	5.31	4.87	4.73	4.69	4.87
CPI excluding perishable food, fuel, and utilities		6.03	5.61	5.07	4.31	4.13	4.09	4.02
Inflation excluding food and regulated items		5.05	5.44	4.87	4.44	4.44	4.57	4.76
Average of all indicators		**5.60**	**5.55**	**5.09**	**4.58**	**4.50**	**4.54**	**4.66**

Source: DANE, calculations by *Banco de la República*.

upward price adjustments for the majority of the family basket for several quarters now. The decline took place in spite of the upward shock that a broad set of prices received because of the increase in VAT and other indirect taxes resulting from the tax reform having gone into effect at the beginning of 2017. These tax increases, a large percentage of which were transmitted during the first three months of the year, did not interrupt the downward trend of consumer prices.

There was a break in the decline of inflation in August and upswings occurred that took it back to levels greater than 4.0%. As had been expected, these increases were caused by the upward pressure exercised by the annual change in the CPI for food, which was associated, to a great extent, with the normalization of price levels after the sharp drops registered in previous quarters. Due to these drops, which were much more pronounced than the usual ones, especially in the last few months of 2016, the basis for comparison was very low and this made itself manifest in the upturn of the annual change for this index at the end of 2017.

In addition, upward pressures were also registered in the main components of the CPI excluding food during the fourth quarter of 2017. This happened partly because of specific shocks to some prices for tradables and non-tradables in November and December that were related to the strike in the aviation sector and the increase in prices for entertainment services, etc., as will be explained below. Increases in the fees on regulated goods and services such as fuel and public transportation were added to that.

With information as of December, there were four complete consecutive years in which inflation surpassed the target of 3.0% by a significant margin. This has resulted in higher expectations with respect to that target, higher indexing levels, and, up to a certain point, an increase in the inflationary inertia in price setting.

One possible source of inflationary pressure in 2017, including the fourth quarter, were the adjustments in labor costs. According to the information available, some of the wage adjustments tended to be quite incompatible with the inflation target of 3.0%. This is the case with the minimum wage, which was adjusted 7.0% for 2017, thus more than offsetting the loss of its purchasing power a year ago due to the end-of-the-year inflation in 2016 (5.75%) Something similar may have occurred with the average salary in the manufacturing industry, which was adjusted at a rate of 7.1% as of November 2017. That said, throughout the entire year, including the fourth quarter, the other salary indicators presented adjustments that were lower than 7.0%. In the commercial sector in particular, the increase was 5.8% in November and the wages in heavy construction and housing were adjusted at annual rates of 4.2% and 5.9% respectively in December (Graph 23).
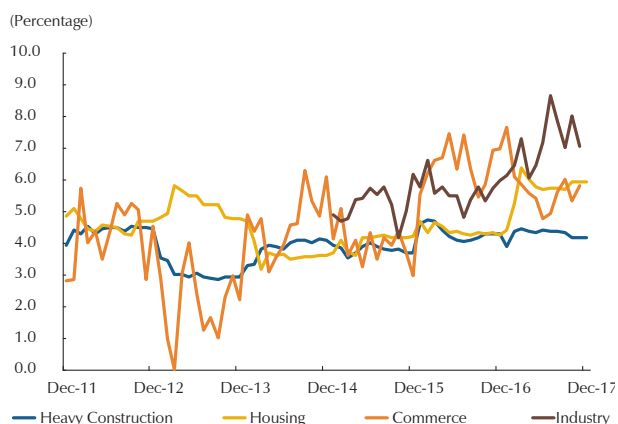
In any case, the adjustment in wages should have been lessened by the weakness in the labor market as the estimates of the *non-accelerating inflation rate of unemployment* (Nairu) suggest. The level of these is below the unemployment rate for the end of 2017 and early 2018 based on the forecasts that will be discussed later.

With respect to upward pressure from non-labor costs, these costs were limited in 2017 or, in the best of all cases, decreased even at the end of the year when they could have begun to adjust to rising rates as indicated by the performance of the producer price index (PPI). The annual change in this indicator also presented two trends during the year: declining in the first half of the year and rising in the second half. In the first six months of 2017, there was a 1.62% decrease in the annual variation of the PPI for domestic supply (imported PPI plus PPI for domestically produced and consumed) in December 2016 to -0.83% in June 2017 denoting the absence of cost pressures (Graph 24). The segment of local PPI prices contributed to this fall (it went from 3.85% in December 2016 to -0.91% in June) but the segment of prices for PPI imports, which incorporated the increases seen in the price of the US dollar, did not (it went from -3.13% to -0.66%), especially during the second quarter.

Graph 24
PPI by Origin
(annual change)

(Percentage)
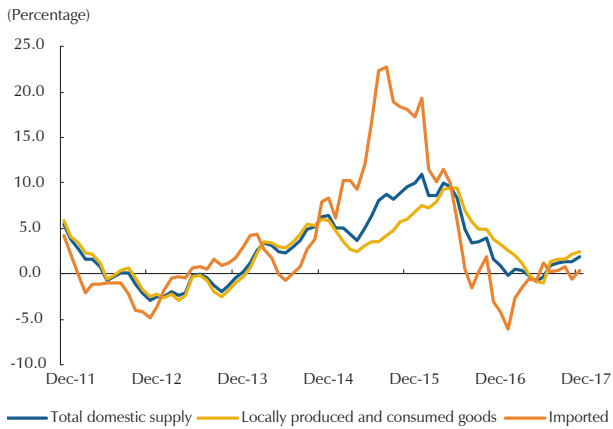
Source: DANE.

In the second half of 2017, the annual variation in the PPI came to 1.85% in December, although it remained at very low levels and consequently, relevant inflationary pressures from non-labor costs cannot be identified either. The upswings were registered in both the PPI for imports (this went from -0.66% in June to 0.32% in September, and to 0.38% in December) and the local PPI (this went from -0.91% in June to 1.55% in September, and to 2.50% in December). This performance was associated with higher oil prices and, to a lesser degree, with some increases in the prices for products that are agricultural in origin, which is normal for this time of year.
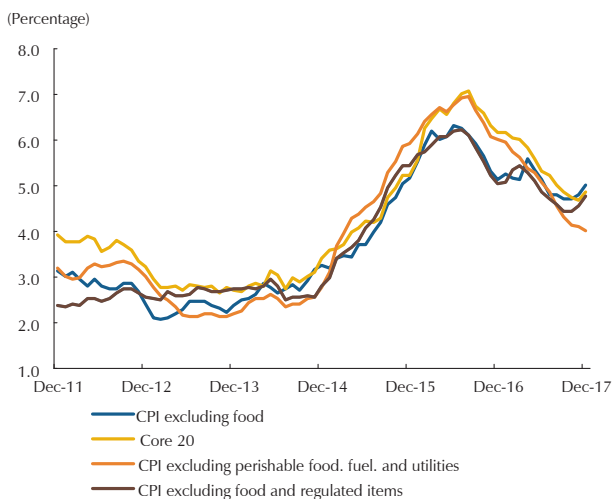
A.   CORE INFLATION

Core inflation, estimated by using the average of the four indicators of this measurement that are regularly monitored by *Banco de la República*, tended to decline over the course of 2017 except in the last two months. Thus, this average declined between December 2016 (5.60%) and October (4.50%) only to rebound in November (4.54%) and December (4.66%) (Table 6). Their level remained above the long-term inflation target (3.0%), something that has been going on since November 2014.

Three of the four core inflation indicators determined the upward performance in the last two months of 2017 (Graph 25). These were the CPI excluding food, which closed 2017 at 5.01% close to 30 basis points (bp) above what was registered in October; the core 20, which went from 4.73% in October to 4.87% in December; and the CPI excluding food and regulated items, which went from 4.44% to 4.76% between these same two months. In contrast, the CPI excluding perishables, fuel, and utilities registered a lower level in December (4.02%) than it did in October (4.13%).

Graph 25
Core Inflation Indicators

(Percentage)

Source: DANE, calculations by *Banco de la República*.

The decline in the core inflation indicators in the first ten months of 2017 occurred despite the increase in indirect taxes at the beginning of the year, for which there is evidence of a significant transmission to consumer prices. Thus, the decrease is explained by weak demand due to the absence of significant pressure on the exchange rate and declining production costs during the first half of the year. Nevertheless, in the last two months,

Graph 26
CPI for Tradable and Non-tradable Goods, excluding food
and regulated items
(annual change)

(Percentage)
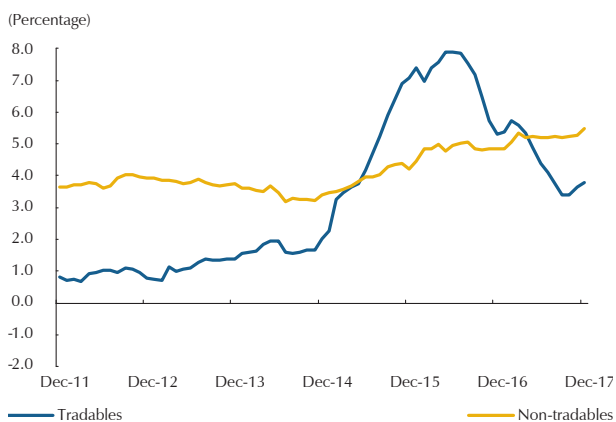
Source: DANE, calculations by *Banco de la República*.

core inflation has probably begun to incorporate
the adjustments observed in the prices of some
tradable goods, including gas and oil, as well as
specific shocks that are mainly transitory in nature
on various prices.

In the specific case of the CPI excluding food, there
was a reduction during the first three quarters of
the year, and after that an increase in the fourth.
This trend was led by the sub-basket of the CPI
for tradables (excluding food and regulated items)
over the course of the year. The annual variation
of prices for this sub-basket went from 5.31% in
December 2016 to about 3.40% in September and
October of this year and finally rose in the months
of November (3.64%) and December (3.79%).

The initial declining trend of the annual change of the CPI for tradables
became more marked at the beginning of April once the transmission of the
indirect taxes to consumer prices was completed. In the case of the tradables,
this was particularly important (Table 6 and Graph 26). The increases in the
last few months of 2017, in turn, were led by airline tickets and coincided with
the recent strike against the major airline in the country. Rises in the prices
for vehicles also occurred in these last few months. These were higher than
those seen twelve months ago when discounts were offered at the car show by
assemblers and importers.

In the case of the CPI for non-tradable goods excluding food and regulated items,
its annual change tended to rise during the first quarter of the year (from 4.85% in
December 2016 to 5.33% in March 2017). After that, it remained stable over the
next two quarters and in the fourth, it rose again, thus
closing the year at 5.49% (Table 6 and Graph 27). This
sub-group was affected in the first quarter of last year
by the higher taxes incorporated into the most recent
tax reform and by the high indexing of its components
to inflation in 2016 (5.75%) and to the minimum wage
for which the adjustment in 2017 was 7.0%.

Graph 27
Non-tradable Inflation, CPI excluding food and regulated
items
(annual change)

(Percentage)
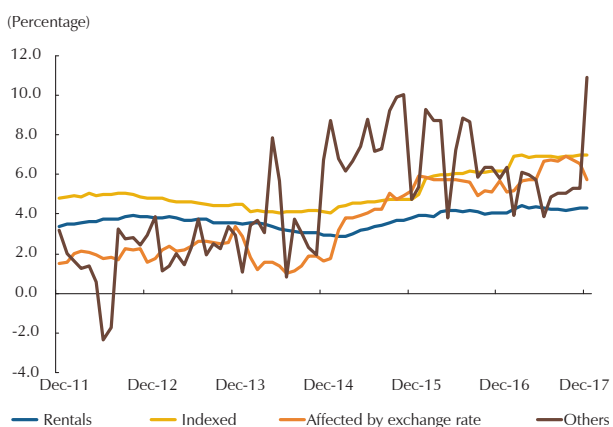
Source: DANE, calculations by *Banco de la República*.

Regarding the increase registered in this basket at
the end of 2017, it was concentrated in the item
termed "other services related to entertainment"
(which is included in "others" presented in Graph
27) and which is measured, in part, based on the
price of soccer tickets. In November and December,
the upswings in the non-tradables "remainder"
group were considerable and much higher than the

ones registered last year (the annual change was 5.27% in November and 10.88% in December) and the majority of the increases were probably due to soccer tickets.

The stylized facts show that when the soccer teams from the capital reach the finals, the prices of the tickets are usually disproportionately adjusted, and this affects the measurement of annual inflation due to the weight of Bogotá on the total CPI. Excluding this item, yearly inflation would have been 3.98%. However, if the price adjustments of this same item seen in 2016 are taken (when only one Bogotá team reached the finals), annual inflation would have ended the year at 3.99%.

It should be noted, however, that these increases in the soccer prices are usually transitory and revert at the beginning of the year or the tournament after that and, as a result, their effect on annual consumer inflation is occasional and not permanent.

(Percentage)
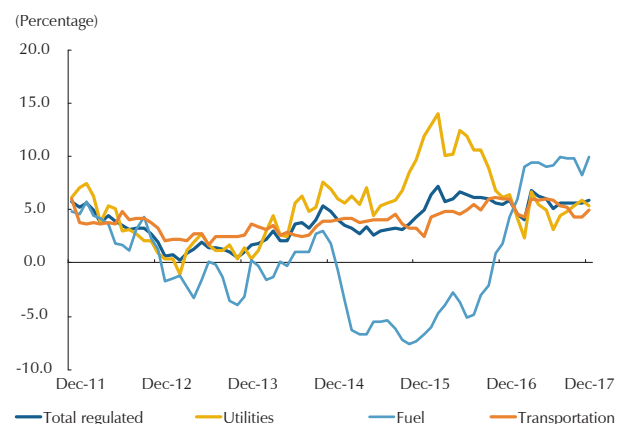
Last of all, the performance of the CPI for regulated prices was characterized by a high volatility and an absence of a clear trend during 2017. It ended the year at 5.86% (Graph 28). Upward pressures were registered in fuel (9.94% in December), rates for water and sewer (8.1%) and natural gas (9.1%). In the first case, these prices were affected by the tax reform, which added a green tax (135 pesos per gallon) to the price of gasoline. Furthermore, the increases in the international price for crude oil in the second half of the year will probably have begun to be passed through to the domestic price for gasoline without having been offset by the appreciation of the peso. Both factors could have determined that the annual adjustments of the CPI for gasoline would have been high throughout much of the year thus fluctuating between 8.3% and 9.9% in the last ten months.

In the case of water supply and sewer, the raised fees incorporate the costs generated by the expansion of the system and improvements in the infrastructure of the companies in the sector as decreed by the respective authorities. With regard to natural gas, the increases were linked to the cost overruns caused by problems in the transportation infrastructure.

The transportation group in the CPI, in turn, ended up with an annual adjustment in December (4.92%) that was lower than the one in December 2016 (6.06%) and September (5.17%). However, with respect to November (4.32%) it rebounded which is due to the fact that the fares for buses, mini-buses, and micro-buses in the provisional Integrated Public Transport System (SITP in Spanish) in Bogota rose 100 pesos at the beginning of December.
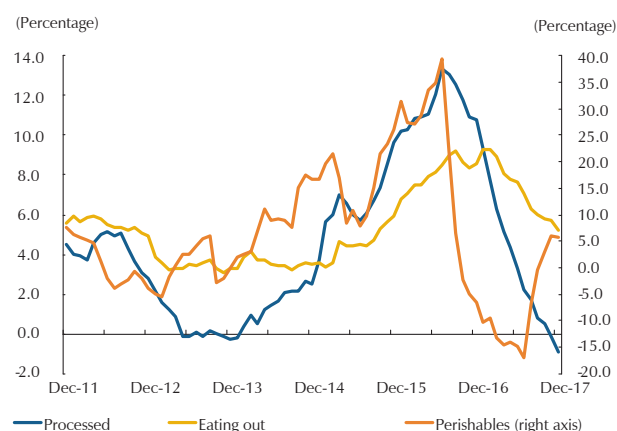
B. FOOD PRICE INFLATION

Food was the component in the CPI basket that contributed the most to the decline in consumer inflation in 2017, especially during the first half of the year. Once the effects of *El Niño* and the trucker's strike were overcome, the substantial agricultural supply throughout 2017 continue helping the decline in the annual change in food prices during the first few quarters of the year. This decline reached its minimum in July (0.20%). Although this indicator presented increases starting in August and reached 2.52% in November, this trend can be attributed to the existence of a low base of statistical comparison during the same period in 2016 when there were drops in prices. Thus, the upward momentum has nothing to do with a deterioration in the food supply For December, there was a decrease in the annual variation in food prices again as it went to 1.92% (Table 6 and Graph 29). Thus, in the case of this basket, the year closed below the expectations that the market had a quarter ago.

Except for perishable food, the large aggregations of this sub-basket declined almost all year (Graph 30). Processed food went from positive territory in December 2016 (10.74%) and September 2017 (0.84%) to negative territory last December (-0.91%). Once the eating away from home group got past the rises in some of its components caused by the tax reform and the higher indexing going into effect at the beginning of 2017 (it went from 8.54% in December 2016 to 9.31% in February), it declined, starting in March, without interruption and ended 2017 at 5.21%. This downward trend could be reflecting the weakness of domestic demand.

The segment of perishable food is the only one that has put upward pressure on annual inflation and this was only during the second half of the year. This is partly due to the already mentioned low basis of statistical comparison but it would also be part of the normal price cycle, which stood at very low levels in 2016.

Graph 29
Food CPI
(annual change)

(Percentage)

Source: DANE, calculations by *Banco de la República*.

Graph 30
Food CPI by groups
(annual change)

(Percentage)   (Percentage)

— Processed   — Eating out   — Perishables (right axis)

Source: DANE, calculations by *Banco de la República*.

IV.   Medium Term Forecasts

The forecast of annual consumer inflation rose for 2018 compared to the one in the September Report.

However, inflation is expected to continue converging to the 3.0% target over the course of 2018 and 2019.

In this Inflation Report, the mid-point of the forecast range for GDP growth for 2018 remained at 2.7%, but the most recent analysis of the risks made it possible to raise the floor and ceiling of the interval to 1.7% and 3.7%, respectively.

The baseline growth forecast assumes that the actual increase in the price for oil at the beginning of the year is largely transitory.

A.   ECONOMIC GROWTH FOR 2018

In this version of the *Inflation Report*, the technical team at *Banco de la República* maintained the central growth forecast for 2018 given in the previous report but raised the floor and ceiling of the low and high scenarios. With this, an annual 2.7% GDP growth is anticipated for 2018 as the most likely figure and is now within a range of 1.7% to 3.7%. In the September report, that range was between 1.5% and 3.5%, which indicated greater downside risks. The current forecast is more balanced as it reflects the recent behavior of oil prices. It should be noted that the new range is consistent with a significant advance in the macroeconomic adjustment in 2017 with respect to the terms of trade shock from previous years due to which the Colombian economy will probably gain momentum gradually in 2018 and converge towards a growth that is closer to what could be its potential rate of expansion as estimated by the technical staff.

As usual, the assumptions about the performance of the key external factors for the expansion of the GDP are consistent with the ones in the balance-of-payments scenarios presented in Chapter I. In this respect, a recovery in the economic growth of our main trading partners is anticipated for 2018 compared to what was registered for 2017, especially due to more dynamic economies in the advanced countries. Also, a recovery is expected (although minor) in the growth of most of the Latin American countries. The above would make a positive contribution of foreign demand to growth of output possible.

Likewise, an upswing, although a moderate one, in the international prices for the major raw materials exported by the country is projected. To be precise, the international Brent price for crude oil (benchmark for Colombia) is expected to stand at USD 60 on average during 2018, which is 9.5% higher than in 2017. This would mean not only a higher level in the terms of trade than seen during the previous year but also an incentive for exploration and drilling for oil in Colombian territory and a boost for the performance of the gross national disposable income and the nation's fiscal accounts in the medium and long term. The higher foreign demand and rise in the level of the terms of trade could further a better performance for net US dollar-denominated exports which, in turn, would contribute to the adjustment of the trade deficit.

The forecasts also assume that the Colombian economy will likely continue to be funded without any serious inconvenience by savings abroad during 2018 and that the capital flows entering the country will probably remain at relatively stable levels. This takes into account the fact that recent revisions of the outlook for Colombian public debt on the part of the risk rating companies have been largely anticipated by the market and, therefore, were not reflected in the country-risk indicators. Nonetheless, increases in the cost of foreign credit are not ruled out given the normalization of the monetary policy stance in the advanced economies.

With respect to internal assumptions, especially those related to the performance of government expenditures and investment in public works, a positive contribution to the expansion of output is expected in 2018. In the first case, a growth is projected that is slightly lower for the current year than what had been seen for the aggregate in 2017 although higher than the GDP. This would be the result, to a great extent, of the effects of the electoral calendar and the adjustment that is expected on the part of the National Central Government (NCG) in the fiscal accounts consistent with the provisions of the *Medium-Term Fiscal Framework* (MFMP in Spanish) and with what is allowed by the regulatory fiscal framework. It also takes into account a greater implementation by regional and local governments compared to last year. With regard to the investment in public works, major expansions are planned similar to those of 2017. This is due to greater expenditures on infrastructure on the part of the regional governments, which, in turn, would supplement the positive performance expected for the investment in exploration and development in the mining sector and, to a lesser degree the disbursement of funds for the 4G highways.

Growth in 2018 should turn out to be favored by the convergence of inflation with the 3.0% target and by the recent actions taken in monetary policy, which could translate into a respite for real disposable income in the economy. Such interlude would contribute to absorption reporting positive growth during this year. This would be provided that the market rates continue reacting to the accumulated movements to date in *Banco de la República's* intervention rate. However, there is the risk that the high levels of indebtedness that agents in the

economy have and the recent deterioration in the loan portfolio could act as constraints on an expansion of demand through this channel.

With all of the above, the forecasts of economic growth in 2018 presented in this Report include an implicit surge in the rate of expansion of domestic demand in comparison to what was observed in 2017. This better performance would probably occur, mainly, in a context of major expansions in gross capital formation. With respect to this segment of the GDP, investment will probably register growth rates that are higher than those seen since 2015. In addition to the contribution of public works already described, the benefits of the reduction of the tax burden on companies that was approved in the tax reform should play an important role in the performance of private investment this year. With the above, increases are expected in the areas of machinery for industry and transportation equipment. In contrast, investment in building construction will probably show a mediocre performance again. This could be related to, mainly, the existence of an oversupply in the sector of buildings (storefronts, offices, and high-income housing) as a result of the weak demand in previous quarters.

For 2018, private consumption is expected to remain modest and thus similar to what was registered for the aggregate last year. As has already been stated, even if lower inflation and a more expansionary monetary policy stance represent a relief for household purchasing power and available income, the high financial burden households have and the, as yet, low levels of confidence will probably limit their performance this year. This could be especially relevant for the performance of the segments of durable and semi-durable consumption that, in both cases, will probably register growth rates that are below their historical averages.

With respect to the foreign trade accounts, the forecasts of GDP growth for the current year assume a positive contribution to economic activity from foreign demand. Accordingly and related to the assumptions of the baseline scenario for the balance of payments, sales abroad will probably be spurred by the better performance of both commodities and the goods classified as non-traditional. Imports, in turn, could also register increases hand in hand with a greater expansion of an intensive domestic demand for goods and services from abroad.

In the area of supply, the estimates of the technical staff at *Banco de la República* suggest that the production of tradable goods and services is likely to recover in 2018 to the extent that the accumulated depreciation, the search for new markets through trade agreements signed in the past, the recovery in domestic demand and more dynamic trading partners make it possible to stimulate the productive apparatus.

With respect to agricultural work, the forecasts made by international agencies such as the National Oceanic and Atmospheric Administration (NOAA) which point to better climatic conditions make it possible to expect favorable performance for the sector. Likewise, the forecasts for international food prices

indicate somewhat higher levels than those seen in 2017, which would also stimulate the cultivation of such products. Furthermore, the improvements in the security conditions in the rural areas is also expected to make positive performance in the agricultural sector possible. As has been mentioned in previous reports, in the case of cattle slaughter and given the duration of the cattle-raising cycle, it is possible that the retention phase is reaching its final stage and, as a result, this segment could present positive growth for 2018.

In the case of the manufacturing industry, a significant part of the sub-branches that it is made up of are expected to recover in 2018 in line with the projections for better domestic demand and for our trading partners who purchase industrial goods based on the forecasts presented in Chapter I of this *Report*.

In the GDP for mining, in turn, an expansion stimulated by higher oil and coal prices is estimated for 2018 as a whole after two years in which production decreased as a result of the fall in their prices. The recent increases in these prices, if maintained at the levels seen in January 2018, would imply a significant rebound in comparison with the levels registered, on average, during 2017. The above would also make it possible for inflows of mining-energy investment to improve in such a way that a better performance of the investment projects could be expected compared to what was implemented last year.

Last of all, the expected growth of the 4G public works projects will continue to stimulate non-tradable production and contribute significantly to the growth of the GDP this year and next. It should be noted that investment in public works for mining will probably also make it possible to expect favorable growth for the sector. Furthermore, this sector has productive chains with branches such as industry and transportation due to which, it should also contribute to making these groups more dynamic.

The central point and forecast range for the growth of the GDP for 2018 (2.7% between 1.7% and 3.7%) are within the fan chart of economic growth derived from the medium- and long-term models of Technical Management. At this time, the breadth of the intervals remains high and, as can be seen in Graphs 31 and 32, the tendencies are slightly upward. The central forecast remained unaltered for 2018 compared to the one presented in the previous quarterly report. The elevated risks in the international context and the performance that public consumption and public works could have are the main sources of uncertainty about the central forecast. As can be seen in Table 7, the probability is nearly 50.1% that economic growth will be between 2.0% and 3.0% in 2018.

The main downward risks to growth are associated with a more sluggish economy in our trading partners that affects non-traditional trade. Furthermore, public investment could be more sluggish than was contemplated in the baseline scenario, and this will depend on the efficiency in implementation, in particular with what is related to the schedules for fourth generation public works. Something similar

Graph 31
Fan Chart of Annual GDP Growth
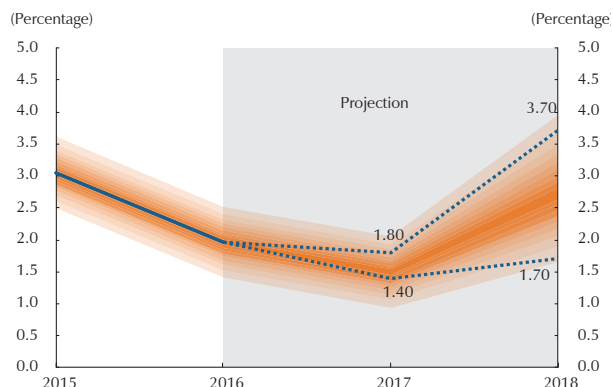
Source: DANE, calculations by *Banco de la República*.

Graph 32
Fan Chart for Annual growth of quarterly GDP
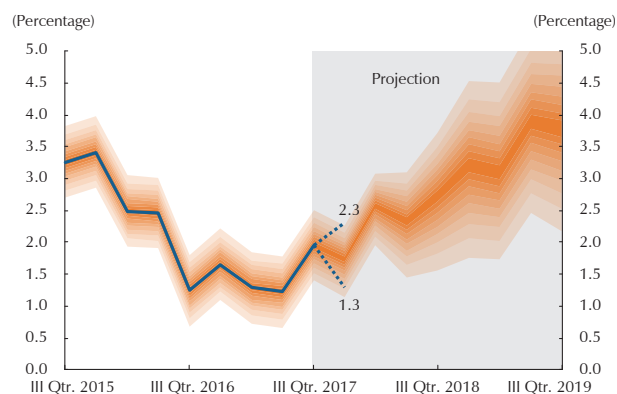
Source: DANE, calculations by *Banco de la República*.

could occur in the trend of public consumption, which could be affected by the law regarding guarantees going into effect and by the forthcoming elections.

The primary upward risks are related to some of the prices for oil and other raw materials that are higher than those considered in the baseline scenario. With respect to the prices for crude oil, in particular, if these prices manage to remain at levels that are close to USD 70 per barrel for a majority of the year, this could end up stimulating production and investment in this sector much more than expected.

INFLATION

1   Forecasts

Upward pressure on consumer prices in Colombia, which had not been anticipated in previous reports, emerged at the end of 2017. This pressure, some of it transitory, but some that was possibly more permanent in nature, partly offset the downward pressure on the prices that had been identified in the September report. Some of these shocks resulted in information as of December that was somewhat higher than expected as was explained in Chapter III of this *Report*.

Table 7
Probability Ranges of the fan chart for Annual GDP Growth
(percentage)

Range	2018	2019
< -1.0	0.00	0.00
-1.0 - 0.0	0.00	0.00
0.0 -1.0	0.34	0.20
1.0 - 2.0	11.89	3.66
2.0 - 3.0	50.06	21.56
3.0 - 4.0	33.13	41.51
> 4.0	4.58	33.06
Between 3 and 5	37.59	68.28
Between 2 and 4	83.19	63.07
Between 1, 5 and 3	59.62	24.41

Source: calculations by *Banco de la República*

Due to that, the forecast for the next eight quarters was raised at this time for both total and core inflation which, in this report, corresponds to the CPI excluding food and regulated items. However, in the current Report, the central forecast for inflation continues to converge with the long-term target established by the BDBR although this is happening more slowly than had been expected earlier.

Specifically, for total annual consumer inflation, a result that is higher than 3.0% but lower than 4.0% is projected for the end of 2018 along with figures that are similar throughout most of the year. This means that the majority of the decline that is expected for this indicator with respect to the figure seen at the end of 2017 (4.09%) should occur at the beginning of this year as was explained in the previous report and will be explained below. Going into 2019, the central forecast indicates that annual inflation will probably continue converging with the target of 3.0%. The trends are similar for inflation excluding food and regulated items although their values are likely to always be higher than those for total inflation within the forecast horizon. There are three circumstances that existed in the last few months and tend to exert upward pressure on inflation over various horizons.

First of all, the increase in the price of crude oil since the middle of 2017 is notable. This increase gained momentum at the end of that year and was consolidated at the beginning of 2018 settling at levels close to USD 70 per barrel (Brent). This figure is significantly higher than what had been expected in the September Inflation Report. As was explained in Chapter I of the current report this forced an upward revision of the projections for the average price for crude oil to USD 60 per barrel (Brent) for 2018 compared to a value of USD 55 which was envisaged a quarter ago. Even though the new forecast assumes that the recently seen increase in the international price of oil is transitory and that this should go through a correction in the next few months, the level to which it should return is relatively high compared to what had been forecast earlier and what was seen on average in 2017.

This increase in the expected levels of the price of crude oil translates into inflation in Colombia through a variety channels with the most direct and important being the effect it has on the CPI for regulated items, especially on stronger adjustments in the domestic price for gasoline, urban transportation services, and probably the price for natural gas for household use. Moreover, due to the resulting rise in transportation costs for merchandise and for other raw materials, this change in the forecast also translates into higher prices for imported goods and, by this means, into greater pressure on non-labor production costs, which will have an impact on consumer prices. Even though the higher price for oil results in the greater strength of the Colombian peso compared to the US dollar and other currencies, which, in principle, would offset this upward pressure, an appreciation of the exchange rate is not contemplated in the central forecast presented in this *Report* and, therefore, the net effect is upward.

That being the case, the main effect of the higher price expected for crude oil was an upward revision of the CPI for regulated items for 2018 and 2019. This change also takes the already announced increases for public transportation in Bogota and the introduction of a new technological platform for charging for taxi service in the capital partially into account. However, this does not include possible revisions in the rates for utilities caused by changes in the regulation formulas.

A second source of inflationary pressure that was not envisioned in the previous report corresponds to pressure from labor costs, especially due to the 5.9% increase in the minimum wage for 2018. Although that adjustment was lower than the one made last year (7.0%) it remains above the inflation at the end of 2017 and of the 3.0% target even after considering the possible gains in labor productivity in Colombia. In the past, these have been estimated at about 1.0% per year under favorable conditions. Other salaries on the market are expected to show adjustments that are more consistent with the target given the weakness that the labor market continues to exhibit in a context of an economy that is recovering slowly.

However, a considerable percentage of the employed population in Colombia receives a minimum wage or their income is indexed to this variable. Therefore, a relatively high upswing in labor costs is to be expected in 2018. In the case of the CPI, the services with respect to health, education, and household (surveillance), etc. have shown a significant correlation with that wage. In terms of the central forecast, the above meant an upward revision for both total and core inflation primarily because of the impact they have on the basket of non-tradables.

Even though the two previous events may be able to absorb one-time shocks on the price level, they could have persistent effects on consumer inflation. The price of gas and the minimum wage have been significant benchmark variables in the formation of prices and inflation expectations in the past. Furthermore, they are linked to indexing mechanisms for different items although not necessarily those that are part of the basic basket of consumer goods.

At the end of 2017, inflation also suffered an unanticipated impact from specific increases in prices for some areas of entertainment, culture, and leisure as well as airline transportation as explained in detail in Chapter III of this *Report*. The central forecast includes a partial, but not total, rollback of these rises in the first quarter of the year in the cases of both price levels and inflation rate. Thus, its effect is largely transitory although to a small degree, this could be contaminating expectations and affecting the indexing mechanisms and, thus, they could also have a somewhat persistent impact on annual inflation.

In spite of the indicated upward shocks and together with the rise in the central forecast, the exercise done in this Report suggests that inflation should continue to converge with the 3.0% target in the next two years. Just as in the September

Graph 33
Fan Chart of the Output Gap

(Percentage)   (Percentage)
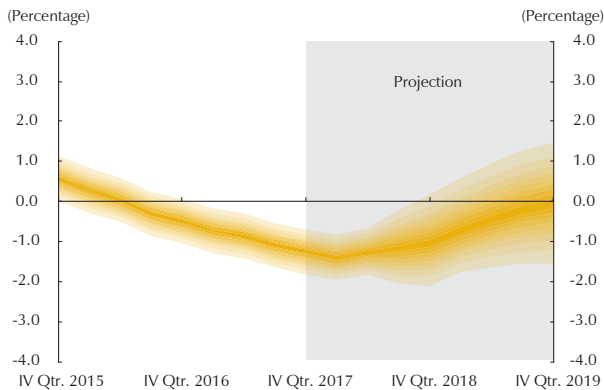
Source: *Banco de la República*.

report, weak pressure on prices from demand are still being expected at this time based on the fact that growth in 2018 will remain below the estimate for the long-term growth of the economy although it will be higher than what was estimated for 2017 as a whole.

That being the case, the output gap should remain in negative territory in 2018 at levels that are similar to those estimated for 2017 (Graph 33). Thus, the Colombian economy will continue to face excess productive capacity in the next few quarters. This will tend to limit the rises in an ample set of prices thus offsetting much of the upward pressure identified above. Due to that, declines in the pace of adjustment of various components of the baskets of tradables, non-tradables, and eating away from home in the food basket, etc., are anticipated.

For 2018 and 2019, the forecast does not anticipate inflationary pressure derived from the depreciation of the Colombian peso with respect to the US dollar and other currencies either. It provides for a relative stability in this variable, which is close to the average levels seen in 2017. This should facilitate the convergence of the annual change in the CPI for tradable goods with figures that are more compatible with meeting the inflation target of 3.0%. Even so, as has already been mentioned, the trajectory projected for the exchange rate does not fully compensate for the upward impact on inflation from the expected increase in crude oil prices for 2018.

It should be noted that the central forecast of *Banco de la República's* technical staff continues to expect a gradual normalization of the monetary policy in the advanced economies as was explained in Chapter I of this *Report.* In this situation, it is assumed that capital should continue to flow into the country without major changes in the relevant costs of financing thus giving the exchange rate stability.

The forecast for 2018 is that food prices will also continue to contribute to the reduction in consumer inflation. This takes into account the assumption that climatic conditions will be favorable for this year. Even though the La Niña climatic cycle is expected to continue evolving with increased rainfall through the beginning of the year, this would be weak and short-lived. According to the most recent reports from the main meteorological agencies in the world, this climatic condition is expected to extend into the first quarter of 2018. Similar episodes in the past have not had an adverse repercussion on the productivity of the agricultural sector at least insofar as the products that have the greatest weight in the basket of consumer goods are concerned. However, as will be mentioned later, the low prices seen throughout the second half of 2017 could generate an upward risk in 2018 since they could discourage production.

Graph 34
Annual Inflation Forecasts by Banks and Stockbrokers

(Percentage)

Legend
As of December of each year
12 months ahead
24 months ahead
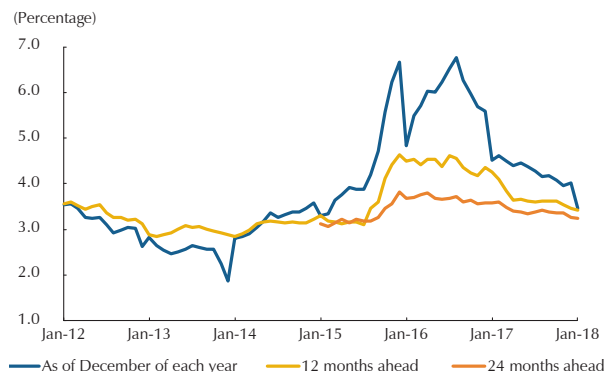
Source: *Banco de la República*.

Graph 35
Quarterly Survey: Inflation and Inflation Expectations
(for three, six, nine, twelve, and twenty-four months from now)
(annual inflation)l)

(Percentage)
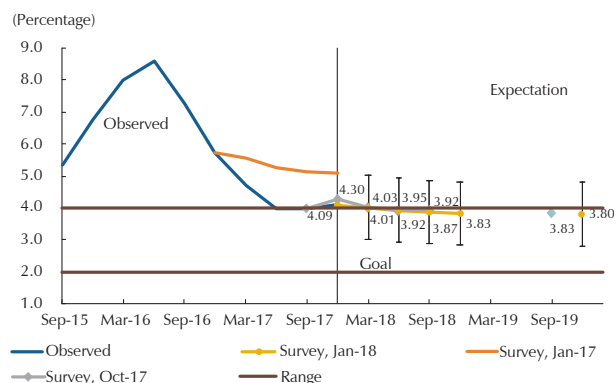
Note: The respective standard deviation is presented for each expectation.
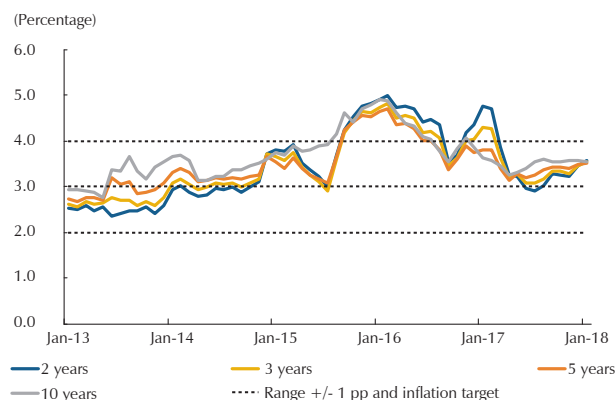Sources: DANE and *Banco de la República* (the quarterly survey of expectations)

Graph 36
Inflation Expectations derived from TES
(two, three, five, and ten years from now)
(monthly average)a/

(Percentage)

a/ Nelson and Siegel Methodology
Sources: *Banco de la República* (the quarterly survey of expectations).

Be that as it may, the convergence of inflation with its target will continue to be very gradual given that the persistence of the indexing mechanisms will continue to play an important role in the process of price formation and that inflation expectations still exceed 3.0%. All of this is holding the persistence of inflation at relatively high levels compared to what seen before 2015.

Thus, with regard to inflation expectations, the central forecast scenario includes levels that are close to 3.5% for the end of 2017 just as the various surveys and indicators available suggest. Therefore, inflation expectations will probably have declined compared to what was seen in the first half of the year but remain relatively stable in relation to what was presented in the September report and continue to stay above the long-term target of 3.0% established by the BDBR.

The monthly survey of market participants and analysts using information from the beginning of January indicated that the inflation expected as of December 2018 was 3.47% and that 3.33% would be expected for a year from then. In the September *Report*, expected inflation in the first case was 3.58% (Graph 34).

The quarterly survey of business owners, analysts, and trade unions, in turn, also done at the beginning of January, showed inflation expectations for twelve months from now at 3.83% which is a little lower than the results of the survey done three months earlier (3.92%). For a horizon of 24 months, the result at this time was 3.83%, practically the same as the one obtained in the September *Report* (Graph 35).

However, the expectations for different horizons derived from the TES yield curve in mid-January 2018 rose compared to what had been obtained in mid-October. Currently, the inflation expected for two, three, and five years ahead is 3.57%, 3.56%, and 3.53%, respectively, according to this methodology. Three months ago, these values were as follows: 3.25%, 3.35%, and 3.44% (Graph 36).

The decline in annual consumer inflation expected for 2018 should be concentrated in the first quarter of the year. This is due to the fact that, during those months, the upward shock that hit the price levels and annual inflation during the same period last year is probably dissipating as a result of the increase in indirect taxes associated with the tax reform that went into effect at that time. The largest decreases should be seen in the CPI for tradables.

To summarize, the convergence of inflation with the long-term target over the next two years is still anticipated in this *Report* and will likely close 2018 with a figure that is about 3.5%. However, the speed of convergence is now somewhat slower than what was contemplated in the *September Inflation Report*. The reasons for that and for the rise in the central forecast scenario have to do with an upward revision in the price for oil, which, nonetheless, will probably be transitory. This would have an impact on the regulated prices in particular. Added to that is the fact that expectations for and the persistence of inflation in Colombia will probably remain relatively high, something that the increase in the minimum wage decreed for 2018 did not help. A greater appreciation of the exchange rate could speed up the convergence provided that the rise in the price for crude oil is more permanent in nature and is moderately passed on to the prices for regulated items and imported raw materials.

2. Balance of Risks

The balance of risks for total consumer inflation and for inflation excluding food and regulated items is given in the fan charts in Graphs 37 and 38. For this Report, a fan chart for a more balanced total inflation than that which was presented in the September *Report* is estimated. The balance of risks was built on the basis of the central forecast for total annual inflation and for inflation excluding food and regulated items both of which are derived from the PATACON model. The risks considered in the construction of the fan chart are presented below.

Graph 37
Fan Chart of Headline Inflation
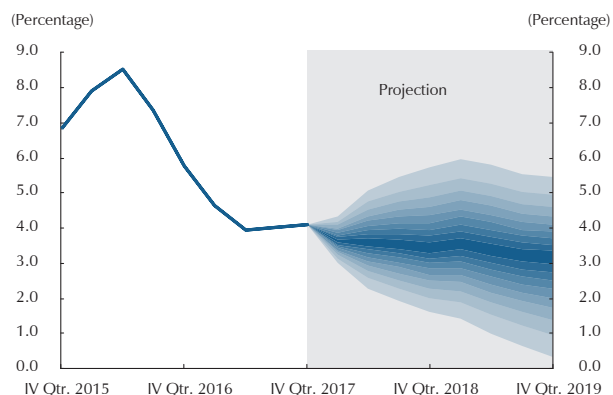
Source: DANE, calculations by *Banco de la República*

Graph 38
Fan Chart of Inflation excluding food and regulated items
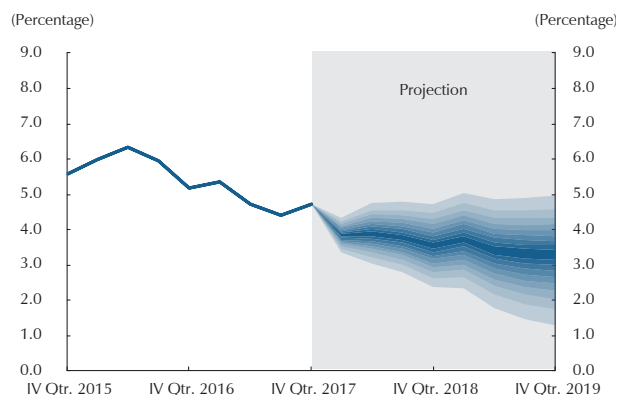
Source: DANE, calculations by *Banco de la República*

The main downward risks are:

A price for crude oil that is higher than what was projected in the central forecast: in the last few weeks, there has been a substantial increase in the international price for oil to levels close to USD 70 per barrel which is significantly above the one used in the central forecast for this Report (USD 60 per Brent barrel) that assumes that a large part of these increases are transitory. Nevertheless, the chance that the high prices will be sustained for a longer period of time than envisaged is not ruled out considering the discipline that the OPEC countries have shown in complying with the limitation quotas for their oil supply. Added to that are some significant reductions in Middle Eastern countries due to complex geopolitical situations. Furthermore, in spite of the fact that there has been an increase in production in the United States, a significant part of this has been absorbed by demand, especially their own. The rest of the world demand, furthermore, could be showing higher growth, particularly in China and Europe. A higher price could affect inflation in a number of ways (including, the rise in prices for regulated items); however, as stated in this document, the main impact will probably be to further strengthen the peso given the trend that the central forecast considers for this variable. This could make a faster than expected convergence of inflation with its target possible, especially due to the downward pressure that it would generate in the prices for tradable goods and services.

Domestic demand that grows less than expected: the central forecast scenario includes growth of domestic demand (consumption plus investment) that would surge in 2018 compared to 2017. This is primarily because of the lagged positive impact that the relief resulting from the 2017 tax reform for companies is expected to have. This relief should spur investment, as should the significant contribution that public works could have. However, confidence problems that are part of projects such as the 4G concessions, the greater uncertainty due to the political cycle, the still low levels of household confidence, and the recent increases in the unemployment rate in urban areas could penalize investment and consumption more than is anticipated in this Report. If these risks should materialize, they could translate into lower economic growth in 2018 than has been predicted and a more negative output gap with greater excesses of productive capacity. All of this could result in downward pressure on prices.

The main upward risk considered in this Report is:

Variations in food prices that are above what has been projected in the central forecast: after a significant downward correction in the food prices during 2017 caused in particular by the recovery of the supply starting in the second quarter of 2018, some upswings are expected given the usual cycle of these prices which is the result of the web effect that characterizes the price-supply interaction. Nevertheless, the current forecasting exercise, which provides for a less than 3.0% change in the CPI for food over the course of 2018, could be underestimating these rises. Higher prices and food price inflation will

probably penalize the performance of total inflation not only directly but also indirectly and permanently through the impact they have on expectations and the activation of indexing mechanisms.

When this *Report* was underway, the risks weighing on the cost of foreign financing in Colombia were not clear. This will depend on the evolution of monetary policy in the advanced economies and, in particular, on how fast the Fed in the United States raises their policy interest rate. The emergence of inflationary pressure in these countries is something that cannot be ruled out given how dynamic their economies are showing themselves to be. In view of this, a normalization of the monetary policy stance can be expected that is faster than what is anticipated in this *Report*. This could generate pressure on the currencies of emerging economies such as Colombia through higher financing costs with the resulting upward impact on consumer prices.

In line with the set of risks presented, the fan chart suggests that the probability that total inflation will be below 4.0% in 2018 is 62.0% and that it will rise in 2019 is 75.3% (Tables 8 and 9). The balance of risks for the end of 2018 varied with respect to what was presented in the two previous reports due to the fact that certain upward risks materialized and caused the most probable value in the inflation forecast (baseline scenario) to grow a little as has already been mentioned. It should be noted that the range of the function of forecast density that is shown in Graphs 39 only includes 90% of this based on the shaded area. These results, just like the central forecast, assume an active monetary policy in which the policy rate of interest of *Banco de la República* is adjusted in order to guarantee that the target is reached. With respect to that it should be noted that starting in 2018, the number of regular meetings in which the BDBR discusses and decides on the monetary policy stance was reduced (from twelve to eight) as is explained in Box 1 of this *Report*.

Table 8
Estimated Probability of Inflation in December 2018 standing between 2.0% and 4.0% (percentage)

Report	Probability
June 2017 *Report*	44.65
September 2017 *Report*	47.59
December 2017 *Report*	53.27

Source: calculations by *Banco de la República*

Table 9
Probability Ranges of the fan chart for Headline Inflation
(percentage)

Range	2018	2019
< 2.0	8.68	27.50
2.0 - 2.5	9.05	11.03
2.5 - 3.0	13.14	12.35
3.0 - 3.5	15.62	12.72
3.5 - 4.0	15.46	11.73
> 4.0	38.05	24.67
Entre 2 y 4	53.27	47.83

Source: calculations by *Banco de la República*

Graph 39
Cross-section of the fan chart for Headline Inflation for
December 2018

(Density function)

■ December 2017 Report — September 2017 Report ⋯⋯ June 2017 Report
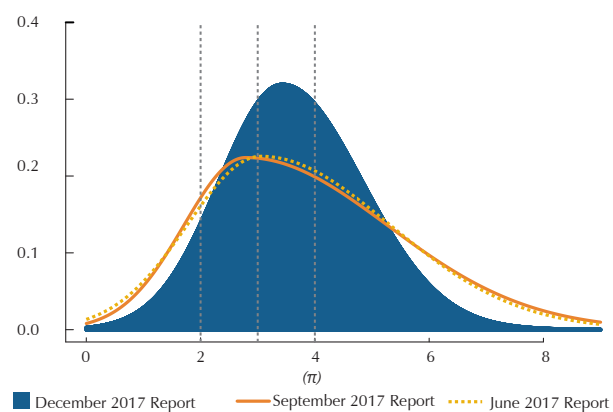
Source: *Banco de la República*.

Box 2
REDUCTION IN THE FREQUENCY OF MONETARY POLICY MEETINGS

At their meeting on Friday, November 24, 2017, the Board of Directors of *Banco de la República* (BDBR) decided that, starting in 2018, although they will continue to meet twelve times a year, they will make decisions about the level of the benchmark interest rate in only eight of those meetings.

Those meetings for monetary policy decisions will be the ones held in the months of January, March, April, June, July, September, October, and December. In selecting these, the publication schedule for the main macroeconomic variables of the country was taken into account.

This change makes it possible to improve the analysis and prognosis of the economy that serves as a support for monetary policy decision-making.

In an inflation targeting plan, which is what is used to guide monetary policy in Colombia, the central bank adjusts its policy stance in accordance with the study of the current state and the outlook for the economy as well as with the evaluation of the forecast of inflation with respect to the target and of economic activity compared to its potential capacity.

Monetary policy decisions face a high level of uncertainty and require careful analysis of the possible trends that the macroeconomic data show. Likewise, to strengthen the analysis, it is important to consider different viewpoints as well as the interaction and feedback between the members of the Board and the technical staff. In this respect, a decision made with fewer time constraints makes it possible to improve this interaction and makes the analysis that supports it more robust. In addition, the reduction in the frequency of the meetings and, therefore, the regularity of reviews of the analysis and of the policy stance turns out to be more in line with frequency with which some fundamental variables are calculated for that analysis (e.g., GDP, balance of payments).

Colombia is not the first country to reduce the frequency of their monetary policy meetings. Recently, in September 2017 the Central Bank of Chile also announced some modifications in its schedule for policy meetings starting in 2018. These changes include a reduction in the number of meetings from 12 to eight per year.

The same reduction was implemented by the Bank of England in 2015 based on an analysis carried out during 2014 which included, as one of the essential elements, an independent report prepared by Kevin Warsh, a former member of the Board of Governors of the US Federal Reserve (Warsh, 2014).

Warsh (2014) justifies this modification based on the following arguments. First of all, a cycle of high frequency meetings takes up a lot of the technical staff's and the Board members' time in the preparation process for the policy meeting and leaves less space for the longer term analysis which is relevant for the soundness of the decisions and their effective communication. Second, the uncertainty that the process of monetary policy decision-making faces requires looking at persistent movements in the data that are being monitored rather than changes that can be attributed to short-term volatility. Third, it is unnecessary to have, on the one hand, markets frequently held in a waiting mode and on the other, the committee that makes the decision revise their analysis (and policies) much more often than some macroeconomic variables relevant to those decisions are calculated.

In addition to the above mentioned, other economies (South Korea, Israel, Japan, and the euro area) have also reduced the frequency of their monetary policy meetings recently to eight per year. Other countries (e.g., Brazil, Canada, the United States, Iceland, Mexico, and the Czech Republic) have had eight meetings for several years. Table B1.1 presents the number of monetary policy meetings per year in the cases of 28 economies: in most countries, the central banks follow the inflation targeting plan for guiding monetary policy.

The change made by the BDBR affects only the frequency of monetary policy meetings. The other issues within the competence of the Board will continue to be discussed in all the monthly meetings. It should be noted that this does not modify the authority of the Board to make policy decisions in the other four ordinary meetings or to convene extraordinary policy meetings when it is considered necessary on the grounds of an exceptional situation. Neither does it affect the publication months for the Inflation Report written by the Bank's technical staff, which will continue to be published quarterly in February, May, August, and November.

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Warsh, K. (2014). "Transparency and the Bank of England's Monetary Policy Committee", Bank of England, December.

Table B2.1
Frequency of Monetary Policy Meetings in Some Economies

Central Bank	Number of Meetings	Months in which meetings are held
Australia	11	All except January
Brazil	8	January, March, April, June, July, August, October, and November
Canada	8	January, March, April, May, July, September, October, and December
Chile	8	January, March, May, June, August, September, October, and December
Colombia	8	January, March, April, June, July, September, October, and December
South Korea	8	January, February, April, May, July, August, October, and November
United States	8	January, March, April, June, July, September, November, and December
Philippines	8	February, March, May, June, August, September, November, and December
Guatemala	8	February, March, April, May, June, August, September, and November
Hungary	12	All
Indonesia	12	All
England	8	February, March, May, June, August, September, November, and December
Iceland	8	February, March, May, June, August, October, November, and December
Israel	8	January, February, April, May, July, August, October, and November
Japan	8	January, March, April, June, July, September, November, and December
Mexico	8	February, March, May, June, August, September, November, and December
Norway	8	January, March, May, June, August, September, October, and December
New Zealand	7	February, March, May, June, August, September, and November
Peru	12	All
Poland	12	All
Czech Republic	8	February, March, May, June, August, September, November, and December
Romania	8	January, February, April, May, July, August, October, and November
Serbia	12	All
South Africa	6	January, March, May, July, September, and November
Sweden	6	February, April, July, September, October, and December
Thailand	8	February, March, May, June, August, September, November, and December
Turkey	8	January, March, April, June, July, September, October, and December
Euro zone	8	January, March, April, June, July, September, October, and December

Source: Central Banks (electronic survey)

ANNEX
MACROECONOMIC FORECASTS BY LOCAL AND FOREIGN ANALYSTS

A summary is presented in this Appendix of the most recent projections by local and foreign analysts for the main variables of the economy for 2018 and 2019. At the time they were consulted, the agents had information up to Monday, January 22, 2018.

1.   Projections for 2018

On average, the local analysts expect an economic growth of 2.4%, which is the same as the estimate in the Inflation Report from the previous quarter.

Table A1
Projections for 2018

	Growth of the Real GDP	CPI Inflation (percentage)	Nominal Exchange Rate	Nominal TDR (percentage)	Fiscal Deficit (percentage of GDP)	Unemployment Rate in thirteen cities (percentage)
Local Analysts						
Alianza Valores[a/]	2.5	3.5	3,200	4.4	3.4	9.0
ANIF	2.3	3.3	n. d.	4.6	2.4	10.7
Banco de Bogotá[a/]	2.5	3.4	3,000	4.5	3.1	9.9
Bancolombia[a/]	2.5	3.5	2,995	4.9	3.3	10.2
BBVA Colombia[a/]	2.0	3.1	3,000	4.4	3.6	11.2
BTG Pactual	2.3	3.3	3,070	n. d.	3.1	9.6
Corficolombiana	2.6	3.3	2,900	4.5	3.2	10.5
Corredores Davivienda[a/ c/]	2.3	3.8	3,065	4.5	3.3	10.8
Credicorp Capital[d/]	2.3	2.9	2,900	4.2	2.5	10.8
Davivienda[a/]	2.3	3.8	3,065	4.5	3.3	10.8
Fedesarrollo[a/]	2.4	3.5	n. d.	n. d.	3.4	n. d.
Itaú[a/, b/]	2.5	3.4	3,050	4.0	3.2	10.8
Ultraserfinco[e/]	2.5	3.5	2,890	4.4	3.2	9.7
Promedio	2.4	3.4	3,012	4.4	3.1	10.3
Analistas externos						
Citibank Colombia	2.5	3.1	3,025	4.5	3.3	10.4
Deutsche Bank	2.6	3.0	n. d.	n. d.	3.3	9.8
Goldman Sachs	2.5	3.1	3,000	n. d.	3.2	n. d.
JP Morgan	3.0	3.9	3,150	n. d.	3.1	n. d.
Promedio	2.7	3.3	3,058	4.5	3.2	10.1

a/ The deficit forecast is from the CNG
b/ Formerly Corpbanca, until June 2017.
c/ Formerly Corredores Asociados.
d/ Formerly Correval.
e/ Formerly Ultrabursátiles.
n. a.: not available
Source: *Banco de la República* (electronic survey).

Table A2
Projections for 2019

	Growth of the Real GDP	CPI Inflation	Nominal Exchange Rate
	(percentage)		
Local Analysts			
Alianza Valores	2.7	3.4	3,300
ANIF	3.0	3.5	n. d.
Banco de Bogotá	3.0	3.0	3,030
Bancolombia	3.2	3.9	3,000
BBVA Colombia	3.0	2.8	2,953
BGT Pactual	2.7	3.2	3,100
Corficolombiana	3.3	3.5	2,900
Corredores Davivienda[b/]	3.1	n.d	n. d.
Credicorp Capital[c/]	2.8	3.3	2,800
Davivienda	3.1	n.d	n. d.
Fedesarrollo	2.8	3.0	n. d.
Itaú[a/]	3.2	3.0	3,070
Ultraserfinco[d/]	2.8	3.2	2,900
Average	**3.0**	**3.3**	**3,006**
Foreign Analysts			
Citibank-Colombia	3.1	3.0	2,893
Deutsche Bank	3.0	3.4	n. d.
Goldman Sachs	3.3	3.0	3,000
JP Morgan	3.2	3.5	n. d.
Average	**3.2**	**3.2**	**2947**

a/ Formerly Corpbanca, until June 2017.
b/ Formerly Corredores Asociados.
c/ Formerly Correval.
d/ Formerly Ultrabursátiles.
n. a.: not available.
Source: *Banco de la República* (electronic survey).

Moreover, the foreign entities who were consulted projected an average expansion of 2.7% for the GDP.

In terms of prices, local analysts estimate an inflation rate of 3.4% and the foreign analysts anticipate a figure of 3.3% at the end of the year. Both forecasts are within the 2.0% to 4.0% range around the inflation target set by the Board of Directors of *Banco de la República* (BDBR) for 2018 but above the long-term inflation target (3.0%).

With respect to the exchange rate, national analysts expect the market exchange rate (MER) to end the year at an average value of COP 3,012 compared to the COP 3,030 estimated in the survey mentioned in the previous report. The foreign analysts forecast a MER that is close to COP 3,058 for the close of the year.

Local analysts are projecting average values of 4.4% for the rate for fixed term deposits (FTD). In addition, they expect the unemployment rate to be at 10.3%.

2. Projections for 2019

National analysts expect an economic growth of 3.0% for 2019 while foreign analysts expect one of 3.2%. With respect to inflation, local and foreign analysts estimate that it will be 3.3% and 3.2% respectively. Regarding the nominal exchange rate, national entities expect average values of COP 3,006 and foreign entities expect average values of COP 2,947.