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Note:

Starting with this edition, Chapter 5 “Risks to Macroeconomic Stability” will not be published.

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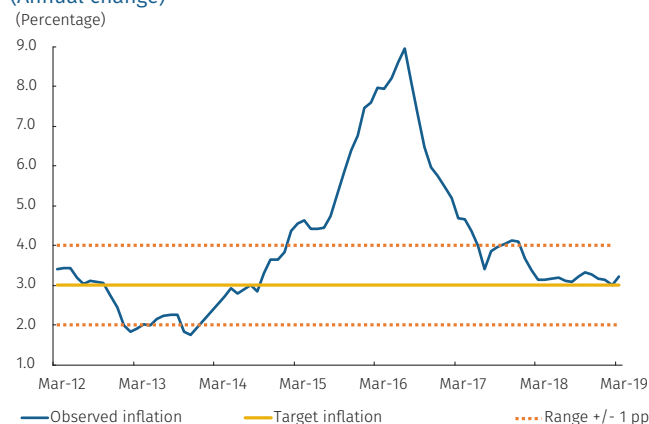
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Inflation Developments and Monetary Policy Decisions

In the first quarter of 2019, inflation and core inflation indicators fell more than had been forecast in the previous Report, and remained close to the 3.0% target. Inflation expectations at different horizons decreased slightly and stand around observed inflation. The new figures for economic activity suggest that economic growth is still recovering from product levels lower than the country's natural output level. The current monetary policy stance is slightly expansionary.

Graph A
Consumer Price Index
(Annual change)



Sources: DANE and *Banco de la República*.

In March, inflation stood at 3.21% (graph A) and the average of core inflation indicators is 2.82%. These figures are lower than was expected a quarter ago and close to the 3.0% inflation target. The lower actual inflation versus the forecast is explained mainly by tradables (0.9%) and non-tradables excluding food and regulated items (3.29%). Factors such as the scarce pass-through of the depreciation of the peso to domestic prices, the indexation of some prices to inflation last December (3.18%), and the spare capacity of the economy explain much of this behavior. Similar to the expectations, the food CPI (3.26%) continued to accelerate, especially due to the group of perishable goods. On the contrary, regulated items (6.42%) increased more than had been projected due to the increase in the rates for public utilities.

With this context, inflation expectations declined slightly in April 2019. Those of analysts to different horizons ranged between 3.25% and 3.28%, and those embedded in public debt bonds to two, three, five, and ten years stood between 3.0% and 3.5%.

The behavior of inflation and inflation expectations in the first quarter of 2019 took place in a context of negative output gap, with a domestic demand that would have continued to recover, thanks to the behavior of public spending and investment, mainly in civil works. Foreign trade indicators allow to forecast an increasingly

negative contribution from net exports. With this information, the Central Bank's technical staff believes that economic growth for the first quarter would be about 3.2%.

As for credit, in the first quarter, the banking loan portfolio in local and foreign currency addressed to companies maintained a low annual growth (3.1%). If direct external credit in foreign currency and bonds issued by companies in local currency were added to this portfolio, the commercial debt would have been more dynamic. The consumer loan portfolio continued to accelerate, while the mortgage credit growth has moderated. Both recorded annual increases close to 10%. Real interest policy rates as well as those for commercial credit, mortgage and consumption (except credit cards) stand at levels below the averages of the past ten years.

Compared to the previous Inflation Report, for all 2019, the technical staff at the Central Bank maintained the forecast for oil prices relatively stable; reduced the expected paths of economic growth of the country's trading partners and of the cost of external financing; increased slightly the forecast of economic growth for Colombia (from 3.4% to 3.5%); and reduced the expected path of inflation.

At the time of this Report, the announcements by the FED suggested greater downside risks to economic growth in the United States, compared to a quarter ago. The expectations of economic growth also moderated in the euro zone and in other advanced and emerging economies. These facts, together with the absence of inflationary pressures, led the national central banks of these countries to announce a pause in their process of normalization of monetary policy in 2019.

So far this year, the price of oil has increased, largely due to global supply restrictions. However, the futures market and the average by analysts see this trend as transitory. In this environment, for 2019, the technical staff at the Central Bank forecasts an average price of USD 63.4 per barrel (before: USD 63 per barrel).

The economic growth forecast of the technical staff for 2019 increased from 3.4% to 3.5%. According to the new projection, domestic demand would accelerate mainly due to a recovery of investment, caused in part by the positive effect of the Financing Act and by the greater dynamism of civil works (4G). The better conditions for external financing, the slowdown of trading partners, and the lower expected path of oil prices *vis-à-vis* 2018 would be reflected in a widening of the trade and the current account deficits. The output gap would close partially in 2019.

The inflation forecast fell slightly suggesting that in the remainder of the year and in 2020 inflation would remain within a range between 3.0 and 3.3%. The CPI for regulated items is expected to

slow down, but supply constraints (mainly in energy) would maintain their growth above 5.0%. The food CPI would continue with rates of increase somewhat higher than the target. Inflation excluding food and regulated items (which stood at 2.38% in March 2019) would converge to 3.0% driven by the gradual closing of the output gap and by the annual nominal depreciation observed and expected and its transfer to domestic prices.

In all, the economy is still recovering from an output level lower than its long-term value. Inflation and inflation expectations stand somewhat above the target, and the average of core inflation indicators is slightly below 3.0%. The monetary policy stance is slightly expansionary. The external and internal factors of the economy suggest a gradual closing of the output gap, convergence of core inflation to the target, and a widening of the external deficit in 2019.

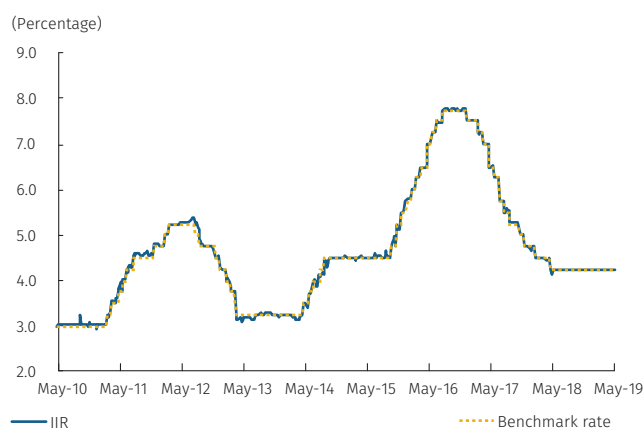
Based on this information, the Board of Directors (BDBR) in its meetings in March and April 2019 considered the following factors to reach a decision:

- Observed inflation will be close to the target and the upside risks are low.
- The spare capacity of the economy and the uncertainty about the pace of its reduction.
- The effects derived from external conditions on the Colombian economy remain uncertain.

In this environment, upon assessing the situation of the economy and the risk balance, the Board deemed appropriate to maintain the benchmark interest rate at 4.25% (graph B).

The Board of Directors will continue to carefully monitor the behavior of inflation and the forecasts of economic activity and inflation in the country, alongside the international situation. Finally, the Board reiterates that monetary policy will depend on the new information available.

Graph B
Banco de la República's Benchmark Interest Rate and the Interbank Interest Rate (IIR)
(2010-2019)^{a/}



a/ The figures correspond to working days. The last figure is for 14 May 2019.
Sources: Office of the Financial Superintendent of Colombia (*Superintendencia Financiera de Colombia*) and Banco de la República.

Juan José Echavarría
Governor

01

The International Context and Balance of Payments

In this report, the cost of international financing is expected to be lower in the next two years than previously estimated.

The price of oil has exceeded the forecasts presented in the previous report. However, this would be a transitory occurrence.

The current account deficit increased in 2018, a trend that would continue during 2019, mainly due to deterioration of the trade balance.

1.1 The International Context

The first quarter of 2019 saw an improvement in international financial conditions, following the deterioration registered at the end of 2018. The rebound observed in the demand for higher-risk assets on international financial markets was due largely to several factors, namely a shift on the part of the major central banks of the advanced economies towards a monetary policy that would remain expensive for longer and the progress made in trade negotiations between the United States and China.

In this environment, we have seen an increase in the main stock indexes, a downward trend in long-term interest rates on bonds in the advanced economies, and a reduction in indicators of financial volatility. At the same time, the risk premia of the Latin American economies have declined for several months in a row, while their exchange rates, on average, have remained relatively stable, including the rate for the Colombian peso.

The forecast for growth of the country's trading partners in 2019 and 2020 was revised downwards slightly. However, it is higher than what was observed in 2015 and 2016.

In addition, international oil prices have trended upward so far this year and are currently above the forecast in the last *Inflation Report* (USD 62 per barrel). This increase is largely the result of actual and anticipated supply restrictions in the crude oil market. However, in this report, these increases still are regarded as temporary and are expected to revert in the coming months, when prices converge towards more sustainable levels.

On the other hand, the economic results in some of the monitored countries have been less than expected. This fact and the persistent swindling growth in world trade, exacerbated by the restrictions imposed in 2018, suggest the slowdown in global economic activity at the beginning of 2019 would be more than was predicted in the last quarterly report.

Taking all of this into account, the growth of Colombia's trading partners in 2019 and 2020 was revised downward somewhat in this report. Also, given the rise observed in oil prices, the projected average price for 2019 was increased marginally, while the 2020 forecast was left unchanged. On the other hand, the central banks of the advanced economies are expected take a break from their monetary-policy normalization processes in during 2019, according to what was announced at their latest meetings. This would translate into lower external financing costs for Colombia and other emerging economies in the coming quarters, compared to those anticipated in the last edition of this report.

1.1.1 Real Activity and Inflation

In 2018, the US economy completed nine consecutive years of growth. This is one of the longest cycles of expansion in its history and, in recent quarters, that economy would have continued to grow at a rate above its potential level.

However, some of the indicators available at the beginning of 2019 suggest more weakening in the US economy than what the market expected. Coupled with the possible impact the partial shutdown of the federal government¹ could have on first-quarter growth in 2019, this prompted analysts to lower their forecast for US economic growth and assign more likelihood to a sharp slowdown in a year or more. At the statistical close of this report, it was known that annualized quarterly (a.q.) growth in real domestic product (GDP) during the first quarter

In recent quarters, the United States economy continued to grow above its potential level.

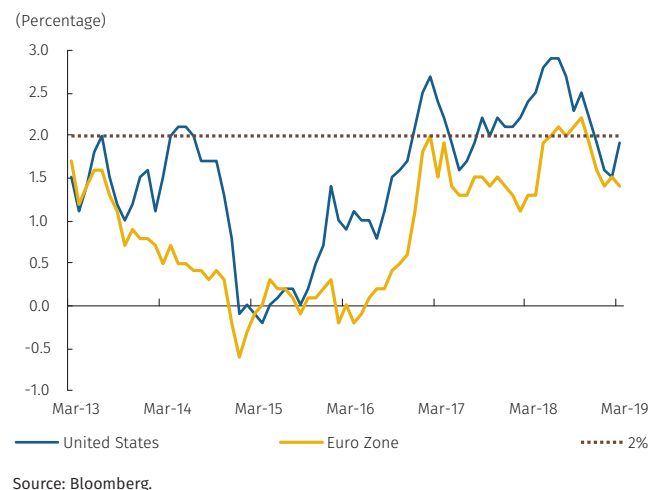
¹ This partial shutdown of the federal government, which occurred between December 22, 2018 and January 25, 2019, came to 35 days and was branded as the longest in the history of the United States.

of 2019 was 3.2%, which is more than the market expected.² However, although this figure represents a surge,³ it was explained by factors that might not be maintained going forward, such as exports, investment in inventories and government spending. On the other hand, non-residential consumption and investment, which are the main components of domestic demand, slowed.

Economic activity in the euro zone continued to weaken during the final quarter of 2018 compared to the first half of that year. Specifically, real GDP in the fourth quarter was up 0.2% with respect to the previous period and 1.2% compared to the same quarter in the previous year, which was less than what the market expected. In the first quarter of 2019, the indicators at hand point to added weakness in the bloc's economic activity as opposed to what was forecast a few months ago, although some acceleration in growth continues to be expected to the extent that certain temporary shocks are dispelled.

By March, the relatively strong economic momentum in the United States had yet to translate into clear inflationary pressure. In fact, headline consumer inflation showed no changes in March 2019 (1.9%) with respect to the December 2018 figure. For its part, the annual variation in prices in the euro zone dropped, going from 1.6% in December 2018 to 1.4% in March 2019 (Graph 1.1). In both cases, core inflation has declined slightly in recent months, having been 2.0% and 0.8% in March, respectively. The inflation expectations for the rest of 2019 and for 2020 have also decreased in the last few months and are near their long-term target, reflecting a scenario of lower inflationary pressures in these economies.

Graph 1.1
United States and the Euro Zone: Annual Inflation



1.1.2 Commodity Prices

With respect to international prices for Colombia's export commodities, one highlight is the upward trend observed in the oil industry so far this year. In the last month, this raw material was quoted above USD 70 per barrel (Brent), bringing the average price for 2019 to USD 65.6 per barrel by April 26 (Graph 1.2). This increase is related largely to the supply cuts applied by the Organization of Petroleum Exporting Countries (OPEC) and its allies, the additional cuts by Saudi Arabia,

² In mid-April, the analysts surveyed by Bloomberg forecast 1.6% growth (a.q.) for the first quarter of 2019, on average.

³ This figure pertains to a quarterly growth rate of 0.8%, which is higher than the 0.5% (2.2% a.q.) registered in the fourth quarter of 2018.

US sanctions on crude oil exports from Iran and Venezuela, and the conflict in Libya.

As for terms of trade, a recovery was observed up to February 2019, thanks to the hike in oil prices. However, the levels recorded so far this year represent a drop with respect to 2018 (Graph 1.3). On the other hand, the prices of imported goods declined, in keeping with international inflation.

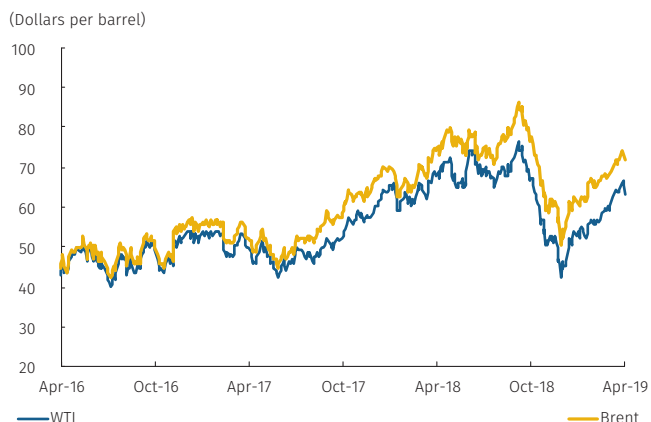
1.1.3 Monetary Policy and Financial Markets

During the first quarter of the year, the United States Federal Reserve (Fed) and the European Central Bank (ECB) made no changes their benchmark interest rates. Additionally, rising concerns about growth in the advanced economies, coupled with the absence of inflationary pressures, led these central banks to announce they would halt their monetary policy normalization processes temporarily during 2019.

Such is the case in the United States. A change in the tone of its announcements was observed throughout the quarter, suggesting that country's monetary policy would remain expansionary. The projections made by the members of the Federal Open Market Committee (FOMC) in March were along those lines and do not include interest rate hikes in 2019 (two increases less, as opposed to what was published in December 2018). Moreover, it was announced that the final phase of the reduction in its balance sheet will begin in May and end in September of this year.

For its part, the ECB announced there will be no changes in its benchmark rates during 2019 and it will continue, for an extended period of time, to reinvest all payments for maturing securities acquired through its asset purchase program (APP).

Graph 1.2
International Oil Prices (Brent and WTI)



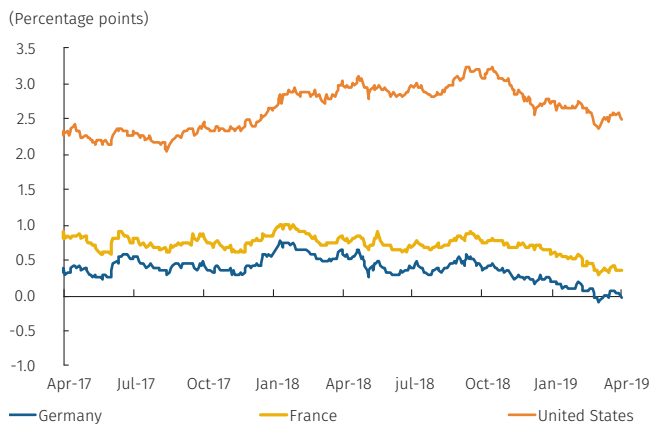
Source: Bloomberg.

Graph 1.3
Terms of Trade Index
(Foreign trade methodology)^{a/}



a/ For further details, see <http://www.banrep.gov.co/es/indice-terminos-intercambio>
Source: Banco de la República

Graph 1.4
Interest Rates on Certain 10-Year Sovereign Bonds



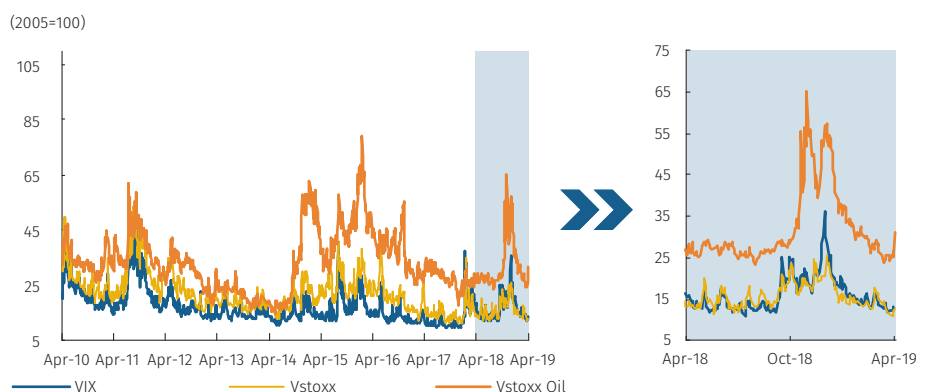
Source: Bloomberg.

The developments described above resulted in a reassessment of what investors expect⁴ in terms of monetary-policy normalization, which would have been transmitted in advance to long-term US Treasury bonds, particularly the 10-year bonds, with yields descending to levels not witnessed since the end of 2017 (Graph 1.4).

The foregoing, coupled with the increase in optimism regarding a possible agreement to end the trade dispute between the United States and China, favored a rise in the demand for what are considered to be riskier assets. This has been reflected in an increase in the major stock indexes and in a reduction in financial volatility indicators and country risk premia (Graph 1.5).

In fact, the sovereign risk premia of some of these economies have declined during the year to date. Again, the fundamentals and the specific political factors in each country have contributed to differences among the group's economies. In the case of the countries in the region, the majority have seen a decline in country risk for several consecutive months. However, in the case of the largest economies (Brazil and Argentina), a rise in sovereign risk was observed during the last month, given persistent uncertainty about the success of current government policies. On the other hand, exchange rates have remained relatively stable so far this year, including the rate for the Colombian peso (Graphs 1.6 and 1.7).

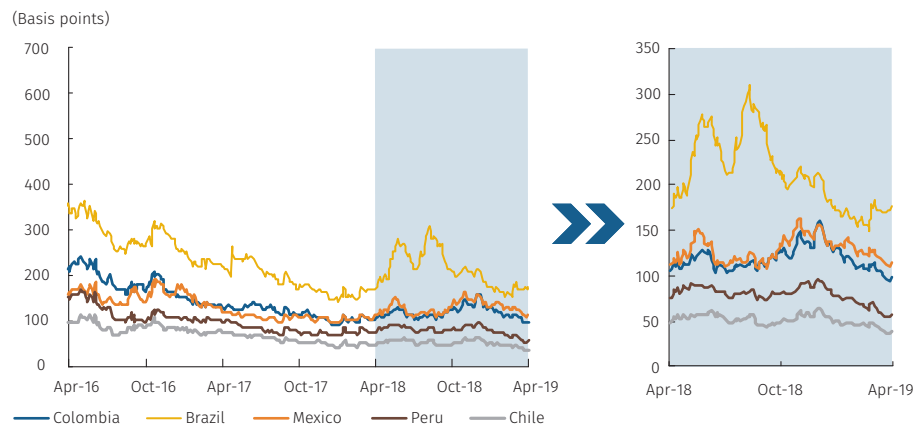
Graph 1.5
Financial Volatility Indexes



Source: Bloomberg.

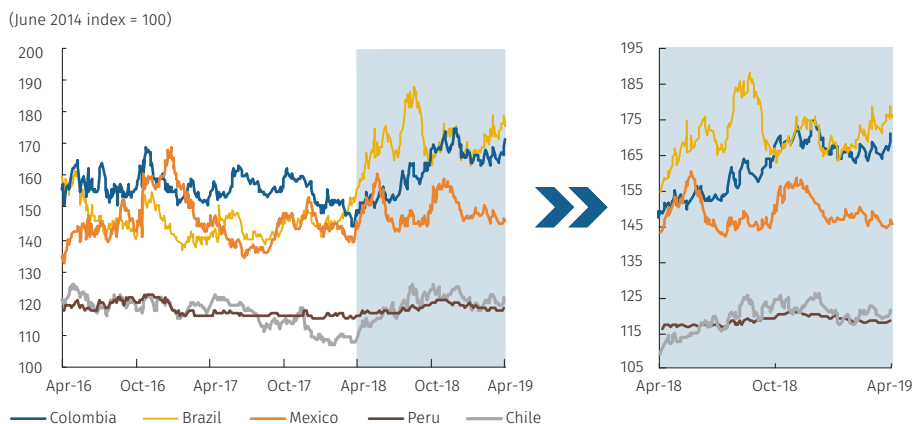
4 By April 26, Bloomberg's data on an increase or decrease in the Fed policy rate, derived from futures, pointed to a 66.4% probability of at least one reduction by the end of 2019, while the probability of current levels being maintained was only 33.6%. Another measure is the distribution of probabilities of potential increases in the interest rate, extracted from market prices, and published by the CME Group, which also shows that by December 2019 the probability of at least one reduction (64.8%) is greater than the probability of no changes in this rate (35.2%).

Graph 1.6
Five-year Credit Default Swaps (CDS) for Several Latin American Countries



Source: Bloomberg.

Graph 1.7
Exchange Rate Index for Several Latin American Countries



Source: Bloomberg.

In this environment, the first quarter witnessed a recovery in capital flows to emerging economies, concentrated mainly in January, compared to what was observed in the last quarter of 2018. According to estimates by the Institute of International Finance (IIF), total capital flows to emerging economies went from USD 11 billion, on average, to USD 36.4 billion between the fourth quarter of 2018 and the first quarter of 2019. In the case of Latin America, these amounts were USD 2.5 billion and USD 6.9 billion, respectively.

1.1.4 Forecasts Developed by Banco de la República's Technical Staff

Taking into account the information at hand, the forecast for economic growth in 2019 and 2020 with respect to Colombia's trading partners was revised downwards slightly, compared to the respective forecasts in the December report.

As for 2019, a slowdown in the advanced economies is anticipated, consistent with less growth in world trade, the fading effects of the fiscal stimulus in the United States, and the impact of monetary-policy normalization in 2018. According to the baseline scenario, consumption and investment would continue to be the driving force of growth in those economies.

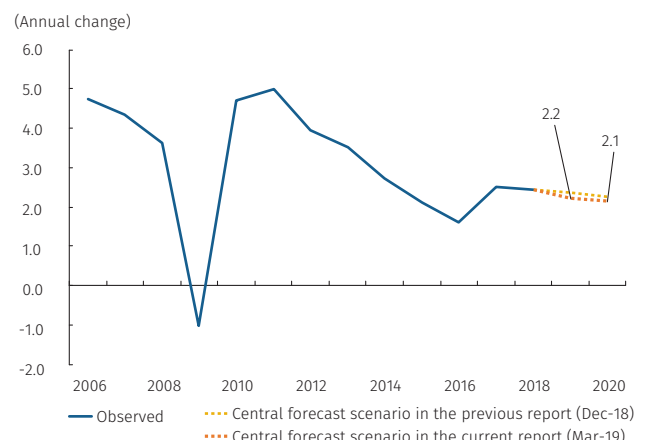
The emerging economies are expected to see somewhat more moderate growth in their output during 2019. This would be due to several factors; namely, the process of reconversion in the Chinese economy towards a more sustainable growth model, the trade barriers imposed by the United States, which predominately affect China, and an economic downturn in other countries. As for the Latin American economies, the largest ones (Brazil and Argentina) are expected to register better economic performance in 2019, given their extremely poor performance in recent years. For the rest of the economies relevant to Colombia, a slowdown in their growth rates is forecast versus what was observed in 2018.

Accordingly, the forecast for the country's trading partners (excluding Venezuela) in terms of economic growth (non-traditional trade weighted) is 2.2% annually for 2019.⁵ This would represent a slowdown with respect to the same estimate for 2018 (2.5%).

This slowdown would continue in 2020, together with a growth rate for the advanced economies that is closer to their potential level and a slower rate of expansion in the Chinese economy. Consequently, for this year, Colombia's trading partners are expected to see 2.1% growth (Graph 1.8), which is still higher than what was observed in 2015 and 2016 (1.9% on average). Table 1.1 shows the revisions of the individual forecasts in the baseline scenario with respect to the previous report.

The forecasts described above for Colombia's trading partners are lower than those presented in the previous report, both for 2019 and for 2020. The downward revision for the advanced economies takes into account the fact that several recent indicators suggest a further weakening of economic activity. In the case of the United States, an added factor would be the impact on economic activity occasioned by the partial

Graph 1.8
Average Growth of Colombia's Trading Partners
(Non-traditional trade weighted)^{a/}



a/ These figures correspond to Colombia's trading partners in total, without Venezuela, since the lack of information on that economy makes it difficult to forecast economic growth.

Source: calculations and projections by *Banco de la República*

⁵ The forecast in the December 2018 report was 2.3% growth for our trading partners in 2019 (excluding Venezuela).

Table 1.1
Growth Forecasts for Colombia's Trading Partners

Growth forecasts for Colombia's trading partners	2018 (Observed)	2019	2020
Main trading partners			
United States ^{a/}	2.9	2.3	1.7
Euro Zone	1.8	1.2	1.4
Ecuador	1.4	0.6	1.2
China ^{b/}	6.6	6.2	6.0
Other trading partners			
Brazil	1.1	2.2	2.4
Peru	4.0	3.8	3.7
Mexico	2.0	1.8	1.9
Chile	4.0	3.3	3.1
All trading partners (excluding Venezuela) (non-traditional trade weighted)	2.5	2.2	2.1
Total trading partners (non-traditional trade-weighted)	1.9	1.9	1.9

a/ The first-quarter figure for GDP growth in the United States was published on April 26. It was part of a set of data used by *Banco de la República's* Board of Directors to reach its decision on that same date. However, the forecasts presented in this report do not incorporate this new information.

b/ The first-quarter figure for GDP growth in China was published on April 16. It was part of a set of data used by *Banco de la República's* Board of Directors to reach its decision on April 26. However, the forecasts presented in this report do not incorporate this new information.

Source: Bloomberg and Latin Focus (observed data); *Banco de la República* (projections and calculations)

shutdown of the federal government. The reduced forecast for the euro zone also is due to less of a contribution from the external sector, to the protests in France, and to the fiscal situation in Italy.

As for Latin America, economic growth declined in Brazil, Mexico, Chile and Venezuela. This is the result of weaker-than-expected data, in addition to the deterioration observed in mining activity, the reduced contribution expected from the external sector, the drop in spending due to fiscal consolidation efforts, the normalization of monetary policy, and the persistence of political uncertainty in some of these economies sparked by new government administrations, which has brought weight to bear on investment performance and projections.

Given the recent developments in international financial conditions, coupled with the announcements by the monetary authorities in the United States, which imply low and stable inflation in the medium term, the baseline forecast scenario in this report anticipates the Fed will not change its policy interest rate during 2019 or 2020. This would represent a change from the December report, which included an interest rate hike for this year. On the other hand, it is assumed the balance-sheet reduction program would be carried out according to what was announced. In the case of the ECB, no changes are anticipated in its benchmark rates during 2019; however, it is expected to continue to reinvest payments from its asset purchase program (APP).

The baseline forecast scenario does not contemplate interest rate changes of the main central banks of the advanced economies during 2019 and 2020.

Considering the way sovereign risk premia have behaved so far this year, coupled with monetary policy in the advanced economies that possibly could remain expansionary for the coming quarters, the path of convergence of Colombia's country risk premia towards its historical average was revised downward in this report. Increases in the country risk premia continue to be expected in the medium term, since their current amounts are very low with respect to the average for the last decade and a half and because the growth of our trading partners and oil prices are expected to be less than what was observed in 2018 and so far during 2019. However, the forecast in this report is that convergence would be slower than anticipated in the last quarterly report.

The baseline forecast scenario does not contemplate the possible effects of changes in the United States' commercial policy with its trading partners; nor does it consider the United Kingdom exiting from the European Union without an agreement (hard Brexit) or the effects an extension in those negotiations could have on investment.

As for raw materials, this report contains a slight upward revision in the oil price forecast for 2019, given the higher prices observed in recent months (Table 1.2). However, these increases are expected to be temporary and should be reversed in the coming months, when prices converge toward more sustainable levels. Consequently, the average price anticipated for 2019 is USD 63.4 per barrel (Brent reference). The price forecast for 2020 remains unchanged (USD 62 per barrel).

Table 1.2
Benchmark Price Forecasts for Colombia's Commodity Exports

	2018	Forecasts for 2019	Forecasts for 2020
Brent Oil (US dollars per barrel)	71.6	63.4	62
Coal (US dollars per ton)	85.8	80	75
Colombian Coffee (ex dock) (US dollars per pound)	1.37	1.31	1.37
Gold ^{a/} (US dollars per troy ounce)	1,269	1,300	1,350

a/ This is assumed to be a haven value, because the price of gold increases when there is more uncertainty.
Sources: Bloomberg; calculations by Banco de la República.

The baseline forecast scenario for growth on the part of Colombia's trading partners, as described earlier, continues to face significant downside risks. Some of the factors, among others, that could reinforce this future bearish cycle include the adoption of protectionist measures in the United States and other countries, added weakness in the euro zone, an eventual traumatic outcome for Brexit, and increased stress in Italian banking. There are medium-term risks as well, due to the high levels of debt registered in some advanced and emerging economies.

One positive risk factor for the Colombian economy would be a higher oil price than what is contemplated in the baseline scenario, in the event restrictions in the world supply of crude are prolonged or increased and oil production in the United States does not compensate for that situation.

1.2 The Balance of Payments

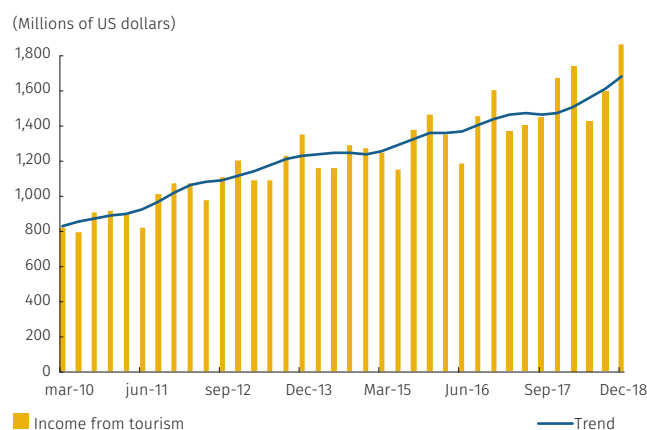
1.2.1 Results for 2018

Although the country's terms of trade improved in 2018, the acceleration in economic growth was reflected in more of an increase in the demand for imported goods and services, and in a rise in profits for companies with foreign capital. The latter also were favored by higher export prices for oil and coal. In effect, during 2018 the current account in the country's balance of payments registered a deficit of USD 12,661 million (m), which is USD 2,364 m more than a year ago. As a proportion of GDP, the 2018 deficit came to 3.8%, which is 0.5 percentage points (pp) above the deficit observed in 2017.

With respect to what happened a year ago, the increase in net outlays of the factor income (USD 2,736 m) and, to a lesser extent, the trade deficit in goods and services (USD 637 m) partially offset the rise in net income from current transfers (USD 1,009 m).

The increase in the trade deficit for goods was due to the growth in imports, which came to USD 5,385 m (12.2%) and surpassed the rise in exports (USD 4,640 m, 11.7%). The expansion in foreign purchases was widespread, but especially important in the case of input and capital goods for industry. This is consistent with the recovery in economic activity. On the other hand, the growth in exports occurred in an environment of higher prices for commodities, especially oil and coal. In addition, sales of industrial products posted levels higher than those in 2017 (6.4%), in line with the growth of the country's main trading partners.

Graph 1.9
Income Associated with Spending by Foreigners on Travel in Colombia^{a/}
(Quarterly)



a/ Includes income related to the travel category and air passenger transportation reported for the non-factorial services component.
Source: Calculations by *Banco de la República*.

The service account deficit was down by USD 108 m for the year as a whole. On the export side, the increase in revenue from tourism was a high point, having risen 12.7% annually (Graph 1.9), as were sales of other services. In terms of imports, the added outlay associated with spending on travel was particularly important, as were payments for transportation, business and construction services

On the other hand, the increase in net outlays for factor income during 2018 is attributed to the added profits registered by firms with foreign investment in the country, especially those in the oil and mining sector, and to the increase in interest payments associated with loans and foreign debt securities.

Net current transfers rose annually by 15.3%, thanks largely to the rise in worker remittances. With respect to this last item, the most important increases were observed in remittances from the United States, Spain and several Latin American countries.

As for external financing, net capital inflows came to USD 11,981 m in 2018, which is higher than a year ago, when they stood at USD 9,644 m. During that period, net direct investment totaled USD 5,888 m, accounting for nearly 50% of all net external financing received by Colombia. In terms of economic activity, foreign direct investment (FDI) received in 2018 was distributed as follows: mining and oil, 37%; financial and business services, 18%; transportation and communications, 14.1%; commerce and hotels, 12%; the manufacturing industry, 7.6%; and all other sectors, 11.3%.

Through portfolio investment, the country registered USD 349 m in inflows of foreign capital. These resources originated with the purchase of approximately USD 3,500 m in TES by foreign investors, making it possible to offset the amortization payments on long-term debt securities and the exit of foreigners from the stock market. In addition, USD 1,571 m in foreign assets were established abroad.

With respect to other capital flows, the country registered USD 8,502m in net inflows during 2018, mainly long term. The public sector received USD 2,036 m in net capital and the private sector, USD 6,466 m. During the period being analyzed, international reserves for balance of payments transactions increased by USD 1,187m, due to new returns on the portfolio and to purchases made as part of the program to accumulate reserves. As of December 2018, the balance of net international reserves in Colombia was USD 48,393 m; at March 2019, this figure was USD 51,261 m.

1.2.2 Forecasts

1.2.2.1 Estimate for the First Quarter of 2019

The figures for the external balance in the first quarter of 2019 point to an increase in the current deficit. Based on the data at hand, this report forecasts a current account deficit above the average observed for the last four quarters, both in dollars and as a proportion of GDP. This would have been close to 4.9% in terms of GDP, 0.7 pp higher than for the same period in 2018.

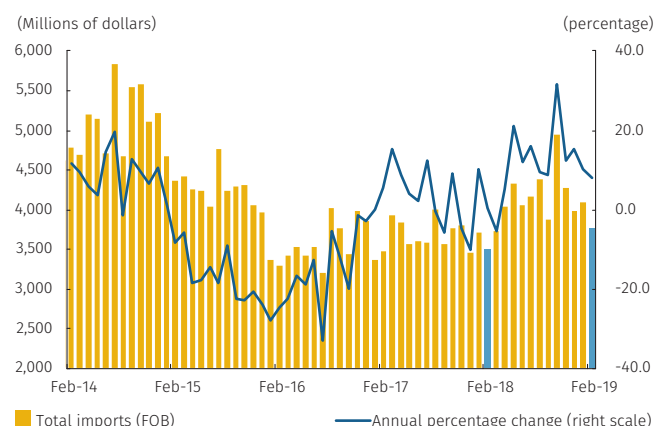
In terms of the country's foreign trade in goods, the available data show imports free on board (FOB) were up by USD 655 m in the January-February period, (9.1% in annual terms), with a general increase in the different product groups: consumer goods, intermediate consumption and capital goods (Graph 1.10, see the shading, page 24).

The country's current account registered a deficit of 3.8% of GDP in 2018, higher than the 3.3% figure observed in 2017.

The data available for the first quarter of 2019 would suggest an increase in the current account deficit.

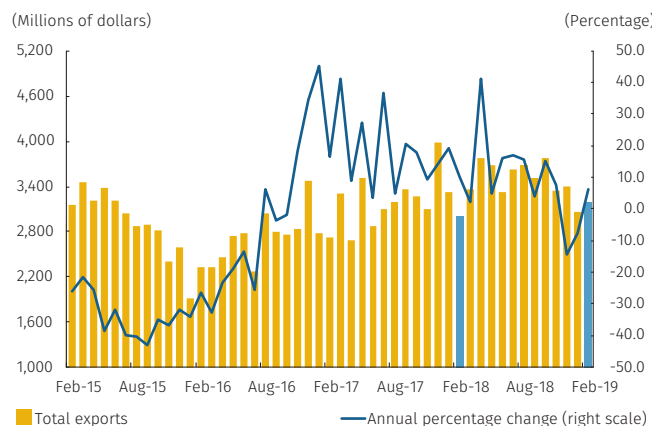
Total exports declined by USD 74 m (1.2%) during this same period with respect to the previous year (Graph 1.11), mainly because of less value for coal and oil exports. The fact that the average price of oil for Brent crude was USD 62.2 per barrel during January-February is an important element. This is lower than the price observed in the same period a year ago and was coupled with a decline in the volumes of coal shipped by Colombia.

Graph 1.10
Total Imports of Goods (FOB)
(Monthly)



Sources: DIAN and DANE; calculations by Banco de la República.

Graph 1.11
Total Exports of Goods (FOB)
(Monthly)



Sources: DIAN and DANE; calculations by Banco de la República.

Exports and Imports of Goods, in Dollars, during the Two-month Period from January to February 2019

During the two-month period from January to February, total exports declined by 1.2% in annual terms (having contracted 7.8% in January and increased by 6.2% in February, Graph 1.9). This is explained largely by the downturn in foreign sales of mining products, which contributed -2.2 pp to the total variation. On the other hand, agricultural goods and all other of exports rose 4.3% and 1.6%, respectively (Table A).

During the two-month period in question, the price index for mining products fell by 4.8% with respect to the same period in 2018, despite a slight recovery in international prices for mining export goods. The foregoing largely determines the drop in total

exports that was supported by the downturn in sales in this sector. Low sales of coal and crude oil exports were an important factor, having contracted 11.7% and 5.5%, respectively, compared to the same two months in 2018, and contributing -3.9 pp to the variation in total exports during the period (Table A).

Non-traditional exports rose by 1.6% in January-February with respect to the same two-month period a year ago (they were up 1.5% in January and 1.6% in February, Graph A). This outcome is explained primarily by better performance in external sales to Ecuador (17.3%) and the European Union (16.8%), which contributed 3.6 pp to the annual change in non-traditional exports (Table A). On the contrary,

Table A
Exports and Imports of Goods, in Dollars, during the Two-month Period from January to February 2019 (FOB)
(Percentage)

Group	Annual change	Contribution to the annual change	Items with an important contribution to the annual change		
			Item	Annual change in the item	Contribution to the annual change
Total exports	-1.2	-1.2			
Mining goods	-3.6	-2.2	Coal, lignite and peat	-11.7	-2.2
			Crude oil	-5.5	-1.7
All other exports ^{a/} (Non-traditional)	1.6	0.4	Automotive vehicles and other types of transport	39.1	0.5
			Chemical products	3.1	0.2
			To Ecuador	17.3	2.2
			To the European Union	16.8	1.4
			To the United States	5.5	1.0
Agricultural goods	4.3	0.6	Coffee	5.6	0.4
			Flowers	5.2	0.2
			Bananas	-0.6	0.0
Total imports	9.1	9.1			
Capital goods	10.1	3.1	Transport equipment	24.5	1.7
			Capital goods for industry	5.6	1.1
Intermediate goods	10.0	4.6	Raw materials for industry	7.5	2.6
			Fuels	23.8	1.7
Consumer goods	6.1	1.4	Durable goods	7.6	0.8
			Non-durable goods	4.9	0.6

a/ This group does not include petroleum or derivatives thereof, nor does it include coal, nickel-iron, gold, coffee, bananas or flowers. However, it does include other mining and agricultural goods. Most are manufacturing exports.
Source: DIAN and DANE; calculations by Banco de la República.

smaller shipments were observed to the rest of the Latin American Integration Association (Aladi)¹, Mexico, Asia and Venezuela. Sales to the United States, the country's main trading partner, rose by 5.5% in annual terms, contributing 1.0 pp to the annual variation in non-traditional exports (Table A).

As for traditional agricultural exports during the January-February period, foreign sales of coffee and flowers increased 5.6% and 5.2%, respectively, while banana sales to the external market were down by 0.6% in annual terms (Table A). The total variation

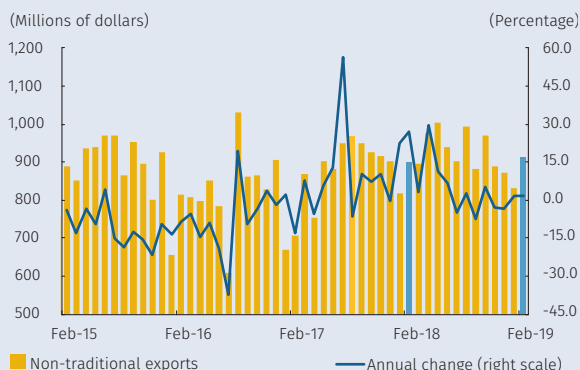
in exports of this group of goods (4.3%) is explained by an increase in export volumes (9.8%), which was offset by a 5.0% drop in the price index.

In terms of FOB imports, the two-month period between January and February saw growth all groups of goods, with a 9.1% annual increase in total imports (which rose by 10.2% in January and 7.9% in February, in annual terms). The largest contribution was from intermediate goods (4.6 pp), driven mainly by a greater momentum in raw material imports for industry (7.5%) (Table A)

Within the group of capital goods, which increased by 10.1% during the two-month period in question,

1 Aladi, excluding Venezuela, Ecuador, Peru and Mexico.

Graph A
Non-traditional Exports^{a/} (FOB)
(Monthly)



a/ This group does not include petroleum or derivatives thereof, nor does it include coal, nickel-iron, gold, coffee, bananas or flowers. However, it does include other mining and agricultural goods. Most are manufacturing exports.
 Source: DIAN and DANE; calculations by Banco de la República.

transport equipment contributed the most (1.7 pp), followed by capital goods for industry (1.1 pp) (Table A).

Regarding consumer goods, imports of non-durable goods increased 4.9%, supported by purchases of food, pharmaceutical products and clothing. On the other hand, imports of durables expanded by 7.6%, mainly due to an increase in the category comprised of private vehicles for transportation (Table A).

On the other hand, the deficit in non-factor services during the first quarter is expected to be somewhat higher than it was for the same period a year ago, while the deficit in factor income will be similar. Despite fewer profits for companies with foreign capital that operate in the mining and oil sector, there would continue to be pressure on factor income via interest payments on the external debt and the profits obtained (remitted and reinvested) by sectors other than mining-energy, as a result of added growth in the economy.

With respect to capital flows, FDI is estimated to have been somewhat higher during the first quarter of 2019 in light of what was observed during the same period in 2018. It would have been fueled by the resources received by the different sectors, in keeping with the favorable outlook for the Colombian economy and higher oil prices. On the other hand, the available data on capital flows in the foreign exchange balance show an annual drop between January and March in foreign investment resources in the private sector portfolio. On the contrary, resources would be obtained from foreign loans, contracted mainly by companies in the private sector.

1.2.2.2 Estimates for All of 2019

The year as a whole is expected to see a decline in the value of oil exports, unlike what happened in 2018. This would be consistent with the lower average export price, as explained in the first section of this chapter. Likewise, some moderation in the growth of external sales of industrial goods is expected, given the slight deceleration in growth for our main trading partners and less momentum in world trade.

In 2019, imports of goods would continue to register positive growth rates, although at a slower pace than in 2018. This is consistent with domestic demand that would increase more than GDP, mainly due to the recovery in private investment. The foregoing will result in more imports, especially of input and capital goods for industry.

Fewer export earnings for oil companies with FDI should translate into a decline in profits from factor income. In addition, income from Colombian investments abroad is expected to grow. On the other hand, the deficit in services would continue to drop, thanks to more exports of this type, and especially to income associated with tourism. The lower international price for oil would reduce shipping costs and the contracting of technical services for that sector. Finally, income from remittances would continue to contribute positively to the lower external imbalance.

Accordingly, the current account deficit forecast for 2019 in the baseline scenario comes to USD 14,302 m (4.3% of GDP) (Table 1.3). Compared to 2018, the larger current account deficit estimated for 2019 would be explained mainly by the growing trade deficit for goods. This deterioration would be offset, in part, by a positive contribution from the other items.

Table 1.3
Balance of Payments
Annual Flows (Millions of US dollars)

	2014	2015	2016	2017 (pr.)	2018 (pr.)	2019 (proj.)
Current account (A+B+C)	-19,762	-18,564	-12,027	-10,296	-12,661	-14,302
Percentage of GDP	-5.2	-6.3	-4.2	-3.3	-3.8	-4.3
A. Goods and services	-11,863	-18,267	-12,679	-8,488	-9,125	-12,335
B. Primary income (factor income)	-12,521	-5,727	-5,228	-8,405	-11,141	-10,260
C. Secondary income (current transfers)	4,622	5,430	5,880	6,596	7,605	8,293
Financial account (A+B+C+D+E)	-19,290	-18,243	-12,275	-9,644	-11,981	-14,302
Percentage of GDP	-5.1	-6.2	-4.3	-3.1	-3.6	-4.3
A. Direct investment (ii-i)	-12,268	-7,505	-9,333	-10,147	-5,888	-6,723
i. Foreign investment in Colombia (FDI)	16,167	11,723	13,850	13,836	11,010	11,437
ii. Colombian investment abroad	3,899	4,218	4,517	3,690	5,122	4,714
B. Portfolio investment	-11,565	-9,166	-4,839	-1,617	1,222	-3,500
C. Other investment (loans, other credit and derivatives thereof)	106	-1,988	1,731	1,606	-8,502	-7,636
D. Reserve assets	4,437	415	165	513	1,187	3,557
Errors and omissions (E & O)	472	321	-249	652	679	0

Observation: The results presented in this table follow the recommendations outlined in the sixth edition of the Balance of Payments Manual proposed by the IMF. For additional information and changes in methodology, see <http://www.banrep.gov.co/balanza-pagos>

(pr.) preliminary
(proj.): projected

Source: Banco de la República.

In contrast to what was anticipated in the previous edition of this report, looser international financial conditions are expected on this occasion, which would imply larger flows of foreign capital into emerging markets, including the Colombian economy. In terms of financing the current account, the estimate for 2019 is that flows for other investment will continue, originating with the contracting of new debt and the sale of external assets. FDI flows are expected to increase, fueled by resources destined for sectors other than oil and mining, while TES purchases by foreigners are expected to continue, albeit at a slower pace than in the previous year.

Lastly, *Banco de la República* currently maintains a program to accumulate international reserves by auctioning put options. These auctions are contingent in nature and are held monthly. Their amount is announced only at the time the auction is called. The current projection for the balance of payments includes only purchases made so far this year, up to April 10.

Box 1 The Process of Adjusting and Expanding the Current Account Deficit

Camilo Cárdenas Hurtado
David Camilo López*

Occasionally, the demand for goods and services in an economy exceeds its capacity to finance that demand with its own resources. When a country has access to international financial markets, this imbalance between income generation and the rate at which it is spent is financed with external resources. In macroeconomic terms, the current account (CA) is defined as the difference between a country's national revenue and its domestic demand, or as the shortfall between national savings and the investment made during a given period. These resources can come from capital flows for direct investments, portfolio investments, debt or the liquidation of external assets. In this sense, persistent deficits in the CA generate a reduction in the balance of external assets or an increase in obligations with international creditors, which translates into possible deterioration in a country's position in terms of international investment.

Such was the Colombian case between 2006 and 2014. In effect, GDP growth during that period was 4.8%, on average, while the increase in domestic demand was 5.9%. Meanwhile, the current account deficit in the balance of payments went from 1.8% of GDP in 2006 to 5.2% in 2014. As has been pointed out on numerous occasions, the sharp decline in terms of trade witnessed since mid-2014 negatively affected the country's productive apparatus and led to a sharp setback in external revenue. The resulting slowdown in GDP growth revealed the effects of this shock on real activity. As will be explained, the process of macroeconomic adjustment observed between 2015 and 2017 was reflected in the momentum in the CA and its components, both on the side of the balance of payments (BP) and in the national accounts (CN).

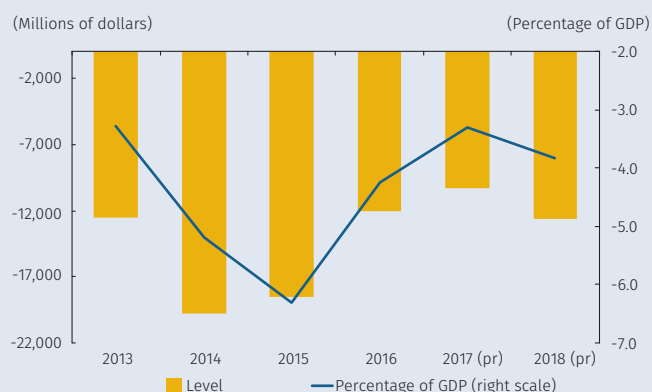
* The authors are, respectively, a specialized professional and expert professional with the Programming and Inflation Department. The opinions and possible errors or omissions in this document are not binding on *Banco de la República* or its Board of Directors.

Recent developments with respect to the current account deficit and its increase on the aforementioned fronts last year are analyzed in this section. According to the data at hand, the current deficit in the BP increased again in 2018. This external imbalance suggests the adjustment that was observed up to 2017 would have been interrupted. According to the BP accounts, that expansion was due to an increase in imports of goods and certain outlays of factor income that were not offset by the good performance witnessed in foreign sales of mining and energy goods, in dollars. This is consistent, on the other hand, with what has been observed in terms of the figures for the national accounts (NA), which indicate the rise in the deficit in 2018 would have been related to an increase in the rate of private investment and, less so, to fewer public savings as a result of more consumption in this sector.

1. Recent Developments in the Current Account, According to the Balance of Payments

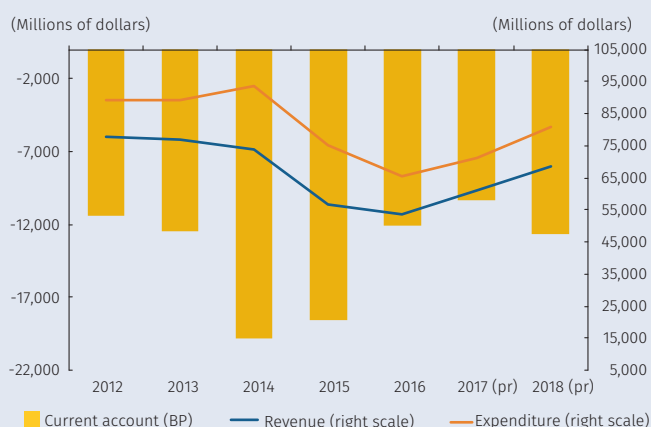
The decline in terms of trade during 2014 initially translated into a sharp contraction in the country's export earnings. This situation, coupled with growth rates that sustained current expenditure in a context of broad external financing, implied an increase in the CC deficit, which went from 3.3% to 5.2% of GDP between 2013 and 2014 (Graph B1.1). Subsequently, the Colombian economy entered a period of adjustment. In the case of the external sector, the CC process could be divided into two stages. The first covers the period up to 2016, characterized by a drop in exports of goods and more of an adjustment in external spending (Graph B1.2). The second refers to 2017, when the current deficit continued to decline, but aided by the rebound in exports of goods and the growth in other types of external revenue which, on the whole, exceeded the moderate recovery in imports of goods and services.

Graph B1.1
Current Account Deficit
(Balance as a percentage of GDP and in millions of dollars)



(pr): preliminary
Source: *Banco de la República*.

Graph B1.2
Current Account, Revenue and Expenditure
(Balance in millions of dollars)



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

Between 2014 and 2016, the current deficit declined from -5.2% of GDP in 2014 (USD -19,762m) to -4.2% of GDP in 2016 (USD -12,027m) (Graph B1.1). During that period, the momentum in the CC was associated with a steady reduction in exports of goods from the mining and petroleum sector and, to a lesser extent, industrial goods, which were affected by the drop in international prices and by weak growth on the part of Colombia's trading partners. However, the deterioration in national revenue generated by the drop in the country's terms of trade, together with nominal depreciation, was reflected in an adjustment in the economy's spending, especially in less demand for tradable goods.

Consequently, from 2014 to 2016, the reduction in the current deficit was explained largely by a significant drop in imports (USD -21.377 m, -28%) and in the profits of companies with foreign capital (USD -7.142 m; 62%). The increase in other types of external revenue also helped to the lower deficit. An added stock of domestic capital abroad, coupled with a better return on portfolio assets and international reserves, was reflected in an increase in the profitability of investments abroad (USD 999 m; 25%). Revenue from worker remittances was more dynamic (USD 758 m; 19%), and there was an improvement in exports of services (USD 615m, 9%), particularly those related to tourism, which were favored by better internal conditions in terms of security and by depreciation of the peso.

An additional reduction in the current deficit occurred in 2017, when it came to 3.3% of GDP (USD 10,296 m), reaching the same proportion of GDP observed in 2013 prior to the shock in oil prices. Unlike the period from 2014 to 2016, this adjustment was characterized by a simultaneous increase in external revenue and expenditure, although the former did so in a larger proportion (Graph B1.2). The recovery in terms of trade and the growth experienced by our trading partners was reflected in an increase in exports, although

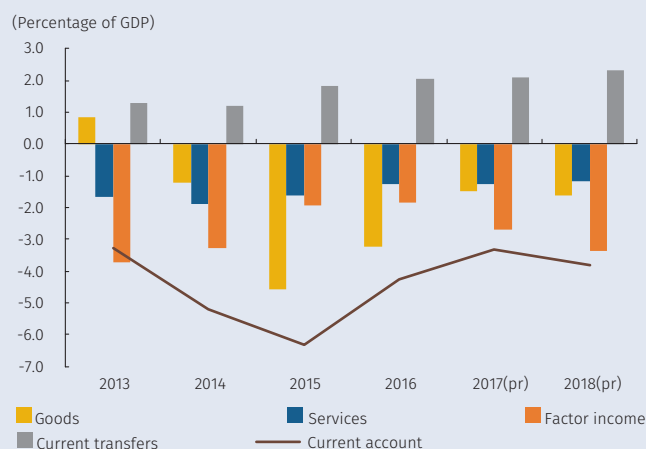
at levels lower than those observed prior to the oil shock. Shipments abroad of oil and coal were what contributed most to export growth, although "all other" exports increased as well, but to a lesser extent. Other external income (the profitability of investments abroad, exports of services, and current transfers) continued to contribute to the adjustment in the CC.

The orderly adjustment in the CC between 2014 and 2017 was backed by permanent and favorable access to external financing, which originated largely with resources from direct foreign investment and liabilities acquired by the public sector (TES, bonds and loans). The latter were reflected in an increase in the public debt, both domestic and foreign, and are consistent, in turn, with the public sector's added contribution to the saving/investment difference in the national accounts (NCs), as described below.

The momentum in the main sources of external revenue continued during 2018, propelled largely by mining and energy exports. However, this growth did not entirely offset the significant rise in imports of goods and outlays for factor income. The latter was consistent with the added growth in local spending and investment and with the increase in profits for companies with foreign capital. As a result of this situation, the CC deficit widened in 2018 to 3.8% of GDP, which is USD 2,364 m more (0.5 pp of GDP) than the year before.

When analyzed by components, most of the increase in the current deficit during 2018 (0.5 pp) would be explained by the increase in net outlays for factor income (0.7 pp) and, to a lesser extent, by the larger trade deficit in goods (0.1 pp) (Graph B1.3). In contrast, the factors that would contribute to external closure would include the improved momentum in transfers (0.2 pp) and the reduction in net imports of services (0.1 pp). It should be noted

Graph B1.3
Current Account and its Main Components



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

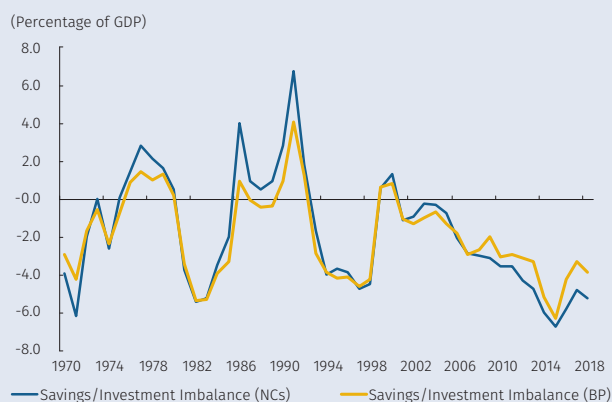
that income from remittances rose by 15.3% annually, surpassing the average rate observed between 2015 and 2017 (10.4%), while exports of services continued to register positive growth rates, drawn by the growth in revenue associated with tourism, which increased 12.7% in annual terms.

2. Recent Developments in the Current Account, According to the National Accounts

To analyze the momentum in the CC with figures from the NCs, we used the annual series, in current pesos, for savings and aggregate investment in the economy. The disaggregation used by the National Bureau of Statistics (DANE) to publish this information allows us to understand the role played by the public and private sectors in the behavior of demand for external savings. The public sector includes the national central government and regional and local governments. The private sector includes financial and non-financial corporations,¹ households and non-profit institutions that serve households. Although there are methodological differences between the BP and the NCs, the two measurements of the current deficit share a high historical correlation (Graph B1.4).

Prior to the shock to the terms of trade, the increase in the CC deficit on the side of the NCs was due to an important momentum in investment, which could not be financed with domestic savings in the Colombian economy. In fact, according to DANE's latest published data on the NCs, the nominal investment rate reached 24.3% in 2013, the highest in the decade, while the savings rate (19.6%) was similar to the one observed in previous years (Graph B1.5). Following the drop in terms of trade, macroeconomic adjustment

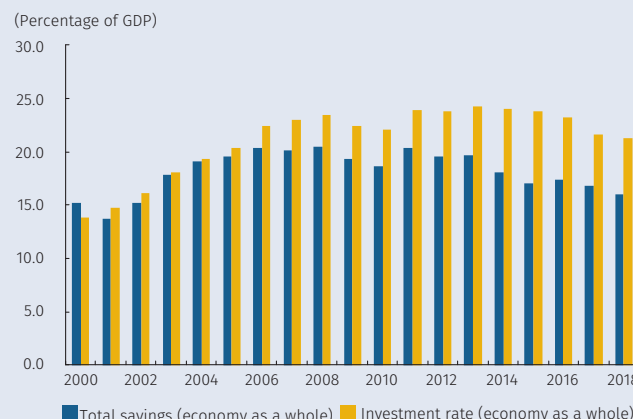
Graph B1.4
Savings/Investment Imbalance According to the NCs and the Current Account Deficit in the BP



Source: DANE; calculations by Banco de la República.

began with more of a reduction of national savings than in investment. This being the case, the savings / investment imbalance in 2015 was the highest it had been since 1970 and reached -6.7%.

Graph B1.5
Savings/Investment Imbalance According to the NCs (Savings and investment rates)



Source: DANE; calculations by Banco de la República.

Between 2015 and 2017, it was evident how the shock to the country's terms of trade negatively affected the investment rate via the different channels for pass-through, although it was the private sector that contributed the most to the adjustment. When broken down by types of goods, we see the lowest momentum in investment occurred initially in the areas of machinery and transport equipment, which responded more quickly to changes in relative prices and less momentum in private income. Investment in construction also reacted, although to a lesser degree. Public investment, in contrast, was more rigid and remained relatively stable, focusing on spending resources to develop infrastructure products.

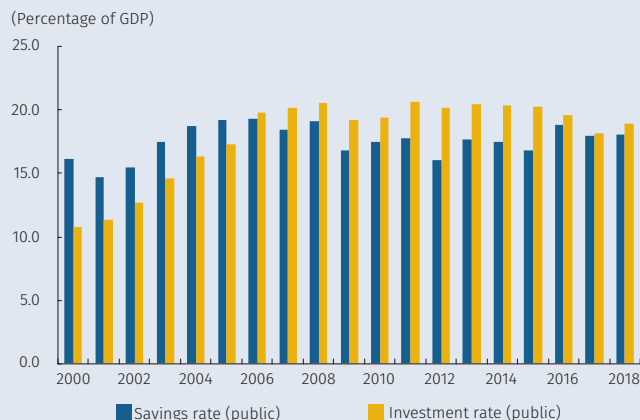
On the other hand, although there was no significant change in the aggregate savings rate of the economy between 2015 and 2017, the performance of the different sectors was mixed. Private savings increased by slightly more than one percentage point of GDP, while public savings declined. In fact, the public sector has posted dissaving rates since 2016, which implies net indebtedness on the part of the public sector. This was consistent with the increase in the fiscal deficit on record for the same period (see the *ESPE Journal*, No. 90, Graph B1.6, panels A and B).

In conclusion, the savings/investment imbalance went from -6.7% of GDP in 2015 to -4.8% in 2017 (Graph B1.7). This adjustment was propelled by the private sector, which lowered its investment rate and raised its savings rate. For its part, the public sector kept its investment rate relatively stable, while its net savings went from surplus to deficit. As a result, the saving / investment imbalance began to be explained largely by the public sector. This is contrary

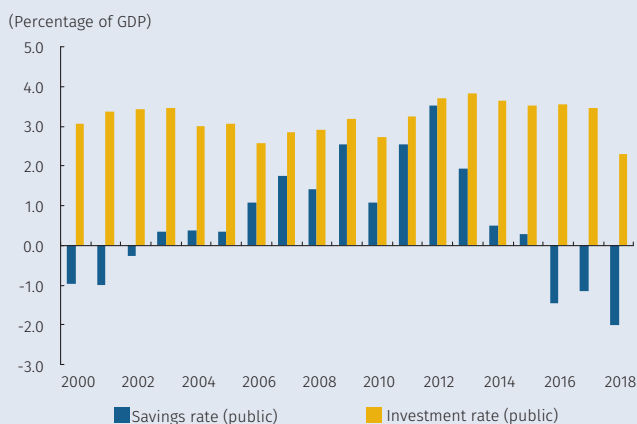
1 Including public-sector companies that operate in the real sector of the economy, such as Ecopetrol and EPM.

Graph B1.6
Savings/Investment Balance According to the NCs
(Savings and investment rates)

A. Savings/Investment Balance: Private Sector



B. Savings/Investment Balance: Public Sector

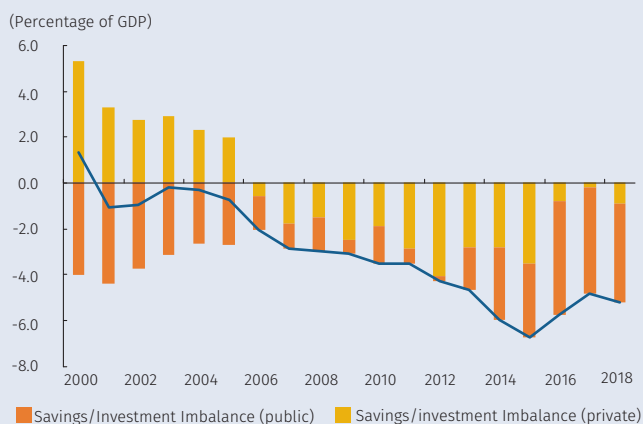


Source: DANE; calculations by Banco de la República.

to what was observed prior the start of the oil shock and deepened what is known in the literature as twin deficits.

However, the current deficit in 2018 widened again with respect to the figure in 2017. This is according to estimates developed by the technical staff at *Banco de la República*, using the latest figures from the NCs. The private sector contributed more to the increase in the deficit than the public sector. In this sense, the private savings rate remained stable between 2017 and 2018, but the private investment rate rose by 0.8% of GDP. Meanwhile, the government's savings would have been more negative, as a result of significant real and nominal growth in public consumption. However, this would have been offset by an equally important adjustment in its investment rate (Graph B1.7).

Graph B1.7
Savings/Investment Balance According to the Institutional Sector
(Differences between savings and investment rates, according to the institutional sector)



Source: DANE; calculations by Banco de la República.

02

Domestic Growth: The Current Situation and Short-term Outlook

The Colombian economy grew by 2.9% in the fourth quarter of 2018, which implied an increase of 2.7% for the entire year. This occurred in a context where domestic demand performed well.

A highlight during 2018 was the dynamism in the sectors that include professional, scientific and technical activities, and public administration and defense. Mining, in contrast, suffered a setback.

The data available for the first quarter of 2019 suggest economic growth would have accelerated with respect to the figures from 2018.

2.1 GDP Performance in the Fourth Quarter of 2018 and all of 2018

According to the latest economic figures published by the National Bureau of Statistics (DANE),⁶ fourth-quarter GDP in 2018 saw an annual increase of 2.8% in its original series and 2.9% in the seasonally adjusted series corrected for calendar effects (Graph 2.1). This figure was somewhat higher than the baseline forecast presented by *Banco de la República*'s technical staff in the previous *Inflation Report*. GDP expanded 0.6% between quarters, which implies an annualized rate of 2.4%.

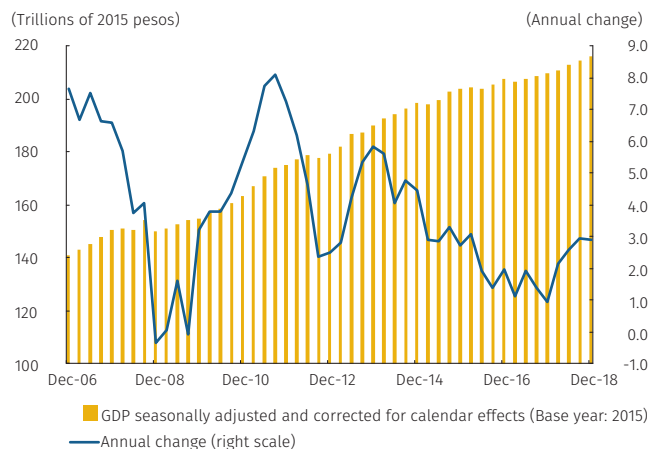
⁶ The figures correspond to the data published on February 28. The new GDP figures were not known at the time this report was written, since they were released by DANE on May 15.

This being the case, the Colombian economy performed better in 2018, having grown by 2.7%, which is more than the increase posted a year earlier (1.4%).

The recovery in the economy was concentrated primarily in the second half of the year. Much of the improvement in performance was derived from the added momentum in absorption. This component of GDP contributed positively to growth during every quarter of 2018.

Specifically, domestic demand was up by 4.5% in the fourth quarter, which is well above the increase in GDP. This was due more to investment than to overall consumption. On the other hand, although the rate of growth in exports accelerated, imports increased at a double-digit rate (Table 2.1). Therefore, the contribution from net exports was more negative than in previous periods.

Graph 2.1
Gross Domestic Product
(Seasonally adjusted and corrected for calendar effects)



Source: DANE; calculations by Banco de la República.

Table 2.1
Real Annual GDP Growth, by Type of Expenditure
(Seasonally adjusted and corrected for calendar effects - base year: 2015)

	2017	2018				2018
	Full year	Q1	Q2	Q3	Q4	Full year
Spending on End	2,4	3,9	4,4	3,8	3,6	3,9
Spending on End household Consumption	2.1	3.4	3.9	3.6	3.3	3.5
Non-durable goods	3.1	4.4	5.2	3.9	3.6	4.2
Semi-durable goods	0.8	3.0	5.1	5.3	4.4	4.4
Durable goods	-4.3	6.4	8.1	5.3	5.6	6.3
Services	2.7	2.8	2.6	2.4	2.5	2.6
Spending on General End government Consumption	3.8	6.0	5.9	6.2	5.4	5.9
Gross capital formation	-3.2	-2.3	-1.8	8.7	9.9	3.5
Gross fixed capital formation	1.9	-0.9	-2.8	2.9	5.4	1.1
Homes	-1.9	-4.8	-1.0	0.9	5.8	0.0
Other buildings and structures	4.6	-2.2	-2.6	1.5	9.5	1.5
Machinery and equipment	1.4	8.8	-0.8	0.2	-3.8	1.0
Cultivated biological resources	0.3	-2.7	2.0	7.6	-2.6	0.9
Intellectual property products	2.5	4.0	5.3	4.7	4.1	4.5
Domestic demand	1.2	3.5	3.3	4.0	4.5	3.8
Exports	2.5	-0.2	0.4	1.6	3.1	1.2
Imports	1.2	0.3	8.3	7.9	15.6	8.0
GDP	1.4	2.2	2.6	2.9	2.9	2.7

Source: DANE; calculations by Banco de la República.

A breakdown by components shows gross capital formation registered good growth during the fourth quarter, almost as high as in the first half of 2014, the period prior to the terms-of-trade shock. This performance was explained by what occurred with inventory accumulation and gross fixed capital formation (GFCF). A highlight in this last GDP category was the growth in investment in construction, both housing and other non-residential buildings and civil works. In contrast, investment in machinery and equipment was down, despite good performance for imports of capital goods.

Private sector consumption slowed somewhat in the fourth quarter, a period when the growth in the consumption of goods posted marginally lower rates than those observed throughout the year. Services, on the other hand, remained stable. Yet, despite this situation, the aggregate for the year shows a significant recovery in household consumption with respect to the momentum in 2017. This occurred in a context of inflation that was controlled, as were inflation expectations (trending downward as the year progressed and ending around 3.0%). Moreover, the economy enjoyed a relatively broad supply of credit, with low real interest rates for households, while household confidence ended the year at levels that were higher, on average, than those in 2017.

Public consumption also slowed during the fourth quarter, but maintained a higher rate of growth than its average calculated since 2006. When the performance of this GDP item is analyzed for the aggregate for the year, the effect of the various positive shocks to public spending becomes evident (elections, hiring of personnel for the population census, and more budget spending by regional government administrations). In effect, public consumption accelerated throughout the year, increasing by 5.9% in 2018 compared to 3.8% a year ago.

Exports, in constant pesos, surged during the fourth quarter, reaching their highest rate of growth in 2018. Even so, real imports performed exceptionally well, as anticipated in the previous edition of this report, and ended the year with double-digit growth rates.

The aggregate for the year shows a slowdown in foreign sales and a significant increase in import momentum. In the first case, a variety of supply shocks limited the expansion in raw material exports, particularly coal and coffee. Likewise, exports of manufactured and other goods were affected by the mediocre behavior of external demand observed throughout the year. The second case was highlighted by the rise in purchases of durable consumer goods, intermediate goods, and capital goods. Given all of the above, the trade deficit, in real pesos, increased in 2018 with respect to 2017.

During the fourth quarter of 2018, the good performance of investment stood out.

In 2018, export growth slowed while the increase in imports accelerated substantially.

On the supply side, the most dynamic branches of activity during the fourth quarter of 2018 were construction; public administration and defense, education, health and social services; and professional, scientific and technical activities, in that order. The agricultural sector and mining showed little momentum. However, no branch registered annual reductions during this period.

In terms of 2018 as a whole, the sectors that grew the most were professional, scientific and technical activities, and public administration and defense, education, health and social services. On the contrary, mining was the only branch that declined (Table 2.2).

Table 2.2
Real Annual GDP Growth by Branch of Economic Activity
(Seasonally adjusted and corrected for calendar effects. Base year: 2015)

	2017	2018				2018
	Entire year	Q1	Q2	Q3	Q4	Entire year
Agriculture, forestry, hunting and fishing	5.5	2.2	3.7	1.3	0.8	2.0
Mining and quarrying	-5.7	-3.5	-3.2	2.7	1.0	-0.8
Manufacturing industry	-1.8	0.1	2.5	2.8	2.6	2.0
Electricity, gas and water	2.9	2.9	2.7	2.6	2.7	2.7
Construction	-2.0	-4.3	-5.2	5.3	5.6	0.3
Buildings	-5.2	0.1	-5.6	5.7	3.9	1.0
Civil works	6.5	-3.7	-3.8	-2.9	7.8	-0.6
Specialized activities for construction	-4.0	-1.0	-5.7	2.1	1.0	-0.9
Retail, repairs, restaurants and hotels	1.9	3.1	3.2	3.2	3.0	3.1
Information and communications	-0.2	0.6	3.1	5.5	3.2	3.1
Financial and insurance activities	5.4	4.7	3.8	1.6	2.3	3.1
Real estate activities	3.1	2.2	2.0	1.9	1.8	2.0
Professional, scientific and technical activities	1.3	7.2	6.1	3.4	3.4	5.0
Public administration and defense, education and health	3.5	5.2	4.2	3.5	3.7	4.1
Artistic, entertainment and recreational activities	2.2	0.7	1.6	0.9	2.5	1.4
Subtotal –value added	1.4	2.4	2.1	2.9	2.5	2.5
Taxes minus subsidies	1.1	2.1	3.1	2.6	2.5	2.6
GDP	1.4	2.2	2.6	2.9	2.9	2.7

Sources: DANE; calculations by Banco de la República

Agriculture slowed sharply in 2018, following the good momentum it registered the year before. An important factor in this branch of activity was the drop in the growth of crops (which went from 6.7% in 2017 to 1.5% in 2018), mainly due to the dramatic downturn in coffee production (down 4.5%). According to the Colombian Coffee Growers' Federation, the harvest was affected by unfavorable weather conditions (too much rain) during the second half of the year. Similarly, ranching (which includes livestock) grew less during 2018, increasing by 3.6% as opposed to 4.2% in 2017. Not as much of an increase in the production of milk, chickens, beef and eggs contributed to this outcome.

Agricultural activity slowed during 2018 in light of the figures for 2017.

Mining, for its part, contracted again in 2018, but less so than the year before. Within this category, coal production registered more of a decline than in 2017, dropping by 6.7%. The Ministry of Mines attributed this, in part, to the rains that affected operations at the main coal fields. However, this situation was partially offset by oil production, which went from a 3.9% decline in 2017 to 1.4% growth in 2018.

The manufacturing industry, as a whole, recovered significantly in 2018, posting 2.0% growth after declining by 1.8% in 2017. When oil refining is excluded, growth for the rest of the industrial sector comes to 1.7% (vs. -2.5% in 2017). Within this last group, the positive performances registered by chemical manufacturing (2.8%) and meat processing and preservation (5.6%) stand out and contributed the most to growth in the sector. The annual increase in oil refining came to 4.3%.

On the other hand, growth in construction during 2018 was almost nonexistent. The important increase observed in the sector during the second half of the year offset the sharp drop experienced in the first six months of 2018. As for the different components, the moderate rise in building construction meant a significant recovery from the 5.2% contraction this line suffered in 2017. With respect to civil works, lags in the construction of highways that are part of the country's so-called fourth generation (4G) road projects, caused by the delays in financial closure that affected several of these initiatives, contributed to the setbacks observed in the first half of the year. However, this momentum was reversed in the final quarter, thanks to budget spending by local administrations and, to some extent, performance in the 4G projects.

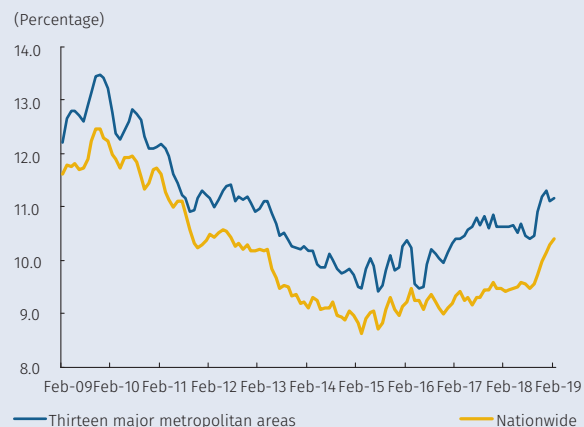
The growth in construction during 2018 was almost nonexistent, despite an important rebound in the second semester.

Last but not least, several service-related sectors contributed appreciably to economic growth during 2018. The sector that includes public administration and defense, education and health is an example. It carries a great deal of weight in GDP and posted remarkable growth consistent with the momentum in public spending. However, other lines related to services experience a slowdown. The sector comprised of financial and insurance activities is a case in point, having gone from 5.4% growth in 2017 to 3.1% in 2018.

Job Market Performance during the Two-Month Period from January to February

Despite some marginal improvement in employment as opposed to the final quarter of 2018, the unemployment rate (UR) during the two-month period from January to February 2019 remained relatively high for the thirteen major metropolitan areas, but declined nationwide (after the seasonal effects are taken into account, Graph A). This is because the meager growth in employment did not offset the increase in labor force participation. Also, in contrast to same months the year before, the UR in the moving quarter up to February increased in all geographical domains (Graph B). The coming months could see moderate reductions in the UR, given the economic forecasts outlined in this report; nevertheless, a pronounced recovery in the job market is not anticipated.¹

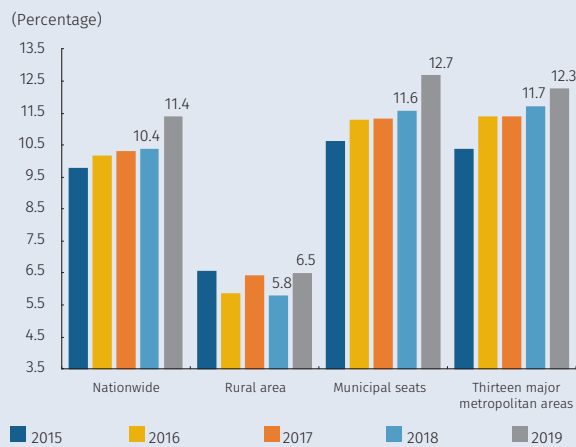
Graph A
Unemployment Rate
(October-November-December Moving Quarter)



Source: DANE (GEIH).

When discounting the seasonal effects, the labor supply, measured by the global labor force participation rate (GPR), and the demand for labor, measured by the employment rate (ER), increased slightly compared to the levels observed at the end of the year (Graph C, panels A and B), especially in terms of the national total. In this last domain, the increase in the supply of labor was more pronounced than the growth in demand, which explains the rise in the UR during the quarter. In the thirteen major metropolitan areas, the

Graph B
Unemployment Rate
(December-January-February Moving Quarter)



Source: DANE (GEIH).

rise in both rates was more moderate and similar in magnitude, which is why the UR remained stable with respect to the levels at the end of 2018.

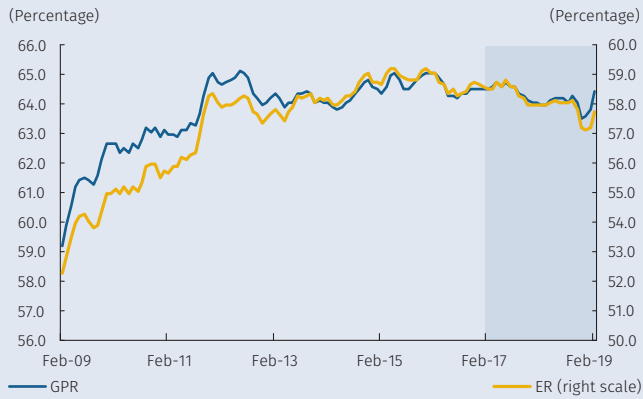
In keeping with the slight recovery in the UR, employment nationwide and in the thirteen major metropolitan areas increased during the first two months of 2019, after the reductions observed at the end of last year (Graph D, panels A and B). A look at the different branches of activity shows community, social and personal services, and construction were the best performing branches in terms of generating employment nationwide, while real estate, business and rental activities make up the sector that detracted the most in this domain.

Urban employment also rose with respect to the previous quarter and the levels reported a year ago. This increase was reflected especially among salaried and formal employees, with 1.2% and 2.6% annual growth, respectively (Graph E and Graph F). However, the positive variations in these segments were offset, in part, by reductions in the number of non-salaried employees and informal workers. As for the different branches of activity, construction remains one of the best performing branches when it comes to creating urban employment, while real estate, business and rental activities represent the sector with the most negative contribution.

¹ For a more detailed analysis of the current situation in labor market, see the *Reporte del Mercado Laboral*, published by Banco de la República.

Graph C
Global Labor Force Participation Rate and Employment Rate
(Seasonally adjusted series)

A. National total



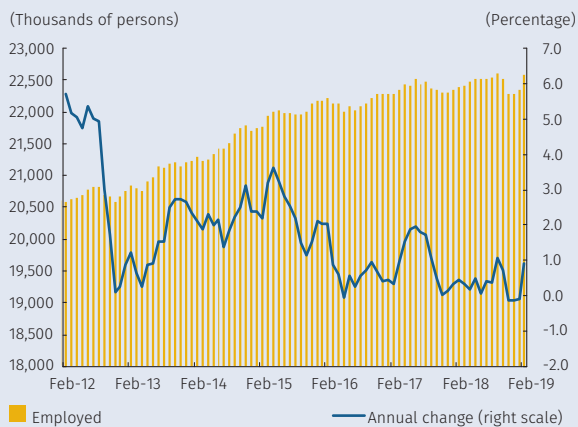
B. Thirteen major metropolitan areas



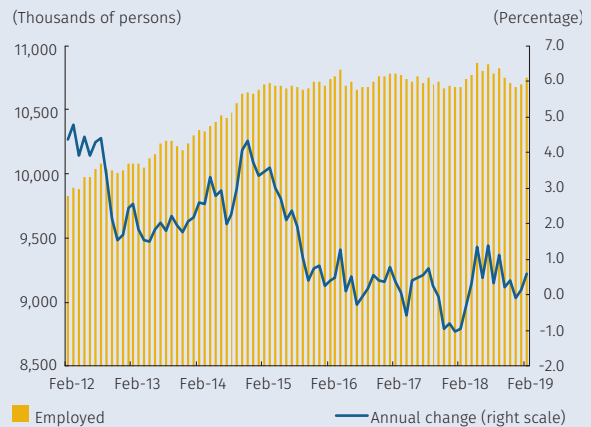
Source: DANE (GEIH).

Graph D
Number of Employed
(Seasonally adjusted and annual change)

A. National total

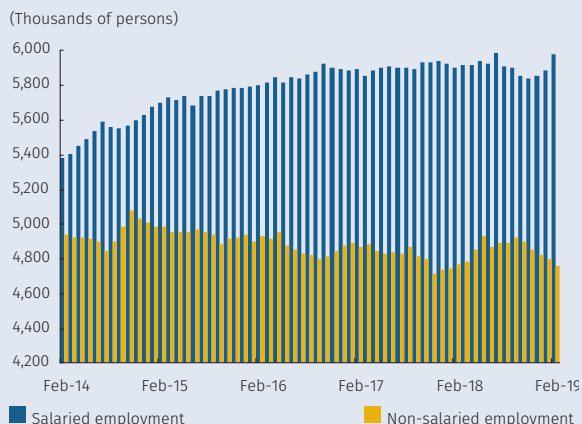


B. Thirteen Major Metropolitan Areas



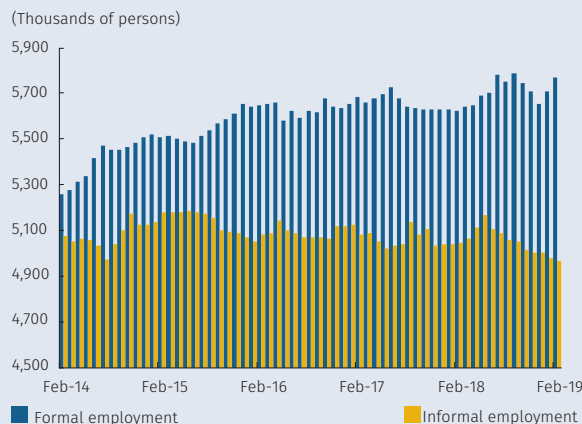
Source: DANE (GEIH); calculations by Banco de la República

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



Source: DANE; calculations by Banco de la República

Graph F
Employment According to Formality
 (Thirteen major metropolitan areas, seasonally adjusted moving quarter)



Source: DANE; calculations by Banco de la República

2.2. GDP in the First Quarter of 2019

Based on the new data available for the first quarter of 2019, the technical staff at *Banco de la República* estimates GDP (seasonally adjusted and corrected for calendar effects) would have posted an annual increase of 3.2% during that period. This outcome, which would be similar to the potential for long-term growth in the Colombian economy, represents a surge with respect to the figure registered at the end of last year.

The good momentum in domestic demand would have continued during the second half of last year, and its growth would have increased during the first three months of 2019. Specifically, investment and public consumption would continue to play an important role in Colombia’s economic performance. On the other hand, the latest foreign trade indicators signal a more negative contribution to GDP growth from net exports.

In terms of gross capital formation, it is estimated the largest contribution would have come from construction and spending on machinery and equipment. In the first case, the sector that includes civil works and non-residential construction saw more momentum in the first quarter compared with the performance observed for the aggregate in 2018. This is due largely to more spending by regional and local governments, as well as progress in the 4G highway projects and other infrastructure works. Home building, on the other hand, is expected to suffer a slowdown in annual growth, since the same period in 2018 constitutes a high basis for comparison, although there would be growth between quarters. In the case of machinery and equipment,

Domestic demand is expected to accelerate during the first quarter of 2019.

some acceleration towards positive growth rates is anticipated, in the wake of the declines registered at the end of last year.

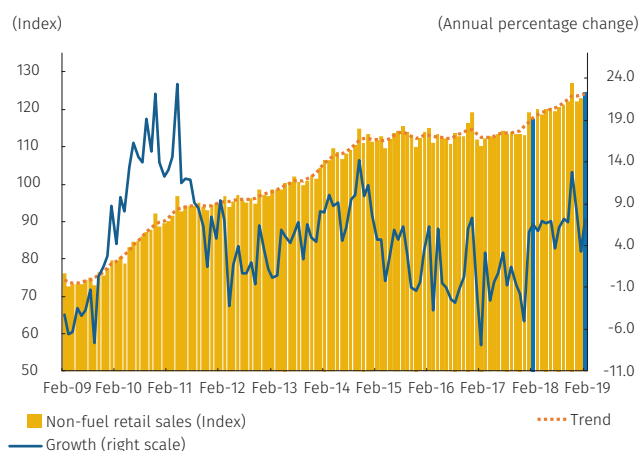
On the other hand, the technical staff assumes the annual growth in public consumption during the first quarter will be good. However, this would imply a slowdown in quarterly terms. Good inter-annual performance would obey, to a large extent, the low base of comparison provided by the same period in 2018, but the figures from one quarter to the next suggest an orderly adjustment in this GDP item, compatible with fulfillment of the fiscal goal, as was anticipated in previous editions of this report. The forecast does not presume an impact from the recent expansion in the fiscal goal for 2019, as approved by the Fiscal Rule Advisory Committee.

As for household consumption, the technical staff expects the annual increase in this item to slow during the first quarter of 2019, as suggested by the latest results for the indicators at hand. The decline in momentum would be due, largely, to the fact that the same period in 2018 is a high basis for of comparison. However, it is important to point out that, in quarterly terms, an expansion in all the items that make up this GDP aggregate continues to be expected, along with continuation of the upward trend in levels observed throughout last year.

Ultimately, the forecast for GDP growth contemplates a negative contribution from net external demand. The momentum in real exports would be less than it was in the fourth quarter of 2018, partly because coal exports performed poorly. On the other hand, imports would have seen important growth, at an annual two-digit rate, but somewhat less than the figure reported at the end of last year. This being the case, the trade deficit, in constant pesos, would have increased during the first three months of the year.

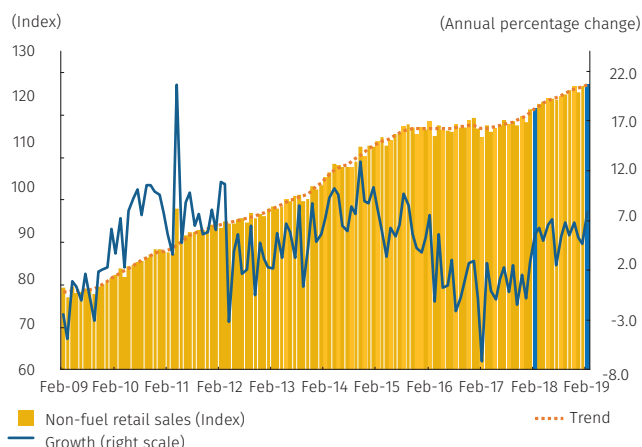
The results for the various short-term indicators support the forecast scenario described. In principle, retail sales of goods during the first two months of 2019 were satisfactory. Taking into account the figures up to February, the non-fuel sales index from the Monthly Retail Trade Survey (EMCM) conducted by DANE rose 7.1% annually, in its original series (Graph 2.2). The aggregate of this index for the January-February period was 5.1%. Although this is lower than the 9.0% recorded for the aggregate pertaining to the fourth quarter of 2018, the trend is positive and allows us to expect that the good momentum in sales of this type will continue. When discounting vehicle sales, the remaining aggregate showed an annual 7.9% increase in February (Graph 2.3), and 6.2%

Graph 2.2
Monthly Retail Trade Survey
(Total Non-fuel Retail Sales, Seasonally Adjusted and Corrected for Calendar Effects)



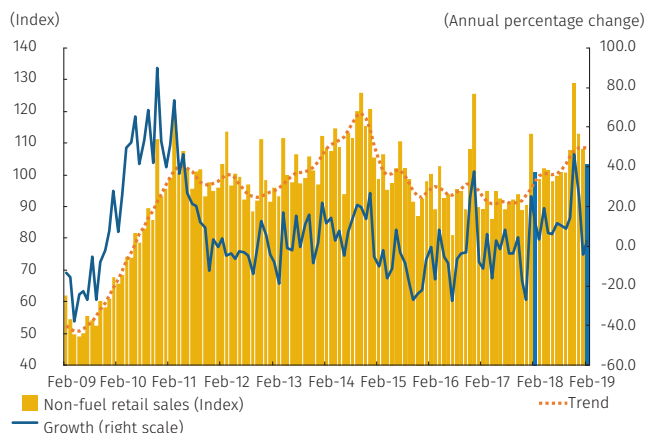
Sources: DANE; calculations by Banco de la República

Graph 2.3
 Monthly Retail Trade Survey (Total Non-fuel and Non-automobile Retail Sales, Seasonally Adjusted and Corrected for Calendar Effects)



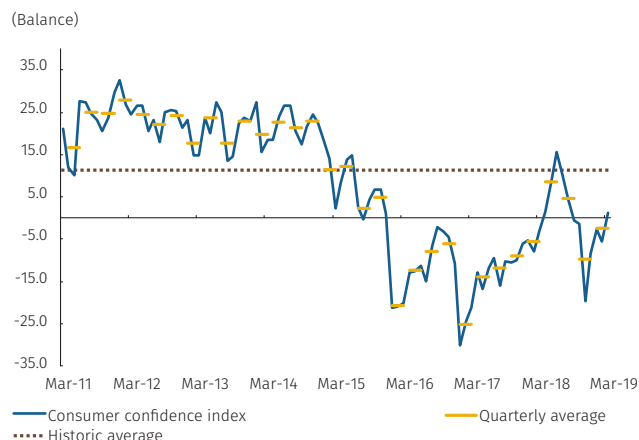
Source: DANE; calculations by Banco de la República.

Graph 2.4
 Monthly Retail Trade Survey (Automotive Retail Sales, Seasonally Adjusted)



Source: DANE; calculations by Banco de la República.

Graph 2.5
 Consumer Confidence Index and Quarterly Average



Source: Fedesarrollo.

for the two-month period. This implies a surge with respect to 5.8% in the last quarter of 2018.

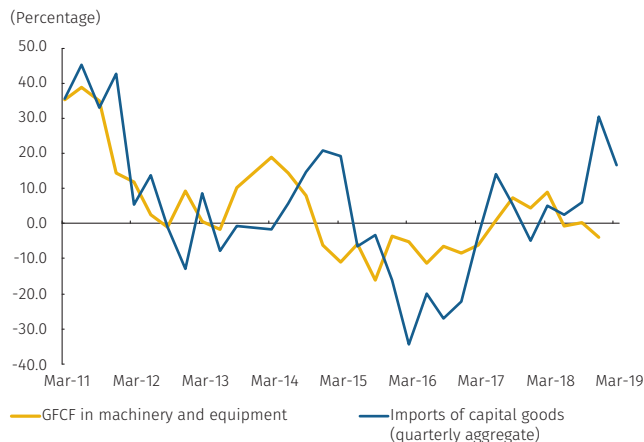
After a good fourth quarter, when vehicle sales rose by 28.8% annually within the framework of the XVI Bogota Motor Show, automotive retail sales slowed and dropped by 0.8% in the first two months of 2019 (Graph 2.4). On the other hand, the registration records published by the National Federation of Merchants (Fenalco) were up by 3.3% in March with respect to the same month last year. The annual increase in the aggregate for the first quarter of 2019 was 0.6%, which implies a major slowdown in light of 22.1% at the end of last year. These figures suggest that growth in the consumption of durable goods during the first quarter of 2019 was moderate.

Other auxiliary indicators that historically correlate highly with the performance of household consumption also point to moderate growth in this item during in the first quarter. To start with, the consumer confidence index (CCI) posted an increase in March that placed it in positive territory and above the figures observed since September of last year. Nevertheless, although the average of the aggregate for the first three months of the year was more than at the end of 2018, it continues to be significantly lower than the average calculated since 2001 (Graph 2.5). On the other hand, with figures up to January, the seasonally adjusted series of the sales balance in the Monthly Survey of Economic Expectations (EMEE) conducted by Banco de la República maintained the levels observed in previous quarters, suggesting few changes with respect to the momentum in household consumption.

With respect to the forecasts for GFCF, the series for imports of capital goods, in constant pesos allows us to expect good momentum in investment in machinery and equipment during the first quarter (Graph 2.6). The seasonally adjusted series for the EMEE balance of investment expectations, which shows a positive slant, suggests something similar.

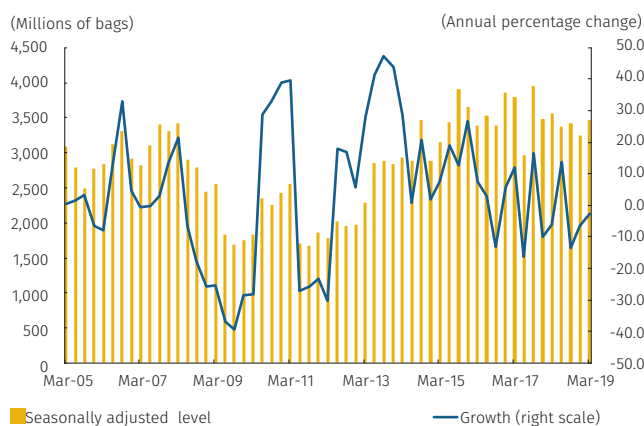
As for the different branches of activity, the indicators at hand also point to more GDP growth than during the last quarter of 2018, although with differences according to the sector. Favorable performance is forecast for mining, industry and

Graph 2.6
Imports of Capital Goods (Real) and GFCF without Construction Machinery and Equipment
(Annual change)



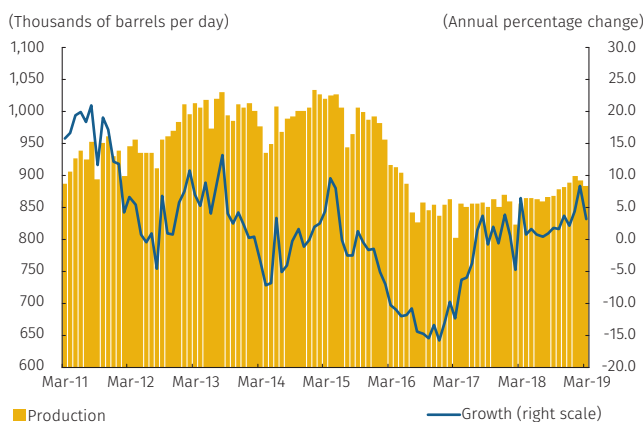
Sources: DANE (foreign trade and national accounts) and DIAN; figures in real terms, calculated by Banco de la República.

Graph 2.7
Coffee Production
(Quarterly and annual growth)



Source: ANH; calculations by Banco de la República.

Graph 2.8
Oil Production
(Monthly and annual growth)



Source: ANH; calculations by Banco de la República.

construction. However, the news on agricultural GDP reveals a certain degree of weakness in that sector.

The agricultural sector is expected to continue to see low growth in the first quarter of 2019, given weak performance that would be affected by the 1.9% drop in coffee production during January-March. This is according to the National Federation of Coffee Growers (Graph 2.7). However, the production of all other crops would have partially offset this performance. Ranching would have slowed because, according to the DANE Livestock Slaughtering Survey, the slaughter of cattle contracted in annual terms during the first two months of the year and there was a slowdown in the amount of hogs that were slaughtered.

Mining is expected to see added growth during the first quarter, surpassing the increase registered at the end of 2018, mainly due to the favorable basis for comparison provided by the early months of that year. In fact, a major surge in oil and gas production is forecast; according to figures from the National Hydrocarbon Agency (ANH), the respective growth in annual production by March came to 5.4% (Graph 2.8) and 14.5%. Coal production is expected to remain at relatively low levels similar to those witnessed the quarter before, which would continue to bring it down in annual terms, although to a lesser extent than at the end of 2018.

Manufacturing, which recovered significantly during 2018, would have shown again satisfactory growth in the first months of 2019. According to the Monthly Manufacturing Survey (EMM) conducted by DANE, total output in the sector rose by 2.9%, on average, during the January-February period (3.0% for the seasonally adjusted series corrected for calendar effects). Even so, the trend component of the series reveals some moderation in the acceleration in the sector (Graph 2.9).

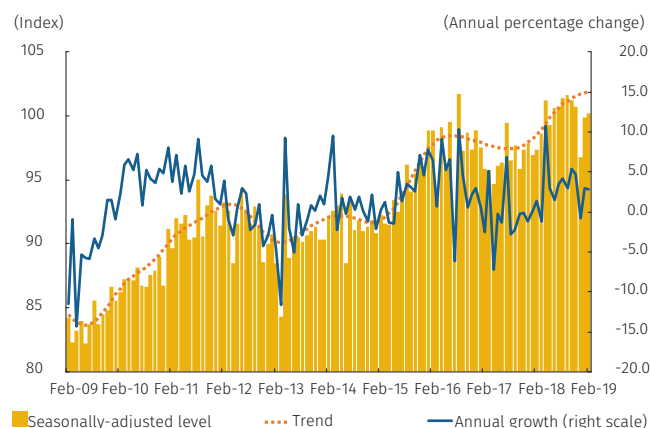
In terms of construction, the figures at hand make it possible to forecast annual growth in the early months of 2019 similar to that of the fourth quarter in 2018. The increase in cement production

and shipments during the first quarter of the year was satisfactory (4.2% and 3.3%, respectively), although these values represent somewhat of a slowdown compared with those on record for the last quarter of the previous year. On the other hand, cement production statistics show a significant surge in their annual growth rate at the beginning of 2019.

Finally, the momentum evident in the service-related sectors at the end of 2018 is expected to have continued at the beginning of 2019. Important annual growth is forecast for information and communications, and for financial and insurance activities, favored by the low basis for comparison at the beginning of the previous year.

With the foregoing figures, the technical staff estimates GDP growth in the first quarter of 2019 would have come to 3.2%. It is important to point out that the forecasts presented here face an additional margin of uncertainty, insofar as the historical correlation that existed between several of the short-term indicators and the items in the GDP weakened during the fourth quarter of last year (and, in general, throughout 2018). That being said, revisions in the historical series of output and its components cannot be ruled out.

Graph 2.9
Total Real Industrial Production
(Seasonally adjusted series, trend component and annual growth)



Sources: DANE; calculations by Banco de la República.

03

Recent Developments in Inflation

Annual consumer inflation remained at levels slightly above 3.0% during the first quarter, ending March somewhat below what was expected.

During the first quarter, core inflation continued to decline, falling below the target and with lower-than-expected results.

The low level and downward trend in core inflation is explained by several factors, namely, the change in the way the CPI is measured, indexing at lower levels, surplus production capacity, and limited pass-through from accumulated depreciation.

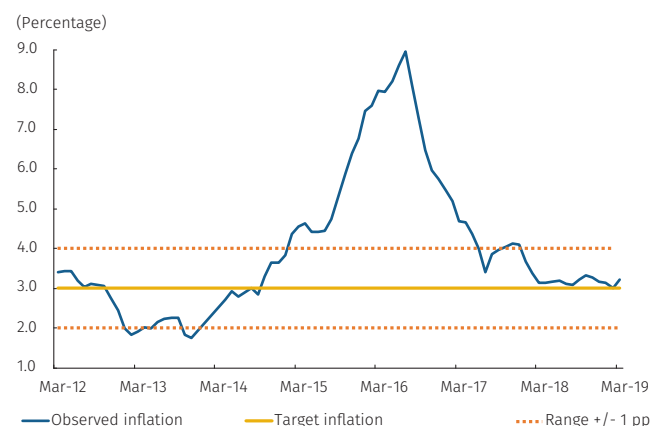
Food and regulated items brought upward pressures on annual inflation in the first quarter.

3.1 General Performance

At the end of the first quarter of 2019, annual consumer inflation stood at 3.21%, which is below the forecast presented in the *Inflation Report* for the previous quarter. With these results, annual consumer inflation completed a year of relative stability, with moderate fluctuations around a figure slightly higher than the specific target set by the Board of Directors of *Banco de la República* (BRBR) (Graph 3.1 and Table 3.1). Annual inflation declined during the first two months of the year, but increased in March, propelled by prices for food and some public utilities. Even so, the figure this last month was quite similar to the one in December 2018 (3.18%).

Core inflation, on the other hand, held to a downward trend during the first quarter of the year. Specifically, the average of the core inflation indicators

Graph 3.1
Consumer Price Index (CPI)
(Annual change)



Sources: DANE and Banco de la República

declined in January and February to below the 3.0% target for the first time since the end of 2014. In March, it stood at 2.82%, which is less than the outcome in December 2018 (3.03%) and similar to that of February.

The decline in core inflation was more pronounced than was forecast in the December *Inflation Report*. This is judging by the performance of the Consumer Price Index (CPI) excluding food and regulated items – the forecast variable in this document (see Chapter 4) – which was 2.38% on March (in contrast to 2.64% in December). The rest of the indicators also declined during the first three months of the year: the non-food CPI (3.26%), Core 20 (3.09%) and the CPI excluding perishable foods, public services and fuels (2.57%) (Graph 3.2 and Table 3.1).

Table 3.1
Inflation, Main Components and Core Inflation Indicators
(At March 2019)

Description	New CPI weights ^{a/}	Mar. 18	Jun. 18	Sept. 18	Dec. 18	Jan. 19	Feb. 19	Mar. 19
Total	100.00	3.14	3.20	3.23	3.18	3.15	3.01	3.21
Without food^{b/}	76.16	4.05	3.81	3.71	3.48	3.46	3.14	3.26
Tradables	19.16	1.80	1.83	1.57	1.09	0.99	0.80	0.90
Non-tradables	42.31	4.76	4.27	4.13	3.79	3.87	3.38	3.29
Regulated items	14.69	6.01	5.82	6.03	6.37	6.08	5.72	6.42
Food^{c/}	23.84	0.98	1.74	2.05	2.43	2.56	2.84	3.26
Perishables	3.15	7.13	8.47	9.51	8.88	8.89	8.32	9.98
Processed	11.90	-2.01	-0.91	-0.72	-0.08	0.22	0.64	1.43
Meals outside the home	8.79	3.32	3.13	3.32	3.68	3.68	3.97	3.43
Core Inflation Indicators								
Non-food		4.05	3.81	3.71	3.48	3.46	3.14	3.26
Core 20		4.04	3.58	3.56	3.23	3.09	3.13	3.09
CPI excluding perishable foods, fuel and public utilities		2.99	2.71	2.81	2.76	2.69	2.57	2.57
Inflation excluding food and regulated items ^{d/}		3.49	3.23	3.04	2.64	2.70	2.39	2.38
Average of All the Indicators		3.64	3.33	3.28	3.03	2.98	2.81	2.82

a/ Weights with the new method, which were used to calculate the CPI as of January 2019.

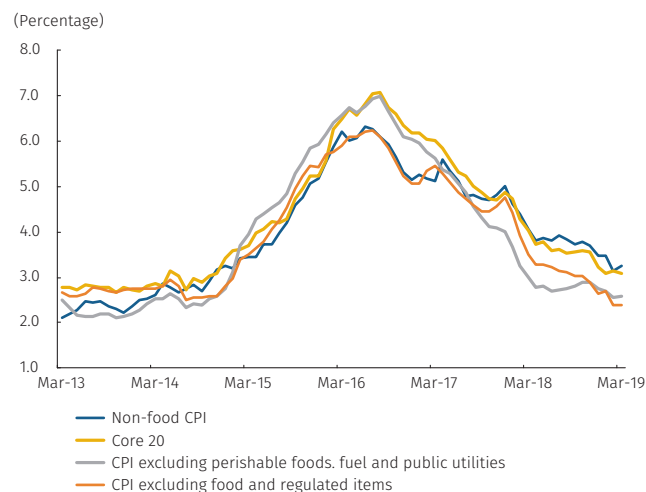
b/ Calculations by Banco de la República using the new methodology, excluding food and the sub-division pertaining to meals outside the home.

c/ Calculations by Banco de la República using the new methodology, including food and meals outside the home.

d/ Calculations by Banco de la República.

Source: DANE; calculations by Banco de la República with provisional classifications.

Graph 3.2
Core Inflation Indicators



Source: DANE; calculations by Banco de la República

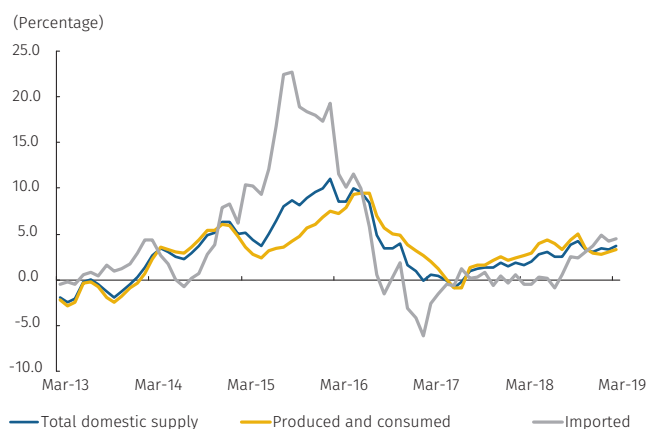
The favorable way annual inflation in Colombia has performed so far during 2019, and especially core inflation, can be attributed to several factors. One of them is the presence of downward shocks attributable to the change in the methodology used to measure the CPI. These shocks modified the non-tradable CPI, in particular, as explained below. Another factor is price indexing at the start of this year. As a reference, it used the headline inflation rate at the end of 2018, which was lower than the year before.

There are also indications that point to lower international prices for end goods and imported raw materials. In this case, however, the information is less conclusive, since annual inflation in the PPI for total domestic supply (the imported

PPI, plus the PPI for goods produced and consumed domestically) increased between December and March (from 3.09% to 3.65%), partly due to a spurt in the annual change in the imported PPI (from 3.67% to 4.46%) (Graph 3.3).

Additionally, and as has been the case for several quarters, the performance of inflation so far in 2019 continued to be favored by the absence of relevant demand-pulled pressure on prices. The different estimates developed by the technical staff at *Banco de la República* indicate that the economy would have continued to face a somewhat important degree of surplus production capacity, similar to the estimates for 2018. This is despite the fact that growth would have continued to gain momentum, as suggested by the GDP forecasts for the first quarter of the year (see Chapter 2).

Graph 3.3
PPI, by Origin
(Annual change)

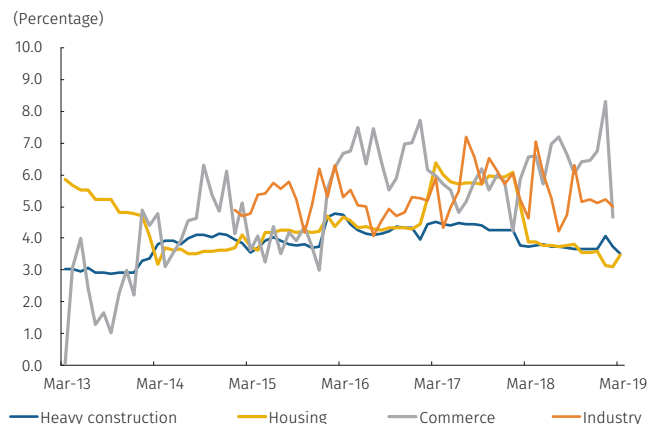


Source: DANE.

This situation would be restricting price adjustments in the non-tradable segment of the family basket of goods and services. Moreover, surplus production capacity would explain the existence of little or no pass-through from accumulated depreciation at the end of last year to domestic prices for tradable goods and services.

At the beginning of the year, there was no upward pressure from the hike in wages, particularly the minimum wage, which saw a relatively high increase for 2019 (6.0%) in relation to the inflation target. Moreover, the wage indicators for different segments of the labor market show declining adjustments during the year. Wages in trade are a case in point. In February, their annual increase came 4.69% as opposed to 6.76%

Graph 3.4
Nominal Wages
(Annual change)



Source: DANE; calculations by Banco de la República

in December. Declines also were reported in the pace of wage hikes in the manufacturing sector, although to a lesser degree (to 5.00% in February), and in those in housing and heavy construction (to 3.49% and 3.50% by March, respectively) (Graph 3.4).

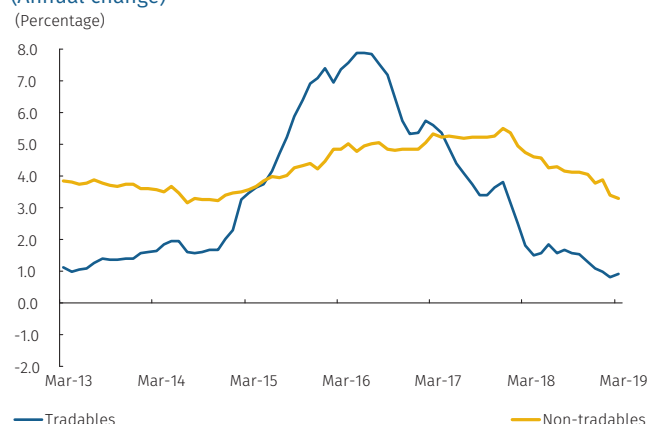
Food prices exerted moderate upward pressure, at least until February. However, the price increases in March were higher, partly owing to the effects the strike by indigenous communities had on the food supply in southwest Colombia. Even so, this segment of the CPI performed akin to the forecast in the previous report, which suggests weather variables would have had little impact and been no different than what was expected.

Regulated prices were another source of upward pressure in the first three months of 2019. Although previous reports warned of this, the adjustments in this segment exceeded the forecasts.

3.2 Performance by Component

During the course of the year up to March, the downward pressures on inflation have been concentrated in the tradable and non-tradable components (excluding food and regulated items). In the case of tradables, the previous report anticipated some upward pressure

Graph 3.5
CPI for Tradables and Non-tradables Excluding Food and Regulated Items
(Annual change)



Source: DANE; calculations by Banco de la República

inasmuch as accumulated depreciation from the second half of 2018 was expected to pass through to those prices. However, this does not seem to have occurred in light of the figures observed in the first quarter, since the annual variation in this component continued to decline (from 1.09% in December to 0.90% in March)⁷ (Table 3.1 and Graph 3.5).

There has been very little pass through from the exchange rate to consumer prices in the last few quarters, probably due to weak domestic demand, but also because international prices for some raw materials and fuels fell during the past year. Although some of these prices have increased more recently, important reductions

⁷ There was an increase in tradables between February and March (from 0.80% to 0.90%), largely attributed to the rise in the tax base for levies on alcoholic beverages. Therefore, its effect on inflation is temporary. In this respect, see Article 9 in the Financing Act, and Resolution 3098 of December 2018, adopted by the National Bureau of Statistics (DANE).

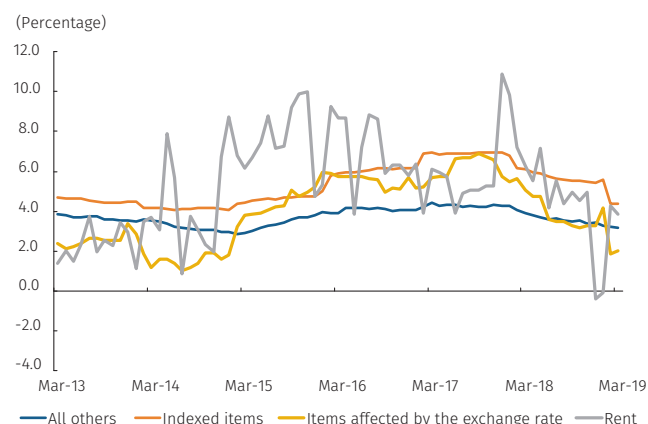
were accumulated in the last twelve months, which helped to reduce production and shipping costs, mainly in the case of tradable goods.

The annual variation in the non-tradable CPI (excluding food and regulated items) has trended downward for more than a year, even in the first quarter of 2019, having gone from 3.79% in December to 3.29% in March (Table 3.1, Graph 3.5). Given its weight in the CPI (42.31%, according to the new basket of goods and services), the main downward pressures on inflation in the early months of the year were concentrated in this component. The reduction in the rate of adjustment in these prices was generalized, with the exception of certain items, such as entertainment-related services (grouped in the segment entitled “the rest”⁸ in Graph 3.6).

Within the non-tradable CPI, the annual adjustments in rental prices (from 3.42% in December to 3.16% in March), indexed prices (from 5.43% to 4.38%) and those affected by the exchange rate (from 3.29% to 2.00%) declined during the first quarter. So far in 2019, these sub-groups of non-tradables have incorporated several downward price pressures. In particular, the indexed subgroup was favored by limited pass-through to these prices from the minimum wage hike⁹, especially in the service areas (such as education and health). The indexed segment of non-tradables also incorporated downward pressure due to methodological changes in the way enrollment fees for pre-school, elementary and secondary education are measured. Rental prices, on the other hand, like those that are indexed, have exhibited low inflationary inertia with respect to the annual adjustment in the total CPI for last year (3.18%). Likewise, the annual change in prices affected by the exchange rate for this sub-group has yet to forcefully include accumulated depreciation in the exchange rate in recent quarters, as was the case with the tradable CPI.

The momentum in the group of regulated items was contrary to that of the tradable and non-tradable components of the non-food CPI. Its annual variation rose during the first quarter (from 6.37% in December to 6.42% in March), maintaining high rates with respect to the inflation target and continuing this quarter with significant volatility, the same as last year (Table 3.1 and Graph 3.7).

Graph 3.6
Non-tradable CPI Excluding Food and Regulated Items
(Annual change)

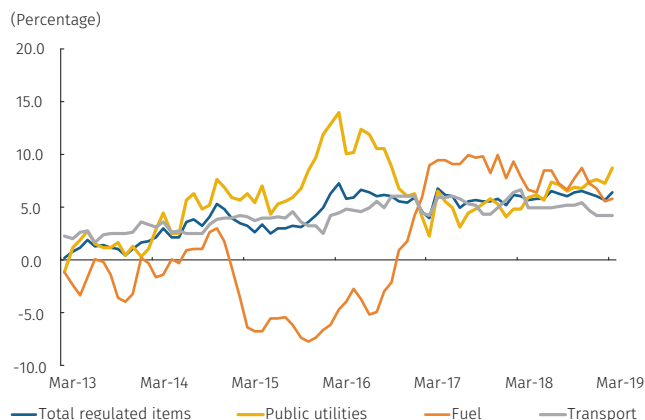


Source: DANE; calculations by Banco de la República

8 The group entitled “the rest” does not include soccer tickets in the new family basket of goods and services. This should reduce the volatility of inflation, especially at the end of each half year period, when the finals of the national championship are played. In this respect, see the June 2018 edition of the *Inflation Report*; specifically, Box 2, *Soccer and Inflation*.

9 The minimum wage hike ruled for 2019 (6.0%) amounts to 6.41% if the adjustment in the transport subsidy is included (10.0%).

Graph 3.7
CPI for Regulated Items and Components Thereof
(Annual change)



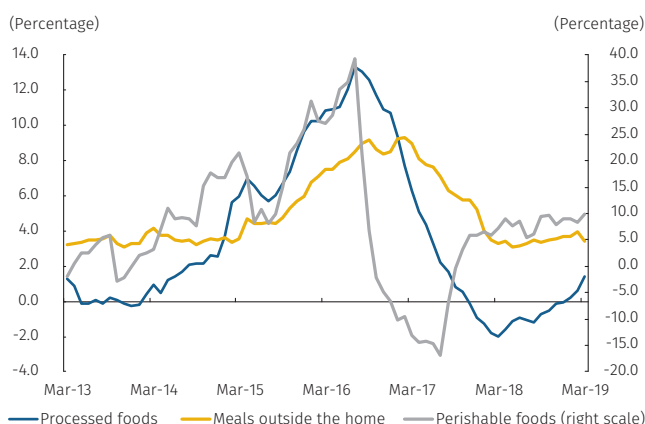
Source: DANE; calculations by Banco de la República

Graph 3.8
Food CPI
(Annual change)



Source: DANE; calculations by Banco de la República

Graph 3.9
Food CPI, by Groups
(Annual change)



Source: DANE; calculations by Banco de la República

As for regulated items, the sub-group comprised of public utilities was the only one that generated upward pressures on the CPI, having risen between December (7.47%) and March (8.80%). The increases were concentrated in the last month and affected all public utilities (gas, water and electricity). As for electricity, in particular, the main hike so far this year occurred in the cities on the Atlantic coast. This would be associated with the regional company’s added exposure to purchase prices on the energy exchange (spot market), which tended to rise sharply in recent months.

In contrast, the rate of adjustment in the fuel CPI was more moderate between December (7.28%) and March (5.85%), as were the increases in public transportation rates (having gone from 4.76% to 4.26%). In these cases, the rise in international fuel prices in recent months has not been reflected in domestic prices.

In addition to regulated prices, prices for the food group (including meals outside the home) also brought upward pressure to bear on annual inflation during the first quarter. Specifically, the annual variation in the respective CPI went from 2.43% in December to 3.26% in March, surpassing the inflation target for the first time since March 2017 (3.65%) (Table 3.1 and Figure 3.8). The first quarter also saw increases in the annual changes in the CPI for perishable foods (from 8.88% December to 9.98% March) and processed foods (-0.08% to 1.43%), while the item referring to meals outside the home pushed inflation down by going from 3.68% to 3.43% (Graph 3.9).

Perishable food prices were affected by the dramatic decline in the supply of these foods in the southwestern part of the country caused by the indigenous strike that lasted from March 10 and April 6. This led to major price hikes, especially in the cities of the Southwest, which reversed the downward trend witnessed the previous two months. There also have been increases in a number of products (those originating with livestock experienced the most pronounced hikes) in the cities on the Atlantic coast. These can be attributed to lower-than-usual rainfall due to the

current bout of *El Niño*. However, in terms of the country as a whole, the food supply has been relatively good, except for the situation derived from the strike, all of which suggests this weather phenomenon has had little impact on food prices, as was expected.

The presence of *El Niño* was confirmed in March and, according to the meteorological agencies, it most likely will last until to the middle of this year and be weak in intensity. This is important to note, as is the fact that weak episodes of *El Niño* in the past have had little impact on inflation, particularly on prices for food and energy.

Finally, increases in prices for meals outside the home have not been affected by higher food prices. Their adjustments would be restrained by the few adjustments in rental fees, by a moderately rising demand, and by the limited impact of the wage hikes.

Box 2 Possible Upward Pressures on Electricity Rates

Edgar Caicedo García
Jonathan Camilo Barriga Rojas*

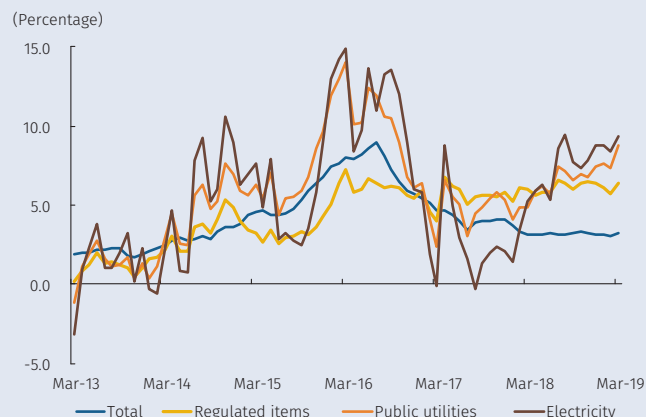
The upward pressures brought to bear on annual inflation so far this year have been caused by food, excluding meals outside the home, and by public utilities within the regulated component of the CPI. Inflationary pressures in this last segment have been generalized (electricity, water and residential gas), but led by adjustments in electricity rates (Graph B2.1). The current structure of the electricity market and its present situation are described briefly below, so as to identify the main upward risks to rates in the near future.

1. Structure of the Electricity Market

In Colombia, electrical power is obtained from different sources, the main one being hydroelectric plants, which produce about 70% of all electricity generated in the country. The rest is produced mainly by thermoelectric plants (28%), while unconventional sources generate 2.0%, with wind power being the prime one. It is important to point out that generating electrical power with sources of water is the least expensive under normal weather conditions. However, in dry periods or during bouts of *El Niño* weather, the percentage of power supplied by thermoelectric plants (especially those powered by gas and coal) tends to increase significantly in order to make up for the deficit in the power supply from hydroelectric plant. In most parts of the country, hydroelectric generating facilities see their volume of output decline when faced with episodes of this type.

* The authors are, respectively, a senior professional and student intern with the Programming and Inflation Department. The opinions and possible errors or omissions in this document are not binding on Banco de la República or its Board of Directors

Graph B2.1
Performance of Energy Inflation



Source: DANE; calculations by Banco de la República.

1.1 Who manages, regulates and oversees this Market?¹

In the electricity market, the Energy-Mining Planning Unit (UPME), a national technical entity attached to the Ministry of Mines and Energy, is responsible for planning and coordinating the agents in the sector. It also is in charge of defining sector policies on generation, transmission, distribution and marketing, until the product reaches the end consumer. The market is regulated by the Energy and Gas Regulation Commission (CREG), an entity that defines policies to improve the quality and coverage of power service. Surveillance, inspection and control over the provision of electrical power are the responsibility of the Office of the Superintendent of Residential Public Utilities (SSPD), a self-managed entity that has its own assets and is independent of the service commissions.

Moreover, in this scheme, operation and management of the electricity market are assigned to XM, an entity of the Commercial Trade System Administrator (ASIC in Spanish), which receives price offers from the companies that generate electricity and allocates daily power generation through auctions, ensuring the costs involved in generating electrical power are kept at a minimum. The regulatory framework establishes two categories of users: regulated (small consumers: households and small businesses) and unregulated (large consumers: medium and large companies).² The difference between them is explained by the

1 Law 142 and Law 143, enacted in 1994, created a new scheme for the electrical sector nationwide. The highlight of this legislation is that it allows the private sector to participate in the provision of public utilities, divides the production chain into several segments (generation, transmission, distribution and marketing), and establishes a regulatory system by creating the Energy and Gas Regulation Commission (CREG) and by designing mechanisms to defend the quality and reliability of service through the Office of the Superintendent of Residential Public Utilities (SSPD).

2 In this respect, see <http://www.creg.gov.co/index.php/es/sectores/energia/estructura-energia>.

prices that are applicable to the sale of electricity. The rates for regulated users are established by CREG, via a price formula, while the price charged to unregulated customers is negotiated freely between them and the companies that sell electrical power.

2. Developments in Prices, Difficulties and Upward Shocks

As mentioned in Chapter 3 of this report, most of the inflation pressures so far this year have come from food, excluding meals outside the home, and from regulated public utilities. Specifically, prices in the regulated group have raised annual inflation during the course of this year, having gone from 8.82% in December to 9.37% in March. During the first quarter of 2019, according to the capital cities included in calculating the CPI, energy prices rose by 5.99%, on average, in the main cities on the Atlantic coast (Barranquilla, Santa Marta and Cartagena), a figure that is quite high in light of the average growth (1.75%) recorded for the others. This sharp inflationary drive is associated with *El Niño*, which has been strongest in the Caribbean region and could last until the end of summer in the northern hemisphere. Added to this are the financial problems plaguing *Electricidad del Caribe* (Electricaribe), a firm that has been obliged to purchase more electrical power on the spot market. Electricity traded on the intraday market and in cash is usually more expensive than electricity purchased through contracts with the generating companies.³

Faced with Electricaribe's breach of payment obligations on the wholesale market, and as a measure to ensure the provision of electrical power in the Caribbean region, the SSPD took over the company for the first time at the end of 2016 and, in March 2017, ordered its eventual liquidation, so as proceed with a change in operators. In turn, under the leadership of the Ministry of Mines and Energy, several measures were designed for that Superintendency and were included in the National Development Plan, which would take effect after being endorsed by the executive branch.⁴

Article 311 in the National Development Plan creates a national surcharge on electrical utility service that amounts to four pesos per kilowatt consumed in households in income brackets 4, 5 and 6. Equal surcharges will be included in the rates charged to commercial and industrial users and to unregulated users of electrical power up to

December 31, 2022. This additional payment is expected to generate an estimated COP 160,000 million in revenue per year, destined to pay off of the financial obligations of the electrical power distributors that are having trouble guaranteeing the delivery of service. Furthermore, the nation will assume COP 1.2 trillion in pension liabilities owed by Electricaribe, and an additional 1.0% contribution will be created between 2020 and 2022, which companies monitored by the SSPD will be required to pay.

On the other hand, the Government intends to segment the market that was assigned initially to Electricaribe, distributing it in almost equal portions to Caribe Sol (Atlántico, Magdalena and La Guajira) and Caribe Mar (Bolívar, Sucre, Córdoba and Cesar). The operation would be carried out in two successive auctions: the first in September and the second one in October of this year. To qualify, buyers will have to invest COP 7.1 trillion in a ten-year plan, which is expected to solve the financial problems and difficulties involved in supplying electricity to consumers on the Atlantic coast.⁵

Moreover, the National Government, through the Ministry of Finance and the SSPD, set aside COP 420 billion for Electricaribe to purchase energy in the first quarter of this year, given the company's high exposure to the spot market, which is over 35%. This is well above the national average and has increased costs, as perceived in the prices charged for electricity in the major cities on the Caribbean coast in recent quarters. It is important to point out that there are two ways to purchase electrical power in the Colombian market: on the wholesale exchange and through long-term contracts (with more stable prices), which few generating plants are willing to offer Electricaribe.

Other electrical power companies also are facing operational and financial difficulties. The most worrisome, because of its size, is Emcali, a firm that has had financial problems since the early 1990s and currently owes the nation COP 1.2 trillion. In some cities in the Cauca Valley, high-income households already pay a surcharge on their energy bills to help cover this item.

On the other hand, the startup of operations at the largest hydroelectric power plant in the country (Hidroituango) has been delayed. Since April of last year, when the first landslides occurred at this facility, and particularly due to the damage caused to the powerhouse, the start of operations at this megaproject has delayed and might not happen until the end of 2021. Once up and running, it would contribute nearly 17% of the electrical power generated in Colombia. Consequently, the authorities in electrical sector were forced to adopt preventive measures to

3 The population served by Electricaribe accounts for 24.0% of the demand nationwide. This percentage underscores how strategically important the company is to Colombia's entire electrical system being able to operate fully.

4 The National Development Plan (Pact for Colombia, Pact for Equity, 2018-2022) is expected to be endorsed by the executive branch and converted into law at end of May.

5 In this respect, see <https://boletinmineroenergetico.uexternado.edu.co/electricaribe-sera-fraccionada-en-caribesol-y-caribemar-para-su-venta/>

meet the future demand for electricity. One of these calls for auctioning reliability charges⁶ to make up for the electricity that would be generated by Hidroituango, which had been scheduled to begin operating partially by the end of 2018. Although the execution of this hydroelectric project is covered by insurance, the aforementioned energy deficit could lead to upward pressure on rates in the coming semesters.

As an additional strategy to guarantee a supply of power in the future, an unconventional energy auction was held on February 26 to encourage the generation of solar and wind energy, and to expand the power supply by an additional 1,500 megawatts (MW). The country's installed capacity, at present, is 17,200 MW. However, on that day, no contact was awarded and a second auction will be scheduled for the second quarter of this year. The Government's objective is to increase the amount of installed capacity for generating solar and wind energy to thirty times what it is at present. Moreover, UPME estimates La Guajira could provide the National Interconnected Transmission System with 13% of the power supply, with non-conventional energy projects.

In summary, energy utility rates are expected to rise, bringing significant inflationary pressures on consumer prices in the near future. This would be associated with the prospect of adverse weather (*El Niño*) in the coming months, which, although weak in intensity, is already generating rising costs due to the added generation of thermal energy. In addition, there are difficulties caused by cost overruns and the delay initiating operations at the largest hydroelectric power plant in the country. Also, the troubling financial situation of two of the main electrical power distributors in Colombia is compromising the supply of electricity, making it difficult to stabilize rates. Specifically, solving the economic problems of the main electrical power distributor on the Atlantic coast will increase the price for every kilowatt consumed in all the upper income brackets of the population and in the country's business sector during the next four years, in accordance with the provisions outlined in the 2018-2020 National Development Plan.

6 The reliability charge is a remuneration scheme designed to encourage investment in the generation of electrical power, by efficiently responding to the demand for energy under critical supply conditions, with long-term signals and stabilization of revenue for the generator. One of the essential components of the new scheme is the existence of firm energy obligations (FEO), which are a commitment on the part of generators to produce stable energy during critical supply conditions. In this regard, see: <https://www.xm.com.co/Promocin%20First%20Sub-asta%20of%20Energia%20Firme/abc2.pdf>

04

Medium-term Forecasts

In this report, the GDP growth forecast for 2019 exhibited few changes.

The remainder of the year is expected to see investment perform better than it did last year.

There are no pressures anticipated for the next two years that would deviate headline inflation permanently and substantially from its target.

The path of core inflation was reduced in this report, maintaining levels below the target but converging toward the forecast horizon.

4.1 Economic Growth in 2019

The data available for the year, as well as the prospects for the performance of macroeconomic fundamentals, allow us to anticipate an upswing in the growth rate for the Colombian economy in 2019 with respect to what was observed for 2018. For this report, the technical staff revised the 2019 GDP growth forecast upward to 3.5% per year (as opposed to 3.4% forecast last quarter).

This surge, which implies a convergence toward the Colombian economy's potential rate for long-term growth, would occur in a context of relatively broad access to external savings, with more availability of resources than in 2018 (Chapter 1). Added to this is the positive effect entry into force of the Financing Act at the beginning of this year must have had. Colombia's economic performance would improve despite the fact that international oil prices would average less than they did last year. Likewise, and as explained in Chapter 1, this would occur in a context of less growth on the part of our principal trading partners.

The increase in domestic demand would be accompanied by more external financing.

The increase in domestic demand would be accompanied by more external financing. In particular, it would influence better performance in terms of gross capital formation. The technical staff at *Banco de la República* expects investment in the construction of civil works and in machinery and equipment to accelerate in 2019 with respect to the figures on record for last year. In the first case, the primary drive would come from an increase in own resources and royalties spent by regional and local governments on infrastructure works, as well as continuation of the 4G highway construction projects. Some of the bottlenecks faced by those projects in recent periods are expected to be overcome.

As for investment in capital goods, the technical staff's forecast includes the potential positive effects that tax benefits would bring on investment of this type; namely, the benefits contemplated in Law 1819 of 2016 and, more recently, Law 1943 of 2018, known as the Financing Act. It is important to point out that investment in the construction of buildings is expected to perform somewhat better, assuming there will be more momentum in the low-income housing sector (LIHS), as well as fewer surpluses in the supply of non-residential buildings.

Growth in total consumption, on the other hand, would be satisfactory, although below its historical average. However, the dynamics in private and public components would be different. In the first case, household consumption would continue its trend toward recovery in a context characterized by controlled inflation, real interest rates that remain in expansive terrain, relative availability of credit, and a gradual recovery on confidence in recent months.

With regard to public consumption, an orderly adjustment in this GDP component during 2019 is expected, as was anticipated in previous editions of this report. Accordingly, the growth in this item would be less than in 2018, when it was 5.9% for the year. This slowdown would be in keeping with what was anticipated by the National Government, and would be consistent with the fiscal target; namely, a deficit of 2.7% of GDP for the current year.

In conclusion, net external demand in 2019 would subtract from GDP growth for the second year in a row. In this respect, the technical staff foresees moderate growth in exports, for two fundamental reasons. First, the negative supply shocks to raw material exports in 2018 would not be reversed entirely in 2019, as was expected previously. This is particularly true in the case of coal. Secondly, less momentum in external demand would not allow for a rebound in non-traditional exports.

In contrast, the rate of growth in imports will be significant, given the expectation of added momentum in domestic demand. This being the

Net external demand would contribute negatively to growth in 2019.

case, the trade deficit (measured in constant pesos) would rise in 2019 in light of what it was in 2018.

From a sector standpoint, the estimates developed by *Banco de la República's* technical staff suggest economic growth will accelerate in 2019, thanks largely to better performance in construction, manufacturing and mining.

As for construction, the two lines that make up this branch of the economy: buildings and civil works, are expected to rebound in 2019. In the first case, growth in the subsector would contribute considerably to the construction of low-income housing (LIH), which the National Government says would register important momentum in 2019. In the second case, the recovery would be supported by budget spending on the part of local governments and, to some extent, by the startup of several 4G projects. It should be noted that construction has important productive links with other branches of economic activity, such as industry and transport. So, its recovery should contribute to better performance in these groups as well.

Industrial production will gain momentum this year, in line with the added drive from domestic demand. On the other hand, growth in agricultural production is expected to be similar to that it was in 2018. The bout of *El Niño* weather, which international agencies are forecasting as weak, would have little impact on supply in the sector. The National Federation of Coffee Growers is forecasting better production during 2019 (thanks to more favorable weather conditions and good blossoming) especially in the second half of the year.

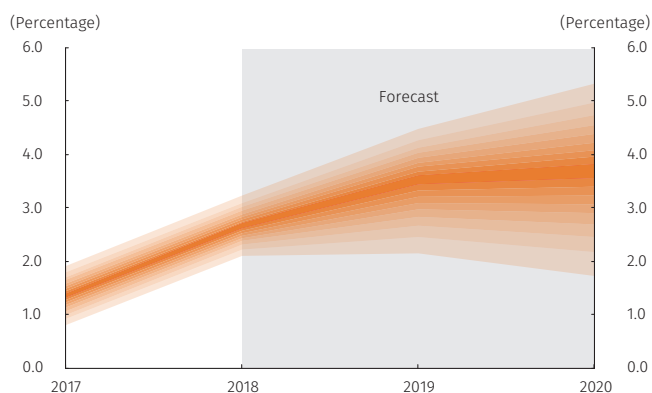
GDP from mining is expected to see positive growth, unlike in 2018 and backed mainly by oil production, which is forecast to accelerate this year. On the other hand, the forecasts developed by federations and unions in the sector allow us to anticipate good momentum in the production of metals, such as gold and nickel. In contrast, another decline in coal production is anticipated for 2019, consistent with the forecast for exports of this product.

Considering all of the above, and as stated at the beginning of this section, *Banco de la República's* technical staff forecasts 3.5% GDP growth in 2019. This is the most likely figure and is slightly above the forecast published in the previous *Inflation Report* (3.4%). The central point is within the fan chart of economic growth that is derived from the medium and long term forecasting models used by the Office of the Technical Governor. On this occasion, the breadth of the intervals remains wide and, as illustrated in Graphs 4.1 and 4.2, the biases are slightly downward. Table 4.1 shows the probability ranges in the GDP growth chart.

Mining GDP will register positive growth in 2019, thanks to the increase in oil production.

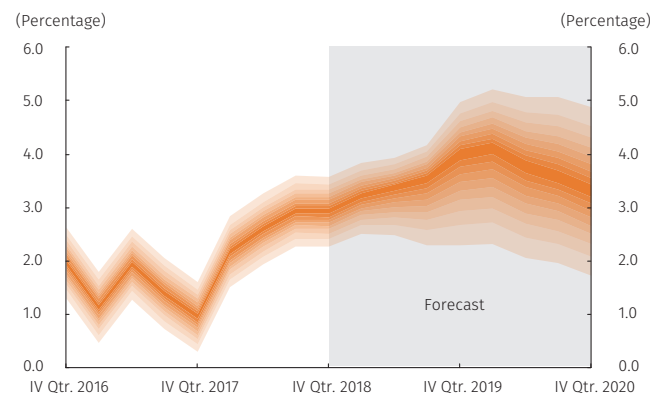
The technical staff forecasts 3.5% growth in 2019.

Graph 4.1
Fan Chart of Annual GDP Growth



Source: DANE; calculations by Banco de la República.

Graph 4.2
Fan Chart of Annual Growth in Quarterly GDP



Source: DANE; calculations by Banco de la República.

Table 4.1
Probability Ranges in the Fan Chart of Annual GDP Growth (Percentage)

Rango	2019	2020
<-1.0	0.0	0.0
-1.0 - 0.0	0.0	0.1
0.0 -1.0	0.2	1.3
1.0 - 2.0	4.0	7.3
2.0 - 3.0	27.2	22.1
3.0 - 4.0	51.9	34.9
> 4.0	16.7	34.4
Between 3 & 5	68.2	60.7
Between 2 & 4	79.1	57.0
Between 1.5 & 3	30.4	27.1

Source: DANE; calculations by Banco de la República.

The main downside risks would be related to weaker performance than what was forecast for domestic demand, which would be generated by less growth in investment, weaker-than-expected external demand (due to less growth on the part of our major trading partners), and a higher risk premia for Colombia. The main upside risk taken into account is the possibility of a slower decline in oil prices with respect to what is contemplated in the baseline scenario.

4.2 Inflation

With the figures for March, annual consumer inflation completed a year of enormous stability at levels slightly above the 3.0% target established by the BDBR. On the other hand, core inflation, measured with the CPI excluding food and regulated items, continued on a downward trend, staying below the target and moving away from it.

There are no pressures anticipated for the next two years that would deviate inflation permanently and substantially from its target. The new forecasts presented in this report suggest headline inflation during that period would remain quite close to its current levels, with fluctuations that will depend on the effects of certain shocks, some of which would be temporary. For its part, core inflation should return to the target during the course of the next four quarters and subsequently stay there.

As opposed to what was presented in the December *Inflation Report*, the most relevant change is in the path anticipated for core inflation, which was reduced in the forecast horizon in this report. However, this indicator still is expected to converge towards 3.0%, although it would do so several quarters later than the timeframe indicated in past editions of this report. In the case of headline inflation, the new path forecast for the next two quarters is lower as well, but the changes moving forward are less, with results for the end of 2019 and in 2020 that are very similar to those obtained for the December report.

As explained in Chapter 3 of this report, headline and core inflation during the first quarter of this year were lower than anticipated, revealing downward pressures on the pace of price changes, which were underestimated in previous reports. These factors should continue to exert an influence throughout the rest of the year and, in part, they explain the lower forecast path, especially in the case of core inflation.

Indexing is a case in point. It has posted lower rates than in previous years, thereby reducing the extent of price adjustment for services such as education and health. This circumstance should continue to limit price hikes for these and other items during the remainder of the year and towards 2020, which would translate into lower inflationary inertia than was contemplated in past forecasts.

It was noted in the previous edition of this report that the increase in the minimum wage, which was 6.0% by 2019 and relatively high in light of the inflation target, would exert upward pressure on consumer prices throughout the year. However, the results for the first quarter appear to show this connection between the minimum wage and the CPI would be less than expected, as suggested by the narrow price hikes for some services (see Chapter 3). Consequently, in this report, the anticipated inflationary pressures associated with this circumstance were revised downward in the forecast path for the remainder of the year.

Current labor market conditions also suggest that the hike in the minimum wage had a limited impact on other wages and, therefore, on consumer prices. The unemployment rate has increased so far this year and, although there have been signs of a recovery in salaried and

The core inflation path was lowered on this occasion.

Indexing is expected to remain low during the forecast horizon.

formal employment, this is not the case with total employment, which remains at a standstill. Accordingly, the persistent weak situation in labor market allows us to rule out the possibility of wage increases that might generate excessive pressure on consumer prices in the coming quarters.

Another factor that should continue to exert some downward pressure on inflation, at least during the rest of 2019, but was underestimated in the previous report, is the impact of the new method used to measure the CPI, which was introduced at the beginning of the year. For reasons explained already (see Chapter 3 of this report, and Box 2 in the December *Inflation Report*), this innovation lowered the pace of price adjustments for certain items in the consumer basket of goods and services, due to changes in the way they are measured, and in the aggregate index itself, because of variations in the weight assigned to the different components. This impact can be treated as a one-time downward shock to the price level, which would persist in annual inflation for twelve months.

In addition to less inflationary pressure and for the reasons noted already, the cost of external financing for Colombia was revised downwards in this report and, with it, the path forecast for the exchange rate. This was done bearing in mind that, during the first quarter of the year and until mid-April, it was evident that monetary authorities in the advanced economies, and particularly in the United States, had less need to raise their benchmark interest rates in the short or medium term. Accordingly, as explained in Chapter 1 of this report, rate hikes by the Fed in the next eight quarters were ruled out and, as a result, the path used in the current inflation forecasts was reduced compared to what it was in the previous report. Furthermore, this is reinforced by a country risk premia for Colombia which is now historically low and is converging towards its average level (calculated since 2005) more sluggishly than was contemplated a quarter ago.

The lower forecast for the exchange rate implies less pressure on tradable prices and has a downward impact on inflation. In part, it explains why the central path forecast for the next two years was revised, especially in the case of core inflation. Even so, it is important to point out that this report continues to forecast nominal and real depreciation of the peso in the medium term, although it should be less than was anticipated earlier and should pass through to consumer prices. Accordingly, an increase in tradable inflation, from its current low levels, is still foreseen for the coming quarters. Also, this phenomenon partly explains the convergence of core inflation (CPI excluding food and regulated items) to 3.0%.

As in recent years, for much of the forecast horizon in this report demand-pulled price pressures will continue to be contained by the existence of surplus production capacity and by a negative output gap.

Introduction of the new methodology for measuring the CPI produced a downward shock to the price level, which will continue to be reflected in annual inflation for the remainder of the year.

This report forecasts less upward pressure on inflation from the exchange rate.

As a result, adjustments in the prices for non-tradables will be held at values close to 3.0% for the remainder of 2019 and pass-through from depreciation to tradable prices will remain low, at least during the second quarter, as has been the case since the middle of last year.

However, this report estimates a product gap in the future that would close a bit faster than was anticipated in the December report. This is based on the assumption that the economy should continue to gain momentum slowly, driven by domestic demand, and the fact that the growth forecast was revised upwards somewhat, as explained in the first half of this chapter.

Consequently, in the current baseline path forecast for inflation, the extent to which the output gap would contain upward pressure on prices by around 2020 would be less than was anticipated last quarter. Likewise, gradual closure of the gap in the next eight quarters should help to boost inflation in non-tradables and, hence, core inflation until it converges with the target, as occurs with depreciation in the exchange rate, which was explained already.

These downward pressures on inflation should offset the main upward pressures, which will continue to originate largely with the performance of prices for regulated items. Food prices would be a contributing factor as well, although to a lesser extent and more in the short term.

The path forecast in this report with respect to the annual variation in the regulated CPI was raised for this year and 2020. Energy rates will continue to be the primary source of inflationary pressure, with larger adjustments than those contemplated last quarter, given the partially anticipated impact of *El Niño*. Although this bout of weather is expected to be weak, it would affect prices on the energy exchange and, consequently, the rates charged to consumers in the short term. Also, the magnitude and frequency of the hikes required to meet the added need for investment in the sector and to guarantee the solvency of the company that serves the market on the Caribbean coast would have been underestimated. Accordingly, energy rates are expected to end 2019 with annual variations significantly higher than 3.0%. This situation would be repeated in 2020, although with smaller increases.

Since international prices for oil and its derivatives were higher at the end of the first quarter (USD 68 per barrel for Brent crude) compared to the forecast, and considering the exchange rate is expected to depreciate moderately, the adjustments in domestic fuel prices in the short term also were revised upwards in this report. However, international prices are expected to come down to more sustainable levels (USD 62 per barrel for Brent crude) during the second half of the year and by 2020 (see Chapter 1). So, in terms of the current baseline

A negative output gap will continue to help trim price adjustments in the forecast horizon.

The path forecast for the annual variation in regulated items increased.

forecast, domestic fuel prices cease to be a source of inflationary pressure in the medium and long term.

As for food (including meals outside the home), the new forecasts indicate a moderate rise in the rate of these price adjustments during the next two quarters. This increase, which would be driven by prices for perishable foods, is due to both the usual behavior of the agricultural cycle and to the impact of *El Niño* weather, which occurred towards the end of the first quarter of this year and would last for one or two more quarters.

Apparently, *El Niño* would have begun to have had some effect on food prices by the end of the first quarter, which is a bit later than anticipated. In the new forecast, the major impact would be observed towards the third quarter and not in the second, as was contemplated in the last report. In any case, the current report still expects the increase in food prices associated with *El Niño* would be minor, because the strength of the current bout is weak or moderate. Therefore, its impact is far from what was observed in 2016, when *El Niño* was quite intense. However, it is important not to forget there is a great deal of uncertainty surrounding forecasts about the weather and how it might affect prices.

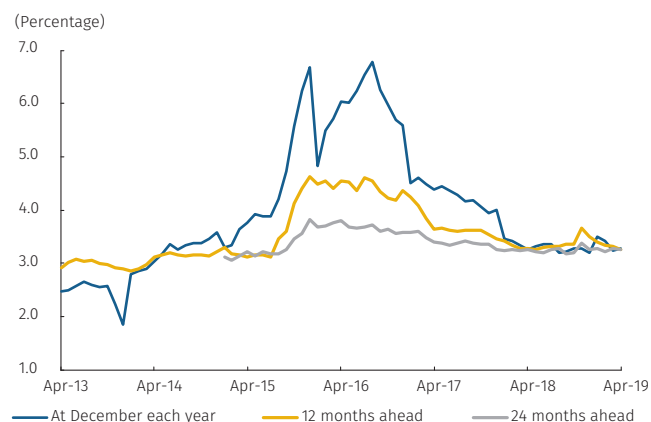
The other components of the sub-group are expected to be relatively stable. No pressure is anticipated in any direction as a result of sharp fluctuations in international prices for the agricultural raw materials imported by Colombia, nor due to the pattern in meals outside the home.

The way expectations have behaved recently should contribute to the stability of inflation at levels near the target, as suggested by the forecasts outlined in this report. So far this year, up to the beginning of April, the expectation measurements available to *Banco de la*

República Republic tended to decline, approaching 3.0%. In particular, the measurement obtained from the Bank's monthly survey shows inflation is expected to be 3.28% by the end of 2019 and 3.25% at twelve and twenty-four months. At the beginning of January, these values were calculated at 3.50%, 3.41% and 3.28%, respectively (Graph 4.3)

On the other hand, the percentages estimated on the basis of TES at mid-April show expectations at two, three, five and ten years came to 3.04%, 3.13%, 3.24% and 3.47%, respectively. These are below the amounts obtained with the figures at mid-January (3.59%, 3.60%, 3.63% and 3.75%, in that order) (Graph 4.4).

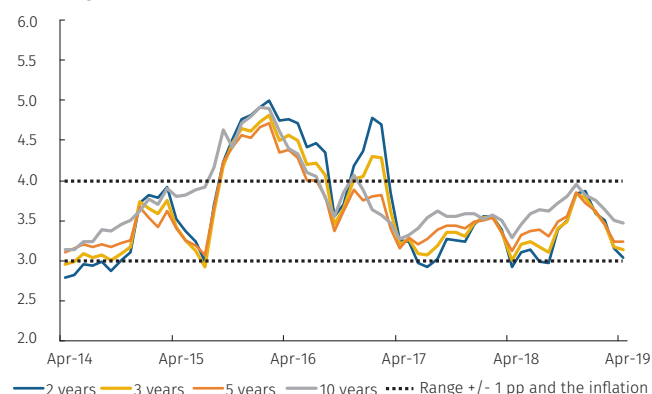
Graph 4.3
Annual Inflation Forecasts by Banks and Brokerage Firms



Source: Banco de la República.

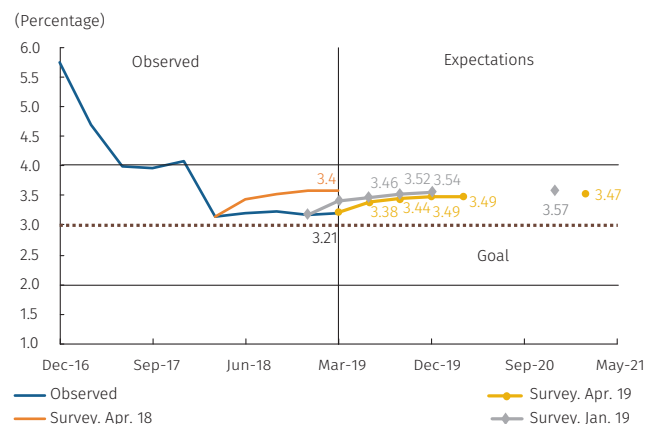
Last but not least, in the case of the quarterly survey, also conducted by *Banco de la República* at the beginning of April, the figure anticipated in December this year is 3.49% (as opposed to 3.54% at the start of January) and 2.47% at twenty-four months (versus 3.57%, which was the previous figure). Historically, this survey has tended to show higher values than those obtained with the other two measurements (Graph 4.5).

Graph 4.4
Break-even Inflation Expectations Derived from TES
(At two, three, five and ten years)
(Monthly average)^{a/}
(Percentage)



a/ Nelson & Siegel Method
Source: *Banco de la República*.

Graph 4.5
Observed Headline Inflation and Inflation Expectations (At three, six, nine, twelve and twenty-four months)

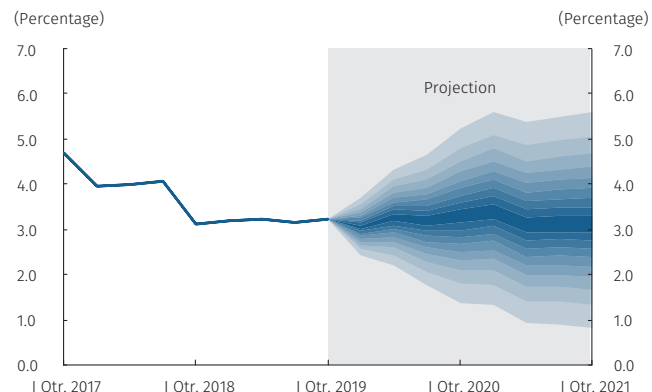


Sources: DANE and *Banco de la República* (Quarterly Survey of Expectations).

4.3 The Balance of Risks

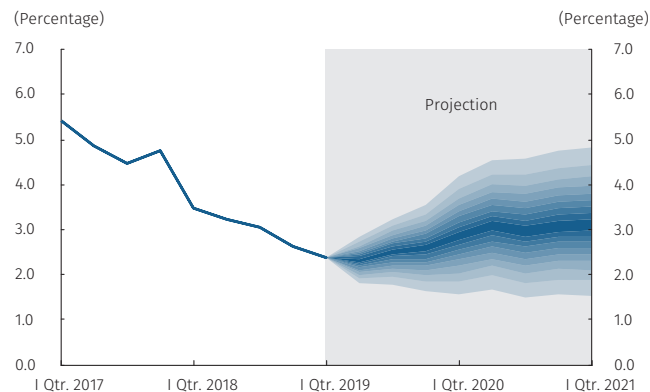
The balance of risks (fan Graph) with respect to headline consumer inflation and inflation excluding food or regulated items is shown in the fan charts (Graphs 4.6 and 4.7). It was constructed based on the central path for these variables, derived from the forecast developed by the technical staff. For this report, we estimate a fan chart of headline inflation with no biases for 2019, but with a slight upward bias for 2020, somewhat lower than what was noted in the previous report.

Graph 4.6
Estimated Probability of Inflation between 2.0% and 4.0% by December 2019



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

Graph 4.7
Fan chart de la Annual Inflation Excluding Food



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

The major risks to headline inflation come from the external context.

The main headline inflation risks considered in this report come from the external context. Changes in the baseline forecast for the variables related to the external environment would affect consumer inflation through various channels, particularly due to movement in the exchange rate (pass-through), since a path of the peso against the dollar is expected to be very different from the one considered in the baseline scenario of this report. The extent of the impact on prices will vary in each case, depending on the origin, circumstances and intensity of the shock. These and other risks considered when constructing the fan chart are detailed below.

The following are the main upward risks:

A country risk premia for Colombia that increases faster than the one projected in the baseline path of the forecast

The baseline forecast in this report assumes that Colombia's country risk premia will increase gradually towards its historical average, but on a slower path to convergence than was considered in the last report (see Chapter 1). This means that the country's premia would have to remain low for a significant period of time. However, circumstances such as a more pronounced economic downturn in the United States and in other advanced and emerging economies that generates international risk and/or reduces Colombia's terms of trade and the demand for its exports could affect the perception of the risk of investing in the country. This would imply a faster increase in the risk premia, which would reduce the flow capital into the Colombian economy, with upward effects on the exchange rate compared to what is contemplated in the central path of the forecast in this report, all of which could lead to higher consumer inflation.

Additionally, there is a risk of deterioration in the debt and in the country's external imbalance, particularly considering an external monetary policy scenario different from what is expected, which would result in more pressure on the country's risk premia.

Regulated prices above the projection in the central path of the forecast

As mentioned in Section 4.2 of this report, the baseline forecast contemplates a downward path for annual inflation in regulated items, although it would continue to be higher than it was anticipated in the last report. However, there are risks that could result in this decline being slower or not happening at all in the coming quarters, particularly because there are still upward risks facing public utilities, especially electricity. These risks are associated with the difficulties confronting several generating plants and distribution companies. There are weather issues as well.

Regulated prices superior to those considered in the baseline forecast pose a risk of higher inflation.

Lower domestic demand than what is contemplated in the central path of the forecast, due to less investment, would generate downside risks to inflation.

On the other hand, there are risks of higher domestic fuel prices. As discussed in other parts of this section, this is because variables such as the international price of oil and depreciation of the peso could be higher than what is assumed in the central path of the forecast.

If these eventualities were to come about, it would not only deal a blow to changes in regulated prices, but also would affect much of the entire CPI basket of goods and services, through higher production and shipping costs.

Finally, should any of these risks materialize, not only would the behavior of headline inflation be directly and temporarily affected, but it also might be impacted indirectly and, to some extent, permanently, due to the effect these events can have on expectations and the activation of indexing mechanisms.

The following are the major downside risks considered in this report.

Less growth in domestic demand than is included in the central path of the forecast.

Domestic demand recovered gradually in 2018 and, according to the baseline forecast in this report, it is expected to continue to accelerate in annual terms during 2019, thanks largely to good performance by investment (especially in civil works and the construction of buildings), as well as the positive effects of the Financing Act.

However, there are still problems associated with project delays, especially in the case of the 4G highways. On the other hand, it is possible the consequences of the Financing Act might be overestimated, primarily for 2019, since investment may take longer to respond than expected. Both situations imply the risk of these variables not performing as well as anticipated in the central path of the forecast in this report. Considering the links investment generates, less momentum in performance would lead to a scenario with less domestic demand, which would tend to exert downward pressure on inflation.

A higher path for the international price of oil than is anticipated in the baseline forecast.

This report includes an average oil price for 2019 near USD 63 per barrel (Brent crude), which means the levels reached in the early weeks of April (over 70 USD per barrel) would be temporary. Accordingly, the baseline forecast in this report assumes a gradual decline in the price of crude oil, especially after mid-year and mainly due to the increase in global supply, driven by production in the United States, among other factors.

However, it could take longer than expected to shore up the supply, particularly due to the political situation of some of the major important oil producing countries (such as Libya, Iran, and Venezuela) and the uncertainty surrounding the agreement on the export quotas for the OPEC member countries. The agreement will be discussed at the OPEC meeting scheduled for mid-year, and the possibility that it might be extended in some way cannot be ruled out at this point.

If these circumstances were to materialize, the price would remain at levels similar to the current ones and above what is considered in the baseline forecast in this report. This would continue for quite some time and consumer inflation would be affected in two ways: on the one hand, there would be less depreciation than expected, which would mean less pass-through to consumer prices; on the other, there would be an opposite effect created by higher production costs, especially for some raw materials and shipping. However, judging from similar events in the past, the exchange rate channel is expected to take precedence, which would reduce the upward pressure on inflation.

Finally, it is important to mention that, as of this report, both the central path of the forecast and the current risk exercise are constructed following to new methodology used to calculate the CPI, with December 2018 as the base period in terms of the updated weights and basis for the indexes. However, as noted elsewhere herein, the subgroups used for analysis in previous reports are maintained.

In keeping with the set of risks outlined in this report, the fan chart suggests the probability of headline inflation being between 2.0% and 4.0% by the end of 2019 increased to 73.4%, and is 52.3% for 2020 (tables 4.2 and 4.3). However, the amplitude of the density function of the forecasts shown in Graph 4.8, according to the shaded area, only includes 90% of it. The results, like the baseline forecast, assume an active monetary policy with *Banco de la República's* benchmark rate being adjusted to ensure the inflation target is met.

There is a 73.4% probability that headline inflation will be between 2.0% and 4.0% by the end of 2019.

Table 4.2
Estimated Probability of Inflation between 2.0% and 4.0% by December 2019
(Percentage)

Report	Probability
June 2018 Report	52.8
September 2018 Report	54.2
December 2018 Report	59.9
March 2019 Report	73.4

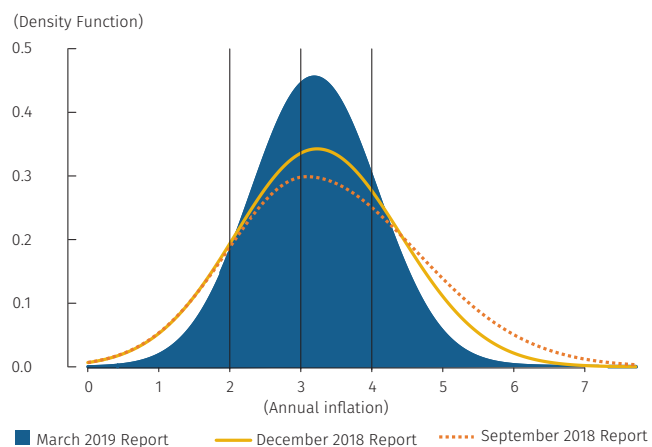
Source: Calculations by *Banco de la República*

Table 4.3
Probability Ranges in the Fan Chart of Headline Inflation (Percentage)

Range	2019	2020
< 2.0	8.6	19.6
2.0 - 2.5	12.8	11.6
2.5 - 3.0	19.8	13.7
3.0 - 3.5	22.4	14.1
3.5 - 4.0	18.4	12.9
> 4.0	18.0	28.1
Between 2 & 4	73.4	52.3

Source: Calculations by *Banco de la República*

Graph 4.8
Cross-section of the Fan Chart of Annual Headline Inflation for December 2019



Source: Calculations by *Banco de la República*.

Annex

Macroeconomic Forecasts by Local and Foreign Analysts

A summary of the latest forecasts by local and foreign analysts concerning the main economic variables for 2019 and 2020 is presented in this attachment. At the time they were consulted, the analysts in question had access to data up to April 25, 2019.

1. Forecasts for 2019

On average, the local analysts expect 3.2% GDP growth, which is the same as estimated in the *Inflation Report* for last quarter. Similarly, the foreign analysts who were consulted forecast 3.2% GDP growth, on average, which is slightly more than the estimate in the last edition of this report (3.1%).

As for prices, the local analysts predict 3.3% inflation by the end of the year, which is less than their forecast in the previous report. The foreign analysts expect it to be 3.4% by the end of the

Table A1
Forecasts for 2019

	Real GDP growth (Percentage)	CPI inflation (Percentage)	Nominal exchange rate End of	Nominal DTF (Percentage)	Fiscal deficit (porcentaje del PIB)	Unemployment for the thirteen major metropolitan areas (Percentage)
Local Analysts						
Alianza Valores ^{a/}	3.4	3.5	3,300	4.8	2.8	9.0
ANIF	3.3	3.5	n.d.	4.9	2.1	10.6
Banco de Bogotá ^{a/}	3.0	3.2	3,100	4.6	2.7	10.3
Bancolombia ^{a/}	3.2	3.4	3,170	4.7	2.7	9.8
BBVA Colombia ^{a/}	3.0	3.0	3,150	4.7	2.7	10.6
BTG Pactual ^{a/}	3.4	3.2	3,120	4.3	2.7	9.8
Corficolombiana	3.2	3.4	2,980	4.5	1.8	n.d.
Corredores Davivienda ^{a/b/}	3.2	3.3	3,155	4.8	2.7	n.d.
Credicorp Capital ^{c/}	3.3	3.3	3,000	4.8	2.1	10.6
Davivienda ^{a/}	3.2	3.3	3,155	4.8	2.7	n.d.
Fedesarrollo ^{a/}	3.3	3.2	n.d.	n.d.	3.2	n.d.
Itaú ^{a/d/}	3.3	3.0	3,180	4.6	2.7	9.8
Ultraserfinco ^{a/e/}	3.3	3.2	2,970	5.1	2.6	11.5
Average	3.2	3.3	3,116	4.7	2.6	10.2
Foreign Analysts						
Citigroup	3.1	3.3	3,048	n.d.	2.1	n.d.
Deutsche Bank	3.2	3.4	n.d.	n.d.	1.9	n.d.
Goldman Sachs	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
JP Morgan	3.4	n.d.	3,200	n.d.	n.d.	n.d.
Average	3.2	3.4	3,124	n.d.	2.0	n.d.

a/ The forecast for the deficit pertains to the central government.

b/ Formerly Corredores Asociados

c/ Formerly Correal

d/ Formerly Corpbanca, until June 2017

e/ Formerly Ultrabursátiles

n.a.: not available

Source: Banco de la República (electronic survey)

Table A2
Forecasts for 2020

	Real GDP growth (Percentage)	CPI inflation	Nominal exchange rate end of:
Local Analysts			
Alianza Valores	2.5	3.8	3,300
ANIF	3.5	3.4	n.d.
Banco de Bogotá	3.5	3.0	3,125
Bancolombia	3.4	3.2	3,240
BBVA Colombia	3.3	3.2	3,020
BGT Pactual	3.6	3.0	3,100
Corficolombiana	3.5	3.5	3,010
Corredores Davivienda ^{a/}	n.d.	n.d.	n.d.
Credicorp Capital ^{b/}	3.2	3.2	2,900
Davivienda	n.d.	n.d.	n.d.
Fedesarrollo	3.5	3.0	n.d.
Itaú ^{c/}	3.6	3.0	3,180
Ultraserfinco ^{d/}	3.6	3.1	3,000
Average	3.4	3.2	3,097
Foreign Analysts			
Citigroup	3.5	3.2	2,992
Deutsche Bank	3.3	3.4	n.d.
Goldman Sachs	n.d.	n.d.	n.d.
JP Morgan	3.1	n.d.	n.d.
Average	3.3	3.3	2,992

a/ Formerly Corredores Asociados

b/ Formerly Correval

c/ Formerly Corpbanca, until June 2017

d/ Formerly Ultrabursátiles

n.a.: not available

Source: Banco de la República (electronic survey)

year. Both forecasts are within the range of 2.0% to 4.0% set by the Board of Directors of *Banco de la República* (BDBR) for 2019, but above the long-term target for inflation (3.0%).

In terms of the exchange rate, the local analysts expect the representative market exchange rate (MER) to average COP 3,116 by the end of the year. The estimate in the survey for the previous report was COP 3,099. The foreign analysts are forecasting a MER close to COP 3,124 by the end of the year.

With respect to the rate on fixed-term deposits (DTF in Spanish), the local analysts are forecasting 4.7%, on average. They also anticipate unemployment at 10.2%.

2. Forecasts for 2020

For 2020, local analysts expect 3.4% economic growth, while foreign analysts are predicting 3.3%. In terms of inflation, local analysts are forecasting 3.2% and foreign analysts, 3.3%. Local analysts expect the nominal exchange to average COP 3,097, while foreign analysts are predicting COP 2,992, on average.

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