BOARD OF DIRECTOR'S REPORT TO THE CONGRESS OF COLOMBIA

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BOARD OF DIRECTOR'S REPORT TO THE **CONGRESS OF COLOMBIA**

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Bogotá, 2 August 2019

To:
PRESIDENTS AND OTHER MEMBERS
Honorable Chairmen and Members Third Standing Constitutional Committees of
The Senate of the Republic
The House of Representatives

Dear Sirs:

In compliance with Article 5, Act of Congress 31/1992, the Board of Directors of *Banco de la República* hereby submits to the Congress of the Republic of Colombia a *report* on the macroeconomic results of the first half of 2019 and the outlook for the remainder of the year for its consideration. The last two chapters report on the breakdown of the international reserves and the forecasts for *Banco de la República's* financial situation in 2019. The means of payment in the Colombian economy are analyzed in the last chapter.

Cordially,

Juan José Echavarría

Governor

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Introduction

In an environment of greater restrictions to world trade and deterioration of global confidence, economic growth for the first quarter of the year in a number of emerging economies including Colombia was lower than expected, and the forecasts for 2019 decreased. In the first three months of the year, the Colombian economy slowed and grew less than expected, a fact explained mainly by a weaker-than-estimated public consumption and an unexpected fall in housing investment.

For the third quarter and for the rest of the year, these items are expected to record a better performance. Also, private consumption is expected to maintain its good dynamics, investment is expected to accelerate, and net exports are expected to subtract from growth. According to the forecasts by the technical staff, in 2019 the economy would grow close to 3.0% (instead of 3.5% as estimated a quarter ago). The greater dynamics of domestic demand vis-à-vis output would be reflected on a wider deficit in the current account.

Regarding prices, in the first half of 2019 inflation was close to the 3.0% target, albeit with an increasing trend due to some supply shocks that affected it. Among them was the presence of a moderate *El Niño* phenomenon due to which food prices increased, and further adjustments in the prices of liquor due to the increase in the *ad valorem* tax. The average of core inflation indicators remained below 3.0%. The greatest impact of these shocks on prices is expected in the third quarter of 2019. Also, inflation is expected to return to the convergence to 3.0% by the end of the year.

This macroeconomic context with spare capacity of the economy, along with an inflation rate that would transitorily drift from its 3.0% target, has allowed for a slightly expansionary monetary policy stance. This stance has been reflected on interest rates on loans that remain below their historical averages, in real terms.

The present *Report to the Congress* presents the vision of the Board of Directors of *Banco de la República* (BDBR) on the current economic situation and its short and medium term prospects. It also informs about the management of the international reserves and the financial situation of *Banco de la República*. The last chapter analyzes the payment systems in the Colombian economy.

External Context

The analysis of the international context contained in the first chapter of the Report is one of the key elements to assess the outlook of the Colombian economy. The first thing to note is the recent consensus of several multilateral agencies about a more conservative vision of the performance of the global economy this year. Thus, the World Bank, the International Monetary Fund (IMF), and the United Nations forecast that global economy would expand between 2.6% and 2.7% in 2019 (measured at market prices). This means 30 basis points (bp) below their initial considerations. These lower prospects are due to the uncertainty generated by the protectionist policies of the United States towards China and other countries, which has already begun to affect global trade. Also, the high leverage of the Chinese economy, geopolitical tensions, and the future of *brexit* have increased the risks on global economy, producing volatility in financial markets.

The performance of emerging economies will be affected by the deceleration of growth in advanced economies caused by a weakening of external demand and lower prices of commodities exported by these economies. In this context, the prospects for growth in Latin America and the Caribbean have also declined. For example, the IMF, in its most recent update (July 2019) of the document titled *World Economic Outlook* forecasts a 0.6% growth rate for this region in 2019, while it estimated a 2.8% expansion (including Venezuela) a year ago.

On this basis, the Central Bank's technical staff reduced its growth forecast for Colombia's trading partners in 2019 from 2.2% to 1.8%, a figure that is lower than the 2.4% figure reached by the country's trading partners in 2018. The lower external demand for Colombian exports could affect the country's terms of trade. Particularly, a lower global growth rate could weaken oil demand and reduce its price. This is inferred from the information on futures market, which suggests lower levels of oil prices in the coming quarters. However, uncertainty over these forecasts is high, and the continuity of the agreement of the Organization of Petroleum Exporting Countries (OPEC) to maintain production quotas is expected to partially offset the effect of the weakening global economy on oil prices.

The prospects of a slowdown in global economic activity have led the central banks of advanced economies to pause their monetary policy normalization processes, and recently even to express the possibility of undertaking a more expansionary monetary policy stance. In the case of the United States, the Federal Reserve (Fed) has maintained its benchmark interest rate unaltered since its increase in December. Also, the Fed stated in March that the process of asset reduction on its balance sheet would end in September. On its part, the European Central Bank (ECB) has announced that it does not anticipate increases in its intervention interest rate for the remainder of 2019. Similarly, the Bank of Japan stated that it will keep interest rates unchanged at least until mid-2020. These messages have influenced agents' expectations regarding the monetary policy stance in developed countries. In the United States, for example, investors anticipate reductions in the benchmark intervention rate by the Fed in the remainder of this year. The likelihood of a relaxation of international financial conditions has been reflected in a decline of long-term interest rates of sovereign bonds in the main advanced economies. While part of this reduction responds to the expectations of a more loose monetary policy, another part may be linked to the search for safe haven assets by international investors in the face of uncertainty on global growth.

The expectations of lower interest rates in advanced economies could encourage greater portfolio flows towards emerging economies and be partially transmitted to their financial markets. This effect could be mitigated by a greater demand for US sovereign securities, given the international uncertainty, which could cause a global appreciation of the dollar, with consequences on the exchange rates of emerging economies, as has been happening in recent months.

While favorable financial conditions are expected to contribute to improve the performance of global economy and thus provide a stimulus to emerging economies, risks to global growth and the likelihood of a trade war could create volatility in financial markets and increase global aversion to risk. This situation would attenuate the effect of the pause in the process of monetary normalization announced by the central banks in developed economies.

Economic Activity

The performance of the economic activity in Colombia during the first quarter of 2019 was affected by a strong shock to construction, which shrank at a 4.5% rate on a yearly basis. This subtracted dynamism to GDP, whose annual growth, according to seasonally and calendar effects adjusted figures, was 2.3%. This record was lower than the one obtained in the last quarter of 2018 (2.7%), posting below the technical staff's forecast. The fall of construction contrasted with the positive trend in this activity in the last two quarters of last year, when it reached 4.3% and 2.5% annual growth rates, respectively. This setback was due to the contraction in the construction of buildings (-8.8%), which was not offset by the increase of civil works during this period (4.7%).

Except for construction, all other branches of activity grew, reaching an average of 2.8% annual expansion in the first quarter, which shows that the shock was relatively isolated. Among the most dynamic, the growth of financial activities and insurance (5.5%) together with mining and quarrying (4.9%) stand out. The latter interrupted its fall in 2018 (-0.2%) thanks to the increase in oil production and a contraction lower than the one for coal. The branches of retail sales, transport, and housing (4.2%), on the one hand, and public administration and defense, education, and health (4.0%) on the other, made the largest contribution to economic growth in this period. Agriculture and manufacturing exhibited decelerations *vis-à-vis* their results in 2018.

The analysis of GDP from the point of view of spending confirms the localized nature of the shock to economic activity in the first months of the year. Indeed, total consumption, led by household spending, expanded in the first quarter at an annual rate of 4.2%, higher than the one recorded in 2018 (4.0%). However, the dynamism of total consumption was affected by the slowdown in final consumption by the Government, which grew at a 2.6% yearly rate compared with 5.6% in 2018, thus reflecting a lower level of public national and local expenditure. On its part, gross capital formation growth fell from 3.5% in 2018 to only 0.7% on a yearly basis in the first quarter of 2019 due to the 7.9% fall of housing investment, which was partially offset by growth of investment in machinery and equipment (9.8%). The combination of these events led to a slowdown of domestic demand which, according to seasonally adjusted data, recorded a 2.7% growth in the first quarter (below the 4.1% figure observed toward the end of last year and 3.9% of the aggregate for 2018). Finally, net exports subtracted dynamism to the GDP, given that the growth of total exports was slower than that of imports (1.1% vs. 13.9%).

Some recent analyses coincide in pointing out that the contraction of construction of buildings was motivated by the sluggish sales of new housing for the segments different from social interest housing (VIS, in Spanish) and priority interest housing (VIP, in Spanish)[1]. Due to this, the average waiting time in months for the sale of a new housing unit increased, which led to an accumulation of inventories in the strata of middle and upper housing, which discouraged the launch of new projects. Until inventories are normalized, no reactivation of this segment of construction is expected for the rest of the year. In the meantime, the stimulus to the recovery of this activity would come from VIS and VIP housing thanks to the greater resources and programs from the National Government. The downcycle for housing construction is expected to be completed in 2020.

However, other items of gross capital formation could contribute to improve the performance of the investment. In this regard, investment in machinery and equipment would maintain its dynamics from the first quarter. Investment in civil works would pick up with the advances in fourth generation highway projects (4G). Added to this are the projects of regional and local initiative, partially financed with resources from the biennial budget of royalties, which, in the context of the electoral cycle, would be implemented more quickly in the remainder of the year. Finally, after the complete regulation of the Financing Law, the good dynamics of investment in capital goods observed during the first quarter is expected to improve.

In addition, private consumption is expected to maintain a good rate of expansion driven by greater purchasing power supported by a greater flow of

1 *Banco de la República*, Special Financial Stability Report: "Analysis of the portfolio and the housing market in Colombia," first half of 2019; ANIF, "Recent performance of the construction sector and new housing market," *Anif*'s Report on the Construction Sector, No. 206, June 2019; *Corficolombiana*, "Sectoral report. Buildings: light at the end of the tunnel," 23 May 2019.

remittances from abroad, in a context of wide availability of credit at relatively low interest rates and inflation close to the target, as suggested by recent indicators of retail sales and sales of vehicles. However, recent increases in the unemployment rate could eventually limit the dynamism of private consumption. On the other hand, the slowdown in public consumption observed in the first quarter could be reversed in the second half of the year as a result of the increased implementation of Central Government resources in the context of the goals set in the *Medium-Term Fiscal Framework* (MFMP, in Spanish)[2], and the progress or termination of programs in charge of regional and local authorities, as often happens at the end of their mandate.

The isolated nature of the shock that affected the pace of economic activity and its eventual reversion, especially in the case of public consumption and more slowly in housing construction, allow to expect that in the second quarter—and especially in the second half of the year—the Colombian economy will gain dynamism in a context of policy interest rates that would continue to be expansive and a wide offer of credit, two factors that would continue driving domestic demand. Additionally, it is anticipated that the positive effects of the *Ley de Financiamiento*, combined with a good performance of civil works, promote an acceleration in the pace of investment growth.

Prospects for Growth

Given the domestic and external context described above, the Central Bank's technical staff revised the growth forecast scenarios for the Colombian economy in 2019. This exercise incorporated the gap between the GDP growth observed during the first quarter of the year *vis-à-vis* the forecast for that period; it also assessed the specific characteristics of the shock, considered the leading indicators available, and incorporated the global economy scenario as outlined in the preceding paragraphs. The result was a reduction in the GDP growth forecast for 2019 from 3.5% to 3.0%. This projection considers an acceleration of economic activity during the second half of 2019. The revision of the forecast took into account, among other factors, the expected strengthening of domestic demand stimulated by a wide credit supply at low interest rates, in the framework of the stimulus provided by monetary and fiscal policy.

Inflation and Monetary Policy

Along the first half of the year, headline inflation exhibited a slight upward trend, which at the end of June led it to reach 3.43% *vis-à-vis* 3.18% last December. This increase was due mainly to the rise in food prices and in some regulated services, which is expected to be transitory. Core inflation, which

2 It should be noted that the Financial Plan for 2019 envisages an increase in total spending of 18.4% to 19.0% of GDP, which is consistent with the target deficit of 2.4% of GDP, thanks to the increase expected in total income of 15.3% to 16.6% of GDP between 2018 and 2019.

partly discounts transitory shocks, fell from the beginning of the year to levels slightly below the target and remained there throughout the semester. This is what the average of the four indicators[3] monitored by the Central Bank shows, which stood at 2.96% in June, falling from 3.03% at the end of last year.

Food inflation, which was the subgroup that contributed the most to the increase in headline inflation during this period, increased from 2.43% in December to 4.46% in June. In addition to the usual agricultural cycle, the upward pressure on food prices came from *El Niño*, despite its moderate intensity. In particular, meat and a number of perishable foods were affected, particularly strongly in the Caribbean region. The adoption of the multistage sales tax on soft drinks approved with the *Ley de Financiamiento* added to this pressure.

On the other hand, regulated items inflation was reduced by more than one percentage point, going from 6.37% in December to 5.33% at the end of June. However, this record still remains at high levels compared to other subgroups. Within this group, the largest adjustments have been on public utilities, particularly water supply and sewerage services, as well as energy and gas.

The moderate increase of inflation during the first half of the year, despite the supply pressures mentioned above, is explained by the existence of fundamental factors that contributed to contain price increases. In fact, due to an economic growth figure below its potential, the economy continues to operate with spare capacity, which represses the price pressures associated with the growth of spending. This same circumstance has contributed to keeping inflation expectations near the target and to prevent the pass-through of the depreciation of the peso to prices. This has allowed core inflation to remain stable around the 3.0% target, and inflation for the subgroup of non-tradable items to continue falling, reaching 3.36% in June. Finally, in the context of a slack labor market, there has been no evidence of inflationary pressures originating from increases in wage costs.

In the remainder of the year, these factors will continue contributing to moderate inflationary pressures arising from the shocks to the prices of food and of regulated items. Additionally, inasmuch as the latter lose strength, inflation should converge to its 3.0% target in 2020. However, there are still risks associated with an unforeseen devaluation that could push the prices of tradable goods, or with the endurance of the closures of the roads that could continue to affect food prices in Bogotá and other regions of the country.

In the context of a relatively stable inflation close to the target, affected only by moderate and transitory shocks during the first half of 2019, the Board of Directors maintained its policy rate at 4.25%, where it has remained since April 2018. This slightly expansionary policy stance has been offering a prolonged stimulus to the economy. This has been observed in the performance of active

3 Core inflation indicators are: inflation excluding food; the Core 20 indicator; the CPI excluding perishable foods, fuels and public utilities; and inflation excluding food and regulated items.

and passive rates so far this year, which, despite normal fluctuations due to seasonal reasons, have remained at low levels that stimulate the demand for credit, as described in this Report.

This is the case, for instance, of the growth of the total portfolio of credit establishments (7.1% on a yearly basis to the end of June), where the trend to recovery that began in the last quarter of 2018 seems to be consolidating. By type, the improvement is due mostly to the behavior of the consumer loan portfolio, which accelerated in a sustained manner along the year, and by the end of June had reached 11.8% annually. At the same time, the mortgage portfolio continues showing annual variations greater than 10%. This suggests that the credit demand by households has strengthened compared to previous years. On the other hand, to June, the commercial portfolio registered a 3.9% annual growth, accompanied by a relative stability in its interest rates.

Employment

Amidst an economic growth level below its potential and an output gap that remains negative, during the first half of 2019 the unemployment rate (TD, in Spanish) continued to show an increasing trend both nationally as well as in urban and rural domains due to a demand for labor that continued to deteriorate. According to the latest information from DANE, the total national TD moved from 10.2% in the moving quarter ending in December to 10.5% in the moving quarter ending in May. Similarly, in the thirteen metropolitan areas, the change recorded was from 11.3% to 11.5%, and in rural areas from 5.5% to 6.6%. For the national total, the increase in the unemployment rate was due to the fact that between January and May, the number of employed exhibited an average annual variation of -0.7%, while the working age population (PET, in Spanish) expanded at 1.3%. As a result, the employment rate (TO, in Spanish) was reduced. The increase in the unemployment rate would have been greater, had it not been for the fact that the labor force participation rate (TGP, in Spanish) was also reduced[4].

By branch of activity, the greatest job losses have occurred in the agricultural sector, which accounts for nearly 15% of the total employed individuals in the country and generates 60% of employment in rural areas. This phenomenon originated mainly by the falls in employment in the sub-branches of transitory crops and cereals (mainly rice) and oilseed, fruits, and nuts crops. As for the urban realm, real estate activities and services for enterprises subtracted the most from the number of employed individuals, especially in the sub-branch of real estate activities. Contrastingly, construction and community, social, and personal services were the branches with best records.

4 The relationships described are better understood with the following formulas:
Unemployment rate (TD) = 1–[Employment Rate (TO) / Labor Force Participation Rate (TGP)].
Employment Rate (TO) = No. of Employed Individuals / Working Age Population (PET).
Labor Force Participation Rate (TGP) = Currently Active Population (PEA) / Working Age Population (PET).

Regarding variations in the quality of employment, the figures to May for the national total show that the decline in occupation is the result of a reduction of non-salaried employment (-5.2%) that exceeds the expansion of salaried employment (3.4%). This behavior was also present in the thirteen areas, for which salaried employment in the moving semester ending in May exhibited an annual 0.5% expansion, and non-salaried employment -1.0%. The slight expansion of salaried employment in the cities is mainly due to the growth of skilled labor forces, given that unskilled labor contracts. Finally, the rate of informality presents mild reductions in the national total, which suggests a slow recomposition of employment in favor of one of a higher quality.

External Balance

As noted, GDP results for the first quarter of 2019 showed that the net external demand (exports - imports) subtracted from the growth figure of the economy, consistent with the fact that domestic demand grew 2.7%, but GDP only did so at 2.3% (according to seasonally adjusted figures). It is important to understand this phenomenon, which had already happened in 2018, and will continue taking place in the future. One way to do this is with the figures from the balance of payments, particularly with the balance in the current account, which is monitored quarterly by the Central Bank. Naturally, these figures are not directly comparable, given that the balance of payments is calculated in US dollars and national accounts in pesos, and that the exchange rate stands between them, but also a series of deflators that convert nominal GDP values into real magnitudes. Even so, the analysis of the balance of payments offers a complete explanation of the transactions of the country with the rest of the world, which ends up affecting economic growth.

In the first quarter of 2019, the current account deficit as a share of GDP was 4.6%, a figure higher than the one observed in the same period the year before (3.5%). The widening of the current account deficit was mainly explained by the deterioration of the trade balance, due to the fact that imports of goods grew at an annual 9.9% rate, while the value of exports only grew by 0.4% annually. To some extent, the increased demand for imported goods reflects the underlying dynamics of the economy in activities other than construction, as noted earlier. On the other hand, the low dynamism of external sales is framed within a context of lower export prices and a slowdown in the pace of growth of the country's main trading partners.

The funding for this current deficit originated mainly in direct investment flows and in the liquidation of external assets. The amount of foreign direct investment (FDI) amounted to USD 3,335 m, 17.5% higher than the average over the past four quarters (USD 2,838 m) and to than the one observed a year ago (USD 1,840 m). The country received additional resources on account of the liquidations of external assets for USD 2,682 m (both deposits and portfolio investment), 60% of them originated in private sector enterprises and the remaining 40% in the public sector.

For 2019, the current account deficit is expected to stand around 4.4% of GDP, which would mean a widening *vis-à-vis* the 3.9% deficit in 2018. This forecast considers the low growth figure expected for global demand, which would be reflected in a greater deficit in the country's trade balance. This would be the result of imports maintaining their positive growth path as long as domestic demand is strengthened, combined with a slow growth of exports affected by their low prices and the meager performance of our trading partners.

Exchange Rate

If the nominal exchange rate is understood as the price of an asset (in US dollars) in terms of another (in pesos), the frequent volatility of this variable is not surprising, being exposed to domestic and external shocks that change investors' expectations about prices and with them their decisions with respect to the participation of every currency in their portfolio. Beyond that, the exchange rate also depends on the risk perception of economic agents, which is affected by: the sustainability of the debt; the external balance; the fiscal viability; inflation expectations; international commodity prices; and other relevant macroeconomic variables. Hence the difficulty to predict the course of this variable.

The evolution of the nominal exchange rate in Colombia in the first half of the year is a clear example of such volatile behavior. Having exhibited an upward trend during the last months of 2018, the exchange rate of the peso *vis-à-vis* the US dollar was revalued in the first quarter of 2019 by the increase in the price of oil and the announcements of the Fed suggesting a less contractionary monetary policy. This behavior was reversed during April and May, a period in which the peso depreciated facing the strengthening of the US dollar (although the depreciation was greater than in other countries of the region). In June, the depreciation reverted in the midst of a more favorable scenario in emerging economies and facing signs of greater liquidity in the United States. Fluctuations of the nominal exchange rate in a flexible exchange-rate regime such as the Colombian should not arouse greater concern, especially when the percentage of currency mismatches of Colombian firms is very low, as has been documented by the technical staff[5]. As the economic literature has repeatedly demonstrated, the adjustments to the exchange rate contribute to cushion the effects of external shocks, thus favoring macroeconomic stability.

5 Currency mismatches are understood as an economic agent's difference between assets and liabilities in US dollars. This concept extends to the ability to generate income in US dollars that can cover obligations in that currency.

Foreign Reserves

This Report presents several indicators of international reserves that seek to measure their response capacity facing external shocks or speculative attacks. To do this, the ratio between the amount of reserves and various aggregates such as external debt, debt service, current account deficit, M3, and GDP is calculated. By producing standard measures, such indicators are also useful to produce international comparisons. In general, the results of this exercise show that the country's current amount of international reserves is sufficient to meet the amortization of the foreign debt, finance the current account deficit, and continue importing for 9.5 months in the event end of a total closure of external markets. On the other hand, the comparison of these indicators with those of other countries in the region such as Brazil, Chile, Mexico, and Peru shows that Colombia has always been at an intermediate point. The country's adequate international liquidity contributes to improve market confidence, which is reflected in lower risk premia.

The amount of net international reserves of around USD 52 billion is complemented with a line of contingent financing with the IMF (flexible credit line: LCF, in Spanish) which was renewed on 25 May 2018 and was reaffirmed on 20 May 2019, amounting to approximately USD 11.4 billion at a two-year term. Considering the temporary nature of the LCF, at its session in September 2018, the BDBR decided to initiate a program of gradual accumulation of international reserves through the mechanism of put options auctions. This program was extended until last 31 May, when the Board decided to suspend it in order to assess its impact on the behavior of the exchange market. With this program, USD 1.878 billion were accumulated. Looking to strengthen the accumulation of reserves, and taking into account that the National Government planned to perform some monetization of US dollars in its financial programming of 2019, *Banco de la República* bought USD 1 billion to the National Directorate of Public Credit and National Treasury on 1 February 2019 at the market rate in force on that day. Thus, reserves were accumulated for a total of USD 2.8784 billion since September 2018.

01

International Context

In recent months, international market dynamics have been marked by a greater concern about the growth of the global economy and the response of the central banks in the advanced economies. During the current year and next, foreign demand that is relevant to Colombia will be somewhat weaker than expected.

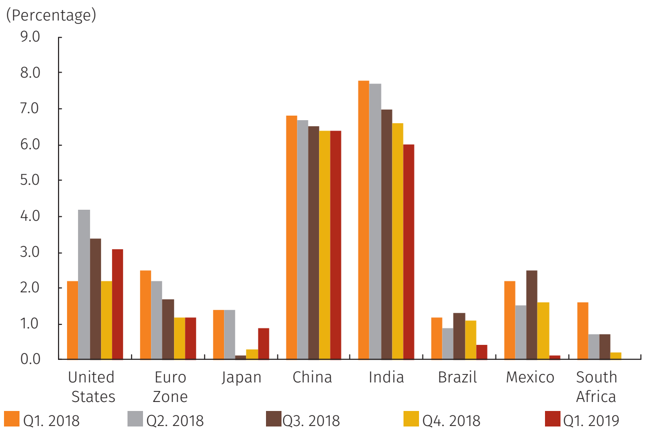
The downturn in global economic growth as well as the downward revisions of the forecasts are probably responding primarily to the uncertainty about the future of the rules for international trade which, in turn, may be jeopardizing investment levels.

The figures for economic growth in the first quarter of 2019 suggest a downturn in most of the regions around the world. For example, for the G-20 economies, the growth of the GDP in the first quarter compared to the same period during the previous year was 3.3% while the growth observed in 2018 was 3.6%.[1] When some particular regions are examined, the trend is similar. In the Euro zone, the annual growth of the GDP during the first quarter was 1.2% at market prices while the figure seen a year ago was 2.5%. In China, the figure for the second quarter was 6.2% while 12 months earlier, it had been 6.7% (Graph 1.1).

Given the lower growth figures, expectations for this year became more moderate, and various international agencies have announced more conservative forecasts. Since the last publication of this *Report*, the International Monetary

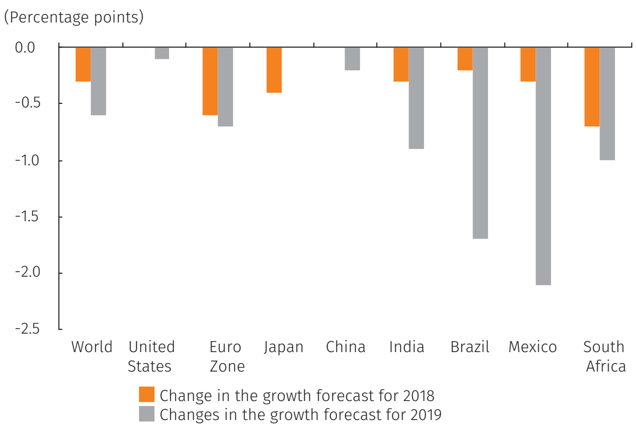
1 Expressed in Purchasing Power Parity - PPP.

Graph 1.1
Annual GDP growth



Source: International Monetary Fund and central banks

Graph 1.2
Change in the IMF's growth forecasts[a/]



a/ The changes in the forecast for 2018 correspond to the growth seen that year minus the forecasts published in the IMF World Economic Outlook Report (WEO) in April of that year. The changes in the forecast for 2019 correspond to the April 2019 WEO forecasts minus the outlook for growth for 2019 published in the April 2018 WEO. A negative value on the bars means that the forecasts have been adjusted downwards.
Source: IMF, calculations by *Banco de la República*.

Fund (IMF) lowered their forecasts for global growth by 30 basis points (bp). Their estimate for this year (2.7%) is 60 bp lower in comparison to their forecast a year ago, and the growth seen in 2018 was below their estimates (Graph 1.2). The World Bank also lowered their outlook for 2019 going from 2.9% to 2.6% while the forecast made by the United Nations (UN) went from 3.0% to 2.7% and the estimate of the Organization for Economic Cooperation and Development (OECD) dropped 30 bp between November and May: currently, this body expects a growth of 3.3% for 2019.

Should these forecasts materialize, it would imply a slowdown in 2019 compared to the growth seen in 2018 (Table 1.1).

The downturn in economic growth as well as the downward revisions of the forecasts are probably responding primarily to the uncertainty about the future of the rules for international trade which, in turn, may be jeopardizing investment levels.

As a consequence of the more limited outlook for global economic activity due to the above-mentioned factors, the forecasts for growth in Latin America and the Caribbean have also declined. The IMF predicts 0.6% growth for this region in 2019 while a year ago, they were anticipating 2.8% (including Venezuela). According to the International Development Bank (IDB), the processes of fiscal consolidation in several of the region's economies could be one of the causes of lower growth. Furthermore, the adjustment of the Argentine economy and the uncertainty that persists regarding the policies of the new governments in Brazil and Mexico may also be affecting the regional perspective. Last of all, the future of relations with the United States is a source of vulnerability for the region, in particular for those economies that have stronger trade relations with that country such as Mexico.

In this situation, the central banks in the advanced economies have signaled a pause in their monetary policy normalization process, and the markets anticipate that this will encourage a relaxation of international financial conditions in the coming quarters. This will probably

Table 1.1
Growth Rates of the Regions Based on the World Bank, the International Monetary Fund (IMF), and the United Nations (UN)
(percentage)

	World Bank						IMF						UN					
	PPA[a/]			Market prices			PPA[a/]			Market prices			PPA[a/]			Market prices		
	2018	2019[b/]	2020[b/]	2018	2019[b/]	2020[b/]	2018	2019[b/]	2020[b/]	2018	2019[b/]	2020[b/]	2018	2019[b/]	2020[b/]	2018	2019[b/]	2020[b/]
World	3.7	3.3	3.5	3.0	2.6	2.7	3.6	3.2	3.5	3.1	2.7	2.9	3.6	3.3	3.6	3.0	2.7	2.9
Advanced economies				2.1	1.7	1.5	2.2	1.9	1.7							2.9	2.3	2.1
Euro zone				1.8	1.2	1.4	1.8	1.3	1.6							1.8	1.4	1.6
Emerging economies				4.3	4.0	4.6	4.5	4.1	4.7							4.3	4.1	4.5
Latin America and the Caribbean				1.6	1.7	2.5	1.0	0.6	2.3							0.9	1.1	2.0

a/ Purchasing power parity
b/ Estimated
Sources: World Bank, IMF, and UN.

generate the conditions for international liquidity to rise with respect to what was seen in 2018.[2]

However, there are significant sources of uncertainty in the international environment that offset, at least in part, the positive effects of a relaxation of international financial conditions associated with a more expansionary stance on the part of the central banks in the advanced economies. The future of international trade flows, the high levels of leverage in the Chinese economy, the geopolitical tensions, and the future of *Brexit* are still a significant source of vulnerability for global growth. These factors could cause greater volatility in the financial markets where, even though some indicators of the perception of international risk have remained at low levels, they have been rising in recent months (Graph 1.3).[3]

There are important sources of uncertainty in the international context that offset, at least in part, the positive effects of a relaxation of international financial conditions.

2 One way to calculate international liquidity is through the evolving growth of transnational bank credits reported by the Bank for International Settlements (BIS). At the close of 2018, the growth level of these credits suggests that although global liquidity remains high, their rate of expansion has been declining. Specifically, transnational credit for the non-financial private sector had grown 2.6% per annum as of the close of 2018, a level that is below the average for the past five years (3.9%). International liquidity is expected to increase in 2019 compared to 2018.

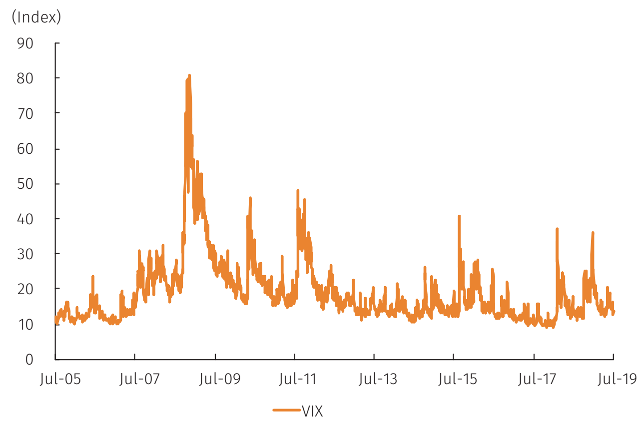
3 The VIX index, calculated by the *Chicago Board Options Exchange* based on information from US options market makes it possible to measure the expectations of market volatility. Higher values indicate a higher perception of risk on the part of investors and greater expectations of volatility. Between 2016 and 2017, this index averaged 13.4 units while between 2018 and up to this point in 2019, it has averaged 16.3.

1.1 Performance during the first half of the year and outlook for the remainder of 2019

Global economic activity has been slowing down in recent months. The indices of manufacturing and trade have declined in comparison to the levels seen in 2017 and 2018 and indicate a negative situation for industry in the Euro zone and the United Kingdom (Graph 1.4) as well as a decrease in international trade flows. In contrast, the labor markets and consumption in advanced economies continue to show favorable figures.[4] The unemployment rates in the United States (3.6%), Germany (3.2%), and Japan (2.4%) stood below their average long-term levels. Likewise, the consumer confidence indices remain above their historical level for several advanced economies (Graph 1.5) and consumption has probably remained strong due to the continued growth of wages.[5] In the United States, the Federal Reserve expects 2.1% growth for this year. This is 20 bp less in comparison to the estimates made in December last year. It also represents a slowdown with respect to the growth observed in 2018 (2.9%). In March, The European Central Bank (ECB) lowered their growth estimates for the Euro zone this year to 1.1% which is significantly lower than the 1.7% that institution had anticipated three months earlier and lower than the level seen in 2018 (1.8%).

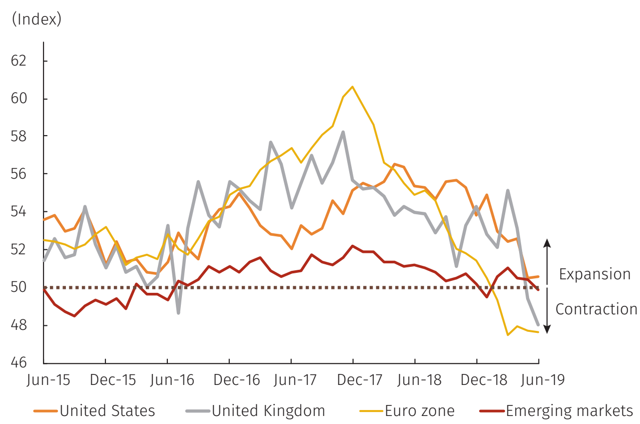
In addition to the lower expected growth, the forecasts for price changes have also fallen and consumer inflation is expected to end the year

Graph 1.3
Index of Risk Perception in the US Stock Market



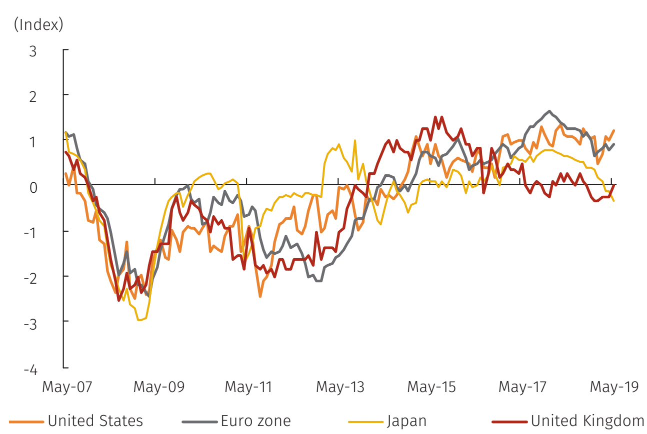
Source: Bloomberg.

Graph 1.4
Manufacturing Indices
(PMI: purchasing managers' index)



Source: Bloomberg.

Graph 1.5
Consumer Confidence Index in Advanced Economies[a/]



a/ Standardized series with an average equal to zero since the year 2000.
Source: Bloomberg.

4 According to the BIS, the robustness of employment and consumption, which contrasts with the slowdown in manufacturing activity, is a common pattern that has already been seen in advanced economies during other periods of slowdown. Similarly, employment in advanced economies has grown more in the service sector compared to the manufacturing sector. This would explain the resilience of the labor markets and consumption compared to the lower manufacturing activity. Technological changes have also led to an increase in employment in the service sector as it facilitates a greater supply of cross-border services. See the Box I.B "Why has inflation remained low despite rising wages" in the BIS Annual Economic Report, 2019.

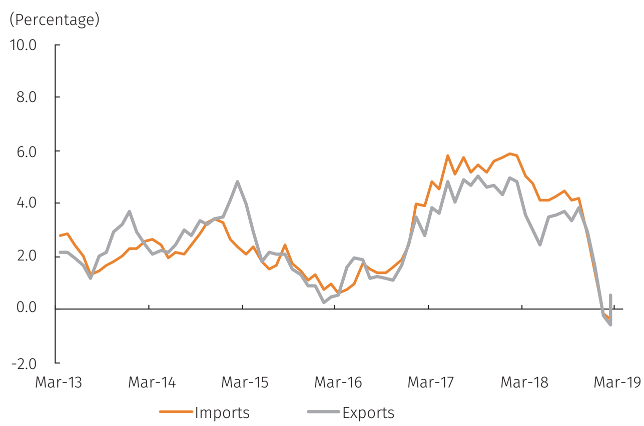
5 Wages in the United States have grown at an average rate of 2.54% per annum since 2015 and since October 2018, they have done so at rates higher than 3.2%.

at 1.5% in the United States.[6] Likewise, the ECB inflation forecast went from 1.6% to 1.2% at the prospect of more moderate economic activity.

The IMF predicts an annual growth of 6.2% for China this year compared to the 6.6% growth seen in 2018 and anticipates a gradual convergence towards 5.6% in 2023. Even though the downturn of the last few years in the Chinese economy has occurred in an orderly manner, this process could be disrupted by the level of domestic indebtedness, especially of the private non-financial sector.[7]

The lower outlook for growth of the global economy is probably, in part, a reaction to greater uncertainty about the future of international trade due to the effects of commercial tensions. This is also reflected in lower levels of global investment. In May, the United States announced a 10% to 25% increase in tariffs on USD 200 billion (b) in Chinese goods. In response, China raised tariffs on USD 60 b in US goods with the rates going as high as 25%.[8] The implementation of protectionist policies since 2018 has probably caused an impact on the growth of international trade flows (Graph 1.6), and they are expected to suffer a slowdown this year.[9] Furthermore, a rise in commercial tensions with the United States could cause a faster slowdown in the Chinese economy where the moderation of its growth is a source of uncertainty.[10] Albeit this is likely to negatively affect overall growth, the Colombian economy could find itself less directly impacted in comparison to others in the region since it has less exposure

Graph 1.6
Annual growth of World Trade[a/] in Volumes



a/ Annual growth of the Quarterly Moving Average of Import and Export Volumes
Source: CPB Netherlands Bureau for Economic Policy Analysis.

6 These projections refer to the median expectations of the members of the Board of Governors of the Federal Reserve in June.

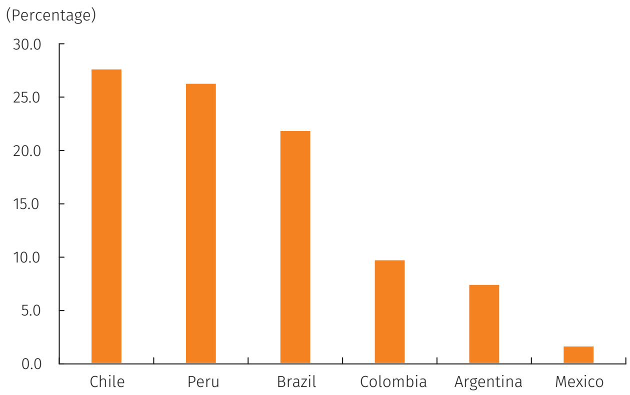
7 At the close of 2018, private non-financial sector loans stood at 204.2% of Gross Domestic Product (GDP) which, even though it has declined in comparison to the peak reached in 2017 (208% of GDP) is still above its long-term level and the aggregate level calculated by the BIS for emerging economies (135.4%).

8 At the G-20 Summit held on June 28 and 29, the United States and China agreed to resume talks on their trade relations. However, the tariff measures that have already been implemented will remain in force.

9 The World Trade Organization (WTO) estimates that the volume of trade in goods will grow 2.6% in 2019, which is a downturn in comparison to the numbers seen in 2018 (3%) and 2017 (4.6%).

10 The annual growth figure for the second quarter of 2019 was 6.2%, the lowest in 27 years. One part of the slowdown could be a response to lower exports which, in June, suffered a 1.3% reduction with respect to the same month the previous year.

Graph 1.7
Exports to China as a Percentage of Total Exports



Sources: United Nations (UN Comtrade Database) and DANE.

to China through financial[11] and commercial channels (Graph 1.7).

International commodity prices have not been spared in this situation. The concerns about a slowdown in growth have affected the estimates of the global demand for oil[12] which, along with the high level of extraction in the United States, the situation in Venezuela, the escalation of trade tensions, and the geopolitical situation in Iran have caused substantial volatility in the price of crude oil during the past few months. The information from the futures market suggests that price levels will be lower in the coming quarters[13] (Graph 1.8), and some specialized agencies have lowered their projections for the average oil price this year.[14] Nonetheless, the uncertainty surrounding these forecasts is high and the prices are expected to respond to the figures on global growth and the continuati0n of the agreement of the Organization of Petroleum Exporting Countries (OPEC).[15] In addition to oil, the prices of other commodities will probably also be affected by lower growth prospects. This could jeopardize the terms of trade of countries exporting those types of goods,[16] especially with respect to their volatility which has increased in recent years (Graph 1.9).

In Latin America, the data on growth during the first quarter has already given warning of a possible economic slowdown this year. In

11 Latin America is not a primary destination of foreign direct investment (FDI) from China. During 2017, 16% of the FDI flows from China went to North America and only 7.7% went to Latin America and the Caribbean. For Colombia, only 0.2% of net FDI flows in 2018 came from China. Another possible financial channel that is relevant is the exposure of banks to Chinese counterparts. Based on information from BIS, foreign banks have USD 1.261 b in loans from China with the highest amount in loans in that country belonging to the banking systems of the United Kingdom, Japan, and the United States. In this region, Brazil's banking system registers an exposure of USD 38 million (m) and Chile's, one of USD 20 m.

12 The International Energy Agency estimates that the global demand for crude oil will grow 1.3 million barrels per day (mdb) in 2019 while in December, they estimated a growth of 1.4 mdb. The Energy Information Administration (EIA) of the US, in turn, anticipates an increase in global demand for crude oil of 1.2 mdb, i.e., 0.3 mdb less compared to their January forecast.

13 The futures contracts for Brent crude oil with delivery in December 2019 were trading at USD 59.09 per barrel. In the latest version of this Report, these contracts traded at USD 62.62 per barrel.

14 In their June projection report, the EIA predicted that the average price for Brent crude oil in 2019 would be USD 67 per barrel. This is USD 3 less in comparison to the May projection.

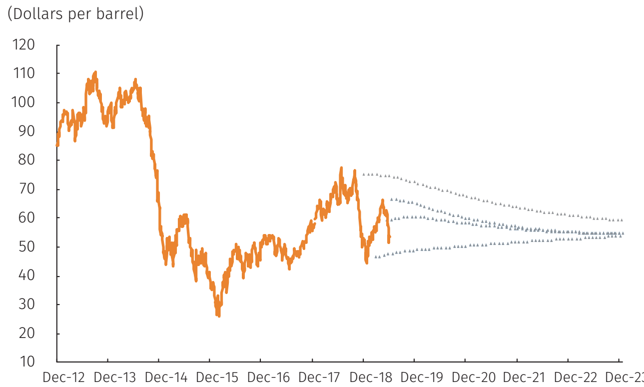
15 Currently, the members of OPEC and other oil producing countries are holding to an agreement to reduce the supply by 1.2 mdb.

16 The variation in the Bloomberg Commodity Index, which follows the price performance of 22 commodities, was -5.9% between April and June of this year and -12.7% compared to its value 12 months ago.

Chile, the annual rate of expansion during the first quarter was 1.6% and thus showed a 0.1% decrease compared to the previous quarter. A similar situation occurred in Peru, where the percentage of growth in the first three months was 2.3%. This means a decrease of 5.3% compared to the previous quarter. In Brazil, the GDP grew 0.5% on a yearly basis which represents a contraction of 0.6% compared to the immediately preceding quarter. Colombia has not been immune to this regional trend having shown a 2.3% growth rate in the first quarter which was lower than the rate at the close of 2018 (2.7%).

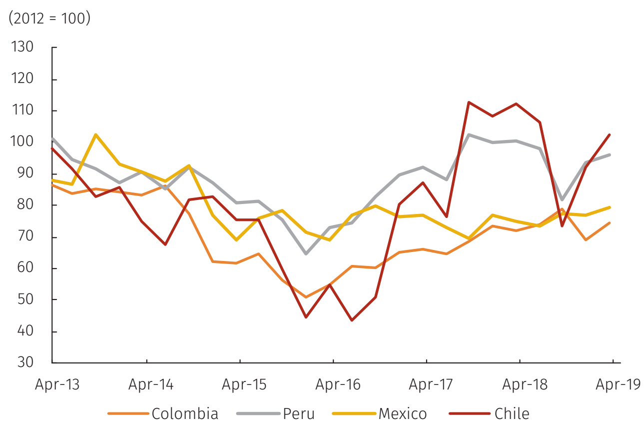
The moderation in the outlook for growth may have motivated the central banks in advanced economies to suspend the monetary policy normalization process. In the United States, the Fed has kept its interest rate unchanged since the most recent increase last December and in March, they stated that the process of reducing assets on their balance sheet, which started in October 2017, would come to an end in September of this year. The ECB, in turn, has announced that they do not anticipate increases in the benchmark interest rate for the remainder of 2019 and the Bank of Japan stated that they would keep interest rates unchanged until at least mid-2020. These decisions have been accompanied by a change in the communiques of the central banks which have had an influence on the agents' expectations regarding the monetary policy stance. For example, information from the futures markets in the United States shows that investors anticipate at least one reduction in the benchmark rate by the Federal Reserve for what remains of the year while in March, they did not expect changes in that direction. The scenario that pointed to increases in interest rates, which was considered highly plausible at the end of 2018, now has a probability of zero (Graph 1.10, panel A). Market expectations, in turn, indicate that there may be cuts of up to 75 bp in the interest rate during 2019 (Graph 1.10, panel B). Moreover, given the greater uncertainty that causes an increase in the demand for government bonds, the long-term interest rates for sovereign bonds of the major advanced economies have already declined. Even though part of the decrease is in response to the expectations of a looser monetary policy, another part may be linked to the search for safe-haven assets by international investors given the

Graph 1.8
Spot Price and WTI Crude Oil Futures



Note: the orange line represents the daily prices for WTI Crude Oil The dotted gray lines show the market forecasts for the prices of WTI futures contracts from the contracts with a maturity of 1 month to the latest data available on 2023 and for some dates in recent months (the futures curve is shown with a lag of two months).
Source: Bloomberg.

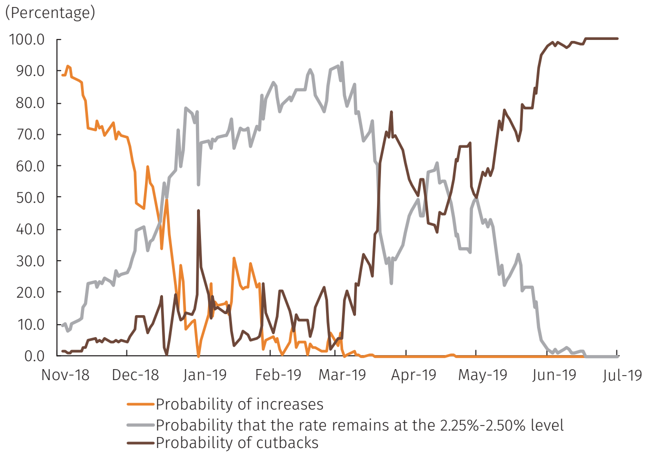
Graph 1.9
Terms of Trade for some Economies in the Region



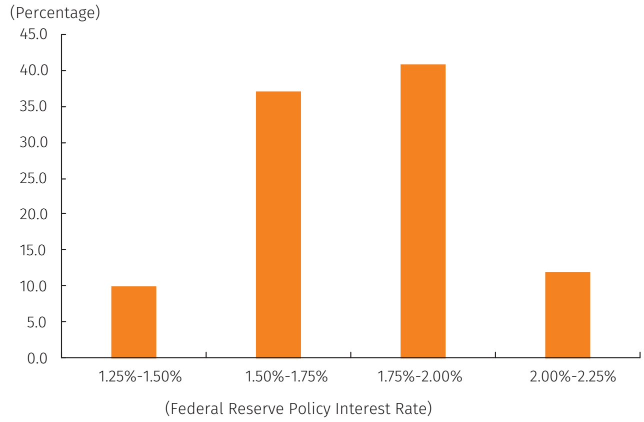
Source: *Banco de la República* and Bloomberg

Graph 1.10
Probabilities and implicit distribution of the monetary policy rate in the United States for December 2019

A. Change in the odds respecting the Federal Reserve decision at their December 2019 meeting.



B. Distribution of implicit probability for the Federal Reserve interest rate at the end of the year (current rate: 2.25%-2.50%)

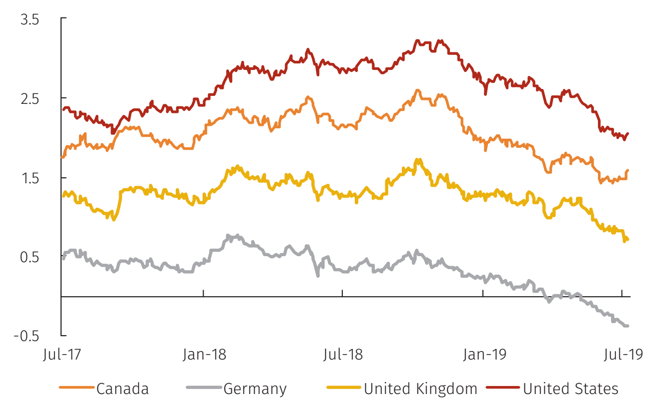


Source: Bloomberg.

uncertainty about global growth and the future of trade flows (Graph 1.11).

These changes have various implications for emerging markets. For one thing, the lower interest rates in advanced economies could encourage greater portfolio flows into emerging economies, and this could be partially transmitted to their financial markets.[17] In this respect, it may be assumed that the monetary policy of the advanced economies will boost favorable financial conditions for the remainder of 2019. For another, given the international uncertainty, there could be a greater demand for US sovereign bonds that would lead to a global appreciation of the dollar which would have consequences for exchange rates in emerging economies. For example, the dollar has become stronger

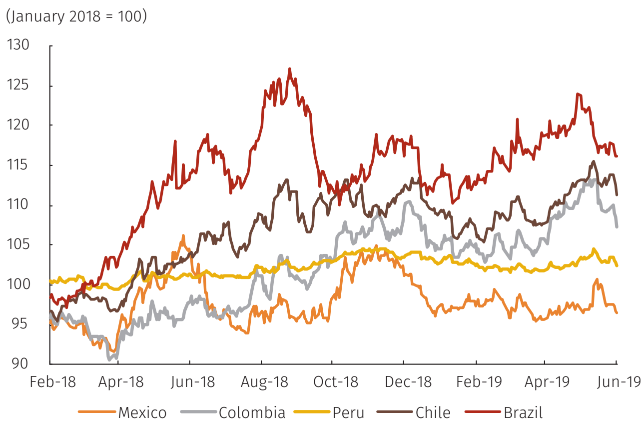
Graph 1.11
Returns on 10-year Sovereign Bonds for Advanced Economies



Source: Bloomberg.

17 The interest rates for the securities issued by emerging economies may be sensitive to changes in the yields of bonds issued by advanced economies. Based on the methodology used by the BIS in a note prepared for the governors' meeting in June 2018, researchers at *Banco de la República* found, using information gathered since 2013, that a 100 bp increase in the long-term interest rate in the United States would precede a 24 bp increase in the long-term interest rates for Colombia. When using only information from the past year, sensitivity is found to be lower (10 bp). The methodology used consists of estimating the parameters of the following regression by country in a set of emerging economies: $\Delta i = \alpha + \beta\Delta i^{*} + \gamma\Delta VIX + \varepsilon$, where Δi and Δi^{*} represent the daily change in the local interest rates and the rate for ten-year US bonds respectively. Moreover, based on the preceding result, researchers at the IMF have found that the sensitivity of the Colombian bond market to the global financial cycle is low compared to other emerging economies (IMF Working Paper, no. 18/253.

Graph 1.12
Exchange Rate Index for Some Economies in Latin America



Source: Bloomberg.

all over the world in the last 12 months[18] and the exchange rates in the region have depreciated, with the Colombian peso showing more sensitivity than other currencies (Graph 1.12).[19]

Emerging economies are expected to continue to be recipients of portfolio investment inflows which have already shown a rise in comparison to the amounts seen in 2018.[20] International investors, in turn, have been making much sharper differentiations with regards to where they invest their funds.[21] This indicates that countries with stronger economic fundamentals will continue to be recipients of capital flows. This differentiation on the part of investors is also reflected in each region; for example, the information on portfolio flows shows that Asia's emerging economies have probably been the primary recipients so far this year (Graph 1.13).

The continuity of the portfolio flows will be significant for emerging countries since their financial markets have been important recipients of foreign investors in recent years.[22] This has largely facilitated the

18 Based on the *DXY* index, which measures the performance of the dollar against a basket of six currencies of advanced economies (euro, yen, pound sterling, Canadian dollar, Swedish krona, and Swiss franc). From June 2018 to June 2019 this index rose 3.8%, which indicates a strengthening of the dollar. During the same period, the Colombian peso depreciated 17.9% compared to the dollar; the Chilean peso, 12.6%; the Peruvian sol, 3.3%; and the Brazilian real, 4.2%.

19 To evaluate the sensitivity of the exchange rate in Colombia to the global movements of the dollar, researchers at *Banco de la República* calculated the following model: where the weekly percentage change in the exchange rate and *ΔDXY* is the weekly percentage change in an index that evaluates the strength of the dollar against six currencies belonging to advanced economies. The results, based on information available since 2013, indicate that a 1.0% rise in the *DXY* dollar index is related to a 0.95% increase in the exchange rate for Colombia. What is more important is that this sensitivity is higher for Colombia than it is for other economies; the average sensitivity for a group of 13 emerging countries is 0.54%.

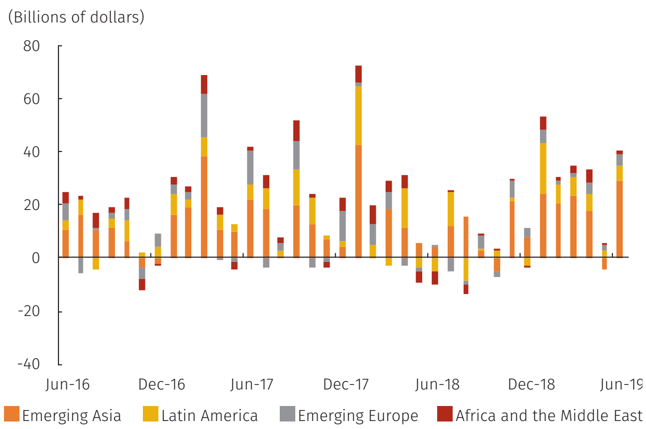
20 In 2018, the average monthly portfolio flows to emerging markets as calculated by the Institute of International Finance was USD 17 b. So far in 2019 the figure for average monthly flows has been USD 32.3 b.

21 In order to ascertain whether or not investors are differentiating more between the various emerging economies, researchers at the Bank did an estimate exercise based on the principal components of portfolio flows to emerging economies in order to isolate the common factor from the idiosyncratic factors that explain these flows. Based on a 36-month window, the first principal component was found to explain 69% of the variance in the data on portfolio flows to emerging countries in September 2018 while this figure drops to 57.7% when the exercise is done using information that goes up to March of this year. When explaining the trends of portfolio flows to emerging markets, the decline in the first principal component suggests that there is a rise in the importance of idiosyncratic factors.

22 Based on a methodology designed by IMF researchers (IMF Working Paper No. 14/39), the share held by foreigners in the public debt markets in the region, at the close of 2018, was significant: Mexico (32%); Chile (16%); Peru (44%); Colombia

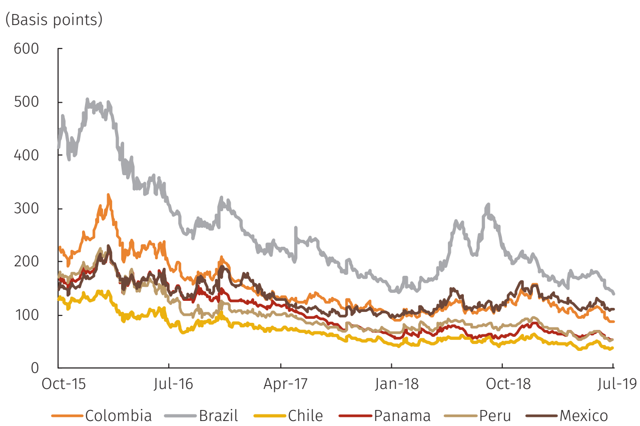
financing of their deficits, both external and fiscal, and has provided depth and liquidity to the local financial markets. Nevertheless, the greater exposure to non-resident investors generates macro-financial risks since, for example, a sudden withdrawal by these agents due to a change in their risk appetite could cause significant adjustments in the markets. In addition, the kind of agent behind these flows is also an important aspect to keep track of. The extensive entrance of passive investors (those who follow and duplicate the composition of international financial indices) could mean greater sensitivity of the local financial markets to the international situation.[23]

Graph 1.13
Portfolio Flows to Emerging Markets by Region [a/]



a/ Estimates as of April 2019.
Source: Institute of International Finance.

Graph 1.14
Five-year Credit Default Swaps (CDS) for some Latin American Countries



Source: Bloomberg.

Even though the emerging economies are expected to benefit from the prolonging of greater international liquidity as they continue to be recipients of flows of portfolio investment, some factors –such as the high volatility in the commodity prices, limited fiscal space, and lower expectations of global growth– could counteract the positive effects of greater international liquidity associated with a more expansionary monetary policy on the part of the central banks in developed countries. Under this scenario, the perception of sovereign risk, which remains at historically low levels in many countries in the region (Graph 1.14) could rise and thus generate higher external financing costs.

(25%). It has risen in all countries in recent years. At the beginning of 2010, this share was significantly lower in Mexico (12%), Peru (19%), and Colombia (1.0%). For Chile, the oldest figure available with information since 2013 shows foreigners holding a 6.0% share.

23 According to the first chapter of the April IMF *Report on Global Financial Stability*, the passive investors, i.e., those who follow some financial index, have become more important within the portfolio flows to emerging markets. The IMF estimates that the quantity of assets that follow some international index of public debt for emerging markets has multiplied by four over the last decade and states that these agents may be highly sensitive to global factors.

With respect to the situation for some Latin American countries, the slowdown in the rate of growth as well as the increase in uncertainty are what stand out the most. The volatility that has accompanied the adjustment process of the Argentine economy is notable. This process has sought to correct the high levels of inflation, regain the confidence of international markets, and reduce the levels of government debt.[24] Ecuador, in turn, whose relationship with Colombia is especially pertinent through the trade channel,[25] is still recovering from the economic recession experienced in 2015. However, the complex situation in its fiscal accounts led the authorities to request help from the IMF[26] and other multilateral organizations. According to IMF estimates, a contraction on the order of 25% of GDP in Venezuela is expected this year and another 10% in 2020. In addition, its production of crude oil continues to fall. According to the information from OPEC, the production of crude oil in Venezuela during the first quarter of 2019 was 970 thousand barrels per day while it had been 1.3 mbd in 2018 and 1.9 mbd in 2017. Under these circumstances, the migratory flows are expected to continue.[27]

High volatility in the price of commodities, reduced fiscal space, and lower expectations of global growth may counteract the positive effects of a greater international liquidity.

Similarly, other countries in the region are expected to show a downturn in economic activity this year in line with the global situation. In June, the Central Bank of Chile lowered the growth expected for the economy of that country in 2019. The country, which was recovering from the drop in copper prices, is now expected to grow between 2.75% and 3.5%, while in March the projected figure was between 3.0% and 4.0%. Brazil, which was recovering from the recession of 2015-2016, will probably have an expansion of only 0.8% this year based on the estimates of its central bank. This would mean a slowdown in comparison to the 1.1% growth observed in 2018. What is more, the forecasts have declined significantly since, in January of this year, a growth of 2.5% was calculated for 2019 and in March, 2.0% growth was expected. For Peru, the central bank's estimate for growth this year is 3.4% which is lower than the 4.0% that was expected in March and lower in comparison to the 4.0% observed in 2018. Although that economy has benefited from favorable terms of trade, it is likely to be

A slowdown in economic activity is anticipated this year in other countries of the region, in accordance with the global situation.

24 In June 2018, the Executive Board of IMF approved a three-year agreement worth USD 50 b in favor of Argentina. This decision was made during a scenario of high inflation and after a sharp depreciation of the Argentine peso. In April of this year, the disbursements for Argentina within the framework of this program came to USD 38.9 b. The program includes regular reviews before IMF disbursements are made. The most recent review, done in July, gives Argentina the right to a disbursement of USD 5.4 b.

25 Ecuador is an important trading partner, especially for non-traditional exports. In 2018, 14.5% of Colombia's non-traditional exports went to that country.

26 On March 11, the IMF Executive Board approved an agreement worth USD 4.2 b in favor of Ecuador under Extended Service (*Extended Fund Facility*).

27 The International Organization for Migration estimates that the number of Venezuelan refugees and migrants comes to 3 million of which more than a million are found in Colombia.

sensitive to a fall in the international commodity prices. In Mexico, the central bank lowered the projected growth for this year in May and placed it in a range of 0.8% to 1.8% while six months previously, it was expected to range between 1.7% and 2.7%. The Bank of Mexico argued that their lower projected growth was in response to the low expansion seen in the first quarter (1.2%) and the concerns about a more moderate global growth.

Slowdown in global growth is expected this year accompanied by greater uncertainty and volatility in the markets.

As for the countries in Central America, whose relationship with Colombia is especially important because of their financial links,[28] a downturn is also expected this year and the growth projections have declined. Although ECLAC estimated in December 2018 that Central America would expand at a rate of 2.4% this year, their projection as of April had fallen to 2.0%. The fiscal situation remains one of the main vulnerabilities for economies in that area and the rating agencies continue to cite this aspect as a significant risk for the economies of Central America[29] as well as for other economies in Latin America.[30]

In short, a downturn in global growth is expected this year along with greater uncertainty and volatility in the markets. The concerns about more protectionist measures that could affect not only trade dynamics and international integration, but also the investment levels thus having a negative impact on worldwide growth, international risk aversion and capital flows, are emphasized. The international financial conditions, in turn, will probably remain favorable during the second part of 2019 supported mainly by a pause in the monetary policy normalization process in advanced economies.

28 The assets in Central America that are the property of Colombian financial conglomerates amounted to USD 59.5 b at the end of 2018. The share held by the Colombian financial conglomerates in Central America measured as a proportion of the total assets of the banking systems in each country is especially relevant in Costa Rica (51%), El Salvador (39%), Panama (23%), and Guatemala (16%).

29 At the end of 2018, Moody's and Standard & Poor's lowered the credit rating of Costa Rica due to their high levels of indebtedness and the risks that arise from the dollarization in the financial system. Moody's lowered the outlook for Nicaragua from stable to negative while Standard & Poor's lowered the credit rating of that country to B- at the end of 2018 arguing a deterioration in the fiscal accounts. In June 2019, Fitch confirmed El Salvador's credit rating at B+ and Standard & Poor's raised it to B- in December because of the approval of a project to refinance part of the public debt. In contrast, Standard & Poor's and Moody's improved their credit rating for Panama this year arguing that the growth figures were positive and the fiscal policy framework had been reinforced.

30 The outlook for Mexico was lowered by Standard & Poor's (BBB+) in March while Moody's (A3) took the same action in June under the argument that there was uncertainty about the government's policies and an outlook of lower growth. For Colombia, Moody's (Baa2) changed the outlook from negative to stable due to a recovery in economic activity and the fiscal consolidation efforts while Fitch (BBB) lowered the outlook from stable to negative basing their argument on fiscal risks and possible external imbalances.

02

The Colombian Economy: Results so far in 2019 and Outlook for the Rest of the Year

During the first three months of the year, the Colombian economy slowed down. In the second quarter and the second half of the year the Colombian economy is expected to become more dynamic.

Annual consumer inflation rose in the first half of 2019 spurred by some transitory supply shocks. However, core inflation, which excludes a large part of these shocks, showed great stability with respect to the target.

Slight rises in total inflation are expected to the extent that the food and regulated prices continue to be subject to upward shocks.

2.1 Economic Activity

During the first quarter, the Colombian economy slowed and registered less growth than the technical staff at *Banco de la República* and the majority of the market analysts had expected. This surprise was the result of various shocks that affected the performance of specific sectors of the gross domestic product (GDP) and that, in part, will probably be transitory. In spite of the above, the forecast of the technical staff suggests that the recovery process of the Colombian economy will probably continue throughout the remainder of 2019.

According to the official figures, the shocks negatively affected the investment in construction and public consumption. In contrast, private consumption and investment in capital goods showed better performance than output did. These, in turn, drove the growth of imports while exports registered low annual growth due to which net foreign demand contributed negatively to GDP growth.

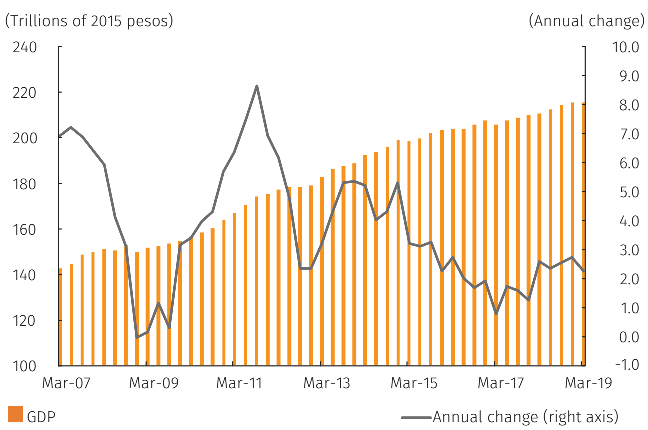
In addition to the reversal of the shocks that occurred in the first quarter, a more dynamic Colombian economy is expected in the second quarter and, above all, in the second half of the year as a result of interest rates that are likely to remain in expansionary territory and an ample supply of credit, factors that will probably continue to drive domestic demand. Moreover, the positive effects of the Financing Act combined with the positive performance of public works are expected to foster a surge in the growth rate of investment. Furthermore, given the assumptions about external fundamentals presented in chapter 1, the international context is not expected to limit the possibilities for the Colombian economy to receive foreign financing this year.

That being the case, the growth of the GDP is expected to surge in the second half of the year. Nevertheless, given the performance seen during the first quarter, the technical staff at *Banco de la República* changed their growth forecast for the full year to 3.0% (in the previous version of this report, 3.5% had been estimated).

2.1.1 Results for the First Quarter of 2019

According to the National Bureau of Statistics (DANE), the GDP numbers, corrected by seasonal adjustment and calendar effects, registered an annual growth of 2.3%[31] (Graph 2.1). The variation between quarters was zero.

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



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

During this period, domestic demand registered a downturn with respect to what had been seen towards the end of last year. The seasonally adjusted series of this aggregate presented a growth of 2.7% in the first quarter of 2019. This is lower than the 4.1% from the fourth quarter of 2018 and the 3.9% for the entirety of 2018 (Table 2.1). The lower growth for this aggregate was concentrated, above all, in its non-tradable component which offset the positive results seen in the tradable component. Specifically, the impetus coming from the positive performance of private consumption

31 DANE reported an annual growth of 2.8% for the original GDP series for the first quarter of 2019.

Table 2.1
Real Growth of the GDP by Type of Expenditure (corrected by seasonal adjustment and calendar effects, base 2015)

	2018				2018	2019
	Q1	Q2	Q3	Q4	Full year	Q1
Final spending on consumption	3.4	4.3	3.8	4.3	4.0	4.2
Final spending on household consumption	3.3	3.8	3.4	3.8	3.6	4.2
Non-durable goods	4.2	4.4	3.4	3.6	3.9	3.4
Semi-durable goods	2.8	4.9	2.9	4.8	3.8	4.7
Durable goods	-2.2	4.7	4.9	8.7	3.9	3.8
Services	2.9	3.1	2.8	3.0	2.9	3.0
Final spending on general government consumption	6.1	5.7	5.9	4.9	5.6	2.6
Gross capital formation	4.5	0.4	4.3	4.9	3.5	0.7
Gross fixed capital formation	1.2	-1.9	2.2	4.3	1.5	3.7
Housing	-3.5	-5.1	4.2	5.5	0.1	-7.9
Other buildings and structures	2.6	-2.6	0.7	5.5	1.5	1.7
Machinery and equipment	6.5	0.2	2.3	-0.4	2.1	9.8
Cultivated biological resources	-2.7	2.0	7.6	-2.6	0.9	-1.1
Intellectual property products	5.8	4.7	3.7	3.9	4.5	1.9
Domestic demand	4.1	3.6	3.7	4.1	3.9	2.7
Exports	2.0	3.4	4.7	5.6	3.9	1.1
Imports	0.4	8.7	7.5	15.4	7.9	13.9
GDP	2.6	2.4	2.6	2.7	2.6	2.3

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

and investment in machinery and equipment was offset by the significant negative shocks to investment seen in construction and public consumption. These shocks were not expected by the technical staff nor by the market analysts in general and were due, in the first case, to the drop that occurred in the area of residential construction (specifically, its non-LIH component); and in the second, to a lower level of implementation by national and local governments.[32]

In this context, the gross fixed capital formation in housing fell 7.9% yearly in the first quarter after having registered an increase of 5.5% in the last quarter of 2018. The one for other buildings and structures grew 1.7% per annum during the same period. This was a slowdown with respect to what had been seen in the fourth quarter of 2018 (5.5%). Public consumption also showed a sharp downturn since it grew 2.6% per annum after having reached an annual growth of 4.9% in the fourth quarter of last year.

32 Added to the above, is the time discrepancy in the wage adjustment for public sector employees which was 4.5% and made retroactively as of May 2019.

Household consumption, in turn, had a satisfactory performance and expanded 4.2% annually. This is better than in previous quarters and also of the aggregate for 2018 (when the growth was 3.6%). All of the components of private consumption expanded in annual terms with consumption of services the one that contributed the most to this. The positive performance of private consumption occurred in a context of an ample supply of credit provided by the financial system at rates that were relatively low in real terms and that continued to be expansionary.

Household consumption exhibited a satisfactory performance.

As for investment in machinery and equipment, this component of the gross fixed capital formation reported significant annual growth in the first quarter of 2019 (9.8% in the seasonally adjusted series and corrected for calendar effects). An annual rate of expansion like this had not been registered since mid-2014, the period prior to the shock to the terms of trade. The above was supported by an equally satisfactory performance of imports of capital goods which registered significant growth rates during the first three months of the year in both dollars and constant pesos.

During the first quarter of the year, net exports contributed negatively to GDP growth. During this period, imports increased at annual double-digit rates (13.9%) which were only a little lower than those seen towards the end of last year (15.4%).

This performance, which was akin to what was seen in the intense domestic demand for goods from abroad, was underpinned primarily by the purchases of capital goods for industry and transportation equipment as well as durable consumer goods. In the meantime, exports were sluggish and lower than expected. The annual growth of this segment of the GDP was 1.1% during the first quarter of 2019 and contrasted with the positive performance registered during the second half of last year (4.7% and 5.6% for the third and fourth quarters respectively). Part of this slowdown could have been the result of the lower growth of our main trading partners as well as of some supply shocks that probably limited the possibilities for expanding the sales of commodities abroad.

Investment in machinery and equipment reported a significant annual growth figure in the first quarter of the year.

Regarding supply, the sectors that contributed the most to growth in the first quarter of 2019 were commerce, transportation and accommodations, public administration, defense, education, and health (Table 2.2). The annual growth of these sectors (4.2% and 4.0% respectively) represented, as a whole, about half of the annual expansion of the economy during this period. In contrast, construction registered a significant deterioration in annual terms (-4.5%).

During this period, agriculture presented an annual growth that was similar to the previous quarter when the expansion of livestock offset the zero growth of crops. Mining, in turn, registered a significant surge mainly due to the higher annual growth in petroleum production (facilitated by a low basis for comparison) and a lower annual fall in the production of coal.

Table 2.2
Real Annual Growth of the GDP by Branches of Economic Activity
(corrected by seasonal adjustment and calendar effects, base 2015)

	2018				2018	2019
	Q1	Q2	Q3	Q4	Full year	Q1
Agri-business, Forestry, Hunting, and Fishing	2.4	3.3	1.4	1.4	2.1	1.2
Mining and Quarrying	-3.0	-0.8	2.7	0.3	-0.2	4.9
Manufacturing industry	0.1	1.6	2.3	3.1	1.8	1.0
Electricity, Gas, and Water	2.5	2.8	2.6	3.0	2.7	3.0
Construction	2.0	-5.5	4.3	2.5	0.8	-4.5
Buildings	0.2	-5.5	5.9	4.1	1.2	-8.8
Public works	-3.2	-2.5	-2.1	6.0	-0.4	4.7
Specialized Construction Work	-0.9	-5.5	2.3	1.2	-0.7	-5.9
Commerce, Repairs, Transportation, & Accommodations	4.0	3.1	2.7	3.5	3.3	4.2
Information and Communications	-0.2	3.6	4.6	4.0	3.0	4.1
Financial and Insurance Business	3.8	4.4	2.7	2.2	3.3	5.5
Real estate	2.3	2.0	1.9	1.8	2.0	3.0
Professional, Scientific, and Technical Work	6.9	5.8	3.3	3.9	5.0	2.4
Public administration and Defense, Education, Health	4.6	4.4	3.8	4.1	4.2	4.0
Artistic, Entertainment, and Recreational Activities	1.4	1.9	1.1	2.5	1.7	2.2
Subtotal value added	2.6	2.2	2.7	2.7	2.6	2.3
Taxes minus subsidies	2.2	2.8	1.3	2.9	2.3	2.4
GDP	2.6	2.4	2.6	2.7	2.6	2.3

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

Manufacturing, in turn, slowed down as it registered an annual growth of 1.0%. In addition, the sector presented a deterioration in quarterly terms mainly due to the setbacks in the areas of oil refining and the manufacturing of machinery and equipment. When refining is excluded, the rest of the manufacturing area registered 1.5% annual growth.

The sectors related to services contributed positively to the growth of the GDP in the first quarter of the year. The performances of the sectors of public administration, education and health, and real estate in particular stand out. As a whole, these contributed more than one-third of the economic growth for the quarter and registered annual changes of 4.0% and 3.0% respectively. Other sectors in this group (professional work and artistic activities) registered annual expansions but had slowed down with respect to the previous quarter.

In contrast, the GDP for construction registered a significant annual and quarterly drop primarily caused by the construction of buildings. This item presented an annual variation of -8.8% in the first quarter.

Although the construction of public works registered an annual growth (4.7%), this was lower than what was seen the previous quarter.

2.1.2 Outlook for Economic Activity for the Remainder of 2019

In the coming quarters, the pace of expansion of the Colombian economy should accelerate.

Over the coming quarters, the expansion rate of the Colombian economy should surge and thus converge with annual growth rates that are close to what is estimated to be its potential (between 3.0% and 3.5%). That is likely to occur to the extent that the negative shocks that affected its performance at the beginning of the year begin to reverse themselves. In this respect, public consumption and investment in construction (both housing and public works and other buildings) could become stronger. The investment in machinery and equipment and private consumption, in turn, will probably maintain the positive trend seen so far.

Thanks to that, the Colombian economy should grow at an annual rate of 3.0% in 2019 which would be higher than the 2.6% registered last year. This prediction implies an annual expansion of more than 3.0% in domestic demand, weak exports that continue to play a secondary role, and net exports that will once again subtract from the GDP. Going into 2020, the economy will probably continue to benefit, just as it did in 2019, from the comfortable domestic financial conditions that are reflected in interest rates that are relatively low and in territory that is still expansionary. Added to this is the positive impact that the Financing Act will have, the continuation of important public works projects, and an end to the downturn in housing construction.

The Colombian economy would grow at an annual 3.0% rate in 2019, higher than last year (2.6%).

This forecast assumes a private consumption that is likely to maintain a strong growth for the rest of the year but with some restraint in the medium term. For the second quarter of the year, the technical team anticipates that a good expansion rate will be maintained. The recent performance of different short-term indicators such as retail sales and consumer credit make it possible to project that trend. These trends should continue in the second half of the year as a result of which, the growth of this item for the entirety of 2019 is expected to be slightly higher than the growth in 2018. This forecast assumes that household consumption is likely to continue to benefit from ample availability of credit at relatively low real interest rates as well as a greater flow of remittances from abroad, an inflation that is not expected to deviate much from the target and that will probably converge toward it at the end of the year. It should be noted, however, that risks persist in the medium term given the sluggishness of employment.

Regarding public consumption, the negative shock seen at the beginning of the year is expected to begin to reverse itself starting in the second quarter. This aggregate will be stronger in the second half of 2019, as long as the central government and the regional and local authorities increase the level at which they make use of their resources.

It is important to emphasize that this forecast assumes full compliance with the fiscal deficit target of 2.4% of the GDP for 2019 that was presented in the *Medium-Term Fiscal Framework* (MFMP in Spanish).

Investment should accelerate in the remainder of the year.

In the case of gross capital formation, the forecast presented in this *report* involves an upswing in this sector of the GDP for the remainder of the year. In this respect, in the wake of the full regulation of the Financing Act, the investment in capital goods is expected to consolidate the positive strength it showed during the first quarter of the year. Likewise, the partial recovery of expenditures in the sectors affected by the negative shocks at the beginning of 2019 will also contribute to the upswing in investment. Regarding that, the implementation of public works will probably regain momentum for what remains of the year and going into the next due to the continuation of the fourth generation (4G) highway projects. Furthermore, given the electoral cycle of the current year, various infrastructure projects set up by regional and local initiative and funded in large part by resources from the two-year budget based on royalties are likely to materialize. In the case of investment in housing construction, a significant reactivation is not expected in view of the weakness that has been seen over the course of the year in the middle- and upper-class market. Going into the second half of the year, the sluggishness that is projected will probably come from the LIH segment given the greater funding announced by the government to boost the sector.

As was discussed in chapter I of this *Report*, in 2019 the rate of growth for the country's trading partners will be lower than what was seen in 2018, and the forecasts for the international prices of the commodities exported by Colombia will probably mean a drop in the country's terms of trade. However, a scenario in which exports could maintain a growth that is a little better than what was seen in the first quarter is anticipated. In addition to a more sluggish foreign demand, the information available suggests that there will not be a full recovery in the production of the main raw materials exported for the remainder of the year. This was affected by different supply shocks over the course of last year.

In contrast, the technical staff anticipates that the high levels of imports will continue, like those seen at the beginning of 2019. Even though the rate of expansion that was registered in recent quarters for this component of the GDP will moderate during the second half of the year, it is likely to continue to be important. The above is based on the prospects for higher growth of investment during the second half of the year as well on the positive performance anticipated for private consumption.

Real exports would maintain a growth figure a little higher than observed in the first quarter.

From the sectorial point of view, the technical staff's estimates suggest that, in 2019, the growth of the manufacturing industry could be similar to what it was in 2018. This would rest on the positive performance expected for domestic demand. Production in crops and livestock is also expected to be similar to the previous year. *El Niño* which, according to the international agencies is weak, has had very little effect on the sector supply over the course of the year, and this limited effect is expected to continue for the remainder of 2019.

The main downside risks facing GDP growth are related with the possibility of a weaker performance of domestic demand.

Moreover, the negative shock of construction seen at the beginning of the year is likely to reverse gradually in the coming quarters. The above could be based, to a large extent, on the implementation of the regional and local governments and on the national government's LIH programs. It should be noted that given their productive links with branches such as industry, transportation, and a few services, the performance of this sector has a significant influence on the expansion of the national aggregate.

The main downward risks that the growth of the GDP faces are related to the possibility of a weaker performance of domestic demand due mainly to a lower recovery of investment in construction and to a scenario of less favorable financial conditions associated with a higher risk premium for the country.

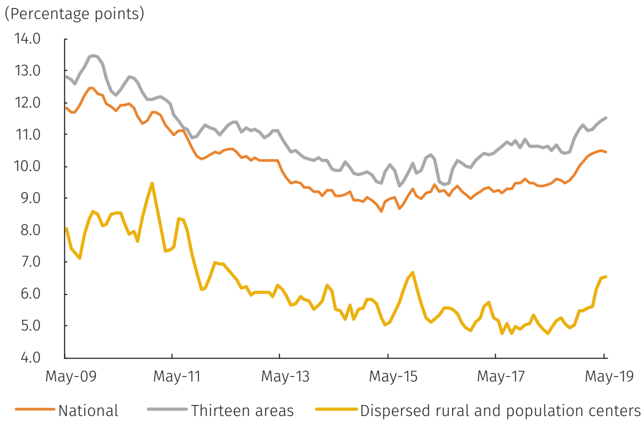
2.2 Labor Market[33]

Urban employment remains at levels similar to those four years ago, although with marginal improvements in formalization so far in 2019.

In the labor market, urban employment remains at levels similar to those seen four years ago although there have been marginal improvements in formalization so far in 2019, especially due to a greater relative demand for skilled labor while rural employment which, in previous years had contributed positively to the number of people employed, declined during the first half of this year. Thus, the labor market showed signs of weakness during the first half of 2019. The demand for labor deteriorated in all of the fields, and the unemployment rate (UR) rose in spite of the lower participation rates. The number of people employed in the national total stood at levels that were slightly lower than those registered a year ago with agriculture as the sector with the largest negative contribution while construction and community services were the branches with the best performance. In this context, and in line with the deterioration in the demand for labor, the number of vacancies has declined and the number of unemployed has risen. This has led to a reduction in the tightness labor market indicator. These conditions make it evident that, so far this year, the labor market has been in a situation that is not expected to generate inflationary pressure in the near future.

33 The labor market shows seasonal patterns, i.e., its numbers are systematically higher or lower depending on the time of year. Therefore, this has to be corrected through statistical techniques in order to compare different months of the same year. Because of that, what is presented in this section is seasonally adjusted.

Graph 2.2
Unemployment Rate
(seasonally adjusted quarterly moving average)



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

2.2.1 Unemployment

Based on DANE's General Integrated Household Survey (GEIH in Spanish), the UR rose in all geographical domains in the first half of 2019 (Graph 2.2). In the national total, the UR went from an average rate of 9.9% in the second half of 2018 to one of 10.4% between January and May 2019 (seasonally adjusted series). Similarly, in the thirteen areas, the change registered was from 10.8% to 11.3% and in the rural areas, it was from 5.2% to 6.1% with the latter being the one that showed the largest increase, especially due to the trend of agricultural employment as will be explained in more detail below.

2.2.2 Labor Supply and Demand

The trend of unemployment can be explained by the interaction between the labor supply, represented by the global labor force participation rate (GPR), and the demand, expressed by the employment rate (ER).[34] The annual rise in the UR in the national total and in urban areas is explained by the drop in the ER since the trend of the GPR has contributed to mitigating the annual rise in unemployment since it has also declined although to a lesser extent than the ER (Graph 2.3, panels A and B).

As for Venezuelan immigration, its effects on wages, the unemployment rate, and rate of informality in Colombia seem to have been limited so far. Thus, estimates are that this phenomenon could explain between 0.25 pp and 0.40 pp of the current unemployment rate and that an increase of 1.0 pp in the rate of migration is associated with 0.18 pp rise in the rate of informality. These results are consistent with the findings in the literature on mass migrations around the world.[35]

The decreases in the ER, in turn, are explained by a slight reduction in the number of those employed while the working age population (WAP) has grown. Therefore, on average, between January and May there was an annual change[36] of -0.7% in the number of employed people in the national total and -0.2% in the thirteen areas (Graph 2.4). This shows evidence of a weak demand for labor while WAP expanded at a rate of

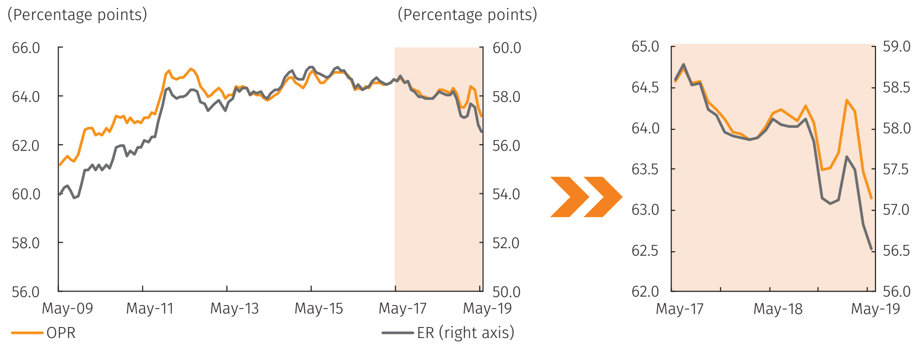
34 The GPR is defined as the ratio between the economically active population and the working age population while the ER in the ratio between the employed population and the working age population.

35 For more detail on the effects of the Venezuelan immigration, see the March 2019 *Report on the Labor Market*.

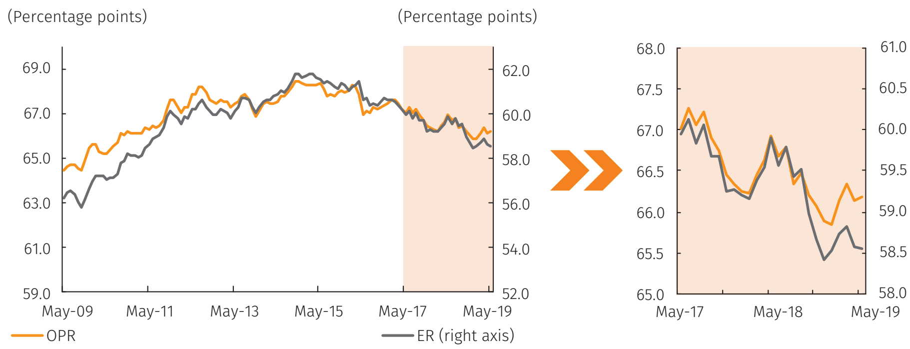
36 The data from the GEIH are expansions that include population projections developed based on the results of the 2005 census.

Graph 2.3
Overall Participation Rate (OPR) and Employment Rate (ER)
(seasonally adjusted)

A. National Total



B. Thirteen areas



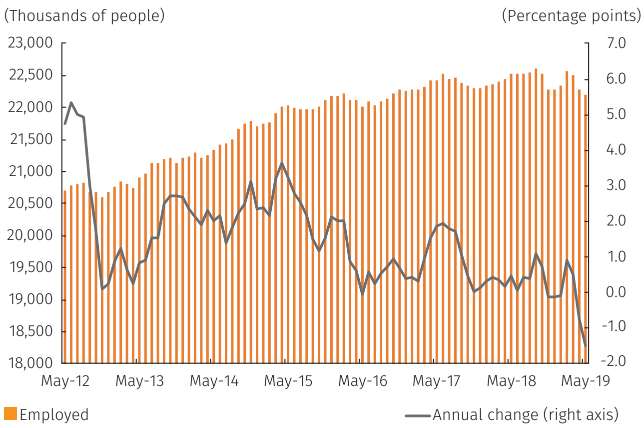
Source: DANE (GELH); calculations by *Banco de la República*.

1.3% and 1.4% respectively. This is consistent with an economic growth that still remains below its potential and an output gap that remains in negative territory. Under these circumstances and since the business owners' decisions with regard to adjusting employment focus first on the intensive margin (hours worked) before they do on the extensive margin (number of people employed), there is no reason for economic growth, if it is modest as the current one is, to lead to a rapid decrease in the UR. When the vacancies, in turn, are analyzed, a negative trend is seen that reiterates the weakness of labor demand. Thus, the tightness labor market indicator, defined as the ratio of vacancies to the number of people unemployed, continues to register a declining trend. This suggests that the labor market is more flexible than was believed in the previous report.

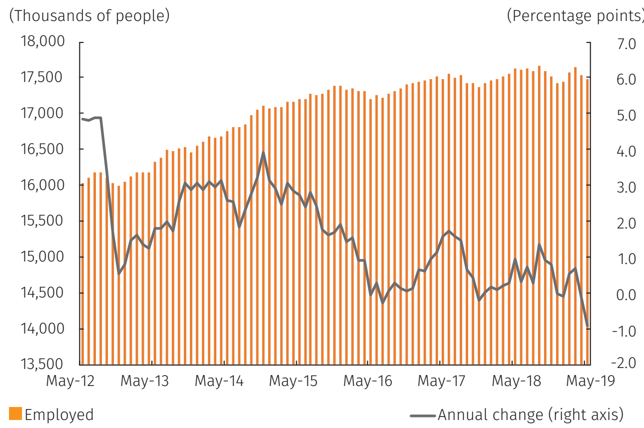
By branches of activity, agriculture, which represents close to 15% of the total number of people employed in the country, was the one with the worst performance in generating employment within the national total. This was registered especially in the Eastern (Norte de Santander, Santander, Boyacá, Cundinamarca, and Meta) and the Pacific (Chocó, Cauca, Nariño and Valle) regions while construction, and community, social and personal services were the branches with the best records. However, the positive changes in construction are

Graph 2.4
Number of People Employed. Seasonally Adjusted Series and Annual Change

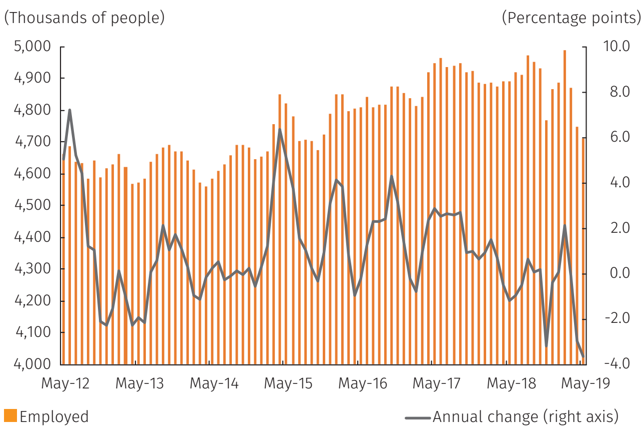
A. National Total



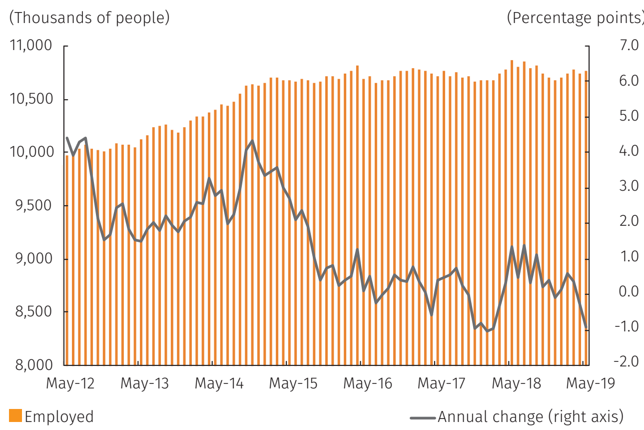
B. Urban Centers



C. Rural Area



D. Thirteen Main Metropolitan Areas



Source: DANE (GELH); calculations b *Banco de la República*.

influenced by a low basis of comparison from last year. In the most important thirteen metropolitan areas, in turn, real estate, business, and rentals were the areas that subtracted the most from the number of people employed, especially the sub-branch of real estate while construction remains the sector with the greatest positive contribution just as it does in the national total.

2.2.3 Quality of Employment and Labor Market Conditions

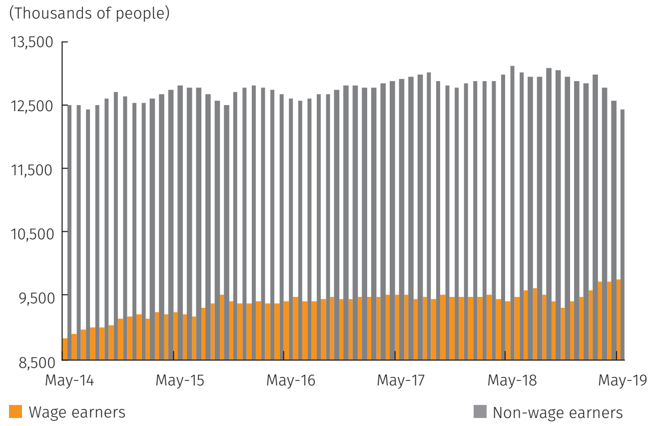
Increases in formal and salaried employment are usually associated with progress in the quality of employment since the workers with these types of jobs enjoy greater job stability, higher wages, and greater access to loans – factors that, in turn, boost confidence, household consumption, and productivity.

During the first half of 2019, a moderate expansion was registered in the number of people employed in the higher quality categories which was offset by decreases in the lower quality categories. Thus, for the thirteen areas in the half-year moving average ending in May, salaried employment had an annual expansion of 0.5% and non-salaried employment one of -1.0% (Graph 2.5). Therefore, non-salaried employment is the one that explains the drop in urban ER. The modest expansion of salaried employment is mainly due to the growth in skilled labor since the unskilled labor declined. The annual growth rates for formal[37] and informal employment in the thirteen areas, in turn, were 1.3% and -1.9% respectively during the same period (Graph 2.6).

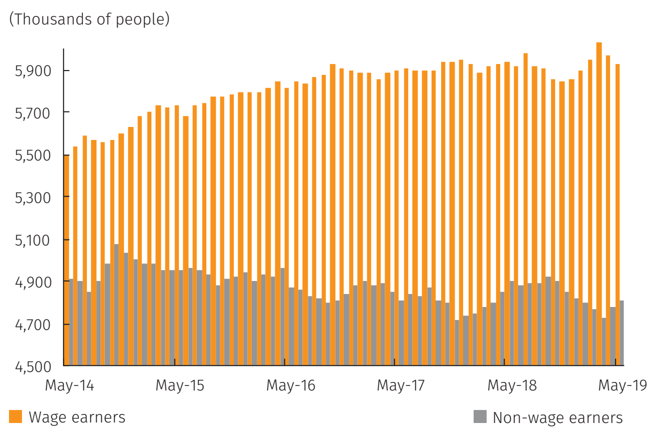
It is possible that the adjustment of the minimum wage which, in recent years has been higher than inflation and productivity, has generated friction that is affecting the net growth of formal employment, especially unskilled formal employment and could even hamper the trend towards formalization that has been seen. Specifically, increases in the minimum wage translate into higher costs for companies which can affect the hiring and firing decisions since the demand for labor is expected to be negatively associated with wages. Added to that is the fact that the level of the minimum wage relative to the median wage is quite high in Colombia if it is compared to other countries in the Organization for Economic Cooperation and Development (OECD; Graph 2.7). Along this line there is evidence[38], in the case of Colombia, indicating that the effect of the adjustment to the minimum wage on the net growth of formal employment is negative.

Graph 2.5
Employment by Type of Occupation
(seasonally adjusted quarterly moving average)

A. National Total

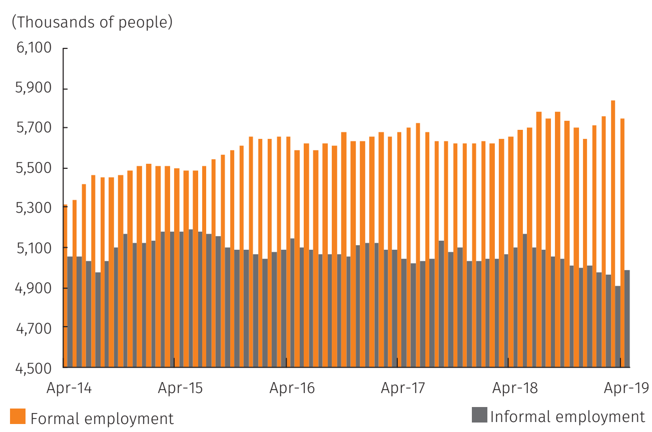


B. Thirteen areas



Source: DANE (GELH); calculations b*Banco de la República*.

Graph 2.6
Employment by Formality



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

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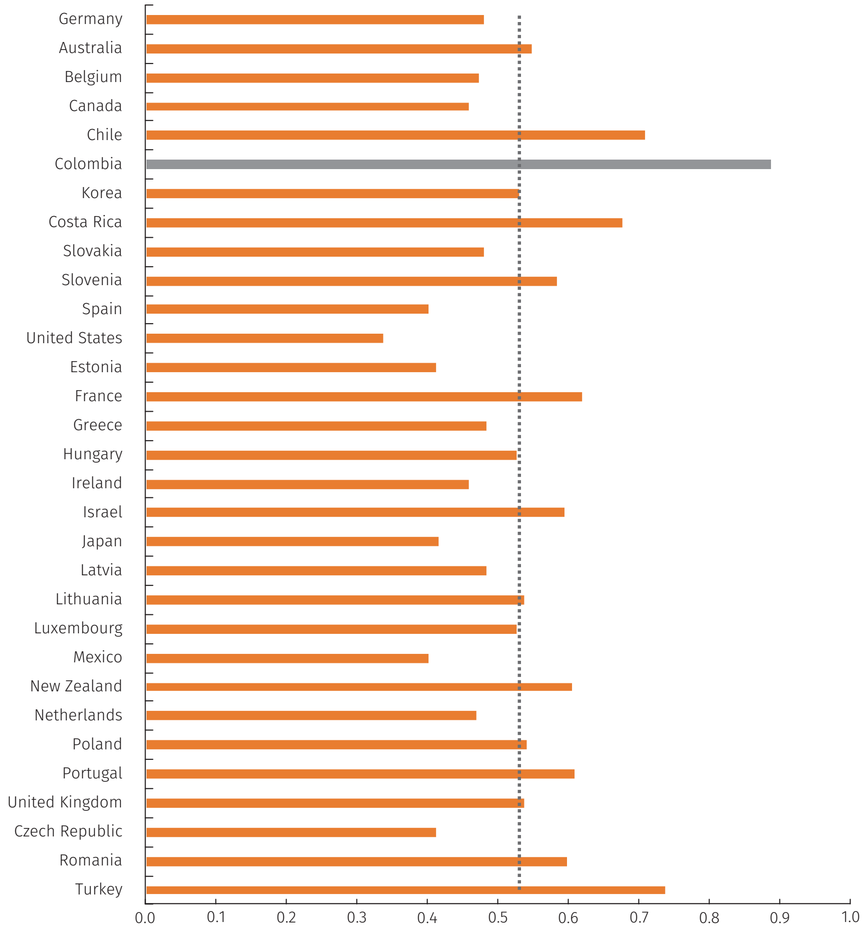
37 All workers or laborers in private companies and the government are considered salaried. In turn, on DANE's definition, which is founded on the resolutions of the United Nations International Labor Organization (ILO), employers and workers in companies that have up to five workers, unpaid family workers,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

38 For more detail on the effects of the increase in the minimum wage on labor market flows see the July 2018 *Labor Market Report*.

Graph 2.7
Minimum Wage Compared to Median Wage in OECD Countries (2017)



Note: the sample average is on the dotted line (0.53). Wages refer to full-time employees.
Source: *OECD.*

2.2.4 Wage and Labor Costs

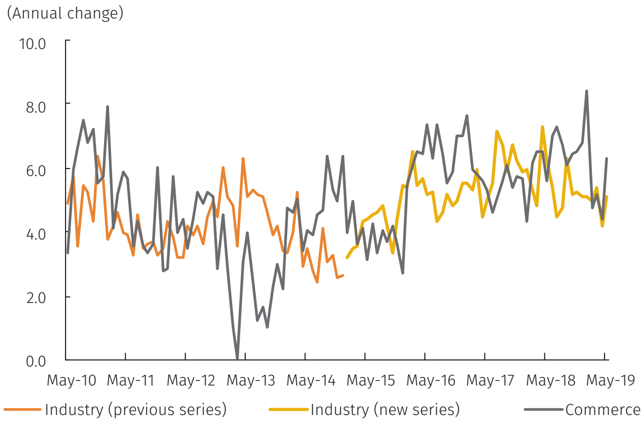
The available information suggests that a large part of the salary adjustments that have been seen so far this year have been above the inflation target. Specifically, between January and May, the nominal wages in the trade sector rose an average of 5.8% per annum and the ones in the industrial sector an average of 4.9% (Graph 2.8, panel A). Between January and June, nominal wages in heavy construction and housing, in turn, registered annual increases of around 3.7% and 3.4% respectively (Graph 2.8, panel B).

2.2.5 Outlook for the Rest of 2019

Even though a more dynamic economy is expected for the second half of this year, there will probably still be excess productive capacity in the economy. This makes it likely that the labor market indicators, the unemployment rate in particular, will probably remain stable at levels close to the current ones. Furthermore, *Banco de la*

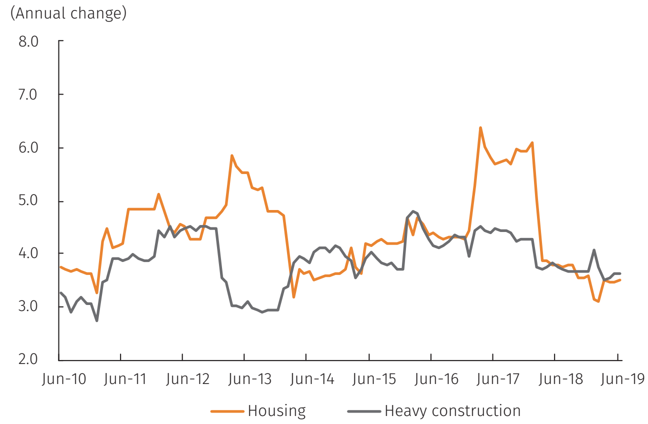
Graph 2.8
Nominal Wage Index

A. Industry and commerce



Source: DANE (EMCM and GELH), calculations by *Banco de la República*.

B. Housing and Heavy Construction



Source: DANE (ICCV and ICCP), calculations by *Banco de la República*.

República's surveys of expectations show no improvements overall in what business owners expect regarding increases in the number of staff since they don't expect high economic growth either domestically or abroad. Thus, if these conditions do not change, substantial pressure on wages and, through this channel, on prices is not likely to be seen.

2.3 Inflation

Annual consumer inflation rose more than expected in the first half of 2019 and deviated a little from the target spurred by some transitory supply shocks arising from adverse weather conditions caused primarily by the presence of *El Niño* and the increases in indirect taxes. Major readjustments in several regulated services were, once again, added to this for various reasons. Nonetheless, basic factors that determine the trajectory of medium- and long-term inflation contributed to contain the pressure on prices and made it possible for core inflation -which excludes a large part of these shocks- to continue to show a high level of stability around the target of 3.0%, just as it has been seen since the end of last year. Within the core inflation indicators, inflation excluding food and regulated items, should be highlighted. It remained below the target throughout the course of the year, and in June, it stood at 2.54%. During these months, the economy continued to have an excess of productive capacity due to which the spending growth did not result in a significant increase in prices. Moreover, inflation expectations remained close to the target and the pass through of the Colombian peso's depreciation to prices was limited and lower than anticipated.

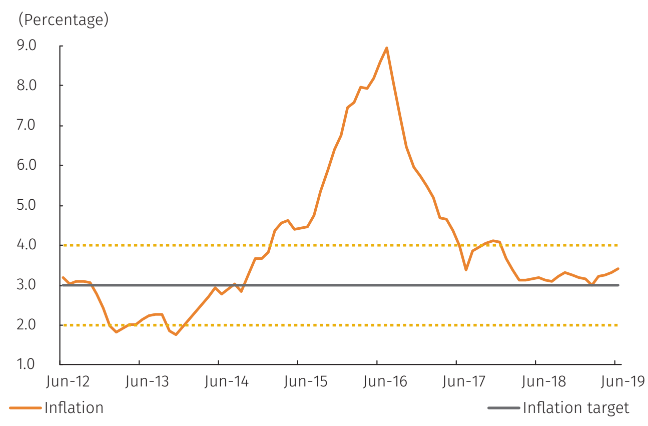
El Niño and the impact of the closure of the highway to the eastern plains (*Llanos Orientales*) will continue pushing consumer inflation upward for a few more months. However, during the last quarter of 2019 and the beginning of 2020, the effect of those shocks should begin to dissipate with the normalization of the climatic conditions and the reopening of the highway. Moreover, given the expected growth, the economy is likely to continue to show excess in its productive capacity and a negative output gap for several more quarters. This will make possible to rule out pressures on prices associated to an increase in spending. On the medium term, neither significant moves in the exchange rate that could generate increases on the prices of tradable goods are expected, nor pressures from wage costs, given the relatively relaxed conditions that the labor market will continue to present.

All of that should make it possible for annual inflation to return to the downward trend towards the end of the year, although the result for December will probably overcome slightly the target. In 2020, the downward trend should continue, causing inflation to converge at 3.0%. During this period, core inflation will probably continue to show a stable performance in relation with the target. Nevertheless, that stability and the return of total inflation to the target, could be delayed if the pressures on the exchange rate end up being important and exceed those considered in the central forecast; also if the road-closure problems are not overcome within a reasonable period of time.

2.3.1 Inflation observed in 2019

As it has occurred since the beginning of last year, during the first half of 2019, annual consumer inflation remained close to the 3.0% target established by the Board of *Banco de la República* (JDBR) showing a greater stability than previous years. In June, the result was 3.43%, a number that is higher than the one in December last year (3.18%) (Graph 2.9 and Table 2.3). During the last six months, inflation has presented a slight upward trend greater than expected, as a result of rises in the prices of food and some regulated services, which should be mainly transitory.

Graph 2.9
Consumer Price Index (CPI)
(annual change)



Source: DANE and *Banco de la República*

Core inflation, which largely discounts these transitory shocks, has fallen into levels slightly lower than the target since the beginning of 2019 and has remained there throughout the first half of the year, according to the average of the four indicators monitored by *Banco de la República*. This average stood at 2.96% in June, compared to a figure of 3.03% at the end of last year (Graph 2.10 and Table 2.3). Two of the four indicators have stood below 3.0% over the course of the year, highlighting the lowest registered percentage (2.54% in June) of

Table 2.3
Consumer Price and Core Inflation Indicators
as of June 2019

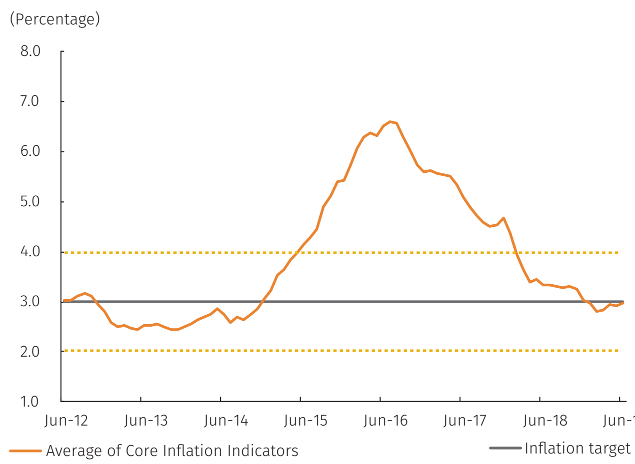
Description	New CPI weights [a/]	Dec-17	Mar-18	Jun-18	Sept-18	Dec-18	Mar-19	Apr-19	May-19	Jun-19
Total	100.00	4.09	3.14	3.20	3.23	3.18	3.21	3.25	3.31	3.43
Excluding food [b/]	76.16	5.01	4.05	3.81	3.71	3.48	3.26	3.26	3.19	3.15
Tradables	19.16	3.79	1.80	1.83	1.57	1.09	0.90	1.16	1.22	1.17
Non-tradables	42.31	5.49	4.76	4.27	4.13	3.79	3.29	3.42	3.34	3.36
Regulated items	15.26	5.86	6.01	5.82	6.03	6.37	6.42	5.78	5.54	5.33
Food [c/]		1.92	0.98	1.74	2.05	2.43	3.26	3.46	3.90	4.46
Perishables	3.88	5.84	7.13	8.47	9.51	8.88	9.98	10.99	13.19	15.46
Processed food	16.26	-0.91	-2.01	-0.91	-0.72	-0.08	1.43	1.45	1.60	2.18
Eating out	8.07	5.21	3.32	3.13	3.32	3.68	3.43	3.70	3.89	3.80
Core inflation indicators										
Excluding food		5.01	4.05	3.81	3.71	3.48	3.26	3.26	3.19	3.15
Core 20		4.87	4.04	3.58	3.56	3.23	3.09	3.25	3.21	3.28
CPI excluding perishables, fuels, and utilities		4.02	2.99	2.71	2.81	2.76	2.57	2.72	2.73	2.87
Inflation excluding food and regulated items [d/]		4.76	3.49	3.23	3.04	2.64	2.38	2.57	2.55	2.54
Average of core inflation indicators		4.66	3.64	3.33	3.28	3.03	2.82	2.95	2.92	2.96

a/ Weightings by the new methodology used to calculate the CPI starting in January 2019.
b/ Calculations by *Banco de la República* using the new methodology. This excludes the division of food and the subclasses corresponding to eating away from home.
c/ Calculations by *Banco de la República* using the new methodology and including the division of food and the subclasses corresponding to eating away from home.
d/ Calculations by *Banco de la República*.
Source: DANE, calculations by *Banco de la República* (BR) with provisional classifications.

consumer price index (CPI) excluding food and regulated items.

According to the foreseen, consumer prices continued to face little pressure from demand due to the economy continued to have an excess of productive capacity and a growth below its potential. This situation has reflected on the stability that core inflation has shown (at relatively low levels) and, in particular, on the CPI sub-basket for non-tradable items for which the annual change remained at around 3.3% during these first six months (significantly below what had been seen last year). Within the non-tradable basket, the performance of the rentals CPI is notable. The annual change for this item, 3.06% in June, continued to decline slowly as it has happened since late 2017. This and other items

Graph 2.10
Average of core inflation indicators



Source: DANE and *Banco de la República*.

So far this year, the greatest contribution to the moderate increase in inflation has come from the hikes in food prices.

would also have been favored by an indexation at lower rates, given the drop in inflation last year.

The scant pressure of demand may also be evident in the low pass-through of cumulative depreciation to consumer prices in the segment of tradable goods, based on the estimates of the Bank's technical staff. Although, over the course of the year, there were rises in the CPI's annual change of this basket (from 1.09% in December 2018 to 1.17% in June), these were associated with the impact of the increase in the *ad valorem* tax on alcoholic beverages. This tax came into force at the beginning of the year, but it has been revised downward recently, due to which it is likely that part of its upward impact on annual inflation will be reversed during the second half of the year. Thus, although the rise in the exchange rate since mid-2018 has led to some price hikes for tradable goods, they have been less than what was anticipated and what happened in similar situations in the past.

Over the course of the year, the greatest contribution to the moderate increase in inflation has come from the rises in food prices. Annual change of food prices (including food away from home) went from 2.43% in December to 4.46% in June. In addition to the usual agricultural cycle, this upswing has been associated with the effects of *El Niño* and, to a lesser extent, with the taxes on sodas. *El Niño,* despite its moderate intensity, has probably affected significantly the prices of various perishable foods and meats, especially in the Caribbean region. Added to this is the adoption of the multi-phased tax on sodas ordered by the *Ley de Financiamiento*. Likewise, circumstances such as the indigenous strike in March and April and the closure of the Bogota-Villavicencio highway, may have generated temporary increases in primary food prices in various parts of the country.

In these first six months, the CPI for regulated items exhibited a decreasing annual variation, although it remains high.

During these first six months, the CPI for regulated goods showed a decreasing annual variation, even though it remains at high levels compared to other observed main sub-baskets. By June, this variation was 5.33% (compared to 6.37% in December). Within this group the largest adjustments have happened in public services, particularly in water supply and sewer services, but also in electricity and gas. The first of these utilities, saw a rising annual change (up to 7.56% in June) due to increases in rates in a few cities such as Medellin, which is seeking to gather funds for investment in water decontamination plants. In relation to electricity, the annual variation for residential service, which carries the greatest weight in the basket, has remained above 7.0% since the middle of last year and, in June, it was at 6.49%. Among other factors, these increases have probably been due to the delayed start of the operations of hydroelectric projects and to the stronger link between the *Electricaribe* rates and the *spot* market price, given the difficulties faced by this company in getting electricity long-term provision contracts (Table 2.3).

In the remainder of the year, annual consumer inflation would show a relative stability.

During the first half of this year, there has been no evidence to suggest that labor costs have been a source of significant inflationary pressure. In the case of labor-intensive non-tradable services such as education and health, the price adjustments moderated over the course of the year. Few items -strongly tied to the minimum wage- such as surveillance and residential administration fees (other services for housing occupation) presented a growing pace of adjustment compared to the previous year.

1.3.3 Outlook for 2019 and 2020

For the remainder of the year, annual consumer inflation will continue to be favored by the absence of pressure from demand and wage costs in addition to a low pass through of the exchange rate movements to domestic prices, all of which should ensure relative stability. Slight rises in the coming months are expected to the extent that food and regulated prices continue to be subject to any upward shocks. Nevertheless, since it is likely that the effects of such shocks will slowly dissipate starting in the fourth quarter, a break in this trend should be seen and inflation will probably converge with the target of 3.0% in 2020. In any case, inflation is not likely to move away from this number significantly for the remainder of the year but rather reach a maximum level sometime between the third and fourth quarters.

Core inflation, which is below 3.0%, will, in turn, probably converge towards this level over the course of the year driven by the tradable segment. The annual change of this basket should rise from the relatively low level seen currently to figures that are closer to 3.0% for what remains of the year and into 2020, as a result of the transmission of the accumulated and expected depreciation of the exchange rate. However, given that, going into the future, no significant fluctuation in the level of this variable is anticipated and that, in the third quarter, part of the upward shock caused by the increase in the *ad valorem* tax on alcoholic beverages has to reverse itself, the upward trend will be very gradual.

Regarding the non-tradable segment of core inflation and considering the fact that the demand pressures will continue to be contained since the economy will have excess productive capacity and a negative output gap, the current levels that are a little higher than 3.0% will probably remain for the rest of the year. Toward longer term, however, a gradual closing of this gap is anticipated, and this will make the price changes of this sub-basket rise slightly.

Food prices, particularly those for perishables, will continue to be a source of upward pressure on consumer inflation during the third quarter as a consequence of the effects of *El Niño* which, based on the most recent information, should extend into the end of summer in the northern hemisphere. Added to this are the rises in the costs of transportation that are being caused by the closing of the main route to the *Llanos Orientales* with the resulting increases in food prices, especially in Bogotá. Nevertheless, the normalization of weather conditions and the reopening of the highway (which, according to the official announcements should happen towards the end of the third quarter) should lead to a gradual normalizing of prices and a decline in food price and total inflation going into the fourth quarter of the year. This trend will probably continue into the first half of 2020, which will make it possible for total inflation to converge at 3.0%.

The decline in inflation at the end of the year and its convergence to the target in 2020 could face risks from the exchange rate and from supply shocks on food prices.

The prices for regulated items will also probably remain another source of upward pressure for the rest of the year and going into 2020, especially due to the electricity rates although to a lesser extent than in the recent past. The circumstances that have led to relatively high adjustments in these prices since last year will continue to be present in the coming quarters. Nonetheless, the decline in the international fuel prices in recent months towards more sustainable levels and the absence of significant exchange rate pressure should lead to greater stability in the domestic price for gasoline in the medium term with smaller readjustments than in previous quarters. Thus, although the annual change in regulated prices will remain relatively high, it should decrease and is not likely to be an impediment to the decline in consumer inflation towards the target in 2020.

The decline in total inflation at the end of the year and its convergence towards the target in 2020 could face upward risks in the event that the exchange rate tends to depreciate more than expected. A situation such as this is likely to have an impact on increases in the prices of tradable goods, affect inflation expectations, and delay the convergence of inflation rates with the target. Another upward risk could emerge if the closing of the roads lasts longer than expected and, thus, has a more lasting effect on food prices in cities like Bogotá and, through expectations, on total inflation for the country.

2.4 Interest Rates and Financial Sector

2.4.1 Performance of Interest Rates in the First Half of 2019

2.4.1.1 Banking Interest Rates

During the first half of 2019, the policy rate remained stable at 4.25%, which is the same level seen since April 2018, and thus completed fourteen months without changes. The lending and deposit rates, in turn, remained relatively stable in the first half of the year. Although there were upswings in all of the types of credit in the first months of the year, which were mainly due to seasonal patterns, the majority of them dissipated during the second quarter. Thus, the rates at the end of June came to levels similar to those at the end of 2018 (Graph 2.11).

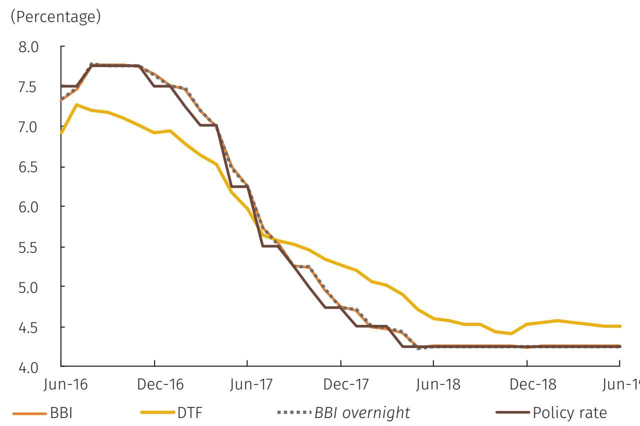
The policy rate remained stable at 4.25%, the same level since April 2018, thus completing 14 months unaltered.

In the first half of 2019 both the *overnight* interbank interest rate (IBR) and the *overnight* banking benchmark indicator (BBI) remained stable at the levels seen at the end of the year: 4.26% and 4.11% respectively (Graph 2.11). The deposit rates, in turn, rose slightly largely due to an increase in the rates and amount deposited in the long-term (360 days or more). The aggregate rate for certificates of deposit (CD) rose 6 bp and the aggregate rate for fixed-term deposits (DTF) declined 2 bp in June. Over the course of the year, the weekly average of the amounts deposited was higher than what was registered during 2018, especially in the long-term deposits (greater than 360 days).

In the lending rates, those for commercial loans increased in the first half of the year (Table 2.4). The rates for loans to households showed reductions as compared to the end of the year in consumer loans and credit cards while the rate of mortgage loans rose slightly during the same period. From the beginning of the year to June, the following changes in interest rates for commercial loans were observed: treasury 115 bp and ordinary 7 bp while the preferential loans remained stable at the end of the year level. The rates for credit cards (-69 bp) and consumption (-30 bp), in turn, fell and mortgage rates rose (12 bp).

In real terms, all the interest rates for loans and deposits rose in the first half of 2019. When the average of several measurements of inflation expectations is discounted[39] (*ex ante* interest rates in real terms), both the deposit and lending rates, with the exception of credit card rates, rose during the first quarter. At the close of the first half of the year, all of the real rates, except those for treasury, were at levels below their historical average (Graph 2.12).

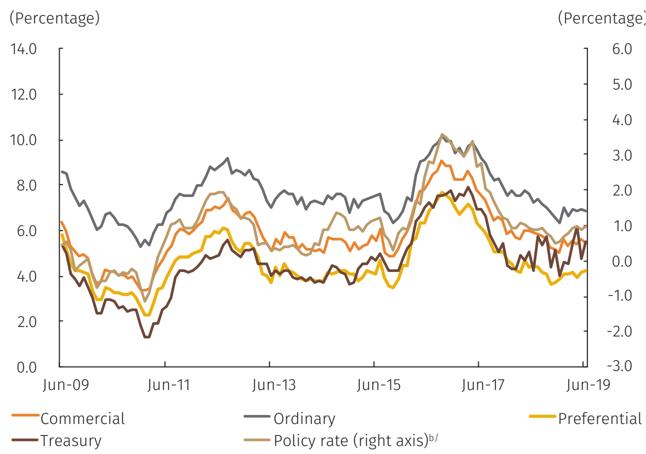
Graph 2.11
Banco de la República's Benchmark Interest Rate [a/], Interbank Rate (IBR) [b/], overnight IBR [b/], and DTF [b/]



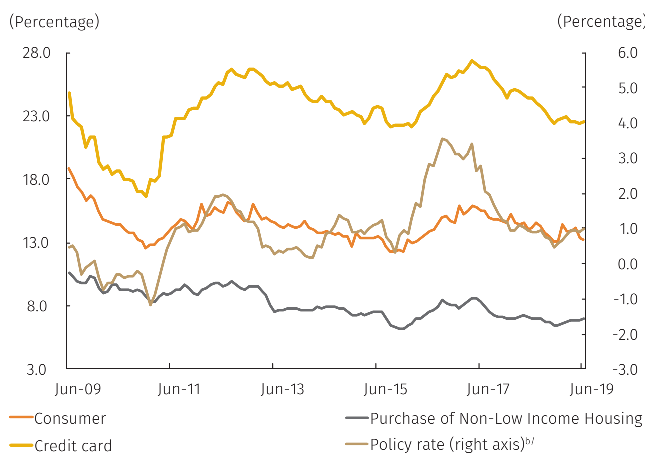
a/ Policy rate based on date of the JDBR meeting.
b/ The average monthly rate is used.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

Graph 2.12
Real Interest Rates *ex ante* [a/]

A. Loans to Businesses



B. Household Loans



a/ The average of several measures of inflation expectations are used as a deflator (for 1 year from now obtained from the monthly survey of financial analysts, for 1 year from now obtained from the quarterly survey on economic expectations, the BEI for 2 and 3 years from now, and the forward BEI for 2 and 3 years from now.
b/ The policy rate is the one set by the JDBR at the monthly meeting; the remaining rates correspond to the average for the month (weighted by amount).
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

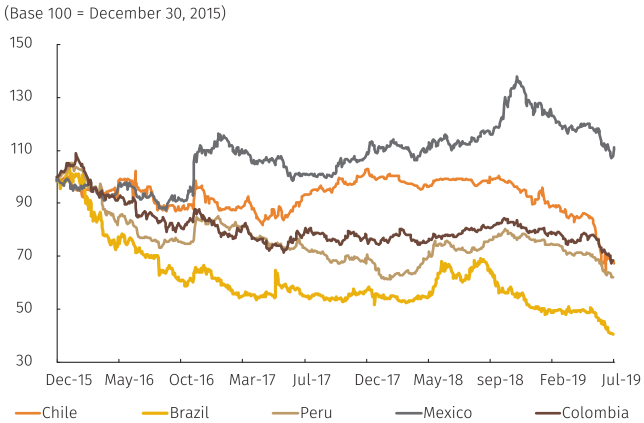
39 Specifically, the average of five measurements of inflation expectations is discounted: for a year from now obtained from a survey of financial analysts, for a year from now obtained from the *quarterly survey of economic expectations*, from the *breakeven inflation* for two and three years from now, and the *forward breakeven inflation* for two to three years from now.

Table 2.4
Financial System Main Nominal Interest Rates
(percentage)

Date	Policy Interest Rate	Deposit rates				Lending rates (monthly average)						
						Households			Commercial			
		DTF	CD	Weighted liabilities[a/]	Three month BBI[a/]	Consumer	Mortgage[b/]	Credit card[c/]	Ordinary	Preferential	Treasury	Total Assets[d/]
Jan-17	7.50	6.94	7.41	6.02	7.33	20.88	12.45	31.89	14.30	11.27	12.22	15.11
Feb-17	7.25	6.78	7.43	5.63	7.03	20.03	12.56	31.70	13.79	11.37	12.03	14.87
Mar-17	7.00	6.65	7.08	5.16	6.64	19.78	12.42	31.63	13.84	11.22	11.96	15.13
Apr-17	7.00	6.53	6.84	5.36	6.20	19.87	12.38	31.71	13.71	10.65	11.26	14.47
May-17	6.25	6.17	6.54	5.05	5.87	19.78	12.36	31.51	13.37	10.09	10.68	14.02
Jun-17	6.25	5.96	6.31	4.23	5.50	19.47	12.02	31.17	12.89	9.75	10.57	13.50
Jul-17	5.50	5.65	6.00	4.38	5.35	19.39	11.57	31.16	12.64	9.47	10.27	13.58
Aug-17	5.50	5.58	6.06	4.52	5.19	18.91	11.29	30.96	12.27	9.14	9.47	13.27
Sept-17	5.25	5.52	5.97	4.12	5.15	18.87	11.01	30.27	12.04	8.77	9.17	12.69
Oct-17	5.00	5.46	5.93	4.95	4.95	18.88	10.91	29.91	12.13	8.79	8.79	13.05
Nov-17	4.75	5.35	5.82	3.70	4.56	18.67	10.90	29.36	11.72	8.72	9.11	12.87
Dec-17	4.75	5.28	5.55	3.69	4.66	18.66	10.83	28.85	11.33	8.43	8.16	11.66
Jan-18	4.50	5.21	5.59	3.84	4.48	19.25	10.74	29.36	11.59	8.28	8.04	12.53
Feb-18	4.50	5.07	5.50	3.96	4.41	18.60	10.82	29.53	11.32	7.92	7.99	12.06
Mar-18	4.50	5.01	5.33	3.48	4.33	18.33	10.77	29.19	11.14	7.72	8.44	11.72
Apr-18	4.25	4.90	5.23	3.86	4.20	18.16	10.66	28.67	11.17	8.02	8.02	12.21
May-18	4.25	4.70	5.05	3.63	4.20	17.77	10.61	28.51	11.18	7.82	8.50	12.37
Jun-18	4.25	4.60	4.91	3.10	4.25	17.89	10.58	28.53	10.80	7.96	7.74	12.35
Jul-18	4.25	4.57	4.96	3.73	4.25	18.41	10.57	28.12	10.97	7.87	9.22	12.33
Aug-18	4.25	4.53	4.87	3.34	4.25	18.00	10.50	27.82	10.70	7.57	8.87	12.49
Sept-18	4.25	4.53	4.87	3.50	4.26	17.70	10.48	27.53	10.70	7.68	9.43	12.25
Oct-18	4.25	4.43	4.83	3.62	4.28	17.50	10.45	27.12	10.55	7.31	8.05	11.98
Nov-18	4.25	4.42	4.77	3.27	4.28	17.28	10.45	27.01	10.56	7.60	9.08	11.96
Dec-18	4.25	4.54	4.90	3.66	4.27	17.21	10.38	27.16	10.24	7.63	7.79	11.13
Jan-19	4.25	4.56	5.16	3.72	4.26	18.43	10.39	27.11	10.82	7.79	8.36	12.69
Feb-19	4.25	4.57	5.20	3.83	4.27	17.82	10.43	27.13	10.29	7.66	8.15	11.93
Mar-19	4.25	4.55	5.10	3.24	4.26	17.66	10.43	26.60	10.46	7.61	8.91	12.05
Apr-19	4.25	4.54	5.00	3.87	4.26	17.85	10.36	26.58	10.39	7.35	9.61	11.89
May-19	4.25	4.50	5.02	3.59	4.25	17.08	10.47	26.49	10.47	7.64	8.29	12.26
Jun-19	4.25	4.52	4.96	3.54	4.22	16.90	10.50	26.47	10.31	7.61	8.95	11.44

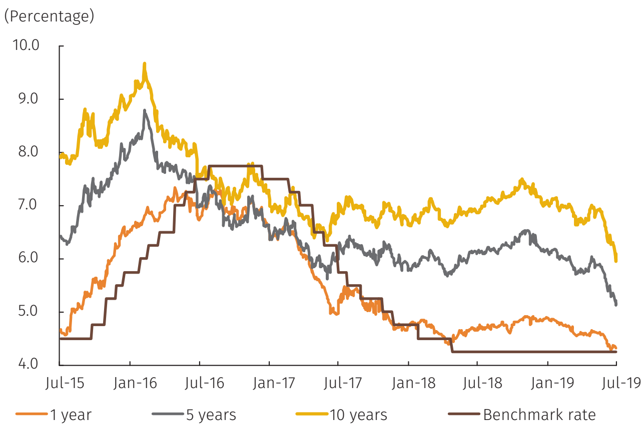
a/ End of month data
b/ Corresponds to the amount-weighted average of the rate for peso- and UVR-denominated disbursements for the purchase of non-low-income housing. Before figuring out the weighted average for the UVR-denominated credit rate, the annual change in UVR was added.
c/ Neither one-payment purchases nor advances are included
d/ Corresponds to the amount-weighted average of consumer, ordinary, preferential, and treasury loans. The weight of Treasury loans corresponds to one fifth of their weekly disbursement.
Source: Office of the Financial Superintendent of Colombia (Form 088 and Form 441).

Graph 2.13
Index of Zero-Coupon Rates for 10 Years Ahead, Latin America



Sources: Bloomberg, SEN (electronic trading system) and MEC (Colombian electronic market), calculations by *Banco de la República*.

Graph 2.14
Zero-Coupon Peso-denominated TES rate, and *Banco de la República's* Liquidity Expansion Auction Rate



Sources: SEN and MEC, calculations by *Banco de la República*.

2.4.1.2 Government Bond Market

Over the course of the year, the yields[40] of the bonds issued by the Colombian Government (TES), as well as the yields for the rest of the countries in the region have declined substantially in line with the trend of the US Treasuries. This reduction is mainly the result of the higher expectations that the Federal Reserve (Fed) would reduce their interest rates this year in response to the release of macroeconomic figures that have shown evidence of a slowdown in inflation and economic activity (Graph 2.13).

The TES have also been favored by the higher expectations that *Banco de la República* would hold to an expansionary monetary policy for a longer period compared to what was expected in December 2018 (Graph 2.14). During this period, there has been less participation by foreign investors who have lowered the percentage of their share of the local TES market going from 26.4% at the close of 2018 to 25.9% as of July 9. However, their presence is maintained with respect to what was seen on July 9, 2018.

The market has been more sluggish during 2019, compared to what was seen last year. The average daily turnover on the SEN and MEC trading systems during this period was COP 5.09 trillion (t) as of July 9, a figure that is lower than the COP 8.75 t registered during 2018.

2.4.2 Balance Sheet of Depository Corporations[41]

So far in 2019, the trend of the main items on the credit institutions' balance sheets suggests that they are returning to an expansionary

40 There is an inverse relationship between the price of a bond and its yield. For example, if a bond promises to pay $110 at maturity and its market price is $100, its yield is 10%. If the market price of the same bond rises to $105, then its yield falls (4.8% = [110/105] -1) because at the maturity date of the bond, the holder will still receive the same $110.

41 Data on the depository corporations may be obtained from the Office of the Financial Superintendent of Colombia's format 281. The figures correspond to June 28, 2019 while the annual comparisons were made with June 29, 2018. Due to the fact that, starting January 01, 2015, the depository corporations have been following the international financial reporting standards (IFRS) to report on the information from their balance sheet accounts, statistical adjustments have been included to offset the effects of the change in methodology.

path. Although the loans and deposits growth rates are still low, they are higher than those registered in recent months and have a positive trend. In particular, at the end of June, the gross loan portfolio in national currency and deposits (liabilities subject to reserve requirements: LSRR) grew at an annual rate of 7.3% and 7.2% respectively (3.7% and 3.6% in real terms) compared to 6.4% (3.1% in real terms) and 5.2% (2.0% in real terms) in December.

In the case of the loan portfolio, which is the main component of depository corporations' assets (DC), the recovery that began in the last quarter of 2018 has strengthened. That is consistent with a scenario of moderate economic recovery and stability of the policy interest rate, and comes about with a lower rate of quality deterioration (see section 2.4.2.3) and a perception of greater demand for loans.[42]

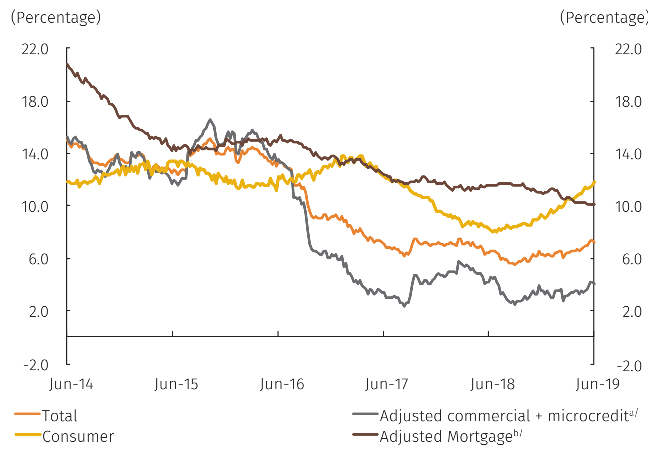
By type, the improvement is due for the most part to the trend of the consumer loan portfolio, which has steadily risen during the year and, as of the latest date, had grown 11.8% per annum (8.1% in real terms). At the same time, the mortgage loan portfolio is still showing annual variations in excess of 10% although there was a slight slowdown in the second quarter (Graph 2.15). The above suggests that the households' demand for loans has become stronger in comparison to what was registered in previous years.

The loan portfolio for businesses (commercial + microcredit), in turn, which represents close to 54% of the total loan portfolio in national currency, continues to have annual increases of about 4.0% (close to 1.0% in real terms). Remember that there were prepayments and written-off loans in significant amounts for the commercial category during the third quarter of 2018. This caused the balance to fall during that period and is still having an effect when annual changes are calculated. However, at the margin, the commercial loan portfolio is growing at a higher rate (close to 6.2%) accompanied by a relative stability in the interest rates (Graph 2.15, panel B).

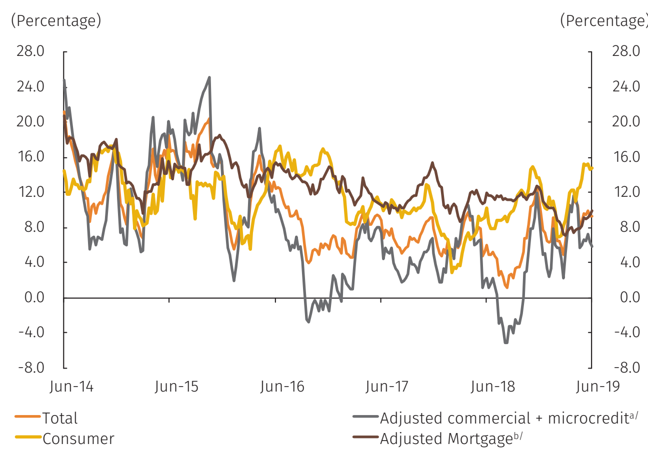
With regard to investments, the second most important asset, these have had annual growth rates close to 15% which is higher than those

Graph 2.15
Annual Growth of the Loan Portfolio in Legal Currency by Type

A. Annual nominal growth



B. Thirteen Weeks Annualized Nominal Growth

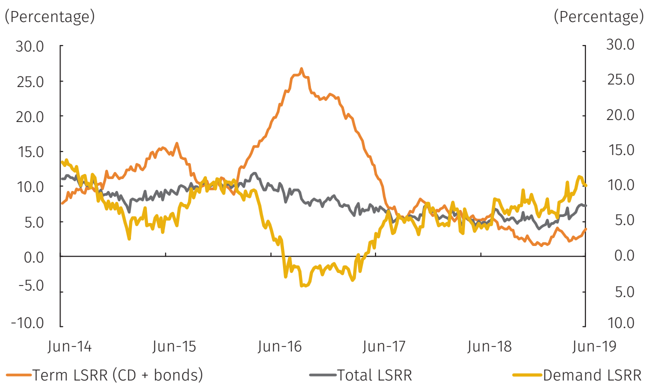


a/ Includes adjustments for operational leasing
b/ Does not include securitizations of the mortgage loan portfolio.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

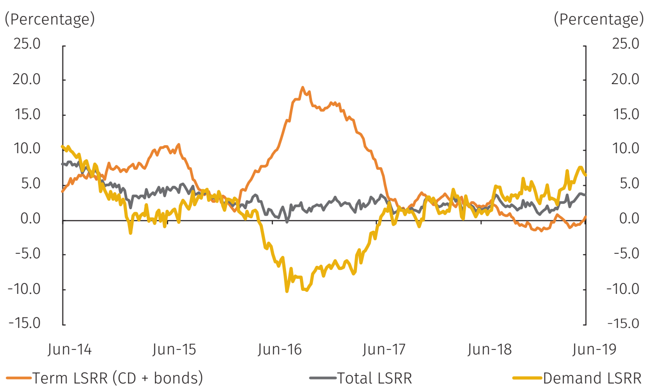
42 See the *Report on the Credit Situation in Colombia*, March 2019: (http://repositorio.banrep.gov.co/bitstream/handle/20.500.12134/9677/Reporte%20SCC%20-%20Marzo%202019.pdf?sequence=1&isAllowed=y).

Graph 2.16
Annual Growth of Liabilities subject to Reserve Requirements (total, demand, and term)

A. Nominal



B. Real[a/]



a/ Deflated by the total CPI.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República*.

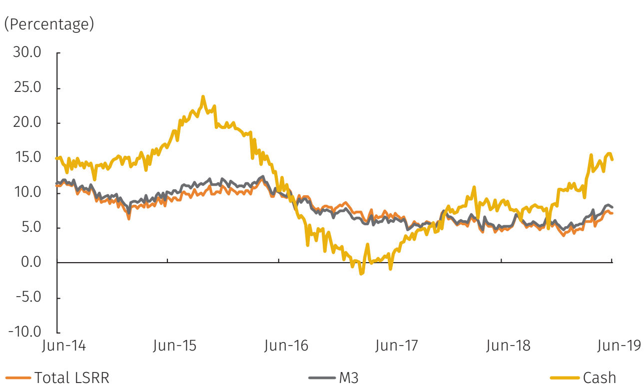
of the loan portfolio. The DCs have been net purchasers of TES and other securities, but the share of peso-denominated investments in the total assets has remained relatively stable.

From the other side of the balance sheet, over the six-month period, deposits had grown 7.2% yearly by the end of June (3.6% in real terms). By type of deposit, the surge in demand deposits that began on mid-2018 has continued, and as of June, they were growing at an annual rate of 10.1% (6.4% in real terms) (Graph 2.16). The annual change for the term deposits is lower (3.9% in nominal terms and 0.5% in real terms) and among these, the deposits with longer maturity,[43] for which there was a significant increase in interest rates at the beginning of the year, are growing the most (see the previous subsection).

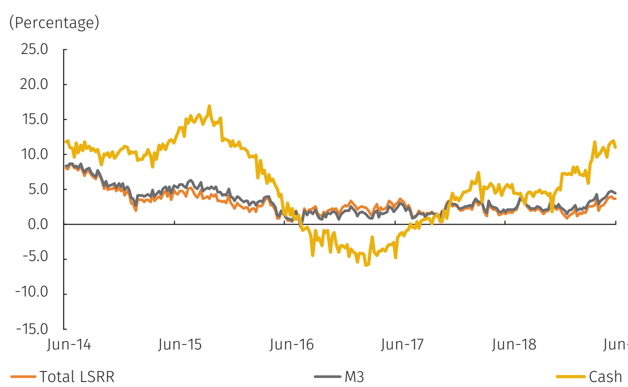
The performance of the deposits was reflected in M3 (LSRR plus cash), which is the monetary aggregate that includes the set of financial assets that agents can use to make payments in national currency. This aggregate surged during the second quarter and, by the end of June, it was growing at 8.0% per annum (4.5% in real terms). Cash, which had an annual growth of 14.7% at the end of June (10.9% in real terms), also contributed to this (Graph 2.17). The better performance of cash and deposits likewise had an impact on primary liquidity (see the box, "Liquidity Supply on the part of *Banco de la República* 2018-2019").

Graph 2.17
Annual Growth of M3, Liabilities subject to Reserve Requirements, and Cash

A. Nominal



B. Real[a/]



a/ Deflated with total CPI.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República*.

43 Close to 6.0% for those deposits that are for periods of more than a year compared to 0.0% for those that are for periods of less than 12 months.

2.4.3 Some Measurements of Financial System Risk[44]

To April 2019, credit institutions maintain solid solvency and liquidity indicators.

As of April 2019, the CEs maintained sound indicators of capital adequacy and liquidity in a context where risky and non-performing loan portfolios are declining. This has translated into a stabilization of credit risk indicators compared to the growing trend they had since the beginning of 2016. So far this year, growth in the total loan portfolio has been higher than growth in the risky and past-due portfolios. If this behavior continues, credit risk indicators could exhibit a sustained reduction in the near future.

The growth rate of funding, defined as the sum of liabilities and equity, continued to register a sustained recovery mainly due to the larger contribution of demand deposits. Investments, in turn, have also registered an upswing which has been accompanied by appreciations in the public debt market and low levels of volatility.

The credit institutions' exposure to credit and funding risks is presented below and the risk in the financial system's TES portfolio is analyzed.

2.4.3.1 Credit Risk

During the past year, the growth rate of the risky and non-performing loan portfolios continued to decline. This has translated into greater stability for the quality indicators by risk (QIR)[45] and by default (QID)[46] both of which have shown upward trends since the beginning of 2016. This trend has occurred in a context of moderate recovery of the economy combined with higher rates of growth for the gross loan portfolio, particularly for the consumer portfolio.

During the past year, the pace of growth of the risky and default portfolios continued to decelerate.

Between April 2018 and the same month in 2019, the risky loan portfolio slowed down as it went from growing 15.3% to decreasing 0.8% in real terms. This performance resulted from the commercial and consumer loan portfolios which presented growth rates of -1.8% and -2.3%, respectively, after they had been at 15.3% and 12.2% a year ago. For microcredit, decreases were also seen although they were smaller in magnitude. The largest reduction in the growth rate of the risky loan portfolio, in turn, was registered in the housing loan

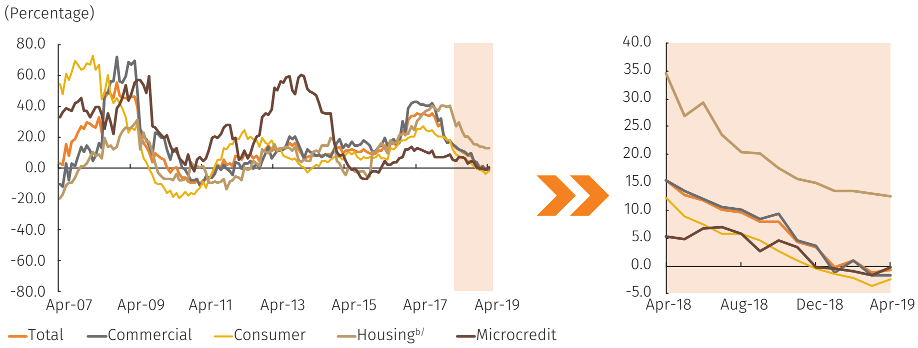
44 The information in this section was obtained from the balance sheets reported by financial entities to the Office of the Financial Superintendent of Colombia.

45 The QIR is defined as the ratio between the risky and the total loan portfolio (the risky loan portfolio corresponds to all the loans with ratings other than A on a scale from A to E where A is the best rating).

46 The QID is defined as the ratio between the loan portfolio with a greater than 30-day default and the total loan portfolio.

portfolio when it went from 34.6% in April 2018 to 12.4% a year later (Graph 2.18).

Graph 2.18
Annual Real Growth of the Risky Loan Portfolio[a/]



a/ CPI is used as a deflator. Special financial entities (second tier banks) are not included.
b/ The high growth of the housing loan portfolio in 2015 was due to the fact that with the implementation of the IFRS starting in January 2015, residential leasing was reclassified from the commercial loan portfolio to the housing loan portfolio.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República*.

The lower growth of the risky loan portfolio compared to the gross loan portfolio generated a slight decline in the total QIR during the period under analysis: this indicator declined 0.4 pp and, in April 2019, it reached 9.9%, the minimum amount registered since the end of 2017. By modality, the commercial loan portfolio and the consumer loan portfolio showed improvements between April 2018 and the same month in 2019 (Table 2.5).

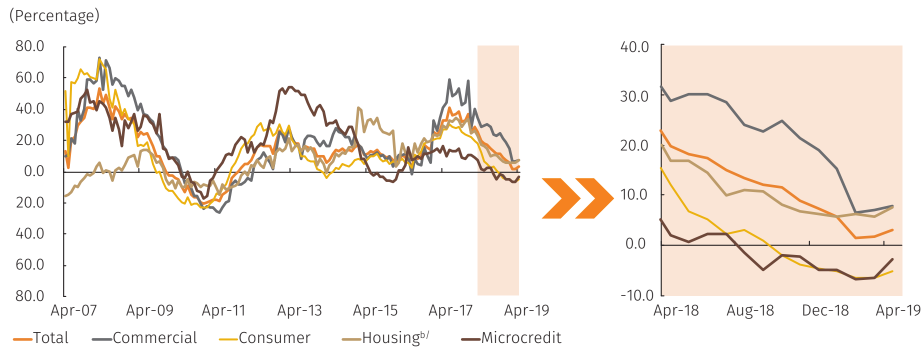
With regard to the materialization of credit risk, the real, annual growth rate of the past-due loan portfolio declined 16.6 pp between April 2018 and a year later when it stood at 3.1% (Graph 2.19). The type of loan that registered the largest drop was commercial (21.0 pp) followed by consumer (17.4 pp), housing (9.4 pp), and microcredit (5.0 pp).

Table 2.5
Credit Risk Indicators by Type of Credit
(percentage)

Type	Quality indicator by risk (QIR)			Quality indicator by default (QID) excluding penalties			Quality indicator by default (QID) including penalties		
	April-18	April-19	Average April 2018 to April 2019	April-18	April-19	Average April 2018 to April 2019	April-18	April-19	Average April 2018 to April 2019
Total Loan Portfolio	10.3	9.9	10.2	5.5	5.5	5.4	10.1	10.5	10.2
Commercial	11.8	11.5	11.9	4.6	4.9	4.7	7.6	8.5	8.0
Consumer	9.3	8.5	8.8	6.2	5.4	5.7	15.0	14.7	14.8
Housing	5.7	5.9	5.8	7.3	7.3	7.2	7.7	7.8	7.6
Microcredit	12.1	12.1	12.1	7.7	7.5	7.5	14.5	14.9	14.5

Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República*.

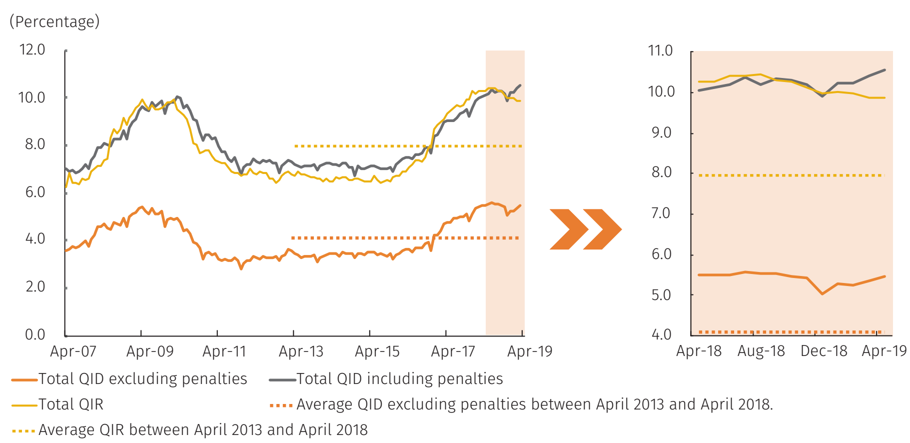
Graph 2.19
Real Growth of Non-performing Loans[a/]



a/ CPI is used as a deflator. Special financial entities (second tier banks) are not included.
b/ The high growth levels for the housing loan portfolio in 2015 were due to the fact that with the implementation of the IFRS starting in January 2015, residential leasing was reclassified.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

In the period under analysis, the QID excluding write-offs remained stable and stood at 5.5%. The QID including write-offs,[47] in turn, rose 0.4 pp and stood at 10.5% thus continuing the growth trend it has been showing since mid-2017 (Graph 2.20). Both indicators are above their averages for the last five years in the cases of both the total portfolio and each one of the specific portfolios (Table 2.5).

Graph 2.20
Quality Indicator by Default (QID) and Quality Indicator by Risk (QIR) of Gross Loans



Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

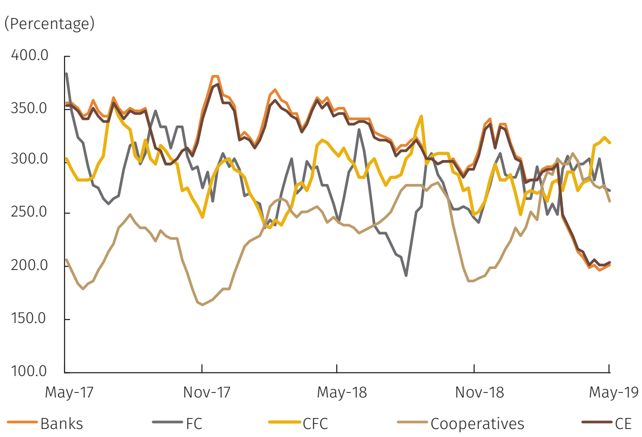
In short, over the past year, the CE credit risk indicators have exhibited a stable performance that contrasts with the deterioration that had been seen since the beginning of 2016. The above is due to the declines seen in the risky and past-due loan portfolios primarily in the commercial and consumer categories. These represent more than 80% of the total loan portfolio and have been framed in the

47 The QID including write-offs is defined as the ratio of the non-performing loan portfolio to the total portfolio plus the write-offs (these are assets which, since they are considered uncollectible receivables or lost, have been removed from the balance sheet in accordance with the legal provisions in effect).

context of a moderate recovery in the economy along with higher rates of growth for the gross loan portfolio. Over the course of the year, the growth of the total loan portfolio has exceeded that of the risky and non-performing loan portfolios, and this could lead to a sustained reduction in the credit risk indicators if this trend is maintained.

2.4.3.2 Liquidity Risk

Graph 2.21
LRI_R at 30 days



Note: the 30-day indicator corresponds to a 4-week weighted moving average.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República*.

In order to evaluate the liquidity the entities have to meet their short-term obligations, the liquidity risk indicator (LRI_R), defined as the ratio between the balance of liquid assets (available and liquid investments) and an estimate of the net requirements of short-term liquidity (thirty days), is used. If the LRI_R is higher than 100%, the entity has enough liquidity to meet their thirty-day obligations, but if not, the entity could have problems covering them in the short term.

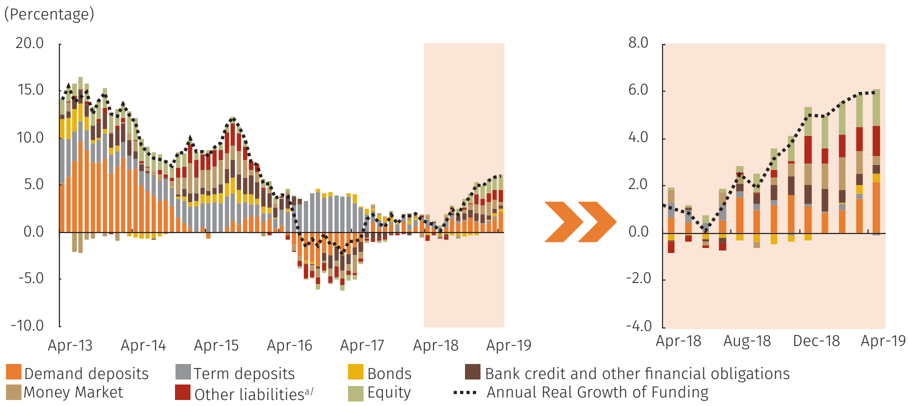
As of May 2019, the CEs' level of liquidity declined as a result of the FSC's External Circular 009/2018 going into effect. This circular generated an increase in the net liquidity requirements for banks. In contrast, the levels of liquidity presented by the FC, CFC, and cooperatives were higher than those seen in May 2018. Given the regulatory changes, the LRI_R of the CE stood at 205.1%, which indicates that the entities have sufficient liquid assets to meet their short-term obligations (Graph 2.21).

When the liquidity based on the balance sheet information is analyzed, the financing of the CEs (liabilities plus equity) during the past year continued to recover as it registered growth rates that have not been seen since the beginning of 2016. As of April 2019, all items with the exception of the term deposits showed positive contributions to the growth of funding, especially demand deposits and equity (Graph 2.22).

2.4.3.3 TES Market Risk

Financial institutions can have TES as part of their assets (their proprietary position) or as part of the assets they manage for their clients (third-party position). Between May 2018 and the same month in 2019, the financial system's TES portfolio, in both the proprietary and third-party positions, rose and its indicator of volatility remained stable.

Graph 2.22
Real Annual Growth of Funding (Liabilities + Equity) and Contribution of their Components[a/]



Note: CPI is used as a deflator. Special financial entities (second tier banks) are not included.
a/ Other liabilities include other financial instruments, accounts payable, BOCAS, BOCEAS, etc.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República*.

As of May 31, 2019, the value of the TES portfolio in the financial system's proprietary account increased COP 10.7 t compared to May 25, 2018. This increase occurred mainly in banks, and insurance and capitalization companies (COP 7.5 t and 2.6 t). In contrast, stock-brokerage firms were the only entities that registered reductions in the value of their TES portfolio in the proprietary account (Table 2.6).

Regarding the managed funds, there was a COP 35.1 t increase during the same period, ending in a balance of COP 221.6 t. As of May 31, 2019, the pension funds and investors increased their TES portfolios holdings by COP 18.4 t and COP 8.7 t, respectively. Nevertheless, the share held by these agents fell, respectively, to 54.6% and 34.9% of total managed funds (Table 2.6).

During the period under analysis, the increase in foreign investors' holdings in the TES portfolio is in line with the trend seen since the beginning of 2014. However, over the course of the year, there has been lower participation of foreigners, since their percentage share in the local TES market has declined slightly.

Like the rest of TES holders, the financial entities may face losses due to valuation resulting from a drop in the price of said securities. This risk is quantified using the measurement of the Value at Risk (VaR), which, on the basis of the returns observed, estimates the maximum loss that an institution may experience in its investment portfolio over a 1-day horizon for a given level of confidence.[48] An appropriate measure of the financial system's market risk is the VaR of their

48 To illustrate, if the VaR of a financial institution is 5.0% at a 99% confidence level, it indicates that the maximum loss that this entity might face in one day would be 5.0% of the value of its portfolio and there is only a 1.0% chance of surpassing this.

Table 2.6
Change in TES Balance in Financial System's Proprietary and Managed Positions (trillions of pesos)

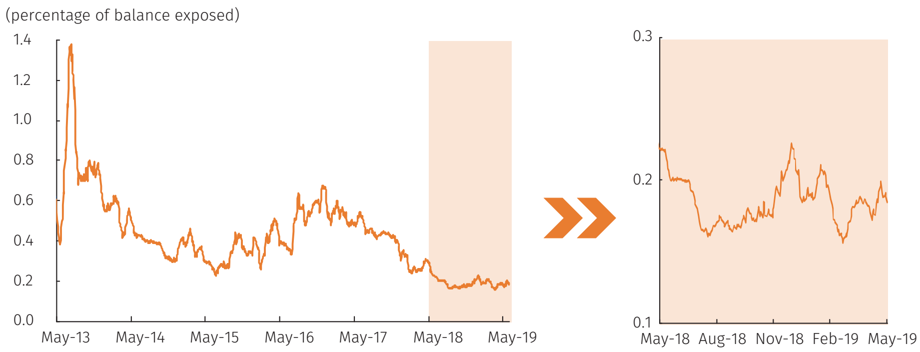
TES balance (trillions of pesos)		
Entities	25-May-18	31-May-19
a) Financial System: Proprietary Position		
Credit institutions		
Commercial banks	41.0	48.5
Investment banks	1.8	2.7
Commercial finance companies	0.1	0.1
Financial cooperatives	0.0	0.0
Non-banking Financial Institutions (NBFI)		
Pension funds	0.1	0.2
Stock Brokerage Firms	1.4	1.0
Trust Funds	0.1	0.1
Insurance and Capitalization Companies	14.7	17.2
Total	59.1	69.8
b) Financial System: Managed Position		
Foreigners	72.8	77.4
Stock Brokerage Firms	0.0	0.0
Trust Funds	72.8	77.4
Pensions	102.6	121.0
Pension funds	79.7	96.4
Trust Funds [a/]	23.0	24.6
Mutual Funds [b/]	1.8	3.2
Stock Brokerage Firms	0.5	0.4
Trust Funds	1.3	2.8
Others	9.3	20.0
Stock Brokerage Firms	0.3	0.7
Trust Funds	9.0	19.3
Total	186.5	221.6
c) Others [c/]	32.8	22.8
Total supply	278.4	314.1

a/ Pension liabilities managed by trust companies.
b/ Information from the Office of the Financial Superintendent of Colombia format 351.
c/ Others include *Banco de la República*, National Treasury Office, Fogafin, etc.
Sources: Central Securities Depository (DCV in Spanish), *Banco de la República*, and Office of the Financial Superintendent of Colombia, calculations by *Banco de la República*.

proprietary account since the losses associated with the portfolios managed by the system are faced by the investors.

As of May 31, 2019, the average monthly VaR for the proprietary accounts of the financial entities declined with respect to what had been seen 12 months ago, and starting in August 2018, the performance has remained stable. The above is a result of the decline in volatility that the public debt market has experienced and that, in turn, has translated into the lowest VaR indicators seen in the last six years (Graph 2.23).

Graph 2.23
Weekly Moving Average of the VaR for for Financial System's Proprietary Position



Source: Central Securities Depository (DCV), calculations by *Banco de la República*.

2.5 External Balance and Exchange Rate Policy

During 2016 and 2017, the country's external sector went through an adjustment period which was characterized by a significant correction of the current account deficit that reached to 3.3% of the GDP in 2017, trend that was reverted in 2018. In the last year, the main sources of external income continued spurred to a large degree by the external sales of mining-energy products and, to a lesser extent, by other income such as remittances and tourism. Nevertheless, this growth was not able to totally offset the significant increase in imports of goods and outflows due to primary income. The latter was consistent with the higher growth in expenditure and domestic investment and the higher profits of companies with foreign capital.

As a result of the above, the deficit in the current account expanded in 2018 and stood at 3.9% of the GDP. The year 2019 is framed in a context by lower export prices, a more dynamic economic activity, and a slowdown in the growth rate of the main trading partners which, added to other factors, would be reflected in a further deterioration of the current balance. In fact, data from the first quarter of 2019 show an expansion in the external deficit.

2.5.1 Colombia's External Balance in the First Quarter of 2019

The drop in international prices and volumes dispatched from some of the main export commodities, the sluggishness of external sales of manufactured goods, and a demand for imports that continued to grow at high rates explain the deterioration in the trade balance and current account during the first quarter of 2019. In fact, the current account of the country's balance of payments registered a deficit of USD 3.614 billion (b) which is USD 808 b higher than it was a year ago (Table 2.7). As a share of the GDP, the deficit was estimated to be 4.6% which is 1.17 pp higher than what was seen during the same period the previous year. The current deficit was financed by net capital inflows

Table 2.7
Colombia's Balance of Payments (annual flows in millions of dollars)

	2018 (pr) (Jan - Mar)	2019 (pr) (Jan - Mar)	Change (dollars)
Current Account (A + B + C)	-2,806	-3,614	-808
(percentage of the GDP)	-3.5%	-4.6%	
A. Goods and services (1 + 2)	-1,524	-2,760	-1,236
1. Goods (a - b)	-908	-1,976	-1,068
a. Exports FOB	10,233	10,272	39
b. Imports FOB	11,141	12,248	1,107
2. Services (a - b)	-616	-784	-168
a. Exports	2,434	2,449	15
b. Imports	3,050	3,233	183
B. Factor income	-2,905	-2,570	335
Income	1,486	1,645	159
Outlays	4,392	4,216	-176
C. Current transfers	1,623	1,716	93
Income	1,861	1,942	81
Outlays	237	226	-11
Financial Accounta/ (A + B + C + D)	-2,335	-3,159	-823
(percentage of the GDP)	-2.9%	-4.1%	
A. Direct Investment (ii - i)	-909	-2,671	-1,761
i. Foreign in Colombia (FDI)	1,980	3,335	
(percentage of the GDP)	2.5%	4.3%	
ii. Colombian Abroad	1,071	665	
B. Portfolio investment (1+ 2)	1,750	-1,334	-3,084
1. Public sector (ii-i)	409	-698	
i. Foreign Portfolio Investment (a+b)	616	793	
a. International markets (bonds)	-664	500	
b. Local Market (TES)		293	
ii. Portfolio Investment Abroad	1,025	94	
2. Private sector (ii-i)	1,342	-635	
i. Foreign Portfolio Investment (a+b)	-463	-126	
a. International markets (bonds)	-500	0	
b. Local Markets	37	-126	
ii. Portfolio Investment Abroad	878	-761	
C. Other Capital Flows public sector + private sector	-3,313	-1,505	1,808
D. Reserve assets	137	2,351	2,214
Errors and Omissions (E and O)	470	455	-15
Memo item			
Financial account excluding change in international reserves	-2,472	-5,510	-3,038
Change in International Reserves	137	2,351	

(pr): preliminary
Note: the results presented at the current date follow the recommendations of the sixth version of the IMF Balance of Payments Manual. Therefore, the financial account is presented with a negative sign for the net capital income. For further information and the methodological changes consult http://www.banrep.gov.co/balanza-pagos.
a/ In the financial accounts, the negative sign on net flows (A, B, C, and D) reflects funding resources entering the Colombian economy. In this respect, positive changes imply less foreign financing in the balance of payments.
Source: *Banco de la República.*

The current account of the balance of payments registered a USD 3,614 million (m) deficit, higher by USD 808 m than the one a year ago.

of USD 3.159 b (4.1% of the quarterly GDP) which included a change of USD 2.351 b in international reserves.[49] Note that the development in the current account of Colombia's balance-of-payments has shown a tight relationship with the performance of the trade balance of goods due to the high share that exports and imports have in the country's total current income and expenditures.[50] This is the main source of the increase in the country's current account deficit during the first quarter of the year.

Thus, the deficit in the trade balance in goods during the first quarter of 2019 rose USD 1.068 b with respect to the year before (Table 2.7). This was mainly due to imports of goods that grew at annual rates of 9.9% in contrast with the virtually zero growth of the value of exports. Regarding the growth of imports, this was widespread and was due to the increase in purchases abroad of supplies and capital goods for industry (7.2%), consumer goods (11.8%), fuel and lubricants (41.4%), and transportation equipment (16.8%).

The country's exports totaled USD 10.272 b during the period under analysis with an annual increase of 0.4% (Table 2.7). The higher external sales of oil and its derivatives (5.1%), stand out, favored by the increase in quantities sold (10.5%) which allowed compensating more than the lower export prices (6.1%). In contrast, external sales of coal (20%) and industrial products (2.1%) registered decreases.

Regarding the deficit in the service account, this rose USD 168 m during the first quarter of 2019 (Table 2.7) due to the higher increase in imports compared to the exported services. Regarding imports, the higher expenses associated with travel expenditures as well as imports of transportation, insurance, and financial services are notable. As for exports, the higher income received from business and construction services, transportation and insurance stands out.

The reduction in the net outflows due to factor income (USD 335 m) (Table 2.7) during the period under analysis, in turn, arose primarily from the lower profits received by companies with direct investment (USD 164 m) and, to a lesser extent, from the decrease in interest payments on the foreign debt (USD 74 m). The lower outflows due to profits from foreign direct investment (FDI) are, to a great extent, the

49 Note that this accumulation of reserves is the result of the net purchases of USD 2.140 b in foreign currencies, income from the net yields of USD 225 m on international reserves and USD 14 m in net outflows for other *Banco de la República* transactions.

50 The analysis of the structure and change in the current account income over the last 15 years shows that foreign sales of merchandise are its main component with a share that ranges between 70% and 81% of the total income (63% between January and March 2019). Regarding the current expenditures, their most important component was imported goods which represented, on average, 64% of the total outlays (61.5% between January and March of 2019).

The contribution of direct investment stands out in the financial account for the first quarter of the year.

result of the decrease in the estimated earnings for the companies that work in oil drilling and mining (USD 114 m), transportation and communications (USD 100 m), and manufacturing (USD 51 m). These lower earnings were partially offset by the increase in the profits of the foreign companies in the financial establishment sector (USD 80 m) and the provision of electricity, gas, and water (USD 30 m).

In terms of the financial account, in the first quarter of the year the contribution of foreign direct investment (FDI) as a source of funding is notable (Table 2.7) followed by other flows of capital and resources associated with portfolio investments. The later arose from both liquidations of assets such as bonds placements by the public sector and, to a lesser extent, by the purchase of TES by foreigners. During the period under analysis, net capital inflows of USD 3.159 b were registered that is USD 823 m higher than what was seen a year ago when they totaled USD 2.335 b.[51].These net inflows were explained by inflows of foreign capital (USD 3.375 b), net liquidation of Colombian capital abroad (USD 2.017 b), inflows from financial derivatives (USD 117 m), and a USD 2.351 b increase in the international reserves as a result of balance of payments transactions. In terms of the quarterly GDP, the financial account rose, going from 2.9% to 4.1% (Table 2.7).

For FDI, USD 3.335 b (4.3% of the quarterly GDP) was received during the first quarter of 2019, amount higher than the average for the last four quarters (USD 2.838 b; 17.5%), and then what had been seen a year ago (USD 1.980 b; 68.4%). The distribution by economic activity of the FDI received during this period was as follows: oil and mining (43.9%), manufacturing industry (15.4%), financial and business services (10.1%), retail trade and hotels (7.1%), electricity (7.0%), transportation and communication (5.0%), and the remaining sectors (11.5%). With respect to the flow of Colombian direct investment abroad, this was estimated at USD 665 m, made in its majority by companies in the manufacturing and financial sectors.

Net income from portfolio investment, in turn, totaled USD 1.334 b which contrasts with the capital outflows registered a year ago (Table 2.7). This was the result of net disbursements of long-term debt securities on the international markets (USD 500 m), the net purchases of TES in the local market by non-residents (USD 293 m), and the liquidations of variable income securities in the local market on the part of

51 According to the IMF's proposed Balance of Payments Manuel, sixth version, the financial account has the same sign as the current account. The financial account is the result of the difference between asset and liability flows. If the current account has a deficit, then the financial account is negative, which indicates that the Colombian economy has had to resort to external financing (liabilities) and/or liquidate its foreign assets in order to finance its current excess expenditure. In contrast, if the current account is positive (surplus), the financial account will also be positive which would indicate that the country has the capacity to lend funds to the rest of the world.

non-residents (USD 126 m). Added to the above were the liquidation of USD 667 m in foreign assets that corresponded mainly to portfolio investments liquidated by private sector companies (USD 761 m) (Table 2.7).

Finally, due to other capital flows, the country received net resources for USD 1.505 b (Table 2.7). Of these, the private sector received 53% (USD 792 m) and the remaining 47% was received by the public sector (USD 713 m). Note that these resources came from the liquidation of USD 2.156 b in foreign assets that made it possible to offset the net debt repayments of USD 650 m in loans.

2.5.2 Forecast of the Balance of Payments for 2019

The forecast for the balance of payments for 2019 indicates that, as a percentage of the GDP, the most likely figure for the deficit in the current account will probably be around 4.4%. This forecast is framed within a context of lower crude oil and coal prices and low growth of the global economy. In addition, the Colombian economy will probably continue showing favorable rates of growth for its domestic demand.

The impetus that dollar-denominated exports of the main products had in 2018 will probably dissipate in 2019, in line with the reversal of the export prices and the volumes shipped of some products. Likewise, a softening of the growth in our sales of industrial goods abroad is expected in a context in which the growth of our main trading partners is slowing down and there is greater sluggishness in worldwide trade. Moreover, imports of goods are expected to continue to grow albeit at a slower pace compared to 2018, which is consistent with the growth of economic activity that encourages imports by all sectors in general.

The projection of the balance of payments for 2019 suggests that the current account deficit as a share of GDP would stand around 4.4%.

The deficit of the trade balance for 2019 is expected to be higher than the one the year before spurred mainly by the growth in imports of goods and, to a smaller degree, by the lower sales abroad of mining-energy products. Thus, the expansion of the current account imbalance would be explained by this item (Table 2.8).

Regarding the remaining components of the current account, these are expected to contribute to partially offsetting the higher deficit estimated for the trade balance (Table 2.8). To the extent that lower income from exports is anticipated for oil and mining companies with FDI, there would be a reduction in their profits. In addition to the above, revenue growth from Colombian investments abroad is expected which, as a whole, would make it possible to offset higher interest payments on foreign debt and the improvement in the profits of businesses with foreign capital that work in sectors other than mining-energy.

Table 2.8
Balance of Payments (flows in millions of dollars)

	2018 (pr)	2019 (proj)
Current Account (A + B + C + D)	-12,908	-14,410
Percentage of the GDP	-3.9%	-4.4%
A. Goods	-5,209	-9,732
Exports	44,373	42,101
Imports	49,583	51,833
B. Non-factor services	-3,896	-2,987
Exports	9,511	10,011
Imports	13,407	12,998
C. Factor Income	-11,421	-9,913
D. Transfers	7,618	8,222
Financial Account (A + B + C + D)	-12,146	-14,410
A. Direct Investment (ii - i)	-6,231	-8,557
i. Foreign in Colombia (FDI)	11,352	12,501
ii. Colombian Abroad	5,122	3,944
B. Portfolio Investment	1,282	-4,978
C. Other investment (loans, other loans and derivatives)	-8,384	-4,373
D. Reserve Assets	1,187	3,499
Errors and Omissions (E and O)	762	0

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

The deficit in services balance for 2019 is estimated to be lower than it was last year (Table 2.8). Regarding exports, these are likely to increase mainly due to the higher income from tourism which is favored by worldwide growth and the level of the exchange rate in Colombia. Meanwhile, the outflows will probably register an amount similar to the one seen last year due, on one hand, to the effect of the lower international crude oil prices which may be reflected in a fall in freight costs, and in contracting for technical services in this sector. On the other hand, a low rate of growth in spending by Colombians on trips abroad is anticipated because of various factors including a high basis of comparison and the effect of the higher exchange rate.

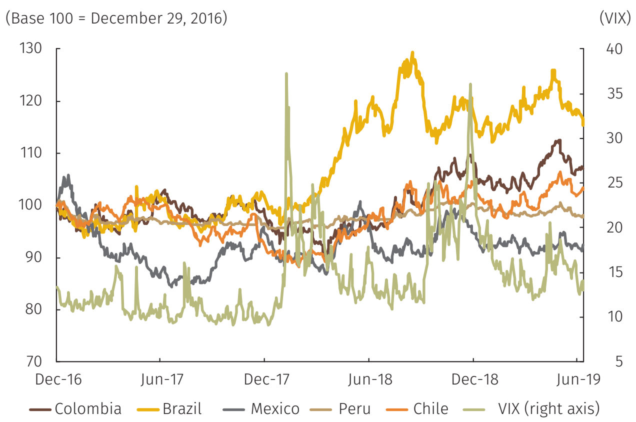
Larger current transfers are also expected, primarily because of the expected growth of the remittances sent from the United States, Europe, and some Latin American countries. Based on the information available from the beginning of 2019 to April, income from remittances registered an annual growth of close to 11%.

Compared to the forecasts in the previous report, the new central scenario for the financial account anticipates a greater contribution from foreign direct investment as a source of external financing. In addition, given what has been seen over the course of the year, a greater acquisition of foreign assets and a lower indebtedness on the part of the private sector is envisioned. The purchase of TES by foreigners is also expected to continue although at a slower pace than the previous year.

2.5.3 Changes in the Exchange Rate so far in 2019

During 2019, the U.S. dollar has strengthen in comparison to the currencies of developed countries although its performance during the first half of the year was mixed. The strengthening of the dollar could have been influenced by 1) the search for safe-haven assets given the fears of a worldwide economic slowdown coupled with increased commercial tensions with China; 2) the better performance of the U.S. economy compared to the rest of the developed countries in the wake of the publication of growth data on the first quarter of the year,[52] and 3) the publication of favorable employment data in the United States.[53] Specifically, over the course of 2019 (as of July 10) the U.S. dollar strengthened 0.7% relative to other developed countries[54] while it weakened 0.9% with respect to the currencies of emerging economies.[55]

Graph 2.24
Nominal Exchange Rate Indices for Some Latin American Countries and VIX



Source: Bloomberg.

In Latin America, the majority of the currencies have appreciated against the dollar due to expectations of lower interest rates in the United States and to idiosyncratic factors in each country. Thus, as of July 10 the following had appreciated against the US dollar: the Brazilian real (3.2%), the Peruvian sol (2.7%), the Mexican peso (2.6%), the Chilean peso (1.1%), and the Colombian peso (1.1%) while the Argentine peso had depreciated 11.1% (Graph 2.24). If the average exchange rates are compared to the average calculated for the same period in 2018, all of

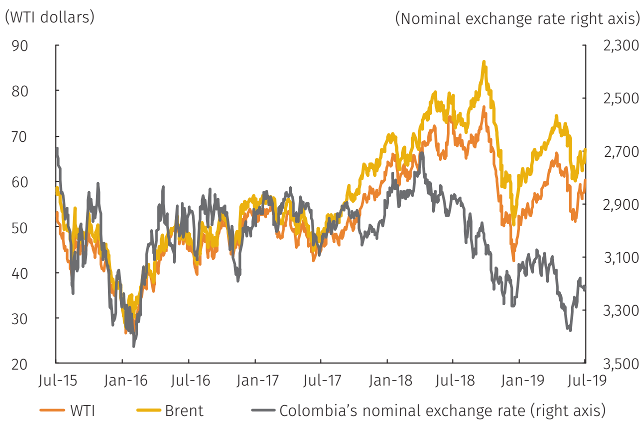
52 In the first quarter, the annualized growth rate of the United States was 3.2% (the expected rate was 2.3%). The European economy, in turn, grew at a rate of 1.6% (compared to the 1.2% expected) while the British economy grew 2.0% (2.0% expected), and the Japanese, 2.1% (-0.2% expected).

53 In June, the data on the non-farm payrolls stood at 224,000 (160,000 was estimated).

54 In line with the DXY, which includes the euro, the yen, the Canadian dollar, pound sterling, the Swedish krona and the Swiss franc. This group of currencies corresponds to those of the United States' main trading partners.

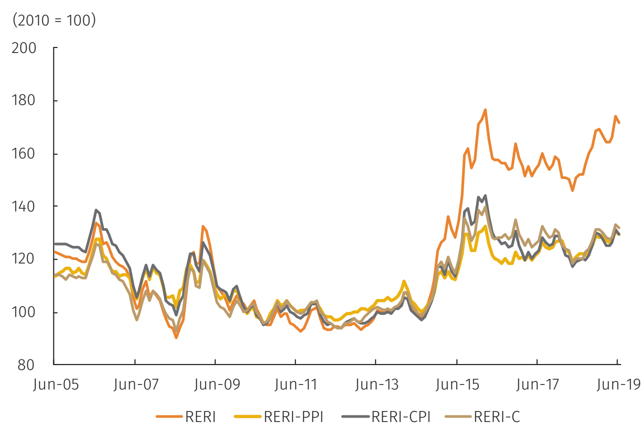
55 According to the *FXJPEMCI index*, which includes the currencies of Brazil, Russia, China, Mexico, South Africa, South Korea, Chile, Israel, Taiwan, Peru, Turkey, India, Argentina, Malaysia, Colombia, Hungary, Indonesia, Egypt, Thailand, the Czech Republic, the Philippines, Morocco, Pakistan, Jordan, and Poland.

Graph 2.25
Nominal Exchange Rate and International Price of Oil



Source: Bloomberg.

Graph 2.26
Multilateral Real Exchange Rate Indices (Nominal and Real)



Source: *Banco de la República.*

the currencies in the region have depreciated against with respect to the dollar.[56]

The Colombian peso, in turn, appreciated during the first quarter of the year in line with the performance of the rest of the currencies in the region and influenced by the increase of the oil price and expectations of monetization from real sector companies for the payment of dividends and taxes. This trend reversed itself in April and May, period in which the peso depreciated 6.4% influenced by the strengthening of the dollar, the uncertainty about Colombia's rating, and the concerns with regards to the increase in the current account deficit. In June and July, this depreciation corrected itself in the midst of a more favorable scenario in emerging economies and in light of the signs of greater liquidity in the United States (Graph 2.25).

Between January and June 2019, the Colombian peso depreciated when comparing to the currencies of the main trading partners based on the nominal exchange rate index (NERI). That was true when comparing against both the average of the same period in 2018 and to the last quarter of 2018. In real terms, that is, adjusting for the changes in prices in both Colombia and the other countries, the Colombian peso also showed a tendency toward depreciation in comparison to its trading partners and its main competitors in the United States in the coffee, banana, flower, and textile markets (RERI-CPI and RERI-C respectively). Similarly, if the producer price index (PPI) is used as a deflator, the peso has shown a slight depreciation so far this year compared to the countries it trades the most (RERI-PPI) (Graph 2.26).

2.5.4 International Reserve Indicators

Banco de la República recognizes the importance of having a suitable level of international liquidity to deal with capital outflows as well as to improve confidence in the country. In addition to the strategy of accumulating reserves, Colombia has had a line of contingent financing with the IMF (flexible credit line: FCL) since May 2009. This is given

56 Using data as of July 10, the Argentine peso depreciated 90.6%; the Colombian peso, 11.9%; the Brazilian real, 11.6%; the Chilean peso, 10.1%; the Peruvian sol, 2.2%; and the Mexican peso, 0.4%.

to member countries with good economic performance, prudent policies, and a sound economic policy framework. On May 20, 2019, the IMF reaffirmed the agreement on access to contingent resources for Colombia for an amount of approximately USD 11,400 m[57] and a period of two years. Although the economic authorities do not envisage using these funds, they consider it prudent to have them in the event of a sudden cut off in external financing.

Considering the fact that the IMF considers the FCL a temporary instrument and their intention is to prepare for a possible reduction of that line going into 2020, the JDBR decided to start a program for accumulating international reserves gradually through the mechanism of auctioning *put* options in an effort to generate the smallest possible impact on the exchange rate at their meeting in September 2018. This mechanism has been used by *Banco de la República* in the past for similar purposes.[58] In the May 31, 2019 meeting of the JDBR, the decision was made to suspend the program in order to evaluate its impact on the foreign exchange market in the current situation.

Up until April 2019, eight auctions of *put* options, each of them for USD 400 m, had been carried out. These options are American ones. They have had a period of validity of about a month, and their strike price is equal to the representative market exchange rate (MER). The condition under which they are exercised is that the MER is below its average for the previous twenty working days. This prevents *Banco de la República* from buying dollars when the Colombian peso is depreciating in comparison to the past twenty days. In addition, if, on the day the exercise condition is active, the exchange rate surpasses the MER (average exchange rate of the day before) the holders of the options will have no incentive to exercise them. That is why the *put* options are an appropriate mechanism if the intention is to minimize the effect on the exchange rate. As of April 30, 2019, USD 1,878.4 m had been accumulated through this exercise.

To 30 April 2019, USD 1,878.4 m were obtained through the put options exercise of the accumulation of reserves program.

Furthermore, in order to reinforce the accumulation of reserves and bearing in mind the fact that the national government had been planning to monetize some dollars in its financial program for 2019, *Banco de la República* bought USD 1,000 m from the General Office of Public Credit and the National Treasury on February 1, 2019 at the MER in effect that day. This means that a total of USD 2,878.4 m in reserves have been accumulated.

57 For more information, see Box 1: "Colombia's Flexible Credit Line with the IMF" in the *July 2018 Report of the Board of Directors to the Congress of the Republic*.

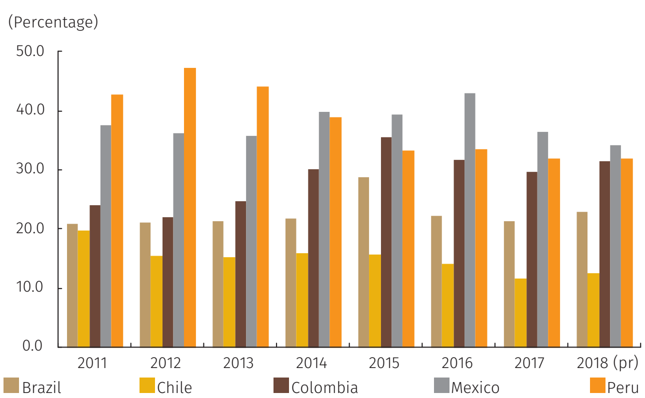
58 *Banco de la República* used it to auction options to the authorized intermediaries at the end of every month between November 1999 and September 2002, March and August of 2003, and March and May 2008. Between December 2002 and January 2004, *Banco de la República* held five of these auctions but not on a monthly basis.

Table 2.9
Indicators of Colombia's International Reserves

	2012	2013	2014	2015	2016	2017 (pr)	2018 (pr)	2019 (proj)
Balance								
Net International Reserves (NIR) (millions of dollars)[a/]	37,467	43,633	47,323	46,731	46,675	47,629	48,393	51,892
Indicators								
A. Foreign Debt Repayment Indicator								
Foreign Debt Repayments (millions of dollars)	22,539	16,773	21,756	24,531	23,759	30,212	31,870	30,881
NIR/current year foreign debt repayments	1.66	2.60	2.18	1.90	1.96	1.58	1.52	1.68
NIR/coming year foreign debt repayments[b/]	2.23	2.01	1.93	1.97	1.54	1.49	1.57	1.65
B. Appropriate External Liquidity Position								
NIR/ (current year debt service)	1.44	2.14	1.84	1.61	1.64	1.34	1.29	1.45
NIR/ (coming year debt service)[c/]	1.84	1.69	1.63	1.64	1.32	1.27	1.35	1.39
NIR/ (current year debt repayments + current year current account deficit)	1.11	1.49	1.14	1.08	1.30	1.17	1.08	1.15
NIR/ (coming year debt repayments + coming year, current account deficit)[d/]	1.28	1.05	1.10	1.31	1.15	1.06	1.07	1.13
C. Other International Reserve Indicators								
NIR as months of product imports	7.9	9.2	9.2	10.8	13.0	12.9	11.7	12.0
NIR as months of total imports	6.5	7.4	7.6	8.7	10.3	10.1	9.2	9.6
NIR/M3 (percentage)	22.1	24.7	30.2	35.5	31.7	29.6	31.4	31.4
NIR/GDP (percentage)	10.1	11.4	12.4	15.9	16.5	15.3	14.6	16.0

(pr): preliminary (proj): projected.
a/ Balance of net international reserves includes contributions to the Latin American Reserve Fund (FLAR in Spanish)
b/ The debt repayments for the coming year correspond to the projected payments on foreign debt at the closing of the projected balance of payments. Includes the balance of the short-term debt.
c/ The interest for the coming year corresponds to the estimated payments at the closing of the predicted balance of payments.
d/ The current account deficit for the coming year is a forecast.
Source: *Banco de la República.*

Graph 2.27
International Reserves/M3

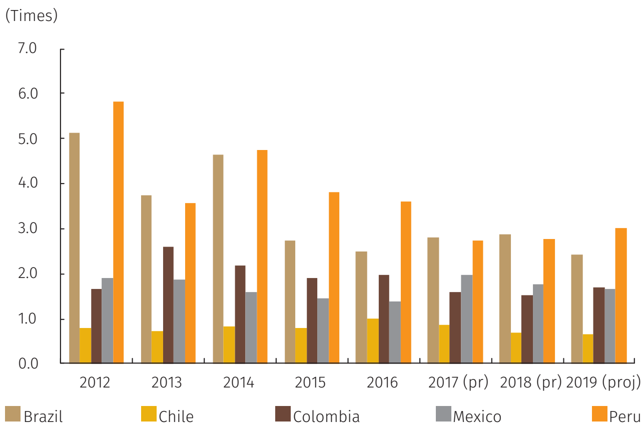


(pr): preliminary
Source: Central banks, The Economist Intelligence Unit (updated June 2019), and *Banco de la República.*

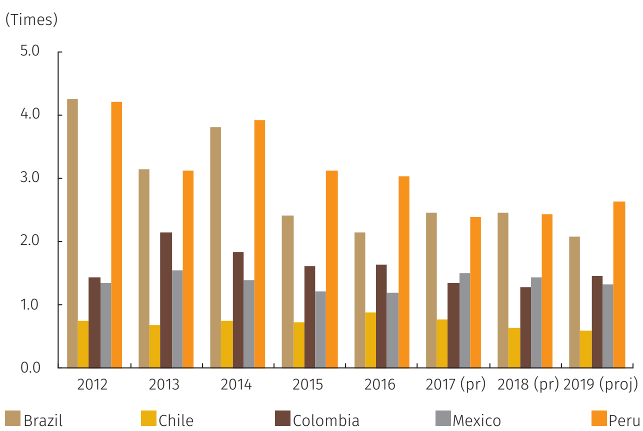
To determine whether or not there are enough international reserves to prevent and deal with external shocks, various indicators, some of which are described below, are used (Table 2.9). In general, the international markets think low values for these could be warning signs of the external vulnerability of an economy. To establish the economy's ability to respond to capital outflows triggered by a speculative attack, the level of the reserves is compared to different economic variables including monetary aggregates such as M2 or M3. When the various indicators of Colombia's international liquidity are compared to those of countries in the region, the

Graph 2.28
Appropriate Foreign Liquidity Position Indicators[a/]

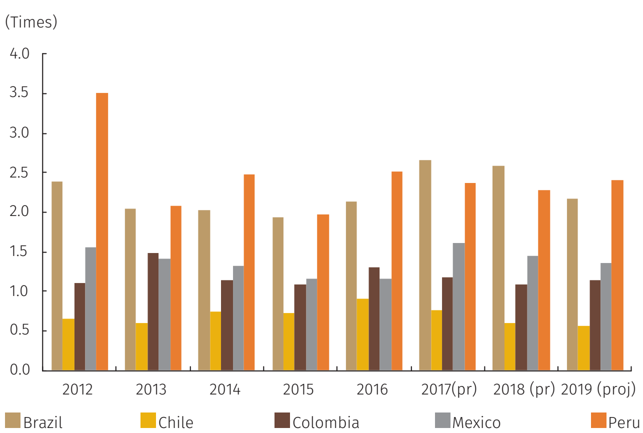
A. Net International Reserves/current year repayment



B. Net International Reserves/current year debt service



C. Net International Reserves/current year (current account deficit + debt repayments)



(pr): preliminary
(proj): projected.
a/ The balance of short-term debt from the previous year is included in the calculation of debt repayment and debt service.
Sources: central banks, The Economist Intelligence Unit (updated as of February 2019), and *Banco de la República*.

ratio of reserves to M3 for 2018 is seen to register levels that are higher than those of Brazil, and Chile, similar to Mexico's, and slightly lower compared to Peru's (Graph 2.27).[59]

The ratios of net reserves to repayment of the total foreign debt and to the current account deficit show the country's ability to meet its credit obligations with the rest of the world in an extreme scenario where access to international financing is completely closed off. In the ratio of international reserves to debt repayment, debt servicing, and current account deficit plus debt repayment, Colombia historically registers levels that are above those of Chile and below Brazil's and Peru's (Graph 2.28). For Colombia these indicators have registered values that, on average, have been above 1[60] during the latest decade.

In 2018, the indicator of reserves to GDP (GDP adjusted by the purchasing power parity rates: PPP), in turn, stood at levels below those of the rest of the countries in the region.[61] However, for 2019, an improvement is anticipated placing it at levels above those for the past three years. Regarding the reserves measured in months of product imports, these show that, in 2018 and 2019, Colombia's relative position was low with respect to Brazil and higher than or equal to the rest of the economies analyzed (Graph 2.29).

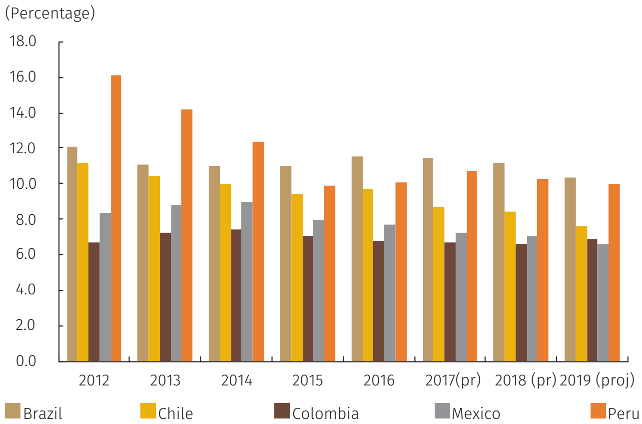
59 In the case of Peru, the banking reserve requirements are excluded from the balance of the international reserves. Note that the calculation of the dollar-denominated M3 is affected by the behavior of the exchange rate.

60 According to the IMF, "Debt and Reserve Related Indicators of External Vulnerability" (2000), there is empirical evidence for a sample of emerging economies, which makes it possible to establish the value of 1 for these types of reserve indicators as a benchmark. Specifically, the Guidotti–Greenspan rule states that a country's reserves should be equal to the balance of the short-term external debt, which implies a ratio of 1 for this indicator. The explanation is that countries should have enough reserves to be able to withstand a massive withdrawal of short-term foreign capital.

61 In order to make this accounting period comparable, the GDP of the countries under analysis, including Colombia, corresponds to the GDP converted into dollars using the World Bank PPP rates.

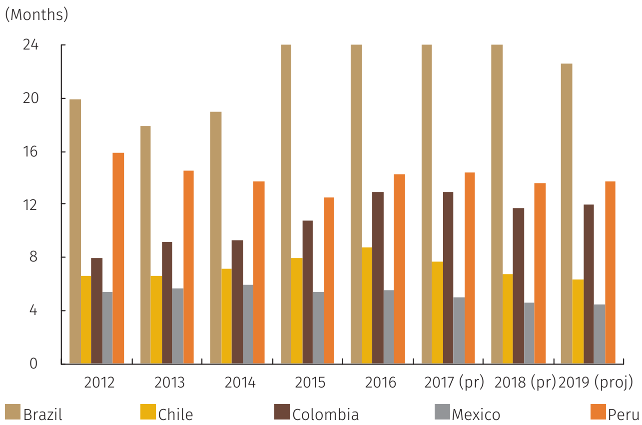
Graph 2.29
Other International Reserve Indicators

A. Net International Reserves/GDP



Note: for the purposes of comparison, the GDP of the countries analyzed corresponds to the GDP converted to dollars based on the World Bank's rates of purchasing power parity (PPP), and the projections of the International Monetary Fund are used.

B. Net International Reserves as Months of Product Imports



(pr): preliminary
(proj): projected.
Sources: central banks, The Economist Intelligence Unit (updated as of February 2019), and *Banco de la República*.

The results of various indicators for Colombia between 2012 and 2019 are shown in Table 2.9. In the case of the ratio of net reserves to M3, an improvement in the indicator was evident up until 2015 along with a slight decline during the two years following that. This 2015 result was associated with the purchase of reserves on the part of the Bank up until December 2014, with the slowdown in the growth rate of the monetary aggregate since mid-2013, and with the effect of depreciation on the M3 valuation in dollars. During 2016 and 2017, a growth rate that is higher than that of the reserves was seen for the dollar-denominated M3, which is why the value of the indicator has declined. For 2018 and 2019, the indicator rose slightly and reached 31.4% due, in large part, to the higher balance of the international reserves. As for the rest of the indicators of debt repayment and external liquidity, an improvement is anticipated in 2019 compared to the levels seen in 2018 and 2017 due largely to the increase in the balance of the international reserves.

The ratio of net reserves to total imports of goods and services shows the number of months of purchases abroad that an economy is able to cover using its international reserves in the event of an abrupt change in the trade balance. This indicator estimates 9.6 months for 2019 which is higher than the average of 7.8 months since the year 2000. When this indicator is calculated for imports of goods, it rises to 12 months.

Recently, *Banco de la República* implemented a new methodology for determining the appropriate level of international reserves plus FCL (for more information, see Box 3: New methodology for determining the appropriate level of international reserves in the March 2019 *Board of Directors' Report to the Congress of the Republic)*. The methodology follows the same line as the ratio of liquidity coverage (LCR) that was proposed in the Basel III supervisory framework for banks which stipulates that the liquid assets should be enough to cover the liquidity needs within a predetermined period and bearing in mind a stress test.

This new approach for determining the appropriate level of reserves assumes that the international reserves should cover at least the forecast of the deficit in the current account plus repayments on the foreign debt over the next 12 months and that the international reserves plus the FCL of the IMF should cover the expected needs of foreign financing and a feasible amount of capital outflows from residents and non-residents. For the latter, outflows from the public debt, stocks, and demand deposit market held by non-residents in local credit establishments as well as resident outflows are considered based on some assumptions. For example, the estimate considers the possibility that, in the event of an adverse shock, the Colombian peso is likely to depreciate and the prices of Colombian assets to lose value. Using data as of May 2019, the reserves plus FCL exceeded the appropriate level of reserves under the new methodology by approximately USD 3,500 million.

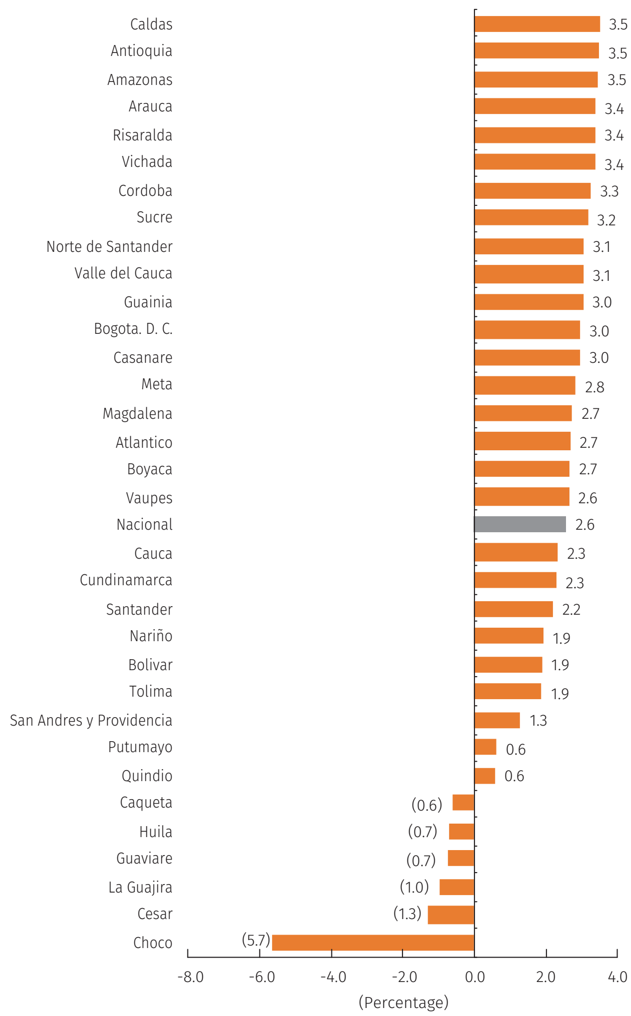
2.6 Performance of Colombia's Regional Economy In 2018

2.6.1 The Economies of the Departments in 2018

In 2018, consistent with the recovery of the whole economy the majority of the country's territories showed better results based on the most recent GDP figures for departments[62] (Graph 2.30). More than half of the economies registered an increase above the national total (2.6%) and fifteen were below, from which, six presented falls in their output (Map 2.1).

Bogota, Antioquia, and Valle del Cauca were among the most dynamic economies that continued to account for almost 50% of the national GDP (Graph 2.31) and contributed 1.6 pp to the total increase. A similar upward trend was observed in some departments in the *Eje Cafetero* (coffee region) as well as in the Amazon-Orinoco area,[63] the Caribbean Coast, and the northeastern part of the country (Northern Santander and Boyacá). The development of the departmental economies unfolded in a context of excess productive capacity, a still recovering domestic demand, and of rising international crude oil prices.

Graph 2.30
Annual Growth of Departmental GDP, 2018

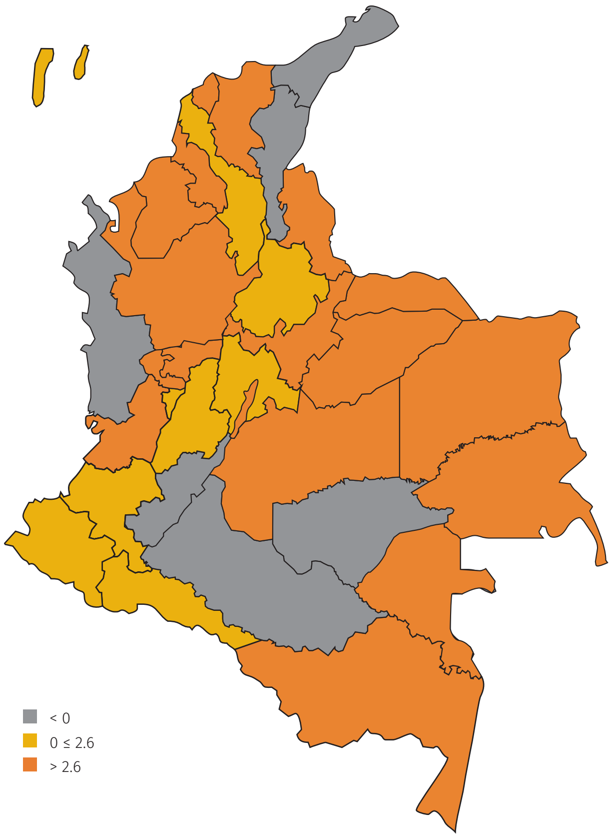


Source: DANE, calculations by *Banco de la República.*

62 DANE published the departmental GDP, base 2015, for thirty-three territories in the country under 12 clusters. The latest information available has 2018 as a cut-off date and a publication date of June 25, 2019.

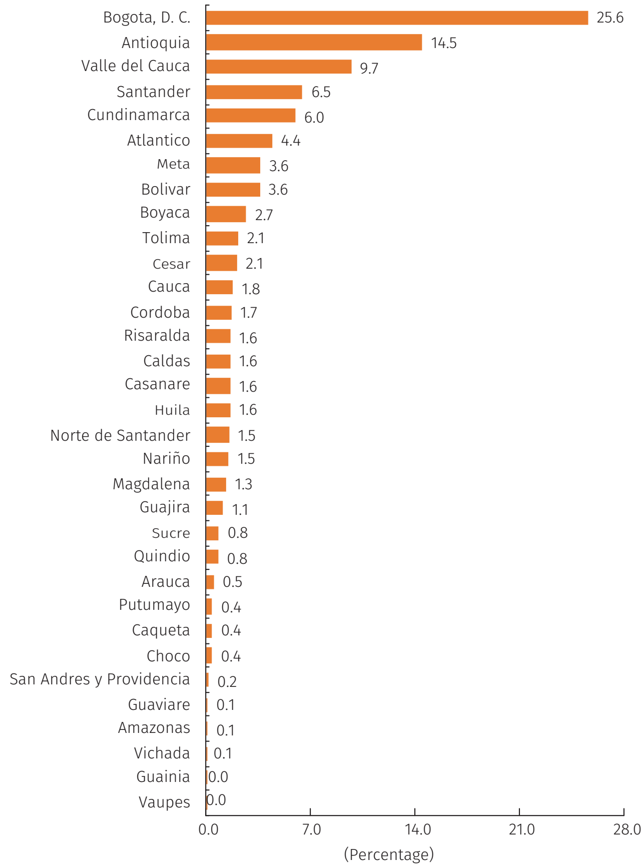
63 Amazonas, Arauca, Casanare, Meta, Vichada, Guainía, Vaupés, Putumayo, and Guaviare.

Map 2.1
Annual Growth of the Real Departmental GDP, 2018



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

Graph 2.31
Departmental Share of the National GDP, 2018



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

In the group of economies that saw a deterioration, La Guajira and Cesar with 43% of its production was concentrated in mining and quarrying, registered a substantial decline in coal mining. In the case of Huila, Caquetá, and Guaviare, the evolution in their economies was explained by the strong contraction of construction. Chocó, in turn, continued to be the department with the poorest performance although its drop was smaller than it was in the previous year partly as a result of the higher growth rate of public administration[64] during 2018.

Among the crucial economic activities for the recovery of the territorial economies, there were the groups of commerce[65] and public administration followed by professional work,[66] industry, and real estate. Trade rebounded compared to the moderate increase of a year

64 Public administration and defense; compulsory affiliation to social security plans; education; provision for human health care, and social services.

65 Wholesale and retail trade; automobile and motorcycle repair; transportation and warehousing; lodging and food services.

66 Professional, scientific and technical work; administrative and support services.

ago driven mainly by Bogota and Antioquia. In 2018, specific events such as the Soccer World Cup in Russia and the international automobile fair which, in some regions, boosted the production and marketing of vehicles, paper, beverages, food, clothing, and household appliances. The growth of public administration seen in all of the departments was notable during a year of presidential and legislative elections and a population census taking. Regarding industrial performance, this was spurred by a manufacturing production of which 80% is concentrated in seven of the country's territories. Within these, Bolivar and Santander registered more dynamism in manufacturing and the remainder achieved positive growth rates compared to the contractions reported in 2017. In line with the above, a larger increase in professional activities was seen, especially in the territories with the most industry: Antioquia, Bogota, Valle del Cauca, Cundinamarca, Santander, and Atlántico.

The group of trade and public administration stood among the economic activities that were crucial for the recovery of territorial economies.

Real estate contributed significantly to the annual growth of the departmental GDP, even though it showed a downward trend compared to previous periods in all of the country regions with the exception of Atlántico and Magdalena. In the other hand, the slight annual rise in construction after the widespread contraction of the previous year, was driven by the dynamism in Valle del Cauca and Boyacá and by the recovery of the activity in 12 territories, notably some on the Caribbean Coast (Sucre, Cordoba, and Magdalena), in the *Eje Cafetero* (Risaralda and Caldas), and in the southwestern part of the country (Cauca and Nariño), in addition to Meta and Northern Santander. Among the most representative territories, in Bogota and Antioquia the activity slowed down, and in Santander and Cundinamarca it continued declining. This, in the aggregate, did not allowed for a greater recovery.

In the sector of mining and quarrying was seen a break in the trend towards a number close to zero, after the falls observed since 2014 and the deep deterioration in 2017. In the period under analysis, the production accelerated in Santander and in Casanare, Arauca, and Antioquia registered an annual recovery. This partially offset the slight decrease in Meta, the department with the highest share (31.7%), and the decline in Cesar, La Guajira, Boyacá, Putumayo, and Choco. Finally, agriculture, livestock and poultry showed a lower growth rate compared to its more dynamic showing in 2017 as it overcame the effects of 2016 caused by the intensity of *El Niño* and the agricultural and truckers' strikes. In 2018, the departments of the *Eje Cafetero* registered an annual downturn, affected mainly by the results of heavy rain on the coffee crops.[67] Among the departments with the highest participation in agriculture, livestock and poultry, production remained stable in Antioquia and Tolima, slowed down in Cundinamarca, Santander, Meta, and Boyacá, and recovered in Valle del Cauca.

Mining and quarrying accelerated in Santander and recovered in Casanare, Arauca, and Antioquia.

67 See the *Inflation Report* prepared by *Banco de la República*, March 2019, pp. 33-37.

2.6.2. Departmental Labor Market

In 2018, based on the data from the DANE *General Integrated Household Survey* (GEIH in Spanish), which is available for twenty-three departments and Bogota, half of the territories presented a rise in the unemployment rate (UR) while two rates remained at a relatively constant level (Bogota and Sucre) and the remaining ten registered a decline (Table 2.10). In the first group, the upward trend in the UR for Tolima, Northern Santander, Antioquia, and Huila was explained by the fall in the labor demand represented by the employment rate (ER) which exceeded the decline in labor supply measured by the overall participation rate (OPR).

Table 2.10
Labor Market Indicators by Department
(percentage)

Dapartments	Overall Participation Rate (OPR)			Employment Rate (ER)			Unemployment Rate (UR)		
	2017	2018	pp[a/]	2017	2018	pp[a/]	2017	2018	pp[a/]
Total for 23 departments and Bogotá	64.6	64.2	-0.4	58.5	58.0	-0.6	9.4	9.6	0.3
Antioquia	63.2	62.3	-0.9	56.8	55.6	-1.1	10.2	10.7	0.5
Atlantico	62.8	63.3	0.4	58.2	58.4	0.2	7.4	7.7	0.3
Bogota D. C.	69.6	69.1	-0.5	62.3	61.9	-0.5	10.5	10.5	-0.0
Bolivar	58.7	59.3	0.6	54.9	55.9	0.9	6.4	5.8	-0.5
Boyaca	59.0	59.8	0.8	54.6	55.4	0.8	7.5	7.4	-0.1
Caldas	56.0	57.3	1.3	50.9	51.5	0.6	9.2	10.1	0.9
Caquetá	57.8	57.9	0.1	53.0	52.6	-0.4	8.2	9.1	0.9
Cauca	60.5	61.4	1.0	55.4	56.0	0.5	8.3	8.9	0.5
Cesar	59.5	56.1	-3.4	53.0	49.8	-3.1	10.9	11.2	0.2
Chocó	50.7	49.8	-0.9	45.7	45.0	-0.7	9.8	9.6	-0.2
Cordoba	62.2	62.0	-0.2	56.6	56.9	0.3	9.1	8.3	-0.8
Cundinamarca	70.5	71.0	0.5	64.9	63.9	-1.0	8.0	10.1	2.1
Huila	62.5	60.8	-1.6	57.0	55.2	-1.8	8.7	9.2	0.5
La Guajira	69.1	68.6	-0.5	64.5	65.5	0.9	6.5	4.6	-2.0
Magdalena	57.1	55.8	-1.3	52.9	51.9	-1.0	7.4	7.0	-0.4
Meta	64.5	62.6	-1.9	56.7	55.2	-1.5	12.2	11.9	-0.3
Nariño	70.0	65.7	-4.3	65.2	61.7	-3.5	6.8	6.1	-0.7
Norte de Santander	59.3	57.3	-2.0	52.0	49.6	-2.3	12.4	13.4	1.0
Quindio	64.6	64.8	0.2	55.9	55.7	-0.2	13.5	14.1	0.6
Risaralda	63.4	63.5	0.1	58.5	58.7	0.2	7.8	7.6	-0.2
Santander	67.9	68.9	1.0	63.2	63.6	0.4	6.8	7.7	0.9
Sucre	59.8	62.3	2.5	54.3	56.6	2.3	9.1	9.1	0.0
Tolima	66.7	66.5	-0.2	59.9	58.0	-2.0	10.1	12.8	2.7
Valle del Cauca	66.5	66.0	-0.5	58.9	58.6	-0.3	11.5	11.3	-0.2

a/ The change in percentage points was calculated while including all decimals.
OPR = (economically active population / working-age population) x 100.
ER = (employed / working-age population) x 100.
UR = (unemployed / economically active population) x 100.
Source: DANE (GELH) and calculations by *Banco de la República*.

The decrease in the labor demand was also observed in Cundinamarca, Caquetá, and Quindío where the deterioration in the UR was accentuated by the increase in the work force. This last department registered the highest unemployment rate (14.1%), followed by Northern Santander (13.4%), and Tolima (12.8%). In the other territories of the group under analysis, the OPR grew far more than the increase in the ER.

On the other side, among the ten departments with a falling UR, the behavior in Valle del Cauca, Meta, Choco, Magdalena, and Nariño was due to the sharp drop in the work force compared to the decline in the labor demand. In the first two, the UR remained at double-digit levels, while in the others, it remained at one-digit levels. In the remainder of the territories, the labor demand showed more favorable results with respect to the increase or decrease in the labor force. Boyacá, Risaralda, and Bolivar represented the first case while Cordoba and La Guajira represented the second.

When the performance of the labor market indicators in the departments (Graph 2.32, panel A) is compared to their capital cities and

Graph 2.32

A. Change in the Unemployment Rate by Department, 2017-2018

B. Change in the Unemployment Rate by City and Metropolitan Area, 2017-2018

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

metropolitan areas (Graph 2.32, panel B), it is clear that in the majority of those in the first group where the UR rose, it also did so in the second group except in the case of Popayan. As for the departments that registered declines in the UR, some of their capital cities such as Tunja, Quibdó, Santa Marta, and Riohacha showed the opposite effect. This last capital city had the sixth highest UR (14.1%) (Table 2.11) while its corresponding department, La Guajira registered the lowest UR (4.6%).

In relation to the number of people employed, of the 23 capital cities and metropolitan areas with an annual increase of 0.3% in 2018,

Table 2.11
Labor Market Indicators by City
(percentage)

Departments	Overall Participation Rate (OPR)			Employment Rate (ER)			Unemployment Rate (UR)		
	2017	2018	pp	2017	2018	pp	2017	2018	pp
Total 23 cities and metropolitan areas	66.5	65.9	-0.6	59.4	58.7	-0.7	10.7	10.9	0.2
Armenia	64.5	64.9	0.4	55.3	54.8	-0.5	14.3	15.6	1.3
Barranquilla, Soledad	64.9	65.1	0.2	59.6	59.6	-0.0	8.2	8.5	0.3
Bogota	69.6	69.1	-0.5	62.3	61.9	-0.5	10.5	10.5	-0.0
Bucaramanga, Giron, Piedecuesta y Floridablanca	69.3	67.1	-2.2	63.4	61.2	-2.2	8.5	8.8	0.3
Cali, Yumbo	68.1	67.4	-0.7	60.1	59.7	-0.4	11.9	11.5	-0.3
Cartagena	57.2	56.7	-0.5	52.0	51.7	-0.3	9.0	8.7	-0.3
Cucuta, Villa del Rosario, Los Patios y El Zulia	62.7	60.9	-1.8	52.8	51.0	-1.8	15.9	16.3	0.4
Florencia	59.8	59.5	-0.3	52.6	51.8	-0.8	12.0	13.0	1.0
Ibague	65.4	65.2	-0.1	56.9	56.0	-1.0	12.9	14.2	1.3
Manizales y Villa Maria	60.7	59.5	-1.1	53.9	52.8	-1.0	11.2	11.2	0.0
Medellin, Valle de Aburra	65.6	65.4	-0.2	58.5	57.7	-0.7	10.8	11.7	0.9
Monteria	64.2	63.8	-0.4	57.1	57.4	0.4	11.1	10.0	-1.1
Neiva	66.6	63.1	-3.5	58.9	55.7	-3.1	11.5	11.6	0.1
Pasto	68.6	64.7	-3.9	62.0	58.9	-3.1	9.6	9.0	-0.6
Pereira, Dos Quebradas y La Virginia	65.6	65.2	-0.5	59.6	59.3	-0.4	9.1	9.1	-0.1
Popayan	58.7	59.1	0.4	51.7	52.7	0.9	11.9	10.9	-1.0
Quibdo	57.1	58.5	1.4	47.9	48.1	0.2	16.1	17.8	1.8
Riohacha	63.8	62.3	-1.5	54.8	53.5	-1.3	14.0	14.1	0.1
Santa Marta	59.7	59.5	-0.2	54.9	54.5	-0.4	8.0	8.4	0.4
Sincelejo	66.2	68.2	2.0	59.9	61.7	1.7	9.5	9.6	0.2
Tunja	61.9	61.4	-0.5	55.5	54.5	-1.0	10.3	11.3	1.0
Valledupar	61.8	61.1	-0.7	53.8	52.1	-1.7	13.0	14.8	1.8
Villavicencio	66.8	66.0	-0.8	58.6	58.1	-0.5	12.3	11.9	-0.4

OPR = (economically active population / working-age population) x 100.
ER = (employed / working-age population) x 100.
UR = (unemployed / economically active population) x 100.
Source: DANE (GELH) and calculations by *Banco de la República*.
Source: DANE (GELH) and calculations by *Banco de la República*.

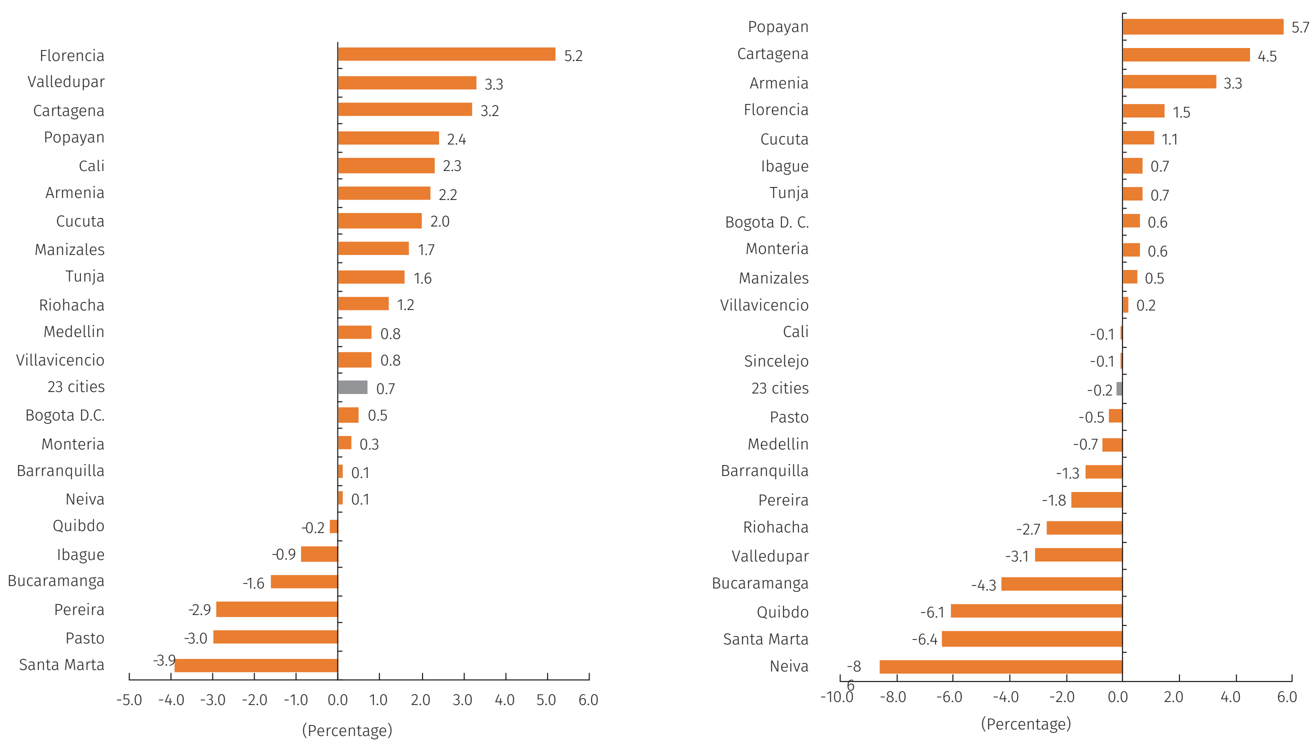
the cities of Sincelejo, Popayan, and Monteria had the highest growth rates in the number of workers. In these cities respectively the industry, commerce, and services generated the largest contribution to the employment growth. In contrast, the number of employees in Neiva, Pasto, and Bucaramanga decreased dramatically. In the first two cities, this was due to limited hiring in the area of retail trade, and in the third city, it was explained by the decrease in employment in real estate, industry, and construction. On the other side, Bogota, Cali, and Medellin concentrated 60.4% of the total number of people employed, with the first two cities registering an annual recovery spurred by commerce in the wake of the sharp decline registered in 2017. In the case of Medellín, the number of employees remained relatively stable.

Regarding the employment quality indicators, salaried employment registered a slight 0.2 pp annual decline while formal employment grew 0.7 pp. The cities with the best performance (a rise in both indicators) (Graph 2.33, panels A and B) were Popayan, Cartagena, Florence, and Armenia. At the opposite end were Santa Marta, Quibdó, Bucaramanga, and Pereira. Regarding formal employment (51.8% of people employed), 13 cities gained a higher share, and the indicator was above 50% in four of them. With respect to salaried employment (53.2% of the total number of people employed), the indicator rose in nine cities, and it exceeded 50% in six with Manizales, Medellin, and Bogotá being the most notable.

Graph 2.33

A. Annual Growth of Formal Labor by City, 2018

B. Annual growth of salaried Employment by City, 2018



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

2.6.3 Consumer Inflation by City in 2018

In 2018, in the 24 cities that DANE monitors, the annual variation of the CPI continued to converge towards the inflation target (3.0%). The cities that had a downward correction were the ones that in the previous year had reached levels close to 4.0%. Moreover, at the end of 2018 the higher upward pressures on inflation occurred in the cities that, a year ago, had registered levels below 2.0%. Altogether, eight of the 24 cities obtained levels of inflation above than national inflation (3.18%), where Barranquilla and Medellin registered the highest annual growth rate (3.69%). The 16 remaining cities were below that rate with Valledupar showing the lowest inflation (2.37%) (Table 2.12).

Table 2.12
Inflation Indicators by City
percentage and change in basis points (bp)

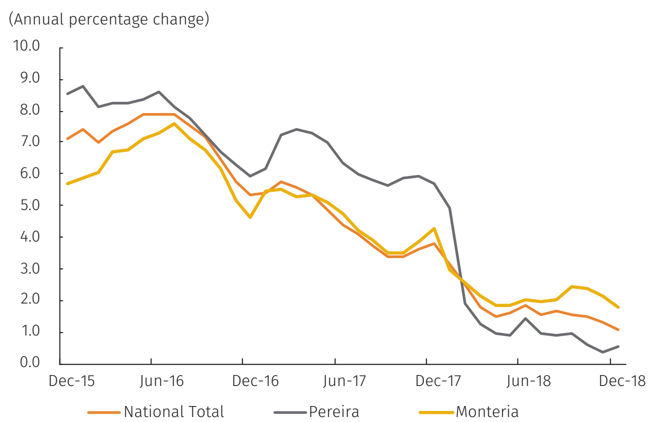
City	Total Inflation			Excluding food			Food		
	2017	2018	Change (bp)	2017	2018	Change (bp)	2017	2018	Change (bp)
Armenia	3.78	2.81	-96	4.17	3.00	-117	2.76	2.32	-44
Barranquilla	3.24	3.69	45	4.36	4.31	-5	0.71	2.26	155
Bogota	4.63	3.06	-157	5.53	3.37	-215	2.45	2.27	-18
Bucaramanga	3.76	2.79	-98	4.96	3.23	-173	1.59	1.96	37
Cali	4.28	3.08	-120	4.59	3.17	-142	3.55	2.88	-67
Cartagena	3.17	3.45	29	4.76	3.44	-132	-0.32	3.49	381
Cucuta	2.87	2.89	2	4.05	2.93	-113	0.74	2.81	207
Florencia	2.98	2.65	-33	3.48	2.65	-83	2.02	2.64	63
Ibague	2.91	3.02	11	4.28	3.47	-80	0.05	2.04	198
Manizales	4.29	3.31	-98	5.35	3.77	-159	1.85	2.23	38
Medellin	4.16	3.69	-47	5.00	4.01	-99	1.76	2.73	97
Monteria	2.79	3.37	58	4.96	3.48	-148	-2.21	3.12	533
Neiva	2.61	2.84	23	3.61	2.48	-113	0.83	3.51	268
Pasto	4.00	3.36	-64	4.63	3.91	-72	2.73	2.22	-51
Pereira	4.11	3.17	-95	4.85	3.73	-112	2.32	1.76	-56
Popayan	4.00	2.76	-124	4.68	3.33	-135	2.63	1.60	-102
Quibdo	2.73	2.71	-2	4.45	3.78	-66	-0.04	0.90	94
Riohacha	1.28	2.84	156	3.77	3.51	-26	-2.76	1.68	444
San Andres	4.19	2.81	-138	4.70	3.53	-117	3.43	1.74	-170
Santa Marta	2.84	2.73	-11	4.19	3.15	-104	0.30	1.91	160
Sincelejo	1.67	3.47	180	3.71	3.47	-23	-2.11	3.46	557
Tunja	3.35	3.37	2	4.20	4.17	-3	1.55	1.64	9
Valledupar	3.41	2.37	-104	5.16	2.65	-251	-0.58	1.71	229
Villavicencio	1.78	2.43	65	2.55	2.30	-25	0.30	2.69	239
Total nacional	4.09	3.18	-91	5.01	3.48	-152	1.92	2.43	52

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

By baskets, the performance of inflation was explained by the correction of the CPI for goods and services (excluding food) which offset the overall upswing of the CPI for food. Based on the information available on 13 cities, the adjustment in the first basket was due to a sharp slowdown of inflation in the subgroup of tradables that was more intense compared to the subgroup of non-tradables. This trend was offset by the sub-basket of regulated items due to the persistence of inflationary pressures where the lowest was in Bucaramanga (5.01%) and the highest in Pasto (8.84%).

Regarding tradable inflation, growth rates of less than 2.0% per annum were registered. These levels from 2018 were close to those seen in 2014, before the effects of the pass-through from the sharp nominal depreciation of the peso caused by the shock to the terms of trade. In 2018, the main upward pressures on the sub-basket occurred in the cities on the Caribbean coast and the border (Cucuta and Pasto), while in the cities of the middle of the country registered lower pressures. Montería reached the most (1.76%) while Pereira obtained the least (0.52%) with the highest annual adjustment (519 bp) (Graph 2.34).

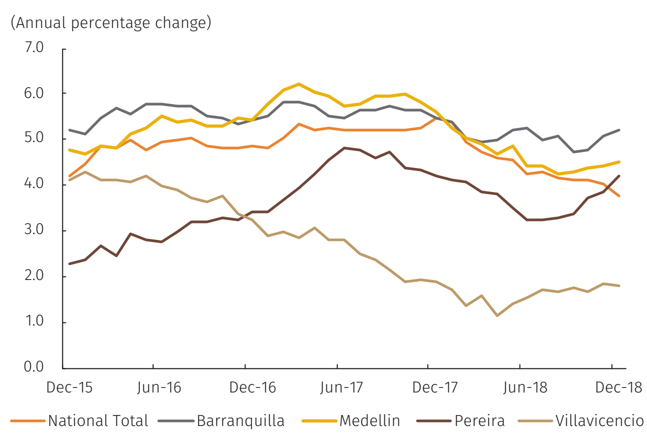
Graph 2.34
CPI for Tradable Goods (excluding food and regulated items)
National Total, Pereira, and Monteria



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

Regarding inflation for the sub-basket of non-tradables which showed a downturn in the majority of the monitored cities, Villavicencio obtained the lowest rate of growth below 2.0% and slightly under the previous year. Bogota, in turn, had the largest adjustment (260 bp) considering the fact that a year ago the specific event of the soccer finals in the capital had had a significant impact over the item related to entertainment services. In contrast, Barranquilla, Medellin, and Pereira, in that order, surpassed the rest of the territories with levels above 4.0% (Graph 2.35). The items that contributed the most to the higher non-tradable inflation in these three cities were rentals, pensions, and tuition fees.[68]

Graph 2.35
CPI for Non-tradable Goods (excluding food and regulated items)
National Total, Barranquilla, Medellin, Pereira, and Villavicencio



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

Furthermore, in the food CPI, annual changes for the 24 cities in 2018 were registered between 0.90% (minimum) and 3.51% (maximum). These numbers correspond to Quibdó and Neiva respectively. Specifically, seventeen cities showed a rising trend in food inflation, mainly on the Caribbean coast (Sincelejo, Monteria, Riohacha

68 Enrollment in secondary and higher education.

and Cartagena) that a year ago had registered a decline. The seven remaining cities that the previous year presented the highest growth rates, in turn, showed declines at the close of 2018. Of these, the corrections for San Andres and Popayan are the most notable.

The upward trend in food inflation in 2018, in large part, was due to the rise in prices in the subgroup of perishables in eleven out of thirteen cities for which the information is available. This was partially offset by the better performance of the prices for processed foods and for meals outside of home (Table 2.13). With regards to the first subgroup, the increase in inflation occurred in a context of a low basis of comparison from the previous year, with minimal levels of inflation for all the cities, most of which lasted until July. Starting at that time, the rising trajectory was due to the normalizing of prices given the better weather conditions following *El Niño*. In this context, Cartagena, Villavicencio, Medellin, and Neiva showed the highest inflation levels at the end of 2018, and the first city in particular showed the largest surge of all.

In the processed food sub-basket, the majority of the cities maintained very low levels of inflation within a range between -0.44% for Bogotá and 1.58% in Monteria. Once the intense drought of 2016 was surpassed, and due to the gradual recovery of the permanent crops and quality pastures, in December 2017 were reached minimum levels of inflation for processed food in Monteria, within the first three

Table 2.13
Food Price Inflation by Subgroups for 13 Cities
percentage and change in basis points (bp)

City	Perishables			Processed food			Eating out		
	2017	2018	Change (bp)	2017	2018	Change (bp)	2017	2018	Change (bp)
Barranquilla	3.02	7.86	485	-1.05	0.23	128	4.03	4.29	26
Bogota	5.47	8.13	267	-0.76	-0.44	32	5.98	3.75	-222
Bucaramanga	2.41	6.55	414	-1.11	0.31	142	4.54	2.41	-213
Cali	14.46	9.22	-524	-0.81	-0.19	61	5.09	4.09	-100
Cartagena	-1.77	12.91	1.468	-1.10	1.36	246	3.10	3.82	72
Cucuta	7.13	9.08	195	-1.98	1.57	355	2.81	1.58	-123
Manizales	7.72	8.13	41	-1.03	-0.29	74	6.62	5.03	-159
Medellin	6.33	12.18	585	-0.25	-0.15	10	4.13	3.91	-22
Monteria	-0.68	8.70	938	-4.51	1.58	609	4.47	4.07	-39
Neiva	9.88	11.93	205	-2.45	0.45	291	1.71	3.83	212
Pasto	7.23	4.31	-292	-0.23	-0.43	-20	6.26	6.85	59
Pereira	6.48	6.90	42	-0.34	-0.39	-5	7.12	4.06	-306
Villavicencio	2.73	12.31	958	-1.94	-0.23	171	2.52	2.62	10
National Total	5.84	8.88	304	-0.91	-0.08	83	5.21	3.68	-153

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

months of 2018 in twelve cities, and for Pasto in June. The weak demand in recovery and the relative stability of the peso from the beginning of 2016 until the middle of 2018 would have also exercised lower inflationary pressures on the sub-basket.

Finally, the downward adjustments of the inflation of meals outside of home were associated with the provision of food on a regular basis at the central collection points and lower levels of annual indexing. Cucuta was the city with the lowest inflation in this sub-basket (1.58%) while Pasto, which had the highest annual increase (6.85%), stood at the other extreme.

Box 1
Banco de la República's Liquidity Supply, 2018-2019

In recent months, the monetary market in Colombia has suffered some significant shocks. On the supply side of the monetary base, there has been a significant contraction due to the substantial increase in government deposits at the central bank. On the demand side, a significant rebound has been registered, particularly due to the growth of currency in circulation outside depositary corporations. This scenario of unusual increase in the need for liquidity coincided with the accumulation of international reserves that started in 2018, so the purchases of foreign currency by the Bank partially eased the situation and contributed to keep money market rates close to policy rate.

The current situation is described in this box, as well as the tools that the central bank has used to provide the liquidity the economy needs. To facilitate understanding of this situation, the Bank's main considerations to define the monetary strategy are presented in the first section, and the recent situation is described in the second.

1. General Considerations about the Liquidity Supply

In Colombia, the monetary policy is governed by an inflation targeting scheme that seeks to keep the inflation rate low and stable and to reach an output growth in line with the potential capacity of the economy. Within this framework, the Board of Directors of *Banco de la República* (JDBR) sends their signals on policy through the benchmark interest rate, also known as the intervention rate or the monetary policy rate. When the Bank sets this rate, it seeks to affect the short term cost of money in the economy. This is the first link in the transmission of monetary policy, which ultimately seeks to influence economic activity and inflation.

Consistent with that, in the inflation targeting scheme the provision of liquidity on the part of the monetary authority seeks to keep the short-term cost of money in the economy close to the policy rate. This means that the Bank will supply all of the primary liquidity that the economy demands at the intervention rate deemed compatible with the inflation target and, therefore, with the longer-term goal of maintaining low and stable inflation.

The money that the central bank provides for the economy is called the monetary base: it is composed of cash and bank reserves. Cash corresponds to banknotes and coins held by the public and the bank reserves to the funds held by the credit establishments (depository corporations) in their vaults or deposit accounts at *Banco de la República* in order to comply with their reserve requirements.

Table B1.1 shows a diagram of the Bank's balance sheet. The monetary base constitutes the main liability of the monetary authority and is the counterpart of other accounts. For example, when the Central Bank acquires foreign currency from financial intermediaries, it credits their accounts at *Banco de la República* hence increasing the bank reserves and monetary base. In contrast, when the government deposits the proceeds from tax collection or debt issuance, the monetary base shrinks.

Table B1.1
Outline of *Banco de la República's* balance sheet

Assets	Liabilities
International Reserves	Monetary Base
Investment in public debt securities (TES)	Cash
Asset operations with the financial system (asset repos)	Reserve
Other net assets	Government deposits in pesos
	DRNCE in effect[a/]
	Equity
	Capital and profits

a/ Interest-bearing deposits not constituting reserve requirements
Source: *Banco de la República.*

It must be taken into account that under the inflation targeting frameworks, a large part of the movements on the Bank's balance sheet are not due to liquidity supply decisions. For instance, when the Bank decides to start an international reserves accumulation program like the one announced after the meeting of the JDBR in September 2018, it is pursuing other policy goals.[1] In the case of the deposits belonging to the General Office of Public Credit and the National Treasury (DGCPTN in Spanish), the movements depend on the central government's flows of revenue and payments, decisions that are external to the Bank.

1 http://www.banrep.gov.co/es/comunicado-28-septiembre-2018-2

Thus, the amount of liquidity provided seeks to offset those changes in the supply of the monetary base that differ from the changes in demand, so that the short-term market rates, particularly the *overnight* Reference banking indicator, (IBR in Spanish) remains close to the policy rate.

If it is necessary an increase of the monetary base supply, the Bank can conduct either repo operations with financial intermediaries or definitive purchases of securities (i.e TES). The first instrument makes it possible to temporarily expand the money supply while the second one generates an expansion for the time to maturity of the bonds.[2] In the opposite situation, i.e., when there is excess of liquidity, the Bank removes it through the use of instruments such as non-reserve interest-bearing deposits (DRNCE in Spanish) or the definitive sales of securities from its own portfolio.[3]

To determine which operations it must be implemented, the Bank makes projections of the supply and demand of the monetary base. For the demand, estimates are done based on econometric techniques. For the supply, various items on the Bank's balance sheet, including the government deposits, are projected. For this particular item there are coordination mechanisms with the Ministry of the Treasury and Public Credit that make it possible to do detailed tracking.

Based on these projections, the Bank selects the instrument, amount, and term for the transactions that are considered appropriate so market clearing occurs at the policy rate. When a need for (or an excess of) long-term liquidity is detected, the Bank chooses to make purchases (sales) of debt securities (TES). In this case, the transactions are carried out in such a way that the Bank acts as a price taker in order not to affect the yield curve. In contrast, when liquidity needs that are not perceived as structural, temporary operations are opted for. In this case, the Bank seeks to avoid a net debtor position with the financial system in the months afterwards, i.e., a situation in which there are excesses of liquidity in the economy which must be removed through reverse repo operations.[4] A situation in which the financial institutions would have a high degree of leverage with *Banco de la República* in overnight transactions is also avoided, preventing any effect on the money market that could put upward pressure on interest rates.

Like all estimates, projections of the supply and the demand for the monetary base are subject to uncertainty and, in some circumstances, it may be difficult to predict the trajectory of certain variables. For that reason, the Bank permanently monitors several variables that allow them to make day-to-day adjustments to the liquidity provision strategy.

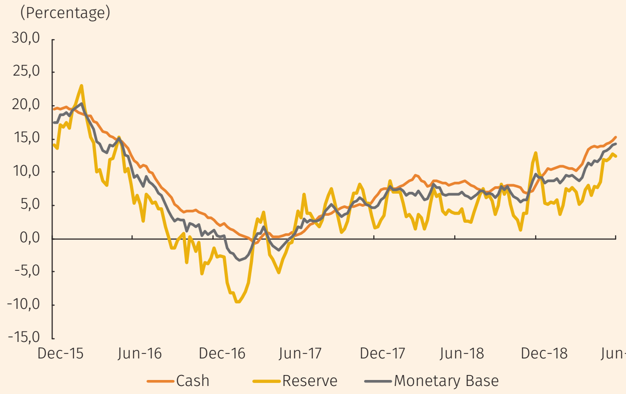
2. Liquidity Supply: 2018 to June 2019

2.1 Monetary base demand

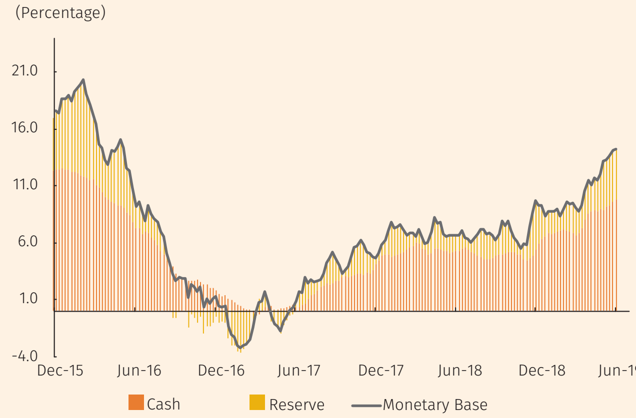
At the end of June 2019, the monetary base stood at COP 95,499 b with an annual growth of 15% (11.5% in real terms) that is equivalent to COP 12,423 b. As can be seen in Graph B1.1, panel A, this aggregate has shown a significant upswing over the course of 2019 with annual variations (both nominal and real) that are higher than those registered in 2018.

Graph B1.1
Change in the Monetary Base and its Components[a/]

A. Annual Nominal Growth, 4-week moving average



B. Contribution of Cash and the Bank Reserves to the Growth of the Monetary Base



Source: *Banco de la República*.

2 On the maturity date, the issuer of the security will pay the bondholders the nominal value of the security and this will generate a contraction in the monetary base.

3 Reverse repos are also authorized in the regulations, but they have not been implemented since 2004.

4 This is because, in some episodes in the past, there were negative deviations in short-term market rates with respect to the policy rate. See "Primary Liquidity Supply by *Banco de la República*, 2008-2016," Box 2 in the July 2016 *Report of the Board of Directors to the Congress of the Republic*.

From the demand side, the upswing in the monetary base is mainly due to the performance of cash demand, although recently, it has also been explained by the bank reserves (Graph B1.1, panel B). Regarding cash, the annual change went from 8.0% on average in 2018 to 12.3% in the first half of 2019 (in real terms from 4.6% to 8.8%) while the bank reserves varied between 5.4% and 7.7% (in real terms from 2.1% to 4.3%).

The demand for monetary base and its components, just like the demand for money in a broader sense, basically depend on the value of the transactions in the economy and on the interest rates. Cash in particular, is more affected than other monetary aggregates due to seasonal factors.

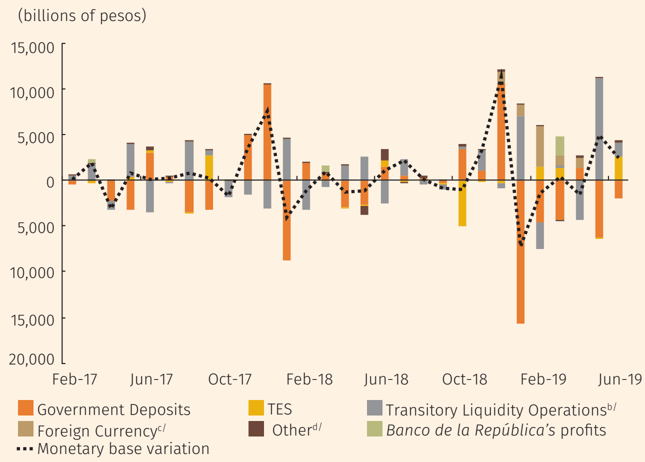
Thus, the rebound in cash demand could have its origin, first of all, in the low opportunity cost of maintaining this means of payment and, in general, liquid means of payment, due to the current levels of inflation and interest rates on deposits and their relative stability. A second explanation is related to the dynamism in sectors in which low- value payments are made, such as retail, and where cash has an important use.[5] Third, Colombia has experienced a significant increase in the number of Venezuelan migrants,[6] a group of people that probably has to make their transactions in cash.[7]

As for bank reserves, the demand has also increased due to the growth of demand deposits, for which the current regulations require greater reserve requirements.[8]

2.2 Monetary base supply

As explained above, by using the available instruments, the Bank offsets those movements in the monetary base supply that differ from the changes in the demand. Graph B1.2 shows the monthly change in the monetary base and its sources.

Graph B1.2
Sources of Monetary Base[a/]



a/ End of month figures.
b/ Net DRNCE expansion repos
c/ Transactions with international agencies are not included.
d/ Includes the monetary effect of the P&L and of other balance sheet accounts. Therefore it includes interest payments on interest-bearing deposits (includes DGCPTN), returns received from repo operations, etc.
Source: *Banco de la República.*

For the majority of 2018, the repos (net of DRNCE) offset the movements of government deposits to the extent that they exceeded the change in the demand for monetary base. In this respect, the lack of liquidity in the economy (or t the excess of it) was adjusted through this instrument except for COP 735 b in purchases of TES made in June and July[9] (Graph B1.2). The repos were *overnight* and had an average balance (net of DRNCE) of COP 5,187b[10] (Graph B1.3).

In December, most of the increase in the monetary base, which seasonally occurs in the last month of the year, was supplied through the reduction in the government's deposits at the Bank[11] (Graph B1.2). In addition, the exercise of the *put* options to accumulate international reserves (as part of the program that the JDBR had started after their

5 According to DANE's figures, retail sales excluding fuel had grown 8.0% per year as of May (seasonally adjusted series and adjusted for calendar effects). Furthermore, according to *Banco de la República's survey on the perception of the use of payment instruments* (2017), the preferred instrument for making regular payments in Colombia such as food or transportation, is cash.

6 Based on figures from *Migración Colombia*, there may be close to 1,300,000 Venezuelans in the country (http://www.migracioncolombia.gov.co/index.php/es/noticias/397-asi-ven-los-medios-a-mc/prensa/comunicados-2019/mayo-2019/11331-mas-de-1-millon-260-mil-venezolanos-se-encuentran-radicados-en-el-pais-director-de-migracion-colombialink). Furthermore, based on newspaper reports, the use of Colombian pesos has risen in the area along the Venezuelan border due to the hyperinflation that country is experiencing. (see, for example, "The Colombian peso is replacing the bolivar in Venezuela," *Portafolio*, February 21, 2019, https://www.portafolio.co/internacional/el-peso-colombiano-esta-desplazando-al-bolivar-en-venezuela-526617; or "The economy of the Páez del Alto Apure district runs on Colombian pesos," *Crónica Uno*, June 22, 2019, http://cronica.uno/la-economia-del-distrito-paez-del-alto-apure-se-maneja-en-pesos-colombianos/).

7 This is due to the fact that cash is the only instrument of payment that is generally available, especially for that group of people that does not have financial services and, in addition, the majority of their transactions are presumably for low amounts.

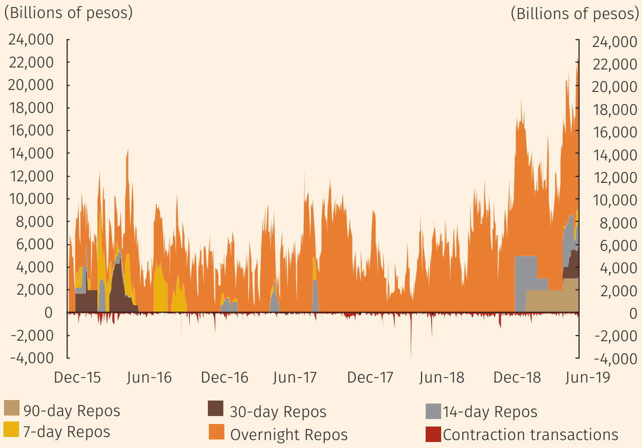
8 Based on External Resolution 5/2008, demand deposits have a reserve requirement of 11% while the term deposits have one of 4.5% if the maturity is less than 18 months, and 0% for longer maturities.

9 Graph B1.2 shows that, in October 2018, the Bank sold TES for COP 5,054,3 b. This transaction, which was between the government and *Banco de la República*, had a neutral monetary effect because the payment was made using funds that the government had in its accounts at the central bank (see http://www.banrep.gov.co/es/noticias/operacion-venta-de-tes-al-ministerio-de-hacienda-05-10-2018).

10 In 2018, the maximum was COP 11,403 b on November 8 and the minimum – COP 2,936 b – on May 8.

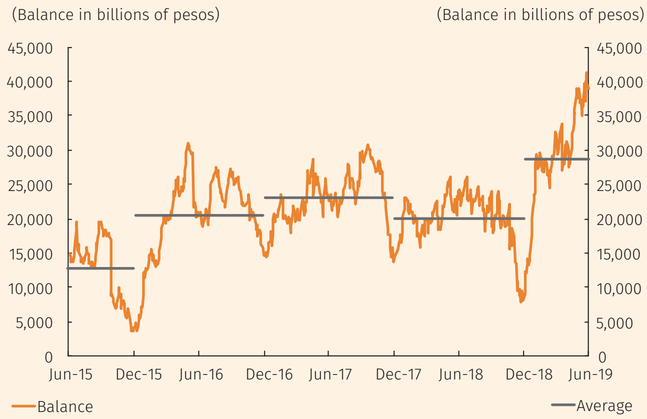
11 The monetary base rose COP 11,386 b during the month, and government deposits with the Bank fell COP 10,587 b.

Graph B1.3
Expansion Repos (overnight and term) and Interest-Bearing Deposits not constituting Reserve Requirements (DRNCE)



Source: *Banco de la República.*

Graph B1.4
Government Deposits at *Banco de la República*[a/]



a/ Balance of monetary control TES not included. NG interest-bearing and non-interest-bearing deposits at *Banco de la República* are included.
Source: *Banco de la República.*

September 2018 meeting) contributed COP 1,278 b to the liquidity supply.

Starting in January 2019, the government's deposits had a significant contractionary effect and reached historically high levels in June (Graphs B1.2 and B1.4). During the first half of the year, government transactions drained COP 25,696 b from the economy,[12] particularly in January. In that month, government deposits rose COP 15,614 b, an amount that is greater than the increase that seasonally occurs at the beginning of the year.

In order to close the gap between a monetary base supply that was significantly reduced and a demand that was recovering, the Bank responded with the available instruments. Specifically, between January and June the monetary authority provided liquidity through the purchase of COP 5,534 b in TES[13], in addition to the COP 4,634 b provided because of the exercise of foreign currency put options.

Moreover, the Bank has offered long-term repos, with a variety of maturities including 90 and 30 days, and has progressively increased d the amounts announced for the repo auctions. These auctions are carried out under a cascade scheme that guarantees that the liquidity that is not required for long-term maturities is available for shorter transactions. The purpose for this is to allow the financial intermediaries to obtain the funds for the periods they need, without constantly having to renew them and thus contribute to the smooth functioning of the money market.

2.3 Monetary Market Interest Rates

In this context, the balance of repos (net of DRNCE) has historically been high[14] over the course of the year (Graph B1.3). Nonetheless, the money market interest rates, particularly the overnight IBR and the interbank rate, have shown slight deviations compared to the monetary policy rate (0.3 bp and 0.8 bp respectively on average) that are even lower than the ones registered at other times (Graph B1.2). This has ensured that the first link of the transmission of monetary policy will function thus contributing to meeting the inflation target.

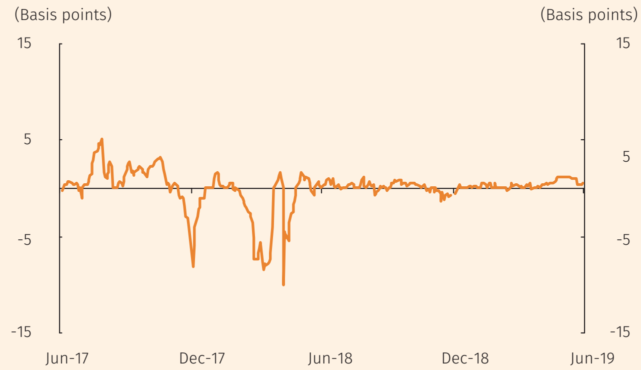
12 From the beginning of the year until June, the balance of the government deposits at the Bank had risen COP 31,198 b of which COP 5,502 b had no impact on the monetary base because they were due to transactions with *Banco de la República*. In particular: 1) on February 1, 2019, the Bank bought USD 1.000 m from the government with which it reinforced its program for accumulating international reserves. This explains the COP 3,116 b increase in their deposits (see http://www.banrep.gov.co/es/comunicado-31-enero-2019-2); 2) COP 2,015 b were transferred to the Government on March 29 for the 2018 profits (http://www.banrep.gov.co/es/comunicado-22-febrero-2019-3); and 3) for those six months, the Bank paid the government COP 371 b in interest on its balance in remunerated deposits.

13 In the first half of the year, the Bank received COP 196 b in coupons.

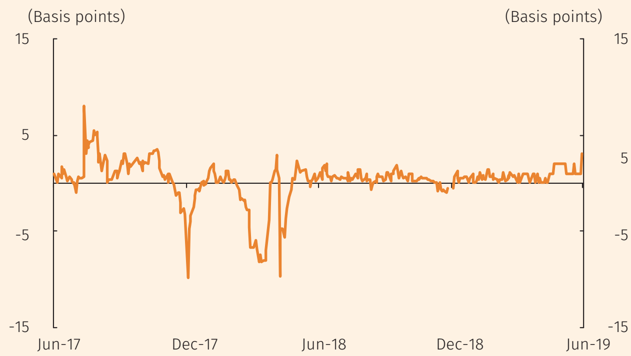
14 Between January 1 and June 30, 2019, the average in net repos was COP 13,518 b, where the maximum balance was COP 22,047 b and the minimum COP 6,202 b.

Graph B1.5
Money Market Interest Rates vs. Benchmark Rate

A. Difference between the Overnight BBI and the Benchmark Rate



B. Difference between the Interbank Interest Rate (IBR) and the Benchmark Rate



Sources: *Banco de la República* and Office of the Financial Superintendent of Colombia.

Box 2
Regional Economic Pulse: Indicator of Economic Activity

Colombia is a country of regions with different economic structures[1] which motivates to monitor the activity by geographical areas in order to comprehend better the national economy. In this context and in order to track the country's economy through the regional performance, *Banco de la República* developed the indicator called *regional economic pulse* with a monthly basis and a lag of less than 25 days. The indicator turns into an input for analysts and economic policy makers that allow them to identify trends in the country's economic activity in a timely fashion.

Banco de la República's interest in analyzing the economic conditions in the regions goes back several years when annual reports on territorial economies were prepared. In 2003, started the quarterly publication of the series, *Boletín Económico Regional* (Regional Economic Bulletin)[2]. Currently, this publication analyzes economic sectors in different regions of the country based on figures produced by various entities. Given the lag of most of the statistics that are the source of these documents as well as the lack of sectoral information on several areas around the country, surged the necessity to seek for an alternative sources of information in order to reinforce economic monitoring of the regions. Hence, *Banco de la República* boosted the construction of the regional economic pulse indicator, which hereinafter will be referred to as Pulse.

The Pulse bases on business owners and chief executives perceptions´ fundamentally who know at real time the productive performance of the company and the conditions of their milieu at the closing period. The first surveys that gave rise to the Pulse were realized in 2010 starting with cities around the country where sources of information were smoothly accessible. Subsequently, the continuing progress in this process allowed to consolidate a regional structure, reinforced and standardized the type of information obtained, and unified the methodological structure for the local indicator and its aggregate. Thus, the Pulse was successfully developed for seven regions around the country (excluding Bogota) and for the national aggregate. Meanwhile, since the beginning of 2019, the compilation of information has started pertaining to the indicator for Bogota, the eighth region studied.

The methodology of the Pulse takes into account the scope of the regional structure used by *Banco de la República* for monitoring the economic performance. *Banco de la República* defined a geographical coverage that groups several country departments into eight regions[3] (Map B2.1) and six economic activities:

Geographic coverage:

1. Southwest: Valle del Cauca, Nariño, and Cauca
2. Antioquia
3. Caribbean: Atlántico, Bolivar, Magdalena, Cordoba, Cesar, Sucre, La Guajira, and San Andres
4. Northeast: Santander, Northern Santander, and Boyacá
5. *Eje Cafetero* (coffee region): Caldas, Quindío, and Risaralda
6. Eastern Plains: Meta and Casanare
7. Center: Tolima, Huila, and Caquetá
8. Bogota: Bogota and Cundinamarca

Sector coverage:

1. Industry: manufacturing industry (excluding oil refining)
2. Commerce: domestic trade, new vehicles, hotel business
3. Agriculture, livestock and poultry: agricultural activities and livestock and poultry activities.
4. Transportation: land and air
5. Construction: buildings (mainly new houses)
6. Financial intermediation: loan disbursements

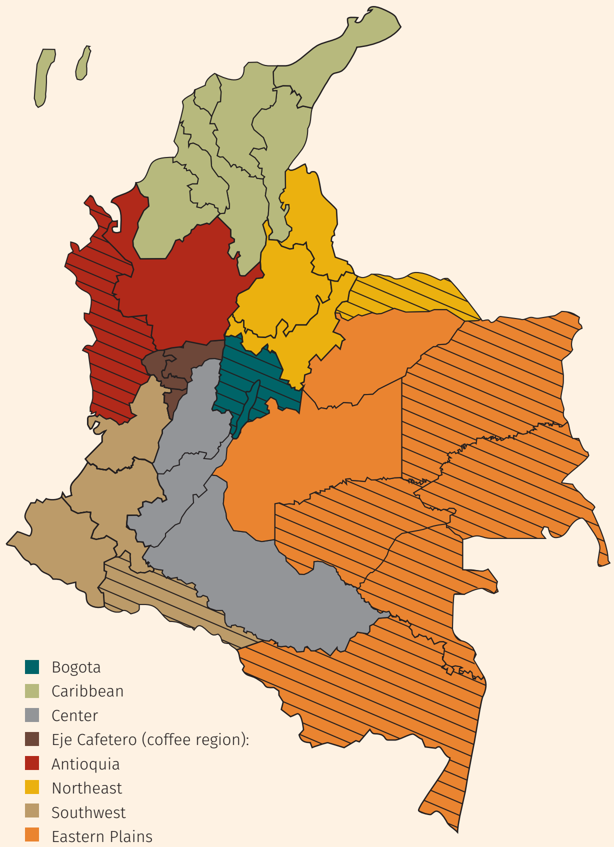
The Pulse is the outcome of a combination of qualitative and quantitative information. The first is obtained from perception surveys and constitutes the largest source of information for the indicator. The second corresponds to the available statistics, which represents a very small proportion of the information in the global indicator. The goal for interviewing local executive directors and business managers is to survey about the performance of their own productive activities of the company they represent

1 See *"Ensayos sobre Economía Regional" (Papers on Regional Economy* (ESER): http://repositorio.banrep.gov.co/handle/20.500.12134/532

2 See http://www.banrep.gov.co/publicaciones-serie/2437

3 The Departments of Guainía, Guaviare, Vichada, Vaupes, Amazonas, Choco, Putumayo, and Arauca are not part of the monitoring given the problems of access to the information. In addition, some territories are included only in a few sectors based on their relative participation within the region.

Map B2.1
Regional Structure: *regional economic pulse*

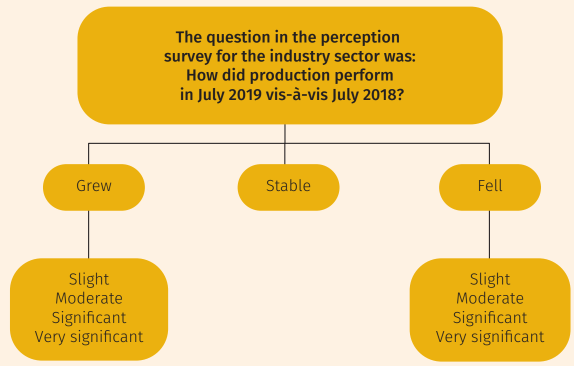


Note: The territories that are shaded and lined are not currently part of the regional economic pulse indicator. The survey process in the Bogota region (Bogota Cundinamarca), in particular, started in 2019.
Source: *Banco de la República.*

and inquire the reasons that support their responses. This process is carried out by the regional economic studies division in different branches of *Banco de la República*. The questions formulated to the business owners in the survey focused on knowing the perceptions related to the annual change in the variable of measurement in the period under analysis. The source responds on a category scale of nine options (Diagram B1.1 shows an example of a question for the industrial sector). These qualitative responses are subsequently assigned values between -1 and 1 in order to quantify the information obtained.

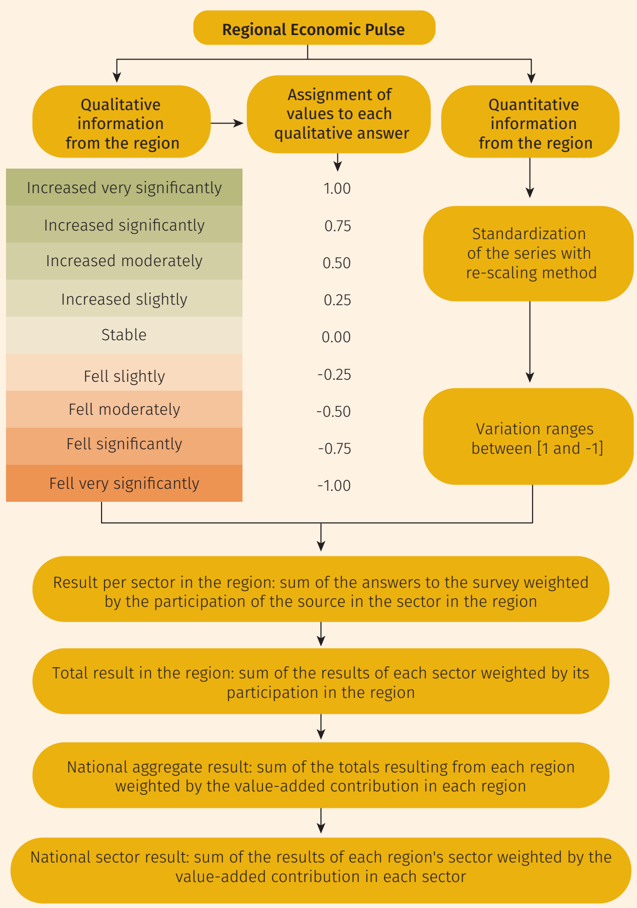
In addition to the qualitative information, some of the regions have timely statistics on certain sectors that are analyzed through the Pulse although are limited (as was mentioned). In order to combine this quantitative information with the one categorized from the surveys, the quantitative data is standardized through the repositioning method[4] which allow to classify annual variations in a range between -1 and 1. With the qualitative and quantitative information repositioned within the same range and considering the participation of sources within the region and the productive structure of each territory, the weighted sum is calculated to obtain the aggregated result of the Pulse for each of the regions and the national total (Diagram B2.2).

Diagram B2.1
Question on the Survey of Perception, Industrial Sector



Source: *Banco de la República.*

Diagram B2.2
Regional Economic Pulse

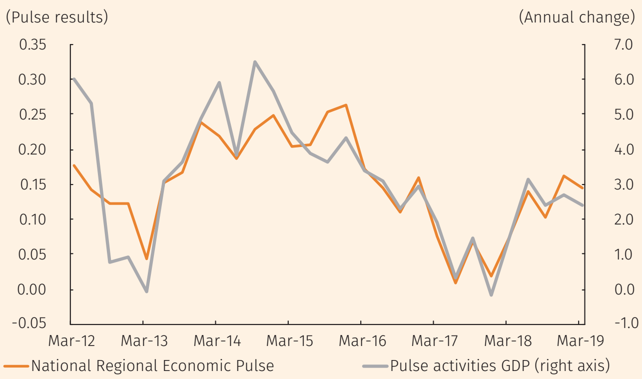


Source: *Banco de la República.*

4 The method uses the distances between the annual growth of the month under analysis with respect to the minimum and maximum data that the variable has acquired in an historical record so that the best performing unit of analysis will have a value of 1 and the worst will have a value of -1.

Regarding the results of the indicator for the national aggregate (excluding Bogota), the Pulse series can be seen to approximate the trend of the recalculated national GDP, which is identified as *GDP Pulse activities*, and includes the same activities that were surveyed with the Bank's short-term indicator (Graph B2.1). Even though the levels of the Pulse do not represent a percentage of the annual growth, its similarity to the trend of the *GDP Pulse activities* indicator shows that the perceptions of the executive directors and business owners who were surveyed are consistent with the annual performance of the variables measured. Moreover, when the national GDP series published by DANE is included in the comparison (Graph B2.2) without removing any sector in particular, a smaller alignment with respect to the aggregate Pulse is seen although the trend registered in the annual GDP growth is maintained. In this comparison, it should be noted that, in addition to not including Bogota, the Pulse does not cover sectors such as mining, services,[5] and public administration, nor civil engineering within construction either.

Graph B2.1
National Total Regional Economic Pulse[a/] and Annual Growth Rate of the Pulse activities GDP[b/] (GDP base 2015)

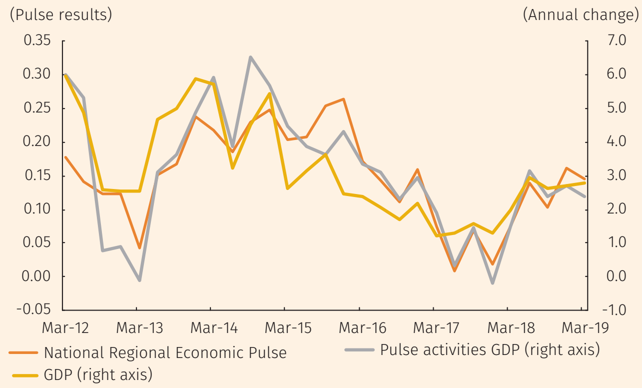


a/ Includes the Southwest, Antioquia, Eje Cafetero, Eastern Plains, Northeast, Caribbean, Central regions. The Bogota (Bogota-Cundinamarca) region is not included.
b/ National GDP aggregate for industry (excluding refining), trade, lodging, agricultural, animal husbandry, air and land transportation, building construction, and finance.
Sources: *Banco de la República* and DANE, calculations by *Banco de la República*.

Regarding the results of the regional Pulse, in the first quarter of 2019, these indicate that the economy grew in annual terms in the majority of the territories (Graph B2.3). In fact, the results located below the diagonal line show that the performance of the first quarter of 2019 improved compared to the same period during the previous year: especially in the Southwest, followed by Antioquia and, to a lesser degree, the Caribbean region. In the case of the Northeast, its location on the right horizontal axis meant an annual growth while in the same period in 2018, it showed no variation. Regarding the *Eje Cafetero*, which is on the diagonal, this location reveals that its economy had an increase similar to the one obtained last year, while the Central area showed a minor recovery since it had a slight decline during the period under analysis in the wake of a pronounced drop in the previous year. Economic activity on the *Llanos Orientales*, in turn, grew slightly below on what had been seen in the first quarter of 2018.

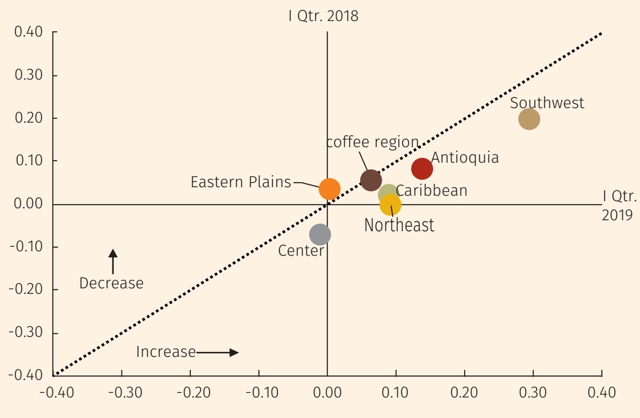
For all that, based on the results described, the monthly production of this new indicator, with a lag of less than 25 calendar days is expected to contribute to the monitoring and analysis of the regional and national economy of the country.

Graph B2.2
National Total Regional Economic Pulse[a/] and Annual Growth Rate of the Pulse activities GDP,[b/] and National GDP (GDP base 2015)



a/ Includes the Southwest, Antioquia, Eje Cafetero, Eastern Plains, Northeast, Caribbean, Central regions. The Bogota (Bogota-Cundinamarca) region is not included.
b/ National GDP aggregate for industry (excluding refining), trade, lodging, agricultural, animal husbandry, air and land transportation, building construction, and finance.
Sources: *Banco de la República* and DANE, calculations by *Banco de la República*.

Graph B2.3
Annual Performance of the Regional Economic Pulse Indicator[a/] Q1 2019 vs. Q1 2018



a/ The results are based on surveys of business owners and managers, and available information.
Source: *Banco de la República*.

5 Meal services, real estate activities, and professional work.

03

International Reserves

As of June 2018, the net international reserves totaled USD 52.444,5 b which is USD 4.051,6 b higher than the balance registered in December 2018. The increase in the balance of international reserves in US dollars over the course of the year was due to the purchase of foreign currency and the increase in its return.

Banco de la República manages the international reserves within a strict framework of risk control in which emphasis is placed on the measures geared towards: 1) the management of market risk so that the value of the investments is not significantly affected by changes in the international interest rates; 2) the management of credit risk in order to have a very low probability of facing defaults on payments, and 3) the management of liquidity risk in order to be able to convert the reserve assets into cash quickly and at a low cost. Through these risk control measures, an effort is made to keep reserves at a high level of security and liquidity. This, in turn, is associated with lower profitability since the safest investments are also those that have the lowest returns. The main management policies for Colombia's international reserves and their current breakdown are explained in this chapter.

As of June 2018, the net international reserves totaled USD 52.444,5 b which is USD 4.051,6 b higher than the balance registered in December 2018.[69] The increase over the course of the year was due to the purchase of foreign currency (USD 2.478,1 b), and the return of the international reserves. Excluding the

69 The net international reserves are equal to the total international reserves, or gross reserves, minus *Banco de la Republica*'s short-term foreign liabilities. The latter consist of demand obligations to non-resident agents in foreign currency. The gross international reserves came to USD 52.499,3 b and the short-term foreign liabilities totaled USD 4.8 m.

foreign exchange component, at the end of June 2019, the return was 3.17%. The most important factors explaining the above are the appreciation of bonds as a result of the fall in interest rates and the accrual of interest of the instruments that are invested in. The decline in the bond rates was caused by expectations of future reductions in the interest rate stipulated by the Federal Reserve in light of the outlook of economic slowdown in the United States.

The main component of the international reserves is the investment portfolio which corresponds to investments in financial instruments on the international market and to the certified physical gold (94.37% and 1.64% respectively of the reserves). The breakdown of the international reserves is presented in Graph 3.1.

3.1 Breakdown of the Investment Portfolio[70]

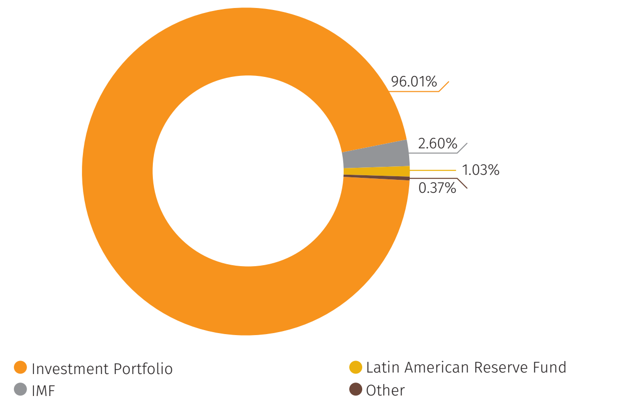
An explanation of the policies that guide the investment portfolio investments and some relevant definitions are provided in the Appendix. The breakdown of the investment portfolio as of June 2019 can be seen in Graph 3.2 when about 95% of it was invested in securities issued by governments, entities related to governments (quasi-sovereign) and repurchase agreements with the Federal Reserve.

Graph 3.3 shows the credit rating of the investment portfolio. The Bank uses the lowest rating granted by at least two of the three main rating agencies (S&P, Moody's, and Fitch Ratings) as a benchmark. Evidence of the high credit rating of the assets in the portfolio can be seen in the fact that 75.52% is invested in instruments with AAA ratings and 21.41% is in instruments with AA ratings.

Finally, Graph 3.4 shows the currency breakdown of the investment portfolio as of June 28, 2019. The largest share of Colombia's international

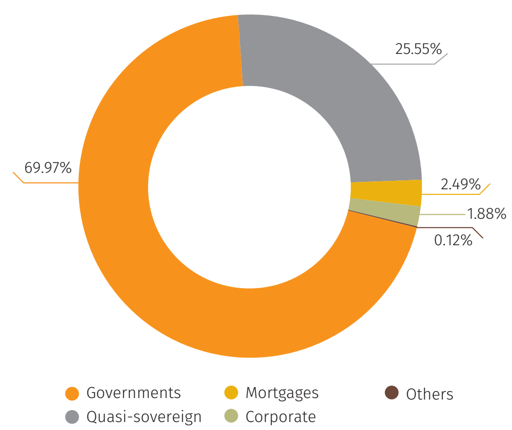
70 The graphs in this section were calculated based on the amount in the investment portfolio excluding the gold.

Graph 3.1
Components of the Gross International Reserves
(information as of Friday 28 June 2019)



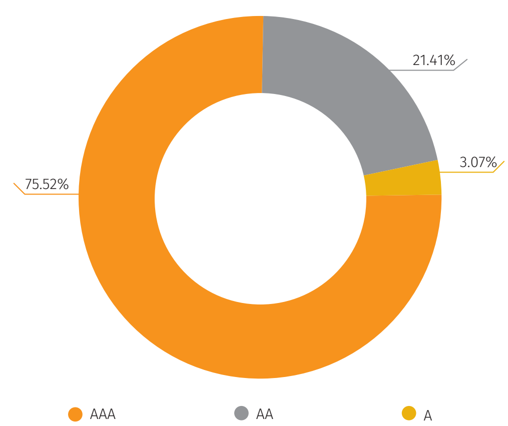
Note: gold is included in the investment portfolio. The item "Others" " includes international agreements, cash on hand, and demand deposits.
Source: *Banco de la República.*

Graph 3.2
Breakdown of the Investment Portfolio by Sector
(information as of Friday 28 June 2019)



Source: *Banco de la República.*

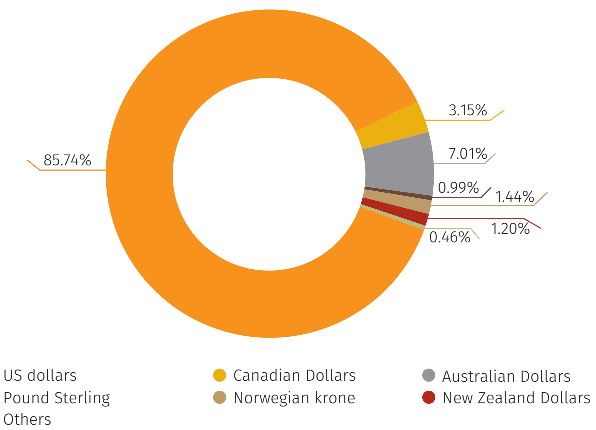
Graph 3.3
Distribution of Investment based on Credit Rating
(information as of Friday 28 June 2019)



Source: *Banco de la República.*

reserves is in US dollars due to the fact that the majority of the country's commercial and financial transactions with the rest of the world are carried out in this currency. Investment in the following currencies is also allowed: Canadian, Australian, New Zealand dollars; Swedish krona; the British pound; Swiss franc; euros; yen; Norwegian krone; the reminbi; Hong Kong and Singapore dollars, and Korean won.[71] All of these currencies are characterized by high daily trading volumes and belong to countries that are characterized by having governments with high credit ratings.

Graph 3.4
Currency Components of the Investment Portfolio (information as of Friday 28 June 2019)



Source: *Banco de la República.*

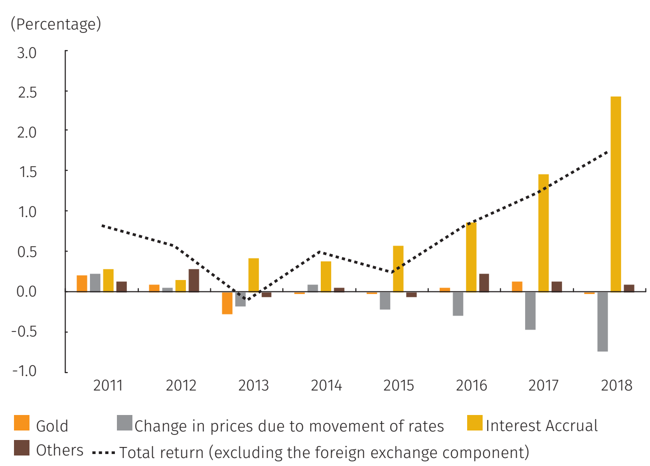
3.2 Profitability of the Reserves

The decision to have a portfolio with a conservative risk profile implies receiving a lower return. The basic financial theory for portfolio management indicates that, if an investor wants to face a lower risk, his expected return will be lower.

The return of the reserves depends primarily on two factors: first, the interest received from the instruments invested in (accrual factor), and second, the change in the prices of the securities because of movements in the interest rate (valuation factor). The second factor occurs because there is an inverse relationship between bond prices and interest rates; that is to say, the price of the bonds declines as the interest rates increase and vice versa.

As can be seen in Graph 3.5, the rate of return on the international reserves has been rising gradually since 2013. Between 2009 and 2015, return remained low due to the expansionary monetary policy implemented by the central banks of the developed countries in response to the global financial crisis which triggered very low interest rates. However, the US Federal Reserve has been gradually raising its monetary policy rate since 2015 which has made it possible for investments to benefit from higher interest rates (accrual factor).

Graph 3.5
Historical Profitability of International Reserves by Components



Source: *Banco de la República.*

71 The euro has a very small share in the international reserves investment portfolio due to the fact that it is not part of the group of currencies that the benchmark index is made up of. The reason why it is not in this group is because both the benchmark interest rate of the European ECB and the rates for the main short-term sovereign bonds issued in euros are negative.

In the first six months of 2019, the profitability of the reserves, excluding the foreign exchange component, was 3.17%[72] (USD 1.598,1 b) which is higher than what has been seen in the last few years. This increase was primarily due to the rise in prices for portfolio securities in view of the reductions in interest rates that have been seen during the period (valuation factor). This drop in rates has occurred because of a change in expectations of the rate path set by the Federal Reserve over the course of 2019, as expectations have gone from anticipating rises to discounting reductions for the next two years. The change in expectations has occurred specifically due to signs of an economic slowdown in the United States, uncertainty because of tensions related to international trade, and lower inflationary expectations.

72 This rate is obtained by dividing the return in dollars by the average value of the net reserves on December 31, 2018 and June 28, 2019. Since 2015, the impact of the exchange rate effect on the profitability of the reserves has been excluded.

04

Financial Situation of *Banco de la República*

From the beginning of the year to the end of June, the Bank's balance sheet had a significant increase due to the purchases of foreign currency, the return on the international reserves, and the monetary regulation transactions (purchases of TES and expansion repos) that were mainly offset by the larger government deposits at the Bank. Thus, between January and June 2019, assets and liabilities rose COP 30.697 b and COP 29.148 b, respectively.

During the same period there was an exceptional conjunction of circumstances that was favorable for the Bank's profits and that is not likely to be repeated in the future. Because of that, the Bank's profit amounted to COP 4.873 b due to the return on international reserves as a result of the appreciation of the investment portfolios and gold. In addition, the growth in demand for money increased the revenue from monetary regulation operations.

4.1. Financial Position Statement of *Banco de la República* (balance sheet)

4.1.1 Assets

The assets of *Banco de la República* registered a balance of COP 217.898 b at the close of June 2019[73] (Table 4.1). This figure is COP 30.697 b (16.4%) higher than the balance observed in December 2018 (COP 187.201 b).

73 In this section, the line items are shown by economic rather than by accounting criteria. Regarding the financial statements presented to the Office of the Financial Superintendent of Colombia and the National General Accounting Office, the differences are: first, the value of the liabilities associated with purchase transactions for the international reserves portfolio for which payment has not yet been made is discounted from the assets (this is registered as a

The main items that explain the increase in assets are:

a. Gross International Reserves: at the close of June 2019, the balance, valued at market prices was COP 168.135 b (USD 52.449 m),[74] which is COP 10.842 b (6.9%) higher with respect to the data observed at December 31, 2018. The rise was primarily the result of: 1) the COP 7.749 b purchase of foreign currency made by the Bank of which COP 4.634 b (USD 1.478,1 m)[75] were made through *put* options for the accumulation of international reserves within the framework of the program launched in 2018 and COP 3.116 b (USD 1.000 m)[76] were made through a direct purchase from the national government in February of this year;[77] and 2) the COP 5.175 b yield on the international reserves. The above was partially offset by the COP 1.782 b negative change in the exchange adjustment caused by the lower exchange rate of the peso with respect to the reserve currencies in comparison to the one at the close of 2018.
b. Repo transactions used to provide transitory liquidity[78]: these presented a balance of COP 22.519 b which was COP 13.391 b (146.7%) higher with respect to the close of 2018.
c. National currency investment portfolio: its balance amounted to COP 12.791 b of which COP 12.762 b correspond to securities valued at market prices and COP 29 b, to coupons which matured on June 30 but, due to the fact that this was a holiday, were paid on the following July 2. This balance was COP 5.964 b higher with respect to December 31, 2018 (87.4%). This change was primarily due to: 1) net purchases of COP 5.534 b in TES on the part of the Bank, 2) the COP 626 b valuation of this portfolio at market prices, and 3) COP 196 b in coupon payments.
d. Contributions to international entities and organizations: the balance amounted to COP 9.505 b which is COP 272 b higher than the one registered at the close of 2018 (2.9%). This increase originated mainly from the positive valuation of the new parity of special drawing rights (SDR) with the IMF (COP 652 b) that was partially offset by purchases of SDRs that reduced the contributions to the IMF in national currency

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higher value of the asset in the Bank's financial statements and as a requirement of the international reserves under liabilities); second, the coins in circulation, which are not part of the accounting information on the Bank's balance sheet, are included in the assets and liabilities in this section; and third, other reclassifications of lower value accounts. In this respect, the asset value presented in this *Report* (COP 217.898 b) differs from what was registered in the June 30, 2019 financial statements (COP 222.272 b), and the value of the liabilities (COP 146.704 b) differs from what was registered on the financial statements as of June 30, 2019 (COP 151.078 b).

74 See previous note.

75 See chapter 3 of this *report*.

76 See previous note.

77 See http://www.banrep.gov.co/es/comunicado-31-enero-2019-2.

78 See the Box "Liquidity Supply on the part of *Banco de la República* 2018-2019," in this *Report*.

Table 4.1
Financial Position of *Banco de la República* Classified by Economic Criteria
(trillions of pesos)

Accounts	December 2018		June 2019		Change	
	Balance	Percentage share	Balance	Percentage share	Absolute	percentage
Assets	187,201	100.0	217,898	100.0	30,697	16.4
Gross International Reserves	157,293	84.0	168,135	77.2	10,842	6.9
Contributions to international entities and organizations	9,232	4.9	9,505	4.4	272	2.9
Investments	6,827	3.6	12,791	5.9	5,964	87.4
Repo agreements and transitory liquidity support	9,128	4.9	22,519	10.3	13,391	146.7
Other net assets	4,720	2.5	4,948	2.3	227	4.8
Liabilities and equity	187,201	100.0	217,898	100.0	30,697	16.4
Liabilities	117,556	62.8	146,704	67.3	29,148	24.8
Foreign-currency liabilities that affect international reserves	22	0.0	9	0.0	-13	-59.4
Monetary base	98,081	52.4	95,499	43.8	-2,582	-2.6
Cash	64,378	34.4	61,305	28.1	-3,072	-4.8
Reserve	33,703	18.0	34,194	15.7	491	1.5
interest-bearing deposits not constituting reserve requirements	68	0.0	472	0.2	404	592.3
Other deposits	59	0.0	80	0.0	21	35.2
National Government: National Treasury Office L/C	8,033	4.3	39,231	18.0	31,198	388.4
National Government: National Treasury Office F/C	312	0.2	206	0.1	-107	-34.2
Obligations with international organizations	10,980	5.9	11,207	5.1	227	2.1
Total equity	69,645	37.2	71,194	32.7	1,548	2.2
Capital	13	0.0	13	0.0	0	0.0
Surplus	68,249	36.5	66,498	30.5	-1,751	-2.6
Special foreign-exchange account settlement	453	0.2	453	0.2	0	0.0
Foreign exchange adjustment	67,446	36.0	65,664	30.1	-1,782	-2.6
Investment in assets for cultural activities and donations	283	0.2	313	0.1	31	11.0
Others	67	0.0	67	0.0	0	-0.0
Other overall results	-224	-0.1	249	0.1	473	n. a
Fiscal year result	2,241	1.2	4,873	2.2	2,631	117.4
Cumulative results: effect of change in accounting policies	-512	-0.3	-347	-0.2	164	-32.1
Accumulated Results Process of Convergence with IFRS	-123	-0.1	-92	-0.0	31	-25.0

n.a.: Not applicable
Source: *Banco de la República.*

to balance the increase in the reserve position (COP 355 b) and the negative differences in currency exchange caused by the appreciation of the peso against the US dollar (COP25 b).

4.1.2 Liabilities

At the close of June 2019, the liability balance was COP 146.704 b[79] which was COP 29.148 b (24.8%) higher than the one registered at the end of 2018 (Table 4.1). This rise was mainly due to:

a. The national government's deposits in pesos, set up through the General Office of Public Credit and the National Treasury at *Banco de la República*: its balance was COP 39.231 b at the close of June 2019 which is COP 31.198 b (388.4%) higher than the one registered in December 2018.[80]
b. Obligations to international organizations: the balance was COP 11.207 b, which is COP 227 b (2.1%) higher than the one presented at the close of 2018. In this case, the change was due to the same reasons described for the asset account, "contributions to international organizations and entities."
c. The interest-bearing deposits not constituting reserve requirements (DRNCE): the balance was COP 472 b at the close of June 2019 which was COP 404 b (592.3%) higher than the balance at December 2018.

The above was offset, in part, by the monetary base with a balance of COP 95.499 b, which was COP 2.582 b (2.6%) less than the one registered at the close of the previous year. By component, the cash in circulation showed a decline of COP 3.072 b (4.8%) while the bank reserves were COP 491 b (1.5%) higher.

4.1.3 Equity

At the close of June 2019, equity presented a balanced of COP 71.194 b, which was COP 1.548 b (2.2%) higher with respect to the figure for December 2018 (Table 4.1). This was mainly due to the Bank's profits of COP 4.873 b throughout the year up to June 2019 and the higher value –COP 473 b– in the account named other comprehensive income (OCI). The above was partially offset by the transfer of COP 2.015 b in profits to the national government charged against the 2018 accounting period and by the COP 1.782 b (2.6%) reduction in the exchange rate adjustment account that was the counterpart to the above-mentioned reduction in the balance in pesos of the gross international reserves.

79 See Note 73.

80 See the Box "Liquidity Supply on the part of *Banco de la República* 2018-2019," in this *Report*.

4.2 Income Statement (L&P)

4.2.1 Close of June 2019

The Bank's accounting period profit for the first half of 2019 was COP 4.873 b, the result of COP 5.946 b in income and COP 1.073 b in expenditures (Table 4.2). With respect to what was observed during the same period last year, there have been COP 4.771 b (406.2%) in annual increases in income and COP 160 b (17.5%) in expenditures.

The revenue observed as of June 2019 is mainly explained by the return on the international reserves, the investment portfolio of Treasury bonds (TES) held by the Bank, and the interest derived from the liquidity transactions through expansion repos. In addition, the outlays are due, in particular, to the remuneration paid to the national government on its deposits at the Bank and to corporate expenditures.

As for income, the return on the international reserves amounted to COP 5.175 b mainly explained by: 1) the return on the international reserve portfolio (COP 4.867 b, USD 1.505 m[81]) as a result of income from interest accrual (COP 1.464 b, USD 459 m) and from the appreciation of the portfolio of international reserves (COP 3.403 b, USD 1.046 m) as a consequence of the fall in interest rates for US government bonds; 2) the appreciation of monetary gold (COP 253 b, USD 76 m), originated from the increase in the international price of gold in June 2019 compared to December 2018 (10.1%)[82] (Graph 4.1) and 3) the revenue from yields on the contributions to international organizations and entities (COP 56 b, USD 17 m) (Table 4.3 and Graph 4.1).

The return on the investment portfolio for monetary regulation, TES held by the Bank, amounted to COP 309 b compared to COP 394 b from the beginning of the year to June 2018. Income from liquidity transactions through expansion repos amounted to COP 284 b, which is COP 200 b higher compared to the first half of 2018. The above resulted from the higher average daily volume of these transactions from the beginning of 2019 up to June which was COP 9.841 b more compared to the same period in 2018[83] and the lower real annual 4.27% (r. a.) remuneration interest rate between January and June of 2019 versus 4.49% r. a. in the first half of the previous year (Table 4.4).

Regarding expenditures, the cost of the remuneration for the national government deposits was COP 606 b which was COP 170 b (39.0%)

81 Profitability of 2.98% in dollars between January and June.

82 The international price of gold was USD 1,282 per *troy* ounce at the close of 2018 and USD 1,412 per *troy* ounce at the end of June 2019.

83 The average daily volume was COP 13.689 b between January and June 2019 compared to COP 3.848 b during the same period in 2018.

Table 4.2
Banco de la República Income Statement, January to June
(billions of pesos)

	Actual as of June:		Annual change		Budget	Percentage implemented with respect to the budget
	2018	2019	Absolute	percentage	2019	
I. Total Income (A+B+C)	1,175	5,946	4,771	406.2	5,066	117.4
A. Monetary income	983	5,784	4,801	488.6	4,625	125.1
1. Interests and returns	971	5,769	4,798	494.2	4,520	127.6
International Reserves		5,175	4,682	949.6	3,695	140.1
Monetary Regulation Investment Portfolio (TES)		309	-85	-21.5	448	69.0
Active Monetary Regulation Operations (Repos)	84	284	200	239.0	376	75.5
Other operations		0	0	861.5	0	404.8
2. Foreign exchange differences	9	6	-3	-34.9	102	5.7
3. Other monetary income	3	9	6	208.8	3	299.4
B. Coins issued	80	62	-18	-22.1	239	26.1
C. Corporate income	112	100	-12	-11.0	203	49.3
1. Commissions: Banking services and fiduciary operations	82	88	6	6.9	187	46.9
Banking services	28	28	-0	-0.6	72	39.2
Fiduciary operations		59	6	10.9	115	51.8
2. Other corporate income	30	12	-18	-59.7	16	77.1
II. Total expenditures (A+B+C+D)	914	1,073	160	17.5	1,808	59.3
A. Monetary expenditures	537	697	159	29.7	838	83.2
1. Interest and returns	439	608	170	38.6	631	96.4
National Government's Interest-bearing Deposits		606	170	39.0	624	97.1
Liability Transaction Deposits for Monetary Regulation	3	2	-1	-20.3	7	34.5
2. Costs of Management and Management of Funds Abroad	17	15	-1	-7.3	49	31.7
3. Commitment fee for IMF flexible credit	42	41	-0	-0.9	83	49.9
4. Foreign exchange differences	40	31	-9	-21.6	29	107.7
5. Other monetary expenditures	0	0	0	11.5	46	0.7
B. Banknotes and coins	90	78	-12	-13.1	272	28.6
C. Corporate expenditures	282	310	28	10.0	678	45.8
1. Personnel costs	191	205	14	7.3	431	47.6
2. Overhead	49	56	7	14.5	136	40.8
3. Other Corporative	42	50	7	17.2	110	45.0
D. Pension payments	4	-12	-16	n. a.	20	-59.1
III. Fiscal year result (I - II)	261	4,873	4,612	1.765.9	3,258	149.6

n.a.: Not applicable
Source: *Banco de la República.*

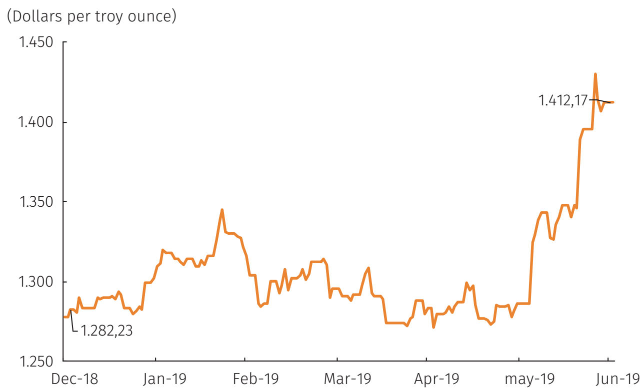
Table 4.3
Return on International Reserve Investments
(billions of pesos)

	Actual as June		Budget	Percentage implemented with respect to the budget
	2018	2019	2019	
Returns	493	5,175	3,695	140.1
Investment portfolio	528	4,867	3,682	132.2
Accrual of interest	923	1,464	4,099	35.7
Valuation at market prices	-395	3,403	-417	...
Gold	-56	253	0	...
International entities and organizations	21	56	13	423.0

Source: *Banco de la República.*

higher compared to the one registered between January and June last year as a result of the COP 8.515 b[84] in higher average daily volume of these deposits and the lower interest rate for remuneration of 4.37% r. a. between January and June 2019 compared to 4.48% r. a. during the same period of the previous year (Table 4.4).

Graph 4.1
Change in the Price of Gold



Source: Reuters.

The corporate outlays were COP 310 b with an annual increase of COP 28 b (10.0% which is equivalent to 6.6% in real terms) of which: 1) personnel costs, COP 205 b, increased 7.3% per year (3.9% in real terms);[85] 2) the overhead, COP 56 b, registered an annual change of 14.5% (10.9% in real terms); and 3) other corporate expenses, COP 50 b, presented an annual increase of 17.2% (13.6% in real terms). This last change is mainly explained by the greater expenditures for depreciation, amortization, impairment, and provisions.

4.2. 2 Outlook for 2019

The Bank's income statement has two main components: monetary and corporative. The former includes the results of responsibilities such as monetary, foreign exchange, and credit authority; manager of the international reserves; banker and lender of last resort for credit institutions; and issuing bank. The results of monetary activity depend on variables that are not under the control of the Bank such as, for example, foreign interest rates and fluctuations in market prices. The

84 The average daily balance of these deposits in *Banco de la República* was COP 28.572 b between January and June 2019 and COP 20.056 b during the same period in 2018.

85 This includes what is covered by the collective agreement in effect.

Table 4.4
Net Monetary Policy Income excluding TES Yields held by *Banco de la República*
(billions of pesos)

	January-June		Difference
	2018	2019	
Net Total	-355	-324	31
(+) Revenue from expansion transactions (repos)	84	284	200
Volume (six month average of daily data)	3.848	13.689	9.841
Annualized percentage rate	4.49	4.27	-0.22
(-) Remuneration on the national government accounts at *Banco de la República*	436	606	170
Volume (six month average of daily data)	20.056	28.572	8.515
Annualized percentage rate	4.48	4.37	-0.11
(-) Outlays on monetary tightening operations (DRNCE)	3	2	-1
Volume (six month average of daily data)	180	149	-31
Annualized percentage rate	3.39	3.25	-0.14

Source: *Banco de la República*

corporate results include the administrative management of the Bank such as, for example, income from commissions, personnel costs, and operating expenses.

An accounting period profit of COP 5.316 b is estimated for 2019 as a result of COP 7.835 b in income and COP 2.519 b in expenditures (Table 4.5).

In the case of revenue, its level is estimated to be COP 3.781 b (93.2%) greater compared to the result of 2018. The items with a greater impact on revenue correspond to the return on the international reserves (COP 6.048 b), the return on the investment portfolio for monetary regulation –TES held by the Bank (COP 690 b)– and income from liquidity transactions through expansion repos (COP 506 b).

In the case of the international reserves, their yield will probably be higher than what was observed in 2018 by: 1) a 3.77% average profitability in dollars of the investment portfolio in 2019 compared to 1.67% from the previous year and 2) a higher balance in international reserves due to the purchases that have been made so far in 2019. In this case, and for the return on the investment portfolio for monetary regulation, purchases of foreign currency or TES on the part of the Bank in addition to those made throughout the year up to June are not assumed. Finally, the larger average volume of liquidity transactions through expansion repos would explain the greater income projected for 2019.

The expenditures for 2019 are estimated to be COP 2.519 b with an annual increase of COP 706 b (38.9%). The monetary expenditures, in particular, are projected to be COP 1.556 b and corporate expenses of COP 671 b are forecasted.

Table 4.5
Forecast for *Banco de la República* 2019 Income Statement
(billions of pesos)

	Actual 2018	Forecast 2019	Annual changes	
			Absolute	Percentage
I. Total Income (A+B+C)	4,055	7,835	3,781	93.2
A. Monetary income	3,659	7,396	3,736	102.1
1. Interest and returns	3,504	7,244	3,740	106.7
International Reserves	2,488	6,048	3,560	143.1
Monetary Regulation Investment Portfolio (TES)	788	690	-98	-12.5
Active Monetary Regulation Operations (repos)	228	506	278	121.9
2. Foreign exchange differences	147	148	2	1.3
3. Other monetary income	8	3	-5	-64.4
B. Coins issued	172	237	65	37.9
C. Corporate income	224	203	-21	-9.4
1. Commissions Banking services and Fiduciary business	184	187	3	1.5
Banking services	72	72	0	0.3
Fiduciary operations	112	115	3	2.3
2. Other corporate income	39	16	-24	-60.1
II. Total expenditures (A+B+C+D)	1,813	2,519	706	38.9
A. Monetary expenditures	1,017	1,556	539	53.0
1. Interest and returns	856	1,207	351	41.0
National Government’s Interest-bearing Deposits	850	1,202	351	41.3
Monetary-contraction operating expenses	6	6	0	4.7
2. Costs of Management and Handling of Funds Abroad	33	52	19	56.3
3. Commitment fee for IMF flexible credit	83	88	5	6.2
4. Foreign exchange differences	44	163	119	270.0
5. Other monetary expenditures	1	46	45	4.156.5
B. Banknotes and coins	213	271	57	26.9
C. Corporate expenditures	594	671	77	13.0
1. Personnel costs	390	425	35	9.0
2. Overhead	111	137	25	22.7
3. Other Corporative	93	110	17	18.1
D. Pension payments	-12	20	32	...
III. Fiscal year result (I– II)	2,241	5,316	3,075	137.2

Source: *Banco de la República.*

Within the monetary transactions, remuneration to the national government deposits at the Bank is projected to be COP 1.202 b, which is 41.3% higher than what was registered in 2018. This growth is due to the higher level of government deposits in the Bank during 2019.[86]

Among corporate expenditures, in turn, COP 425 b correspond to personnel costs, COP 137 b to overhead, and COP 110 b to other corporate expenses with an annual nominal growth of 9.0%, 22.7%, and 18.1% respectively. These changes incorporate what was agreed upon in the Collective Agreement of the Bank that is in effect, which includes the impact of the agreement with the National Association of Employees of *Banco de la República* (Anebre) signed in September 2018 and the higher levels of execution than those seen in 2018. It should be noted that the annual projected growth of corporate expenditures for 2019 is in line with what was approved by the JDBR in the five-year framework that included a real 3.0% average annual growth in the medium term for the Bank's corporate expenditures.

86 In what was implemented for 2018, a daily average of COP 19.793 b in deposits and a 4.39% r. a. interest rate were registered. The 2019 forecast envisions average deposits of COP 28.309 b and an interest rate of 4.34% r. a.

05

Payments in the Colombian Economy

The net annual ratio between the cash that *Banco de la República* provides for economic agents and the cash that *Banco de la República* receives corresponds to the growth of cash in circulation. The value of the monetary species in circulation at the end of 2018 stood at COP 80.7 trillion (t). Of this, COP 64.4 t (80%) were in the possession of the real sector and the public, and the remaining COP 16.3 t were held by credit institutions.

Banco de la República, like the majority of central banks, provides cash[87] in the amount and quality demanded by the economy as well as a the service of payments system to commercial banks and other authorized financial entities by opening deposit accounts at the central bank so that these entities settle transactions resulting from the markets for both goods and services (retail payments) and from financial assets. Based on the above, financial entities are the ones that are authorized to have accounts and make transactions in *Banco de la República* (system of deposit accounts CUD). Individuals and legal entities, in turn, have their accounts in financial institutions.

When reference is made to retail payments, they are usually included among those carried out in the market for goods and services in line with its inherent feature: At least one of the parties to the transaction, the payer or payee is

87 In this section of the report, *cash* is understood as the use of banknotes and coins to make payments. In Chapter 2, when referring to monetary aggregates, cash is limited to only what is in the hands of the public. What credit institutions have in their vaults is part of the bank reserves.

not a financial institution (BIS, 2016); this is what makes it possible to differentiate them from the payments made in the market of financial assets.

Retail payments are frequently used in different types of transactions between individuals, companies, and national or local government (legal entities). Payments are made daily in retail trade and businesses in general, in distribution and collection done by governmental entities, and in agreements made between individuals, etc. (BIS 20169). Payments are made using the instruments referred to as payment orders. These facilitate the transfer of money from the payer to the payee. These instruments include: cash (banknotes and coins), credit and debit cards, checks and electronic transfers (Diagram 5.1).

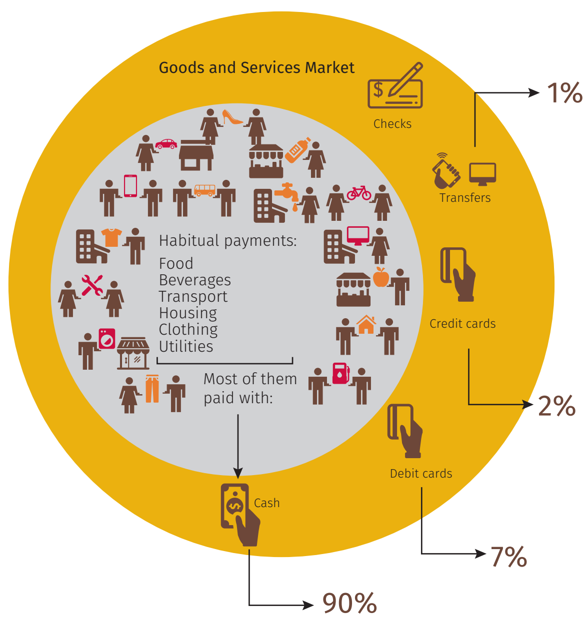
Within the market of goods and services, payments are often made for food, beverages, transportation, clothing, utilities, rent or mortgage installments, etc. When people are asked about the instrument they prefer for making those regular payments, cash is the favorite by 90% followed by the debit card (7.0%), credit card (2.0%), and electronic transfer (1.0%) (Diagram 5.2). Cash is the only instrument of payment that is generally available, especially for a population that does not have financial services.

It is possible to classify payment instruments as either cash: banknotes and coins; or electronic: those made electronically or that may start as a payment on paper such as checks, for example, but that at some

Diagram 5.1
Market in Goods and Services
Payment instruments in the retail market

Source: *Banco de la República.*

Diagram 5.2
Regular Retail Payments in the Goods and Services Market



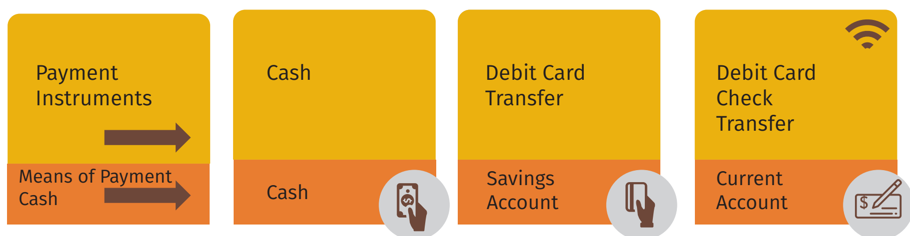
Note: Results corresponding to the question, "Regarding the amount or total value of your monthly payments (food, beverages, clothing, transportation, housing, utilities, etc.) What is the most widely used payment instrument?"
Source: *Banco de la República (Survey of perception of use of payment instruments, 2017).*

point in the process incorporates an electronic component to ensure the settlement and subsequent completion of the payment.

5.1 Electronic Payments

Savings and current accounts (means of payment) have been the central focus of development for electronic instruments; i.e., the payer initially orders the transfer of the value corresponding to the payment (Diagram 5.3), and the financial entity in which the payer has an account uses available financial infrastructures as per each instrument so that the amount of the payment is credited to the savings or checking account of the beneficiary.

Diagram 5.3
Associated Instruments and Means of Payment



Note: Cash is the only one that is both instrument and means of payment at the same time.
As an instrument of payment the credit card is associated with a credit limit granted by the financial entities.
Source: *Banco de la República*.

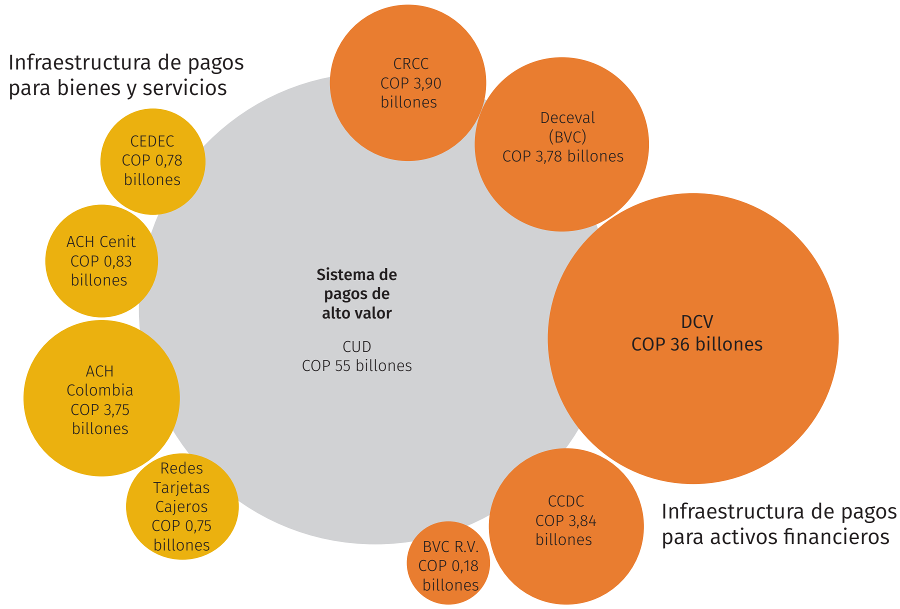
When the transaction is started by the payer using any of the non-cash instruments such as checks, debit or credit cards, and electronic transfers, the corresponding financial infrastructure that allows for communication between financial institutions must be in place to enable the transfer of funds authorized by the payer to the beneficiary of the payment.

When reference is made to the financial infrastructure, the different existing payment systems in the Colombian financial sector are being grouped together. These systems carry out a basic function for the economy as they provide a set of mechanisms to facilitate the transfer of money and financial instruments for the settlement of transactions. These systems are indispensable for the beneficiaries of payments to receive the resulting transfer of funds from the market for goods and services and for the market in financial assets.

In Diagram 5.4, the infrastructure as a whole is summarized with daily average values during 2018. CUD, the system of large value payments[88], operated by *Banco de la República*, is the axis and support

88 CUD deposit account system.

Diagram 5.4
Global Overview of the Financial Market Infrastructure (IMF) (2018)
Daily Average Values



Source: *Banco de la República.*

In 2018, the deposit accounts system (CUD) performed operations by COP 55 b, daily average.

of all the financial infrastructure in Colombia.[89] This system offers the settlement of transactions online and in real time between entities authorized to maintain deposit accounts at the central bank. The settlement of the cash leg of the transactions is carried out in CUD with the different payment instruments issued by financial institutions for the payment of goods and services such as debit and credit cards, checks, and electronic transfers occurs in the CUD. Transactions involving the country's different financial assets such as public and private debt bonds, stock, derivatives, and foreign exchange currencies also occur there. In 2018, CUD had a daily average of COP 55 trillion (t) in transactions.[90]

Specifically, the infrastructures on the left side of the diagram are associated with each one of the low value payment instruments in the economy: the Electronic Check Settlement Clearinghouse (Cedec in Spanish), managed by *Banco de la República*; the automated central

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89 The Bank for International Settlements (BIS) defines the infrastructures of the financial market as multilateral systems in which the participating entities compensate, settle, and register payments, securities, derivatives, and other financial assets. Among them are included payment systems (PS), the central depositories for securities (CDS), the central counterparty clearinghouses (CCC), and the systems for transaction registration as well as other infrastructures for clearing and settlement.

90 The *Report on Payment Systems*, where changes in figures and the performance of the infrastructure of goods and services and financial assets, the results of the biannual survey on the perception of the use of payment instruments, and other related topics are disseminated, is published annually and available on *Banco de la Republica*'s website (http://www.banrep.gov.co/).

The local financial infrastructure is composed of: the high-value payments system; the clearing and settlement systems of financial assets; and the clearing and settlement systems for payments of goods and services.

clearinghouses for electronic payments (ACH), ACH - Cenit (managed by the central bank) and ACH Colombia, that receive electronic payment orders to transfer funds; and the Credibanco, Redeban, A Toda Hora (ATH), Tecnibanca, etc. networks which process transactions made with debit and credit cards in commercial establishments and at automatic tellers (Table 5.1).

Table 5.1
Low Value Infrastructures that operate through the use of Payment Instruments in Colombia

Payment instruments	Low value clearing and settlement systems
Checks	CEDEC
Transfers	ACH: CENIT and Colombia
Cards	Cedibanco, Redeban, ATH, and Tecnibanca

Source: *Banco de la República.*

On the right side of Diagram 5.4 are the financial asset infrastructures: the Central Securities Depository (DCV in Spanish) managed by *Banco de la República* exclusively for public debt securities; the Centralized Securities Depository of Colombia S.A. (Deceval) for all types of securities both public and private; the Central Counterparty Risk Clearinghouse Colombia S.A. (CRCC in Spanish) for forward transactions and standardized –both financial and energy commodities– and non-standardized derivatives such as interest rate forwards (OIS in Spanish); and the Colombian Stock Exchange (BVC in Spanish) for variable income securities.

With respect to foreign currency, the most notable are the Foreign Exchange Clearing House of Colombia S.A. (CCDC in Spanish), where foreign exchange transactions are settled in cash, and the CRCC as well, where standardized derivatives and non-standardized *non-delivery forwards* (COP/USD) are cleared and settled on the market exchange rate (MER).

Cash is the main means of payment used by individuals for regular low-amount payments.

5.2 Cash[91]

As mentioned, *Banco de la República* has the exclusive constitutional function that cannot be delegated of issuing the legal currency and, consequently, it prints, mints, distributes, and destroys the monetary species. Cash consists of banknotes and coins.

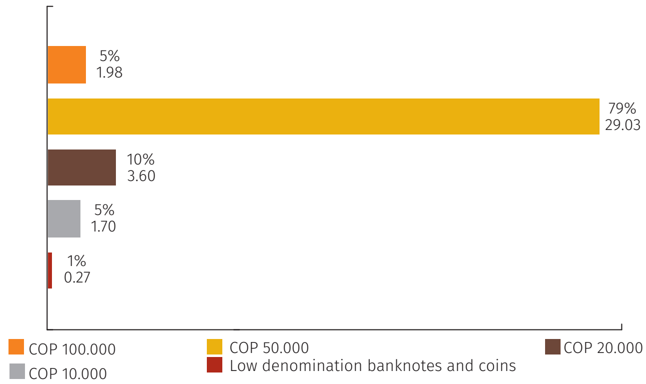
Cash is the main instrument of payment used by individuals as was concluded from the survey on the use of payment instruments carried out by *Banco de la República* in 2017.

91 In this section of the *report*, cash refers to banknotes and coins held by the financial entities, the real sector, and the public.

Banco de la República provides for the needs of the economy for these monetary species through different distribution channels:

1. The requests that commercial banks make to *Banco de la República*. These withdraw mainly high denomination banknotes (10 thousand, 20 thousand, 50 thousand, 100 thousand) from their deposit accounts at the CUD for their ATMs and branch offices. In 2018, banks' requests to *Banco de la República* came to COP 36.6 t of which COP 29 t (79%) corresponded to 50 thousand Peso banknotes (Graph 5.1).
2. The public (which includes the commercial sector, public transportation companies and toll companies, etc.) demands low denomination banknotes (1 thousand, 2 thousand, and 5 thousand) and coins from *Banco de la República* for their commercial transactions. *Banco de la República* receives these requests at their public service windows in the branches with a treasury office and in facilities that operate as extensions of *Banco de la República*'s vaults. *Banco de la República*'s facilities with public service windows are located in Bogotá and in thirteen branches (Armenia, Barranquilla, Bucaramanga, Cali, Cúcuta, Ibagué, Leticia, Medellín, Montería, Pasto, Quibdó, Riohacha, and Villavicencio).
3. The facilities that are extensions of the vaults, in turn, correspond to the service contracted by *Banco de la República* with security transportation companies in some cities around the country.[92] These have mainly concentrated on the provision of low denomination banknotes and coins since they only began to venture into supplying high denomination banknotes starting in 2019.

Graph 5.1
Financial Entities' Requests for Cash from *Banco de la República*, 2018
Participation and value (trillions of pesos) by denomination

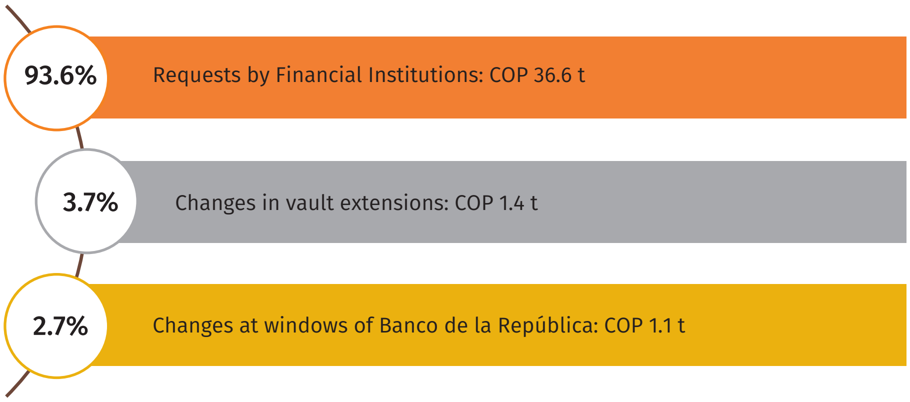


Source: *Banco de la República*.

The provision of small-denomination banknotes and coins is done through exchange transactions, which means that the public is given an amount in banknotes of 1 thousand, 2 thousand, 5 thousand, and coins equivalent to the cash in other denominations or damaged banknotes that is received from them. This method makes it possible to not only meet the needs for low denomination banknotes and coins in a timely manner to facilitate trade transactions but also to facilitate the removal of deteriorated banknotes in a timely fashion.

92 Currently, the facilities that function as vault extensions operate in the following cities: Barranquilla, Bogotá, Bucaramanga, Cali, Cartagena, Florencia, Manizales, Medellín, Neiva, Pereira, Popayán, Santa Marta, Sincelejo and Valledupar.

Diagram 5.5
Cash Outflows from *Banco de la República*, 2018



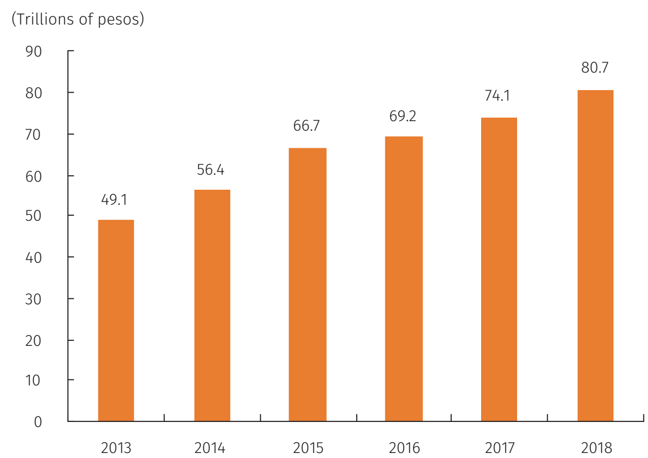
Source: *Banco de la República.*

During 2018, *Banco de la República*'s system of public service windows and vault extension facilities put a total of COP 2.5 t into circulation, which represented 6.0% of the total cash requested from *Banco de la República* (Diagram 5.5).

5.2.1 Change in Cash in Circulation

The net annual ratio between the cash *Banco de la República* provides for economic agents through the previously described channels and the cash that *Banco de la República* receives, whether by means of deposits financial entities make in their deposit account at CUD or through exchange operations, corresponds to the annual growth of cash in circulation. Therefore, the latter is a balance that changes daily and corresponds to banknotes and coins that are held by financial entities, the real sector, and the public.

Graph 5.2
Cash in Circulation at the End of the Year



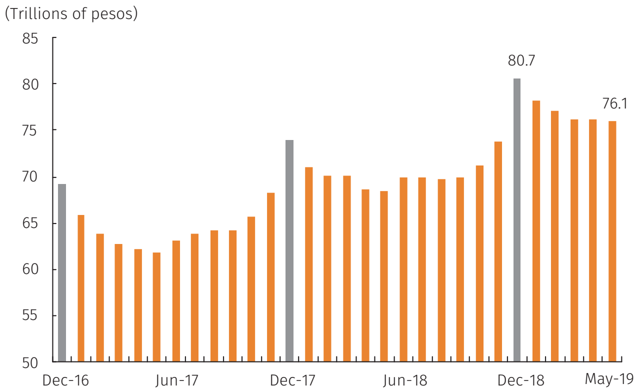
Source: *Banco de la República.*

The value of the monetary species in circulation at the end of 2018 stood at COP 80.7 t (Graph 5.2). The average rates of nominal and real growth of the cash in circulation during the 2013-2018 period stood at 11% and 6.0%, respectively.

Of the total value in circulation (COP 80.7 t) at the end of 2018, COP 64.4 t[93] (80%) were in the possession of the real sector and the public, and the remaining COP 16.3 t were held by credit institutions. During the 2014-2018 period, the average share of cash held by the public at

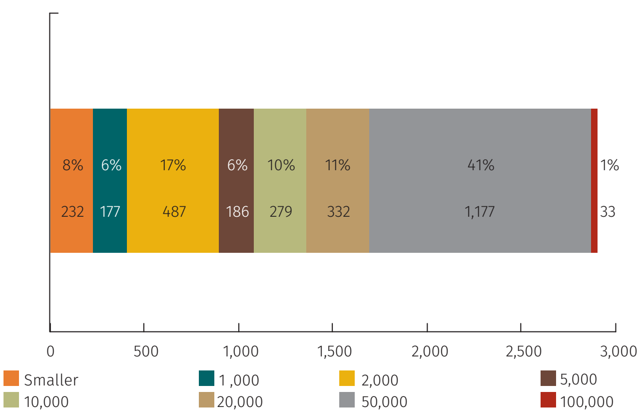
93 Information contained in the *Report on Monetary and Credit Aggregates* published by *Banco de la República*. Calculations done by *Banco de la República* are based on information from Office of the Financial Superintendent.

Graph 5.3
Cash in Circulation at the End of the Month



Source: *Banco de la República.*

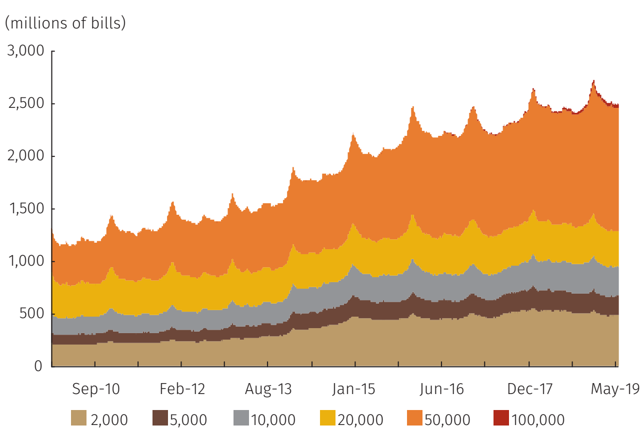
Graph 5.4
Banknotes in Circulation by Denomination
(as of 31 May 2019)
(percentage of participation and millions of banknotes)



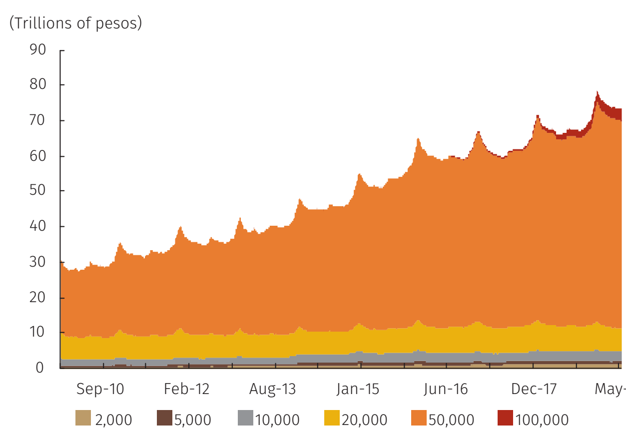
Source: *Banco de la República.*

Graph 5.5
Change in Banknotes in Circulation by Denomination

A. Quantity of Banknotes in Circulation by Denomination



B. Value of Banknotes in Circulation by Denomination



Source: *Banco de la República.*

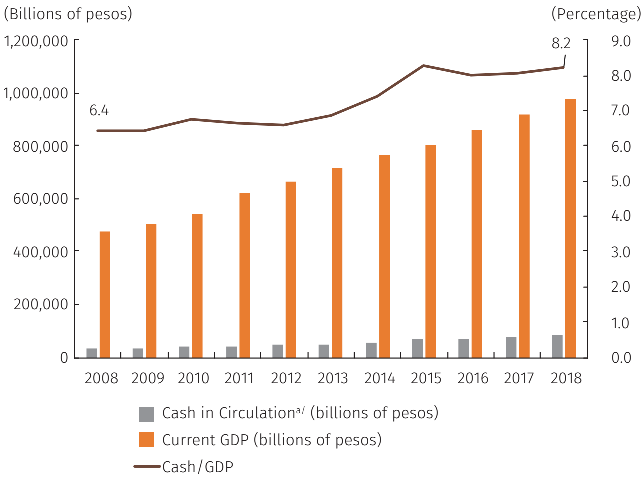
the end of the month has been 79% of the total in circulation which indicates that it is preferred as a medium of payment.

Cash has high seasonal demand variations during certain periods of the year (Graph 5.3) such as, for example, June and December as a result of school vacation in the middle of the year and the Christmas season, respectively. This cash, which goes out into circulation in times of high demand, later returns to *Banco de la República* via deposits in commercial banks. The above becomes evident when the balance in circulation (banknotes and coins) at the close of last May, which came to COP 76.1 t (97% in banknotes and 3.0% in coins) and represented a 5.7% decrease, is compared to the amount in circulation at the end of December 2018.

The quantity of banknotes (number of bills) in circulation at the end of May 2019 came to 2.902 million bills of which 41% were the 50-thousand Peso denomination bill followed by the 2-thousand Peso denomination, which accounted for 17% of the total (Graph 5.4).

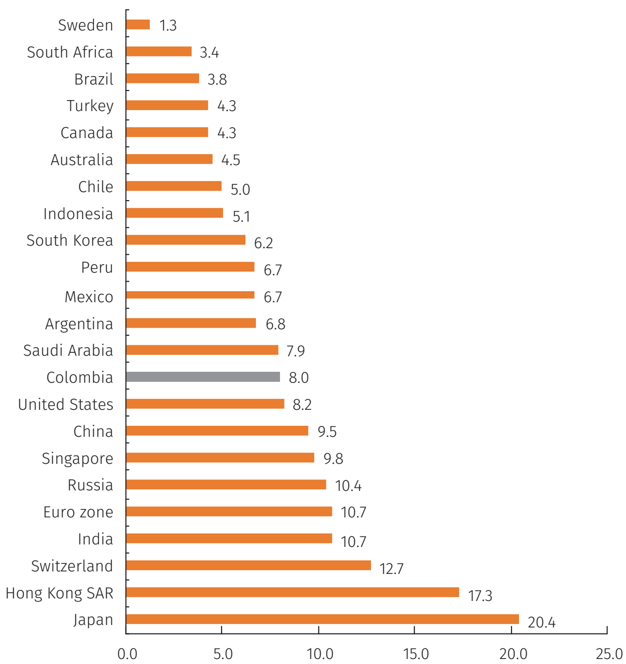
Graph 5.5 shows the evolution in quantity and value of the 2-thousand and 100-thousand Peso denominations in circulation. Here the sustained growth of the 50-thousand Peso banknote, which was the highest denomination in circulation until 2016, can be seen. Considering the fact that, as mentioned, close to 80% of the cash in

Graph 5.6
Value of Cash in Circulation and Cash/GDP



a/ Value of banknotes and coins in circulation at the end of the year
Sources: *Banco de la República* (cash in calculations) and DANE (current GDP), calculations by *Banco de la República.*

Graph 5.7
Ratio Cash/GDP for 2017, several Countries



Sources: Bank for International Settlements for the value of the cash in circulation at the end of the year; for Colombia, Chile, and Peru, calculations by authors based on information published by central banks.

circulation is in the hands of the public, this is probably reflecting not only the preference for it as an instrument of payment but also its use as a store of value.

The share of the value of cash in circulation (banknotes and coins) with respect to the GDP went from 6.4% in 2008 to 8.2% in 2018 (Graph 5.6).

This share places Colombia at a mid-point position with respect to other countries, as can be seen on Graph 5.7, where the contrast in the cash/GDP ratio at the end of 2017 is shown.

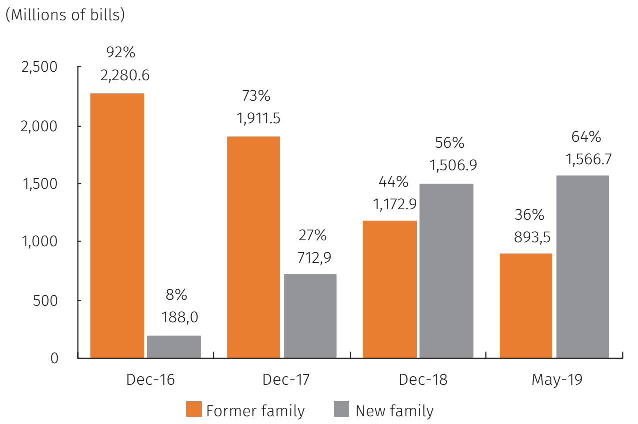
5.2.2 New family of banknotes

In 2016, *Banco de la República* put a new family of banknotes into circulation in order to reinforce their security by incorporating elements of cutting-edge technology that make it difficult to counterfeit them and facilitate recognition by the public. They also introduced the 100 thousand Peso denomination in this new family based on the result of the econometric studies which, among other variables, take into account the average daily value of cash transactions. Because of the change in the country's macroeconomic variables over the last decade and a half, the purchasing power of a 100 thousand Peso banknote in 2016 was similar to that of a 50 thousand Peso banknote in 2000 (when it went into circulation).

In accordance with the plan laid out by the Central Bank, the simultaneous circulation of the two families was estimated to be for a period of three years in order to gradually transition to the new family and incrementally phase out the bills from the old family as these reached the end of their useful life.

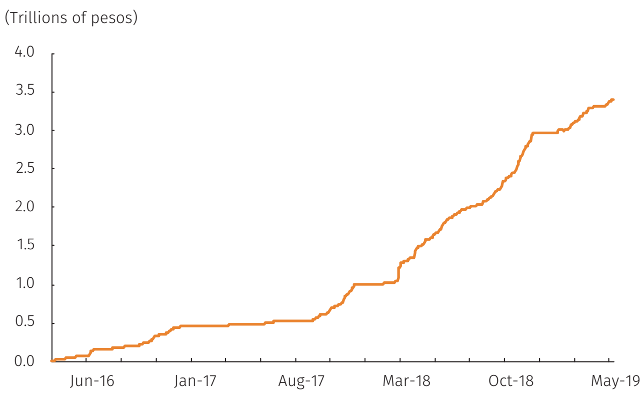
As a result of this gradual change, by May 31 (which is close to the middle of the third year of transition) the share held by the new family of the total number of banknotes in circulation was 64% (Graph 5.8) and it is projected to reach 90% by the end of 2019.

Graph 5.8
Breakdown of Circulation by Families of Banknotes
COP 2,000 to COP 50,000 denominations



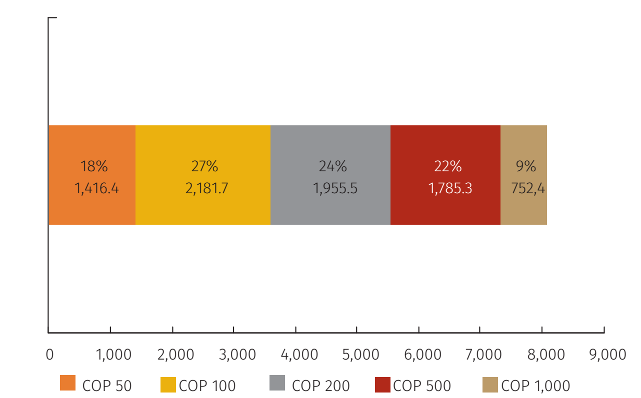
Source: *Banco de la República.*

Graph 5.9
Change in Value in Circulation of COP 100,000 Banknote



Source: *Banco de la República.*

Graph 5.10
Coins in Circulation by Denomination as of 31 May 2019
COP 50 to COP 1,000 denominations
(percentage of participation and millions of bills)



Source: *Banco de la República.*

The 100 thousand-peso banknote has been gaining a share of the value in circulation (Graph 5.9) and, since the end of 2017, it has begun to have a higher rate of acceptance as a result of a higher demand from some financial entities that provide it at the teller windows in their networks of offices. At the end of May, the value of this banknote in circulation was COP 3.3 t, which corresponded to 4.5% of the total value of banknotes in circulation at that date.

5.2.3 Coins in circulation

As of May 31, 2019, the quantity of coins in circulation in denominations from COP 50 to COP 1,000 came to 8.091,3 billion coins (Graph 5.10) which represents COP 2.4 t.

As has been stated, coins are delivered primarily through Banco de la República's public service windows and vault extension facilities and are demanded especially by big box stores, toll companies, and the public transportation sector.

Participation of *Banco de la República* in the Bank for International Settlements

Law 1484 of 12 December 2011 authorized the incorporation of *Banco de la República* (BR) as a shareholder of the Bank for International Settlements (BIS). According to the authorization granted, the Bank purchased 3,000 BIS shares for 65,712,000 special drawing rights (SDR), equivalent to USD 100,978,710, which will remain registered at their acquisition cost in SDRs under the heading "contributions to international organizations and entities." On 5 July 2019, the Bank received SDR 735,000 (USD 1,018,537[1]) as dividends for the accounting year of the BIS ended in March 2019 (from April 2018 to March 2019), which is equal to a 1.11% annual profitability[2].

The incorporation of BR to the BIS has enabled the participation of *Banco de la República's* leaders in periodic meetings at which recent developments and prospects for the global economy and financial markets are examined. These meetings are a forum to exchange views and experiences on particularly relevant issues for central banks, which contributes to better understand the challenges affecting the countries and to implement appropriate policy measures.

Among these spaces, BR's recent inclusion in the Central Bank Governance Group (CBGG), stands out. This group, chaired by Veerathai Santiprabhob, governor of the Bank of Thailand, aims to share experiences regarding the design, operation, and management of central banks in order to promote best practices in these institutions. Since 2018, BR also participates in the Meeting of Small Open Economies, chaired by Sea Guðmundsson, governor of the Central Bank of Iceland.

During 2019, the discussions held at the meetings of Governors of BIS member countries have focused on a variety of topics, such as the possible effects of trade tensions and *bigtech* in emerging economies, codes of conduct at central banks, policies for human resource management and independence of central banks, and the role of these institutions regarding financial inclusion.

BR also participates in various advisory groups coordinated by the BIS, such as the Consultative Council for the Americas (CCA), which is composed of the governors of central banks of the American continent that are members of the BIS[3]. These forums encourage international cooperation and research on topics related to the policies of central banks and other issues that affect macroeconomic and financial stability. Similarly, the Bank is member of the Consultative Group of Directors of Operations (CGDO), a network of representatives of central banks responsible for central banking operations. The annual meeting of this Consultative Group introduced a new working group that seeks to study aspects of exchange-rate intervention in the countries of the region.

In the framework of the activities coordinated by the CCA, BR is actively involved in research projects and conferences in various areas of central banking. Among them, the Scientific Committee (comprising the chief economists of the respective central banks) launched a network to study monetary policy communication issues. At the Annual Research Conference of the CCA on "macro and micro data models"[4] focused on labor markets, local finance, and trade, a researcher from BR presented a paper on the possible effects of a resource misallocation at corporate level on a country's comparative advantage[5].

So far in 2019, the Central Bank has been involved in activities such as: 1) the Emerging Market Deputy Governors' annual meeting of central banks of the BIS, which focused on international reserves and foreign exchange-rate intervention in emerging economies. For this meeting, the Bank prepared a paper on the effectiveness of sterilized intervention

1 This amount corresponds to the exchange rate of the SDR to 2 July 2019, in accordance with the policy used by the BIS.

2 The General Assembly of the BIS approved a dividend of SDR 245 per share. Profitability is equal to the ratio between the dividend received and the subscription price per share (SDR 21,904).

3 Argentina, Brazil, Canada, Chile, Colombia, United States, Mexico, and Perú.

4 The agenda and documents are available at: https://www.bis.org/events/ccaconf2019/agenda.htm

5 Jose Pulido presented the paper "Intra- and inter-Industry misallocation and Comparative Advantage," available at: https://www.bis.org/events/ccaconf2019/colombia.pdf

in Colombia and international reserves, which will be published soon[6]; 2) a seminar on cyber security in central banking; 3) a lecture on the administration of reserves in the framework of the expansion of activities of the BIS Representative Office in the Americas, which will be in charge of an area for the management of international reserves; and 4) the BIS Annual Conference held on 28 June in Zurich on digital economy and financial innovation. Finally, BR hosted the BIS and the Center for Latin American Monetary Studies (CEMLA, in Spanish) Roundtable, where topics such as the appropriate levels of reserves, exchange-rate intervention, and management of international reserves in central banks in Latin America were discussed.

6 The Bank contributed with this conference thanks to H. Vargas, P. Cardozo, and M. Villamizar (2019). "International Reserves and Effectiveness of Sterilized FX intervention in Colombia."

Appendix
Management Policy for the International Reserve Investment Portfolio

According to the best practices' recommendations, reserves management should endeavor to: 1) have enough liquidity in foreign currency, 2) have strict policies regarding the management of the different risks that the operations face, and 3) generate reasonable, risk-adjusted returns subject to liquidity and other risk restrictions.[1] How these criteria are applied in the management of Colombia's international reserves is explained below.

1. Risk Management Policy

Banco de la República has a framework for risk management that identifies and assesses the risks to which their operations are exposed in order to keep them low. Some of the main policies for risk management are as follows:

Liquidity risk: investing in financial assets that are permanently in demand on the secondary market in order to have the ability to turn reserve assets into cash quickly and at low cost. The portfolio is also divided into tranches so that some of them can be liquidated more rapidly.

Market risk: types of eligible assets and strict limits on investment are used to lower the sensitivity of the value of the portfolio to interest rate movements in the market.

Credit risk: investments are only allowed in assets with high credit ratings by major rating agencies given that these investments have a low probability of defaulting on their payments. The minimum credit rating for governments and entities related to governments is A-. Regarding private issuers, the minimum rating is A+ for exposure to individual issuers, and BBB- (investment grade) when the investment is done through funds. Historically, the percentage of issuers with these ratings that have defaulted on their payments the year after is close to 0%. If the rating of an issuer that the portfolio has invested in directly drops below the minimum allowed, the exposure is liquidated within a short period of time. Moreover, the maximum exposures are limited by sector and issuer in order to limit the impact of credit events on the value of the portfolio.

Foreign exchange risk: market prices of currencies are highly volatile and frequently don't have defined long-term trends. This makes it very difficult to reliably predict their behavior. *Banco de la República*, like the majority of the central banks around the world, has currencies other than the US dollar as part of their currency composition in order to cover the country's payments abroad since these are made in many currencies. The impact of the foreign exchange risk is mitigated by the "foreign exchange adjustment" equity account that is dealt with under Decree 2520/1993 number 4 of article 62 (Statutes of *Banco de la República*). This account rises during those years in which the reserve currencies become stronger with respect to the Colombian peso and decline in those years when they weaken. Therefore, the variations in the currencies do not have any impact on the consolidated profit or loss statement.

Counterparty risk: In order to reduce the exposure to counterparties, transactions are settled by payment upon delivery mechanisms. The purpose for these mechanisms is to make the exchange of papers for cash or exchange of payments in a foreign currency exchange transaction simultaneous in order to eliminate the possibility of a default by one of the parties to the trade. In addition, counterparties in fixed income trading are required to be market makers and the counterparties in currency trading are required to have high credit ratings. The foreign currency exchange counterparties must have a minimum credit rating of A- if they have an ISDA framework contract.[2] If they do not have said contract, the minimum rating is A+.

1 One example of good practice in this respect can be found in the document "Guidelines for the Management of International Reserves," produced by the International Monetary Fund, which can be consulted at this link http://www.imf.org/external/np/sec/pr/2013/pr13138.htm

2 The purpose of the framework contract established by the International Swaps and Derivatives Association (ISDA) is to establish the terms and conditions that govern over-the-counter derivatives traded between entities.

2. Tranches of the Investment Portfolio

The investment portfolio is made up of three tranches: the short term, the medium term and the gold tranche.

The purpose of the short-term tranche is to cover potential liquidity needs from the reserves in twelve months. Currently, this tranche consists of *working capital* and a passive portfolio. The working capital is the portfolio into which the funds that come from intervention in the exchange market are placed and their investments are concentrated in very short-term assets denominated in dollars. Given that the objective of this tranche is to provide immediate liquidity for intervention in the foreign exchange market, the working capital is concentrated in deposits and investments that can be liquidated in one day at a very low cost.

The passive portfolio is the main component in the short-term tranche. This portfolio is characterized by its investment in a larger number of instruments and having an investment horizon and profile of expected return that are greater than the working capital portfolio. This under the restriction that the expected return on the portfolio, excluding the foreign exchange component, must be positive in 12 months with a confidence level of 95% and that the expected value of a possible loss must not exceed 1.0%. The passive portfolio is invested in multiple currencies in order to replicate the behavior of the outflows of the country's balance of payments, and seeks a return similar to that of the benchmark index.[3] As of June 2019, the value of the short-term tranche was USD 32.483 b, of which USD 1.157,1 b corresponded to working capital and USD 31.326 b to the debt portfolio.

The medium-term tranche is implemented with an investment horizon and a profile of expected return that is higher than the short-term tranche. The goal of the medium-term tranche is to maximize the risk-adjusted return in US dollars, the currency in which the international reserves are valued, for the portion of the portfolio that is less likely to be used within a twelve month period. When there is a medium-term tranche, an effort is made to raise the expected return of the international reserves in the long term while maintaining a conservative portfolio. Thus, the objective is to maximize its return, subject to the restriction that the expected return in US dollars for this tranche must be positive with a 95% probability over a horizon of three years and that the expected value of a possible loss should not exceed 1.0%. Currently, the majority of the medium-term tranche consists of actively managed portfolios that seek to generate a return that is higher than the benchmark index.[4] As of June 2019, the value of the medium-term tranche came to USD 16.229,8 b.

The last tranche corresponds to the international reserve investments in certified physical gold that can be easily traded on international markets. Gold helps to diversify the investment portfolio since its price behaves differently than prices of the securities which the short- and medium-term tranches are invested in. As of June 2019, the market value of the gold in the reserves came to USD 859.2 m.

The securities in the investment portfolio are deposited in financial institutions known as custodians.[5] The entities that provide custody service for the securities in the international reserves are the New York Federal Reserve, Euroclear, JP Morgan Chase, and State Street. The investments in physical gold are in the custody of the Bank of England.

3. Benchmark indices

To manage the reserves investment portfolio, *Banco de la República* has defined theoretical portfolios or benchmark indices.[6] Different indices are built for the short-term and for the medium-term tranches in order to reflect each of their investment goals. The indices serve as a reference framework to measure the management of each one of the portfolios. The way the two benchmark indices are built is explained below.

In order to build the short-term tranche index,[7] firstly a target currency composition is defined. The target currency composition for this index are intended to replicate the behavior of the outflows from the country's balance of payments.[8] The goal is for the currencies other than the US dollar to appreciate during periods in which the dollar value of the country's payments abroad increases, which would mean that the value of these foreign currencies

3 The concept and breakdown of the benchmark index will be explained in the next subsection.

4 The section, "External Management Program," explains that one of the eight active portfolios is managed directly by *Banco de la República* and the rest by external managers. An explanation on how this program functions can also be found there.

5 Currently, the minimum credit rating for the trustees is A-.

6 In the capital markets, a benchmark index refers to a basket of assets with predetermined weights in accordance with certain rules that define their components. In general, an index tries to comprehensively duplicate the trend of a financial asset market and serves as an indicator of the performance of other investment portfolios in the same market. For example, some of the best-known benchmark indices on the stock markets are the ColCap in Colombia, or the S&P500 and the Dow Jones in the United States (the Bank uses fixed income market indices only).

7 This benchmark index does not apply to working capital since there are no benchmark portfolios that make it possible to properly measure the instruments allowed in this portfolio.

8 See the box, "International-reserve Portfolio's New Foreign Exchange Components in the March 2012 *Report to Congress* for a detailed explanation of the methodology for the foreign exchange components of the reserves.

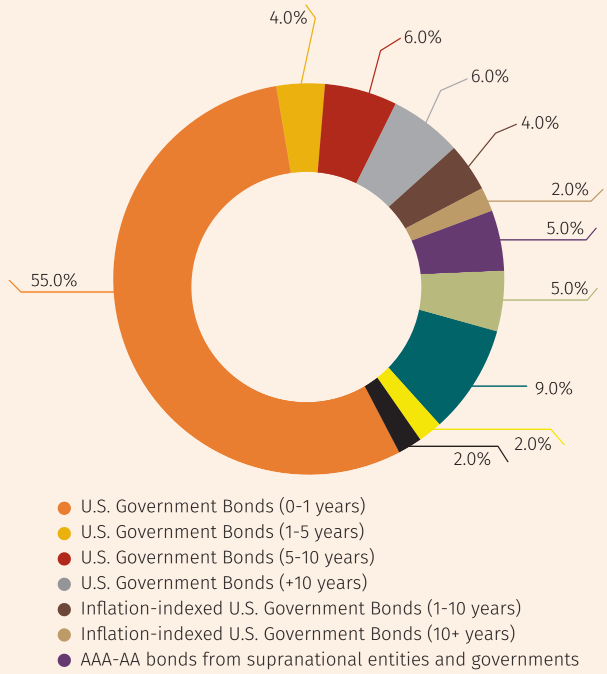
could decline with respect to the US dollar during periods in which the dollar value of the foreign payments decreases. As of June 28, 2019, the currency composition of the short-term tranche index was 82% US dollars, 9.0% Australian dollars, 5.0% Canadian dollars, 2.0% New Zealand dollars, and 2.0% Norwegian krone.[9] Once the currency composition is defined, two restrictions are included: the restriction of having positive returns over a horizon of twelve months with a 95% level of confidence excluding the exchange rate effect and the restriction that the expected value of a possible loss over a horizon of twelve months don't exceeds 1.0% of the tranche value. Based on the restrictions described, what is sought is a portfolio that maximizes the risk adjusted return.[10]

A similar procedure is followed to build the index for the medium-term tranche, with two basic differences. First of all, no currency exchange component restriction is imposed given that the goal of this tranche is to maximize the risk-adjusted return in US dollars. Secondly, the restriction of having positive returns at a 95% confidence level and that the expected value of a possible loss don't exceeds 1.0% of the tranche value is defined for a longer horizon (three years) in order to reflect the lower probability of using the funds in this tranche in the short term. When building a portfolio that maximizes risk-adjusted profitability in dollars, investments in currencies other than the dollar are allowed.

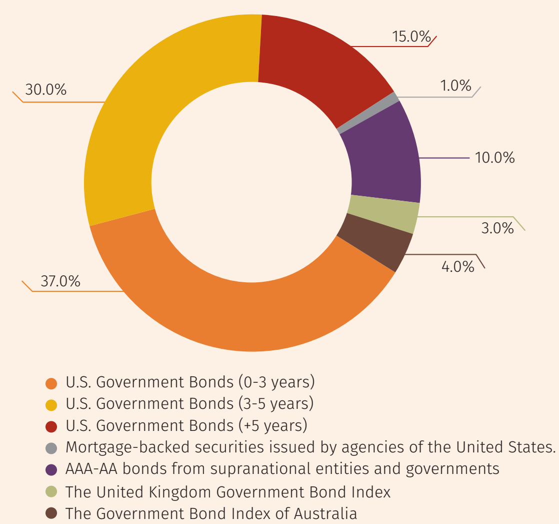
Graph A shows the benchmark indices approved for the short- and medium-term tranches.[11] The level of market risk for the two portfolios is low. The modified duration of the short-term tranche index is 2.77 and the one for the medium-term tranche is 4.35.[12]

Graph A
Breakdown of the Benchmark Index
(information as of Friday, June 28, 2019

1. Short-term Tranche



2. Medium-term Tranche



Note: Merril Lynch, along with others, builds indices that make it possible to measure the performance of different sectors of the fixed income market. The government bond indices include all of the instruments that comply with the minimum conditions of size and liquidity. Their rules are a matter of public record.
Source: *Banco de la República.*

4. External Management Program

Banco de la República manages the short-term tranche, a portion of the medium-term tranche, and the gold tranche directly (USD 35.335,6 b or 70.17% of the investment

9 The euro is not part of the group of currencies that the benchmark index is made up of. The reason why it is not in this group is because both the benchmark interest rates of the ECB and the rates for the main short-term sovereign bonds issued in euros are negative.

10 The detailed description of the methodology for building the benchmark index is located in the Box, "Technical Explanation of the Methodology for Building the Benchmark Index," in the March 2013 *Management Report on the International Reserves.*

11 The indices published by Merrill Lynch are used for the different sectors the benchmark index consists of.

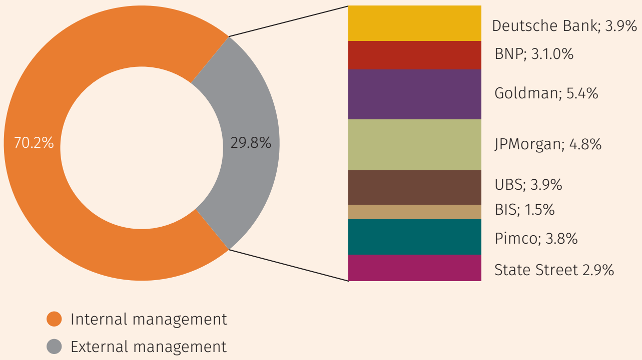
12 The modified duration is defined as a percentage decrease (increase) in the value of the portfolio with respect to a 1.0% increase (decrease) in all of the interest rates.

portfolio). The remaining medium-term tranche funds are managed by external portfolio managers.

At the end of June 2019, the external management program came to USD 15.019,5 b (29.83% of the investment portfolio). The reason for using external managers is to generate returns that are better than the benchmark index and train Bank officials in the management of international investments. The firms chosen to participate in the program are highly capable in the analysis of financial markets and have a sophisticated infrastructure that can be taken advantage of in order to define investment strategies.

The private companies that participate in the external management program currently are: DWS GmbH, BNP Paribas Asset Management USA, Inc., Goldman Sachs Asset Management, L.P., J.P. Morgan Asset Management (UK) Limited, Pacific Investment Management Company LLC, State Street Global Advisors Trust Company, and UBS Asset Management (Americas) Inc., (Graph B). The private firms that participate in the program are chosen through a competitive bidding process and continuously evaluated. The funds that these entities manage are in *Banco de la República's* custody accounts and the administrators' contracts can be canceled whenever considered necessary. Based on the results each administrator obtains beginning with the starting date of their contract, the amount managed will be modified or their continuing to participate in the program will be reviewed. The investments in funds managed by the BIS are also considered part of the external management program. Only central banks and multilateral entities have access to these funds and the purpose for them is to invest in the assets that are appropriate for global international reserves in an effort by different countries to work cooperatively.[13]

Graph B
Breakdown of the Investment Portfolio
(information as of Friday, June 28, 2019



Note: approximate values due to rounding.
Source: *Banco de la República*.

13 At present, the investments are made in a fund of inflation-indexed securities issued by the Treasury of the United States (USD 114.5 m), a fund of securities issued by the government of China (USD 259.4 m), a fund of securities issued by the government of Korea (USD 105.2 m), and a fund of securities issued by non-financial corporations (USD 261.7 m).

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