REPORT OF THE **BOARD OF DIRECTORS** TO **CONGRESS**

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REPORT OF THE **BOARD OF DIRECTORS** TO **CONGRESS**

Banco de la República
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This update contains some ortho-typographic and formal corrections that do not alter the information contained in the previous version.

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* This report reviews the actions of *Banco de la República* carried out with the participation of Juan José Echavarría, Governor as of December 2020, Ana Fernanda Maiguashca, Gerardo Hernandez, and Arturo Galindo, members of the Board of Directors as of February 2021.

Bogotá, 30 March 2021.

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

Dear Sirs:

In compliance with Act of Congress 31/1992, Article 5, the Board of Directors of *Banco de la República* hereby submits to the Congress of the Republic of Colombia a detailed report on the measures that *Banco de la República* has taken in the emergency situation generated by Covid-19 and presents the macroeconomic results for 2020 and the outlook for 2021 for its consideration. Furthermore, the breakdown of the Foreign Reserves and their performance, the financial position of the Bank and its forecasts, and the Bank's Cultural management are described.

Sincerely,

L Villar.

Leonardo Villar Gómez
Governor

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#MuseoEnTuCasa is an activity summoned by the Art and Collections Unit on Instagram @banrepcultural.

Here, the Rodríguez-Tobón family enacts the work titled La Familia (“The Family”), by Colombian artist Fernando Botero, which makes part of *Banco de la República*’s art collection.

Photo credits:
Left: Botero Museum, Banco de la República.
Right: Irene Tobón Restrepo.

Introduction

After a year, the Covid-19 pandemic continues to cause serious damage to the economy and society, affecting the low-income levels most severely. In fact, part of the progress in reducing poverty that the country had achieved in the last two decades has been lost. The governments and central banks around the world, including Colombia, have made funds available to ensure that the productive apparatus continues to work, and the social costs of the crisis are mitigated. Likewise, science has employed all its research capacity. These efforts have prevented an even greater collapse and are beginning to bear fruit. During the second half of 2020, global economic activity showed signs of recovery and unemployment began to decline. Public policies in support of companies helped preserve the business fabric, although many of them closed or went bankrupt. Moreover, in less than a year, effective and safe vaccines have been developed and with them, the vaccination process is advancing in many countries, including Colombia. All of this lays the groundwork for an economic and social recovery that, unfortunately, will probably have ups and downs and could take several years. It will certainly require active international cooperation and economic reforms to restore macroeconomic balances and long-term growth. The humanitarian trauma left by this pandemic will last for a long time and will require the support of the entire society.

Just two years prior to its 100th anniversary, *Banco de la República* (the Central Bank of Colombia) faced the greatest challenge in its history with the Covid-19 pandemic. While the various crises of the past three decades – including the global financial crisis of 2008 and the one triggered by the oil price collapse in 2014 – were difficult and costly, their origins were entirely economic. This made them more predictable and to some degree easier to mitigate. In contrast with the above, the current crisis is not only more intense with respect to its effects on growth and employment but in origin, it is health-related rather than economic. The latter makes it unpredictable with respect to its intensity and duration, and this makes it difficult to handle. The measures taken by *Banco de la República* and the government have sought to mitigate the economic effects of the pandemic but do not constitute a solution to the source of the problem which is eminently health related. On the contrary, the health measures taken to deal with the pandemic have evidently accentuated the short- and medium-term recessionary effect as occurred in Colombia during the first year of the pandemic even though they will have a beneficial economic effect in the long term.

From the very beginning of the pandemic, the Board of Directors of *Banco de la República* (BDBR) understood the exceptional nature of the crisis that was beginning and the danger that it meant for the country's economic stability. That is why the Board did not hesitate to act quickly and decisively even amid the great uncertainty and volatility caused by the arrival of the virus in Colombia. The BDBR knew that the financial sector had the strength to deal with a shock of that magnitude due to the adoption of macroprudential measures in recent years and the strict supervision of the financial entities that has been done in compliance with international standards like those of Basel III. This enabled the BDBR to concentrate their efforts on three basic objectives: 1) protect the payment system; 2) stabilize key markets such as foreign exchange and public and private debt securities that have been subjected to intense pressure; and 3) the creation of the conditions needed for credit to continue to flow into the economy.

In line with these objectives, the BDBR undertook the necessary actions to give the market ample liquidity in pesos in order to provide financial intermediaries with enough funding to maintain a suitable supply of credit for households and businesses. This injection of liquidity also helped stabilize public and private debt markets and ensure the smooth functioning of the payment system. To reduce pressure on the foreign exchange market, in turn, intervention mechanisms were introduced that facilitated hedging and expanded liquidity in dollars without affecting the amount in the foreign reserves. At the same time, the BDBR started to progressively cut the policy interest rate and took it from a starting level of 4.25% in March 2020 to one of 1.75% in September, its lowest historical nominal level, which is equivalent to a real interest rate (*ex ante*) of -1.0% when inflation expectations for 2021 are discounted. The precise set of measures that the BDBR adopted to meet the goals described are discussed later in this summary and explained in detail in section 2.2 of this report.

A year after the pandemic started, it is possible to confirm that the decisions made at the time by the BDBR contributed to maintaining the normal functioning of the financial markets. The supply of credit continued to flow into the economy and alleviated the initial pressure on the public and private debt markets. The foreign exchange market also stabilized largely due to the transactions carried out by *Banco de la República* and the confidence of the agents in the support offered by the appropriate level of foreign reserves. The pronounced growth of the monetary aggregates (base and M3) reflected the greater preference for liquidity which was served in a timely manner by *Banco de la República*. As can be seen in Box 1 in this report, the reductions in the policy interest rate were rapidly transmitted to the financial system's interest rates on deposits and lending rates. This contributed to restore the volume of credit disbursements which, at the end of 2020, were similar to those registered before the pandemic. These lower interest rates will continue to drive the economy's recovery in 2021.

Going forward, the ability of *Banco de la República*'s monetary policy to support the recovery of economic activity and employment depends to a large degree on developments on the foreign and fiscal fronts. Specifically, the combination of an environment of sufficient liquidity and low financing needs supports macroeconomic stability, facilitates monetary policy management, and allows for its effects to be transmitted more efficiently.

The greater need for public spending to address the consequences of the pandemic and the lower tax revenue caused by the slowdown in economic activity has deteriorated fiscal positions worldwide. In the case of Colombia, public debt rose substantially in 2020 and has acquired a momentum that, if not reversed, will jeopardize the country's ability to meet it. This reality is a threat to the public sector's access to both local and foreign financing at a time when this access is indispensable for the normal implementation of the national budget.

Thus, the ability of the Bank to continue to support the recovery is closely associated with the approval of the fiscal adjustment program that the government will soon put before Congress.

This report is divided into five parts. After this first section containing the executive summary, the second will proceed with a detailed discussion of the macroeconomic environment and *Banco de la República*'s decisions in view of the Covid-19 crisis. There the effects of the health shock on Colombia are explained and the logic and characteristics of the measures taken by the BDBR to deal with the economic effects of the pandemic are delved into. The international macroeconomic environment is also discussed and the change in the country's main macroeconomic variables such as the financial markets, economic activity and the labor market, the balance of payments, and inflation are described. The rest of the report concentrates on issues inherent to the management of *Banco de la República*. The first of these, related to the management of the foreign reserves, their composition, profitability, and the measures adopted to increase the country's international liquidity are analyzed in the third section. *Banco de la República*'s financial statement is presented in the fourth section. A report on *Banco de* *la República's* cultural management, which the BDBR considers very important, is included in the fifth section. Furthermore, this report includes shaded sections and boxes that address topics that must be presented separately due to their technical content. Among them, Box 1 on the transmission of the monetary policy interest rate to the market interest rates and Box 2 on the flexible credit line (FCL) with the International Monetary Fund (IMF) stand out.

1.1. The International Economic Shock

The rapid expansion of Covid-19 from China to Europe, Asia, and the United States during February 2020 together with the subsequent social distancing measures that began to be introduced in various countries alarmed the international markets. The main stock markets around the world saw sudden drops. The risk indicators deteriorated and the prices of oil and other raw materials plummeted. The extension of the lockdown around the world led to a sharp reduction in international trade in goods and services, and an effect on global value chains. The figures on economic activity for the second quarter of the year that were released later in the year showed the magnitude of the initial impact of the pandemic on the global economy. The economy of the United States contracted -9.0% and in the Euro zone, it contracted -14.7%. The main economies in the Latin American region registered significant declines in the Gross Domestic Product (GDP) during the same period, thus: Peru, -30%; Mexico, -18.6%; Chile, -14%; Brazil, -10.9%; and Colombia, -15.6%.

Central banks around the world reacted strongly to the first signs of economic deterioration caused by the pandemic through significant interest-rate cuts and strong injections of liquidity. Towards mid-July, this massive response had partially reversed the initial deterioration in financial conditions. The stock markets stopped declining and showed significant recoveries in several countries. The risk premia were corrected, and the volatility indices of the international financial markets showed substantial improvements. These measures, together with fiscal policy responses and the relaxing of the lockdowns in some countries helped to reassure the markets and laid the groundwork for the start of a recovery.

In the third quarter of 2020, global output registered a positive change in its trend from the steep decline that occurred in the second quarter. The fiscal and monetary policy responses and the relaxation of lockdown measures stimulated aggregate demand and economic activity, and this was also reflected in increased world trade. Nevertheless, towards the end of the year, this rebound lost strength, especially in Europe, due to the need to impose new lockdowns to contain another outbreak of the virus and appearance of new strains.

In this context, the IMF estimates that the global economy contracted 3.5% in 2020 while the advanced economies fell 4.9% and the emerging and developing economies fell at a more moderate rate of 2.4% due to the 2.3% growth of the Chinese economy. The IMF has estimated a 7.4% reduction for Latin America and the Caribbean in 2020. This is the sharpest decline among all the groups of countries considered. The World Bank, in turn, estimates that the contraction in global output in 2020 was 4.3%, which is higher than what the IMF considered, and the drop in Latin America and the Caribbean was 6.9%. Last of all, for Colombia's trading partners, the technical staff at the Bank has calculated a drop of close to 7.0% which is more accentuated than what occurred in the world economy. This is explained by the sharp reduction in the GDP of important trading partners such as Peru (-11.2%), Mexico (-8.5%), Ecuador (-8%), and the euro area (-6.8%).

Since the collapse of economic activity caused by the Covid-19 pandemic, all forecasts point to a significant recovery in 2021 and 2022 although this is subject to a high degree of uncertainty. For example, in their January review, the IMF projected 5.5% growth in the global economy in 2021 and 4.2% in 2022. This forecast considers the stimulus to global economic activity that could be generated by progress in vaccination and the support policies announced in large economies. Favored by supply and demand conditions, in turn, the price of crude oil has reached pre-Covid levels and exceeded the expectations of the markets, analysts, and international organizations. Based on the above, the World Bank and the Organization for Economic Cooperation and Development (OECD) agree with the IMF in anticipating a return to world growth of about 4.0% in 2021 and 3.8% in 2022.

The pace of recovery may vary between countries depending on factors such as vaccination coverage, the scope of support policies, and the structural characteristics of the countries when they entered the crisis. The IMF forecasts growth of 4.1% for Latin America and the Caribbean in 2021 and 2.9% in 2022, and for Colombia, it forecasts 4.6% in 2021 and 3.7% in 2022. The World Bank's forecasts for the region are similar as they predict a growth of 3.7% in 2021 and 2.8% in 2022.

The uncertainty surrounding these forecasts is significant. On the positive side, success in the vaccination process which would require accelerating vaccination production and improving its distribution would increase expectations of a rapid end to the pandemic and boost confidence in business owners and consumers and thereby boost final demand, income, and employment. However, less than anticipated growth could occur if the spread of the virus is not contained due to the inability to ensure mass access to the vaccine and the emergence of new strains that require lockdowns or other restrictions. The prolonged economic weakening could accelerate business failures, especially if government support is prematurely withdrawn. Financial conditions could become more restrictive for countries that are highly indebted and social tensions could be exacerbated by high unemployment and greater inequality. All of that could affect the expectations of a rapid end to the crisis and decimate the confidence of the economic agents.

1.2 The Shock to the Colombian Economy and *Banco de la República's* Measures

In Colombia, just as in many countries, the Covid-19 pandemic resulted in an unprecedented drop of economic activity due to the lockdowns, quarantines, and other restrictions on mobility that were indispensable to containing the progress of the disease. Added to this was the very fear of contagion that induced many people to stop interacting and thus interrupted their economic and social activities. The sharp fall in mobility caused by both the restrictions imposed and the preventive behavior of the population produced two simultaneous phenomena. First, a collapse in domestic demand resulting from the sharp contraction in household consumption and investment and, second, a decline in supply, mainly for those productive sectors that require close social interaction. Added to this was a sharp decline in terms of trade due to the drop in oil and coal prices both of which are an important part of our export basket. This precipitated the fall in the country's exports which had already been affected by the collapse of world demand. These shocks tended to reinforce each other as they brought about a fall in national income, an increase in unemployment, and the deterioration of consumer and business confidence.

It was thus that the shock of the pandemic initially produced a widespread paralysis of economic activity that the country had never before experienced. Unlike natural disasters that paralyze a region but have a very limited effect at the national level, what began to happen with this emergency was an unusual phenomenon that jeopardized the country's economic stability and required an immediate and forceful response from both the national government and *Banco de la República*.

And thus, it was that the BDBR began to act even before the first case of coronavirus was confirmed in Colombia. The BDBR counted on the financial system's soundness and, on that base, they decided to draw up the above-mentioned specific objectives that were essential for the operation of the country's economic system in the short and medium term. The precise nature of the objectives that were set favored the effectiveness of the measures adopted as could be demonstrated later. Succinctly, *Banco de la República*'s response included the following set of measures which will be discussed extensively in Section 2.2 of this report. 1) extension of the eligible amounts, counterparties, terms, and securities of the Bank's transitory expansion operations (repos). To this end, access to liquidity resources was given to a larger number of entities and the use of private debt securities and securities from portfolio operations in addition to the usual public debt securities as collateral was authorized. 2) permanent liquidity was injected into the economy through the definitive purchases of public debt securities and securities issued by credit institutions. These transactions were designed to provide liquidity for prolonged periods and reduce the uncertainty of the financial intermediaries about their funding. 3) the average reserve requirements were lowered from 7.0% to 5.0% in order to permanently free up resources for the economy and to strengthen the incentives for financial intermediation by reducing its costs. 4) modern mechanisms of intervention were used on the foreign exchange market to facilitate hedging and expand liquidity in dollars without affecting the amount in the foreign reserves.[1] 5) the policy interest rate was reduced 250 basis points (bp) from an initial level of 4.25% in February to 1.75% in September 2020 and thus placing it at a historic low. 6) international liquidity was increased through the direct purchase of foreign currency from the national government, the renewal and expansion of the flexible credit line with the IMF, and access to the Repos Facility (FIMA) offered by the Federal Reserve.

1.3 Economic Activity

As was noted, the social distancing measures to control the spread of the virus that were implemented in the country starting the last ten days of March 2020 and people's fear of becoming infected caused a sudden halt to economic activity which had been normal until then. Thus, the growth of the GDP for the first quarter was 0.1%, although during January and February economic performance had been satisfactory with an annual growth of 3.7% and 3.0% respectively according to the economic monitoring index (EMI, ISE by its acronym in Spanish) published by DANE (seasonally adjusted and corrected for calendar effects, sace).

But it was in the second quarter that the collapse of the economy became apparent with an annual -15.6% contraction of the GDP.[2] With this result, the growth in the first half of the year stood at -7.8%. Other economies in the region and some OECD countries suffered similar contractions during this period, and this showed the severity of the economic shock that the Covid-19 pandemic was beginning to cause.

During the third quarter of 2020, there was an improvement in the Colombian economy's performance. This was made possible by the relaxing of the restrictions on mobility and the first effects of the measures taken by the government and *Banco de la República* to deal with the crisis. Thus, after bottoming out in

1 These mechanisms were: 1) forward sales of dollars with financial compliance at one month to extend coverage against the risk of a sharp depreciation of the peso, and 2) dollar swaps at two-months to stabilize the foreign exchange market and provide liquidity in dollars. How they work is explained in the body of the report.

2 Calculated for the sace series.

the second quarter, DANE reported that the contraction of the GDP during the third quarter had been reduced to -8.3% per year which was equivalent to an annualized quarterly change of 43.1% for the sace series. This result showed that even amid the pandemic, economic activity was beginning to show signs of recovery. The trend towards recovery seen in the third quarter continued into the last quarter of the year when the annual contraction of output dropped to -3.5%. This is equivalent to an annualized quarterly change of 26.5%. Therefore, during the second half of 2020, the change in the GDP compared to the same period in 2019 was -5.9%, a smaller decline than had been registered in the first half of the year. This showed evidence of a significant reversal of the cluster of negative economic effects from the beginning of the pandemic.

The pattern of economic activity in Colombia shows a V-shaped trend throughout 2020 and is similar to that of many other countries. This means that the economy suffered a dramatic decline during the first months of the pandemic followed by a marked recovery although statistics show that it still has not reached the pre-pandemic level. The main question is whether the recovery will continue, or will new outbreaks occur like the one that happened this January which could determine a W-shaped economic pattern during 2021. This risk introduces a high degree of uncertainty about the performance of the Colombian economy this year. That is why the 4.5% growth forecast for 2021 prepared by the technical staff is framed within a relatively wide range: from 2.0% to 6.0%. For this forecast, the effects of the more restrictive social distancing measures required in January and part of February were taken into account, but new significant outbreaks of the disease for the remainder of the year were not considered. In addition, it is assumed that Covid-19 vaccination targets proposed by the national government are met.

In mid-February 2021, DANE reported that Colombia's GDP had fallen 6.8% in 2020. This decline was slightly less than what the technical staff at *Banco de la República* and the IMF had anticipated (-7.2% and -7.9% respectively). Even so, it is the largest recession registered for the Colombian economy in modern times. Moreover, this contraction is lower than the one estimated by the IMF for Latin America and the Caribbean in 2020 (-7.4%) but is more pronounced than the one that occurred in the world economy (-3.5%) and to the OECD countries (-4.9%).

On the demand side, the contraction of the GDP in 2020 resulted from a collapse in household consumption that could not be offset by government consumption due to which total consumption was down -4.1%. Added to this was a sharp contraction in gross capital formation (-21.2%) induced by the decline in its main components such as housing, other buildings and structures, and machinery and equipment. Thus, domestic demand, which is the total of consumption and investment, contracted -7.6% in 2020. The effect of the decrease in domestic demand on the GDP was partially offset by an improvement in net foreign demand since the drop in imports was sharper than what was registered for exports.

From the point of view of the branches of production, the sectors with the largest contractions in 2020 were construction (both buildings and public works), mining and quarrying, commerce, repairs, transportation, and housing, and artistic and recreational activities. In contrast, the agricultural sector, financial activities, real estate activities, and public administration, education, and health grew in 2020.

1.4 Employment

The contraction of the gross domestic product in Colombia in 2020 came mainly from those branches that are labor-intensive, such as construction, commerce, manufacturing, and arts and recreation which translated into a historic increase in the unemployment rate, both nationally and in the country's thirteen main urban areas.

The most critical moment for the labor market occurred in April when about a quarter of the jobs existing before the crisis were lost. As a result, the unemployment rate (UR) that month reported by DANE came to 19.9% for the national total and to 23.8% for the thirteen cities and was approximately double the corresponding levels of unemployment seen in April 2019 (10.3% and 11.1% respectively).

As the social distancing measures began to relax, new jobs were created at a faster pace than the growth in labor participation. This was reflected in successive decreases in unemployment during the second half of the year that led, in December, to the UR standing at 14.3% nationwide and at 16.4% for the thirteen major cities, based on DANE's seasonally adjusted monthly series. The number of employed people in December indicated that close to 77% of the jobs lost in the country between March and April had been recovered by the end of the year (4.7 million jobs). Even so, the number of people employed continued to be 1.4 million lower than in the pre-pandemic period. In the case of the thirteen major cities, about 70% (2.3 million) of the jobs lost between March and April had been recovered by the end of the year. Nevertheless, this recovery was not uniform across population groups and types of employment, which accentuated gender disparities and introduced changes in the composition of employment.

With respect to change by population groups, the seasonally adjusted series shows that the recovery in employment for women was slower than for men. Due to that, between June and December, the unemployment rate for women declined 5.1 pp while the rate for men decreased 6.1 pp. This led to historically high levels on unemployment gender gap, which was associated with unemployment rates for women and men of 20.0% and 11.3% respectively at the end of 2020. Another effect of the crisis was the greater reduction in women's participation in the labor force (OPR) due, in part, to the closure of children's daycare and schools which prevented many women with children at home from working.[3]

In terms of the change by types of jobs, in the second half of 2020, the growth of employment was stronger in the non-wage and informal segments. For the twenty-three major cities, in the quarterly moving average that ended in December, salaried employment grew 13.6% (700,000 jobs) and non-salaried, 26.9% (1.1 million jobs) with respect to the quarterly moving average ending in June. This growth suggested that between May and December close to 75% (1.3 million) of non-salaried urban jobs that had been lost between March and April were recovered compared to 55% (1.0 million) in the salaried segment. The change in the breakdown of employment is also seen when distinguishing between formal and informal employment. These have recovered about 56% (800,000 jobs) and 70% (1.5 million jobs) respectively of the jobs lost in the wake of the pandemic. This phenomenon is explained by non-wage employment and the sectors with the most informality are characterized by being the most affected segments of the labor market when the economy falls but also the most flexible when a recovery starts.

Estimates by the technical staff suggest that national UR will probably continue to decline in 2021 but at a slower pace than was seen in the second half of 2020 given the slow recovery of salaried and formal employment as well as the level of the GDP that remains below the level in 2019. Thus, the average national UR for

3 For a detailed analysis see: "Recuperación de la ocupación y dinámica reciente de la participación laboral," Grupo de Análisis del Mercado Laboral (Gamla), at *Banco de la República*, January 2021, available at: https://repositorio.banrep.gov.co/handle/20.500.12134/9976

all of 2021 is likely to be between 12.5% and 15.5% with the most probable value being around 14.0%.

1.5 Inflation and Policy Framework

Last year the inflation targeting regime with flexible exchange rate under which monetary policy decisions are made completed two decades of operation in Colombia. The adoption of this regime at the end of 1999 made a progressive decline in annual inflation to the long-term target of 3.0% possible. This was achieved in 2009 and has been in force since then. Over the last decade, the inflation rate has remained around that level except for temporary deviations usually caused by shocks to food prices. Monetary policy management has been consistent with achieving the inflation target and with output growth around the potential capacity of the economy. This has made it possible to anchor inflation expectations around the 3.0% target and carry out a counter-cyclical monetary policy that has contributed to the country's macroeconomic stability. The flexibility of the exchange rate as a basic element of the inflation targeting plan has been essential to achieving the economic adjustments required in the wake of the external shocks that the Colombian economy has received during the last few years.

This institutional framework has been the basis for monetary policy management in the wake of the severe economic consequences of Covid-19. The pandemic caused simultaneous negative supply and demand shocks to the economy. With respect to supply, the social distancing measures that forced many establishments to be closed and their workers remain in lockdown compelled various branches of the economy to reduce or stop their productive activity. On the demand side, household consumption plummeted not only because it was impossible for people to go out and consume but also due to the drop in their incomes and loss of confidence. This was compounded by a sharp contraction in gross capital formation. If the phenomenon had been limited to only a contraction in supply, it would have caused a rise in inflation and a decline in output. But what was seen was a decline in inflation (which went from 3.8% in 2019 to 1.61% in 2020) and a reduction of the GDP (-6.8%). This made it possible to deduce that, in 2020, the negative demand shock dominated the negative supply shock.

The inflation rate stood below the inflation target in 2020 (1.61% vs. 3.0%), and economic growth (-6.8%) was well below the potential growth which is estimated to have an annual rate of 3.0%. The forecasts made by the technical staff anticipated these results with the first signs of the impact of the pandemic. This allowed BDBR to take timely action. Following the monetary policy rule embedded in the inflation targeting plan, the BDBR started a progressive cut in the policy rate as of March 2020 which took it from a starting level of 4.25% to one of 1.75% in September 2020 where it remained the rest of the year. In addition, the Bank was able to implement an important set of policies to ensure an abundant supply of liquidity for the public and private financial markets in both pesos and dollars.

The reduction in the rate of inflation reflected the economic consequences of the health crisis. In particular, the downward pressure that dominated the trajectory of inflation was the fall in aggregate demand, the excess productive capacity, the low pass through of peso depreciation to prices and the effect of temporary tax and tariff relief. This downward pressure outweighed the upward price effects due to supply restrictions resulting from the close down of various economic sectors. After reaching an annual peak of 3.86% in March 2020, inflation began to decline starting in April. This downward trend continued until November when it hit a minimum annual rate of 1.49%. After a rebound in December, inflation closed the year at 1.61%, the lowest level for a year-end since the existence of records. This fall of more than 50% from the initial level in just nine months facilitated the decision to move ahead on a significant easing of monetary policy through a substantial cut in the policy interest rate and the abundant injection of liquidity that *Banco de la República* started to make during the first few weeks of the pandemic.

Core inflation also showed a considerable decline. Thus, for example, the measurement of inflation excluding food and regulated items closed the year at 1.11% having fallen 200 bp with respect to December 2019. The other two indicators of core Inflation also registered significant declines such that, at the end of 2020, the average for the indicators of core inflation stood at 1.34% compared to the 3.44% level in 2019. The overall decline in core inflation reflected the sharp weakening of aggregate demand.

The persistence of large excess productive capacity in 2021 and price indexing at low rates should keep consumer inflation below the 3.0% target though with a slow trend toward its convergence. Inflation expectations point in this direction with an expected value for December of 2.74%.[4] The trend of annual inflation to return to the target should begin to take place as of the second quarter to the extent that the economy recovers, and the price relief decreed in 2020 is withdrawn. Likewise, the low base for statistical comparison from last year caused by the sharp decline in inflation makes it likely that a rise between the second and fourth quarters of this year will be seen. As with other macroeconomic variables, this forecast is subject to high uncertainty given the risks posed by changes in the pandemic and the challenges in measuring the inflation resulting from it. Under these circumstances, the technical staff at the Bank estimates that headline inflation will stand below the 3.0% target by the end of 2021.

1.6 Balance of Payments

At the end of 2020, the country's balance of payments current account registered a deficit of USD 9,083 million (m) which is USD 5,201 m lower than what was seen in 2019. This meant that the deficit in the current account went from 4.4% in 2019 to 3.3% of the GDP in 2020. This decrease could seem paradoxical given that it occurred amid a sharp collapse in foreign demand resulting from the 3.5% contraction in global output in 2020 (according to the IMF) and the -7.1% contraction in the economies of our trading partners. This outcome looks even more unexpected given the sharp declines in international crude oil prices and prices for other raw materials exported by our country, especially at the beginning of the pandemic. Under these conditions, understanding what led to the reduction of the country's deficit in the current account during such an atypical period as 2020 is of special interest.

The primary reason for the reduction of the current account deficit during the previous year was the USD 4,728 m decrease in the deficit balance of primary income. This was mainly explained by lower outflows of profits linked to foreign direct investment (FDI). The decline in FDI profits was widespread across all economic sectors but especially notable for oil drilling companies, financial and business services, transportation and communications, manufacturing industry, and mining and quarrying. This result shows the beneficial counter-cyclical role that companies with foreign capital play in stabilizing the country's external balance in the wake of major negative shocks like the one we face.

A second reason behind the reduction of the deficit in the current account was the decline in imports which allowed for a USD 532 m fall in the trade deficit in goods even though the value of exports fell USD 8,886 m. Indeed, the fall in the

4 Corresponds to the median of the Monthly Survey of Economic Analysts' Expectations for March 2021.

absolute value of imports was even greater (USD 9,419 m). The decline in exports arose mainly from the lower sales of oil and its derivatives, coal, industrial products, nickel-iron, and flowers. The drop in value of imports, in turn, reflects the contraction in the country's economy and it is mainly because of the decline in imports of supplies and capital goods for industry, the purchases of fuel and lubricants from abroad, consumer goods, and transportation equipment.

The third reason for the decrease in the current account deficit was the 0.2% (USD 20 m) improvement in the balance of net current transfers (secondary income). Although this improvement was small, it should be noted that net income from transfers is of significant value (USD 8,724 m) and among them the income from workers' remittances which came to USD 6,853 m in 2020 and had an 1.8% annual increase (USD 120 m) stood out. This income is equivalent to 2.5% of the annual GDP and 12.9% of the current income from the balance of payments. The growth of remittances was because the amounts sent from the United States offset the declines received from Latin America and Spain.

The deficit in the current account for 2020 was financed from net capital inflows of USD 8,092 m (3.0% of the annual GDP). These inflows were the result of USD 23,492 m in foreign capital income that were partly offset by outflows of Colombian capital abroad (USD 11,579 m). Income from foreign capital came mainly from the placement of public debt securities (bonds and TES), external borrowing by the public sector, and foreign direct investment (FDI) as described below.

First, FDI in Colombia was USD 7,690 m in 2020, figures 46.3% lower with respect to the year before. The drop in FDI was due to 50.5% in reductions in capital shares and 68% in reinvestment of earnings. As was argued, this performance reflects to a high degree diminished profits (or losses) of companies in the country with foreign capital who limited the reinvestment of profits as a source of FDI.

On the other hand, capital inflows in the head of the public sector through both the placement of public debt securities and the contracting of loans from abroad came to a total of USD 18,448 m, which is an exceptionally high figure compared to the same inflows in 2019 (USD 727 m). This more-than-25-fold increase in foreign resources attracted by the public sector reflects the efforts of the national government, public entities, and territorial governments to obtain the financing to cover their budget shortages caused by income losses and higher spending requirements created by the Covid-19 emergency. Among those resources, the portion of the IMF's FCL (USD 5,400 m) that the national government disbursed in the last quarter of 2020 within the framework of the financial plan for the year, was notable.

Finally, the outflow of Colombian capital abroad to the tune of USD 11.579 b in 2020 was equally atypical if compared to the USD 376 m registered in 2019. Of this amount, the largest outflows came from private sector's portfolio investment and other items, contrasting with inflows on the same concept that were seen in 2019.

As a result of these capital movements, Colombia registered a net negative international investment position at the end of 2020 of USD 175,474 m (64.5% of the annual GDP). The negative position rose USD 5,937 m in comparison to what was seen at the end of 2019, which was consistent with the acquisition of higher external liabilities to finance the current account deficit.

The forecast of the technical staff points to a deepening of the current account deficit from -3.3% as a percentage of 2020's GDP to -3.6% in 2021, as a result of the gradual recovery of the Colombian economy despite the expected reversal of the external terms of trade shock and higher projected foreign demand. The expected rebound in domestic demand will probably induce growth in imports as well as growth in profits of companies in the country with foreign capital shares. Furthermore, the higher projected prices for some commodities will probably raise the earnings of the foreign-owned companies that export those products. These factors will probably be the main drivers of the expansion of the deficit throughout the year. Nevertheless, they will probably be partially offset by the effects of some higher terms of trade and the economic recovery of Colombia's trading partners that would make an increase in exports of commodities and industrial goods possible.

1.7 Foreign Reserves

At the end of 2020, net foreign reserves totaled USD 59,030.8 m with a USD 5,863.6 m increase compared to the outstanding amount in 2019. As explained in detail in Chapter 3 of this report, the accrual during the period was mainly explained by the purchase of USD 3,500 m and the return on the foreign reserves which, at the end of December 2020, was 3.37% (USD 1,888.89 m) excluding the foreign exchange component.

The purchases of foreign currency met the objective of strengthening international liquidity and were acquired directly from the national government which needed monetization of dollars from its portfolio for the treasury management in 2020. The profitability of the reserves, in turn, remained at a high level (3.37%) in 2020 due to the significant rise in bond prices held in the portfolio. This was the result of the Federal Reserve and other central banks reducing the interest rates to near-zero levels in order to deal with the economic effects of the pandemic. A scenario of high yields from the reserves was not foreseen at the beginning of 2020 since the international interest rates were expected to remain stable after the reductions seen in 2019. However, it is plausible to expect a considerable reduction in the profitability of foreign reserves in 2021 since there is no prospect of appreciations due to additional reductions in the rates given their proximity to zero.

To supplement external liquidity *Banco de la República*, in coordination with the Ministry of the Treasury, negotiated an extension of access to the FCL from the 384% of the country's quota in the organization (approximately USD 11,200 m) to 600% (approximately USD 17,600 m) of it with the executive Board of the IMF. Of this amount, last December the national government received an exceptional disbursement of 187.5% of the country's quota to the entity (around USD 5,400 m) as a supplement to the sources of foreign financing within the framework of the needs created by the pandemic. The remaining amount will continue to be precautionary. It should be recalled that the FCL is an IMF instrument that only countries with sound monetary, fiscal, and financial policy frameworks as well as a favorable record of economic performance can get access to. Colombia has had access to this line since its creation in 2009 (see Box 2 in this report).

The current level of the foreign reserves is largely satisfactory from the perspective of risk-hedging for the country's foreign liquidity. Indeed, this level covers the projected current account deficit of the balance of payments for the next twelve months plus the repayments on the external debt. Furthermore, the foreign reserves together with the IMF's FCL cover those needs for foreign financing and the risk of possible capital outflows.

Finally, in 2020, *Banco de la República* obtained access to the Federal Reserve repo facility (FIMA). Through this facility, FIMA account holders can exchange their U.S. Treasury bonds held in custody at the Federal Reserve for U.S. dollars with the commitment to repurchase the securities the next day and pay the interest. The primary benefit that access to the FIMA repo facility has for *Banco de la República* is to have liquidity in US dollars if needed without having to face adverse market conditions nor sell off the assets of the international reserve portfolios permanently. This access mitigates the liquidity risk.

1.8 *Banco de la República*'s Profits

Banco de la República's profits during 2020 reached an unexpectedly high value of COP 7,483 billions (b) (USD 1,888.89 m) that was higher than what was obtained in 2019 (COP 7,149 b; USD 2,322.76 m). This high an amount in profits was due to the extraordinary return on the foreign reserves invested in bonds abroad. These suffered a sharp price increase when the US Federal Reserve (FED) decided to reduce their interest rates to near-zero levels in order to deal with the economic effects of the pandemic. The magnitude of this surprise can be better appreciated if one recalls that at the beginning of 2020 when the FED interest rate was within a range of 1.5% to 1.75%, *Banco de la República* forecast a moderate return on the foreign reserves for this year of USD 585 m of which, USD 567 m would correspond to the portfolio of these reserves (USD 754 m for interest minus USD 187 m for devaluation). On the same date, they projected returns on the foreign reserves of USD 594 m and USD 754 m for 2021 and 2022 respectively.

The scenario is different now. The positive surprise with respect to profits in 2020 should be seen as a one-time event since there is no prospect of additional price increases due to additional reductions in external interest rates as they are close to zero. Going forward, a significant reduction in the profitability of the foreign reserves can be expected due to the low level of foreign interest rates and the fact they are not expected to rise in the short term.

1.9 Public Finances

The state of public finances affects risk premia, interest rates, capital flows, the confidence of economic agents, and the growth of the GDP along with many other relevant economic variables. Hence the importance of the monetary authority carefully monitoring the state of and outlook for public finances. This will make good coordination between monetary and fiscal policies possible and contribute to the design of a macroeconomic policy that ensures the stability and economic growth of the country.

As in other countries around the world, the Covid-19 pandemic produced a negative shock to the Colombian fiscal situation unlike any seen before. In 2019, the central national government (CNG) had achieved the lowest fiscal deficit since 2014 and the first primary surplus since 2012. In this context, the public finances were expected to continue a gradual adjustment of the deficit in compliance with the fiscal rule. The pandemic thwarted that positive momentum as the figures at the close of the previous year show. Between 2019 and 2020, the total CNG deficit tripled as it went from 2.5% to 7.8% of the GDP. The primary balance went from a 0.4% surplus of the GDP to a 4.9% deficit of the GDP. The gross debt came to 64.8% of the GDP at the end of 2020 compared to a level of 50.3% of the GDP in 2019.

These results did not come as a surprise to the government, which maintained control of the situation. In fact, in the *Medium-Term Fiscal Framework* (MTFF) that the Ministry of the Treasury submitted to Congress in June 2020, a total deficit of 8.2% of GDP was forecast for the CNG, one that was 0.4% of the GDP higher than what was finally seen. Thus, the government was aware that the emergency created by the pandemic merited an increase in the deficit and public indebtedness that would allow them to have the necessary funds to mitigate the economic effects of the crisis and to protect the most vulnerable people. In accordance with the above, the national government, having consulted the Fiscal Rule Advisory Committee and received a favorable and unanimous opinion, decided to invoke Act 1473, article 11 to suspend parametric compliance with the rule for 2020 and 2021 to have the fiscal flexibility needed to deal with the effects of the pandemic and in recognition of the uncertainty regarding the duration and depth of the shocks. The risk rating agencies also understood this when they decided to maintain Colombia's investment grade in spite of the fiscal deterioration and give the government a period of respite while it undertook the announced fiscal reform and the economy makes progress on its recovery.

According to the 2021 Financial Plan, the total deficit of the CNG will be 0.8% of the GDP higher than what was registered in 2020 and amount to 8.6% of the GDP at the end of the current year. The higher deficit is mainly due to the expenses required to meet the health emergency that came to 1.7% of the GDP and the investments that amounted to 1.3% of GDP and are intended to boost the economic recovery. The emergency costs include the purchase of vaccines, increased health insurance needs, the expansion of extraordinary transfers for the poor and vulnerable through government social programs. With respect to reactivation, the plan is to fast-track the implementation of infrastructure projects that boost economic activity and generate employment. Therewith, the gross debt of the CNG will probably rise marginally in 2021 to 65.2% of the GDP since the expected recovery in the level of output is likely to cushion the effect of the higher deficit on the debt ratio.

In view of this fiscal picture, the government has announced the need to submit a bill to the Congress of the Republic within the next few weeks that includes adjustments in both income and expenditures that will make it possible to improve the primary balance by at least 1.5% of the GDP on a recurring basis as of 2022 once the effects generated by the pandemic are overcome. This will make it possible to reduce the public debt to prudential levels and lower the risk of losing the investment grade rating for our sovereign debt.

1.10 Business Continuity

Given its strategic role in the functioning of the country's economic system, management at *Banco de la República* has always given special importance to the handling of operational risks. One of the most important areas in this field is business continuity, which is understood as the institution's ability to continue operating under extreme conditions. The risk that had received the most consideration was that of an earthquake affecting the facilities of *Banco de la República* in Bogota and a reaction strategy had been designed for that. However, a pandemic like that generated by Covid-19 had not been considered.

Therefore, this situation posed major challenges for the administration. It required a timely adjustment to the regulations and making decisions that would favor the adoption of measures in different areas. In the technological field, collaborative work tools were implemented in the cloud, and equipment was provided to enable mobility and remote work by employees. The reinforcement of IT security plans provided reliable working environments for the Bank, the financial sector, and the government in the services provided. These actions were basic for the non-interruption of any of the central banking activities.

At the beginning of the pandemic, the Bank had policies on information management (physical and electronic) and the use of digital signatures. It had also been implementing the electronic corporate content manager (*iConecta*) for some time, which allowed it to react quickly to the demands of the moment.

The production, access, and digital and digitized (scanned) signature on electronic documents (meeting legal requirements) allowed all the departments to carry out their duties supported and sustained by appropriate document management without detriment to the attributes that are granted to the Bank's documents such as authenticity, reliability, usability, confidentiality, integrity, and availability.

Regarding the processes of generation and distribution of monetary species and that is work that must be carried out in person, shifts were established to maintain this vital service for the country. The transportation companies provided the remittance services to the different branches without incident and in compliance with all biosecurity protocols.

The Human Resources area provided the employees with support in the areas of benefits, health, and monitoring of health conditions to ensure the application of biosecurity measures. The accelerated implementation of biosafety protocols enabled workers to maintain their health and has supported the continuity of the Bank's services and processes as well as being prepared for a return to an in-person situation. In addition, all the regulations issued by the national government to address the situation presented have been implemented.

Banco de la República's cultural management has also adapted to the new circumstances to continue to offer leisure and high-quality culture. The use of multiple digital platforms, the generation of content and virtual activities from the regions, the encouragement of participation and interaction through social networks, and audiovisual production were used for this purpose as is detailed in chapter 5 of this report. Thanks to that, it was possible keep audiences loyal and reach new ones at the national and international levels.

There is no doubt that the most important factor for ensuring business continuity and allowing *Banco de la República* to continue serving the country was the responsibility, sense of belonging, and commitment of each one of its members to this institution. The agile way in which the Bank's personnel adapted to remote work was outstanding, and they continued the teamwork that is indispensable for completing the complex tasks required by the entity. For all of this, the BDBR recognizes the huge effort that each and every one of their employees have made.

02 / Macroeconomic Environment and Measures Taken by *Banco de la República* in the Wake of the Covid-19 Crisis

#MuseoEnTuCasa, activity promoted on IG @banrepcultural by the Art and Collections Unit.

José Pérez represents the antropomorphic *Poporo quimbaya* from *Banco de la República*'s gold collection.

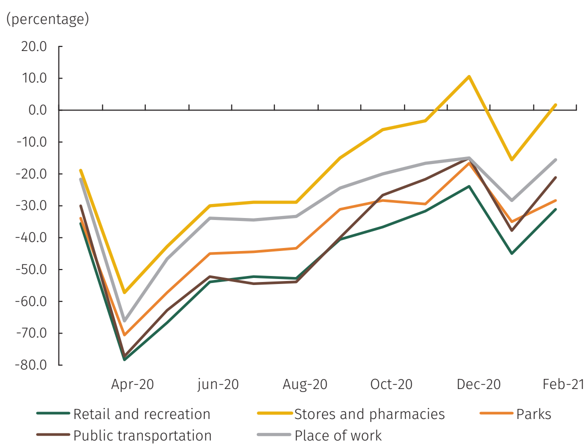
Left photo: Gold Museum, *Banco de la República*.
Right photo: José Pérez.

2.1 The Initial Impact of the Covid-19 Shock on Colombia

The Colombian economy received a severe shock as a result of the Covid-19 pandemic and the necessary and indispensable measures taken to contain and mitigate it. The health crisis caused sharp declines in economic activity, employment, and income for Colombian households. At the same time that risk aversion increased globally, the peso depreciated against the dollar, revenue from abroad fell, the demand for liquidity in pesos and dollars grew and there was deterioration in the money, debt, foreign currency exchange, and credit markets. The abrupt change in macroeconomic conditions was reflected in a significant decline in actual inflation and inflation expectations to levels below the 3.0% target. The government's response meant a significant increase in public spending and a deterioration in the short- and medium-term fiscal outlook.

In Colombia, just like in the rest of the world, the Covid-19 pandemic generated an unprecedented crisis because of its impact on people's health and the measures needed to control the disease. At the beginning of 2020, the world faced a new coronavirus (SARS-CoV-2, the cause of the Covid-19 disease) which had already been listed as a pandemic by the World Health Organization (WHO) by March 11. By the end of 2020, Covid-19 had affected more than 190 countries with more than 100 million cases reported and more than two million people killed by the disease. The first official case of infection in Colombia was reported on March 6, 2020 and, between that date and the end of the same year, infections exceeded 1.6 m cases and more than 43,000 deaths from this disease were registered. The measures to address and contain the health emergency began in March when the national government (NG) decreed the period of strict quarantine[5] that was needed to curb the rapid advance of the virus and prepare the health system to cope with the emergency. Thus, the mobility indices (Graph 2.1) and economic activity fell to historically low levels in April and reflected the strong impact of the measures of compulsory social distancing. Subsequently, the NG started relaxing restrictions for some sectors to the extent that changes in the pandemic allowed. Thus, in May they allowed construction and industry to partially restart,[6] and between June and July, there was a second easing of the measures with the reopening of some particular segments of retail trade and pilot tests in some services such

Graph 2.1
Indices of Mobility to different Locations in Colombia



Source: Google Community Mobility Reports, calculations by *Banco de la República*.

5 Based on Resolution 385/March 12, 2020, the Ministry of Health and Social Protection declared a health emergency throughout the nation. Subsequently, the NG issued Decree 457/March 22, 2020 declaring a mandatory preventive isolation measure throughout the country. The Ministry of Health and Social Protection has extended the health emergency four times under Resolutions 844/May 26, 2020, 1462/Aug 25, 2020, 2230/Nov 27, 2020, and 222 on Feb 25, 2021 that extended the emergency period to May 2021.

6 Decrees 593/April 24, 2020 and 636/May 6, 2020.

as gastronomic and religious.[7] The above produced a significant increase in mobility and fewer negative impacts on economic activity.

In the second quarter of 2020, the sharp rise in global risk aversion, the deterioration in foreign and domestic macroeconomic conditions, and the decrease in crude oil prices generated sharp increases in sovereign risk premia, in the nominal rhythm of depreciation, in the volatility of the financial markets, and in the agents' demand for liquidity. During this period, the country has faced declining petroleum prices, reduced worker remittances, and a lower demand from abroad. Global risk rose and, as in other economies in the region, for Colombia this translated into a sharp rise in sovereign risk premia, the depreciation of the peso, and greater volatility in the public and private debt markets with significant deterioration in their prices and in the liquidity of the securities. These factors, together with the uncertainty associated with the effects and duration of the quarantine, generated a widespread increase in the demand for liquidity on the part of households and companies. In addition to the devaluations in the public and private debt markets, the above put pressure on the liquidity of some segments of the financial system. In the credit market, the commercial loan portfolio rose rapidly due to the precautionary demand for liquid resources by some companies while the high uncertainty about the future performance of the economy and employment led to a higher perception of risk on the part of financial entities and lower levels of portfolio placement for households and other agents.

In addition to the loss of income from abroad, the implementation of mandatory isolation measures in the country starting at the end of March put an abrupt stop to productive work in important sectors of the economy. The measures implemented that were needed to deal with the public health crisis caused abrupt setbacks in several productive sectors, especially in those where mobility restrictions put limits on their ability to operate. In April, the month when mobility was restricted the most, there was a 21.6% reduction in productive activity based on the Economic Monitoring Indicator (EMI) published by DANE. There is no precedent for this kind of decline in the historical records available, and it generated a level of real productive activity similar to the level nine years ago. Despite the fact that the restrictions on mobility were partially relaxed in May and June, the contraction of the GDP in the second quarter of 2020 (-15.6%) was a historic record. During this period, the largest declines were in construction, commerce, repairs, transportation and accommodations, and artistic and recreational activities. In contrast, branches with less exposure to these restrictions such as the agribusiness sector, real estate, and financial and insurance business continued to see positive annual growth.

The Covid-19 pandemic and the health measures needed to contain it produced an unprecedented deterioration in the labor market as it destroyed close to a quarter of the pre-crisis level of employment in April 2020. In line with the seasonally adjusted monthly series in DANE's *General Integrated Household Survey* (GEIH), the measures taken to contain and mitigate the pandemic in Colombia caused a historic deterioration of the Colombian labor market to occur in April 2020. The number of people employed showed a 24.6% annual contraction in the national total (loss of 5.3 m jobs) and a 28.0% one in the thirteen cities (loss of 3.0 m jobs). These decreases, the largest in the history of the seasonally adjusted series, meant the loss of about a quarter of the pre-crisis employment level. Furthermore, the inability to seek employment given the restrictions on mobility led to a significant increase in non-activity. Compared to April 2019, the inactive population rose 28.9% (4.3 m

7 Decree 749/May 28, 2020, 847/June 14, 20250, and 878/June 25, 2020.

inactive) in the national total and 34.0% (2.1 m inactive) in the thirteen cities. The lower labor supply mitigated a higher increase in the unemployment rate (UR). Nevertheless, in April 2020, this registered the largest monthly change since monthly data have been available (20.0% and 23.7% in the national and thirteen cities' total respectively).

The sharp drop in aggregate demand, the temporary reduction of some indirect taxes, new temporary subsidies for utilities, etc. led to lower inflation and inflation expectations that went below the 3.0% target. Between March and June 2020, the period in which the preventive isolation measures were the strictest, an overall slowdown in the large CPI groups was registered. During this period, total inflation decreased 167 basis points (bp) and, as of June, it stood at 2.19% which, at the moment, is the lowest level since 2014. This performance, which was also seen in all of the core inflation indicators, reflected a weak aggregate demand that was severely impacted by the lockdowns in a broad group of sectors, a growing excess of productive capacity, and low labor cost pressure in the wake of the deterioration in the labor market. The change in inflation was partly due to the effect of the transitory reduction of some indirect taxes, the freezing of some highly weighted prices on the CPI, the significant reduction in the price of gasoline decreed by the NG, and the implementation of temporary subsidies for utilities. The new macroeconomic conditions that indicated strong downward pressure on demand and the expansion of excess productive capacity were reflected in lower inflation expectations for the end of 2020. These went from 3.49% in March to 2.25% in June[8] and maintained that trend over the course of the year.[9] The decline in inflation and inflation expectations to levels below the 3.0% target, the severe deterioration in the labor market, and the extensive excess productive capacity led to a more expansionary monetary policy stance.

To address the pandemic, a significant increase in public spending was required to deal with the health system's new needs and mitigate the negative shock to the economy. These actions implied a deterioration in the fiscal scenario and risk outlook. When the pandemic reached the country, it was necessary to enable the health system to do Covid-19 tests and to address the rapid increase in patients in the intensive care units. In addition, there was an urgent need to mitigate the drop in household and business income caused by the social distancing measures required to deal with the pandemic. To this end, the NG created the Emergency Mitigation Fund (FOME in Spanish)[10] through which it channeled funds to meet these needs.[11] FOME started with close to COP 15 t in funds that came mainly from the Savings and Stabilization Fund loans to the Nation (COP 12.1 t) and the Territorial Pension Fund (COP 2.7 t), and this was expanded until it reached a budget of COP 25 t for 2020.[12] These additional necessary expenditures plus the expected reduction in tax revenue that resulted from the economic downturn meant a significant change

8 Corresponds to the average of the economic analysts' expectations that were obtained from a monthly survey done by *Banco de la República* in March and June 2020.

9 The analysts' inflation expectations continued to fall, and in December 2020, they stood at 1.42% on average for the close of this year according to the M*onthly survey of economic expectations of economic analysts* done that month.

10 Decree 444/March 21, 2020.

11 Based on the economic emergency declared by the NG under Decree 417/March 17, 2020.

12 The FOME balance at the close of 2020 was COP 13.2 t (these funds were part of the Treasury deposits at *Banco de la República*). In addition to the sources of funds initially considered for FOME (FAE for COP 12.1 t and Fonpet for COP 3 t), over the course of 2020, resources derived from the Solidarity Securities (SS for COP 9.8 t) the Labor Risk Fund (COP 0.3 t), solidarity tax (COP 0.3 t), and credit resources from abroad (COP 15 t) were added.

at the beginning of last year in the fiscal deficit and the estimated level of public debt for 2020 and 2021. Initially, the Tax Rule Advisory Committee (RF in Spanish) approved raising the deficit from 2.3% to 6.1% of the GDP for 2020.[13] However, a month later, this Committee approved a suspension of the mechanism[14] due to the fact that the spending needed to address the emergency surpassed the parameters of the RF and, as is presented in the Medium-Term Fiscal Framework (MTFF), they suggested a deficit of about 8.2% of the GDP at the end of June. The sharp increases in fiscal deficits and public indebtedness together with the suspension of the RF caused a deterioration in the risk outlook for the sustainability of public finances which, in turn, had implications for the scope of action monetary policy has.

The strongest impacts of the shock generated by the pandemic were felt in the second quarter of 2020 and continued throughout the year although the effects began moderating to the extent that the restrictions imposed for virus control were relaxed. In the second half of 2020, some partial restrictions on mobility were continued to control the pandemic though they were less accentuated than those implemented in April and May (Graph 2.1). In August, in response to a new rise in reported cases of infection and growing pressure on the installed capacity of the health system, additional partial restrictions were imposed in the major cities. As of September, a phase of selective isolation,[15] which allowed for a significant relaxation of restrictions, began. Nonetheless, at the end of 2020, it was necessary to implement additional partial restriction measures on mobility in the major cities to curb a new wave of infections that put pressure on the health system between December 2020 and January 2021. As will be explained in detail in this report, to the extent that social distancing measures were relaxed with the progress on controlling the pandemic and measures to support households and businesses were implemented by state entities, several indicators began to show signs of partial recovery over the course of 2020 although, in the majority of cases, they had not reached pre-health crisis levels at the end of the year.

2.2 Measures implemented by the BDBR to address the negative Effects of the Pandemic

Banco de la República's timely and forceful reaction in supplying sufficient liquidity was essential to ensuring the stability and proper functioning of the payment systems, and the foreign exchange, public and private debt, and credit markets. Added to this was the significant reduction in the benchmark interest rate to historically low levels that lowered financial costs for companies and households. To the extent that markets have begun a gradual return to normalcy, monetary policy, along with the NG's response, has helped support the economic recovery.

The Bank reacted in a timely and decisive fashion to address the unprecedented shocks generated by the pandemic by providing ample liquidity in pesos and dollars and by reducing their interest rate. Starting in March 2020, policies were adopted that succeeded in averting a deep crisis in the midst of the coronavirus pandemic, a shock of enormous dimensions for humanity, and an inevitable impact on the Colombian economy. The Bank's reaction to the imminent effects of the crisis was carried out in two stages: the first was

13 Tax Rule Advisory Committee meeting on May 4, 2020.

14 Tax Rule Advisory Committee meeting on June 15, 2020.

15 Decree 1168/August 25, 2020.

immediate action in taking measures that provided liquidity in order to stabilize markets that were showing signs of risk in the wake of the sudden change in global macroeconomic and financial conditions; the second was gradual action that sought to mitigate the effects of the pandemic on the Colombian economy and to support economic recovery to the extent that the markets began normalizing. Thus, the Bank's policy response was fast and comprehensive. It provided the public and private financial markets with abundant liquidity in pesos and dollars and was accompanied by a significant cut in the policy interest rate. This was done in an attempt to protect the payment system and stabilize key markets that were under pressure in the short term, and protect the supply of credit, reduce the financial burden on households and businesses, and stimulate economic activity in the medium and long term.

The Bank's actions were geared towards ensuring the proper functioning of the payment system, maintaining the supply of credit, contributing to the stability of key markets, and supporting the reactivation of economic activity. As was mentioned, the Bank's first reaction was focused on guaranteeing the proper functioning of the payment system and ensuring that financial intermediaries, companies, and households had the necessary liquidity to meet their obligations. This turned out to be essential to retaining the confidence of all agents and to mitigating the volatility and uncertainty in the economy and financial markets. In addition, the actions taken were intended to help maintain the supply of credit for households and businesses and, thus, ensure that the financial intermediaries would have enough funding which, in turn, required a suitable supply of liquidity. At the same time, the measures implemented were intended to stabilize key markets such as the foreign exchange and public and private securities markets. These are essential for the transmission of monetary policy and for the financing of the government and the financial system. Once the key markets were stabilized and the liquidity risk that arose from the effects of the pandemic was mitigated, the Bank focused their efforts on supporting the reactivation of economic activity. To this end, in addition to a more expansionary benchmark interest rate, it was essential to achieve the above objectives since, without them, the effectiveness of the monetary policy to boost the economy could be seriously limited. The effective transmission of the monetary policy required that financial markets operate under conditions of relative normality.

To achieve these objectives the Bank launched a comprehensive set of measures (Table 2.1). Specifically, their monetary policy actions included: 1) the extension of temporary expansion transactions; 2) the implementation of definitive purchases of financial instruments; 3) the reduction in reserve requirements; 4) the provision of hedging mechanisms and liquidity in dollars; 5) the reduction in the monetary policy interest rate, and 6) maintaining a sound international liquidity position. The following is a description, listed in the same order, of the main features of each of these economic support mechanisms used by the Bank:

i. **The eligible amounts, counterparties, terms, and securities of the Bank's transitory expansion operations (repos) were extended. Through this, the intention has been to expand liquidity in the economy and its ability to spread it.** The Bank supplies temporary liquidity through repo transactions by means of which they provide funds to their counterparts in the financial system. During the period of the transaction, the counterparties pledge securities to the Bank as collateral which are returned to them upon payment of principal and interest. In the wake of the effects of Covid-19 on the economy, the range of securities eligible as collateral for these transactions was expanded by the BDBR so that, in addition to the public debt securities that are traditionally accepted, the use of private debt securities and

Table 2.1
Goals of the Measures Adopted by *Banco de la República*

	Protect the payment system	Preserve the supply of credit	Stabilize essential markets under pressure	Stimulate economic activity (direct effect)
Temporary Liquidity (repos): extension of amounts, counterparties, eligible collateral, and maturities	X	X	X	
Definitive purchases of public and private debt securities	X	X	X	
Reduction of reserve requirements	X	X		X
Sales of dollars in forward contracts with financial compliance			X	
Dollar Swaps	X	X	X	
Reduction of the policy interest rate		X		X

Source: *Banco de la República.*

securities from loan portfolio transactions (promissory notes) was authorized. Furthermore, while the period for repos is usually overnight, repos for longer periods have been auctioned since March 2020, and the amounts being offered are substantially larger than what the estimated demand is expected to be. The increase in the amounts, counterparties, periods, and securities that are eligible for the Bank's temporary repo operations meant a significant monetary expansion compared to what is normally required by the economy. In March 2020, when the highest intensity in the use of these transactions was registered, COP 14,662 b, which is equivalent to 15.6% of the average monetary base for 2019 was injected (including overnight and longer-period repos).

ii. **Definitive purchases of public and private securities were implemented. This was done to contribute to stabilizing key markets for the transmission of monetary policy and to provide ample and stable liquidity that would help preserve the payment system and the supply of credit.** The Bank also does transactions in which it provides its counterparties with permanent liquidity through the definitive purchase of securities at market prices. These transactions were designed to provide liquidity for prolonged periods and reduce the uncertainty of financial intermediaries about their funding to the benefit of those who require credit from the financial system. In March 2020, the BDBR authorized the purchase of private debt securities in addition to the public debt securities with which they normally carry out these transactions. This is the first time in the history of the Bank that this measure has been adopted. During March and April, the months in which the transactions made under these measures were concentrated, the Bank purchased COP 8.7 t in private securities and COP 2.8 t in TES. All of this as a whole came to 12.2% of the average monetary base in 2019. The final purchase of private debt securities in this program was made on April 20, 2020 and the final one of public debt securities was on April 30.

iii. **The reserve requirements were lowered two percentage points on average as a means of permanently freeing up funds for the economy and to reinforce incentives for financial intermediation.** The Bank maintains a reserve requirement structure with required percentages for three different categories of credit establishment liabilities (the highest percentages are required for the most liquid liabilities, or demand deposits). In order to *permanently* free up funds for those entities with deposits at the Bank and enable them to meet commitments or generate credit, the Bank lowered the two highest required percentages in April 2020. They went from 11% to 8.0% (checking accounts, savings accounts, etc.) and from 4.5% to 3.5% (CDs for less than 18 months) respectively (the lowest percentage required remained at 0%). With the above, the average reserve requirement went from 7.0% to 5.0%. This also enhanced the incentives for financial intermediation since it reduced the cost of raising money for lending purposes. The estimated amount of the corresponding injection of liquidity was COP 10.1 t, which is equivalent to 9.4% of the average monetary base for 2019.

iv. **These three decisions (repo expansion, definitive purchases, and reduction of reserve requirements) were made to respond to the increased demand for liquidity in the economy in order to help stabilize the financial markets.** The decisions made in this regard were based on comprehensive technical diagnoses that showed a widespread increase in the preference for liquidity by households and firms, and the need to be prepared for the effect that the financial intermediaries' greater uncertainty and risk perception could have on the supply of credit. As a result of these analyzes, the BDBR made the decision to provide targeted facilities for those markets that showed clear signs of volatility and limited liquidity and that were critical to the stability of and confidence in the system. In this respect, and unlike other non-conventional measures such as the quantitative easing that has been undertaken in other countries (that usually have specific price targets for certain markets or tranches of the yield curve) the measures were focused on stabilizing specific markets that, in the wake of the sudden change in the financial and economic conditions generated by the pandemic, were under pressure at the beginning of the crisis. That was essential to avert systemic consequences for the financial market and the economic and productive structure of the country.

v. **Mechanisms were adopted to provide currency hedging and dollar liquidity.** The following measures were intended to provide a large group of entities with temporary liquidity in dollars to alleviate pressure on the foreign exchange market:

- Forward sales of dollars with financial compliance at one month to extend coverage against the risk of a sharp depreciation of the peso. The market normally controls the provision of this type of coverage but, in this environment of marked aversion to risk and uncertainty, said provision may be insufficient and instead generate volatility and illiquidity in the currency exchange market. The Bank's offer of dollars through a futures contract with financial compliance contributed to mitigating that volatility and illiquidity since it prevented various agents from demanding foreign currency on the spot market for hedging purposes. Financial compliance with these contracts means that, at maturity, the Bank recognizes or receives the difference between the negotiated price of the dollar[16] in the future and the one seen at the time the contract is settled. This payment is made in pesos, so

16 In the contract for sales of dollars with financial compliance (NDF), *Banco de la República* sells dollars under a 1-month futures contract at an exchange rate that corresponds to the cut-off rate of a uniformly priced auction. In this auction, participants offer the exchange rate (price expressed in pesos per dollar) at which they would be willing to buy dollars from the Bank at the expiration of the contract as well as the amount of dollars they are offering to buy. In the auction, the bids of the participants are organized in a strictly descending order by price and all the bids with a price higher than or equal to the cut-off price at which the daily limit of the auction is completed (cut-off price) are approved. All the approved bids will pay the same cut-off price. When the value of the bids at the cut-off price exceeds the remainder of the auction limit, the remainder will be distributed in proportion to the value of the bids that accept partial approval. The amount approved per bid will be a multiple of USD 100,000.

it does not affect the level of the Foreign Reserves. From March to May 2020, the Bank auctioned contracts for USD 1,000 m each month. Furthermore, they also auctioned the maturity renewals from April 2020 to March 2021. The last USD 90.9 m in forwards expired at the beginning of March and were not renewed by the market. Therefore, the current balance of forwards on the Bank's balance sheet is zero.

- Dollar swaps at two-months to stabilize the exchange market and provide liquidity in dollars. In these transactions, the Bank sells dollars on the spot market with a commitment to repurchase them in the future. This way, liquidity is provided in dollars for those who need it, which is especially important if Colombian banks see their sources of short-term funding in foreign currency reduced because of the aversion to international risk. This not only stabilizes the foreign exchange market but also maintains short-term external financing for the economy. When this instrument is used, the balance of the Foreign Reserves is not affected after the transaction is completed since the counterparty returns the foreign currency to the Bank as in the case of sales of dollars in *forward* contracts with financial compliance. Between March 19 and 20, 2020, a total of USD 400 m in swaps was contracted for. This was equivalent to 6.0% of the banks' balance in short-term foreign currency debt. Between April and June 2020, USD 400 m in *FX Swap* contracts were auctioned per day but were not taken. Taking the latter and the fact that external liquidity improved into account, the BDBR decided not to continue these auctions as of July 2020 and announced that these contracts will be offered again when deemed necessary.

vi. **The policy interest rate was significantly reduced (-250 bp), and as of September, it stood at historically low levels in nominal (1.75%) and real terms.** The negative effects of the pandemic and the health measures needed to cope with it were reflected in a sharp fall in output and employment, considerable excess productive capacity, and an actual and expected inflation level that was below the 3.0% target. In this context, the BDBR decided to reduce the monetary policy interest rate 250 bp over the course of 2020 starting from 4.25% at the beginning of the year to 1.75% at the end of December. This was to contribute to the recovery of domestic demand and employment insofar as the markets gradually started functioning normally and to alleviate the financial burden on households and companies during the current situation. This reduction was significantly large compared to the cuts to the monetary policy rate implemented in other economies around the world.[17] In addition, the current level of the monetary policy rate at 1.75% indicates very low real interest rates including the lowest one in recent history whether actual inflation or the different measures of expected inflation are discounted. Consequently, the monetary policy stance is broadly expansionary.

vii. **They adopted measures to hold to a sound international liquidity position.** During 2020, the Bank increased the Foreign Reserves through the direct purchase of USD 3,500 m from the NG at market prices. Furthermore, in April 2020, they gained access to the repo facility (FIMA) that the Federal Reserve provides.[18] Subsequently, the Bank obtained a two-year renewal of the IMF's

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17 Compared to other emerging countries, Colombia was among the countries that reduced its policy interest rate the most and was only surpassed in the region by Mexico which has reduced its benchmark rate 300 bp since the start of the pandemic in March 2020.

18 *Banco de la República* announced that they would make use of that facility only in the event that, having decided to sell dollars on the spot market, the market for the purchase and sale of Treasury bonds could, at that same time, be very low in liquidity, and *Banco de la República*'s sale of Treasury bonds would, thus, be unfavorable.

flexible credit line (FCL) for approximately USD 11,200 m that was expanded in September to approximately USD 17,600 m in view of an external context that was more uncertain for the Colombian economy. A portion of this line was disbursed to the NG by the IMF (see chapter 3).

The Bank's actions helped to alleviate the initial pressure registered on the foreign exchange and public and private debt markets in the first few months of the crisis while, at the same time, they accommodated the intense preference for liquidity in the economy by supplying abundant funds using various means. The latter measure has protected the proper functioning of the payment system and provided a necessary means of maintaining or expanding the supply of credit. As is detailed later in section 2.4, the improvement in the financial and external liquidity conditions together with the Bank's timely reaction made the partial correction of the foreign exchange market and gradual decreases in the risk perception possible in the second half of 2020. In addition, the demand for public debt securities by foreign investors recovered starting in May 2020 and the high levels reached by interest rates on public and private debt in March of that year were corrected. In the second half of 2020, they stood at levels that were even lower than the ones seen prior to the pandemic.[19]

To the degree that market operations begin to gradually normalize, the reduction of the policy interest rate and its transmission to the market rates has alleviated the financial burden on households and businesses as well as contributed to the recovery of aggregate demand and employment. The monetary policy actions that contributed to stabilizing the financial markets added to the gradual reopening of the economy allowed the reductions in the policy interest rate to be completely transmitted to the money market and deposit interest rates. Likewise, the transmission to the lending rates has been significant and, compared to what has been registered since 2003, it has been transmitted faster towards deposits and preferential loans (see Box 1 in this Report). In an environment in which interest rates are being reduced to historical minimums, the disbursements of loans recovered and at the end of 2020 were similar to those registered before the pandemic in some categories. This recovery together with the improvement in conditions abroad and the counter-cyclical fiscal policy have contributed to the recovery of the economy and employment starting in the second half of 2020 as will be explained in greater detail below.

The NG also implemented measures in 2020 to mitigate the negative impact of the emergency on productive activity, and this served to strengthen liquidity. Some of these measures will be maintained for part of 2021. In addition to the different levels of government postponing the dates for paying taxes in 2020, the NG regulated the automatic refund of credit balances for low-risk taxpayers within the fifteen days following the filing date of the application. According to the National Revenue and Customs Bureau (DIAN), the measures adopted at the national level generated an almost COP 10 t boost in liquidity in the economy. The COP 3.25 t added to the equity of the National Guarantee Fund (FNG in Spanish), in turn, makes it possible for the Fund to extend guarantees of up to COP 48.2 t based on estimates by the Ministry of the Treasury and Public Credit, and this could represent up to COP 80.3 t in

19 Fratto *et al.* (2021) did a study on non-conventional monetary policy measures for a group of emerging countries, including Colombia, in which they concluded that these were successful in reducing the rates of return on debt bonds with different maturities in those countries and contributing to stabilizing prices in the financial markets –Fratto, C; Vannier, B. H.; Mircheva, M.; de Padua, D.; Ward, M. H. P. (2021). "Unconventional Monetary Policies in Emerging Markets and Frontier Countries", International Monetary Fund—.

new loans for working capital. A total of COP 11.5 t had been disbursed with the support of the FNG as of December 30, and this was reflected in 466,993 transactions.[20] The NG will continue some of their efforts, at least for a few months, to mitigate liquidity problems for companies and income problems for vulnerable households and contribute to an economic recovery in 2021. The Formal Employment Support Program (PAEF in Spanish) through which the NG provides the requesting companies with a payroll subsidy equivalent to 40% of the minimum wage (COP 351,000)[21] per employee and that, according to the NG had paid COP 4.9 t by the end of 2020 and contributed to sustaining close to 3.6 million jobs will probably be continued until March this year. The Solidarity Income program, in turn, that grants COP 160,000 monthly per family to close to three million households that do not receive state support will continue until June 2021.[22] As can be seen, this spending effort together with the decrease in revenue meant a sharp increase in the fiscal deficit and public indebtedness in 2020 and in the forecasts for them in 2021 as published by NG.

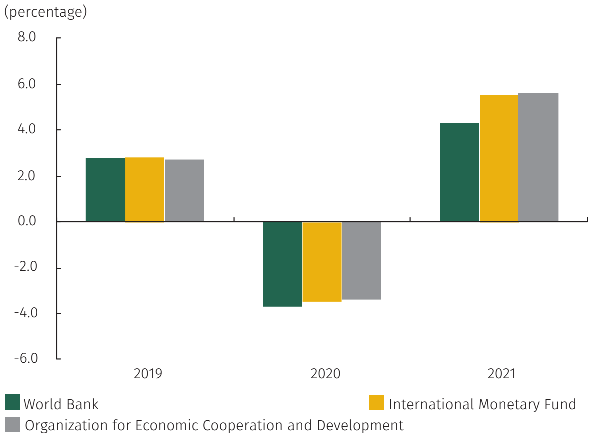
The pandemic also imposed major challenges on *Banco de la República*'s management with respect to the need to maintain operational continuity under the extraordinary conditions the country was facing. Given their strategic role in the operations of the country's economic system, the managerial staff at the Bank established a timely adjustment to their regulations and decision-making that favored adopting measures in different areas. In the technological field, collaborative work tools were implemented in the cloud and the provision of equipment was ensured to enable mobility and remote work by employees. The reinforcement of security plans for information technology provided reliable working environments for the Bank, the financial sector, and NG in the services they provided. These actions were basic for the non-interruption of any of the central banking activities. Regarding the processes of generation and distribution of monetary species, which is work that must be carried out on site, shifts were established to maintain this vital service for the country's economy. The transportation companies provided the remittance services to the different branches without incident. In addition, the accelerated implementation of biosafety protocols enabled workers to maintain their health, supported the continuity of the Bank's services and processes, and held things in preparation for a return to an in-person situation. The agile way in which the Bank's personnel adapted to remote work was outstanding, and they continued the teamwork that is indispensable for completing the entity's complex tasks.

20 As of February 24, 2021, the different lines defined by the FNG have channeled 559,662 loans for a value of COP 13.6 t.

21 Act 2060/Oct 2020 established that for those beneficiaries whose primary occupation is economic and service activities in the tourism, hotel and gastronomic sectors as well as artistic, entertainment, and recreational occupations, the amount of the support will be 50% of the minimum wage. It also established that when one or more women are found among the employees who are receiving the state subsidy, the value of the state subsidy for them will also correspond to 50% of the minimum wage for each employee.

22 The extraordinary emergency payment was added to these programs in 2020 for Covid-19 within the Families in Action plan, which corresponded to a single value of COP 145,000 per household that was given to families that were active in the program. Furthermore, as an economic support measure for the poorest households, the NG introduced the VAT refund plan which began operating as of April 2020 and that grants COP 75,000 to each prioritized household every two months.

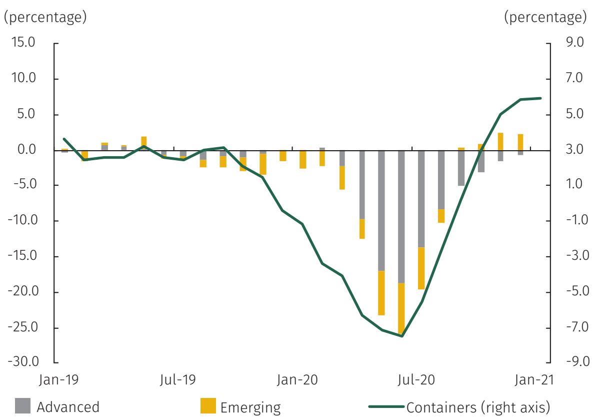
Graph 2.2
Global Economic Growth
(annual change)



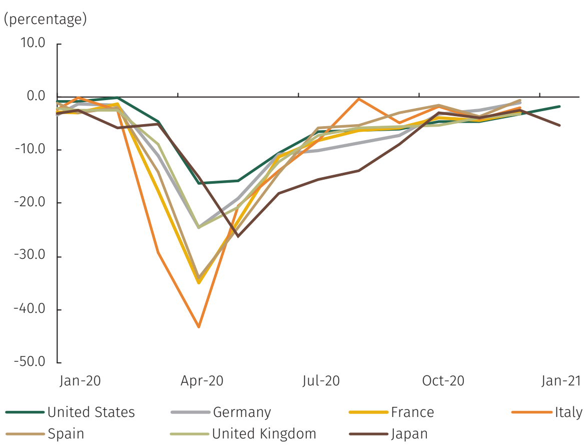
Sources: International Monetary Fund, World Bank, and OECD.

Graph 2.3
Industrial Production in the Major Economies and Global Trade Indicators
(annual change)

A. Real worldwide exports and container traffic[a/]



B. Industrial production



a/ Corresponds to the 3-month moving average of the annual variation.
Sources: Bloomberg, CPB Netherlands Bureau for Economic Policy Analysis and Institute of Shipping Economics and Logistics.

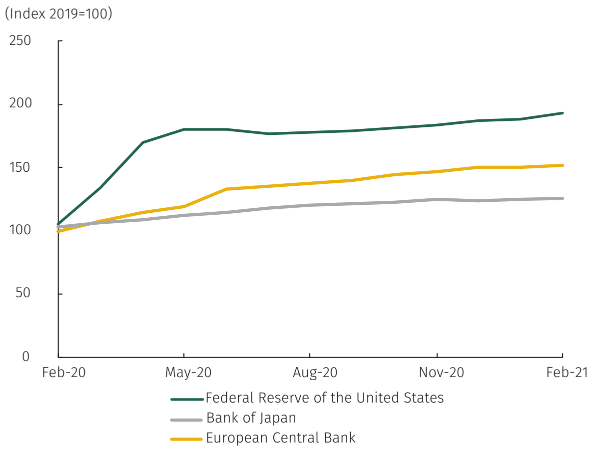
2.3 International Outlook

In 2020, the global Covid-19 shock generated an unfavorable context abroad that showed a partial recovery in the second half of that year spurred by the reopening of the economy, the upturn in external demand and terms of trade, the increase in workers' remittances, the low interest rates, and extensive international liquidity. Going forward, the outlook has improved due to the development of various vaccines against the virus. Nonetheless, uncertainty is high since the course of the pandemic and the persistence of its negative effects on the global economy are unknown.

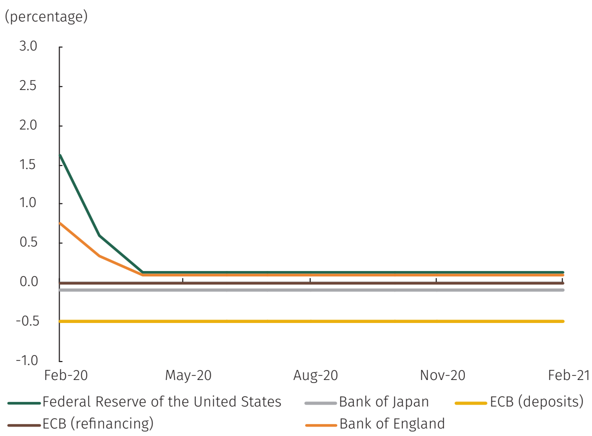
Following the unprecedented drop in the second quarter of 2020 caused by the health crisis and the intense restrictions on mobility needed to contain the spread of the virus, the global economy showed a partial recovery in the second half of the year. In 2020, the pandemic generated a significant reduction in the world economy which the International Monetary Fund estimated at 3.5% (Graph 2.2). Global economic growth had been affected since the first quarter of 2020 and continued to deteriorate until it bottomed out in the second quarter. All of this was due to the spread of the virus and the severe lockdown measures to contain it. In the third quarter, there was a partial rebound in economic activity as a result of the gradual reopening of the countries and the multiple fiscal and monetary measures implemented to counteract the shock. In the fourth quarter, the pace of recovery slowed down, a trend to which new outbreaks of the virus, which required increased social isolation measures, may have contributed in several countries, including those in the euro area and the United States. This partial improvement in the worldwide economy in the second half of the year was accompanied by a rebound in international trade in merchandise, industrial production, and the prices of raw materials all of which were indicators that had shown significant declines in the second quarter (Graph 2.3). Furthermore, in the second half of 2020 and in an environment of ample liquidity and low international interest rates, the international financial markets saw better performance in the wake of the deterioration seen in March and April of that year. The medium-term prospects for the global economy, in turn, have become more favorable due to the development of various Covid-19 vaccines and the launching of vaccinations of the population even though this process began relatively slowly and with limits on the global supply. In this context, different international organizations and analysts forecast a rebound in global GDP, which will probably be between 4.3% and 5.6%, in 2021 (Graph 2.2). Nevertheless, uncertainty remains high since the progression of the pandemic and the persistence of negative effects around the world that are associated with greater public indebtedness, increased poverty, and the deterioration of the labor markets, among others, are unknown.

Graph 2.4
Monetary Policy in some Advanced Economies

A. Balance sheets (total assets)

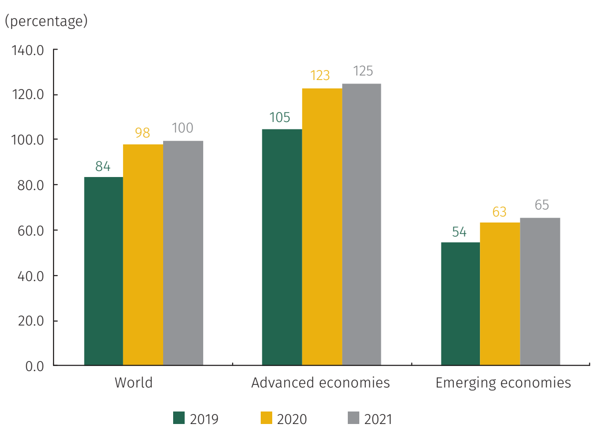


B. Benchmark rates



Sources: Federal Reserve of the United States, European Central Bank, and Bloomberg.

Graph 2.5
Government's Gross Debt
(percentage of the GDP)



Source: International Monetary Fund.

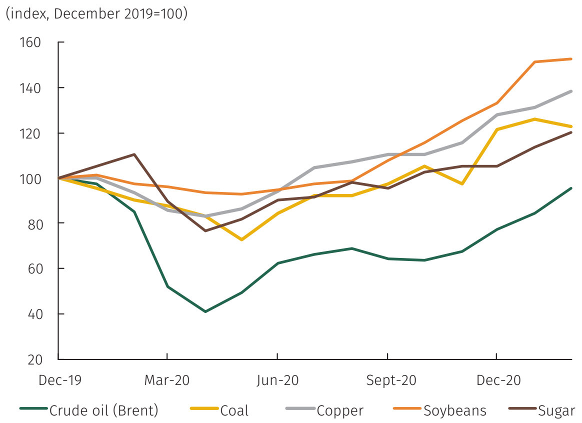
The fiscal and monetary stimulus implemented by the authorities in several countries has contributed to the recovery of the different economies. In 2020, the central banks of the developed economies lowered their interest rates or kept them at historically low levels and implemented non-conventional measures that favored international financial market liquidity (Graph 2.4). This was done in an environment of low inflationary pressure, excess productive capacity, and ample labor markets resulting from the Covid-19 shock. The central banks of the developing economies also implemented a broadly expansionary monetary policy that was accompanied by additional measures to counteract the shock. On the fiscal front, and subject to their financing capacity, the governments provided different types of support to companies and households to mitigate the negative impact on income. The above was added to the reduction in tax collection due to the economic crisis and led to a generalized deterioration of fiscal variables. As a result, public debt rose almost 18 percentage points (pp) of the GDP in advanced economies and 9 pp in emerging economies during 2020 according to the IMF and reached levels of 123% and 63% of the GDP respectively. The IMF expects the fiscal deficits, on average, to decline for both the advanced and emerging economies in 2021 while they anticipate an additional rise, though smaller than the one in 2020, in the average levels of public debt (Graph 2.5). These expectations could be based mainly on the recovery of tax revenues in accordance with the rebound expected for the economy this year.

In 2020, the decline in foreign demand constituted an unfavorable shock to the country which was partially diluted in the second half of that year. The average GDP for Colombia's trading partners registered an unprecedented fall in 2020 that the technical staff estimated at close to 7.0% in their January *Monetary Policy Report*. This drop may have been more accentuated than what was estimated for the worldwide economy. The latter was because of the sharp reduction in the GDP of several of the main trading partners such as Peru (-11.2%), Mexico (-8.5%), Ecuador (-8.0%),[23] and the euro area (-6.8%). It should be noted that the Central American countries where Colombian financial system investments are located also showed significant downturns in their economic growth. For example, Panama registered a 17.9% drop in the GDP in 2020. The assumptions of the technical staff at *Banco de la República* suggest an average GDP growth for our trading partners that is likely to be between 2.5% and 6.5% for 2021. This trend will probably be favored, in part, by the vaccination for the virus where the advances made in the United States and Chile are notable. The recovery of our trading partners will probably continue to take place in an environment of high variability among countries due to the differences in the condition of their economies before the shock, the control

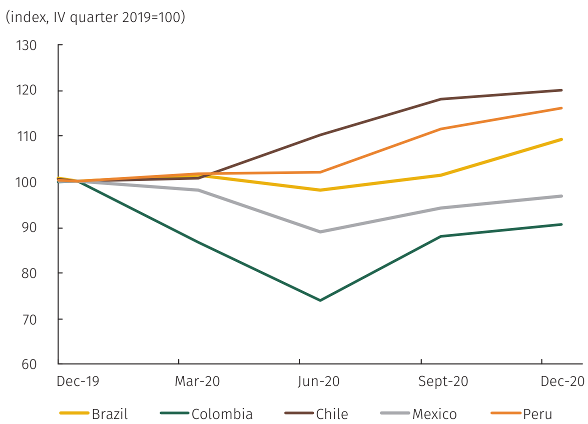
23 This figure corresponds to the technical staff's forecast in the January 2021 *Monetary Policy Report*.

Graph 2.6
International Commodity Prices and Terms of Trade for Some Countries in the Region

A. Prices of Exported Commodities



B. Terms of trade



Sources: Bloomberg, Datastream, central banks, IPEA, and *Banco de la República*.

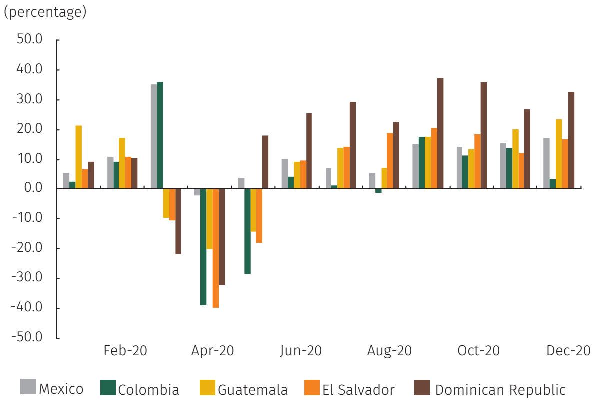
of the pandemic, and the measures taken to counteract its negative effects. In this area, most of the countries in the region will probably have a less favorable outlook. In any case, the uncertainty about the speed and sustainability of the recovery remains high since it is difficult to anticipate the course of the pandemic and the persistence of its negative effects as well as the rate at which the population is vaccinated along with other factors.

In 2020, the 15.5% reduction in the terms of trade (TT) was an additional negative shock that the Colombian economy faced and was mainly due to the lower export prices for oil and coal (Graph 2.6, panel A). Specifically, the decline in the price for crude oil in 2020[24] was largely driven by the global economic recession and restrictions on mobility. Regarding supply, after the cutbacks in production on the part of OPEC and their allies, there were disagreements between Saudi Arabia and Russia at the beginning of March which delayed these cuts and even led to a temporary increase in production that contributed to an oversupplied market and an increase in world inventories. Thus, the TT reached the minimum for the year in April and, thereafter, presented a partial recovery that was in line with the rebound in the prices for raw materials exported by the country including that of crude oil.[25] The reduction in TT had negative effects on national revenue and economic growth and contributed to the depreciation of the currency. In addition, it limited the country's external adjustment since it significantly reduced the value of the exports and was a determining factor in the decrease in direct investment. Tax revenue, in turn, was also affected by the impact on the royalties and profitability of mining and petroleum companies, particularly Ecopetrol. In relative terms, the impact on TT was greater than what was registered in other countries in the region that have more diversified export baskets, are crude oil importers, or whose sales are concentrated in commodities where the prices were not affected as much (Graph 2.6, panel B). In 2021, the technical staff's outlook shows a rebound in the TT due, in part, to the higher prices expected for crude oil which are likely to be favored by factors such as the better performance in the global economy and a supply that, considering aspects such as the cutbacks by OPEC and its allies, will probably remain at levels below those seen before the pandemic. The market outlook for 2021 has improved recently, and starting with the price

24 The price of oil in 2020 was USD 43.2 bl for the Brent benchmark and USD 39.3 bl for the WTI crude oil benchmark which meant an annual decline of 32.7% and 31% respectively.

25 After having reached the yearly minimum in April, the crude oil price partially recovered and, in December, its average stood at USD 50.2 bl for Brent and USD 47.1 bl for WTI. This rebound was partly due to the reduction in worldwide production resulting from the cutback agreements by OPEC and their allies. Furthermore, crude oil production also declined in other countries, due to the deterioration in the profitability of the business. Demand factors such as the rebound in global economic activity, the rebound in global economic activity, the gradual reopening of countries, and the growth of the Chinese economy also contributed to this partial recovery of the price.

Graph 2.7
Dollar Income from Workers' Remittances
(annual change)



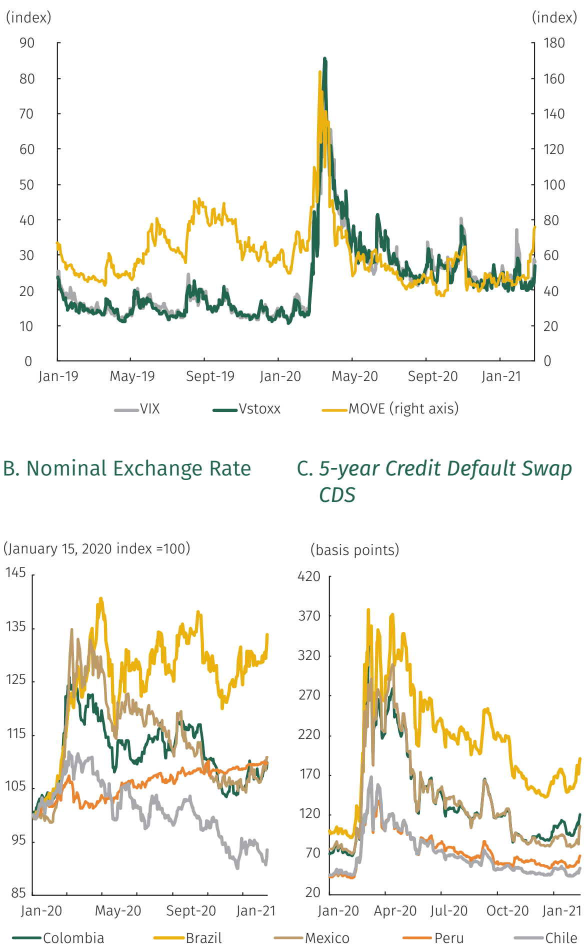
Source: central banks.

Graph 2.8
Index of Volatility in International Financial Markets, Nominal Exchange Rate and Risk Premia (five-year CDS) for Some Economies in the Region

A. Financial Volatility Indices

B. Nominal Exchange Rate

C. *5-year Credit Default Swap CDS*



Source: Bloomberg.

increase seen in February, the analysts anticipate that this price will be between USD 47 bl and USD 71 bl (Brent) as the average for this year. This interval is wide and reflects the high uncertainty that remains in the market.

Workers' remittances showed an increase that contributed to mitigating the negative impact of the pandemic on national revenue. After the low levels seen in April, dollar inflows from workers' remittances showed a significant recovery as they grew close to 9.0% per annum during the latest quarter and bringing in USD 6,853 m, which is 1.8% more than what was registered a year earlier, over the course of 2020. This income, which played a counter-cyclical role and that was largely intended for the consumption of recipient households, went from representing 2.1% of the GDP in 2019 to 2.5% in 2020. Data by geographic origin for the second half of the year highlight the higher amount in funds coming from the United States, where a significant number of Colombian migrants have settled and where economic activity and the labor market partially recovered in the second half of the year. This, along with the fiscal stimulus, contributed to improving people's income. The performance of workers' remittances in 2020 was not exclusive to Colombia. Other countries in the region registered increases with cases such as Mexico and Central American countries standing out (Graph 2.7).

In an environment of ample liquidity and low international interest rates, the country has been able to maintain its access to different sources of financing from abroad. As will be explained in detail in section 2.4.1, there was a sharp decline in the risk premia and the currencies depreciated with respect to the dollar in the emerging economies including Colombia in March and April. This partly reversed itself in the second half of 2020 (Graph 2.8). During this last period, capital flows to emerging countries performed better according to the Institute of International Finance (IIF). Despite this recovery in the international financial conditions, the rating agencies downgraded the credit rating and outlook for several countries in the region in 2020.[26] In the case of Colombia, the investment grade rating of the public debt remained unchanged despite the changes made by some rating agencies as is explained in detail in the next section. In 2020, *Banco de la República*, in turn, increased their Foreign Reserves, and this, together with the access to and expansion of the IMF's flexible credit line,[27] contributed to giving the Colombian economy greater resilience with respect to possible shocks from abroad. According to the outlook of the Bank's technical staff, the country will

26 Mexico's debt rating was downgraded by the three major rating agencies (S&P, Moody's, and Fitch) while still keeping its investment grade rating. In Chile, although only Fitch Ratings downgraded its rating from A to A-, Moody's and S&P changed their outlook from stable to negative. In the case of Brazil, there were no downgrades in its debt rating. However, the S&P lowered its outlook from positive to stable and Fitch Ratings, from stable to negative.

27 See Box 2 of this Report.

probably continue to have full access to international financial markets and to various sources of funds to supply its external financing needs. Nevertheless, high volatility in international financial conditions cannot be ruled out due, among other factors, to changes in the speed at which the monetary policy in the United States is being normalized given that country's greater prospects of economic growth and inflation.

2.4 Change in and Outlook for the Financial and Loan Markets

As of the end of the first quarter in 2020, foreign and domestic financial conditions had deteriorated significantly due to the pandemic shock. Subsequently, the ample international liquidity, the partial reopening of several economies, the approval of the first Covid-19 vaccines, the recovery of crude oil prices, and the measures taken by Banco de la República and the national government, etc., contributed to stabilizing the financial markets and the recovery in the country's internal and external financing conditions. The policy interest rate reductions have been transmitted to the interest rates for deposits and loans. Credit continues to recover, and the financial system is remaining at suitable levels of sound equity and liquidity.

2.4.1 Financial Markets

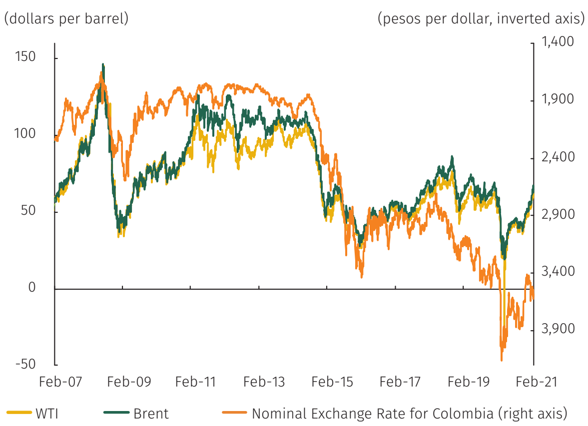
At the beginning of 2020, the financial markets registered a positive performance, but with a sharp deterioration at the end of the first quarter due to the pandemic. Subsequently, these markets partially recovered in a volatile environment and lower global risk aversion (Graph 2.8). At the beginning of the first quarter of 2020, the financial markets performed well as they were driven by higher demand for risk and by expectations of a greater monetary stimulus around the world in response to Covid-19 which was expected to have a moderate impact. However, the rapid global spread of the virus along with the strict social isolation measures needed to contain it generated a sharp deterioration in the international financial markets and in the risk perception indicators (Graph 2.8, panel A). Starting in the second quarter of 2020, the process of gradual recovery of financial markets began as a result of the flexibilization of social isolation measures and the reopening of most of the economies, the implementation of expansionary monetary and fiscal policies, the partial recovery of commodity prices, and the development of various Covid-19 vaccines as well as the beginning of the vaccination process.

In the second quarter of 2020, risk measures in emerging countries went from being historically low to exhibit significant increases. Subsequently, these measures were gradually reduced but remain at levels higher than those observed prior to the pandemic. In the case of Latin America, during the first quarter of 2020, the five-year credit default swaps (CDS) increased by 176 bp in Brazil, 162 bp in Mexico, 161 bp in Colombia, 88 bp in Chile, and 78 bp in Peru. Subsequently, between March 31, 2020 and February 26, 2021, they declined[28] (Graph 2.8, panel C). For Colombia, this risk measure peaked at 356 bp on March 23, 2020, closed the year at 87 bp, and so far in 2021, as of February 26, it has remained at 102 bp on average. The continuing high levels of risk premia for some countries in the region is largely explained by the elevated uncertainty regarding the progress of the pandemic and its effect on the recovery of global and local economic activity, the limited supply of vaccines, weaknesses in its

28 The 5-year CDS decreased 134 bp in Mexico, 112 bp in Colombia, 85 bp in Brazil, 76 bp in Chile, and 50 bp in Peru.

application, the increase in public debt, etc. Regarding the foreign exchange market, after the strengthening of the U.S. dollar in the first quarter, its performance reversed, and between the end of March 2020 and February 26, 2021, the US dollar weakened 8.2% vis-à-vis its peers[29] and 9.7% compared to the currencies of emerging economies.[30] Towards the end of 2020, the DXY (index that compares the U.S. currency with six major currencies) reached its lowest level in two and a half years. However, this weakening of the dollar was contained by the increased infections in several countries and by global uncertainty on some fronts such as the negotiations in the US Congress for a new fiscal stimulus package, the tensions between the United States and China, the US presidential election, and Brexit. In Latin America, some currencies appreciated starting in the second quarter of 2020 in line with the global weakening of the dollar. They were also influenced by the increase in the prices of oil and industrial metals, as well as by some idiosyncratic factors. Until February 26, in the region, the Chilean peso (15.0%), the Mexican peso (11.9%), and the Colombian peso (10.6%) appreciated, while the Brazilian real (-7.6%) and the Peruvian sol (-6.3%) depreciated (Graph 2.8, panel B).

Graph 2.9
Nominal Exchange Rate and International Oil Price



Note: Data as of February 26, 2021.
Source: Data License.

As other emerging currencies, the Colombian peso partially corrected the sharp depreciation against the dollar seen in the first quarter of 2020. During this period, the Colombian peso depreciated 23.7% vis-à-vis the dollar in accordance with the deterioration of the foreign and domestic economic expectations and the fall in the oil prices. Starting in the second quarter, the partial reversal of the appreciation was supported, in addition to the above-mentioned international factors and the recovery of oil prices[31] favored by: 1) the OPEC+ cutbacks going into effect; 2) the additional cutbacks announced by Saudi Arabia, the United Arab Emirates and Kuwait; 3) the optimism about the gradual reopening of the economies; 4) the decline in oil production as a result of some hurricanes, and 5) the recent interruption of oil production in the United States due to the severe winter (Graph 2.9). Furthermore, starting in the last quarter of 2020, the recovery of the peso was also influenced, in part, by the ratification

29 In line with the DXY, which includes the euro, the Japanese 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.

30 In line with the MXEF0CX0 Index, which includes the currencies of Argentina, Brazil, Chile, China, Colombia, the Czech Republic, Egypt, Greece, Hungry, Kuwait, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates.

31 During the first quarter of 2020, the Brent oil price fell 61.5% and the WTI, 66.8%. Nevertheless, between March 31, 2020 and February 26, 2021, the Brent oil price increased 144.5% and the WTI price, 200.3%. The correlation between the Brent and the COP/USD rate was -0.92 in 2020. However, so far in 2021, the correlation has been 0.54.

of the country's sovereign rating by some rating agencies[32] (after Fitch lowered the country's credit rating in early April 2020[33]), government monetization, expectations of additional sales related to the disbursement of a portion of the flexible credit line with the IMF, and the supply of dollars by foreign agents. Thus, the exchange rate stood at COP 3,430 per dollar at the end of 2020 after having reached a high of COP 4,106 per dollar on March 19 of the same year.[34] Since February 2021, the financial markets of emerging countries, including Colombia, have been negatively affected by the massive global sale of bonds due to the expectations of an accelerated growth in inflation, particularly in some developed countries. So far in 2021, as of February 26, the exchange rate stood at COP 3,526 per dollar on average.

Since March 2020, *Banco de la República* has offered foreign exchange hedging measures and provided liquidity in dollars. As mentioned in section 2.2 of this report, in order to alleviate the pressure on the foreign exchange market, *Banco de la República* implemented the following mechanisms: 1) forward sales of dollars with one-month financial compliance to extend the hedges against risk of a sharp depreciation of the peso, and 2) dollar *swaps* at two-months to stabilize the foreign exchange market and provide liquidity in this currency. Considering that foreign liquidity showed improvements with respect to the conditions seen in March 2020, from July 2020 to March 2021, the Bank auctioned only the maturities of Non-Delivery Forwards. In addition, the BDBR decided not to continue the auctions of spot dollar sales through FX Swaps contracts and announced that this last instrument will be offered again when deemed necessary.

The demand for public debt securities by foreign investors recovered in May after the sell-off of these securities in the first quarter of 2020 with the outbreak of the pandemic. Thus, the net purchases in 2020 contrasted with net sales seen in 2019.[35] Furthermore, a historic demand was registered in September (COP 5,016 b) that coincided with the inclusion of local currency public debt securities on the Bloomberg Barclays indices starting that month[36] and with the issuance of a 30-year TES[37] of which foreign investors purchased COP 3.3 trillion (t) of the COP 4.8 t that were initially offered. In line with other emerging markets, foreign inflows were reversed in February 2021 when they sold COP 2.4 t, sales not seen since March 2020 (COP 2.6 t). In the forward

32 On October 28, 2020, the S&P rating agency kept the long-term foreign currency and local currency debt rating at BBB- with a negative outlook. On November 6, 2020, Fitch Ratings affirmed Colombia's long-term debt rating at BBB- with a negative outlook. On December 3, 2020, Moody's rating agency confirmed Colombia's rating at Baa2 and changed the outlook from stable to negative.

33 On April 1, 2020, Fitch Ratings downgraded Colombia's rating from BBB to BBB- and kept the outlook at "negative."

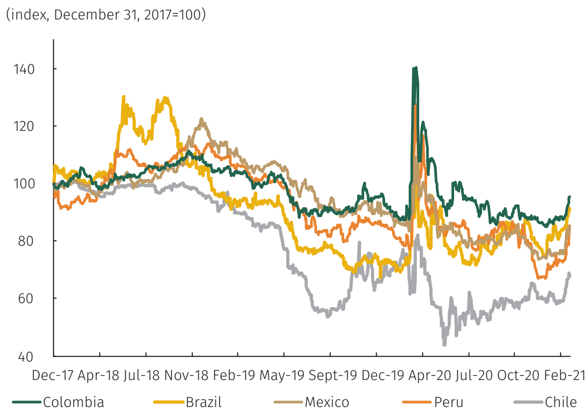
34 The average exchange rate for 2020 was COP 3,693 per dollar, which meant that the average depreciation for the year was 12.5%.

35 The foreign investors bought a net COP 12,476 b in peso-denominated TES (while registering COP 1,197 b in maturities for these securities) and sold a net COP 525 b in UVR-denominated TES. In 2019, they sold a net COP 627 b in peso-denominated TES (and registered COP 1,216 b in maturities) and bought a net COP 734 b in UVR-denominated TES (and registered COP 7 b in maturities).

36 This was announced on January 30, 2020 when it was reported that Colombia, together with Peru and Romania, would be eligible for the Bloomberg Barclays Global Aggregate and Global Treasury fixed income indices. At the time, it was noted that together they would encompass 0.2% of the Global Aggregate Index and 0.5% of the Global Treasury Index. Later, on July 30, Bloomberg projected that Colombia's individual share within these indices would be 0.1% and 0.19% respectively.

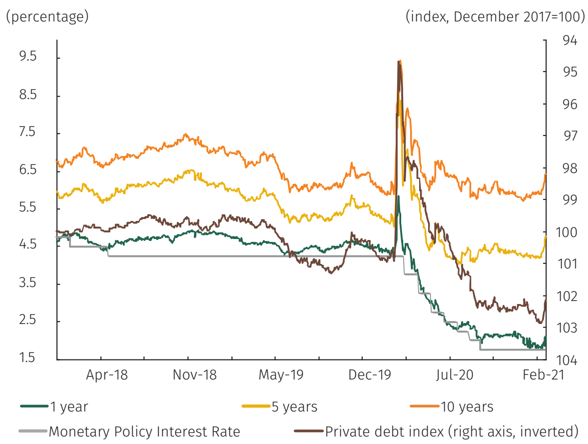
37 Maturing in October 2050, it is the longest term, local currency, fixed-rate bond issued to date.

Graph 2.10
Interest Rates in some Emerging Economies



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

Graph 2.11
Zero-Coupon TES Rates in Pesos by Maturity, Private Debt Index[a/], and Monetary Policy Rate



a/ The private debt index is presented on a December 2017 base of 100.
Sources: SEN (electronic trading system) and MasterTrader, calculations by *Banco de la República*.

market, the net buying position in TES by foreign investors through NDF contracts[38] also increased in 2020 compared with 2019[39]. In the case of local currency denominated TES, these forward purchases took place mainly in the first half of the year (COP 4,149 b, COP 2,293 b in 2020) while their position partially declined in the second half of the year in line with a higher interest of these investors in participating in the public debt spot market. In the case of UVR-denominated TES, the sustained rise in their buying position (COP 1,662 b) in the fourth quarter of 2020 was explained by the foreign investors' anticipation of a possible rise of inflation in the first months of 2021. So far in 2021, foreign investors' buying position through NDF showed a significant reduction, mirroring their behavior[40].

The high levels of the interest rates of public and private debt that were reached in March 2020 corrected downward and stood at levels lower than the ones seen prior to the pandemic. During the first two months of 2020, the public (TES) and private debt securities like most of the securities issued in the countries in the region performed well amid a better international environment. Subsequently, the sharp increase in global and domestic risk due to the pandemic generated a significant increase in rates of the region's debt securities. Nevertheless, these rates have corrected downward rapidly and reached levels below those seen prior to the crisis (Graph 2.10). This is a result of the lower risk aversion due to the expectations of a gradual reopening of most of the economies and partial recovery of commodity prices including crude oil. So far in 2021, the long-term rates of these securities have started to rise again in line with US Treasury rates in the wake of higher expectations of a fiscal stimulus and its implications for the prospect of higher inflation. In contrast, the short-term rates have had limited changes over the year given the expectations that the monetary policy stance will remain stable in most countries in the region (Graph 2.11).

Foreign investors were the biggest sellers on the stock market during 2020. However, inflows from these agents were seen in November and December. In 2020, foreign investors sold a net COP 3,431 b thus presenting the largest annual outflows since information has been available (2010). Nonetheless, in November and December, and they made net purchases that amounted to COP 241 b.

38 A forward contract is a derivative financial instrument in which the parties make the commitment to buy or sell an asset in the future, in this case a TES, at a price fixed on the trading date of the contract. This instrument allows foreign investors to take positions in TES without having to buy the asset directly.

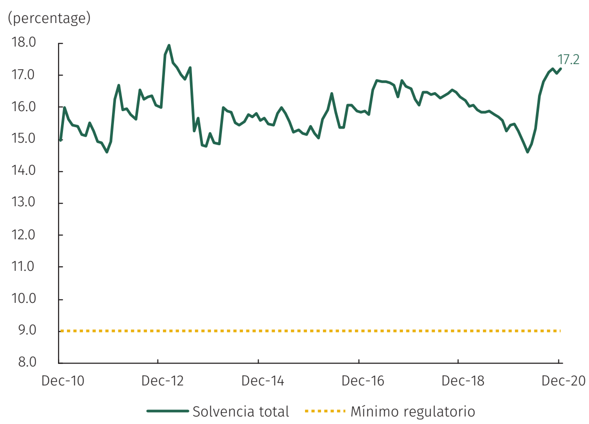
39 During 2020, the buying position of foreign investors through NDF contracts for peso-denominated TES and UVR-denominated TES rose COP 2,293 b and COP 2,731 b respectively while in 2019 the futures buying position of these investors declined COP 1,668 b and COP 58 b for peso-denominated TES and UVR-denominated TES respectively.

40 Peso-denominated TES and UVR-denominated TES rose COP 377 b and COP 159 b respectively in January while, in February, their position dropped COP 1,508 b and COP 479 b respectively.

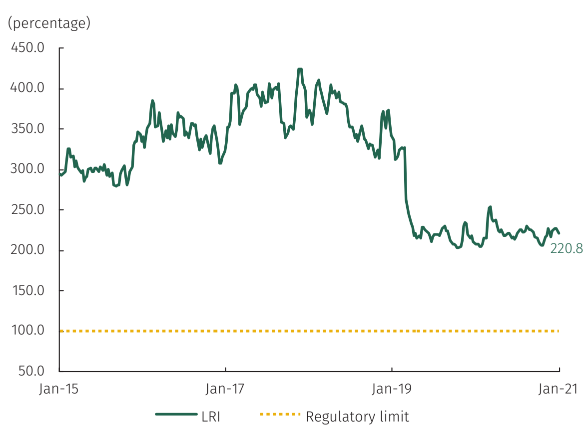
In 2021, the performance of local financial markets will depend on the trends abroad, the progression of the pandemic, the process and efficiency of local vaccination, the speed of employment and the economy recovery, and the fiscal adjustment program. As is explained in this report, the levels of output and employment are expected to continue recovering in 2021 in an environment in which the foreign demand is growing and the terms of trade will probably be higher than those registered in 2020. The government, in turn, has announced that a tax reform, which is essential to stabilize public finances, will be processed in the first half of 2021, and it is likely to result in a confirmation of Colombia's credit ratings. This fiscal recovery could be influenced by the pace of economic recovery which will largely depend on the vaccination process and the evolution of the virus.

Graph 2.12
Credit Institutions' Capital Adequacy and Liquidity Indicators

A. Total capital adequacy



B. LRI[a/]



a/ The LRI refers to the liquidity risk indicator that measures the ratio of liquid assets to net liquidity requirements over a 30-day horizon for all credit institutions.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

2.4.2 Credit Institutions' Financial Intermediation

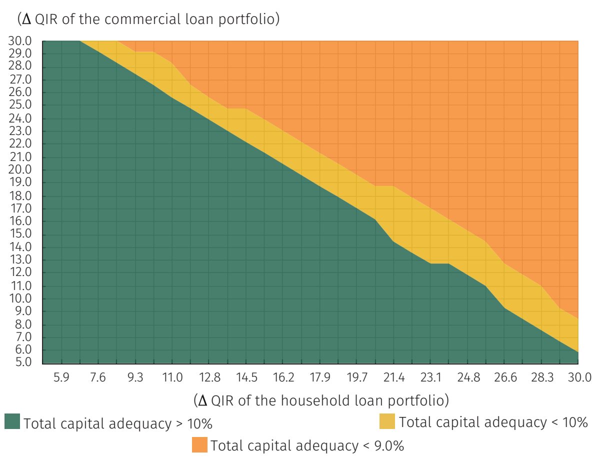
In 2020, the financial system maintained a sound equity and appropriate levels of liquidity. In the recent past, its profits have been lower mainly due to the increase in loan-loss provisions. A strength of the Colombian economy lies in the soundness of its financial system. The timely adoption of macroprudential measures, the strict supervision of financial institutions, and the progress in meeting international standards such as those under Basel III contributed to making the financial sector well prepared to face a shock as large as the arrival of Covid-19. For the first few months of 2020, and before the shock produced by the pandemic, the credit institutions (CI) showed aggregate indicators of capital adequacy (Graph 2.12, panel A) and liquidity (Graph 2.12, panel B) that were well above the regulatory minimums. After the appearance of the pandemic, these levels of capital adequacy and liquidity have not exhibited deterioration, which responds both to the resilience of the institutions and to the response measures adopted by *Banco de la República* and the Office of the Financial Superintendent of Colombia (FSC). Towards the end of the year, the aggregate capital adequacy of the CIs rose slightly due to the convergence of three factors: 1) the anticipation of some entities to the full implementation of Basel III by early 2021 under the guidelines of decrees 1477/2018 and 1421/2019; 2) the lower asset growth, and 3) the restructuring of loan portfolio assets into investments.

The downward trend of the aggregate indicator of profitability (return on assets, ROA), which had been declining since the end of 2019, was accentuated in 2020. With this, some of the CIs have started to register losses. Given the expectation of deterioration and the increase in the share of the risky loan portfolio, the CIs have increased their loan-loss provisions, and as could be expected, this has had an impact on their profitability indicators. The ROA, in particular, has reached levels that have not been seen since 2002 (Graph 2.13). If this trend towards the materialization

Graph 2.13
Credit Institutions' ROA

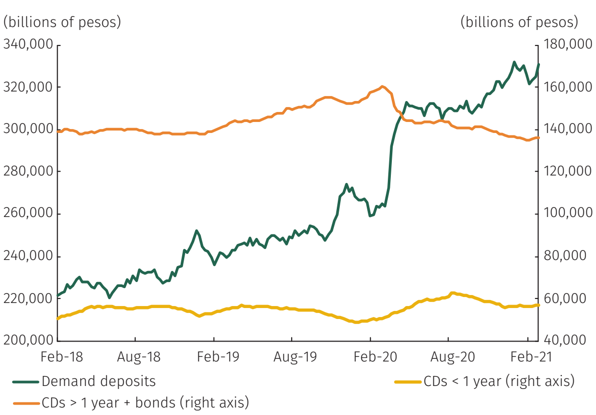
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República*.

Graph 2.14
Total Capital Adequacy for Different Shocks from QIR by Type



Note: each point on the graph represents a simulated combination of the change in the QIR of the commercial and household portfolio at the end of 2021.
The colors for each of these points represent the aggregate capital adequacy of the system if these shocks were to materialize with the green representing ample capital adequacy and the orange representing a situation where the aggregate capital adequacy of the system falls below the regulatory minimum.
Source: *Banco de la República*.

Graph 2.15
Balance of Credit Institutions' Deposits by Maturity



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

of risk in the loan portfolio continues, profitability is likely to remain on a downward trend.

Despite the above, the system aggregate has ample margin for dealing with losses. *Banco de la República*'s Financial Stability Report for the second half of 2020 contained a reverse stress test that sought to assess the financial system's ability to absorb extreme hypothetical variations in the quality indicator by risk (QIR) (Graph 2.14). The exercise suggested that the aggregate QIR would have to be at levels above 28% (more than three times the current level) towards the end of 2021 for the aggregate capital adequacy of the CIs to fall below the regulatory minimum. This represents more than three times the system's current level. The above implies that the aggregate system currently has a substantial cushion for dealing with losses from loan-loss provision expenses and the lower income from interest that a deterioration in the quality of the loan portfolio could cause.

Since the second quarter of 2020, the short-term financing sources increased their share of the credit institutions' liabilities. This trend, which calls for prudent asset management by intermediaries, has continued. In March and April 2020, the balances in savings deposits and in checking accounts increased significantly within a few weeks as a result of greater uncertainty and risk aversion because of the pandemic. After this change in level, the balances of these deposits remained the same and growth stabilized in the second half of the year. Regarding term deposits (CDs and bonds), the preference for shorter periods has risen since the beginning of the crisis and the desire for long-term deposits decreased notably (Graph 2.15). This trend has continued and, as a result, the total balance of CDs and bonds at the end of January was at levels similar to those seen two years ago. The preference for demand or short-term financial assets was also reflected in an increase in the demand for cash. Cash registered the largest annual growth in real terms since the 1980s (see the shaded section, Monetary base and M3). The decrease registered in the average maturity of CI liabilities suggests prudent asset management. When the CIs raise short-term funds from the public and transform them into long-term loans, they are exposed to a liquidity risk as a natural part of the business they carry out. This risk is accentuated by the shorter duration of the liability. Going forward, prudent asset management will prevent the maturity mismatches from becoming difficulties for the entities, even more if the preference for demand or short-term financial assets persists.

Due to the fear of facing a period of illiquidity, there was a strong demand for credit from companies in the second quarter. This subsequently moderated as financial markets stabilized and the Bank ensured that ample liquidity was provided. At the beginning of the pandemic and as one of the effects of uncertainty on the performance of economic activity and the changes in cash flows during the lockdowns, the companies with access to credit sought to increase their liquid resources as a preventive measure. Thus, commercial loan portfolio disbursements rose considerably and the balance for that type of loan registered a jump in its level. In the second half of the year, once companies noticed their effective cash requirements, the demand for commercial credit declined, and several of these loans were repaid in advance. This led to a drop in the balance for this category of loan portfolio (Graph 2.16, panel A).

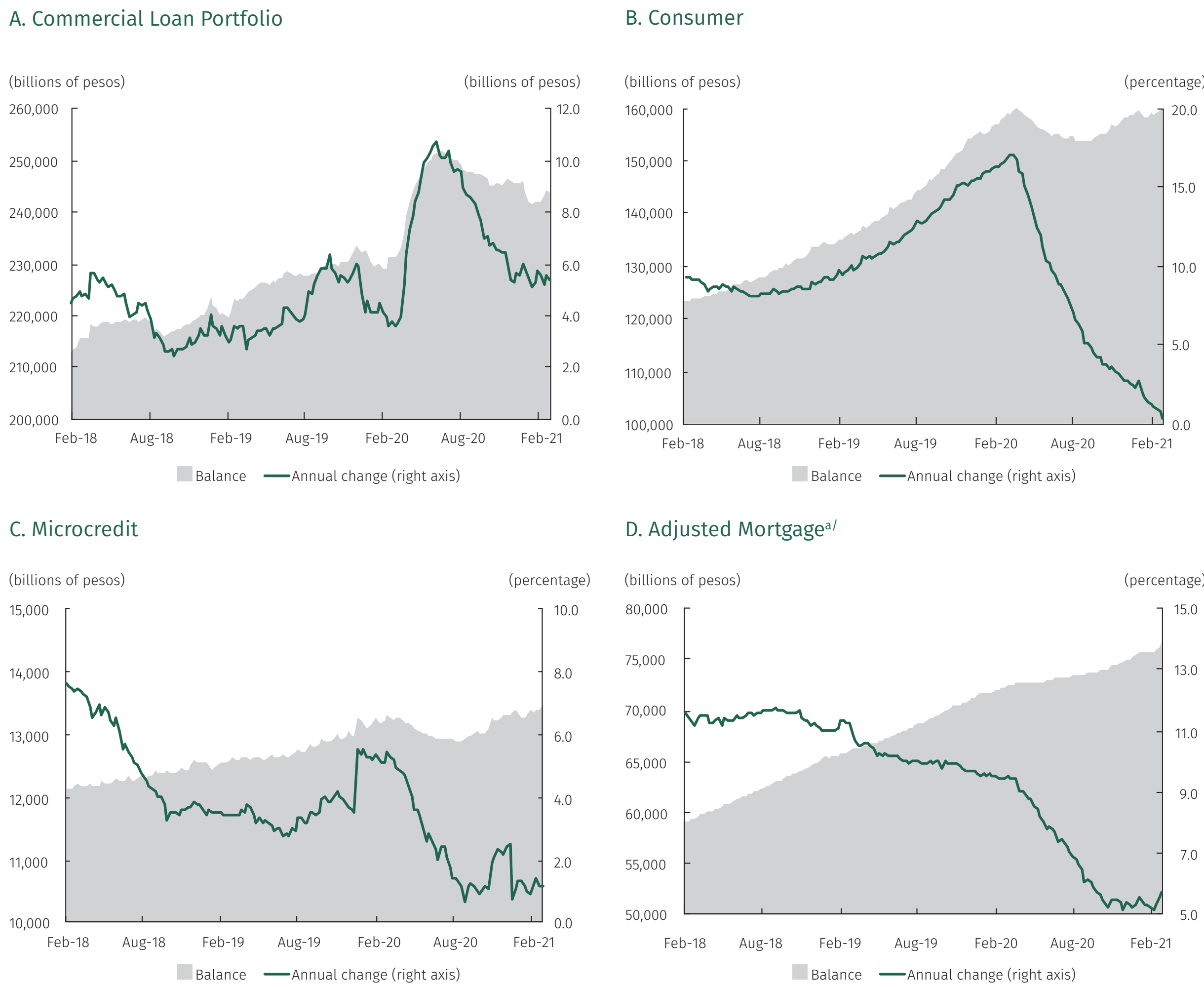
Policy interest rate reductions have been transmitted to the money market and to deposits interest rates. Both the Benchmark Banking Indicator(BBI) and the interbank rate declined at a pace similar to the policy interest rate (-250 bp). With regards to the deposit interest rates, the transmission over the past year was almost complete, and based on several exercises, it was the fastest in recent years with interest rates reaching historic lows (see Box 1). As of December 2020, the rate at which deposits were made in CDs was 240 bp lower than the rate registered in March prior to the change in the monetary policy stance. Likewise, the interest rate for CDs with a maturity of less than or equal to one year exhibited a 242 bp reduction (the DTF specifically fell 258 bp) and the interest rate for CDs of more than a year, one of 249 bp. In the case of savings deposits, the decrease in their rate was also considerable (-114 bp) (Graph 2.17).

The transmission to loan interest rates has also been significant (except for microcredit). As has been seen in the case of deposit rates, the reduction in lending rates has been the fastest in recent years and has followed the pattern of previous periods. Based on this, the rates for commercial loans react first, followed by consumer loan rates, then housing and microcredit rates (see Box 1). As of December 2020, the commercial loan rate was 222 bp below the March rate (ordinary 210 bp, preferential 248 bp, and treasury 146 bp), the consumer rate was 166 bp (loans covered by automatic payroll deductions -126 bp and loans other than loans covered by automatic payroll deductions -128 bp), and the credit card rate was 95 bp.[41] For the purchase of housing, a loan with a longer period than the others, the decline in its interest rate was 95 bp for non-Low-Income Household (LIH) and 63 bp for LIH compared to the levels in March (Graph 2.18). Following this decline, the rates for ordinary and preferential commercial loans, consumer loans, housing loans, and credit cards stood at historical minimums.[42] As of December, the interest rate for microcredit was 71 bp higher than the rate in March. This type of loan is characterized by high levels of credit risk due largely to the low credit profile of borrowers and the high costs of screening and monitoring the small companies that apply. This is reflected in an interest rate level for microcredit that is higher than the one registered for the other types of loans. In periods when economic activity is dropping, the levels of risk rise and the transmission of declines in the Monetary Policy Rate (MPR) to the interest rates for microcredit may be low or zero. Control and monitoring of the various risk factors by credit institutions is intended to ensure the stability of these entities, which is essential for preserving the money deposited by families and companies in the financial system.

41 In the second half of March 2020, when the quarantines were already widespread and before the change in the Bank's stance, the interest rates for individual's credit cards had already registered a significant decrease compared to the previous month due to various advertising campaigns carried out by financial institutions for purchases in stores selling basic necessities such as supermarkets and drugstores. When the interest rate in December is compared to the one in February, the drop is 172 bp.

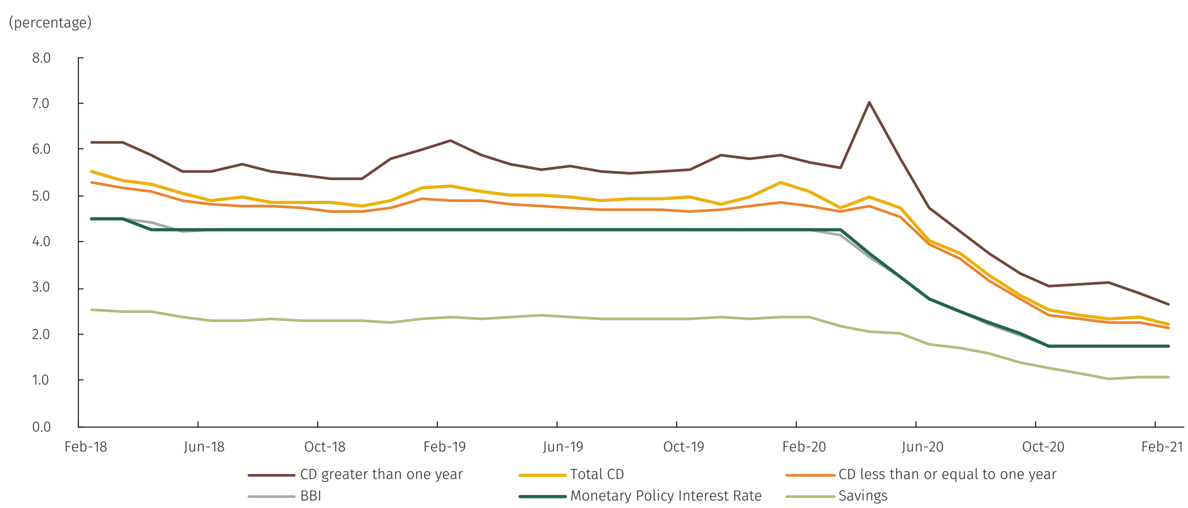
42 For commercial (ordinary and preferential) and consumer loan rates, the data as of December 2020 corresponds to historical lows (since May 2002) in both nominal and real terms (if inflation expectations are used as a deflator). For housing loans, it corresponds to the minimum in nominal terms. In the case of credit cards for individuals, the rate for November 2020 was the lowest since 2011.

Graph 2.16
Gross Loan Portfolio in Legal Currency by Category[a/]
(Balance and annual change)



a/ Includes adjustment for securitization.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

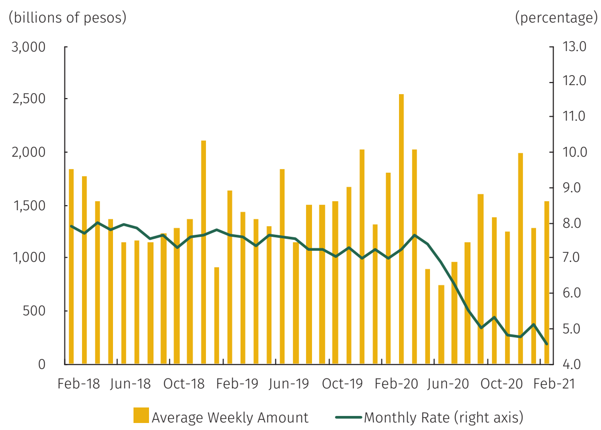
Graph 2.17
Monetary Policy Interest Rate, BBI, and Deposit Rates



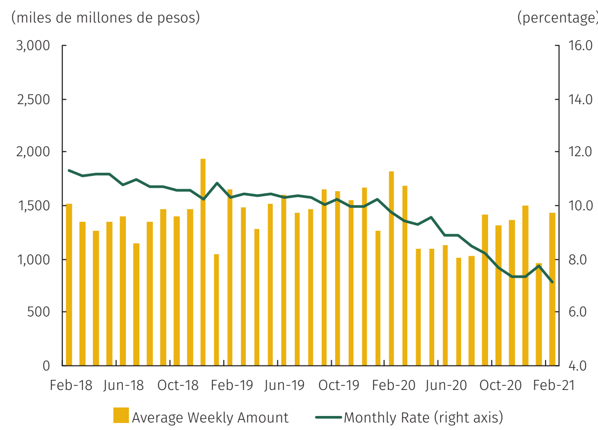
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

Graph 2.18
Rates and Disbursements for Different Categories of Credit
(average monthly rates weighted by disbursements; average weekly disbursements)

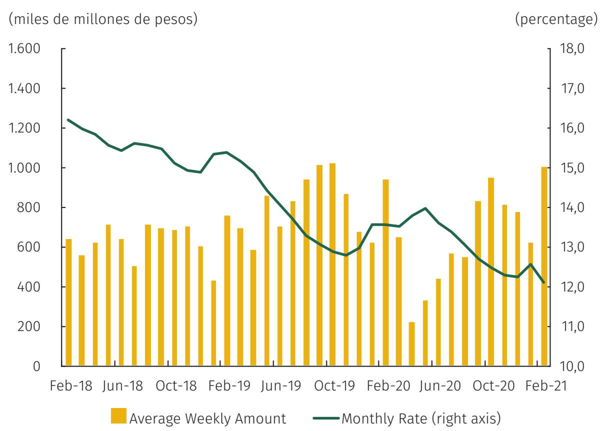
A. CPreferential Commercial Loans



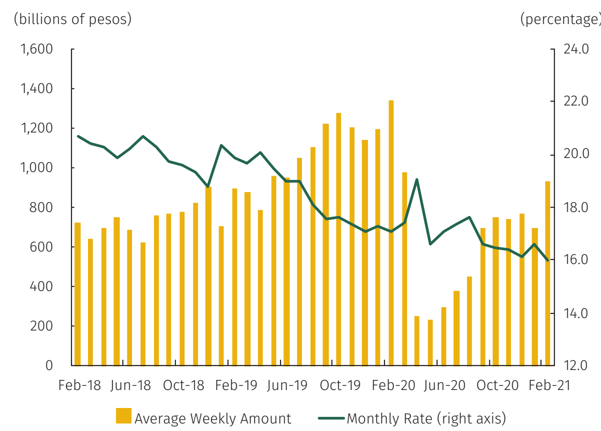
B. Ordinary Commercial Loans



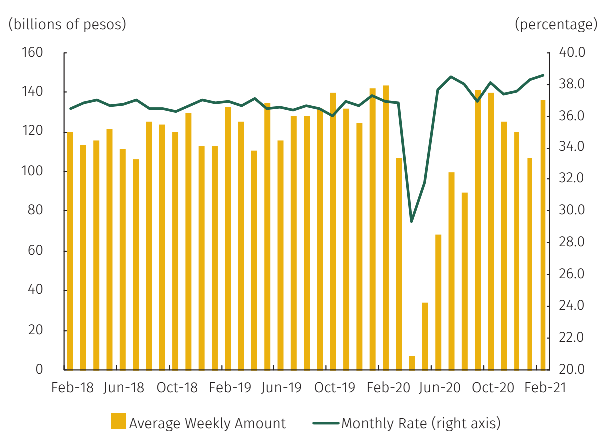
C. Consumer loans through loans covered by automatic payroll deductions



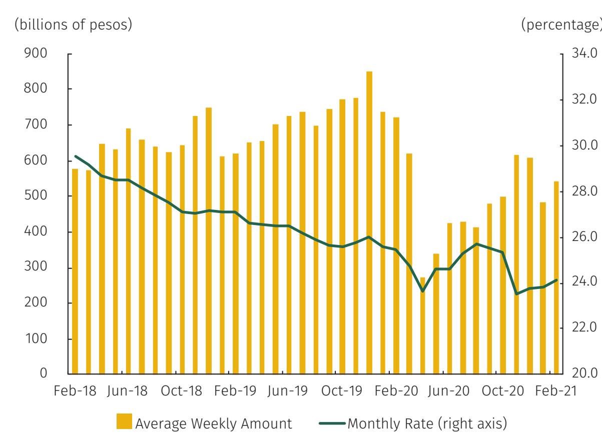
D. Consumer loans other than loans covered by automatic payroll deductions



E. Microcredit



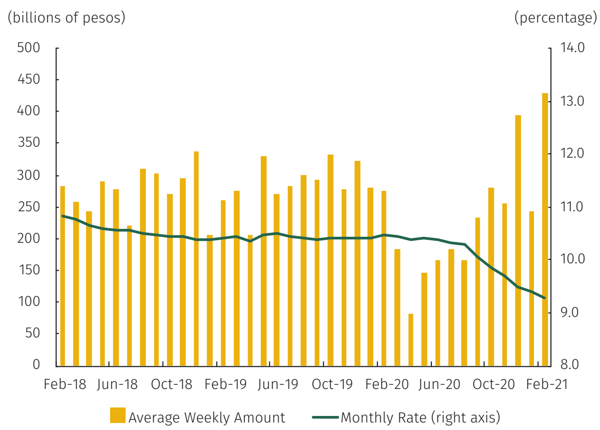
F. Credit card - Individuals



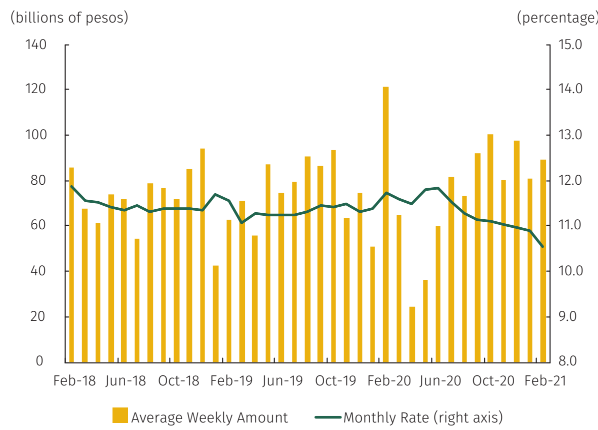
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

Graph 2.18 (continued)
Rates and Disbursements for Different Categories of Credit
(average monthly rates weighted by disbursements; average weekly disbursements)

G. Purchase of Non-Low Income Housing



H. Purchase of Low-Income Housing

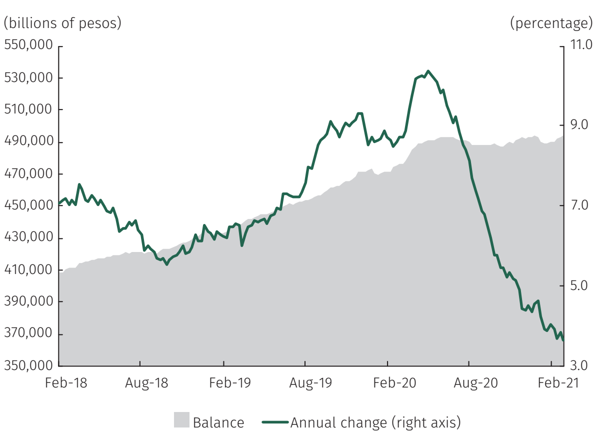


Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

Between the first and second quarter of 2020, the disbursements of loans declined significantly. Subsequently, in an environment of reduction in interest rates to historical minimums, disbursements recovered and were similar at the end of 2020 to those registered prior to the pandemic in some categories. During the second quarter when the most severe restrictions on economic activity were introduced, the disbursements reached historic minimums. They recovered starting in the third quarter, especially after the reopening of the economy. Thus, in the last few months of the year, the new loans in the consumer category through loans covered by automatic payroll deductions, LIH housing, and micro-credit registered levels that were above the 2019 average. For credit cards of individuals and consumption other than loans covered by automatic payroll deductions, the disbursements stabilized but did not approach the values from previous years (Graph 2.18)

In the second half of 2020, the loan portfolio balance stabilized (Graph 2.19). With the increase registered in disbursements of loans to households and microcredit starting mid-year, their balances grew again (Graph 2.16, panels B and C), especially consumer loans, which thus offset the reduction in the balance of the commercial portfolio. Remarkably, despite the fall in production and national income, the economy's total credit continued to grow at positive annual rates which were essential to supporting the economy's recovery.

Graph 2.19
Gross Loan Portfolio in Legal Currency[a/]
(Balance and annual change)

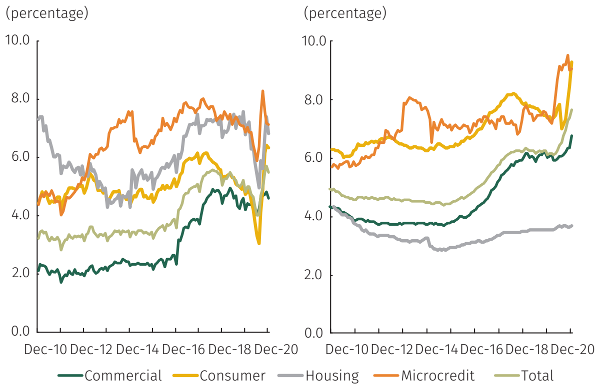


a/ Includes adjustment for securitization.
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

Graph 2.20
Credit Institutions' Risk Indicators

A. Non-performing loans

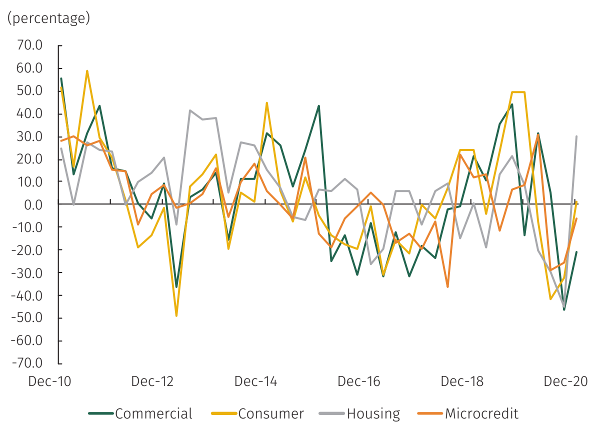
B. Loan-loss provisions as a percentage of the gross loan portfolio



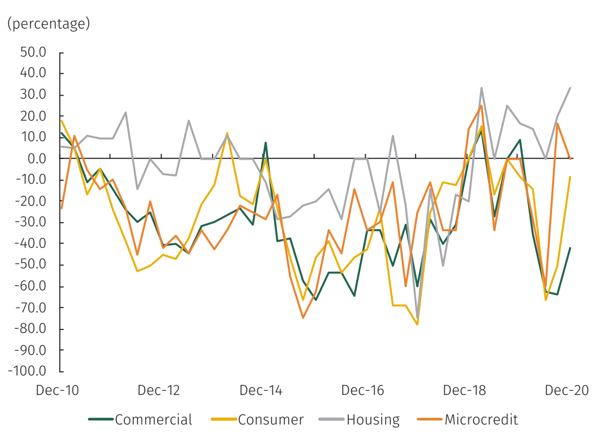
Source: Office of the Financial Superintendent of Colombia, calculations by *Banco de la República.*

Graph 2.21
Supply and Demand Indicators in the Credit Market for Credit Institutions

A. Perceived Demand for Loans



B. Indicator of the change in requirements for granting new loans



Source: *Banco de la República* (*Report on the loan situation in Colombia*).

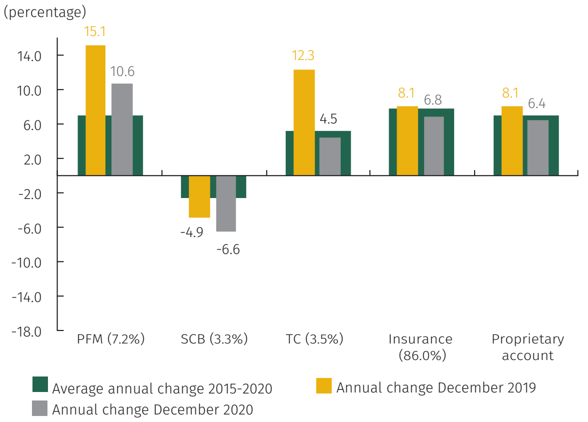
The measures adopted by the Office of the Financial Superintendent of Colombia were reflected in transitory downturns in the credit risk indicators, but there is uncertainty about the final effects they will have on bank balance sheets. The containment measures taken by the FSC (as defined in External Circulars 007 and 014) and implemented by the CIs to mitigate the effects arising from the situation in the financial markets and the health emergency were reflected in temporary decreases in the credit risk indicators between March and July 2020 (Graph 2.20, panel A). When these measures came to an end, the quality indicators showed deterioration from August to December, especially in the loan portfolio categories for households (consumption and housing). There is still great uncertainty about the value these indicators could reach when the risk is fully revealed and the period of validity of the structural measures under the Debtor Assistance Plan (PAD in Spanish) comes to an end as defined in External Circulars 022 and 039 of the FSC. The uncertainty associated with the progression of the pandemic can be added to the above. In any case, the entities have increased the level of the loan-loss provisions that they depend on to deal with the possibility that these risks materialize (Graph 2.20, panel B).

The expected recovery of economic activity, the extensive liquidity and credit supply, coupled with low interest rates, should contribute to the performance of the loan portfolio held by credit institutions in 2021. According to *Banco de la República*'s December 2020 Survey on the Credit Situation in Colombia, the perception of demand for the housing and consumer loan portfolios is rising based on what is reported by the financial institutions that were consulted (Graph 2.21, panel A). With respect to the commercial loan portfolio and microcredit portfolio, this indicator shows an upward trend following the shock registered last year. According to the same survey, there has been a decrease in requirements for the granting of new loans (Graph 2.21, panel B). These requirements are already in positive territory for the housing and microcredit portfolio while the consumer and commercial categories have shown significant upturns. The performances seen in both supply and demand will probably spur the loan portfolio growth in the short term.

2.4.3 Non-banking Financial Institutions

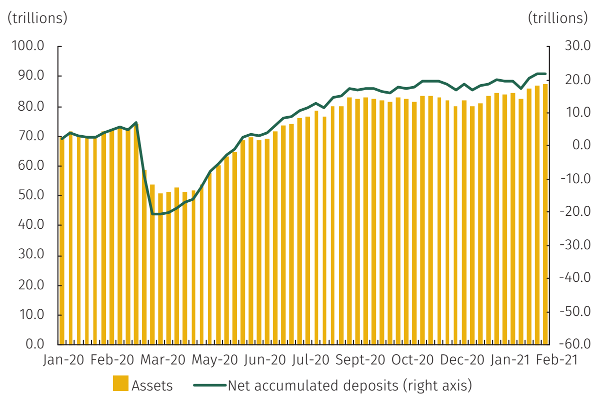
Over the course of 2020, the growth rate of the NBFI assets remained at around their historical average despite the devaluations that were seen in the capital markets in the first quarter of the year. In spite of the shock experienced by the capital markets in the first quarter of 2020, the NBFI assets grew at a rate close to their average for the past five years (Graph 2.22). This growth was mainly associated with appreciations in their fixed income portfolios that consisted primarily of investments in TES. The appreciations of these bonds was consistent with *Banco de la República*'s rate cut over the course of 2020.

Graph 2.22
Assets of Non-banking Financial Institutions
(real annual change)



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

Graph 2.23
Assets and Net Deposits of Open-ended Collective Investment Funds



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

During the first quarter of 2020, there were sharp decreases in the open-ended collective investment fund assets. The liquidity granted by *Banco de la República* contributed to stabilizing this market. In mid-March, in the wake of the shocks caused by the pandemic and lack of agreement regarding the crude oil supply on the part of OPEC+, there were substantial outflows of the larger investors from the open-ended collective investment funds (Graph 2.23). These outflows led to an increase in the liquidity needs these funds had. The liquidity supply measures taken by *Banco de la República* contributed decisively to the fact that the financial markets did not suffer permanent damage as a result of these shocks.

During the second half of the year, the collective investment funds recovered their assets and, by December, their level had exceeded what had been seen at the beginning of the year. In the second half of the year, the open-ended collective investment funds returned to the asset level they had before the pandemic. As of December, the total amount of assets managed by the CIFs came to COP 83.5 t with a growth of 20.2% compared to the end of December 2019.

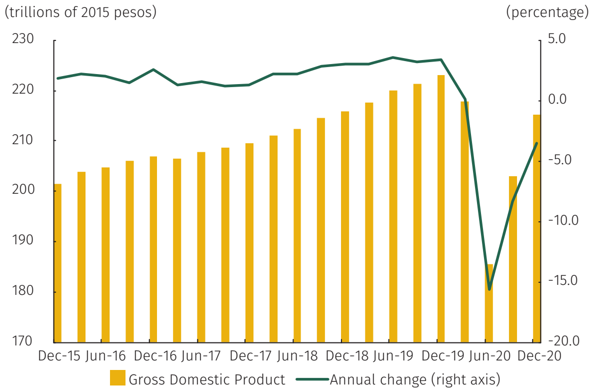
2.5 Change in and Outlook for Economic Activity, the Labor Market, and Balance of Payments

In April 2020, there was a sharp fall in output and employment as a consequence of the measures that needed to be implemented to deal with the Covid-19 pandemic. The gradual opening of the economy, the improvement in conditions abroad, the counter-cyclical fiscal measures, and monetary policy actions contributed to the recovery of economic activity as of the second half of 2020. The better output during these last two quarters was mainly due to the reactivation of domestic demand where private consumption and investment in machinery and equipment has probably played a crucial role. Going forward, economic growth will continue to be determined by the changes in the pandemic. The Colombian labor market has also been recovering since May 2020 even though the employment levels registered are still well below those seen prior to the pandemic. It also shows a change in the breakdown of employment due to the greater strength of non-salaried and informal employment.

2.5.1 Economic Activity

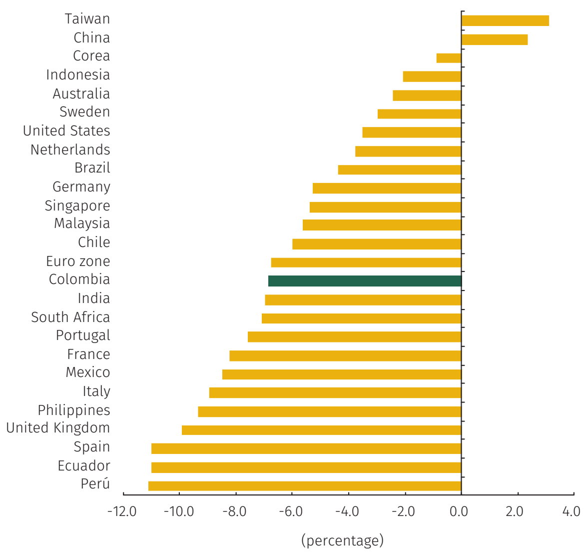
The shock of the pandemic interrupted the positive growth trend in early 2020 and caused a sharp drop in economic activity in the second quarter. Although there were encouraging signs of recovery in the second half of the year, the economy suffered an unprecedented downturn in 2020 (Graph 2.24). In 2020, the GDP shrank 6.8% as a result of the shock from the Covid-19 pandemic. This fall was similar to the ones registered in other economies around the

Graph 2.24
Gross Domestic Product[a/]
(quarterly and annual change)



a/ seasonally adjusted series and corrected for calendar effects.
Source: DANE, calculations by *Banco de la República.*

Graph 2.25
Growth of the 2020 GDP
(Percentage; selected countries)



Note: the growth figures for Chile and Ecuador are IMF projections.
Source: Bloomberg, statistics offices and central banks, calculations by *Banco de la República.*

world and particularly in Latin America (Graph 2.25). However, the economy performed rather unevenly throughout the year. The first quarter started with a very positive performance that was interrupted by an increase in the number of infections at the beginning of March. The measures needed to deal with the public health crisis caused a steep decline in economic activity, especially in April, that led, during the second quarter, to the largest annual shrinkage of the GDP since quarterly records have been kept (-15.6% with seasonally adjusted and calendar-adjusted numbers) and had a major impact on all expenditure components. The lifting of the strictest lockdown and social distancing measures starting in May due to the greater control over the transmission of the virus and the decrease in the risk of overloading the health system made it possible for the economy to begin to reactivate that month. With a few short interruptions, that trend was consolidated over the course of the second half of the year along with the strong income support measures for households and firms implemented by the national and local governments and the expansionary monetary policy and the ample liquidity provided by *Banco de la República*. All of this made the gradual recovery of business and consumer confidence possible. Thus, in the second half of 2020, the GDP showed significant increases in its level compared to the very low record in the second quarter although it did not reach the levels seen before the shock.

The downturn in 2020 was mainly because of a sharp decline in domestic demand. This component fell 7.6% over the course of the year with the strongest part of the shock concentrated in the second quarter when it shrank 17%. In the second half of the year, domestic demand began to reactivate gradually, and this, in turn, explained the partial recovery of the GDP level during the same period (Table 2.2). Net external demand, in turn, registered a positive contribution to the change in economic activity during the year with the steep decreases in exports and, primarily, imports.

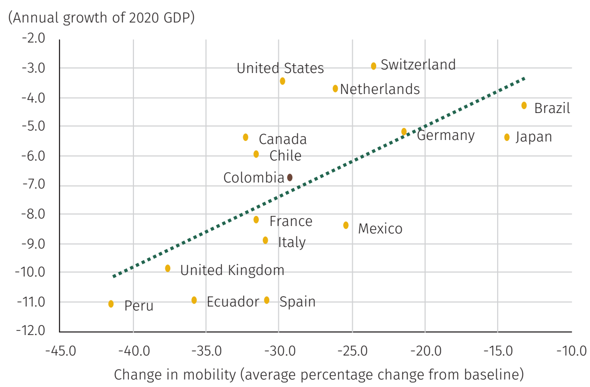
The economic downturn correlates highly with the intensity of the restrictions on mobility. In both Colombia and many other countries, a tight link between declines in mobility levels and downturns in economic activity was seen throughout the year (Graph 2.26). The social distancing and self-care measures also entailed restrictions of varying intensity on carrying out various economic activities and limited private consumption in a number of ways as well. In Colombia, the sectors affected the most were precisely those that felt the impact of the restrictions on mobility the most. This was the case with artistic and recreational activities, retail trade, repairs, transportation, housing and food services, the manufacturing industry, and construction, in addition to mining as a result of the steep decline in the prices for exported raw materials (Table 2.3). Once the social distancing measures were relaxed and mobility increased, several of these sectors were reactivated in the second half of the year. This was

Table 2.2
Real Annual Growth of the GDP by Type of Expenditure (seasonally adjusted and corrected for calendar effects, base year: 2015

	2019	2020				2020
	Full year	Q1	Q2	Q3	Q4	Full year
Final spending on consumption	4.2	3.2	-11.9	-6.7	-0.8	-4.1
Final spending on household consumption	3.9	3.2	-15.4	-9.0	-2.1	-5.8
Non-durable Goods	2.8	13.4	3.9	3.5	3.4	6.0
Semi-durable Goods	3.4	-2.8	-37.0	-18.7	-8.8	-16.8
Durable Goods	7.3	5.2	-29.1	-2.6	9.1	-4.3
Services	4.4	-1.1	-19.9	-13.8	-4.9	-9.9
Final spending on general government consumption	5.3	3.3	3.6	3.8	4.0	3.7
Gross Capital Formation	3.8	-6.8	-39.3	-20.6	-18.4	-21.2
Gross Fixed Capital Formation	3.1	-5.5	-40.2	-21.7	-17.3	-21.1
Housing	-8.4	-11.2	-41.5	-32.7	-27.5	-28.2
Other buildings and structures	2.9	-6.7	-43.6	-35.5	-31.1	-29.1
Machinery and Equipment	12.3	-2.2	-37.7	-1.6	2.1	-10.5
Cultivated biological resources	4.9	1.6	0.7	-4.3	2.4	0.1
Intellectual property products	1.6	0.2	-16.8	-10.5	-7.4	-8.6
Domestic demand	4.1	0.1	-17.0	-9.2	-4.1	-7.6
Exports	3.1	-2.0	-24.6	-21.4	-21.6	-17.4
Imports	7.3	0.7	-30.9	-23.9	-17.2	-18.0
GDP	3.3	0.1	-15.6	-8.3	-3.5	-6.8

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

Graph 2.26
Mobility to workplaces and growth in 2020



Note: the growth figures for Chile and Ecuador are IMF projections.
Source: Bloomberg, IMF, Google, calculations by *Banco de la República*.

especially true of commerce, repairs, and the manufacturing industry which reached levels close to those seen prior to the pandemic. However, branches such as construction (both buildings and public works) and mining continued to show pronounced annual declines while others – the agribusiness sector (2.8%), financial and insurance business (2.1%), real estate (1.9%), and public administration, education, and health (1.0%) – that were less affected by mobility restrictions registered positive annual growth. In terms of private consumption, services have been the most affected component.

The main impetus for the recovery of economic activity in the second half of 2020 came from private consumption. This component of demand showed a significant decline for the full year (-5.8%) that was smaller in magnitude than what was registered for the other major components (except for public consumption) and had a faster recovery in the second half of the year as well. Towards the fourth quarter, private consumption had already managed to recover much of the ground lost by the shock of the pandemic as shown by the mere 2.1% annual decline. This compares very favorably with the decline in the second quarter (-15.4%). Within this aggregate, the consumption of

Table 2.3
Real Annual Growth of the GDP by Branches of Economic Activity
(seasonally adjusted and corrected for calendar effects, base year: 2015)

	2019	2020				2020
	Full year	Q1	Q2	Q3	Q4	Full year
Agri-business, Forestry, Hunting, and Fishing	2.3	5.8	0.4	2.5	2.6	2.8
Mining and Quarrying	1.7	-4.2	-20.8	-18.6	-19.4	-15.7
Manufacturing Industry	1.2	-1.6	-22.8	-6.5	0.0	-7.7
Electricity, Gas, and Water	2.5	3.4	-8.5	-4.2	-0.9	-2.6
Construction	-1.9	-15.9	-40.5	-28.0	-27.2	-27.7
Buildings	-8.4	-19.4	-37.9	-28.1	-23.6	-27.2
Public works	11.2	-10.1	-47.7	-30.0	-28.6	-28.9
Specialized Construction Work	-2.8	-17.1	-40.8	-27.1	-24.9	-27.3
Commerce, Repairs, Transportation, & Accommodations	3.7	1.4	-33.9	-21.1	-6.5	-15.1
Information and Communications	1.1	1.1	-5.4	-2.3	-4.2	-2.7
Financial and Insurance Business	6.3	2.5	1.3	1.8	3.0	2.1
Real estate	3.3	2.5	1.7	1.8	1.7	1.9
Professional, Scientific, and Technical Work	3.4	2.4	-10.6	-5.6	-2.6	-4.1
Public administration and Defense, Education, Health	5.1	1.6	-1.3	0.0	3.4	1.0
Artistic, Entertainment, and Recreational Activities	13.0	5.2	-33.3	-11.2	-6.8	-11.7
Subtotal value added	3.2	1.0	-15.9	-8.7	-4.0	-6.9
Taxes minus subsidies	4.4	0.9	-14.3	-7.8	-3.3	-6.1
GDP	3.3	0.1	-15.6	-8.3	-3.5	-6.8

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

non-durable goods sustained positive growth rates throughout the entire year supported by the national government and local administrations' transfers to households under various assistance programs along with other factors. Although the consumption of durable and semi-durable goods registered significant declines throughout the year, the boost provided by special days such as VAT-free days and other discounts plus the decrease in the interest rate made it possible for these sub-components to show notable recoveries during the second half of the year. Finally, the consumption of services, the segment hardest hit by the preventive isolation measures and the closure of establishments, showed a significant drop but also a considerable rise in its level at the end of the year compared to what had been seen in the second quarter. Given its share in household spending, it was the segment that contributed the most to the improvement in the fourth quarter. Despite this encouraging picture, the full recovery to pre-pandemic levels was not possible in 2020 since some capacity limits and social distancing measures were retained even until the end of the year, and the losses in employment and household income continued to weigh on the growth of this spending.

Public consumption was boosted by the government's spending effort to mitigate the negative impact of the pandemic. However, this, together with the reduction in tax collection, led to significant increases in the fiscal deficit and public debt. DANE's recently revised figures showed a remarkable growth in public consumption for the entirety of 2020 (3.7%) with significant annual growth during all quarters of that year and higher ones in the second half of the year. This indicates that the central government's and the regional and local administrations' expenditures played an important role in mitigating the shock. However, the government faced, as did the great majority of the countries around the world, a double impact on their finances during 2020. The shrinking of economic activity meant a COP 17 t reduction in NG tax revenue compared to 2019 while the additional emergency expenditures came to almost COP 20 t. Consequently, between 2019 and 2020, the NG's fiscal deficit went from 2.5% to 7.8% of the GDP according to the Ministry of the Treasury while the ratio between the public debt and output rose by almost 15 pp and reached a level of 65% of the GDP.

Gross fixed capital formation also registered a significant recovery in the second half of 2020 although it remains low compared to the levels prevailing prior to the shock. Investment was the aggregate that fell the most in the second quarter as a result of the outbreak of the pandemic, but the notable recovery of some of its components allowed it to end 2020 with an annual decline of about half of what it showed in the April-June period. The positive performance of investment in machinery and equipment during the second half of the year was notable. It even closed 2020 with a positive growth rate and was driven by incentives granted under the 2019 Financing Act and by the pandemic-related spending on rolling stock and health care equipment. In contrast, investment in construction registered a very modest recovery in both the housing component and in other buildings and structures (including public works). With the above, the gross fixed capital formation stood at levels close to those in 2012 in the fourth quarter.

Despite the fact that net external demand contributed positively to growth, the slow recovery of exports limited its contribution. Exports of goods and services were hit hard in the second quarter by the shock of the pandemic and the disruption of global trade that it caused. Their recovery was modest in the second half of the year. Their poor performance was a result of the sharp downturn and almost no recovery in the sales abroad of mining products and services though these were partially offset by the better performance of some agricultural and non-traditional goods. With respect to imports, despite the fact that they also registered a sharp downturn over the year, their recovery was considerably greater than that of exports and in line with domestic demand. With the above, the trade deficit in real terms declined to 6.7% of the GDP in comparison to 2019.

The Colombian economy should continue to recover in 2021 although the speed at which it does so will depend on the progression of the pandemic and the characteristics of the fiscal adjustment that ends up being carried out. The technical staff at the Bank projects a growth of 4.5% within a range of 2.0% to 6.0% for this year. This range is broad due to the significant sources of uncertainty that still persist. This forecast includes the more restrictive social distancing measures from the beginning of the year which will probably mean a decline in the levels of economic activity for the first quarter of this year compared to the prevailing ones in the fourth quarter of 2020. However, starting in the second quarter, the economy should resume its growth trajectory, provided that there is a gradual reduction in the incidence of Covid-19. This growth, which should be possible with the progress of the vaccination program and other factors, will make it possible to continue relaxing the social distancing measures and make progress on opening up the different productive sectors. On the domestic front, growth will probably continue to be driven by normalizing consumer and business confidence, and by monetary policy that is likely to remain expansionary thus allowing for comfortable credit conditions. In addition to this, and as a result of major public works programs at the national and local levels which should gain ground in 2021, better performance is expected from the investment in public works. On the foreign front, growth will also be supported by the recovery of our major trading partners (as is explained in section 2.3 of this report), on the availability of major sources of financing from abroad, and higher terms of trade. Furthermore, this year's growth will probably be explained by the low base of comparison in 2020, especially during the second quarter of the year. For 2022, the technical staff expects 3.5% growth with a range of 2.0% to 6.0%. This forecast implies the levels of economic activity prior to the pandemic will be reached by the end of that year and includes the effects of the fiscal adjustment in line with the 2021 Financial Plan.

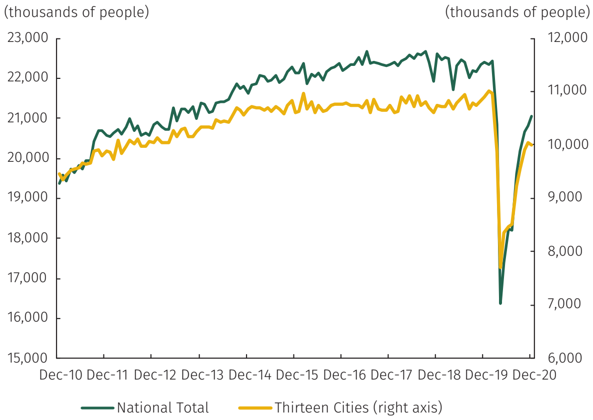
The government has announced the need to move ahead on a fiscal reform in 2021 that will contribute to ensuring the sustainability of public finances in the medium term. In 2021, the recovery of productive activity will probably allow tax collection to return to the level it had in 2019 (around COP 148 t). In terms of spending, part of the emergency funds (close to COP 19 t) will be used during this fiscal year and the Government, in accordance with its 2021 financial plan, is projecting an increase in public investment with respect to the previous year, as it seeks to contribute to economic reactivation. In accordance with the above, the Ministry of the Treasury estimates that the fiscal deficit in 2021 will probably be around 8.6% of the GDP. As a result, the ratio of public debt to GDP will probably rise a little more this year but to a much smaller extent than what was seen in 2020 largely due to the expected recovery in output. In view of this scenario for public finances, the government has announced their intention to submit a tax reform bill in 2021 as a means of ensuring the sustainability of public finances and reducing the risk of losing the investment grade rating on sovereign debt.

2.5.2. Labor Market

The pandemic caused an unprecedented fall in employment in Colombia between February and April 2020. Although there has been a notable recovery in the number of employed people since May, this is still at levels below those of the pre-crisis period. The reactivation of productive activities, which took place during the second half of 2020, allowed for the gradual recovery of employment after its abrupt drop in April. Based on DANE's *Large Integrated Household Survey* (GEIH by its acronym in Spanish) seasonally adjusted monthly series,[43] the number of people employed in the country grew 15.4% (2.8 million jobs) in December in comparison to June (Graph 2.27). The number of people employed that was reached in December meant that 4.7 million jobs had been recovered since May, which is nearly 77% of those lost between March and April. Even so, the number of jobs is 1.4 million lower than during the pre-pandemic period. In the case of the thirteen major cities, employment grew 18.3% (1.5 million jobs) in December compared to June which meant

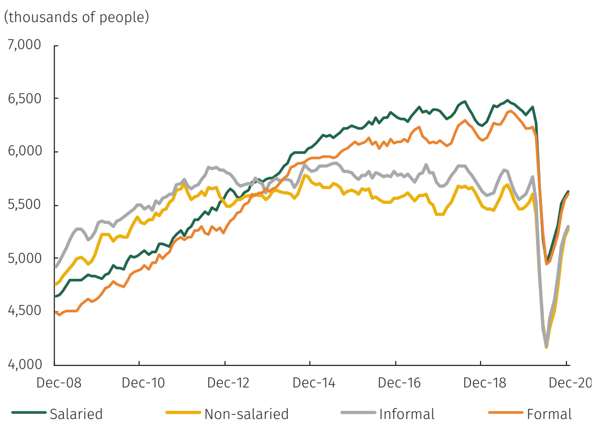
43 The labor market figures are showing a seasonal adjustment i.e., their numbers are systematically higher or lower depending on the month of the year. This phenomenon has to be identified through statistical techniques in order to compare different months of the same year. That is why the information given in this section corresponds to the series that does not have such calendar effects which is called the seasonally adjusted series.

Graph 2.27
Changes in Employment
(seasonally adjusted monthly)



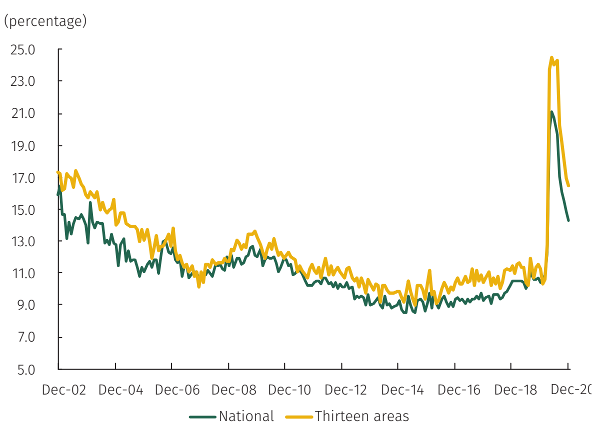
Source: DANE (GEIH), calculations by *Banco de la República*.

Graph 2.28
People Employed by Quality of Employment: twenty-three principal cities
(seasonally adjusted quarterly moving average)



Note: The National Bureau of Statistics (DANE) officially considers the workers who work in establishments, businesses, or companies that employ up to five people in all their agencies and branches, including the employer and/or partner to be informal and excludes from this self-employed professionals and government workers and employees.
Source: DANE (GEIH), calculations by *Banco de la República*.

Graph 2.29
Unemployment Rate by Domain
(seasonally adjusted monthly)



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

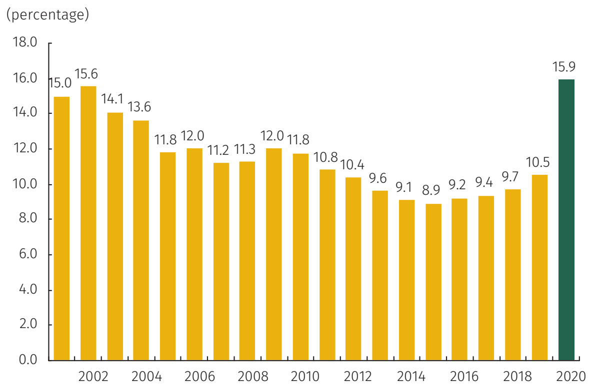
that, by the end of the year, the urban areas had recovered about 70% (2.3 million) of the jobs lost between March and April.

The recovery of employment shows significant changes in the breakdown of employment towards the non-salaried and informal segments as well as disparities between population groups. In the second half of 2020, the growth of employment was stronger in the non-salaried and informal segments. During the quarterly moving average that ended in December, salaried employment for the twenty-three cities grew 13.6% (700,000 jobs) and non-salaried, 26.9% (1.1 million jobs) compared to the quarterly moving average ending in June (Graph 2.28). This growth suggested that between May and December 2020 close to 75% (1.3 million) of non-salaried urban jobs that had been lost between March and April of the same year were recovered compared to 55% (1.0 million) in the salaried segment. The change in the breakdown of employment is also seen when distinguishing between formal and informal employment. These have recovered about 56% (800,000 jobs) and 70% (1.5 million jobs) respectively of the jobs lost in the wake of the pandemic. The lower growth of formal employment is also confirmed by alternate indicators based on administrative records such as the number of dependent pension contributors reported by the Integrated Contribution Payment Plan (PILA by its acronym in Spanish) which, as of November 2020, continued showing no signs of recovery. Moreover, the pandemic had different impacts on different population groups, particularly on the labor indicators for women where the gender gaps in occupation, participation, and unemployment were accentuated. The latter gap reached 9.3 pp, its highest level since 2007, for the quarterly moving average at the national level at the end of October 2020.[44]

In the second half of 2020, the greater growth of employment versus labor participation was reflected in consecutive declines in the national unemployment rate (UR) which, on average, was 15.9% for the entire year. The relaxing of the restrictions on mobility made the reincorporation of unemployed workers into productive activity possible and, therefore, brought about an increase in labor participation. Nevertheless, this growth in the work force occurred at a slower pace than that of employment which allowed the UR to register consecutive declines in the second half of 2020 both nationally and in the thirteen cities. Thus, in December of that year, the seasonally adjusted monthly UR for both geographical domains stood at 14.3% and 16.4% respectively, i.e., 5.7 pp and 7.3 pp below what they had registered in April (Graph 2.29). Nevertheless, the UR still registers considerably high levels, and its recovery

44 For a more detailed analysis of the recent determiners of labor participation and the effect of the health crisis on the probability that different population groups will participate we invite you to consult *Banco de la República*'s Labor Market Report (Reporte del Mercado Laboral) available at: https://www.banrep.gov.co/es/reporte-mercado-laboral

Graph 2.30
National Unemployment Rate
(annual average)



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

in the last few months of 2020 occurred at a slower pace. With all that, the national UR on average stood at 15.9% for 2020 and was the highest annual record since 2001 (Graph 2.30).

Estimates by the technical staff suggest that the national UR will probably continue to decline in 2020 but at a slower pace than what was seen in the second half of 2020. The high levels of unemployment seen in 2020 were accompanied by a significant deterioration in other labor market indicators. First, the most recent information available on the indices of job openings that were calculated based on the GEIH and the Public Employment Service is still showing levels that are low and below those seen prior to the pandemic. Furthermore, information on labor income from GEIH still shows a significant deterioration in the income for the non-salaried segment while income in salaried employment remains relatively stable. The above suggests that the Colombian labor market was generally loose in 2020 and was not a source of inflationary pressures via wage costs. Taking this and the forecasts for economic activity presented in the January 2021 Monetary Policy Report into account, the national UR is expected to continue declining but at a slower pace than what was seen in the second half of 2020 given the slow recovery of salaried and formal employment as well as economic activity that is likely to be even lower than the levels seen in the pre-pandemic period. Thus, the average national UR for all of 2021 is likely to be between 12.5% and 15.5% with the most probable value being around 14.0%.

2.6 Balance of Payments

In 2020, the deficit in the current account fell to 3.3% of the GDP compared to the 4.4% that was seen in 2019. The deterioration in the global and domestic economic and financial conditions along with the downturns in export prices were reflected in a significant decline in the profits of companies in the country with foreign capital. This accounted for the majority of the current account correction. The trade deficit also declined due to a more pronounced drop in imports as compared to the drop in exports. The slight increase in net transfer revenue also contributed to the lower current account deficit.

In 2020, the dollar-denominated current account deficit stood at USD 9,083 m and 3.3% as a share of the GDP. The above implied a USD 5,201 m reduction in the foreign imbalance and of 1.1 pp as a percentage of output compared to what was registered in 2019. The drop in net outflows from factor income (from USD 10,114 m in 2019 to USD 5,386 m) in 2020 was the item that contributed the most to the current deficit correction followed by a lower trade deficit in goods (from USD 8,451 m to USD 7,918 m), and a slight increase in net income from transfers (from USD 8,704 m to USD 8,724 m). The above was partially offset by a rise in the deficit of the trade balance for services that went from USD 4,425 m to USD 4,503 m.

The trend in factor income was the main source of the decline in the current account deficit in 2020. The reduction in the net factor income deficit that year was USD 4,728 m. This adjustment was mainly due to the downturn in the profits of firms that have foreign direct investment (FDI). The above was a result of the effect of the pandemic on the Colombian economy that has been reflected in a sharp drop in the level of domestic and foreign sales, a decrease in export prices, and in lower profits in dollars due to the depreciation of the Colombian peso. The lower FDI profits were widespread across all economic sectors and the decrease in profits was especially notable for the companies working in oil drilling and mining, financial and business services, transportation and communications, and the manufacturing industry.

In 2020, the deficit in the trade balance declined USD 454 m compared to the previous year. This result reflects a USD 532 m decline in the trade deficit in goods and a USD 78 m increase in the one for services. The adjustment in the balance of goods was generated by a larger reduction in the value of imports compared to the fall in exports. In the first case, the purchases from abroad were affected by the reduction in domestic demand and, to a lesser extent, by lower import prices. The decrease in exports was mainly due to the decline in prices, especially those for crude oil. The slump in household spending and in the gross fixed capital formation largely explained the lower purchases of goods from abroad. The lower prices and the fall in crude oil production as well as the slowdown for our main trading partners, in turn, contributed to the fall in exports of goods. In contrast, the deficit in the balance of services rose as a result of a larger decline in the value of the exports as compared to imports. The export and import of trips and passenger air transportation were affected by the closure of airports around the world and the contingency measures applied due to the pandemic. This led to a lower flow of travelers carried by airlines. With respect to exports, this effect was primarily offset by the higher income received from business services, especially those related to *call center* operations. Regarding imports, the lower freight costs associated with the smaller quantities imported and technical and business services, especially those linked to the petroleum business, also stand out.

Net transfers registered a slight rise and contributed to the closing of the current deficit in 2020. The USD 20 m increase in net income from current transfers is explained by higher remittances received from abroad. It was the remittances sent from the United States that mainly rose as a result of government aid and unemployment insurance implemented for that economy to offset the negative effects of the pandemic on household income. In contrast, the remittances from Latin America and Spain reported declines in amount because of the increase in unemployment as a result of closures and lockdowns decreed by governments to prevent the spread of Covid-19, especially during the second and third quarters of 2020.

The country's lower current deficit was offset by the lower need for financing in 2020. Thus, the financial account registered USD 8,092 m (3.0% of the GDP) in net capital inflows which were lower than what had been seen a year ago (USD 13,240 m, 4.1% of the GDP). These net inflows were due to foreign capital income (USD 23,492 m), outflows of Colombian capital abroad (USD 11,579 m), payments of residents to non-residents due to financial derivatives (USD 507 m),and increases in the Foreign Reserves as a result of balance of payment transactions (USD 4,328 m).[45] The errors and omissions were estimated at USD 992 m.

Foreign public debt was the most important source of financing for the external deficit in 2020. A significant rise in net disbursements for loans from abroad and income from foreign investment in the loan portfolio was registered during this period (see the shaded section “Colombia’s Foreign Balance in 2020”). The results described reflect a change in the structure of external financing sources of the current deficit with respect to what has happened in recent years when FDI capital was the main source of financing from abroad. The foreign debt acquired by public entities through long-term loans contracted with international organizations (USD 9,174 m) and the placement of debt securities (USD 9,274 m) became the main source of financing for the 2020 deficit as it replaced FDI (income of USD 7,690 m) as the most relevant source.

FDI declined in 2020, in an environment of weak global demand and low commodity prices. The net FDI funds registered a fall of USD 6,623 m in 2020 in comparison to the previous year and stood at USD 5,724 m. The lower FDI capital inflow was caused by the decrease in funds received from both capital inflows and reinvested earnings of firms both of which declined sharply during 2020. This was evident in most economic activities, especially in the mining-energy, commerce, restaurants and hotels, transportation and communications, and financial and business services sectors in a context of a demand that has been hard hit by the measures to curb the pandemic around the world and the low prices of commodities.

The current account deficit is likely to grow to 3.6% of the GDP in 2021 as a result of the gradual recovery of the Colombian economy and despite the expected reversal of the external terms of trade shock and higher projected foreign demand. In particular, the expected rebound in domestic demand will probably induce growth in imports as well as growth in profits for companies in the local market with foreign capital. Furthermore, the higher projected prices for some commodities will probably raise the earnings of the foreign-owned companies that export those products. These factors will probably be the main determiners of the expansion of the deficit throughout the year. Nevertheless, they will probably be partially offset by the effects of higher terms of trade and the recovery of the country’s trading partners. Thus, the increase in current external revenue during 2021 would probably result from higher exports of both the main commodities and industrial goods. In addition to this, remittances are expected to perform well due to the countercyclical nature of these inflows and the fact that migrants’ income could continue to benefit from fiscal stimuli in some of their countries of residence. Finally, note that there is high uncertainty in the forecast of the current account deficit for 2021 due to which the estimate of the technical staff at the Bank is within a fairly wide forecast range (between -5% and -2% of the GDP).

Despite the expected increase in the current deficit which is consistent with the projected reactivation of the economy, permanent access to financing and a stronger external position will reduce the country’s vulnerability. Ample liquidity and low global interest rates are expected to continue during 2021. This will probably help the country gain full access to different sources of financing from abroad. At the same time, the domestic and international

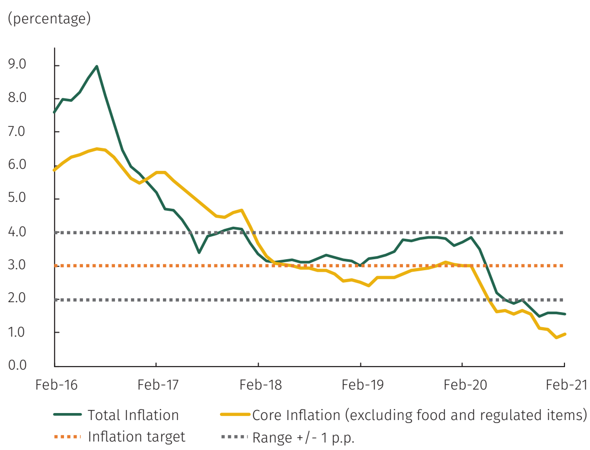
45 Note that this accumulation of reserves is the result of the net purchases of USD 3.500 b in foreign currencies, USD 894 m in income interest, and USD 66 m in net outflows for other *Banco de la República* transactions.

economic recovery is likely to lead to an increase in FDI inflows which, together with the resources associated with the public sector, will contribute to the financing of the current account deficit. The increase in the Foreign Reserves in 2020, the access to and extension of the IMF's flexible credit line (FCL) as well as a foreign financing structure concentrated in FDI and long-term liabilities have strengthened the country's ability to face external shocks in a context of great uncertainty such as the current one. The above has to take into account the fact that the level of the current account deficit continues to add to the accumulation of the country's net external liabilities and that there could be scenarios of less favorable financial conditions abroad which would especially affect capital flows other than FDI.

2.7 Change in and Outlook for Inflation

The downward pressure on prices that have resulted from the decline in aggregate demand, excess productive capacity, a low pass-through of the pressure on the exchange rate and the effect of price relief on some goods and services have outweighed the upward price effects caused by supply restrictions (due to the close down of various economic sectors). This has been reflected in a decline in total and core inflation for which the forecasts and expectations are below 3.0% for 2021.

Graph 2.31
Consumer Price Index (CPI)
(annual change)



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

Since April, inflation has shown a sharp downturn and during the rest of 2020, it stood significantly below the long-term 3.0% target as a result of the shock from the pandemic. After showing relative stability at above target levels in the first quarter of the year, annual consumer inflation dropped sharply starting in April once the effects of the Covid-19 shock and the measures taken to address it were felt. Going into the third quarter, annual inflation had already fallen below 2.0% and, in December, it stood at 1.61%, the lowest level for a December since records have existed. A similar pattern was seen in the case of core inflation measured by the CPI excluding food and regulated products which, having fallen 199 basis points (bp) compared to December 2019, closed the year at 1.11%. (Graph 2.31). The other two indicators of core Inflation also registered significant declines such that the average for the indicators of core inflation stood at 1.34% at the end of the year.[46] Although market expectations were corrected downward as the year progressed, they did not manage to foresee the full impact of the downward shock that also significantly affected the major baskets with the exception of food.

46 Since the middle of last year, *Banco de la República* has been using new core inflation indicators. With respect to that see: González, E.; Hernández, R.; Caicedo, E.; Martínez-Cortés, N.; Grajales, A.; Romero, J. (2020). "Nueva clasificación del Banrep de la canasta del IPC y revisión de las medidas de inflación básica en Colombia", *Borradores de Economia*, no. 122, *Banco de la República*.

The sharp reduction in demand, the increased excess of productive capacity, and the various temporary measures for tax and tariff relief explain the sharp decline in inflation. Even though the health emergency hammered the supply and production of goods and services, it simultaneously had direct and indirect effects on the aggregate demand that were impossible to fully counter. As was the case in much of the world, these effects tended to predominate and were mainly responsible for the decline of inflation in Colombia. The collapse of demand from abroad together with isolation measures, mobility restrictions, and partial commerce closures intermittently implemented by the national and local authorities throughout the pandemic damaged the economy, increased unemployment, and lowered household income with the result that demand was severely affected. This deterioration was reinforced by the drop in consumer confidence since consumers also voluntarily opted for social distancing and stayed away goods and services markets that were considered unnecessary for subsistence. All of the above translates into very strong downward pressure on consumer prices for goods and services other than food. Furthermore, implementation on the part of the national and local authorities of various types of price relief such as eliminating VAT or excise taxes and the increase in subsidies for utilities, etc. contributed to temporarily accentuating the decline in annual inflation, especially in the second quarter of the year. These measures also led to decreases in the price level of many goods and services including those covered by the basket of regulated products that had an effect on annual inflation, even though the majority of these have been transitory in nature, for the remainder of 2020.

Moreover, an ample food supply met the temporary increase in demand that resulted from the pandemic. This factor, together with the temporary decreases in the fees for utilities contributed to the decline in inflation in 2020. The minimal disruption of agricultural work during the most critical months of the pandemic, the limited upward pressure on international prices during a large part of 2020, and sufficient rainfall in the last three quarters of the year made an abundant supply of food possible and led to reductions in the annual variation of this basket between May and October despite the increases in consumption of these goods. This trend was broken at the end of the year, partly as a result of a very low statistical comparison base in November and December 2019. At the end of the year, the annual change in the CPI for food stood at 4.8% thus showing a significant decrease compared to a year ago although a smaller one than the other main CPI baskets showed. A much larger drop was seen in the annual change in the CPI for regulated items that resulted in only 0.7% in December (compared to 4.8% the previous year). Within this group, utilities contributed significantly to reducing inflation in the first few months after the pandemic began as a consequence of the different types of relief granted by local and national authorities on some of their fees. With the end of these relief efforts and the gradual normalization of fees starting in July, utilities exerted some moderate upward pressure on annual inflation. However, at the end of the year, the prices for primary education and high school as measured by DANE exhibited significant declines associated with the transition to online education. This kept the annual change in the level of regulated items as a whole very low (Table 2.4).

The shock also generated some upward pressure on some segments of the CPI due to supply restrictions and higher operating costs. This is the case with intermunicipal transportation, where significant but specific increases were seen in the second half of last year, probably resulting from the higher operating costs that the decrease in the capacity allowed on the buses meant and the higher biosafety requirements. Something similar happened with eating out where price adjustments on the order of 4.0% per annum were registered. In latter case, moreover, there may have been a sharp downturn in supply that

Table 2.4
Consumer Price and Core Inflation Indicators
(annual change)

Description	New CPI weights	Dec-19	Jul-20	Aug-20	Sept-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21
Total	100,00	3,80	1,97	1,88	1,97	1,75	1,49	1,61	1,60	1,56
Excluding food	84,95	3,45	1,42	1,37	1,57	1,42	1,02	1,03	0,89	0,93
Goods	18,78	2,18	0,91	0,99	1,15	1,03	0,02	0,63	0,42	1,07
Services	48,85	3,45	1,94	1,79	1,86	1,75	1,55	1,29	1,04	0,91
Rentals	25,16	2,68	1,87	1,66	1,53	1,42	1,35	1,33	1,23	1,23
Eating out	8,79	4,18	3,66	3,59	3,65	3,86	3,83	3,84	3,66	3,86
Remaining[a/]	14,91	4,34	1,06	0,95	1,37	1,05	0,54	-0,26	-0,82	-1,34
Regulated items	17,32	4,81	0,48	0,59	1,19	0,92	0,58	0,73	0,94	0,83
Utilities	6,69	6,02	0,86	1,16	3,19	2,32	1,59	3,22	4,03	3,08
Fuel	2,91	1,90	-12,02	-11,94	-11,95	-12,23	-12,45	-12,22	-10,62	-9,09
Transportation	5,53	3,89	3,87	3,87	5,42	7,13	6,93	6,35	5,43	5,62
Education	2,38	6,38	6,71	6,71	4,69	4,73	4,73	1,05	1,05	0,56
Remaining[b/]	0,13	4,22	5,23	5,23	5,23	5,23	5,23	5,23	1,35	3,52
Food	15,05	5,80	5,00	4,66	4,13	3,54	4,09	4,80	5,51	5,02
Perishables	3,15	8,66	-3,16	-3,13	-3,42	-4,89	-1,57	2,49	6,71	6,47
Processed food	11,90	5,04	7,48	6,99	6,40	6,08	5,72	5,43	5,19	4,62
Core Inflation Indicators										
Excluding food		3,45	1,42	1,37	1,57	1,42	1,02	1,03	0,89	0,93
Core 15 (p08)		3,78	2,21	2,15	2,33	2,23	1,96	1,88	1,78	1,74
Inflation excluding food and regulated items		3,10	1,66	1,57	1,67	1,55	1,13	1,11	0,87	0,96
Average core inflation indicators		3,44	1,76	1,70	1,86	1,73	1,37	1,34	1,18	1,21

a/ Remaining services: washing and ironing clothing; services related to joint share in ownership; housecleaning services; health; other transportation (maintenance and repairs, school, air, intermunicipal, and international transportation); information and communications; recreation and culture; housing, bars, and discotheques; education (higher education, certificates, and non-formal educational courses); other miscellaneous services (personal care, insurance, child care)
b/ Other regulated: moderate EPS fees; certificates, administrative documents and payment of fees.
Source: DANE, calculations by *Banco de la República* (BR) with provisional classifications.

could have exceeded that of demand. The group of goods in the CPI also faced inflationary pressure arising from the growing demand for private means of transportation. Finally, in the last four months non-labor production costs could be exerting substantial upward pressure on consumer prices judging by the indicator that approximates them (the annual producer inflation). Nevertheless, the inflationary pressure noted above has been more than offset by the slump in demand.

The persistence of large excess productive capacity and price indexing at low rates should keep consumer inflation below the 3.0% target over the course of 2021. Inflation expectations point in the same direction. Although the recovery of demand is expected to continue in 2021, this should be accompanied by the complete reopening of the productive sectors, and aggregate supply should also see a significant rebound along with it. Thus, the higher economic growth projected will be consistent with excess productive capacity that will probably remain substantial although it is likely to decrease slowly and, therefore, should not translate into significant upward pressure on inflation. A low pass-through of the depreciation to consumer prices should contribute to this. These factors are expected to keep inflation below the target throughout 2021, albeit with a slow convergence trend towards it. Market agents' expectations point in this direction with an expected value for December of 2.60%.[47] The second infection peak between December and January generated restrictions on mobility and partial closures of businesses and productive activity in various regions around the country. This affected supply which, in any case, seemed to be offset by a temporary weakening of demand. This will probably prevent upward pressure from emerging at the beginning of the year. Thus, core and total inflation are expected to remain at very low levels until the end of the first quarter. In the second quarter, an increase in annual inflation is expected as a result of the dissolution of the downward shocks from the price relief enacted in 2020. This rebound is likely due to the return of VAT on the prices of hygiene and cleaning products. Likewise, the increase in inflation between the second and fourth quarters of the year was also the result of a very low statistical basis for comparison due to the downward pressure that affected prices during this same period the year before.

The above forecast is subject to a higher than usual uncertainty given the risks posed by the progression of the pandemic and the challenges in measuring the inflation resulting from it. The current projections of future price trends in the Colombian economy are still surrounded by a much higher level of uncertainty than usual due to the number and size of the shocks associated with the Covid-19 pandemic. These circumstances, plus the challenges that this generates for CPI measurement, make it difficult to estimate the relative role that each one of these factors plays in price trends. Considering all of this, the technical staff at the Bank estimates a range of 1.5% to 3.0% for total inflation at the close of 2021.

47 Corresponds to the average of *Banco de la República*'s *Monthly Survey of Economic Analysts* done in February 2021.

Shaded section 1:
Monetary Base and M3

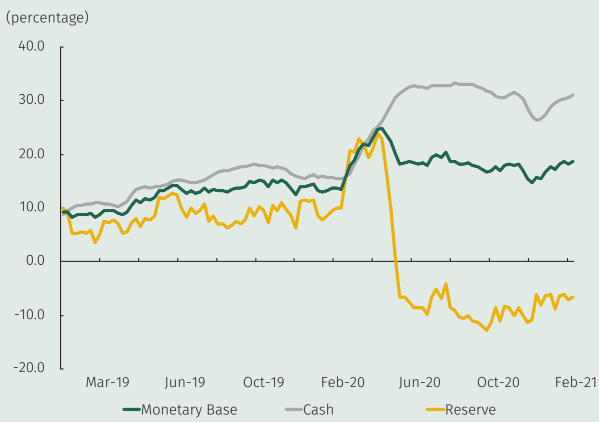
During 2020, after the onset of the pandemic, monetary aggregates registered the highest growth rates in recent years and reflected the strong increase in preference for liquid assets.

In the case of the monetary base, the average annual growth was 18% (vs. 12.3% in 2019). In the first quarter, the annual change was 15.3% while from April to December it was 18.9%. This is a consequence of cash trends which rose at annual rates of 30.5% between the second and fourth quarter thus offsetting the decline in bank reserves in the wake of the reduction of the reserve requirement ratios[1] (Graph S1.1). In real terms,[2] cash growth in that period was the highest since the 1980s.

By levels, the monetary base rose COP 20,220 b (COP 19,335 b in cash and COP 865 b in bank reserves) and at the end of the year, it stood at COP 132,674 b. From the viewpoint of supply, once the financial markets normalized, liquidity was supplied mainly through temporary liquidity transactions (repos and interest-bearing deposits not constituting reserve requirements) that offset the movements of government deposits at the Bank.[3] It should be noted that the Bank acquired a total of USD 3,500 m (USD 2,000 m in May and USD 1,500 m in December) in foreign currency from the government. Those purchases increased Government deposits by COP 13,203 b and had an impact on the monetary base as the Government made its payments in pesos[4] (Graph S1.2).

The M3 and deposits held by the public,[5] in turn, registered an average annual change of 13.5% and 11.6% in 2020, respectively (vs. 7.5% in 2019, for M3 and 6.6% in 2019 for deposits). In the first quarter, the annual change was 10.3% for M3 and 9.3% for deposits. In the wake of the sharp increase in the preference for liquid assets at the beginning of the crisis, both deposits and cash increased significantly in level, and with it, their growth rate. Towards the end of the year, the rate of expansion of these aggregates moderated, but remained above what had been registered prior to the pandemic (Graph S1.3).

Graph S1.1
Monetary Base, Cash, and Reserves
(4-week moving average; annual change



Source: *Banco de la República.*

1 The decline in the reserve requirement ratios established by the BDBR on April 14, 2020 applied as of the two-week period beginning May 13, 2020. See: https://www.banrep.gov.co/en/banco-republica-injects-permanent-liquidity-economy-reducing-reserve-requirements-and-reinforces

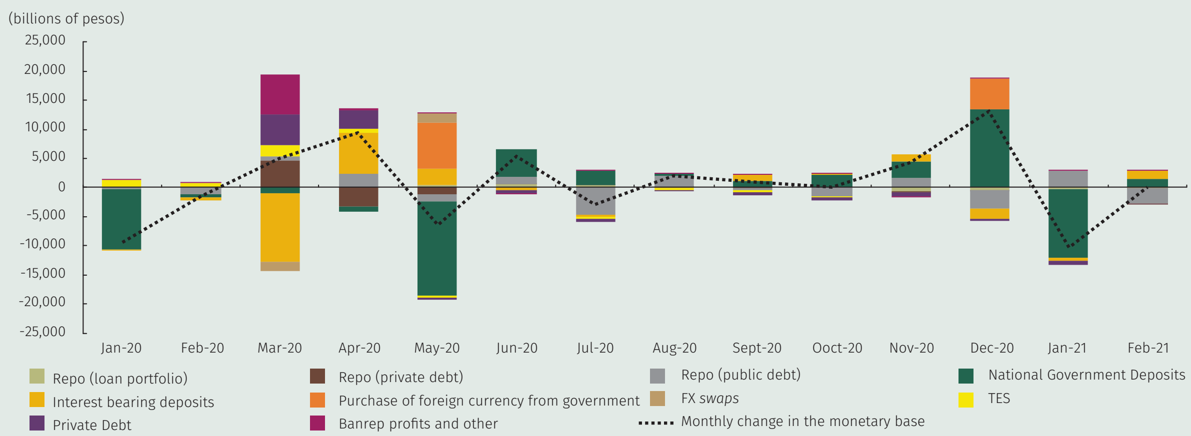
2 The total CPI is used as a deflator.

3 The Bank acquired public and private debt securities in March and April 2020 that generated a COP 11,505 b increase in the monetary base. Furthermore, they had purchased COP 2,000 b in public debt securities previously (in January and February 2020).

4 At the end of 2020, the balance of government deposits in the Bank amounted to COP 14,485 b, COP 2,285 b more than its value at the end of 2019.

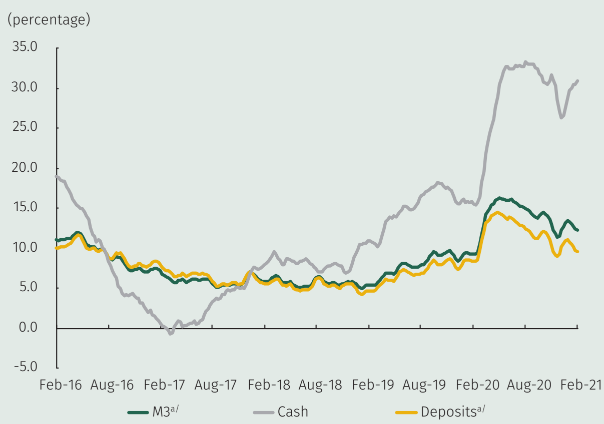
5 Does not include CDs nor bonds held by *Banco de la República.*

Graph S1.2
Change in the Monetary Base by Sources



Source: *Banco de la República.*

Graph S1.3
M3 and its components
(4-week moving average; annual change)



a/ Excludes CDs and bonds held by *Banco de la República.*
Source: *Banco de la República.*

Shaded section 2: **Colombia's External Balance in 2020**

The country's balance of payments current account is estimated to have registered a deficit of USD 9,083 million (m) in 2020 which is USD 5,201 m lower than what it was the year before (Table S2.1). As a share of the GDP, the deficit was estimated to be 3.3% which is 1.1 percentage points (pp) lower in comparison to 2019.

The smaller current deficit in 2020 occurred in a context of weakening of domestic demand, lower export prices, and our trading partners' economic crisis. First of all, the decrease in both household spending and gross fixed capital formation with annual changes of -3.9% and -17.4% respectively during 2020 was reflected in the decline of imports of goods and services and in the worsening sales of companies with foreign direct investment (FDI) that led to a decrease in net outflows of factor income (USD 4,728 m). Lower international prices and lower crude oil production, in turn, as well as the slowdown among our main trading partners were responsible for the drop in exports of goods. However, given that the reduction in the value of imports was greater than that of exports, the trade balance deficit decreased USD 454 m in 2020 with respect to the year before (Table S2.1). In contrast, the deficit in the balance of services rose (USD 78 m). The net income from current transfers, in turn, rose USD 20 m.

Note that although the change in Colombia's current account balance of payments shows a close relationship to the performance of the trade balance in goods due to the high share of exports and imports in the country's total current income and expenditures,[1] the factor income acquired so much relevance that it became the main source of the country's current account deficit during the period under analysis.

The counterpart to the country's lower current deficit was the lower need for financing since, in 2020, the financial account[2] registered net capital inflows of USD 8,092 m (3.0% of the GDP) that were lower than what had been seen a year ago when they totaled USD 13,240 m (4.1% of the GDP) (Table S2.1).

The sources of external financing of the current deficit in 2020 were as follows: net disbursements of USD 8,287 m from other foreign loans, a number that is USD 5,859 m higher than what was registered a year ago, foreign direct investment (FDI) (USD 7,690 m, 5.0% of the GDP) that was USD 6,623 m lower with respect to 2019, and income from foreign portfolio investment (USD 7,515 m) that was USD 7,224 m higher than what was obtained in 2019.

Given the external and internal shocks, FDI ceased to be the main source of foreign financing since the capital inflows to most of the economic activities (especially those to mining-energy, trade activities, restaurants and hotels, transportation and communication, and financial and business services) declined significantly. In contrast, the foreign debt contracted for by public entities through the placement of debt securities and other loans was the main source of external financing, and this represented a restructuring with respect to what had been seen in previous periods.

The performance of the different components of the balance of payments is described in greater detail below.

Foreign trade in goods during 2020 registered a deficit balance of USD 7,918 m which is USD 532 m lower than the one a year ago (6.3%) (Table S2.1). This result is due to the USD 33,481 m in exports that had an annual decline of 21.0% (USD 8,886 m) and USD 41,400 m in imports that saw an annual decrease of 18.5% (USD 9,419 m) (Table S2.1).

The decline in exports was widespread and arose mainly from the lower sales of crude oil and its derivatives (USD 7,212 m), coal (USD 1,502 m), industrial

1 The analysis of the structure and the change in the current account income over the last 15 years shows that foreign sales of merchandise are its main component and hold a share that ranges between 63% and 81% of the total income. Regarding the current expenditure flows, their most important component is importing goods which represented, on average, 64% of the total outlays (66.5% in 2020).

2 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 foreign financing (liabilities) or liquidate its foreign assets in order to finance its current excess spending. 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.

Table S2.1
Colombia's Balance of Payments

Current Account (millions of dollars)	2019 (pr)	2020 (pr)	Change (dollars)
Current Account (A + B + C)	-14,285	-9,083	5,201
Percentage of the GDP	-4.4%	-3.3%	
A. Goods and Services	-12,876	-12,421	454
1. Goods	-8,451	-7,918	532
Exports FOB	42,368	33,481	-8,886
Imports FOB	50,818	41,400	-9,419
2. Services	-4,425	-4,503	-78
Exports	10,589	5,662	-4,927
Imports	15,014	10,165	-4,848
B. Factor Income	-10,114	-5,386	4,728
Ingresos	7,044	4,449	-2,595
Egresos	17,157	9,835	-7,323
C. Current Transfers	8,704	8,724	20
Ingresos	9,666	9,590	-76
Egresos	962	866	-96
Financial Account Annual flows (millions of dollars)	**2019 (pr)**	**2020 (pr)**	**Change (dollars)**
Financial account with change in Foreign Reserves (A + B + C + D)	-13,240	-8,092	5,148
Percentage of the GDP	-4.1%	-3.0%	
A. Direct Investment (ii - i)	-11,095	-5,724	5,371
i. Foreign in Colombia (FDI)	14,314	7,690	
Percentage of the GDP (FDI)	4.4%	2.8%	
ii. Colombian abroad	3,219	1,966	
B. Portfolio Investment (1+2)	250	-1,346	-1,596
1. Public Sector (ii - i)	-794	-10,570	
i. Foreign Portfolio Investment (a + b)	850	9,274	
a. International markets (bonds)	1,069	6,182	
b. Local markets (TES)	-219	3,092	
ii. Portfolio Investment Abroad	56	-1,296	
2. Private Sector (ii - i)	1,044	9,224	
i. Foreign Portfolio Investment (a + b)	-559	-1,759	
a. International markets (bonds)	673	-1,305	
b. Local markets	-1,232	-454	
ii. Portfolio Investment Abroad	485	7,465	
C. Other Public Sector + Private Sector Capital Flows	-5,728	-5,350	378
D. Reserve Assets	3,333	4,328	995
Errors and Omissions (E and O)	1,045	992	-53
Memo items			
Financial account excluding change in Foreign Reserves	-16,573	-12,420	4,153
Change in the Foreign Reserves	3,333	4,328	

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

products (USD 896 m), nickel-iron (USD 110 m), and flowers (USD 64 m). In contrast, the sales abroad of non-monetary gold (USD 1,130 m), coffee (USD 174 m), and bananas (USD 56 m) rose. The lower exported value of crude oil, coal, and nickel-iron is a result of the combined effect of the reduction in their export prices (38.6%, 22.2%, and 9.2% respectively) and the lower volume exported (10.5%, 4.7%, and 10.4% respectively). With respect to exports of non-monetary gold, its increase was due to a rise in both its volume exported (32.2%) and its export price (27.1%) while the higher value of sales abroad of coffee resulted from the increase in the sales prices (16.7%) that were partially offset by the decrease in the quantities sold (7.7%).

The decrease in the value of imports was widespread and was mainly caused by the downturn in imports of supplies and capital goods for industry (USD 3,307 m, 13.0%), purchases of fuels and lubricants from abroad (USD 1,959 m, 49.9%), consumer goods (USD 1,841 m, 15.5%), and transportation equipment (USD 1,414 m, 31.1%).

Regarding the country's terms of trade, these declined 15.4% in 2020 in comparison to 2019. This result was due to the decline in export prices (19.6%) which was not offset by the decrease that occurred in import prices (4.9%).

The deficit in the service account, in turn, rose USD 78 m during 2020 (Table S2.1) due to the greater reduction of exports compared to the decrease in imported services. Note that, during the period under analysis, the export and import of trips and passenger air transportation were affected by the closure of airports around the world and the contingency measures applied due to the pandemic that led to a lower flow of travelers carried by airlines. With respect to exports, this effect was primarily offset by the higher income received from business services, especially those related to *call center* operations. Regarding imports, the lower freight costs associated with the smaller quantities imported and technical and business services, especially those linked to the petroleum business, also stand out.

During the period under analysis, in turn, the decrease in net outflows due to factor income (USD 4,728 m) (Table S2.1) was mainly due to the decline in the profits earned by companies with FDI (USD 6,635 m). This decline was widespread throughout all of the economic sectors with the decrease in estimated profits for companies operating in oil drilling (USD 1,775 m), financial and business services (USD 1,189 m), transportation and communication (USD 1,082 m), manufacturing industry (USD 809 m), and mining and quarrying (USD 758 m) standing out.

With regard to current transfers, USD 8,724 m in net income was received in 2020, an amount that was 0.2% (USD 20 m) more than what was received a year earlier and was mostly the result of the amount in worker's remittances which came to USD 6,853 m with an annual rise of 1.8% (USD 120 m). The growth was explained by remittances sent from the United States, which grew 9.5% yearly, while those from Latin America and Spain declined (-20% and -1% respectively).

As for the result of the financial account, in 2020 there were net capital inflows of USD 8,092 m, USD 5,148 m lower than what had been seen a year earlier. These net inflows were due to foreign capital income (USD 23,492 m), outflows of Colombian capital abroad (USD 11,579 m), payments of residents to non-residents due to financial derivatives (USD 507 m) and increases in the Foreign Reserves as a result of balance of payment transactions (USD 4,328 m).[3] The errors and omissions were estimated at USD 992 m (Table S2.1).

These foreign funds the country received were the result of inflows from net disbursements of USD 8,287 m in loans and other external credit, USD 7,690 m in foreign direct investment (FDI), and USD 7,515 m in foreign portfolio investment. This income was partially offset by net sales of TES in the local market by non-residents (USD 822 m) and the settlements of variable income securities in the local market by non-residents (USD 163 m).

In 2020, USD 7,690 m was received through FDI (2.8% of the annual GDP), an amount that is USD 6,623 m (46.3%) lower than what had been received a year earlier. The distribution of FDI received during this period by economic activity was as follows: financial and business services (28%), mining and petroleum (23%), commerce and hotels (11%), electricity (10%), manufacturing industry (8%), and the rest of the sectors (20%). The flow of Colombian direct investment abroad, in turn, was estimated at USD 1,966 m and the majority of this was made by businesses in the electricity and financial sectors.

In 2020, foreign portfolio investment inflows, in turn, totaled USD 7,515 m (2.8% of the GDP). This was the result of net income received by issuance of long-term public debt securities by the national government and public sector companies on the international markets (USD 6,182 m) and net purchases of fixed-income securities on the local market on the part of non-residents (USD 3,092 m). The above was partially offset by private sector payments on debt

3 Note that this accumulation of reserves is the result of the net purchases of USD 3.500 b in foreign currencies, USD 894 m in income from interest and USD 66 m in net outflows for other *Banco de la República* transactions.

securities in the international markets (USD 1,305 m) and net sales of variable income (USD 454 m) in the local market by non-residents. Outflows of Colombian capital for this totaled USD 6,169 m in net additions and correspond to portfolio investments made by the private sector (USD 7,465 m) that were partly offset by liquidations made by the public sector (USD 1,296 m) (Table S2.1).

Finally, due to other capital flows, the country received USD 5,350 m in net inflows. This is partly explained by net disbursements of USD 8,257 m through mainly long-term loans and other credit. Of these, the public sector received USD 9,174 m in net disbursements mainly through long-term loans from international organizations, and the private sector made net repayments of USD 887 m primarily for the repayment of short-term debt.

03/ Foreign Reserves

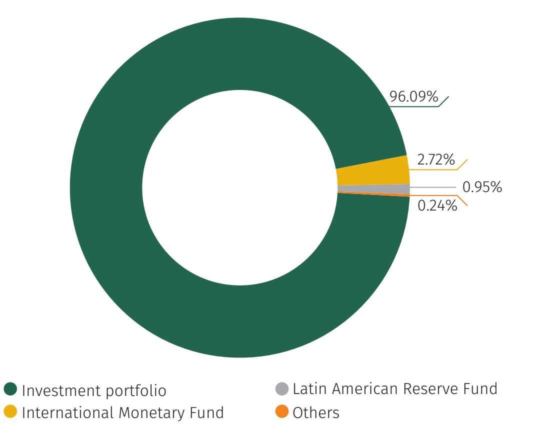
#MuseoEnTuCasa, activity promoted on
IG @banrepcultural by the Art and Collections Unit.

Ana González Rojas represents the piece *Sin título* ("*Untitled*") by Débora Arango, from *Banco de la República*'s Art Collection.

Left photo: *Banco de la República*'s Art Collection.
Right photo: Ana González Rojas.

In compliance with Act 31/1992, *Banco de la República* manages the Foreign Reserves in accordance with the public interest, to the benefit of the national economy, and to facilitate the country's payments abroad. Consequently, the law requires that investment of the reserve assets be done under the criteria of security, liquidity, and profitability. The security criterion under which the Foreign Reserves are managed in Colombia implies proper control of the risk to which the investments are exposed. In order to manage risks within acceptable parameters and levels, the Foreign Reserves Committee of *Banco de la República* defines strict limits for exposure to each of the different risks faced by the reserves. In order to comply with the liquidity criterion, the Bank invests the Foreign Reserves in financial assets that are easy to liquidate or in assets with short-term maturities and defines investment tranches on the basis of liquidity and profitability objectives. Once the criteria are defined to ensure that the Foreign Reserves portfolio is invested at a low risk, the management policy also seeks to achieve a suitable return since this criterion is part of the mandate given to *Banco de la República* by law. An explanation of the policies that guide the investment of the reserves and some relevant definitions are provided in the Appendix.

Graph 3.1
Breakdown of the Gross Foreign Reserves
(information as of December 31, 2020



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*.

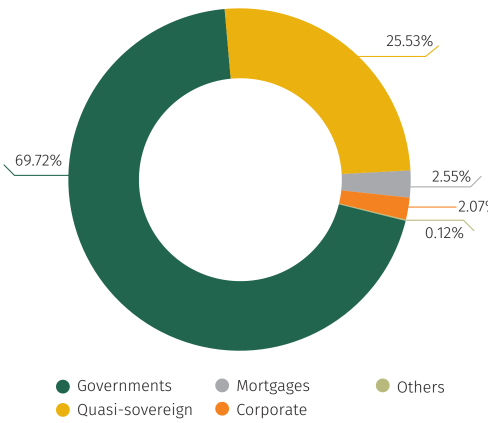
In 2020, the net Foreign Reserves rose USD 5,863.6 m due primarily to the purchase of Foreign Reserves and the positive profitability gained over the course of the year. As of December 31, net Foreign Reserves amounted to USD 59,030.8 m.[48] The increase during the period was mainly because of the purchase of USD 3,500 m in foreign currency and the return on the Foreign Reserves which, at the close of December 2020, was 3.37% (USD 1,888.89 m) excluding the foreign exchange component.[49] The most important factor for explaining the return on the reserves is the appreciation of the bonds as a result of the decline in the interest rates.

The main component of the Foreign Reserves is the investment portfolio. This portfolio corresponds to investments in financial instruments on the international market and to the certified physical gold (95.66% and 0.43% respectively of the reserves). The breakdown of the Foreign Reserves is presented in Graph 3.1.

48 The net Foreign Reserves are equal to the total Foreign Reserves, or gross reserves, minus *Banco de la República*'s short-term foreign liabilities. The latter consists of demand obligations to non-resident agents in foreign currency. The gross Foreign Reserves came to USD 59,039.3 m and the short-term foreign liabilities totaled USD 8.54 m.

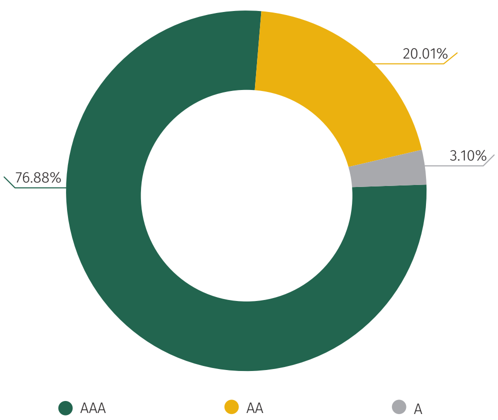
49 More information on the increase in Foreign Reserves can be found in section 3.3.

Graph 3.2
Breakdown of Investment Portfolio by Sector
(information as of December 31, 2020



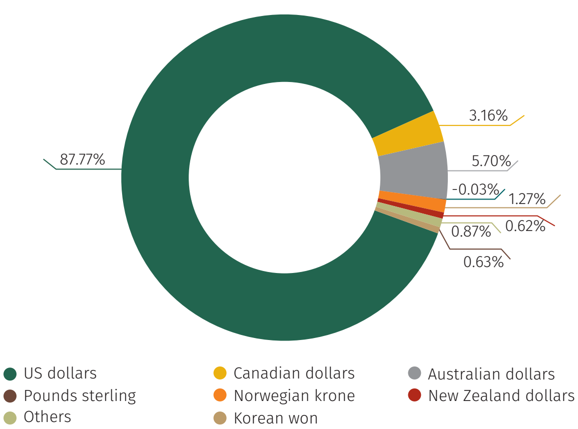
Source: *Banco de la República.*

Graph 3.3
Distribution of Investment by Credit Rating
(information as of December 31, 2020



Source: *Banco de la República.*

Graph 3.4
Currency Components of the Investment Portfolio
(information as of December 31, 2020



Source: *Banco de la República.*

3.1 Breakdown of the Investment Portfolio[50]

As of December 2020, the investment portfolio was mainly invested in securities issued by governments or entities related to governments (quasi-sovereign). The breakdown of the investment portfolio as of December 2020 can be seen in Graph 3.2 when about 95.25% was invested in securities issued by these entities.

The breakdown of the portfolio by rating is evidence of the high credit quality of the assets the portfolio invests in. Graph 3.3 shows that 76.88% of the portfolio is invested in instruments rated AAA and 20.01% in AA. 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.

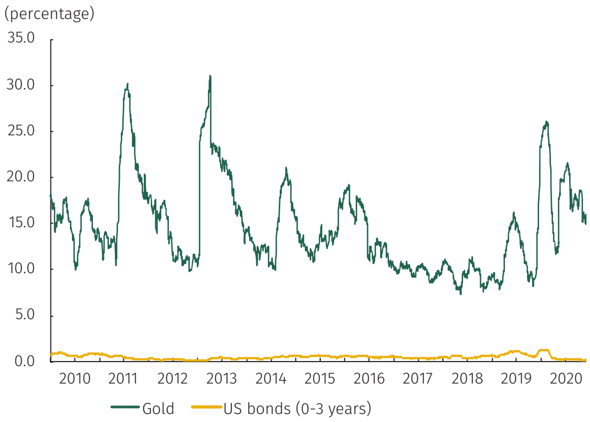
The investment portfolio is made up of currencies that are characterized by their high daily trading volumes and the fact that they belong to countries with high credit ratings. The United States dollar is the currency with the highest share. Graph 3.4 shows the foreign exchange components in the investment portfolio as of December 31, 2020. The largest share of Colombia's Foreign Reserves is in US dollars, because most 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 pound sterling; Swiss franc; euros; yen; Norwegian krone; the reminbi; Hong Kong and Singapore dollars, and Korean won.[51]

As of December 31, 2020, the share of gold in the Foreign Reserves declined from low levels and stood at approximately 0.4%. This is due to the high volatility of this asset and the limited ability that a low-risk portfolio, like the Foreign Reserves portfolio, has to absorb potential negative movements in the prices of risky assets. Thus, during 2020, the share of gold declined from the low levels it had had the previous year, changing from approximately 1.3% to 0.4%. This change occurred because in a scenario of low international interest rates, like the current one, the yield that the portfolio receives from interest decreases and thus, its ability to balance the potential strong and adverse movements that the value of gold may experience is further reduced. Gold is a high-risk asset because its price is highly volatile. This is even more noticeable when it is compared to safer assets such as fixed income instruments which are the main components of the Foreign

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

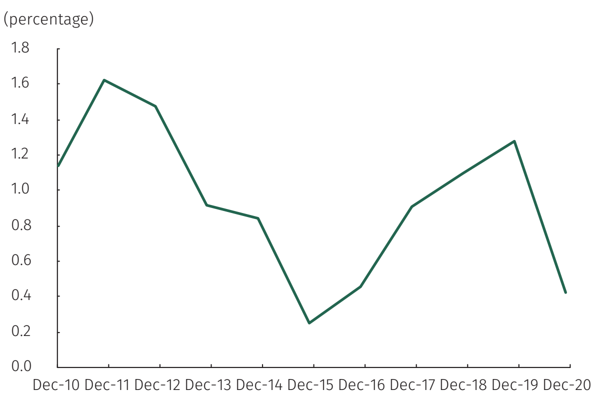
51 The euro has a very small share in the Foreign Reserve investment portfolio because it is not part of the group of currencies in the benchmark. The reason why it is not in this group is because both the benchmark interest rates of the European Central Bank and the rates for the main short-term sovereign bonds issued in euros are negative (See the Appendix "Management Policy for the Foreign Reserve Investment Portfolio").

Graph 3.5
Annualized Volatility of Gold and US Government Bonds
(annualized 3-month daily volatility)



Source: Bloomberg.

Graph 3.6
Share of Gold in the Foreign Reserves
(information as of December 31, 2020



Source: *Banco de la República*.

Graph 3.7
Historical Profitability of the Foreign Reserves
(information as of December 31, 2020

Source: *Banco de la República*.

Reserve portfolios. Graph 3.5 shows the volatility of the price of gold and of the US Treasury bonds with maturities of less than three years that are considered typical assets for reserve portfolios. The volatility of gold is clearly much greater as it reaches levels as much as thirty times higher than those of bonds. However, the amount of gold in the reserves is periodically defined as part of a process that seeks to preserve a safe, diversified portfolio that has a low probability of losses. As a result of this exercise and due to the high volatility of gold, the reserves have kept a low share of this asset over the last few years, a practice that is considered common within reserve management.[52] This can be seen in Graph 3.6 where, as a result of gold performance and portfolio construction, it is clear that the share of gold in the reserves at the close of the last ten years has remained below 2.0%.

3.2 Profitability of the Reserves

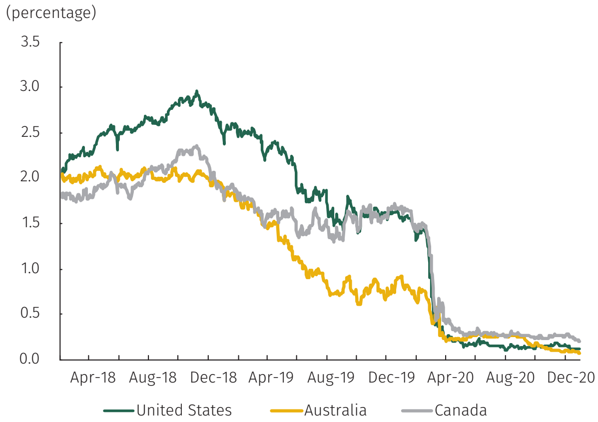
The profitability of the reserves depends primarily on two factors: interest and appreciation. The first corresponds to the interest received from the instruments invested in, while the appreciation factor corresponds to the change in the prices of the securities due to movements in the interest rate. The second factor occurs because there is an inverse relationship between bond prices and interest rates: the price of the bonds declines as the interest rates rise, and vice versa.

The profitability of the reserves remained high (3.37%)[53] in 2020 as interest rates fell sharply to near-zero levels as a result of the exceptional measures taken by the authorities due to the economic effects of the pandemic. This scenario was not what was expected at the beginning of the year, when rates were expected to be stable. In late 2019, after the Federal Reserve had lowered its benchmark interest rate several times in view of the global economic slowdown and predicted a pause in this cycle, financial markets expected the rates to stabilize at those levels in 2020. Faced with the prospect of receiving lower interest on investments (interest factor) and a limited outlook for their appreciation due to additional decreases in interest rates (appreciation factor), it seemed likely that the Foreign Reserves would yield significantly lower returns in 2020 than they did in 2019. Nevertheless, as can be seen in Graph 3.7, performance remained at high levels during the last year. The above came after the interest rates in the United States and other markets relevant to the portfolio fell rapidly to near-zero levels. This fast decline in interest

52 According to the most recent IMF data, the median share of gold in Foreign Reserves in 173 countries is 1.7%.

53 This profitability is obtained by dividing the actual return by the average value of the net reserves on December 31, 2019 and on December 31, 2020. Since 2015, the impact of the exchange rate effect on the profitability of the reserves has been excluded.

Graph 3.8
Short-term Government Bond Rates (2 years)
(information as of December 31, 2020



Source: Bloomberg.

rates led to unanticipated appreciations in the securities the portfolios are made up of (appreciation factor) and hence, favored the profitability of the Foreign Reserves in 2020.

A considerable reduction in the profitability of the Foreign Reserves is expected in 2021. With interest rates in the markets where the reserves are invested at near-zero levels, the interest received will be very low (interest factor), and there is no prospect of appreciations from additional rate reductions in the short term (appreciation factor). The appreciation of the Foreign Reserve portfolio seen during 2019 and 2020 that resulted from the abrupt fall in interest rates will probably have an adverse effect on portfolio profitability, which is likely to remain low in the coming years. The sudden drop of interest rates for portfolio assets and corresponding increase in their prices led to the receipt of a profit in 2020 that had been expected to be achieved over a longer period of time under more stable conditions. Thus, the drastic reduction in the interest the portfolio assets receive will generate a decrease in future profitability. In addition, the possibility of additional returns as a result of further interest rate declines seems lower now than during previous periods. As can be seen in Graph 3.8, the interest rates in the markets that are relevant to reserve investment have reached near-zero levels and, at the moment, are not expected to reach negative levels.

3.3 Measures to Reinforce International Liquidity

Banco de la República **raised the Foreign Reserves USD 5,863.3 m during 2020 by accumulating their returns and the direct purchase of foreign currency from the national government.** In order to increase the Foreign Reserves and considering the expected monetization of dollars by the national government, *Banco de la República* purchased USD 3,500 m through the General Office of Public Credit and National Treasury at the Ministry of the Treasury and Public Credit. On the other side, the returns generated during the year from the investment of the Foreign Reserves also contributed to the increase in their level, which stood at USD 59,030.8 m.

In 2020, Colombia renewed and expanded access to the flexible credit line (FCL; see Box 2). A portion of this line was disbursed to the national government by the IMF. Access to the FCL supplements the country's foreign sources of liquidity and the coverage provided by the adequate level of Foreign Reserves in view of the extreme external risks. Access to the line represents an important sign of the stability, performance, and resilience of the Colombian economy as well as support for the sound economic policy framework and is limited to countries that meet stringent qualification criteria in terms of their underlying fundamentals and economic policy framework. In May 2020, the FCL agreement Colombia had for SDR 7,849.6 m (approximately USD 11,200 m) was renewed. In September this amount was expanded to SDR 12,267 m (about USD 17,600 m) in view of a more uncertain external context and the effects that more extreme external conditions could generate on the Colombian economy's financing needs. On the same date, the intention to disburse, as an exception, a partial amount of the FCL to supplement the external financing sources made available by the authorities' timely response to the pandemic was announced. This IMF disbursement of SDR 3,750 m (equivalent to almost USD 5,400 m) was made to the national government in December 2020. The Colombian authorities have said that the amount remaining after the partial disbursement of the FCL (approximately USD 12,200 m) will remain a precaution that will supplement the country's Foreign Reserves as coverage and a source of international liquidity in the event of extreme external risks.

In 2020, *Banco de la República* obtained access to the Federal Reserve repo facility (FIMA). In these transactions, FIMA account holders (central banks and other international monetary authorities with accounts at the Federal Reserve Bank of New York) exchange their U.S. Treasury bonds held in custody at the Federal Reserve for U.S. dollars with the commitment to repurchase the securities the next day with an additional interest payment. The primary benefit that access to the FIMA repo facility has for *Banco de la República* is to have liquidity in US dollars without having to sell off the assets of the Foreign Reserves portfolios permanently, which contributes to liquidity risk mitigation. *Banco de la República* is likely to make use of this repo facility only if, after deciding to sell dollars on the spot market, the market for buying and selling Treasury bonds turns out to have a very low liquidity.

3.4 Reserve Indicators

Based on *Banco de la República*'s model for estimating liquidity needs in foreign currency under an adverse scenario with a one-year horizon, the Foreign Reserves plus the recently renewed flexible credit line were higher than the appropriate levels as of December. *Banco de la República* established a new methodology in June 2018 for estimating their foreign currency liquidity needs in the event of an adverse scenario with a one-year horizon. This 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.[54] Based on *Banco de la República*'s criteria, the Foreign Reserves should at least cover the forecasts for the current account deficit for the next twelve months plus the repayment of foreign debt. As of December 2020, Foreign Reserves covered these items as a whole. If the possible capital outflows from residents and non-residents are also considered, the level of the reserves stands slightly below the total estimate. However, when the IMF's FCL is included, the short-term liquidity needs in foreign currency are amply covered. This excess value takes into account the fact that part of the FCL may be used by the government to meet its financing needs.

Supplementary indicators to evaluate Foreign Reserves showed appropriate levels for the country. *Banco de la República* uses a modification of the IMF's proposed metric that is also used by several countries as a complementary

54 For more information on the methodology, see the shaded section: New methodology for determining the appropriate level of Foreign Reserves in the March 2019 Board of Directors' Report to the Congress of the Republic.

indicator (methodology ARA).[55] The ARA seeks to cover the main risks to the balance of payments by looking at macroeconomic variables[56] during periods when there is pressure on the exchange market. The modified metric introduces some variants to reflect the characteristics of the Colombian economy such as the fact that no crisis has occurred during the period under analysis,[57] and the remittances are included to capture the impact of a collapse of demand from abroad.[58] In accordance with the application of the methodology to several countries, an economy is holding a suitable level of reserves if the ratio is at a level equal to or greater than 1. Based on these metrics, Colombia was maintaining an acceptable level of reserves as of December 2020.

55 This acronym corresponds to Assessing Reserve Adequacy.

56 The first risk is associated with a loss of access to external financing and is captured by short-term debt. The second is associated with a loss of confidence in the local currency and is captured by a monetary aggregate (M2). The third is associated with a reversal of the capital flows that finance the deficit in the current account and is reflected the portfolio liabilities of the international investment position. Last of all, the volume of exports is incorporated to capture a possible collapse of demand from abroad. FMI (2015). "Assessing Reserve Adequacy: Specific Proposals."

57 The estimate for Colombia takes data from when the floating exchange rate regime began.

58 Gómez and Rojas (2013). "Assessing Reserve Adequacy: The Colombian Case," *Borradores de Economía*, no. 781, *Banco de la República*.

04/ Financial Situation of *Banco de la República*

#MuseoEnTuCasa, activity promoted on
IG @banrepcultural by the Art and Collections Unit.

Laura Zarta Gutiérrez represents the piece *Retrato en rojo* ("*Portrait in Red*") by Pedro Nel Gómez, from *Banco de la República*'s Art Collection.

Left photo: *Banco de la República*'s Art Collection.
Right photo: Laura Zarta Gutiérrez.

In 2020, the increase in Banco de la República's assets mainly arose from the increase in the peso-denominated balance of the Foreign Reserves that resulted from the purchase of foreign currency by the Bank, the return on the reserves, and the depreciation of the peso. This last factor, in turn, was reflected in the equity in the exchange rate adjustment account having a higher value. Likewise, the investment portfolio in national currency showed a significant increase that was the result of the Bank's purchases of private and public debt securities as part of the measures taken by the BDBR to deal with the negative effects that the Covid-19 health emergency had on the markets.

The profit for the 2020 fiscal year (COP 7,843 b) was higher than the profit in 2019 (COP 7,149 b). This was a result of unexpected and extraordinary situations caused by reductions in external interest rates and the high growth in the demand for money. It is unlikely that these exceptional conditions, which caused the profits expected to be received over a longer period appear sooner, will be repeated in the next few years. In particular, from 2021 onwards, a significant reduction in the profitability of the Foreign Reserves is expected because of the lower interest received given the low external interest rates and because there are no prospects of additional appreciations from further reductions to those rates. In 2020, the measures taken by Banco de la República to deal with the health emergency caused by Covid-19 resulted in higher unexpected income.

4.1 Financial Position of *Banco de la República* (balance sheet)[59]

During 2020, the Bank's balance sheet expanded significantly. At the close 2020, the Bank's assets registered a balance of COP 248,942 b which was COP 36,526 b (17.2%) higher than what was seen in December 2019. The liabilities, in turn, amounted to COP 162,168 b with a COP 26,280 b increase compared to the end of the previous year (19.3%), and the equity totaled COP 86,774 b which is COP 10,246 b higher than what had been registered the year before (Table 4.1). The expansion on the balance sheet reflects the BDBR's decisions that were designed to stabilize the foreign exchange and public and private debt markets. They are also the result of the increase in the monetary base and the depreciation of the peso against other currencies.

The rise in assets is primarily explained by the increase in the Foreign Reserves and in the investment portfolio denominated in national currency (TES and private debt securities held by the Bank). The balance of the gross Foreign Reserves in pesos rose COP 28,396 b (16.3%) as a result of foreign currency purchases from the national government in May and December (a total of USD 3,500 m, equivalent to COP 13,203 b),[60] the positive change due to the exchange rate adjustment arising from the depreciation of the Colombian peso against reserve currencies (COP 8,539 b), and the yield from the Foreign Reserves (COP 6,635 b). The

59 In this section, the line items are shown by economic rather than by accounting criteria. With respect to the financial statements presented to the Financial Superintendency of Colombia and the National General Accounting Office, the differences are: first, the value of the liabilities associated with purchase transactions for the Foreign Reserves portfolio for which payment has not yet been made is discounted from the assets (this is registered as a higher value of the asset in the Bank's financial statements and as a requirement of the Foreign 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. In this respect, the asset and liability values presented in this *Report* (COP 248,942 b and COP 162,168 b respectively) differ from those registered in the financial statements as of December 31, 2020 (COP 253,603 b and COP 166,829 b respectively).

60 See: https://www.banrep.gov.co/en/banco-republica-increases-international-reserves-through-direct-purchase-usd-2000-million-national and https://www.banrep.gov.co/en/banco-republica-increases-its-international-reserves-usd-15-billion

Table 4.1
Financial Position Statement of *Banco de la República,* classified by Economic Criteria
(billions of pesos)

Accounts	December 2019		December 2020		Change	
	Balance	Percentage share	Balance	Percentage share	Absolute	Percentage
Assets	212,416	100.0	248,942	100.0	36,526	17.2
Gross Foreign Reserves	174,257	82.0	202,653	81.4	28,396	16.3
Contributions to international entities and organizations	9,349	4.4	10,126	4.1	776	8.3
Investments	15,221	7.2	26,214	10.5	10,992	72.2
TES	15,221	7.2	21,088	8.5	5,867	38.5
Private debt securities	0	0.0	5,126	2.1	5,126	n. a.
Resale agreements (repos): Temporary Liquidity Support	8,600	4.0	4,679	1.9	-3,921	-45.6
Other net assets	4,988	2.3	5,271	2.1	283	5.7
Liabilities and equity	212,416	100.0	248,942	100.0	36,526	17.2
Liabilities	135,888	64.0	162,168	65.1	26,280	19.3
Foreign-currency liabilities that affect Foreign Reserves	19	0.0	29	0.0	10	52.7
Monetary Base	112,454	52.9	132,674	53.3	20,220	18.0
Cash	75,101	35.4	94,456	37.9	19,355	25.8
Reserve	37,352	17.6	38,217	15.4	865	2.3
interest-bearing deposits not constituting reserve requirements	55	0.0	2,864	1.2	2,809	5,109.7
Other deposits	120	0.1	49	0.0	-70	-58.7
National Government: Office of the Treasury National N/C	12,200	5.7	14,485	5.8	2,285	18.7
Obligations to international organizations	11,041	5.2	12,067	4.8	1,027	9.3
Total equity	76,528	36.0	86,774	34.9	10,246	13.4
Capital	13	0.0	13	0.0	0	0.0
Surplus	70,149	33.0	78,703	31.6	8,554	12.2
Special foreign-exchange account settlement	521	0.2	521	0.2	0	0.0
Foreign exchange adjustment	69,315	32.6	77,854	31.3	8,539	12.3
Investment in assets for cultural activities and donations	313	0.1	329	0.1	15	4.9
Other overall results	-343	-0.2	879	0.4	1,222	n. a.
Fiscal year result	7,149	3.4	7,483	3.0	335	4.7
Cumulative results: change in accounting policy adoption of new IFRS	-347	-0.2	-242	-0.1	105	-30.2
Accumulated Results Process of Convergence with IFRS	-92	-0.0	-61	-0.0	31	-33.3

Source: *Banco de la República.*

increase was COP 10,992 b (72.2%) for the national currency investment portfolio which was mainly due to the Bank's purchases of private and public debt securities as part of the measures they took to deal with the negative effects the health emergency generated by Covid-19 had on the markets and the appreciation caused by changes in market prices. Between March and April, the Bank acquired COP 8,676 b in bonds and certificate of deposits issued by credit institutions of which COP 3,689 b of principle had matured as of December. The Bank also acquired COP 4,836 b in TES. The above was partly offset by a COP 3,921 b decrease in the balance of temporary liquidity operations.[61]

The liabilities, in turn, increased mainly due to the growth of the monetary base. The monetary base rose COP 20,220 b over the course of the year as a result of the sharp increase in the demand for cash held by the public (COP 19,355 b). In addition to the above, there were also increases in interest-bearing deposits not constituting reserve requirements and the national government's deposits in pesos[62] at the Bank of COP 2,809 b and COP 2,285 b respectively.

Last of all, the equity rose, especially due to the exchange adjustment account and the profit for the year. There was a COP 8,539 b change in the exchange adjustment account that was the counterpart to the increase in the gross Foreign Reserves peso balance arising from the higher peso exchange rate with respect to the reserve currencies. The result for fiscal year 2020 was COP 7,483 b. The above was partially offset by the transfer of profits to the national government from the 2019 result for COP 6,998 b.

4.2 Income Statement (L&P)

4.2.1 Close of December 2020

At the close of December 2020, *Banco de la República*'s annual profits came to COP 7,483 b as a result of COP 9,863 b in income and COP 2,380 b in expenditures (Table 4.2). Compared to what was seen the previous year, revenue rose COP 416 b (4.4%) and expenditures COP 82 b (3.6%). As has been mentioned, the Bank's profits were exceptionally high in 2019 and 2020 as a result of a combination of favorable circumstances such as the declines in interest rates abroad and the increase in the demand for money. Furthermore, the measures taken by the Bank to deal with the Covid-19 health emergency brought about higher unanticipated revenue.

The income seen during 2020 is mainly due to the return on the Foreign Reserves, the return on the securities denominated in national currency held by the Bank (TES and private debt), and the profits from the foreign exchange regulation transactions. The return on the Foreign Reserves amounted to COP 6,635 b[63] and was COP 1,002 b lower than the result seen in 2019 (Table 4.3). As was mentioned, the high yield on the reserves in 2020 that resulted from the sharp reduction in external interest rates was a surprise and significantly higher than what had been estimated at the beginning. This fall to near-zero

61 Does not include interest accrued and not yet paid to *Banco de la República*.

62 These deposits are made through the General Office of Public Credit and the National Treasury at *Banco de la República*. Interest-bearing and other deposits such as the cashier account as well as accrued interest that has not yet been paid by *Banco de la República* are included.

63 This performance includes COP 6,146 b of the portfolio which accounts for COP 3,214 b in accrued interest and COP 2,932 b from appreciation due to changes in the market prices caused mainly by the fall in interest rates of U.S. government bonds over the course of the year. The latter caused the assets that the Foreign Reserves portfolio is made up of to appreciate.

Table 4.2
Income Statement of *Banco de la República*
(billions of pesos)

	Implemented:		Change	
	2019	2020	Absolute	Percentage
I. Total Income (A+B+C)	9,447	9,863	416	4.4
A. Monetary income	8,975	9,471	496	5.5
1. Interest and returns	8,926	9,365	439	4.9
Foreign Reserves	7,638	6,635	-1,002	-13.1
Regul. Investment Portfolio Monetary (TES)	756	1,133	377	49.9
Active Monetary Regulation Transactions (Repos)	533	241	-291	-54.7
Transactions in other private debt securities	0	309	309	n. a.
Foreign Exchange Regulation Transactions	0	1,047	1,047	n. a.
Other operations	0	1	0	142.9
2. Foreign exchange differences	35	105	71	204.2
3. Other monetary income	14	0	-14	-99.0
B. Face value of the coins issued	221	171	-50	-22.6
C. Corporate income	251	221	-30	-12.0
1. Commissions	190	192	2	1.1
Banking services	68	55	-13	-18.8
Fiduciary operations	122	137	15	12.1
2. Other corporate income	62	29	-32	-52.2
II. Total expenditures	2,299	2,380	82	3.6
A. Monetary expenditures	1,421	1,480	59	4.2
1. Interest and returns	1,235	1,318	83	6.7
Remunerated deposits: General Office of Public Credit and the National Treasury	1,229	777	-453	-36.8
Liability Transaction Deposits for Monetary Regulation	6	77	71	1,261.1
Foreign Exchange Regulation Transactions	0	465	465	n. a.
2. Management Costs and Cost of Managing Funds Abroad	39	60	22	55.9
3. IMF Commission on Flexible Credit Commitment	88	98	10	11.3
4. Foreign exchange differences	13	3	-9	-74.2
5. Other monetary expenditures	47	1	-46	-98.8
B. Banknotes and coins	233	216	-17	-7.3
C. Corporate expenditures	644	676	33	5.1
1. Personnel costs	416	432	16	3.7
2. Overhead	122	125	3	2.7
3. Other Corporative	106	119	14	12.9
D. Pension payments	1	8	7	726.4
III. Operating results (I - II)	7,149	7,483	335	4.7

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

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

	2019	2020	Annual change
Foreign Reserves	7,638	6,635	-1,002
Portfolio	7,132	6,146	-986
Interest	3,056	3,214	158
Valuations	4,076	2,932	-1,144
Gold	445	413	-32
International Entities, Aladi agreement, etc.	60	76	16

Source: *Banco de la República*.

levels was caused by the exceptional measures taken by central banks to address the economic effects of the pandemic. This scenario was not expected at the beginning of 2020, and additional reductions in these rates that would allow for a high yield outlook for Foreign Reserves in the coming years are not expected. The return on the national currency-denominated securities held by the Bank, in turn, was COP 1,441 b (COP 1,133 b in TES and COP 309 b in private debt securities) which was COP 685 b higher with respect to what was earned during the previous year. The income from TES was COP 377 b higher compared to what was seen the previous year and resulted from a higher average balance of these securities held by the Bank due to the purchases made over the past year. The income from private debt securities amounted to COP 309 b due to the first-time purchases made by the Bank in March and April 2020. The net result of the foreign exchange regulation transactions amounted to COP 583 b.[64]

The outlays, in turn, are primarily due to the remuneration paid on the national government's deposits and the corporate expenditures. The remuneration for the national government's deposits was COP 777 b during 2020 and was COP 453 b lower than the value registered during the 2019. This was the result of a lower average balance and a lower rate of compensation.[65] The corporate outflows, which came to COP 676 b in 2020, were COP 33 b higher (5.1%, equivalent to 2.5% in real terms) and of these: 1) personnel costs, COP 432 b, rose 3.7% per annum (1.2% in real terms); 2) the overhead, COP 125 b, registered an annual change of 2.7% (0.2% in real terms), and 3) other corporate expenses, COP 119 b, presented an annual increase of 12.9% (10.1% in real terms). The change in overhead costs was mainly due to the decline in expenditures related to utilities, special surveys and studies, contracted services, and other overhead costs.[66] The final figures on outlays for personnel and overhead was affected by the health emergency due to Covid-19. Last of all, the growth of the item, "other corporate expenses" was mainly caused by expenses related to the administration of the Savings and Stabilization Fund (FAE trust),[67] the donation of Casa Bolívar in the city of Cartagena to the Ministry of Culture, and the increased expenditures on contributions and affiliations.[68]

64 Result of COP 1,047 b in profits on some forward contracts and swaps reported as income, and COP 465 b in losses on other forward contracts and swaps registered as Bank expenses.

65 The average daily volume of these deposits was COP 28,587 b in 2020 and COP 28,797 b in 2019. For these same dates, the average annual effective interest rate was 2.75% and 4.36% respectively.

66 Other overhead costs include reporting on the Bank's activities, subscriptions, scholarships for students other than employees, and materials and supplies, etc.

67 The increase in these expenditures was mainly due to the impact from the higher exchange rate.

68 Especially to the Office of the Financial Superintendent of Colombia as a result of the rise in assets other than the Foreign Reserves.

4.2.2 Reserve Accumulation and Profit Distribution

According to the Bank's legal framework contained in the Constitution, Act 31/1992, and the Bank's by-laws, once the net investment in goods for cultural activity is discounted and the statutory reserves are appropriated, the remainder of the profits will belong to the nation. The buildup of reserves was due to:

a. According to Act 31/1992, literal d) number 8, article 27 and Decree 2520/1993, article 60, the BDBR is required to set up a Monetary and Exchange Stabilization Reserve in order to absorb possible Bank losses before resorting to the relevant appropriations established in the General Budget of the Nation. This reserve shall be set up with the amounts necessary in accordance with the projected losses shown in the Bank's budget for the next two fiscal years. Therefore, based on the 2020 results, and in accordance with *Banco de la República*'s loss projections for 2021 and 2022, a Monetary and Exchange Stabilization Reserve was created with COP 181 b.

b. According to Decree 2520/1993, numeral 2, article 61, the differences in the value of the daily foreign currency purchase and sale transactions on the foreign exchange market with respect to the daily market price are registered on the Bank's Income Statement and, when their value is positive, must be credited to the Reserve for Exchange Results at the end of the period. This reserve could be used to cover losses incurred by the Bank in the future with daily foreign currency purchase and sale transactions. Therefore, based on the 2020 results, a Reserve for Exchange Results was set up in 2021 with COP 583 b, an amount that corresponds to the net result of the foreign exchange regulation transactions described.

Moreover, an additional withholding of COP 5 b in profits for net investment in assets for cultural activities and additional withholdings for losses arising from the process of converging with IFRS and the adoption of IFRS 9, for both of which an offset is pending of COP 31 b and COP 54 b respectively was done.

In accordance with the above, in February 2021, the BDBR approved a COP 6,629 b profit transfer to the government which was carried out at the end of March (Table 4.4).

Table 4.4
Distribution of Profits
(billions of pesos)

	Distribution of Profits in 2021
A. Fiscal year result	7,483
B. Plus use of reserves	0
C. Minus accumulation of the reserves and other deductions	855
Monetary and currency stabilization reserve	181
Foreign-exchange result reserve	583
Net Investment in Cultural Activity Goods	5
Loss due to implementation of IFRS	31
Losses due to the adoption of IFRS 9: change in accounting policy on TES held by the BR	54
Net Result in favor of the national government: A + B- C	6,629

Source: *Banco de la República*.

4.3 Income and Expense Projection for 2021

The budget for 2021 was approved by the BDBR in December 2020 with the prior approval of the Fiscal Policy Board (*Consejo Superior de Política Fiscal, Confis*) with regard to the implications for public finances. *Banco de la República*'s budget 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 Foreign Reserves; banker and lender of last resort for credit institutions; and issuing bank. The corporate results include the administrative management of the Bank such as income from commissions, personnel costs, operating expenses, and pensioner expenses.

A loss of COP 122 b is projected for 2021 which contrasts with the historically high results in 2019 and 2020. As was mentioned, no additional reductions in foreign interest rates are anticipated that might allow us to support a high yield outlook for Foreign Reserves in the coming years. The estimated revenue will be COP 1,856 b and outflows will be COP 1,978 b for 2021. Compared to the two previous years, the Bank's performance is mainly the result of the esti-mated COP 41 b negative return on Foreign Reserves (Table 4.5).

With respect to monetary results, a net income of COP 516 b is expected. The budget approved for 2021 estimates a 52.3% annual decrease in revenue com-pared to what was budgeted for in 2020 mainly as a result of the projected lower return of COP 2,047 b[69] on the Foreign Reserves compared to the 2020 budget. Income from the return on the securities in national currency held by the Bank, in turn, is projected: TES (COP 1,185 b) and private debt (COP 157 b). The main monetary expenditures correspond to the remuneration paid to the national government on their deposits at the Bank which are estimated at COP 503 b with a 62.3% decrease compared to the projected budget in 2020.

A net outflow of COP 61 b is expected with regards to putting coins into circu-lation. It is estimated that COP 267 b in income will be generated with a 3.3% annual reduction compared to what had been budgeted in 2020. The costs of production and putting the monetary specie into circulation are estimated to be COP 328 b, which is 19.7% higher than what was budgeted in 2020.

A net outlay of COP 567 b is expected from the corporate budget. COP 230 b in income and COP 797 b in spending is estimated (annual changes of 2.8% and 7.4% respectively compared to what was budgeted for 2020). The real growth in corporate expenses is mainly due to what was considered in the Bank's Collec-tive Agreement and the higher expenses resulting from technology projects, maintenance, repairs and modifications, depreciation, debt repayment, and contributions and affiliations, etc.

Last of all, expenditures on pensions were budgeted to go to COP 10 b. This amount includes the effect of the pensions shared with Colpensiones.

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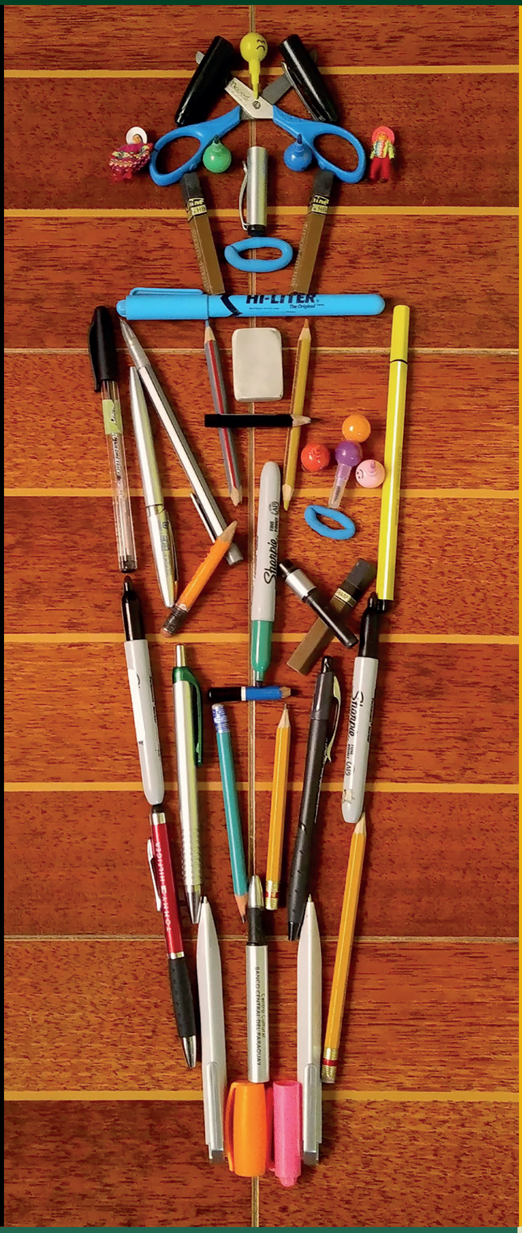
69 As was mentioned above, a negative return of COP 41 b on the Foreign Reserves is projected for 2021. The budget approved in 2020 included a COP 2.006 return for this.

Table 4.5
Budget of *Banco de la República*, 2021
(billions of pesos)

	Approved Budget		Change	
	2020[a/] (A)	2021 (B)	Absolute	Percentage
I. Total Income (A+B+C)	3,895	1,856	-2,038	-52.3
A. Monetary income	3,395	1,360	-2,036	-60.0
1. Interest and returns	3,328	1,325	-2,003	-60.2
Foreign Reserves	2,006	-41	-2,047	n. a.
Monetary Regulation Investment Portfolio (TES)	854	1,185	331	38.8
Transactions in other private debt securities	0	157	157	n. a.
Active Monetary Regulation Transactions (Repos)	468	24	-444	-94.8
2. Foreign exchange differences	63	26	-37	-58.7
3. Other monetary income	3	8	5	133.9
B. Coins issued	276	267	-9	-3.3
C. Corporate income	223	230	6	2.8
1. Commissions	198	212	14	7.1
Banking services	71	75	4	5.4
Fiduciary operations	126	137	10	8.1
2. Other corporate income	26	18	-8	-30.1
II. Total expenditures (A+B+C+D)	2,595	1,978	-616	-23.8
A. Monetary expenditures	1,568	843	-725	-46.2
1. Interest and returns	1,341	598	-742	-55.4
Remunerated deposits: General Office of Public Credit and the National Treasury	1,334	503	-831	-62.3
Monetary-contraction operating expenses	7	96	89	1.370.3
2. Costs of Management and Handling of Funds Abroad	48	68	20	41.4
3. Commitment fee for IMF flexible credit	95	128	33	35.1
4. Foreign exchange differences	63	41	-22	-34.7
5. Other monetary expenditures	22	8	-14	-62.5
B. Banknotes and coins	274	328	54	19.7
C. Corporate expenditures	742	797	55	7.4
1. Personnel costs	455	489	33	7.3
2. Overhead	151	162	10	6.9
3. Other Corporative	132	142	11	8.1
4. Budget availability	4	4	0	7.4
D. Pensioners' expenses	10	10	0	1.7
III. Fiscal year result (I - II)	1,300	-122	-1,422	n. a.

a/ Starting in 2020, lower value assets were registered under depreciation as part of other corporate expenses. Previously included in overhead. This change was made to the information in the 2020 approved budget column to maintain consistency with the 2021 budget projection.
Source: *Banco de la República*.

05/ Management of Cultural Assets by *Banco de la República*

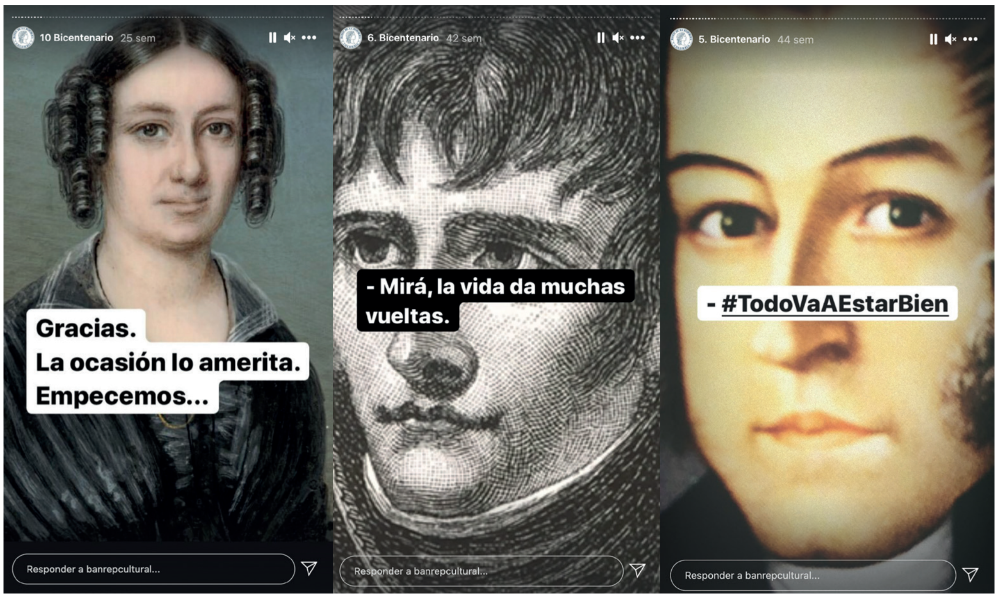


#MuseoEnTuCasa, activity promoted on IG @banrepcultural by the Art and Collections Unit.

José Pérez represents a *muisca* "tunjo" of a woman with a baby in her arms, from *Banco de la República*'s gold collection.

Left photo: Gold Museum, *Banco de la República*.
Right photo: José Pérez.

Banco de la República's cultural activity was reinvented to address the challenges imposed by the Covid-19 pandemic. In a short period of time, the different aspects of the cultural offerings were adapted to the new circumstances and offered high quality entertainment and culture. The use of digital platforms, the sustained audiovisual production, the generation of content and virtual activities in the regions with local participants and stories, and the interaction on social networks made it possible to maintain loyal audiences and reach new audiences nationally and internationally with special emphasis on vulnerable people, people with disabilities, and teachers in online classes.



Fragments of the IG stories published @banrepcultural about the country's Bincentennial.
Photo: Cultural Outreach Section of the Office for Cultural Affairs, *Banco de la República*.

The Bank contributes to the country's cultural activities along four lines of action: The Library Network, the Gold Museums, the art, coin, and stamp collections, and music.[70] On each one of these fronts, long-term projects are carried out that generate knowledge and make it possible to serve the public needs with a differentiated and inclusive approach by means of teamwork supported by technology. This model reinforces the ties with the local community and opens windows to the world.

In response to the pandemic, cultural activity was changed in 2020. Within a short period of time, the four lines of work were developed in order to continue offering high quality entertainment and culture to different audiences. The use of multiple digital platforms, the sustained audiovisual production, the production of content and virtual activities in the regions with local participation and stories, and the encouragement to participate and interact on social networks made it possible to retain loyal audiences and reach new audiences nationally and internationally. Specific strategies were also

70 Act 31/1992 (article 25) stipulated that the Bank could continue to carry out the cultural and scientific functions it had been involved in at the time this law was passed.

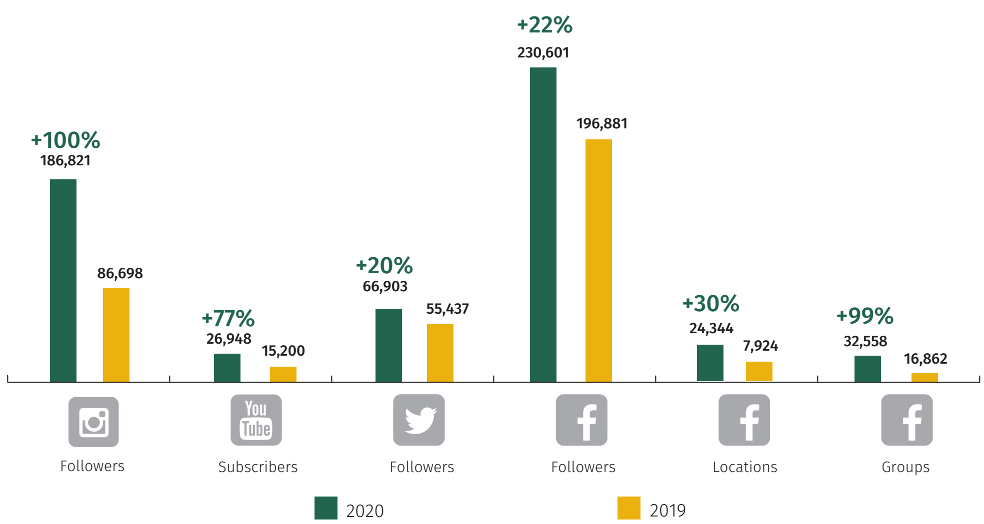
developed to serve vulnerable people, people with disabilities, and teachers doing online teaching.

In 2020, interaction with the regions strengthened the cultural exchange on the Web. Going online allowed us to decentralize and reinforce the production of content from different cities. More than 300 online activities were carried out using local stories and protagonists. Forums for conversation related to local practices and interaction using the Bank's digital archives were created, thereby contributing to the recognition of diversity and intercultural dialogue. The indigenous people created content on the Gold Museum's social networks, the cultural mediators read and interpreted with their communities, and the children were encouraged to make podcasts. Particular emphasis was placed on access for disconnected and vulnerable publics and those with a seeing or hearing disability.

Production of digital content rose 47% with respect to the previous year. Along with other things, 671 videos were recorded and are available on the Banrepcultural YouTube channel.[71] There were more than 10 million visits to the Bank's cultural website compared to 9 million in 2019. Nearly two million people participated in the online cultural programming that was generated from the 29 cities in which the Bank operates, and the social networks of the cultural area reached 568,175 followers. The total number of network users reached 43,253,828[72] in 2020.

The Bank's cultural offerings were recognized by users as a possibility for their growth as individuals, communities, and society. This was reflected in the survey done in July and August 2020 to measure the impact of the Bank's cultural activity, and in it, the public reported that they found companionship, solidarity, and free access to reliable and serious sources of knowledge in this service during the lockdown.[73]

Graph 5.1
Followers on all of *Banrepcultural's* social media accounts



Source: Outreach Section, Office of the Deputy Cultural Manager, *Banco de la República*.

71 https://www.youtube.com/user/banrepcultural

72 Data supplied by Loyal Quo, the company responsible for high-impact measurements for *Banco de la República*.

73 Electronic survey done by the Cultural Network Management Unit of the Cultural Management Division in June and August 2020 of users of *Banco de la República*'s cultural services in 29 Colombian cities.

5.1 Network of Libraries

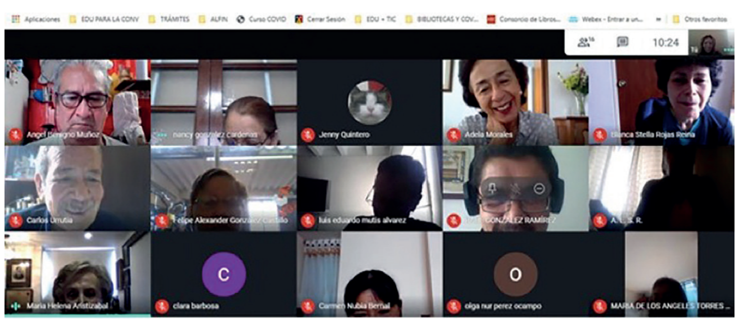
The Luis Angel Arango library leads *Banco de la República*'s network of libraries that provide their services through their 29 cultural branches throughout the country. Those who use the network get access to the 2,599,094 titles, to electronic databases, and digital collections. The Network of Libraries opened its free digital universe and actively worked to reach audiences excluded by the digital divide.

Consultation services for specialized information and reference services continued to be provided virtually. As a result, 65,000 members (including 15,000 new members) enjoyed access to information in all disciplines and platforms where they could enjoy music, art, literature, and film. Resources specifically for children, parents, and teachers were also offered to address their new needs. For example, through the online service, "Ask the librarian," thousands of students and researchers were able to consult library books from their homes. Digital communication made it possible for users to have access to quality content throughout the year via their screens, and since the end of the year, the over-the-counter book lending service has been reopened and home delivery of books has been implemented for members throughout the country.

Initiatives were launched to reach vulnerable populations or those excluded from access to the virtual universe, thus helping to close the digital divide. The *itinerant book suitcase* service made it possible to send 6,950 books directly to the homes of vulnerable families in hard-to-reach areas in 24 cities and 25 rural areas. A web section and a Banrep Club for Teachers on Facebook were developed to provide teachers with didactic resources and support for teaching their classes online. Outreach to populations that were doubly affected by mobility restrictions was achieved through WhatsApp reading projects for the visually impaired, clubs on the history of Colombia for the hearing impaired, alliances with local radio stations and community radio stations for reading aloud, and information literacy for older adults.

The libraries developed a wide range of virtual programming for different audiences, which reached all the regions around Colombia and more than 15 countries. Extensive programming for young people that included workshops to reinforce research and critical thinking processes in the classroom was carried out. The program "Authors read in your home" had 28 writers participating. Through a creative writing lab, teenagers from all over the country were encouraged to write a personal diary about how to live in a world in crisis. The Bank participated in the Children's Book Festival in alliance with the Colombian Chamber of Books, in virtual book fairs in Pasto, Monteria, Medellin, Cucuta, and in the Hay Festival.

Instagram slide @banrepcultural.
Photo: Cultural Outreach Section of the Office for Cultural Affairs, *Banco de la República.*



Virtual activity of the IT instruction service for the elderly by the *Luis Ángel Arango* Library.
Photo: Cultural Outreach Section of the Office for Cultural Affairs, *Banco de la República.*

Digitalized historical archives that had a historical background provided by expert researchers were made publicly accessible. Our users can now browse these Colombian heritage treasures. The Bank received the Digital Humanities Award for this initiative in the category of Excellence in the Management of Historical Collections.

5.2 Gold Museums

The network of Gold Museums has maintained its basic role as a cultural and identity reference point in Bogota and the regions. The Gold Museum in Bogota together with its six regional museums[74] conserves and exhibits one of the most important pre-Hispanic collections. The Museum has gravitated towards quality and innovation in their work in research, conservation, and circulation of Colombia's archaeological heritage. This has contributed to the appropriation of the country's pre-Hispanic past and turned it into a symbol of national identity. Having been in existence for eighty years, these collections[75] come to 34,268 articles made of gold and 19,401 articles made of ceramic, textiles, or wood in addition to other materials.

José Pérez, mediator from the Gold Museum, represents the piece *El hombre murciélago* (*the Bat-Man)* from *Banco de la República*'s gold collection. Left photo: Gold Museum, *Banco de la República*. Right photo: José Pérez.

In 2020, the museums pooled their efforts and reinvented their services in order to deal with the challenges posed by the difficulty of physical access. A multi-language application that allowed the people to do online tours of the Gold Museum was made available to the public. Thematic online rooms were created for teachers and students to interact through pedagogical cartoons, and content was created for the hearing impaired.

74 To exhibit its collections, the Gold Museum has a head office in Bogotá and six regional museums: 1) Quimbaya Museum in Armenia; 2) Calima Museum in Cali; 3) Zenu Museum in Cartagena; 4) Ethnographic Museum in Leticia; 5) Nariño Museum in Pasto; and 6) Tairona Gold Museum-Customs Office (Museo del Oro Tairona Casa de la Aduana) in Santa Marta.

75 Act 1185/2008 article 3 states: "In compliance with articles 63 and 72 of the Constitution, items that are part of our archaeological heritage belong to the nation and are inalienable, and not subject to statutes of limitation nor liens. The Colombian Institute of Anthropology and History (Icanh, in Spanish) may authorize individuals or legal entities to have custody of archaeological treasures provided that they comply with the registration, handling, and security requirements for those items as determined by the Institute."

Online educational activities were held for schools, children, young people, families and senior citizens as well as online dialogs with the public led by indigenous people. More than 2,000 online educational cartoons were developed for schools with the participation of 58,977 students from Popayan, Neiva, Bello, Samacá, Yopal, Piedecuesta, Cúcuta, Tunja, Tolemaida, etc. The online workshops, carried out in partnership with family compensation funds in Cundinamarca, Atlántico, Bolivar, Quindío and Casanare, allowed families and young people to share a space to learn about mythical animals, textile dyeing and the making of ancient ceramics. Claudio, the archaeologist fox, a puppet that tells children about archeology and historical heritage, made his debut on the YouTube channel. Specific workshops were also held for senior citizens while some indigenous people led online dialogs with the public in #LosIndígenasCuentan and participated in workshops in the departments of Choco, La Guajira, Huila, and Bogota.

During 2020, we celebrated the 80th anniversary of the beginning of the collection with the program "80 years of shared stories." During the year, 9,742 people participated in the guided tours led by the exhibition organizers and curators, many of which were translated into Colombian sign language.

Progress was made on the architectural and technical renovation projects for the Quimbaya Gold Museum and the Zenú Gold Museum. Furthermore, the exhibitions in Cartagena, Santa Marta, Cali, Armenia, Pasto, Leticia, and Bogota have been open to visitors since November 2020 with a restricted capacity and complying with all biosafety protocols.

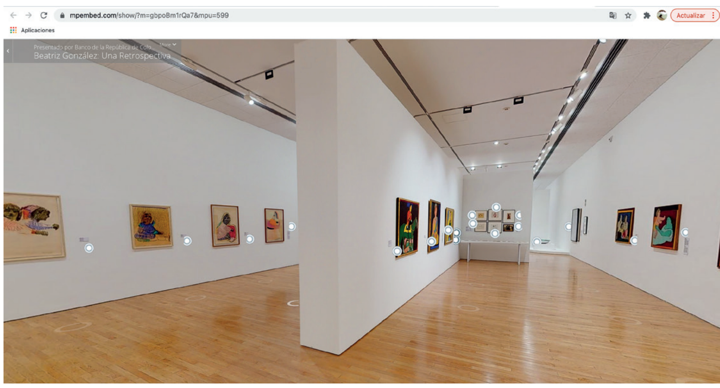
5.3 Art and Numismatic Museums

The museums and art collections breached the confines of their white walls and achieved physical and online presence in areas they had never reached before. *Banco de la República*'s art collection has 6,191 works of art that are representative of Colombia, Latin America, and international art and that date from the 15th century to the present day. The collection is on permanent exhibition at the Miguel Urrutia Museum of Art (MAMU in Spanish) and the *Casa Republicana*. Added to the above are the collections donated by Fernando Botero and by the Gomez Campuzano family. The Mint Museum (*Casa de Moneda*) exhibits the Bank's coin collection which has a total of more than 17,498 coins and is considered one of the most important ones in Latin America because of the quality and rarity of its contents. The stamp collection with more than 35,000 stamps is in Medellin.

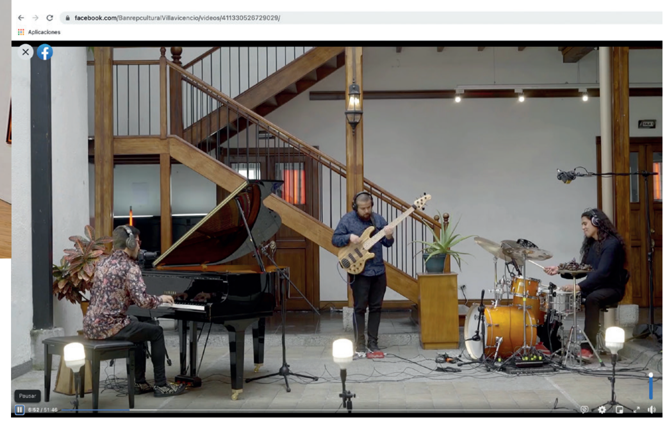
The temporary exhibitions "Beatriz Gonzalez: a retrospective" at MAMU and "The Beatriz Gonzalez Archives" at the *El Parqueadero* exhibition site were held in person while complying with all biosecurity measures. In addition, a 3D online tour of the exhibition was developed so that anyone in the world could explore it exactly the way it was set up. In addition, to allow many people to get to view this historical flashback, three tours were recorded with experts and a video tour with the artist, *and an online pedagogical resource was created for children: "El taller de la maestra Beatriz" (Professor Beatriz's workshop).*

One project, called "Interior/Exterior: artistic exchanges in times of pandemics," broke the mold of art exhibitions, and included the participation of 130 artists and 7 curators in 21 cities. The artists were commissioned to create works of art from the places where they were confined. The facades, doors, windows, and malocas of the country served as a showroom. With the instructions provided by the artists, the online public was invited to join this chain of creation on the social networks. The project achieved interaction with art and generated reflections on how the country is coping with this exceptional situation.

The Open Windows Museum project got the public to interact with the works of art from their homes. The online “Appreciation of Art at *Banco de la República* Museums” club succeeded in getting many people to see contemporary art for the first time. Children participated in online workshops designed especially for them, and the national and international community actively participated in creative challenges through the social networks. Three seminars were held with renowned national and foreign guests on current topics such as: creation in digital media, inclusion and diversity in museums, and museums during the pandemic. The Botero Museum celebrated its 20th anniversary through multiple online interactions and gave the public a chance to thank Maestro Botero for his generous donation. In 2020, progress was made on the architectural and technical renovation projects at the Mint Museum, and the possibility of visiting art exhibitions at the Bank’s cultural centers throughout the country was reopened in November, with restricted seating and in compliance with all biosecurity protocols.



Virtual tour of the exhibit *Beatriz González, retrospectiva*.
Photo: Cultural Outreach Section of the Office for Cultural Affairs, *Banco de la República.*



Virtual concert from Villavicencio.
Photo: Cultural Outreach Section of the Office for Cultural Affairs, *Banco de la República.*

5.4 Musical Endeavors

The closure of the concert halls challenged the Bank to change the plans for music programming in the short term. The efforts were focused on supporting national artists, continuing to encourage creation, training talented young people, and providing access to the enjoyment of music. The Bank works with music by programming a national season in the 29 cities that are part of its cultural network. The purpose for this work is to provide access to and enjoyment of music through concerts, workshops, classes, music creation rooms, and teaching concerts. In the first two and a half months of the year, the Bank organized 27 on-site concerts, 11 of them in Bogota and 16 in other cities, among which the famous *Cuarteto Casals* of Spain, who played Beethoven’s complete set of string quartets, was most notable. After the close, six concerts were held with musicians from the *Jóvenes Intérpretes* program (who recorded from their homes), four concerts with Colombian groups, and a season of online international and national concerts was produced, which will be presented in 2021 on digital platforms.

Musical activity went beyond programming concerts through a sustained exercise of on-line communication. Through weekly trivia, streaming of the week, access to platforms such as Naxos Music Library, medici.tv, proprietary content on YouTube, Spotify playlists and the launch of the podcast “La música se habla" (music speaks), an effort was made to keep the public close to music. Interviews with musicians, conferences, workshops, audio interpretations from the archives, a national reflection called "Colombia en un bambuco," talks on the *vallenata* tradition, and children's concerts along with lots of other content, were produced in the 29 cities of the Bank's Cultural Network.

The Colombia Composes project continued to support musical creation. This included the recording of Nicolas Quevedo Rachadell's music for his album and the completion of the monographic albums by Pedro Sarmiento and Luis Carlos Figueroa, which were released online in November 2020. Contemporary creative work was also presented with the online presentation of the CDs "Compositores de nuestro tiempo, volumen 4" (Composers of our time, volume 4) and the Monograph CD with works by Fabian Roa.

5.5 Scholarship Programs for Postgraduate Studies Abroad

As part of their culture policy, *Banco de la República* helps Colombian artists and musicians further their skills by encouraging studies abroad through the annual Talented Young People competition. The two fields alternate, since one year a student of music is supported and the next year, a student in visual arts is. Since 1986, 33 beneficiaries have been given support (18 in music and 15 in visual arts).

Shaded Section 3: **Share of the Bank for International Settlements Held by *Banco de la República***

Act 1484/December 12, 2011 authorized *Banco de la República* to participate as a shareholder of the Bank for International Settlements (BIS).[1] Based on the authorization conferred on it, the Bank acquired 3,000 shares of the BIS for a price of 65,712,000 in special drawing rights (SDR), which is equivalent to USD 100,978,710 that are registered on the books at their acquisition cost in SDR under "contributions to international organizations and entities.»

The effects of the Covid-19 pandemic and the resulting substantial losses in the financial markets were also reflected in low net profits for the institution in the first half of 2020. In view of this, the BIS Board of Directors decided not to pay dividends on June 30, 2020 to any of its members for the 2019-2020 period. Instead, and assuming that financial conditions improve, a supplementary dividend will probably be paid for the 2020-2021 period thus offsetting the non-payment of last year's dividends. Thus, all profits for the 2019-2020 period went to the General Reserve Fund and the Free Reserve Fund.

The membership of *Banco de la República* in the BIS has allowed the directors of the Bank to participate in periodic meetings in which recent events and the outlook for the global economy and the financial markets are examined. These meetings are a discussion forum where points of view and experiences with issues particularly relevant to central banks are exchanged, which contributes to a better understanding of the challenges that affect countries and to implementing appropriate policy measures. In the current Covid-19 pandemic crisis, having the ability to have discussions with other central banks and the BIS technical staff has been very useful to learn from international experience on policy design and use as well as from the analysis of the international environment.

Recent discussions at meetings held by governors of BIS member countries have focused on a variety of topics such as the effects of the Covid-19 pandemic on the global economy, the room for maneuver for monetary policy in emerging economies, fiscal policy and its implications for monetary policy, and the impact of the crisis on household consumption, etc. Also, in response to a request from *Banco de la República*, the institution prepared a note on the implications of low interest rates and the effect of changes in monetary policy on capital flows.

Furthermore, since April, the BIS has also begun to publish the *BIS Bulletins* series,[2] in which brief analytical documents on the effects of coronavirus and the recent developments in the markets and economy in general are presented. There is also the *FSI Briefs* series,[3] where a set of brief notes on regulatory and supervisory issues associated with the responses of financial sector authorities to the pandemic crisis are published.

The BIS is organized into various consulting groups that do research and analysis in areas such as financial stability and banking operations. The Bank participates in these groups through the Consultative Council for the Americas (CCA), which consists of the governors of the central banks on the American continent that are members of the BIS.[4] These forums foster international cooperation and research on issues related to central bank policies and other topics that impinge on macroeconomic and financial stability. Likewise, the Bank is a member of the Consultative Group of Directors of Operations (CGDO), a network of representatives of the central banks who are responsible for central bank operations, the Consultative Group of Directors for Financial Stability (CGDFS), and the Consultative Group on Innovation and Digital Economy (CGIDE).

Within the framework of the work coordinated by the CCA, the Bank actively participates in research projects, groups and conferences on various areas relevant to central banks. At the end of last year as part of these projects, the CCA organized two round tables where the CCA governors and private sector representatives, who included CEOs of financial

1 This international institution was created in 1930 and currently includes 62 central banks. Its mission is to serve central banks in their quest for monetary and financial stability by fostering international cooperation in these areas as well as to serve as a bank for member central banks. Its headquarters are located in Basel, Switzerland, and it has two representative offices: one in Hong Kong and another in Mexico City.

2 The series is available at: https://www.bis.org/bisbulletins/index.htm?m=5%7C439

3 The series is available at: https://www.bis.org/fsi/fsipapers.htm?m=5%7C440

4 Argentina, Brazil, Canada, Chile, Colombia, the United States, Mexico, and Peru.

institutions and New York-based Chief Economists and Strategists for Latin America, discussed the economic outlook for the region and the financial conditions in the current environment . Likewise, the Scientific Committee (which includes the chief economists of the respective central banks) organized a meeting on monetary policy frameworks and communication in February 2020 which will result in the publication of a report on the development and effectiveness of the monetary policy frameworks of the CCA member central banks. Also, the annual meeting of the working group on monetary policy in Latin America where macroeconomic and financial sector developments and non-conventional policy instruments were discussed was held at the end of last year.

In addition, earlier this year, the BIS Representative Office for the Americas announced the creation of the Consultative Group on Risk Management (CGRM), which will report its activities to the CCA. The goal of this new group is to establish a forum for sharing experiences and technical expertise on the monitoring, assessment, and mitigation of various forms of risk among BIS member central banks in the region. *Banco de la República* will participate in this consultative group.

Within the framework of the BIS Innovation Hub, which was created by the BIS to encourage international cooperation on financial technology issues within central banks, the BIS Innovation Network and the Global Cyber Resilience Group (GCRG) were established in the second half of 2020 in order to set up focal points for a group of experts from BIS member central banks to discuss technological innovation issues in the financial sector, and security and cyber resilience issues respectively. The Bank participates in these groups. Likewise, the BIS supported *Banco de la República* during 2020 in discussions regarding low-value payments.

Given the Covid-19 pandemic, work with the BIS was adjusted in 2020 and up to this point in 2021, and the Bank's involvement has been concentrated in various virtual meetings. In addition to others, the Bank participated in: 1) the bimonthly BIS Governors' meetings; 2) the online conferences, and seminars streamed by the institution[5] at the 19th BIS Annual Conference where central bank cooperation, the link between fiscal policy and monetary policy, digitalization of money, and foreign exchange intervention were discussed; 3) the annual meeting of deputy governors of central banks of emerging BIS member countries which focused on the interaction of monetary policy and fiscal policy in the aftermath of the pandemic, and 4) the meeting of financial stability directors (CGDFS) where the situation of the corporate and banking sector in the pandemic and the stress testing exercises and scenarios evaluated by the different central banks were discussed. In addition, the Bank is working with the BIS to develop a repository of measures implemented by central banks during the health crisis.

The BIS recently published, as BIS Papers, the contributions of central banks to the meeting of deputy governors of central banks of emerging countries. At these meetings, the challenges of financial development on monetary policy and financial stability were discussed.[6] The Bank's contribution analyzes the effect of increased foreign participation in the Colombian local public debt market on domestic financial conditions.[7]

Last of all, in 2020, the BIS opened a new bank dealing room at its Representative Office for the Americas located in Mexico City. This new room complements the existing BIS trading rooms in Basel and Hong Kong SAR and will enable the institution to undertake reserve operations for the region's central banks. In January 2021, the BIS also announced the launching of its second green bondfund, this time denominated in euros, for central banks and financial institutions. This launch follows the successful introduction of its first dollar-denominated green bond fund in late 2019.

5 The events broadcast by the BIS during the 19th annual conference are available on the BIS website: https://www.bis.org/events/conf201030/overview.htm

6 Available at: https://www.bis.org/publ/bppdf/bispap113.htm

7 Available at: https://www.bis.org/publ/bppdf/bispap113_f.pdf

Box 1
The Transmission of the Changes in the Monetary Policy Interest Rate (MPR) to the Interest Rates of the Credit Institutions (CI)

The mechanisms through which the monetary policy actions affect the short-term economic growth and inflation are called the channels of monetary policy transmission. One of them, the interest rate channel, implies that changes in the MPR (short term) are transmitted to the interest rates with similar and longer terms for the different financial instruments. These changes modify the cost of financing for various economic agents, alter their spending and investment decisions and, as a result, affect the economic activity, the exchange rate, inflation expectations and, finally, prices. In this context, the efficiency of this channel depends on both the degree of sensitivity of short, medium, and long-term rates to changes in the MPR and the time it takes for this sensitivity, along with other factors, to materialize.

The above mechanism is reinforced when the credit channel works. The latter channel has an effect when bank loans are a special or single source of financing for agents[1] and when, for commercial banks, loans cannot easily be replaced by other investments either. Under these circumstances, changes in the MPR alter the general level of the interest rates and affect the supply of bank loans in the economy. As a result, the impact of such changes on the interest rates for loans is reinforced as is their effect on aggregate demand and, therefore, prices.

Despite the above, the transmission of the changes in the MPR to deposit and loan interest rates is not immediate and has a high degree of uncertainty. In this Box, we show some results which suggest that compared to observed since 2003, the speed of adjustment of the interest rates to changes in the MPR in the period (April to December 2020) has been faster, particularly to interest rates on deposits and preferential loans. First, we describe the main aspects of the transmission of the MPR to market interest rates, and how the performance of some variables that affect the savings and loan markets generates uncertainty in estimating the MPR. Also, we argue why the transmission of the MPR may be asymmetric, i.e., its degree or speed may differ in periods when the MPR increases or decreases.

1. How does the transmission of changes in the MPR to savings and lending rates occur operationally?

For CIs, one source to cover their short-term liquidity shortages is the financing (expansion repos) from *Banco de la República*. To grant this financing, generally with an overnight term, the Bank requires a debt security (generally a TES) as collateral and charges an interest rate that is generally equal to the MPR.[2] Through this mechanism, changes in the MPR can impact on the financial system's cost of financing and thus, be transmitted to deposit and lending interest rates. However, as is shown in Table B1.1, repo transactions between CIs and the Bank are a minor source of their financing (about 1.4%) since these entities have a wide range of demand deposits available (checking or savings accounts) or need to raise funds on the deposit market with longer maturities in order to finance loans or investments with longer maturities.[3] In the case of credit, another way the transmission occurs is through portfolio balances indexed to short-term benchmark interest rates such as the banking benchmark index (overnight BBI) or the rate of fixed-term deposits (3-month DTF). Since these short-duration rates react quickly to changes in the MPR, the cost of credit tied to one of these benchmarks reacts at the same speed. As will be seen below, transmission is slower in the balances or new loans granted at fixed rates.

Therefore, interest rates in the financial system are determined by supply and demand in a market where banking entities collect money from agents to finance their loans and investments and offer credit to households and companies that demand it. Thus, deposit and lending interest rates result from the interaction of variables that affect both the supply and demand of funds in the financial system. In this context, in addition to the actions and expectations of monetary policy, factors such as the current and expected state of the economy, changes in agents' income and credit risk, the characteristics of the CIs, financial regulation, etc., can affect the pass-through. To the extent that all these factors can change over time in uncertain ways, the degree and speed of transmission of MPR changes to financial market interest rates also depend on the duration of the latter. Thus, for example, the transmission of a change in the MPR to short-term

1 In 2019, within corporate financing in national (N) and foreign (F) currency, 55.6% was the result of loans from the CI, 23.8% from N or F providers, 13.9% from the parent companies, and 7.8% from bonds. In households, 93.3% of financing is provided by CIs and the remaining 6.7% by cooperatives, employee funds, and mutual associations.

2 Repos are granted by auction, and the interest rate cut is generally equal or very similar to the MPR.

3 The smaller mismatch between the period for deposits and the one for loans decreases the risk of the CIs experiencing illiquidity.

Table B1.1
Value of the Credit Institutions' Main Liabilities and Assets Based on the Variable or Fixed Interest Rate
(trillions of pesos with a cut-off as of December 31, 2020)

Type of asset or liability	Variable rate in national currency				Total variable rate	Total fixed rate	Total national currency	Duration of assets and liabilities: Number of days with cut-off as of December 2019
	DTF	BBI	UVR-CPI	Others				
Liabilities	15.0	21.2	39.6	0.6	76.4	399.7	522.7	
Current Account	0.0	0.0	0.0	0.0	0.0	0.0	46.7	Over the counter
Interest-bearing Current Account	0.2	0.0	0.0	0.0	0.2	14.3	14.5	Over the counter
Savings Account	0.2	0.9	0.0	0.0	1.2	245.4	246.6	Over the counter
CD	0.4	7.1	21.6	0.0	29.1	123.0	152.1	648 [a/]
Bonds	0.3	3.0	16.7	0.0	19.9	8.3	28.3	648 [a/]
Loans from other entities[b/]	13.9	10.2	1.3	0.6	26.1	1.3	27.4	n. d.
Repos with *Banco de la República*	0.0	0.0	0.0	0.0	0.0	7.2	7.2	1
Total Loan Portfolio	111.7	100.0	28.7	2.5	242.9	246.0	488.8	
Commercial	89.8	93.2	20.5	2.3	205.8	38.9	244.7	1,606
Consumer	17.7	4.9	0.0	0.1	22.8	135.8	158.6	2,099
Microcredit	4.2	1.9	0.0	0.0	6.1	7.2	13.3	n. d.
Housing	0.0	0.0	8.2	0.0	8.2	64.0	72.2	5,059
Investments	7.8	3.8	13.7	1.2	26.5	61.4	88.0	1,042

n.a.: not available.
a/ Average duration of CDs and bonds
b/ Rediscount credits deposited by public institutions (Finagro, Bancoldex, etc.)
Source: calculations by *Banco de la República*.

preferential lending rates for companies may be greater than long-term mortgage lending interest rates.

2. Some Factors that Affect the Transmission of the MPR

a. Risk

The main function of the CIs is to raise money from families and companies (surplus) in an economy and lend it to agents (deficit) who require it for consumption or investment. In this respect, the control and monitoring of the various risk factors[4] by the CIs is intended to ensure the stability of these entities, a crucial factor in preserving household and corporate savings. In the case of MPR transmission, high customer risk levels for the financial system weaken the credit channel and the transmission of the MPR. An example of this is the level of credit risk faced by the microcredit category. These types of loans, generally for low amounts, are characterized by high costs in client selection and continuous monitoring due to the low credit profile of the borrowers, limited business culture, and limited balance sheet information (when available). These characteristics are reflected in high credit risk indicators and higher interest rates for these types of loans than for others.[5] In addition, when economic activity is dropping, the risk rises and the transmission of declines in the MPR to the interest rates for micro-credit may be low or even zero.

b. The State of the Economy

Significant changes in economic activity or very volatile periods alter the credit channel, affecting the transmission of the MPR. For example, sharp declines in output are usually accompanied by declines in the supply and demand for loans, liquidity problems or increases in the CIs' cost of financing, decreases in income for agents, and increases in credit risk, etc. In a context like this, the accumulation of risks[6] in CIs is passed on to lending rates and slows the transmission of reductions in the MPR. This slow or limited transmission may also occur in periods of economic boom or rises in the MPR, particularly when they coincide with increases in credit supply that are far above demand.[7] For example, Chavarro *et al.* (2015) found that in

4 Liquidity, counterparty, insolvency, credit, operational risk, etc.

5 Some characteristics of the CIs that offer such loans may also affect the rate levels. For example, some of them are small and, in comparison to the market average, have lower levels of capital adequacy, efficiency, and higher operating and counterparty risk, etc.

6 Illiquidity, loan, insolvency risks, etc. See Betancourt *et al.* 2006.

7 In the case of excess loanable funds, the elasticity of lending interest rates to changes in the MPR is reduced.

periods of economic boom and high inflation, the probability of transmission diminishes in the commercial loans.

c. Limits on Lending Interest Rates

In principle, the limits on lending interest rates are intended to protect the consumer from being charged an excessive rate, known in legal terms as a usury rate. Nevertheless, critics of these limits argue that, since they do not result from an optimal balance between the supply and demand for credit, they may generate different adverse effects such as less financial depth, an informal high-risk loan market,[8] and rigidities in the transmission of the MPR to lending rates, etc. Regarding the latter case, a statistical exercise for Colombia[9] shows the significant effect changes in cap rates have on the interest rates for microcredit, credit cards, mortgages, and consumer loans (less than three years).[10] In contrast, the influence of usury rates on commercial loans is very low and considerably lower than the contribution of the MPR (Chavarro *et al*., 2015).

d. Characteristics of the CIs

Some microfinance characteristics of CIs may be sources of an explanation for the different reactions of savings and lending rates to changes in the MPR. For example, CIs with low levels of capital or liquidity may face restrictions on their financing, have funding costs that are higher than the market average, and their lending rates may show less sensitivity to movements in the MPR. With respect to size, some small CIs tend to specialize in high-risk loans and face restrictions on access to funds. Therefore, these entities may take longer to fully adjust their rates to the changes in the MPR. Finally, the reaction of interest rates to variations in the MPR in a highly concentrated financial market may be different from what is seen in a competitive market. For example, Chavarro *et al.* (2015) studied the effect of the size, liquidity, and capitalization of CIs on the transmission of the MPR to the consumer, ordinary commercial, and preferential commercial lending rates. They found that in consumer loans, the size of the CIs was the only factor that influenced transmission (larger entities had greater transmission) while for preferential loans, the entities that had a higher level of capitalization were the ones that were most responsive to the change in the MPR. Furthermore, liquidity makes no difference in the transmission for any of the types of credit.[11]

e. Expectations and unanticipated changes in the MPR.

In theory, long-term interest rates can be expressed as an average of the expected short-term rates that the total maturity period (maturity) of the loan or deposit has. Thus, agents can modify, over the entire term horizon, the expected level of a market interest rate in the event of variations or expectations of changes in the MPR. With respect to that, Cristiano *et al.* (2017) found that, for short periods (one to three months), the CIs anticipated the MPR decisions and passed the expected changes to the MPR on to their short-term deposit interest rates (90-day CD or to the DTF indicator).[12] Regarding the longer-term interest rates, they found that unanticipated changes in the MPR[13] were significant and were transmitted to commercial loan interest rates (ordinary and preferential).

3. How long does the transmission of the MPR take?

The different factors that affect the transmission of monetary policy explain, to a large extent, the existence of a lag between the time when the decision is made to change the MPR and its transmission to the market interest rates. This has been analyzed in several studies in Colombia where a long-term relationship between the MPR and savings and loan interest rates has been found although its transmission may be incomplete in the short term.[14] In general terms, the estimated time for a complete transmission is quite uncertain and covers a wide range. For deposit interest rates, it can take about a year and a half, and, for lending rates, it can take between one and a little over two years, depending on the type of loan.[15] Among the latter, the transmission to commercial loan interest rates (preferential and ordinary) is usually at the lower end of this range while consumer rates tend to be at the upper end. The slowest to react are microcredit and housing interest rates. For example, in a recent econometric study, Galindo *et al.* (2020) evaluated this relationship[16] and found that a 90% transmission of

8 The demand for credit in the high-risk lending markets at rates above the usury rate is usually met by unmonitored agents.

9 There is a cap or usury rate in Colombia for ordinary, consumer, credit card, microcredit, and housing loan rates.

10 Co-integration relationships between the market rate, the policy rate, and the respective cap rate were found only for some credit card and microcredit deadlines, and for some types of credit in the case of home purchases. Long-term relationships between the rates for consumer and ordinary and preferential commercial loans were found.

11 Chavarro *et al.* (2015) found that this heterogeneity has a moderate influence on the level of the market rates. The larger entities have lower rates for ordinary and consumer loans. For ordinary loans, liquidity has a positive impact on the level of the rate while for other types of loans, this characteristic does not have a significant effect.

12 In these periods, an econometric technique suggests that unanticipated changes or adjustments to the expectations for the MPR are not relevant when the deposit rate is modified while another indicates that they are important.

13 Defined as the difference between the actual MPR and the one expected by economic analysts one month before.

14 See Julio (2001), Huertas *et al.* (2005), Betancourt *et al.* (2006), and Chavarro *et al.* (2015).

15 Given such wide margins of uncertainty, there is no full consensus as to whether the speed of transmission is faster to deposit rates than to lending rates.

16 For the May 2002 to September 2020 period.

a change in the MPR: 1) is almost complete in the deposit rates and takes about 11 months; 2) is complete in the total lending rate and requires about 17 months, and 3) shows a faster transmission to the interest rates for preferential commercial (14 months) and ordinary commercial (23 months) loans in comparison to the interest rates for consumer (34 months) loans.

Another way to analyze the transmission is to use the sensitivity index which is calculated as the cumulative change in a market rate as a ratio of the cumulative change in the MPR for each period of increase or decrease in the MPR. If this indicator has negative values, it indicates an opposite sensitivity, between 0 and 1 low sensitivity (less than proportional), equal to 1 full transmission, and greater than 1 suggests high sensitivity (more than proportional). The results show that, between 2003 and 2020, the transmission took time and differed based on the different categories. During this period, to reach 0.9% sensitivity, CD rates required, on average, about a year and a half, and the transmission was faster for treasury deposits than for those obtained through offices. In loans, the mean and the standard deviation of the indicator suggest that the categories that first reach 90% transmission and do so with less uncertainty are as follows: interest rates on preferential, ordinary, consumer, microcredit, and housing loans (Table B1.2). The results also suggest that in the latest phase of reductions in the MPR, April to December 2020, the transmission to deposit (seven months) and preferential credit (six months) interest rates has been faster than its historical average. At the end of 2020, the other categories also registered a positive rate of sensitivity: ordinary (0.84%), consumption (0.67%), mortgage (0.35%) (Graph B1.1).

4. Is the transmission of the MPR symmetrical?

Various studies have found differences in the transmission and speed of the adjustment of market rates in the

Table B1.2
Sensitivity Index of Savings and Loan Rates to Changes in the MPR

Type	Category	Average months to reach 90% of the change		
		Apr/2020 to Dec/2020	Jan/2003 to Dec/2020	
			Average	Standard Deviation
	Total CD	7	17	11
	CD < 6 months	5	19	11
	DTF (3 months)	5	18	11
Deposit	CD between 6 and 12 months	5	18	10
	CD > 12 months	4	8	8
	Treasury CD	4	9	7
	Office CD	7	22	10
	Consumer	*	17	10
Household deposits	Mortgage (non-LIH)	*	20	12
	Credit card	1 **	15	8
	Ordinary	*	13	9
Company deposits	Preferential	6	8	7
	Microcredit	1 **	17	11
	Non-Low Income Housing Construction	*	16	9

*Has not reached 90%.
**In these cases, the reaction is due to the effects of rate repositioning rather than a rapid transmission of the MPR. In this regard, it should be considered an atypical event.
Source: calculations by *Banco de la República*.

wake of reductions or increases in the MPR. For example, when Borio et al, (1995) analyzed data from the Organization for Economic Cooperation and Development (OECD) countries, they found that the adjustment of the market rates responds more slowly to the reduction of the MPR than to an increase. One argument for why this is the case is that, during recessions, risk, and the requirements to be granted a loan increase, loan applicants turn to lenders with whom they have closer relationships and, in this context, a reduction in the MPR leads to a small equilibrium adjustment in market interest rates. Transmission asymmetry could go in the opposite direction due to the presence of adverse selection problems and information asymmetries in the loan market. In such cases, to avoid an increase in credit risk, CIs may decide to not fully pass on the increase in the MPR to their clients since this could increase the probability of defaults and cause a deterioration in the quality of their portfolio. This problem is likely to appear when there are increases in rates but not when there are reductions. De Bondt (2005) also found that in competitive markets increasing the market rate may cause the loss of customers in favor of competitors and be reflected in interest rate rigidities. In practice, both types of asymmetry can be seen in an economy and may be different for the different savings and loan interest rates.

In the case of Colombia, Galindo *et al.* (2020) found some asymmetries in the long term but not in the short term. They found symmetry, in particular, in the response of the aggregate lending rate and that of the preferential commercial loans. The consumer and ordinary commercial lending rates, in turn, react more to reductions in the MPR than to increases. The interest rates for deposits respond more to increases than to reductions in the MPR. Thus, these results suggest that monetary policy may be more effective when it is expansionary (reductions in the MPR) than when it is contractionary (increases in the MPR).

Graph R1.1
Sensitivity Index of the Market Interest Rates Compared to the MPR

Note: the Sensitivity Index (SI) corresponds to the cumulative change in a market rate as a share of the cumulative change in the MPR for each period of increase or decrease in the MPR. An SI<0 means a reaction contrary to the MPR; 0<SI<1 low sensitivity to MPR (less than proportional); SI=1 full transmission of MPR; SI>1 high sensitivity to MPR (more than proportional). The white bands correspond to periods of reductions in the MPR, the gray bands to increases in the MPR, and the yellow one to the last phase of reduction in the MPR (April to December 2020).
Source: calculations by *Banco de la República*.

References

Betancourt, R.; Vargas, H.; Rodríguez, N. (2006) "Interest Rate Pass-Through in Colombia: a Micro-Banking Perspective," *Borradores de Economía*, no. 407, pgs. *Banco de la República* de Colombia.

Borio, Claudio.; Fritz, Wilhelm. (1995). "The Response of Short-term Bank Lending Rates to Policy Rates: A Cross-Country Perspective," Working Paper, no. 27, BIS Monetary and Economic Department.

Chavarro-, X.; Cristiano-, D.; Gómez-González, José E.; González-, E.; Huertas field, Carlos (2015). "Evaluación de la transmisión de la tasa de interés de referencia a las tasas de interés del sistema financiero," *Borradores de Economía*, no. 874, *Banco de la República* de Colombia.

Cristiano-Botia, Deicy Johana; González-Molano, Eliana Rocío; Huertas-Campos, Carlos Alfonso (2017). "Evaluación de la transmisión de la tasa de interés de referencia a las tasas de interés del sistema financiero considerando las expectativas de los agentes," *Borradores de Economía*, no. 988, *Banco de la República* of Colombia.

De Bondt, G. (2005). "Interest Rate Pass-through: Empirical Results for the Euro Area," *German Economic Review*, vol. 6, pp. 37-78.

Galindo, Arturo J.; Steiner, Roberto (2020). "Asymmetric Interest Rate Transmission in an Inflation Targeting Framework: The Case of Colombia," *Borradores de Economía*, no. 1138, *Banco de la República* of Colombia.

Huertas, Carlos; Jalil, M.; Olarte, Sergio; Romero, José (2005). "Algunas consideraciones sobre el canal del crédito y la transmisión de tasas de interés en Colombia," *Borradores de Economía*, no. 351, *Banco de la República* of Colombia.

Julio, Juan (2001). "Relación entre la tasa de intervención del Banco de la República y las tasas del mercado: una exploración empírica" (Relation between *Banco de la República*'s benchmark rate and market rates: an empirical exploration), *Borradores de Economía*, no. 188, *Banco de la República* of Colombia.

Vargas, Hernando; Hamann, F.; González, Andres (2010). "Efectos de la política monetaria sobre las tasas de interés de los créditos hipotecarios en Colombia" (Effects of the monetary policy on interest rates for mortgages in Colombia," *Borradores de Economía*, no. 592, *Banco de la República* of Colombia.

Box 2
Colombia's Flexible Credit Line with the International Monetary Fund (IMF)

The Flexible Credit Line (FCL) is an instrument designed by the IMF to provide immediate and flexible financing to countries with strong economic fundamentals and a sound economic policy framework. Colombia has had access to the FCL since 2009, when it was created. In 2020, Colombia renewed and augmented its access to this instrument. A portion of this line was disbursed to the national government by the IMF. This box gives a description of the main characteristics of the FCL, the reasons why the authorities requested an increase, and the most relevant aspects of the partial disbursement of the FCL funds received by the national government in 2020 as well as *Banco de la República*'s role in the transaction.

1. What is the FCL?

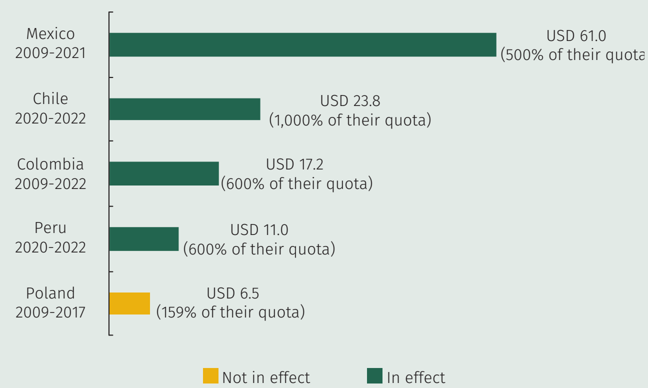
The FCL is an IMF instrument that only countries with sound monetary, fiscal, and financial policy frameworks as well as a favorable record of economic performance can get access to. This instrument is designed to provide flexible financing in anticipation of the country's balance of payments needs. The FCL works as a revolving renewable credit line that, at the discretion of the country, can be used for one or two years and an evaluation of the country's right to access it is done at the end of the first year.[1] It allows a country to get immediate access to IMF funds without conditionalities or further commitments.[2] In addition, the amount may be increased during the period the agreement as long as the country continues to meet the stringent qualification criteria.

For a country that is a member of the IMF to get access to an instrument such as the FCL, it must meet conditions that guarantee the strength of the economic and economic policy fundamentals. These conditions are: 1) sustainable external position; 2) the majority of the capital account must be financed by flows from the private sector; 3) a track record of sovereign access to international capital markets under favorable terms; 4) an appropriate international reserve position; 5) sound public finances that include a sustainable public debt position; 6) low and stable inflation under a sound monetary and exchange rate policy framework; 7) a sound financial system and the absence of solvency problems that could pose a risk to systemic stability, 8) effective oversight of the financial sector, and 9) integrity and transparency of information. Compliance with these conditions by the countries benefiting from this instrument is evaluated annually by the IMF.

This FCL is contingent, immediately accessible, and non-conditional. The FCL has three basic characteristics: 1) it is contingent in character which means that its purpose is to cover the materialization of extreme external risks; 2) access to the funds is immediate and, therefore, available upon request of the countries that have subscribed to it, and 3) it is an non-conditional instrument which means that the countries may get access to the line based on their previous sound conditions and there are no subsequent commitments after the instrument is disbursed. The line may be used to deal with actual or potential funding needs of the member countries' balance of payments.

Since its implementation, this line of credit has been approved for five countries: Chile, Colombia, Mexico, Peru, and Poland. Mexico and Colombia have had the credit line in place since 2009. Chile and Peru have accessed to this instrument since the beginning of the pandemic in 2020, and it was in effect for Poland from 2009 to November 3, 2017 when they decided to cancel it (Graph B2.1).

Graph B2.1
Approved FCL



Source: IMF (official communiques).

The IMF offers member countries several types of financial support mechanisms depending on the macroeconomic and economic policy fundamentals each one has. Among the facilities offered by the IMF under non-concessional financing are stand-by arrangements (SBA), extended fund facility (EFF), rapid financing instrument (RFI), the flexible credit line (FCL), the precautionary and liquidity line (PLL), and short-term liquidity line (STLL) (Table B2.1). The first three mechanisms are instruments designed to respond rapidly to the urgent external financing needs of member countries. In contrast, the last three mechanisms provide

1 This modification was made on August 30, 2010. Previously, the credit line would have had a period of either six months or one year that included a review of the country's access rights after the first six months.

2 Access to the FCL involves a strict process of verifying compliance with sound macroeconomic conditions and a proven track record of favorable economic performance.

Table B2.1
Mechanisms of IMF Financial Support

Mechanism	Purpose	Conditions	Monitoring	Access Limit (percentage of quota)	Period
Drawing Rights Agreement (*Stand-by*)	Assistance for countries with short-term difficulties with the balance of payments (BoP).	Adopt policies that make it possible to solve the difficulties with the BoP.	Disbursements are made each quarter. Contingent upon the performance of the country.	Annually: 145% Cumulative: 435%	3.25 to 5 years
IMF's Extended Fund Facility (EFF)	Assistance to support structural reforms carried out by members in order to handle long-term difficulties with the balance of payments.	Adopt a program for up to 4 years with a structural agenda and a definition of detailed policies for the upcoming twelve months.	Disbursements are made each quarter or every six months and are contingent upon the performance of the country.	Annually: 145 % Cumulative: 435 %	4.5 to 10 years
Fast-track financing instrument (FFI)	Rapid access financial support for all members facing urgent needs in their BoP.	Efforts to solve difficulties in the BoP (previous efforts made may be included).	Direct purchases with no need for a program or reviews. The country should cooperate with the IMF to resolve the BoP's difficulties and describe the general economic policies it will pursue.	Annually: 100 % (temporary) Cumulative: 150 % (temporary)	3.25 to 5 years
Flexible Credit Line (FCL)	Flexible tool that makes it possible to manage the current or potential needs of the BoP.	The country must have strong economic fundamentals, a sound institutional framework for economic policy, and have implemented prudent policies beforehand.	Access is approved in advance for the entire period of the agreement and there are no ex post conditions.	There is no limit	3.25 to 5 years
Precautionary and liquidity line (PLL)	Tool for countries with sound fundamentals and policies.	Soundness in the institutional framework, in the external position, in access to the market, and in the financial sector.	Access in advance subject to semi-annual reviews.	6 months: 125 % Approval for 1 to 2 years. For the first year: 250% After twelve months of satisfactory progress: 500%	3.25 to 5 years
Short-term liquidity line (STLL)	Tool that makes it possible to manage the short-term potential needs of the BoP.	The country must have strong economic fundamentals, a sound institutional framework for economic policy, and have implemented prudent policies beforehand.	Access is granted through an "offer" by the Board of Executive Directors to those members who meet the conditions.	Approval for twelve months: 145%	12 months

Source: IMF.

financing to meet current or potential balance-of-payments needs for countries with very sound macroeconomic fundamentals and policy frameworks. Thus, these are instruments that are precautionary in nature.

Unlike other IMF instruments, the FCL does not generate any conditions subsequent to a disbursement in its economic policy. The strict access conditions allow countries that meet these qualification criteria to have broad and early access to IMF funds.

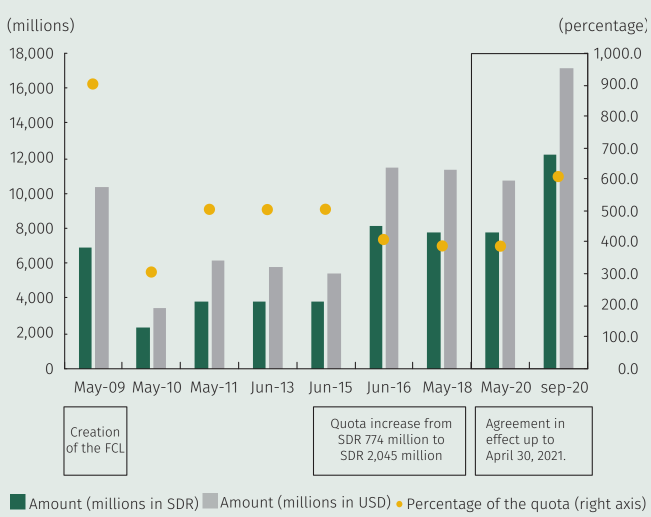
2. Colombia's Access to the FCL

Since the creation of the FCL (in 2009) to the present, Colombia has had access to this instrument (Graph B2.2) on a full precautionary basis up to September 2020 and on a partial precautionary basis within the framework of the current agreement after the first disbursement took place in a context of elevated uncertainty given the Covid-19 situation. It is considered a useful tool because it strengthens the economy's ability to deal with external shocks and sends a positive signal to the market regarding economy´s prudent management, the country becomes less vulnerable to speculative attacks and reducing their frequency. Given the temporary nature of this instrument, access to it is understood to depend on the changes in international conditions and the country's vulnerability to external shocks. In this respect, the Colombian authorities have stated that, to the extent that the risks decline, access to this instrument should decrease in the future. The current terms and conditions of this agreement remain in effect until April 30, 2022

3. Augmentation

On May 1, 2020, the previous FCL agreement signed in May 2018 was renewed for 384% of the quota (approximately USD 11,200 b) and a period of two years.[3] However, in view of the resurgence of the Covid-19 pandemic and the shocks arising from the health emergency, on August 31, 2020, the Colombian authorities asked that their access to the FCL be augmented to 600% of the country's quota in the IMF (about USD 17,600 b), an amount that represented an increase of approximately USD 6,300 b in comparison to the agreement signed in May.[4]

Graph B2.2
Colombia's Historical Access to the FCL



Sources: *Banco de la República* and FMI (official communiques).

The pandemic has had an unprecedented impact on the global economy through a variety of channels. In Colombia, the transmission has been mainly due to the shrinking of domestic demand with its respective effects on tax collection, the significant decrease in oil prices and export revenues, and the need for increased expenditure to support the health system as well as the groups of vulnerable people and companies to protect employment. The duration and magnitude of the shocks were greater than anticipated in May 2020, given the global uncertainty, when the FCL agreement was renewed.

In addition, these shocks have affected the country's external and fiscal accounts in a context of declining tax collection and temporary expansion of public spending. In this regard, the active fiscal policy response in an environment of economic slowdown generated greater financing needs that made it essential for the country to maintain ample and diversified access to liquidity and external financing.

As a result, the deterioration of the country's economic and fiscal situation was greater than expected in May 2020 and, together with higher external risks and a weak and highly uncertain international environment, it raised Colombia's vulnerability and opened the way for greater balance-of-payments needs. This situation led the authorities to request greater access to the line in order to give the country more flexibility to respond to shocks and as insurance against the growing risks abroad so that they could reinforce their international liquidity position and provide additional funds to cover the financing needs.

On September 25, 2020, the IMF approved Colombian authorities' request to augment the access to the FCL under the current arrangement This request was made in view of the uncertainty generated by the Covid-19 pandemic and its implications for Colombia.

3 The IMF communiques and documents regarding the renewal of the line are available at:

https://www.imf.org/es/News/Articles/2020/05/01/pr20201-colombia-imf-executive-board-approves-new-two-year-flexible-credit-line-arrangement

4 *Banco de la República*'s press releases on the renewal and extension of the line are available at: https://www.banrep.gov.co/es/el-fondo-monetario-internacional-aprobo-renovacion-linea-credito-flexible-para-colombia

https://www.banrep.gov.co/es/fondo-monetario-internacional-fmi-aprueba-ampliacion-linea-credito-flexible-lcf-para-colombia-usd

https://www.banrep.gov.co/sites/default/files/paginas/abc-fmi-septiembre.pdf

The approval of the request reflected the IMF's continued support for Colombia's economic policy framework and our trajectory of sound and prudent macroeconomic policies. The IMF Executive Board highlighted the active and coordinated response of the Colombian authorities to mitigate the economic effects of the health emergency. Based on their communique,[5] this response was possible thanks to the country's sound, flexible, and comprehensive policy framework that is based on a credible inflation targeting regime within a framework of exchange rate flexibility, effective supervision and regulation of the financial system, and responsible fiscal policy. Thus, access to the FCL represents an important sign of the stability, performance, and resilience of the Colombian economy as well as a support for public policy efforts to mitigate the Covid-19 outbreak and its effects on the economy.

4. Disbursement

The confluence of different shocks resulted in an even greater deterioration in external revenue, more pressure on access to funding sources, and the need to diversify the available external financing with respect to what was originally planned. In this context, in view of the higher risks Colombia faced and in order to provide fiscal support to address the health crisis and its impact, the authorities made a partial disbursement from the FCL for SDR 3,750 billion which was equivalent to approximately USD 5,400 billion or 183% of the country's quota at the entity on December 2, 2020.[6]

Colombia is the first country to request a FCL disbursement in the history of the IMF. Likewise, the country´s disbursed amount represents the largest IMF transaction in the Covid-19 crisis.

The option of using the FCL funds for budget support made it possible to cover financing needs that could have put pressure on the balance of payments. The government's disbursement contributed to addressing the balance-of-payments needs related to the declining external revenues, increasing their financing options, supporting market confidence, and ensuring that budgetary needs are met. Furthermore, the diversification of financing sources contributed to mitigating a possible crowding out or an increase in the cost of local financing available to the private sector or other public entities in view of the rise in government borrowing needs. The FCL is notable for being a financially favorable option due to its supplementary role and its catalytic effect on other existing funding sources to support the robust public policy response to the pandemic and its impact on the economy.

The cost of borrowing under the FCL increases varies based on the amount of the instrument used. Under the FCL agreement, the financing has grace periods and extended repayment periods, and the repayment should be made over a period of 3.25 to 5 years in installments of eight quarterly payments. The fee paid for the disbursement of funds under the FCL agreement is calculated based on three components: 1) a basic rate of charge, which corresponds to the SDR interest rate[7] plus a 100 bp margin; 2) some surcharges that are equivalent to 200 bp if the amount disbursed exceeds 187.5% of the quota, and if the loan remains above this level (187.5% of the quota) for more than three years, it will rise to 300 bp, and 3) a service charge of 50 bp for the amount withdrawn.[8]

Given that, in the case of Colombia, the disbursement of funds constituted financing for budgetary support, the obligations arising from this transaction were fully assumed by the government represented by the Ministry of Finance and Public Credit. That is why, the disbursement was made directly to the account belonging to the National Government. *Banco de la República*, in turn, only plays the role of fiscal agent of the government and channels the payments associated with the transaction.[9]

Note that neither the increase in access nor the partial disbursement of the line for budgetary support has a direct effect on the stock of foreign reserves held by *Banco de la República*. The augmentation of the level of access to the FCL enhances the country's external liquidity by making more funds available in the event of potential risks and complements the coverage provided by the currently adequate level of international reserves.

Likewise, the remaining amount of the line remains precautionary, and the authorities plan to reduce access to the FCL once the exceptional situation in the global economy improves and external risks affecting the country recede.

Those countries that have this instrument are subject to annual reviews in which the IMF assesses whether or not they continue to meet access requirements. In this context, within the framework of the country's existing FCL agreement with the IMF, the organization will do their mid-term review of Colombia's eligibility criteria for access to the line. In 2022, if the country applies for a renewal of the FCL, a careful assessment of compliance with the criteria will be made again.

5 IMF communique on the extension of the line, available at: https://www.imf.org/es/News/Articles/2020/09/25/pr20300-colombia-imf-executive-board-approves-augmentation-of-the-flexible-credit-line

6 IMF communique on the disbursement of the line, available at: https://www.imf.org/es/News/Articles/2020/12/03/pr20363-colombia-colombia-draws-on-imf-flexible-credit-line-to-address-the-covid-19-pandemic

7 The SDR rate on February 15, 2021 was 0.064%.

8 IMF FCL Operating Guide available at: https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/08/06/pp080618-flexible-credit-line-operational-guidance-note

9 The terms and conditions under which *Banco de la República* will serve as fiscal agent for this are set out in the Memorandum of Understanding signed on November 17, 2020 and in the Fiscal Agency Contract entered into between *Banco de la República* and the Nation-Ministry of the Treasury and Public Credit (Otrosi, no. 2: interadministrative contract 4600335302).

Appendix
Management Policy for the Foreign Reserve Investment Portfolio

According to good practice recommendations, the management of Foreign Reserves should be based on liquidity, risk management, and profitability criteria. In that respect, an attempt must be made to 1) have enough liquidity in foreign currency, 2) have strict policies regarding the management of the different risks that the transactions face, and 3) generate reasonable, risk-adjusted returns subject to liquidity and other risk restrictions.[1] How these rules are applied in the management of Colombia's Foreign 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 transactions are exposed in order to keep them low. Some of the main policies for risk management are as follows:

Liquidity Risk: financial assets that are permanently in demand on the secondary market are invested in, and the portfolio is divided into tranches. This is done in order to have the ability to convert reserve assets into cash rapidly and at a low cost, and so that some of the defined tranches can be liquidated faster.

Market Risk: investment is made in a limited group of eligible assets with strict investment limits on the duration, margin duration, foreign exchange components, and breakdown of the portfolio by sector. The goal is for the value of the portfolio to be moderately sensitive to interest rate movements in the market.

Credit risk: investments are only made in assets with high credit ratings 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-. With respect to 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. In addition, the maximum exposure is limited by sector and issuer in order to limit the impact of credit events on the value of the portfolio.

Exchange risk: 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 when 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. *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 components in order to cover the country's payments abroad since these are made in many currencies. It is important to keep in mind the fact that the prices of the currencies are highly volatile and do not often have defined long-term trends. This makes it very difficult to reliably predict their behavior.

Counterparty risk: to mitigate the counterparty risk, transactions are settled through payment on delivery mechanisms. 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 purpose for payment on delivery mechanisms is to make the exchange of papers for cash or exchange of payments in a foreign currency exchange transaction a simultaneous one in order to eliminate the possibility of a default by one of the parties to the trade. 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 Foreign Reserves," produced by the International Monetary Fund, which can be consulted at: 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. Tranche 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 debt 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. As of December 2020, the value of the short-term tranche was USD 38,237.7 m, of which USD 2,639.5 m corresponded to working capital and USD 35,598.2 m to the passive portfolio.

The liability portfolio is the main component of the short-term tranche. This portfolio is characterized by an investment horizon and a profile of expected profitability that are higher than those of the working capital portfolio. In addition, it has a foreign exchange breakdown that is intended to replicate the performance of the country's balance of payments outflow, and a profitability that is similar to that of its benchmark index.[3] The liability portfolio is invested in multiple currencies and instruments that are in line with those in a benchmark index defined under the restrictions 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 medium-term tranche is intended to raise the expected profitability of the Foreign Reserves in the long term while preserving a conservative portfolio with a profile of expected profitability that is higher than the short-term tranche and the benchmark index. Its goal is to maximize the risk-adjusted return in US dollars, the currency in which Foreign Reserves are valued, for the portion of the portfolio that is less likely to be used within a twelve-month period. Thus, the maximum return is sought subject to the restriction that the expected return in US dollars for this tranche be positive with a 95% probability, and that the value expected from a possible loss does not surpass 1.0% over a horizon of three years. 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 December 2020, the value of the medium-term tranche came to USD 18,241.0 m.

The last tranche corresponds to the Foreign Reserve investments in certified physical gold that can be easily traded on international markets. Gold makes it possible 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 December 2020, the market value of the gold in the reserves came to USD 252.2 m.

The securities in the investment portfolio are deposited in financial institutions known as trustees.[5] The entities that provide custody service for the securities in the Foreign 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 reserve investment portfolio, *Banco de la República* has defined theoretical portfolios, or benchmark indices[6] for the short- and medium-term tranches. Different indices are built for each one of these tranches in order to reflect their investment goals. The indices serve as a frame of reference to measure the management of each one of the portfolios. The way the two benchmark indices are built is explained below.

The first step in building the index of the short-term tranche[7] is to define a target foreign exchange breakdown which seeks to replicate the behavior of the country´s balance of payment outflows. Once the foreign exchange components are defined, a portfolio is sought that maximizes risk-adjusted return[8] and complies with the loss restrictions defined for this tranche. The foreign exchange components for this index are intended to replicate the trend of the outflows from the country's balance of payments.[9] 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 could decline with respect to the US dollar during periods in which the dollar value of the foreign payments decreases. As of December 2020, the foreign exchange breakdown of the short-term tranche index was: 82% US dollars, 9.0% Australian dollars, 5.0% Canadian dollars, 1.0% New Zealand dollars, 2.0% Norwegian krone,

3 The concept and components of the benchmark index will be explained in the next section.

4 The fact that one of the seven active portfolios is managed directly by *Banco de la República* and the rest by external managers is explained in the section, "External Management Program." 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 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 Foreign Reserves.*

9 See the Box: "International-reserve Portfolio's New Foreign Currency Breakdown," in the March 2012 Report to Congress for a detailed explanation of the methodology for the foreign exchange breakdown of the reserves.

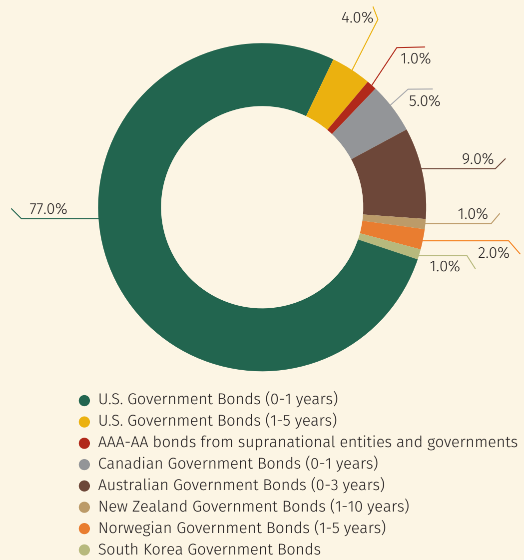
and 1.0% Korean won.[10] The loss restrictions defined for the short-term tranche are: 1) having positive returns over a horizon of twelve months with a 95% level of confidence while excluding the exchange rate effect and 2) that the expected value of a possible loss over a horizon of twelve months does not exceed 1.0% of the value of the tranche.

In order to build the index of the medium-term tranche, a similar procedure is followed with two basic differences: no restriction is imposed on the foreign exchange breakdown and the loss restrictions are defined over a longer horizon. First, there are no restrictions on the foreign exchange composition because the goal of this tranche is to maximize the risk-adjusted return in US dollars. Second, the restrictions of having positive returns at a 95% confidence level and that the expected value of a possible loss do not exceed 1.0% of the value of the tranche are defined for a three-year horizon in order to reflect the lower probability of using the funds in this tranche in the short term. When building a portfolio to maximize risk-adjusted profitability in dollars, investments in currencies other than the dollar are allowed.

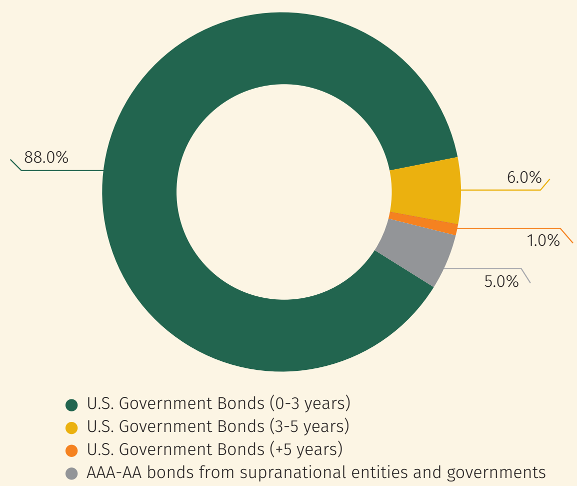
As of December 2020, the benchmark indices defined for the two tranches have a low level of market risk with an effective duration of 0.81 for the short-term tranche index and of 1.78 for the medium-term tranche.[11] Graph A1.1 shows the benchmark indices approved for the short- and medium-term tranches.[12]

Graph A1.1
Breakdown of the Benchmark Index
(information as of June 31, 2020)

1. Short-term Tranche



2. Medium-term Tranche



Note: Merrill 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. The remaining medium-term tranche funds are managed by external portfolio managers. At the end of December 2020, the portion of the investment portfolio that is managed internally corresponded to USD 40,848.9 m (72.0% of the investment portfolio) while the external management program came to USD 15,882.1 m (28.0% of the investment portfolio).

The main reasons for using external managers are to generate returns that are higher than the benchmark index and to improve the diversification of the portfolio. In this respect, 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 to define investment strategies and to train Bank officials in the management of international investments. The latter is another objective that the external management program has.

The private firms that participate in the program are chosen through a competitive selection process and continuously evaluated. The amount of assets under management and the continuation in the external management program are tied to the results obtained by each administrator in the evaluation process. The private companies that participate in the external management program currently are: DWS International GmbH, 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 Inc. (Americas) (Graph A1.2). The funds that these companies manage are in *Banco de la República's* custody accounts and the administrators' contracts can be canceled whenever considered necessary. The investments in funds managed by

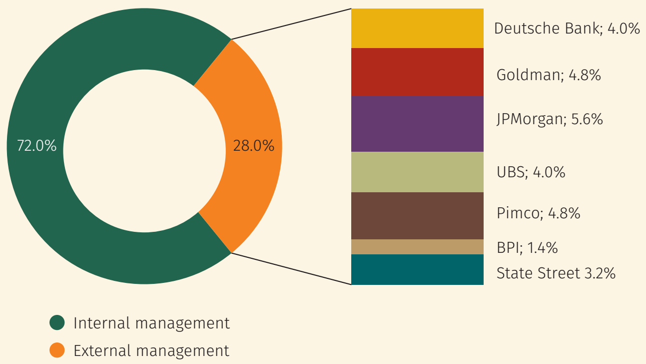
10 The euro is not part of the group of currencies that the benchmark index is made up of. The reason why it is not in this group is because both the benchmark interest rate of the European Central Bank and the rates for the main short-term sovereign bonds issued in euros are negative. The Korean won has been included in the November 29, 2019 adjusted index.

11 The effective duration is a risk measurement 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.

12 For the different sectors that that the benchmark index is made up of, the indices published by ICE data indices are used.

the Bank for International Settlements (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 Foreign Reserves in an effort by different countries to work cooperatively.[13]

Graph A1.2
Breakdown of the Investment Portfolio
(information as of December 31, 2020



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 126.2 m), a fund of securities issued by the government of China (USD 285.1 m), a fund of securities issued by the government of Korea (USD 115.1 m), and a fund of securities issued by non-financial corporations (USD 280.8 m).