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MONETARY **POLICY REPORT**

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MONETARY
**POLICY
REPORT**



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Monetary Policy in Colombia

The Central Bank of Colombia (*Banco de la República*) is required by the Constitution to maintain the purchasing power of Colombia's currency in coordination with general economic policy¹. In order to fulfill this mandate, the Central Bank of Colombia's Board of Directors (hereafter BDBR) has adopted a flexible inflation-targeting scheme, by which monetary policy actions (MP) seek to lead inflation to a specific target and achieve maximum levels of sustainable output and employment.

The flexibility of this scheme allows the BDBR to maintain an adequate balance between reaching its inflation target and smoothing output and employment fluctuations around their sustainable growth paths. The BDBR has set a 3% inflation target based on annual change in the consumer price index (CPI). In the short term, inflation may be affected by factors outside of monetary policy control, such as changes in food prices due to climate-related phenomena. To factor in this reality, the BDBR has also set a ± 1 percentage point range outside its inflation target (i.e., 3.0 ± 1 pp). This range does not represent a monetary policy target, but rather reflects the fact that inflation can fluctuate around the target and will not always be equal to 3%.

The main the BDBR uses to control is the policy interest rate (overnight repo rate, or benchmark interest rate). Given that monetary policy actions take time to have their full effect on the economy and inflation², the BDBR assesses the inflation forecast and inflation expectations vis-à-vis the inflation target, as well as the current situation and outlook of the economy, in order to determine their value.

The BDBR meets once a month, producing monetary policy decisions in eight of its meetings (January, March, April, June, July, September, October, and December). In principle, no such decisions are made in the BDBR's four remaining meetings (February, May, August, and November)³. At the end of the meetings in which monetary policy decisions are produced, a press release is published and a press conference held by the Governor of the Central Bank and the Minister of Finance. The minutes of the meeting describing the positions that led the BDBR to its decision are published on the following business day. Additionally, the Monetary Policy Report (MPR)⁴, produced by the Central Bank's technical staff, is published in January, April, July, and October, together with the minutes. On the Wednesday of the week following the Board meeting, the Governor clarifies concerns about the minutes, and the Bank's Deputy Technical Governor presents the MPR. This dissemination scheme⁵ seeks to deliver relevant and up-to-date information to contribute to better decision-making by the agents of the economy.

1 Political Constitution of Colombia (1991), Article 373 and Decision C-481/99 of the Constitutional Court.

2 For further details, see M. Jalil and L. Mahadeva (2010). "Transmission Mechanisms of Monetary Policy in Colombia", Universidad Externado de Colombia, Faculty of Finance, Government, and International Relations, ed. 1, vol. 1, no. 69, October.

3 A Board Member may request an extraordinary meeting at any time to make MP decisions.

4 Formerly known as the Inflation Report.

5 The current communication scheme was approved by the BDBR in its August 2019 meeting.

Content

01	Summary	/11
	1.1 Macroeconomic Summary	/11
	1.2 Monetary Policy Decision	/15
02/	Macroeconomic Forecasts and Risk Analysis	/16
	2.1 International Outlook	/16
	2.2 Macroeconomic Projections	/21
03/	Current Economic Conditions	/30
	3.1 Inflation and Price Behavior	/30
	3.2 Growth and Domestic Demand	/32
	3.3 Labor Market	/37
	3.4 Monetary and Financial Markets	/39
Annex 1:	Macroeconomic Projections from Local and International Analysts	/41
Annex 2:	Primary Macroeconomic Forecast Variables	/43

Graphs

Graph 1.1 Policy Rate, Interbank Rate, and OPR[/] /15

Graph 2.1 Labor Market Indicators and Consumer Confidence for Selected Advanced Economies /16

Graph 2.2 Purchasing Manager's Index (PMI) for the United States, China, and the Euro Zone /17

Graph 2.3 U.S. Weekly Economic Indicator /17

Graph 2.4 Mobility Reports, Selected Countries /17

Graph 2.5 Chinese Economic Activity Indicators /18

Graph 2.6 Prices of Exports of Commodities for Selected Latin American Countries /18

Graph 2.7 Trade Partners Assumed Annual Growth /18

Graph 2.8 International Oil Price /19

Graph 2.9 Balance between Global Supply and Oil Demand /19

Graph 2.10 Assumed Annual Oil Prices /19

Graph 2.11 Net Foreign Investment Flows to Emerging Economies /20

Graph 2.12 Assumed Annual Fed Interest Rate /20

Graph 2.13 Monthly Average of Nominal Exchange Rate and Risk Premia (Five-Year CDS) for Selected Latin American Countries /21

Graph 2.14 Colombia's Assumed Annual Risk Premia^{al} /21

Graph 2.15 Consumer Price Index (CPI) /22

Graph 2.16 Consumer Price Index Excluding Food and Regulated Items /22

Graph 2.17 Bank Analyst and Stockbroker Inflation Expectations /23

Graph 2.18 Gross Domestic Product /25

Graph 2.19 Four-Quarter Accumulated Gross Domestic Product^{al} /25

Graph 2.20 Annual GDP /26

Graph 2.21 Annual Output Gap /27

Graph 2.22 Annual Current Account /28

Graph 2.23 Analyst Policy Rate Expectations Survey /29

Graph 3.1 Total CPI and Indicators for Basic Goods Baskets /30

Graph 3.2 CPI for Food and its Components /31

Graph 3.3 Inventory in Storage Centers /31

Graph 3.4 CPI for Tradable and Non-Tradable Goods, excluding Food and Regulated Items /31

Graph 3.5 Components for Non-Tradable CPI excluding Food and Regulated Items /32

Graph 3.6 CPI for Regulated Goods and its Components /32

Graph 3.7 PPI for Domestic Supply and its Components /32

Graph 3.8 GDP and Quarterly Domestic Demand /33

Graph 3.9 Quarterly GDP, Spending Side /33

Graph 3.10 Overall Household and General Government Consumption /33

Graph 3.11 Quarterly Gross Fixed Capital Formation /34

Graph 3.12 Exports, Imports, and Trade Balance /34

Graph 3.13 Quarterly GDP, Supply Side /34

Graph 3.14 Coffee Production /35

Graph 3.15 GDP and Economic Tracking Indicator /35

Graph 3.16 Weekly Energy Demand, 2020 /35

Graph 3.17 Consumer, Industrial, and Commercial Confidence Indices /36

Graph 3.18 Mobility Trend Reports in Colombia separated by Destination /36

Graph 3.19 Unemployment Rate (10 Feb to 20 Feb) /37

Graph 3.20 Contribution to Annual Change in Employment National Total (19 Feb to 20 Feb) /37

Graph 3.21 Unemployment Rate (Annual Change in 23 Cities) and Internet Indicator /38

Graph 3.22 Beveridge Curve for 7 Major Cities /39

Graph 3.23 Weekly Monetary Aggregates /39

Graph 3.24 Liabilities subject to Reserve Requirements (PSE) /39

Graph 3.25 Weekly Gross Portfolio in National Currency /40

Graph 3.26 Weekly Commercial Interest Rates /40

Graph 3.27 Weekly Household Interest Rates /40

01 / Summary

1.1 Macroeconomic Summary

The magnitude and duration of the global recession expected as a result of the COVID-19 pandemic is uncertain, as is the recovery rate in 2021. Lockdowns and the temporary closure of foreign and domestic markets as a means of dealing with COVID-19 have led to significant declines in global economic indicators, including in Colombia. The shutdown has brought, in the short run, the simultaneous collapse of both supply and demand, and led to significant uncertainty over price behavior, the size of expected production declines, and levels of excess production in world economies. The nature of an eventual recovery will depend on still more uncertainties, including over the duration of the pandemic and the possibility of new waves of contagion; the fiscal space available to confront the crisis; the flexibility of labor markets and the degree to which they are impaired by the pandemic; access to foreign sources of financing and capital flows; and other factors. This uncertainty has led to wide variance in projections among international economic analysts. As more information has become available, projections for global economic output in 2020 have grown more pessimistic, and recovery in 2021 has become more uncertain.

Low, highly volatile oil prices reflect another negative shock and source of uncertainty for the Colombian economy. An agreement between the world's major oil-producing countries to limit supply has so far not been enough to offset the observed and expected fall in demand for this commodity resulting from COVID-19. Prices remain at historic lows, marked by significant volatility, and the International Energy Agency and other market analysts forecast a slow recovery for crude prices.

The negative effects of COVID-19, and the economic policy response required to address the pandemic, are without precedent in Colombian history. In addition to the impact of international oil prices, the pandemic has added an unusual degree of uncertainty to measuring and forecasting economic performance. As a result, this report offers a range of values, rather than point estimates, for projections related to growth, excess production capacity, and inflation. As mentioned above, temporary market closures have generated significant uncertainty over price behavior and the size of expected output declines. The potential for pandemic conditions to persist adds an additional degree of difficulty to forecasting labor market and investment deterioration, among other factors, and increases uncertainty surrounding projections of potential output and excess production capacity. Given these conditions, and the fact that there are no historical data that account for a dual shock of the kind currently facing the Colombian economy, conventional forecasting methods may provide skewed, unreliable results. Goods, factor and financial markets cannot be expected to behave normally, at least for the time being. As a result, the projection exercise for this report was based on scenarios and simulations provided by static and dynamic models, which served as the basis for defining the value ranges presented for economic growth, the output gap, inflation, and the main assumptions about international economic variables in 2020. Broad levels of uncertainty make it difficult to assign probabilities for given scenarios, thus the projections do not include specific central forecast values for the variables

in question, nor does this report provide a projection of their respective quarterly trajectories.

The dual shocks of COVID-19 and the fall in oil prices below levels registered in 2014-2015 will have a significant, negative impact on aggregate demand and aggregate supply. The effects of the pandemic have also led to significant declines in external and tax revenue, and put strong pressures on public spending. Given these conditions, sovereign risk premiums have risen, the Colombian peso has depreciated, and long-term interest rates on domestic public debt have increased. All of these represent unprecedented challenges for the Central Bank on the monetary and foreign exchange policy fronts, and for the National Government on the health, fiscal, and social policy fronts.

The Central Bank's initial steps in response to the pandemic have been aimed at providing necessary liquidity for the economy and the financial system, and ensuring the proper functioning of foreign exchange and public debt markets. Firms face cash-flow difficulties as a result of temporary business closures, which could hinder their ability to meet financial obligations and maintain employment. Many households also face difficulty in paying for utilities, rent, and other obligations. In response, the Central Bank in March and April took extraordinary steps to guarantee liquidity for economic agents, ensuring access to savings sources and providing the financial system with the resources needed to finance firms and households alike. At the same time, the Bank's policy measures have sought to stabilize exchange and public and private debt markets, which have been badly affected by the dual shocks of the pandemic and oil price behavior. The proper functioning of public and private debt markets is essential for the transmission of monetary policy on economic activity and inflation because these markets serve as reference points for the cost of money and credit. These, in turn, are key indicators in determining values for securities that serve as collateral and investment portfolios. Stabilizing the foreign exchange market against temporary movements that are not associated with fundamental economic factors is important in minimizing unnecessary currency pressures on domestic prices and preserving confidence in the currency itself. An adequate supply of credit is also essential for monetary policy to have an effect on economic behavior, and to mitigate the impact of macroeconomic shocks on the country. The Bank has, to this point, increased money amounts, maturities, and the number of eligible counterparties, as well as collateral types in its temporary liquidity operations (repos). The Bank has also made permanent purchases of public and private debt securities, reduced reserve requirements, and intervened in exchange rate derivatives markets to guarantee both access to hedges and proper price formation. Additionally, in its March 2020 meeting, the Central Bank's Board of Directors (BDBR) reduced its benchmark interest rate by 50 bp, to 3.75%.

Under current conditions, it is highly likely that foreign demand relevant to the Colombian economy will contract significantly in 2020, and recover slowly in 2021. Oil prices should then recover as well, but only to levels below those registered in 2019, due to continued weakness in global demand. Quarterly GDP growth figures for China (-6.8%) and the United States (0.3%) released this month point to the scale of the economic impact of the pandemic. Several of Colombia's main trading partners in the region, including Ecuador and Brazil, have been significantly affected, alongside European countries such as Italy, Spain, and the United Kingdom. Given these circumstances, average output in 2020 among Colombia's trade partners is expected to fall significantly (between -4% and -9%). Recovery in

2021 is expected to be slow, reaching levels below those registered in 2019. Meanwhile, despite agreements by major oil-producing countries to limit supply, crude oil demand is expected to remain significantly suppressed, with prices recovering slowly to below 2019 levels (between \$25 USD and \$45 USD per barrel in 2020).

The United States and other developed economies are expected to maintain a broadly expansive monetary policy stance for the next several years. As a result of the weakening of labor markets, expected inflation below target rates, and the persistence of excess production capacity, central banks in developed economies are expected to maintain interest rates near zero, together with ample liquidity that will be reflected in the expansion of their balance sheets. Expected increases in public spending in these countries as a response to the COVID-19 pandemic will significantly increase public debt relative to output.

Oil-exporting emerging economies and remittance recipients, such as Colombia, could experience persistent upward pressures on sovereign risk premiums, the exchange rate, and the cost of external financing. COVID-19 is expected to produce a significant drop in foreign demand, along with low oil prices and a reduction in remittance receipts from workers abroad. These reductions in external income come alongside an increase in public debt resulting from the response to the pandemic and efforts to boost the economy. For Colombia, this will generate upward pressure on sovereign risk premiums, the cost of international financing, and the exchange rate. Even as global liquidity has increased as a result of central bank activity in developed economies, the effects of the pandemic and uncertainty over its duration have led to capital flows out of the country and increased financing costs for the Colombian economy, which in recent years has accumulated external imbalances as a result of dynamic private demand. This uncertainty is amplified by the potential interplay between oil price behavior, capital flows, and the sovereign risk premium. This represents a significant risk in the macroeconomic forecast. Further tightening of international financing conditions could create significant pressure on Colombia's currency.

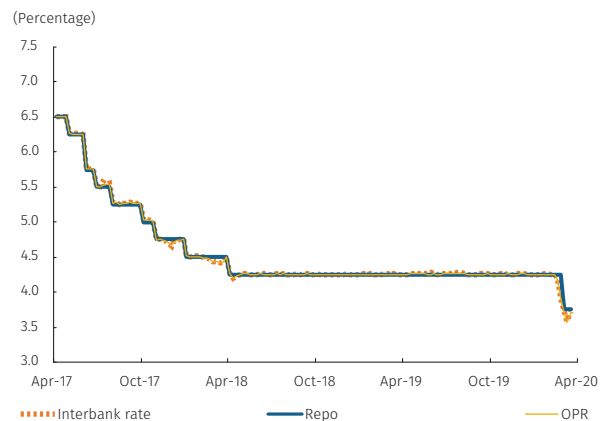
The size and persistence of the decline in Colombia's economic output for 2020, as well the speed of an eventual recovery, remain uncertain and will depend on a variety of factors. The impact of COVID-19 and the efforts to slow its propagation will lead to a decline in economic activity, with outsize effects on sectors such as tourism, transportation, entertainment, other services, and the manufacture of some durable goods. The initial stages of the pandemic led to mandatory closures in various sectors (some services and durable goods) and a temporary increase in demand for some items deemed essential for dealing with the virus (non-durable and semi-durable consumer goods). Some interruptions in supply and increases in prices of raw materials and services required for production may also occur. The full degree of deterioration of labor markets and investment remains unclear, as does the impact of these factors on the potential output of the economy. As mentioned above, current conditions have led the Bank's technical staff to use static simulations in their projections, taking into account the possible effects of closures and lockdowns on different sectors of the economy as well as possible trajectories for recovery. These were complemented with simulations using dynamic macroeconomic models and the judgment of the technical staff itself. The results of these exercises suggest that Colombia's economic growth in 2020 will be somewhere between -2% and -7%. These projections are subject to various sources of uncertainty, including infection rates of the virus and any additional fiscal and health policy measures taken by the government that could affect economic activity, to the extent that repeated shocks can produce proportionally greater effects on investment and firms' demand for labor.

The output gap, which prior to COVID-19 was estimated to be slightly in negative territory, is expected to widen. However, there remains considerable uncertainty regarding the degree of excess capacity relevant to monetary policymaking. The economic shock of COVID-19 will affect both demand and supply, as home quarantines and the temporary closure of businesses reduce consumption and production of a variety of goods and services. In the longer term, the closure of certain economic sectors could have enduring adverse effects on consumer confidence, consumption habits, and decisions about investment made by firms, as well as on their overall financial health and that of the labor market. Colombia's output gap is expected to grow more negative as a result. That said, significant uncertainty remains regarding the magnitude and persistence of these effects, which in turn is reflected in uncertainty regarding the measurement and evolution of the economy's excess capacity. Based on the scenarios examined by the technical staff and the previously mentioned expected range of economic growth, Colombia's output gap is expected to be between -3% and -7% on average for 2020.

Weak demand and excess production capacity should push inflation to levels below or equal to the 3% target rate through 2020 and 2021. In the second quarter of the year, limited business transactions in a variety of sectors and government subsidies for public services have created uncertainty over measurements for several baskets in the consumer price index (CPI). Weak aggregate demand and excess production capacity are expected to lead core inflation (excluding food or regulated items) closer to 2% than to 3% by the end of the year, in a scenario that would not exhibit additional inflationary pressures from currency depreciation. This is explained primarily by the expected behavior of non-tradable goods, the annual variation of which could fall substantially. The pass-through effect of observed peso depreciation on prices of tradable goods and services would be low, in part due to the weakness of demand, and because of smaller adjustments in international prices and significantly reduced sales margins. Nevertheless, the change in prices for this sub-basket of the CPI will depend on the future performance of the exchange rate and, in particular, international financing conditions. Significant deceleration in the CPI for regulated items is expected to keep annual adjustments below 2%, a consequence of larger expected falls in the price of gasoline and fuel derivatives, and smaller price increases in transportation. Ample food supply and weak demand for food away from home will contribute to a lower rate of increase in the CPI for food, which is expected to be around 3% at the end of the year. Some components of prices for food and regulated items, however, could be affected by additional downward pressure on the peso. Given the above, annual inflation is expected to end the year between 1% and 3%, converging toward the target rate in 2021.

The nature of the shocks currently affecting the economy complicates the transmission of monetary policy. The effect of changes to monetary policy on economic activity and inflation presuppose the proper functioning of the credit market, as well as consumption and investment behavior that is sensitive to variations in the cost of money and credit. Both assumptions may be seriously disrupted by current economic conditions. On one hand, the context of high uncertainty over economic activity, both now and in the future, may restrict the capacity and willingness of financial intermediaries to offer loans. This is why the most important short-term economic policy steps taken thus far have been to provide adequate liquidity to financial services firms and to offer state guarantees on new loans. On the other hand, given quarantines and the closure of certain economic sectors, the responsiveness of consumption (especially of durable goods) and investment to reductions in interest rates may be significantly limited. In these conditions,

Graph 1.1
Policy Rate, Interbank Rate, and OPR^{a/}
(weekly data)



a/OPR: overnight policy rate.

Repo: policy rate.

Source: Office of the Financial Superintendent of Colombia and the Colombian Central Bank.

the potential for interest rate cuts to stimulate economic activity will be greater once the gradual normalization of goods and credit markets begins. In the interim, reductions in the interest rate will relieve financial burdens on debtors holding credit at variable interest rates, and those drawing loans going forward.

1.2 Monetary Policy Decision

The Central Bank of Colombia's Board of Directors (BDBR) unanimously decided to lower its policy rate by 50 bp in both its March and April 2020 meetings. The overall reduction of 100 bp leaves the current interest rate at 3.25% (Graph 1.1).

02/ Macroeconomic Forecasts and Risk Analysis

2.1 International Outlook

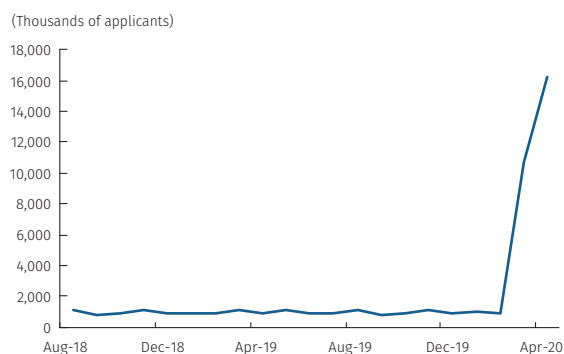
Global economic conditions have deteriorated significantly as a result of COVID-19, and the magnitude and likely duration of the shock to world economies remain uncertain. The international economic outlook has suffered a drastic and unexpected deterioration since this report was last published. The rapid spread of COVID-19, and the social distancing measures put in place to contain it, have caused significant disruptions to the international economic system performance and financial markets. The International Monetary Fund (IMF) has forecast a global recession of unprecedented scale, evidence for which is already apparent in recent measurements of economic activity. Meanwhile, the World Trade Organization (WTO) expects trade in goods to decline, the World Bank projects a reduction in remittances, and the World Tourism Organization forecasts a contraction in global tourism. The Institute of International Finance (IIF) forecasts a decline in capital flows to emerging markets to persist through the course of the year. International prices for basic goods are expected to fall, while financial market conditions will likely deteriorate, leading to greater volatility and higher risk premiums. Policymakers around the world have responded to this crisis with emergency measures, many of which include significant stimulus packages intended to mitigate the negative effects of the pandemic.

2.1.1 Foreign Demand

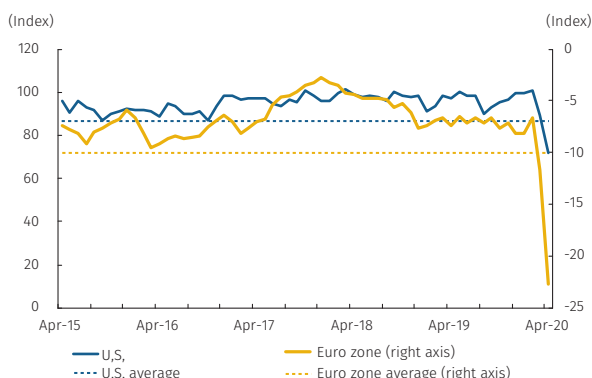
Recent economic indicators suggest that developed economies are heading toward an unprecedented recession. The rapid spread of the coronavirus prompted the United States and the euro zone to close borders and implement social distancing measures in March. Restrictions on mobility, high levels of economic uncertainty, and lost or reduced income from rising unemployment have all affected private consumption. The U.S. unemployment rate in March rose to 4.4% and the initial jobless claims was 27 million between the beginning of the month and April 17¹ (Graph 2.1, Panel A). Consumer expectations have deteriorated as well, (Graph 2.1, Panel B) with individuals making fewer trips to their places of

Graph 2.1
Labor Market Indicators and Consumer Confidence for Selected Advanced Economies

A. U.S. unemployment insurance claims^{a/}



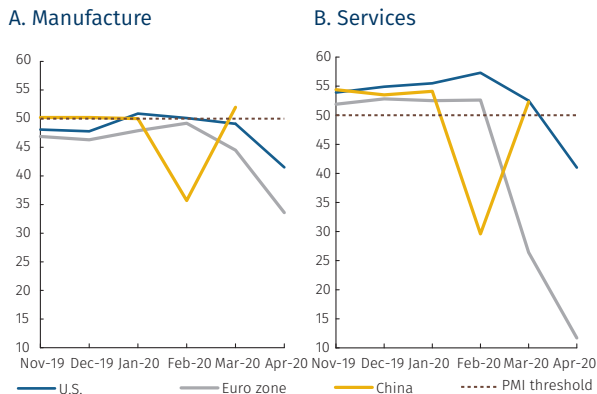
B. Consumer confidence index



Note: Consumer confidence indicator averages for the U.S. and the euro zone were taken in 1978 and 1985, respectively
 a/ April data refers to accumulated figures from 1-17 April.
 Sources: Federal Reserve Bank of St. Louis (FRED); European Commission.

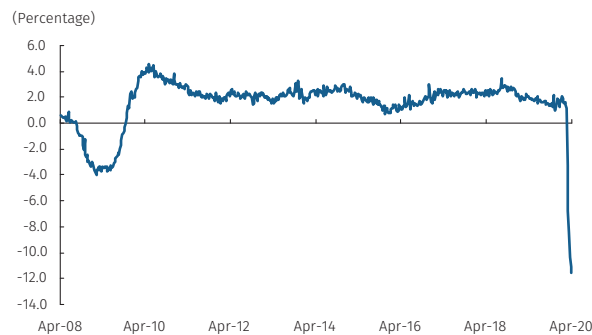
1 At publication, unemployment insurance claims had reached 30.8 million from the beginning of March to 25 April.

Graph 2.2
Purchasing Manager's Index (PMI) for the United States, China, and the Euro Zone (seasonally adjusted)



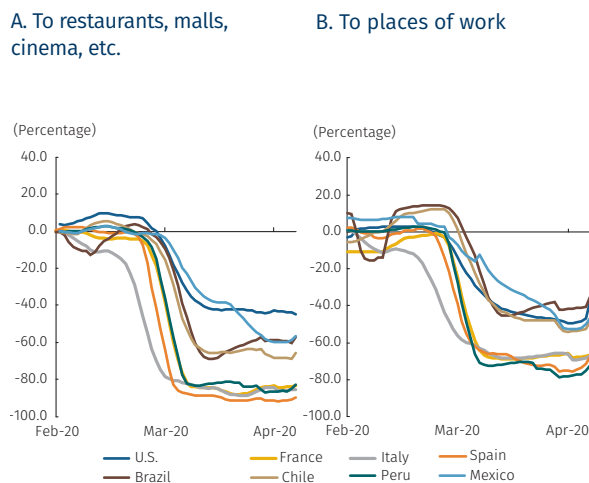
Note: PMI figures above the threshold indicate previous month expansion, and below the threshold indicate previous month contraction for given sectors. U.S. PMI services data for April corresponds to the median of the Bloomberg survey. Source: Bloomberg.

Graph 2.3
U.S. Weekly Economic Indicator



Note: index units correspond to annual GDP growth units. Source: New York Federal Reserve, weekly economic indicators. <https://www.newyorkfed.org/research/policy/weekly-economic-index>. Updated April 25, 2020.

Graph 2.4
Mobility Reports, Selected Countries



Note: seven-day moving average. Source: Google LLC "Google COVID-19 Community Mobility Reports, available at <https://www.google.com/covid19/mobility>. Accessed el 29/04/2020.

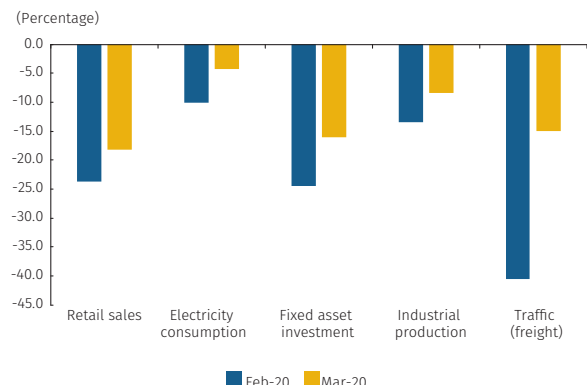
work and shopping (Graph 2.4). Private investment has been affected by a fall in production and weak expectations among business owners. Business conditions indicator in the services and manufacturing sectors have deteriorated in both the U.S. and the euro zone (Graph 2.2). These effects on aggregate demand have coincided with supply shocks caused by the shutdown of factories and businesses, which in turn has led to a loss of production, broken supply chains, and increased unemployment. First-quarter GDP in the U.S. fell at an annualized rate of 4.8%.² All of these trends may continue while mass quarantine measures remain in place. The U.S. Weekly Economic Index (WEI), for example, has continued to decline even after significant fall at the end of March (Graph 2.3), due in part to impacts on the labor market, a reduction in retail sales, and the collapse of consumer confidence.

First-quarter GDP in China, where the first outbreak of COVID-19 was reported, fell by 6.8% at an annualized rate, the worst performance in the country's recent history. According to official Chinese information, this country has contained thanks to strict social distancing measures, which have considerably reduced the number of new cases and deaths in the last month. This has allowed the country to reopen some markets. Business conditions improved in March (Graph 2.2) and some indicators suggest less deterioration of the economy (Graph 2.5). That said, economic activity remains far below pre-outbreak levels, suggesting the negative effects of COVID-19 will persist. China is also facing highly unfavorable external economic conditions, amid a world economic recession and the risk of new waves of infection.

Colombia's trade partners in Latin America will experience significant economic contraction due to the shocks of COVID-19. As with the rest of the world, social distancing and mobility restrictions (Graph 2.4) have taken a toll on the economic performance of Colombia's regional trade partners. Latin America faces a particularly complex set of challenges, as international prices for many of the region's raw materials exports, especially oil, have fallen (Graph 2.6). Reduced foreign demand will also affect the export of industrial goods, and restrictions on air travel will lead to a contraction in activities related to tourism. Countries that receive significant remittances from workers abroad will also find their external revenue affected, as quarantines and rising unemployment rates in migrants' countries of residence limit their ability to send money home. Despite ample global liquidity, a generalized increase in risk premiums, higher interest rates on foreign debt, and a reduction of capital flows may

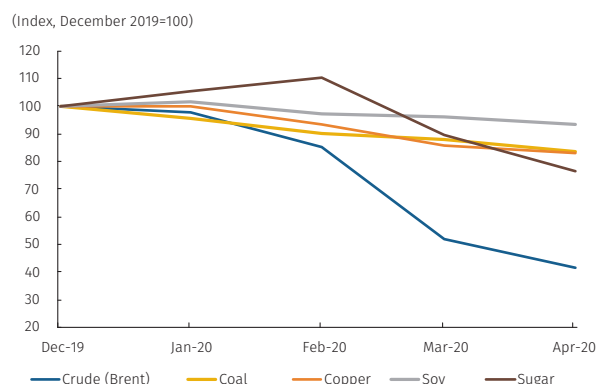
² At publication, euro zone GDP was projected to have contracted in the first quarter of 2020 at a 14.4% annualized quarterly rate.

Graph 2.5
Chinese Economic Activity Indicators
(annual change)



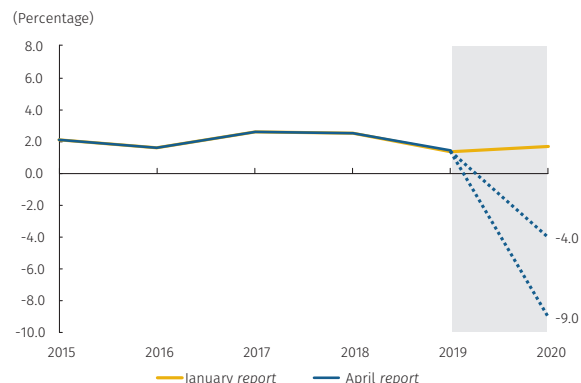
Source: Bloomberg; Calculations by the Central Bank of Colombia

Graph 2.6
Prices of Exports of Commodities for Selected Latin American Countries



Sources: Bloomberg, Datastream; calculations by the Central Bank of Colombia.

Graph 2.7
Trade Partners Assumed Annual Growth



Sources: statistics offices, Central Banks, Bloomberg; calculations and projections by the Central Bank of Colombia.

continue to hinder international financing conditions for emerging markets (Graph 2.11).

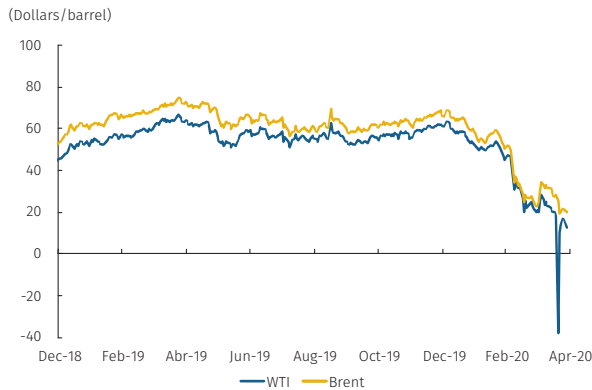
Real annualized GDP growth among Colombia’s trade partners is expected to be between -4% and -9%, with some partial recovery expected in 2021 (Graph 2.7). There continues to be a high degree of uncertainty surrounding the likely effects of the pandemic on global economic growth. Any additional waves of contagion or, conversely, the development of a vaccine will be crucial factors in the duration and intensity of the global crisis. Countries’ responses to the pandemic, both in health policy and economic terms, will have a significant impact in their respective recoveries. With economic activity weakening, central banks in advanced economies have reduced interest rates and adopted extraordinary measures to expand liquidity, improve the flow of credit to businesses and consumers, and ensure financial stability. Monetary authorities in Latin America have also lowered interest rates and used diverse policy instruments to provide more liquidity to markets. Fiscal measures adopted by governments include tax rebates, subsidies, loans and credit guarantees, as well as increases in public health spending. In several of the countries analyzed for this report, high existing debt levels and a fall in fiscal revenues could limit space to take on additional public debt. In this report, the sharpest drop in external demand is expected to occur in the second quarter, recovering slowly on the assumption that the public health emergency will begin to subside, fiscal and monetary policy measures will take effect, and domestic and international markets will begin to reopen.

2.1.2 Developments in International Prices

Low, highly volatile oil prices reflect another negative shock and source of uncertainty for the Colombian economy. International oil prices have undergone a sharp, accelerated, and unanticipated decline in recent months. From March-April Brent crude averaged USD \$30.30/bl and hit a low of USD \$19.30/bl, while WTI prices fell to negative territory (Graph 2.8). This constituted one of the most drastic oil price declines in history, and reflected significant excess supply in the market (Graph 2.9) as the result of low levels of observed and projected global economic activity, and of the social distancing measures to respond to the pandemic, resulting in significant reductions in general mobility and air travel. The Organization of Petroleum Exporting Countries (OPEC) and other countries are expected to cut production.³

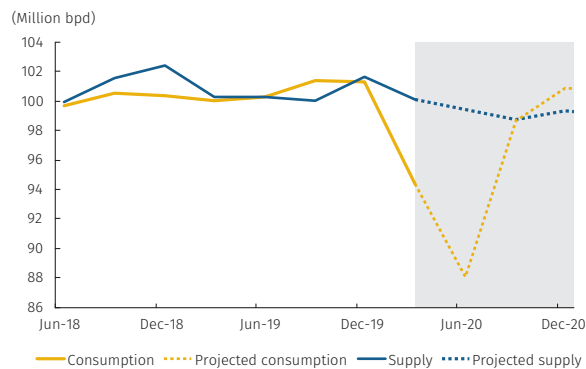
³ The agreement cuts production by 9.7 million bpd for two months, 7.7 million bpd in the second half of 2020, and 5.8 million bpd in 2021.

Graph 2.8
International Oil Price



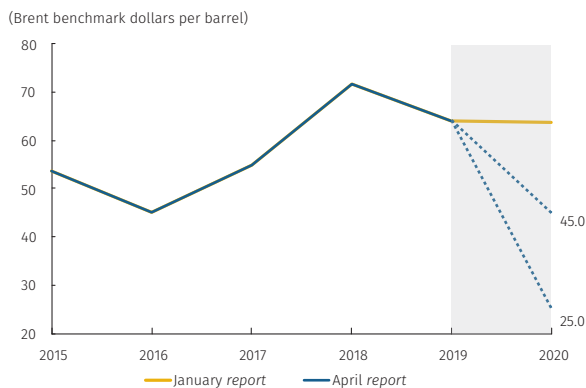
Source: Bloomberg.

Graph 2.9
Balance between Global Supply and Oil Demand



Note: supply and demand figures were obtained from the U.S. Energy Information Administration's (EIA) April report, and refer to oil and other liquid derivatives. These data do not take into account supply cuts agreed April 12 between OPEC and other countries.
Sources: Bloomberg, EIA; calculations by the Central Bank of Colombia.

Graph 2.10
Assumed Annual Oil Prices



Source: Bloomberg; calculations and projections by the Central Bank of Colombia.

Reduced extraction rates in the United States and elsewhere should also reduce supply. Still, at least in the short term, analysts and market agents have signaled that these reductions will be insufficient to completely offset the glut. Excess supply has increased just inventory and sounded alarms over global storage capacity and the possibility of still more saturation. Average Brent prices are thus expected to remain below levels observed in 2019, at a range between USD \$25 and USD \$45 per barrel (Graph 2.10). The negative shock on oil prices is expected to be temporary, recovering slowly through the year.

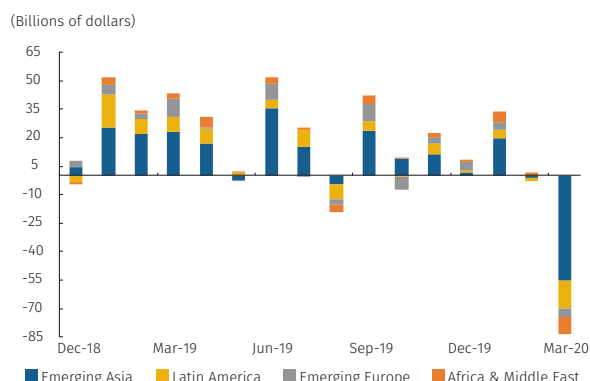
Inflation in advanced economies on the forecast horizon is expected to remain below target rates, given persistent excess production capacity, lower labor costs, and reductions in raw materials prices. Annual inflation in the United States and the euro zone decreased in March from the previous month, falling from 2.3% to 1.5% and 1.2% to 0.7%, respectively. Core inflation fell over the same period, from 2.4% to 2.1%, and 1.2% to 1%. Inflation expectations for 2020 and 2021, based on both analyst surveys and market information, have fallen, suggesting a lack of inflationary pressures in those countries. These expectations are in line with forecasts of global economic recession, low oil prices, significant increases in unemployment, and reductions or minor increases in salary costs.

Colombia's terms of trade are expected to weaken in 2020. Falling dollar prices on total exports (7.5%), especially in mining, led to a decline in Colombia's terms of trade of 4.2% annually from January-February. This was partially offset by lower prices on total imports (3.5%), in particular for intermediate goods. Given the weakness of international demand for commodities, exports of some basic goods are expected to remain below levels observed in 2019, which would affect the implicit price of the country's exports. This effect will be offset, in part, by a fall in the price of imports due to the global economic recession. The expected result is an annual decline in the terms of trade of at least 10.0%, with a negative impact on revenues. Uncertainty surrounding this projection is high, and will depend on the behavior of international prices for imported goods.

2.1.3 Developments in International Finance

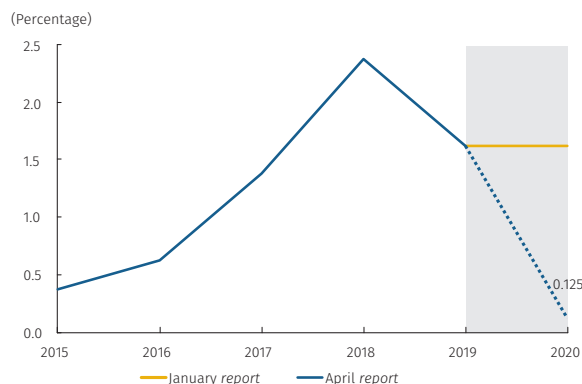
Global risk and the demand for safer assets increased in the first quarter of 2020, as stock indices fell and emerging economies experienced capital flight. Financial volatility measured by the CBOE Volatility Index (VIX) increased 118% compared to the previous quarter, and in March surpassed historic highs registered during the 2008 financial crisis. Sovereign bond yields in advanced economies reflected higher demand for safer assets, and fell in the first quarter. Especially in March, emerging economies experienced net outflows of foreign investment (Graph 2.11). These outflows were concentrated primarily in the equity market and in the emerging Asian and Latin American regions. For 2020, the IIF projects a decline in gross capital inflows to emerging markets. Colombia is expected to maintain access to international financing, though increased cost volatility is possible.

Graph 2.11
Net Foreign Investment Flows to Emerging Economies ^{a/}



a/ Monthly net investment flows in debt and equity instruments.
Source: International Institute for Finance (IIF).

Graph 2.12
Assumed Annual Fed Interest Rate^{a/}



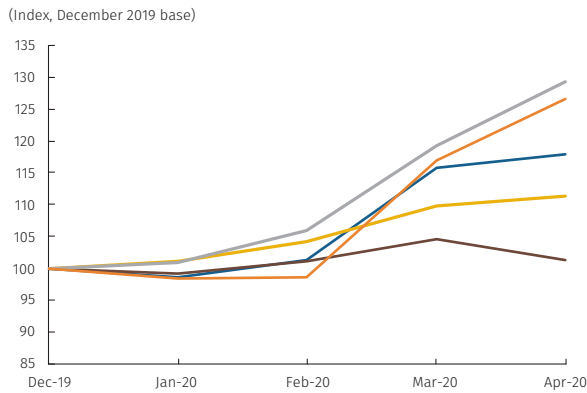
a/ Mid-point of year-end Fed interest rate range.
Source: Federal Reserve of St. Louis; calculations and projections by the Central Bank of Colombia.

The Federal Reserve is expected to keep interest rates between 0.0% and 0.25% for the remainder of 2020 (Graph 2.12). In extraordinary meetings on March 3 and March 18, the Federal Open Market Committee (FOMC) reduced its benchmark interest rate by 150 bp, to a technical minimum between 0.0% and 0.25%. These decisions were made in light of the risks represented by COVID-19 on economic activity in the U.S., and the deterioration of financial and economic conditions worldwide. Changes in the Fed’s interest rate are not expected for the rest of the year, in line with information from futures markets and analyst projections. The Fed has also taken measures to provide liquidity, including moves directed at non-financial corporations (Commercial Paper Funding Facility), money market funds (Money Market Mutual Fund Liquidity) and primary agents (Primary Dealer Credit Facility), with the purpose of supporting the flow of credit to households and businesses. Liquidity swap lines with other economies, designed to maintain international dollar liquidity, have also been introduced. The Fed has also increased its purchases of treasury bonds and mortgage-backed securities. For its part, the European Central Bank (ECB) has taken several measures to respond to the pandemic, including the purchase of additional assets (Asset Purchase Program), long-term financing operations (TLRO III) and the introduction of a temporary program to purchase value assets from the public and private sectors (Pandemic Emergency Purchase Program), while also maintaining stable interest rates.

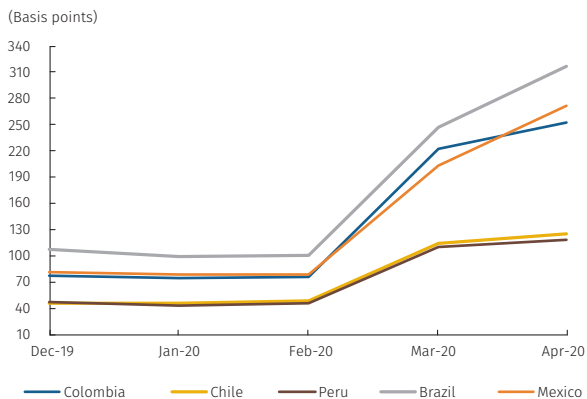
Risk premia is expected to rise above historical averages in 2020. Latin American risk premiums have generally been higher and more volatile since March, as a result of the negative effects of COVID-19. This has generated high

Graph 2.13
Monthly Average of Nominal Exchange Rate and Risk Premia (Five-Year CDS) for Selected Latin American Countries

A. Nominal exchange rate

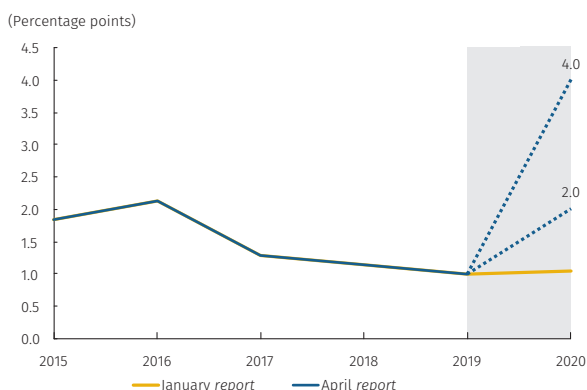


B. Five-year credit default swap



Source: Bloomberg; calculations by the Central Bank of Colombia.

Graph 2.14
Colombia's Assumed Annual Risk Premia^{a/}



a/ Annual average for five-year credit default swaps.
 Source: Bloomberg; calculations and projections by the Colombian Central Bank.

degrees of uncertainty in international financial markets and depreciation in currency values in the region (Graph 2.13). In the first quarter, Colombia's credit default swap average (CDS at five years) was 124.8 bp and reached a maximum of 356.6 bp, lower level experienced during the 2008 financial crisis (600.4 bp). Risk premia in 2020 is expected to average between 200 bp and 400 bp (Graph 2.14). This assumption takes into account lower current and expected oil prices, and the accumulation of foreign debts on next external liabilities.

2.2 Macroeconomic Projections⁴

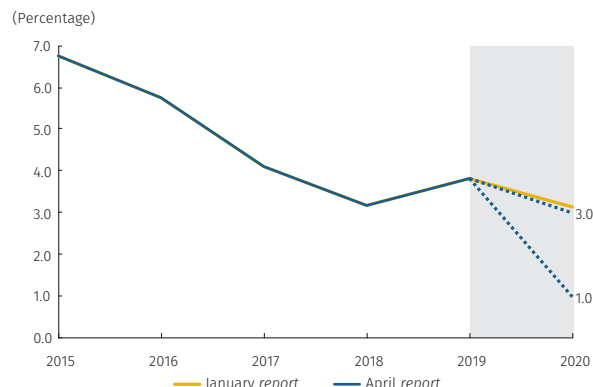
2.2.1 Inflation

The current public health crisis and social distancing measures have increased levels of uncertainty over inflation projections on the forecast horizon. The shock of COVID-19 has made measuring prices more complicated, especially as both the supply and demand for goods and services have been affected. On balance, deflationary pressures due to decreased demand should outweigh the effects of possible restrictions on supply in 2020. These downward pressures are expected to become apparent beginning in the second quarter. Social distancing measures, meanwhile, are expected to primarily affect the performance of non-essential sectors (those unrelated to food production and health care goods and services). The partial or total closure of non-essential sectors should preclude significant price changes for the time being. Steps by the national government in response to the pandemic, such as price controls on certain goods and services (including rentals), relief measures that include a reduction in fuel prices, and the reduction of indirect taxes and tariffs, are also expected to contribute to lower short-term inflation. As a result, end-of-year inflation is projected to be between 1% and 3% (Graph 2.15), converging toward the inflation target in 2021 as the economy recovers.

Policies designed to address the pandemic will push core inflation downward, primarily in the second quarter. Social distancing measures are expected to be stricter in the second quarter, with more markets closing as a consequence. Price controls and the reduction of taxes and tariffs are also expected to have an effect on core inflation in this period. The temporary closure of non-essential commerce for a large portion of the quarter could

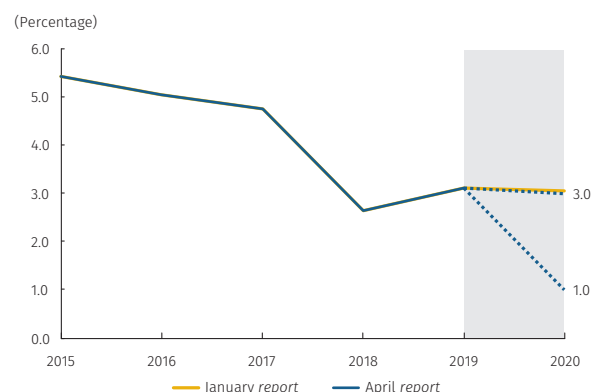
⁴ These results assume active monetary policy in which the Central Bank of Colombia adjusts its benchmark rate to guarantee compliance with the inflation target.

Graph 2.15
Consumer Price Index (CPI)
(end of period; annual change)



Source: Central Bank of Colombia

Graph 2.16
Consumer Price Index Excluding Food and Regulated Items
(end of period; annual change)



Source: Central Bank of Colombia

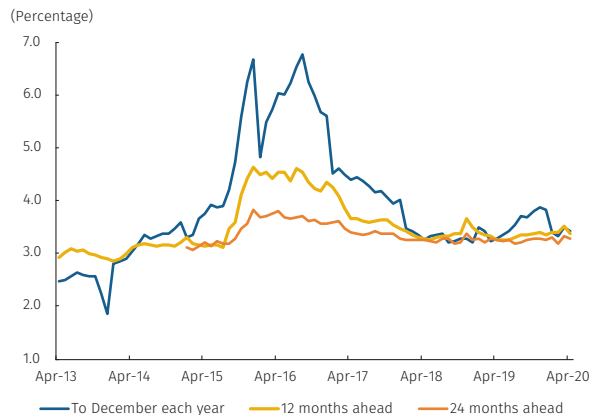
create significant challenges to collecting data for the calculation of the CPI.

Domestic demand will be affected for several quarters, generally limiting price increases. This will be the primary determining factor in the evolution of prices for tradable and non-tradable goods over the forecast horizon. Factors such as the decline in consumer confidence and reductions in household income as a result of rising unemployment will suppress demand over this period. Additional declines in international prices for some imported goods, and a possible reduction in sales margins, will also limit the pass-through effects of significant price depreciation for tradable goods. Inflation for non-tradable goods could fall below 3% on the forecast horizon, given expectations of a more negative production output gap and reductions in labor costs, the absence of demand for some non-essential services, and temporary government price controls in the rental market. In this context, various simulation exercises suggest that core inflation (excluding food and regulated items) will fall and remain below the target rate in 2020 (Graph 2.16). Inflation is expected to increase gradually in 2021 as the production output gap begins to close.

Prices for regulated items are expected to fall significantly on an annual basis as a result of lower oil prices and only moderate increases in utility prices. A government-mandated reduction in fuel prices is expected to be a determining factor in the behavior of regulated goods prices in 2020. Utilities are expected to experience small price changes over the course of the year as a result of measures taken by the national government and local authorities to ease declines in household income. Given the above, the annual change in prices for regulated goods is expected to be below 2% at the end of 2020. That said, there remains significant uncertainty surrounding the behavior of this basket of goods, as performance will ultimately be determined by movement in fuel prices and the exchange rate, as well as the government methodology used to measure changes in utilities prices.

Prices in the CPI for food are expected to fall over the course of the year as a consequence of weak demand and the persistence of adequate food and supply. Food away from home prices is one of the components of the CPI that has been most affected by reduced demand, not only as a result of lost household income but also due to voluntary measures taken by consumers in response to the outbreak. Preventive measures to close restaurants make price changes difficult to measure. Government price monitoring will also affect the dynamics of this basket of goods in 2021. Year-end adjustments in

Graph 2.17
Bank Analyst and Stockbroker Inflation Expectations



Source: Central Bank of Colombia

the CPI for food are expected to be around 3%. Future performance will depend, among other factors, on the reactivation of economic activity, the cost of inputs, the interplay between price depreciation and the exchange rate (which primarily affects processed foods), and the evolution of international market prices for food.

Inflation expectations based on public debt securities fell below 3% in April. Analysts expect year-end inflation around 3.4%, and 3.3% in 2021. Break even inflation (BEI), which is derived from peso- and UVR-denominated government bonds, fell from two-, three- and five-year figures published in the previous report (data through Jan. 24) by 127 bp, 105 bp, and 42 bp, respectively. BEI expectations at 10 years rose by 52 bp. To April 23, the BEI for two, three, five, and 10 years stood at 2.3%, 2.5%, 3.1%, and 4.1%, respectively. Measures derived from the TES market may be affected by its current volatility. The results of the Bank's monthly analyst survey⁵ showed year-end, 12-month, and 24-month inflation at 3.4% (Graph 2.17). For the January report, those values were 3.4% to December 2020, and 3.4% and 3.3% at 12 and 24 months, respectively.

2.2.2 Economic Activity

As with almost all global economies, Colombia faces an economic shock the size and likely duration of which are still uncertain. In principle, the economic shock from COVID-19 will be a temporary one. But as this report went to print, there was not enough information or analysis available to establish, with reasonable certainty, the extent of the epidemic in Colombia and the degree to which rigorous social distancing and isolation efforts implemented beginning on March 20 had been successful in stopping its spread. As a result, it was necessary to consider a wide range of scenarios related to the evolution and eventual end of the crisis, ranging from the gradual relaxation of containment measures starting on April 27 and coinciding with a slow return to normalcy, to the potential need to reestablish those measures in coming months or in 2021. All of these scenarios would have different effects on economic growth in the short, medium and long term.

5 The *Encuesta Mensual de Expectativas de Analistas Económicas (EME)* surveys economic analysts on their expectations related to inflation, the Central Bank of Colombia's benchmark rate, the market exchange rate (MER), and GDP growth over predetermined time horizons. These data correspond to the survey published on 15 April, 2020.

Even if the epidemiological aspects of the outbreak were more certain, GDP projection exercises would remain subject to high degrees of uncertainty. Beyond non-traditional or anecdotal information, it is hard to judge the effect quarantine measures have had so far on productive sectors of the economy and their respective abilities to retain workers. Information about patterns of individual consumption, perceptions over the economy, the financial health of firms and households, and business investment decisions has been obscured by the effects of the outbreak. How these variables will behave once the pandemic has been overcome, and just how quickly the economy will return to pre-crisis levels, is also uncertain. On the international front, the speed with which global trade is normalized will depend on how the pandemic is addressed by Colombia's trading partners. This adds uncertainty to projections of how long the crisis will affect terms of trade, the functioning of international financial markets, and capital flows. The ranges of projected performance that need to be considered for these variables, all of which have a significant impact on the trajectory of economic growth, remains exceptionally wide.

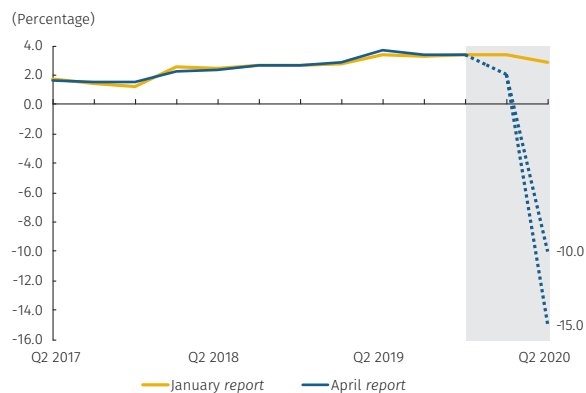
In addition to the COVID-19 crisis, Colombia is facing a significant fall in oil prices the scale and likely duration of which is itself highly uncertain. This will have negative effects on revenues, investment and public spending, with consequences for economic growth. Production and exports in the oil sector (which until recently were forecast to contribute to economic growth) are now likely to decline. This will have negative effects on sectors tied to the industry, and likely lead to a drop in planned investment – something that has already affected the country's main oil producer, Ecopetrol. Future government revenues at the local and national levels will suffer as a result, with all of the restrictions on growth in public consumption and investment that entails. As mentioned earlier in this section, a gradual recovery in international oil prices, to go along with an increase in global demand once the most critical phase of the pandemic has passed, is at this point a reasonable expectation. That scenario would support economic recovery in the medium and long term. Downward risk remains, however, along with a high degree of uncertainty over current GDP projections.

For the reasons described above, this report uses GDP simulations for the remainder of the year, as opposed to traditional projection exercises. The point estimates provided by a traditional forecast exercise would not be particularly informative under current global economic conditions. Given the unprecedented nature of the dual shocks now facing Colombia's economy, and the fact that there are no comparable historical data to help anticipate their outcome, conventional forecast methods would be expected to produce skewed, unreliable results. Normal behavior in the goods, factor and financial markets cannot be expected. Nonetheless, simulation exercises taking consensus assumptions by the Bank's technical staff into account can provide a useful metric for gauging economic activity. As with most of the world, Colombia has implemented voluntary and mandatory measures designed to mitigate the effects of the contagion on health outcomes and avoid the saturation of its hospital systems. These steps have drastically reduced economic activity in non-essential sectors, and aimed to protect the normal functioning of sectors that are essential, such as food production and goods and services related to health care. In this context, the normal supply and demand mechanisms measured by central forecasting models are not operating completely or efficiently, and do not offer the level of detail required at a sector level to provide a complete picture. To that end, input-output matrix methodology, while static, offers a more appropriate means of measuring short term impacts, taking into account severe reductions in the demand of some goods and

services and, in some instances, the closure of markets entirely.

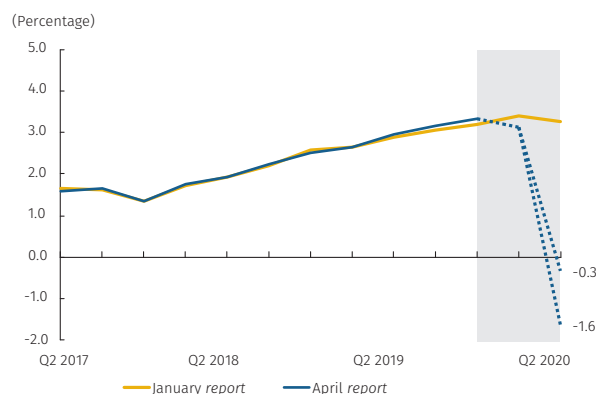
Second-quarter simulations using an input-output matrix suggest a strong contraction of GDP. Input-output matrix methodology can account for pronounced sector-level reductions in demand, impacts due to supply-chain effects, and the closures of some markets as a consequence of the COVID-19 health emergency (See Box 1). For this report, the simulation exercise assumes the government's announced strategy for dealing with the virus. This entails a strict period of social isolation in April and through May 11, with the partial relaxation in some measures in certain sectors in the early part of the month. The model also assumes a slow economic recovery beginning in June, and significant fiscal policy efforts to deal with the crisis to be implemented this quarter, including an increase in public spending and the continuation of subsidy programs to help soften the effects of the pandemic on individual households. The results of this exercise depend largely on the (still uncertain) degree to which demand in different sectors will be affected by the health crisis. However, based on reasonable expectations of those effects, annual second-quarter growth is expected to range between -10% and -15% (Graph 2.18 and 2.19). In terms of supply, the sectors that will likely be most affected by the pandemic are arts and recreation activities, and retail, repairs, transportation, lodging and food services, with an expected decline above 30% annually for the quarter. On the demand side, the contraction in economic growth is expected to affect both private consumption and investment. The non-durable component of consumption may be the least affected by the crisis, in part because it will be supported by government transfers for families. Export spending will be strongly affected, given deterioration in the economies of Colombia's main trade partners. Additional health spending at all levels of government should provide a boost to public spending in general.

Graph 2.18
Gross Domestic Product^{a/}
(percent annual change in quarterly figures)



a/ Seasonally adjusted and corrected for calendar effects.
Source: Central Bank of Colombia.

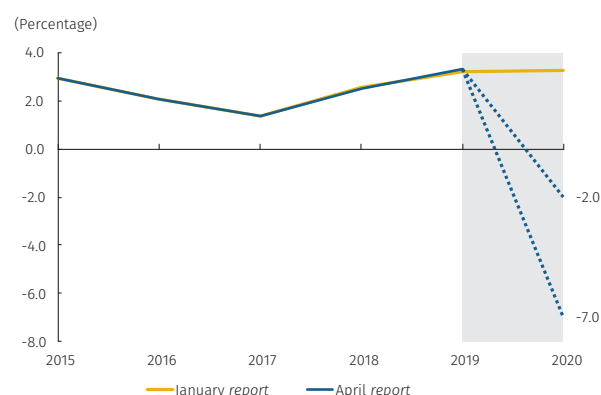
Graph 2.19
Four-Quarter Accumulated Gross Domestic Product^{a/}
(annual percentage change)



a/ Seasonally adjusted and corrected for calendar effects.
Source: DANE; calculations by the Central Bank of Colombia.

The incremental relaxation of social distancing measures and the return of consumer confidence would allow for the expectation of a gradual economic recovery in the second half of the year, continuing into 2021. If short-term social distancing measures are successful in mitigating the most severe effects of the pandemic, it would be reasonable to expect a gradual normalization in the rate of economic activity in the second half of the year. This scenario presupposes that the relaxation of measures announced by authorities, together with a reduction in perceived health risks, would be accompanied by a recovery in consumer and business confidence and allow for the progressive return of consumption and investment in the third and fourth quarters of the

Graph 2.20
Annual GDP
(Annual Percentage Change)



Source: DANE; Calculations by Banco de la República.

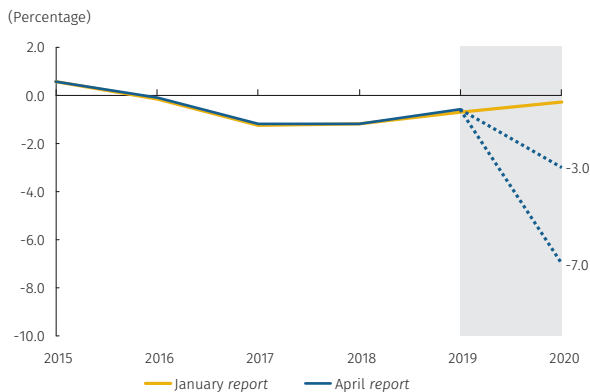
year. Public works projects and a significant portion of public-sector investment plans would be expected to resume in the second half of the year, as the most critical phase of the public health emergency starts to subside. This scenario assumes a gradual recovery in employment this year, based on a fair degree of flexibility in the labor market. The third quarter would be expected to entail a significant opening of those markets that were most affected by the health crisis. This scenario would allow for a first-quarter GDP growth projection of 2% (see Section 3), which, along with the previously mentioned second-quarter simulation and the results of different simulation exercises using the Bank's dynamic and static models, would lead to a 2020 GDP growth between -2% and -7% (Graph 2.20). The upper and lower range limits of that projection are not directly related to the maximum and minimum range levels of the exogenous variables presented at the beginning of this section.

The previously mentioned simulation exercises assume higher-cost access to international financial markets and weak international trade continuing through 2020, recovering gradually in 2021. While upward pressures on international financing costs are to be expected, Colombia should retain its access to capital markets, which would facilitate financing for both the public and private sectors. It is also assumed that improvements in economic activity among Colombia's trade partners, which should coincide to some degree with the country's own recovery, will lead to a gradual reactivation of international trade.

The credit market should continue to contribute to recovery in economic activity. Measures adopted by the Central Bank to increase liquidity and reduce interest rates and reserve requirements, together with government actions to aid the economy, should support the payments systems and the credit market. This will help facilitate recovery in private spending, and reduce financing costs in the local market as the economy begins to function normally and monetary policy transmission channels are reestablished.

Given the context described above, the gradual recovery of economy activity is expected to extend into 2021. The progressive recovery of foreign demand and improved terms of trade, alongside relatively low interest rates and other factors, are expected to support growth in 2021. GDP would be expected to return to pre-crisis levels toward the end of the year, given presumed recoveries in the labor market, consumer confidence, and investment conditions, as well as higher levels of public debt.

Graph 2.21
Annual Output Gap^{a/}
(percentage change)



a/ This gap is calculated as the difference between observed GDP and potential (trend) GDP based on the 4GM model.
Source: Central Bank of Colombia.

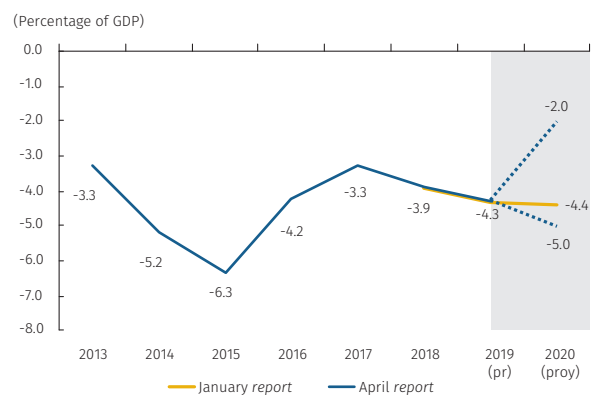
The output gap, which was estimated to be in slightly negative territory in the January report, should expand considerably in 2020, though significant uncertainty over the size of excess production capacity remains.

The COVID-19 pandemic and efforts to contain it have had significant effects on both supply and demand, and have led to the temporary closure of some markets in various sectors. These shocks are having simultaneous short-term effects on both supply and demand, in that they have forced the temporary closure of businesses as well as the home isolation of a large portion of the population. The shock to demand is likely to persist in the medium term, even after isolation measures are relaxed. Market closures will likely exert long-lasting, adverse effects on employment, consumer confidence, consumption habits, business investment decisions, and companies' financial health. Colombia's trade partners will likely see only a gradual return of economic activity, suggesting that variables tied to international economic behavior, such as remittances and exports, will recover slowly. As a result, while it is reasonable to expect an effect on production capacity, the output gap is likely to expand significantly in negative territory. Nevertheless, there remains a great deal of uncertainty over the size and likely duration of these effects and, as a result, on the measurement and evolution of the economy's excess capacity. According to the scenarios examined by the technical staff, and based on the previously mentioned simulated ranges for growth, the output gap is expected to be between -3% and -7% on average in 2020 (Graph 2.21). Expectations for 2021 are also highly uncertain, and will depend, among other factors, on the size of the fall in output in 2020, the speed of recovery of the economy, and the behavior of distinct variables that affect the potential output of the country.

2.2.3 Balance of Payments

The simulations suggest a current account deficit in 2020 below last year's levels. There is nonetheless a high degree of uncertainty given the magnitude and diversity of the shocks currently facing the country. Deficit correction in 2020 will primarily come as the result of recession in the Colombian economy and changes in relative prices. Declines in investment and private consumption, together with depreciation of the peso, are expected to lead to a reduction in goods and services imports, and in the earnings of businesses with foreign capital focused on the local market. Lower earnings for firms in the mining and hydrocarbons sectors, due to

Graph 2.22
Annual Current Account



(pr): preliminary
(proy): projection
Source: Central Bank of Colombia.

a fall in revenue, are also expected⁶. Given the above, simulations suggest a reduction in the current account deficit in 2020 in the millions of dollars compared to 2019. This would be in line with behavior observed after previous adverse events, such as the 1999 recession, the international financial crisis, and the 2015 oil shock. The current account deficit would be between -2% and -5% of GDP (Graph 2.22)⁷.

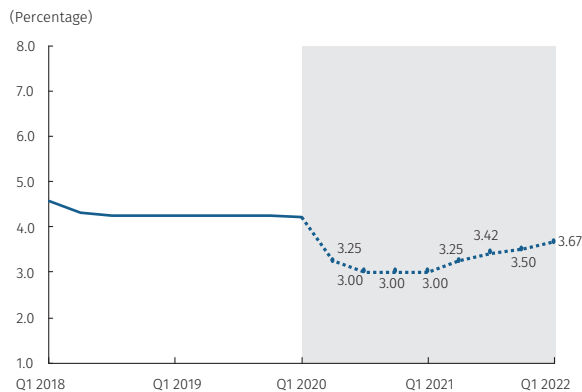
Several factors preclude a more significant reduction in current account deficit and could instead generate upward pressures. These include the negative effects on goods and services exports from reduced terms of trade, given lower international prices for commodities exports, especially oil and coal. Reduced external demand due to the economic contraction among Colombia's trade partners will also be a factor. Others include an expected reduction in remittances, due to a deterioration of labor markets in migrants' countries of residence, and reduced revenues from foreign investment.

The contraction in economic activity and respective reduction in the current account deficit should mitigate the need for external financing. Foreign direct investment would continue to be one of Colombia's principal sources of revenue, though it may be affected by a reduction in the reinvestment of earnings due to foreign firms' reduced profitability, fewer investment projects during recession, and reduced dynamism in mining and hydrocarbons activity as a result of low international prices for raw materials. Despite volatility in international markets, foreign debt should continue to be another important source of revenue. Financing costs have increased in the context of higher risk premiums for countries in the region. The effect of this should be mitigated by the relaxation of monetary policy in the largest global economies, where central banks have considerably expanded their balance sheets to provide liquidity to markets and stimulate their economies. Finally, the fact that Colombia's external liabilities are concentrated in FDI, and that the country has a relatively limited negative balance in net foreign assets, excluding direct investments, should limit international vulnerability. In December 2019, foreign assets totaled USD \$121.9 billion (excluding direct investments)

6 Colombia's external financing structure, supported primarily by direct investment inflows, will allow company earnings to have a dampening effect on the current account deficit.

7 Preliminary figures from the first quarter of the year suggest a deficit around 3.7% of GDP, below levels observed in the same period the previous year. This would be likely associated, primarily, with lower earnings of business with foreign capital and an increase on remittances.

Graph 2.23
Analyst Policy Rate Expectations Survey
(period average)



Source: Central Bank of Colombia

2.2.4 Monetary Policy and Interest Rates expected by Analysts

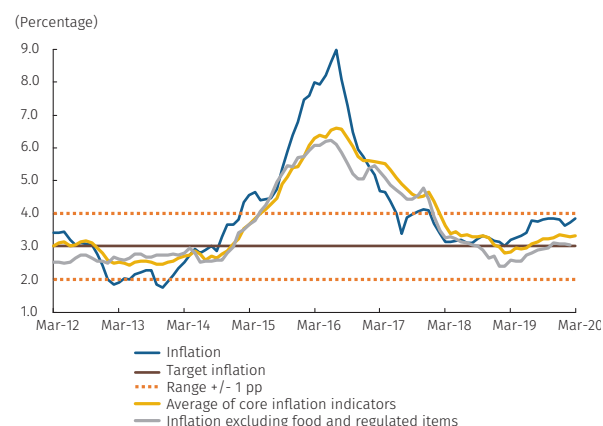
Analysts expect reductions in the policy rate to 3% at the end of the 2020 (Graph 2.23). The median response to the Bank's monthly survey of analyst expectations conducted in April suggest expectations that the policy rate will drop to 3% at the end of 2020, with reductions of 50 bp in the second quarter and 25 bp in the third. Analysts expect a gradual normalization of monetary policy in 2021, with increases of 25 bp in both the second quarter and third quarters. The Bank's technical staff also projects the need for a significant relaxation in Colombia's monetary policy stance. The timing, size, and speed of interest rate changes will be determined primarily by: 1) the magnitude and persistence of supply and demand shocks; 2) the form with which economic agents incorporate shocks caused by the health crisis and social distancing measures into their inflation expectations; 3) the evaluation of local financial conditions and the transmission of the policy rate; and 4) the evolution of international financial conditions, and their effect on the exchange rate and its effect on prices.

Growth and inflation performance will be affected by the intensity and duration of the COVID-19 health crisis.

A prolonged crisis or new waves of contagion in Colombia or its main trade partners would seriously jeopardize economic activity and could generate greater downward pressures on inflation. Nevertheless, some upward inflationary risks could come from more pronounced supply shocks and less favorable international financial conditions than those projected by the technical staff. Though the negative shock on demand is expected to outweigh potential disruptions in supply in determining inflation, it is possible that the composition of supply shocks could generate significant pressure on firms' cost structures. It is also possible that international financial conditions become less favorable, generating additional pressures on the exchange rate, which would be transmitted into prices despite a weak demand.

03/ Current Economic Conditions

Graph 3.1
Total CPI and Indicators for Basic Goods Baskets
(annual change)



Sources: DANE, Central Bank of Colombia.

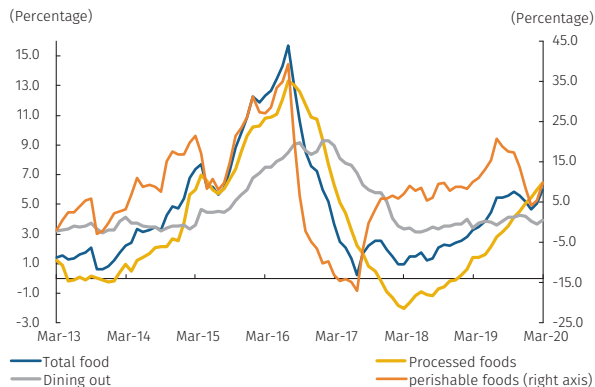
3.1 Inflation and Price Behavior

After falling at the beginning of the year, in accordance with projections, in March consumer inflation started to reflect the impact of COVID-19 and the collapse of international oil prices. Annual inflation continued to fall in January, as a result of the dissolution of supply shocks that affected it the previous year. However, significant depreciation of the peso starting in February, related to the fall in oil prices, and the appearance of COVID-19 in March pushed food prices upward, resulting in an unexpected rise in headline inflation to 3.86%, which was higher than in December 2019 (3.80%) (Graph 3.1). The probable cause of the price increase was an atypical, likely temporary increase in household food purchases at the end of the quarter in response to the public health crisis. These were partially offset by a significant fall in domestic fuel prices decreed by the government in March as a response to the decline in international oil prices.

Core inflation, measured through the CPI excluding food and regulated items, fell slightly in the first quarter. Figures for March indicated a possible weakening of demand. Annual change in core inflation in March was 3.04%, below levels observed in December. Two other indicators showed declines over the period: the CPI excluding food, which fell from 3.37% in December to 3.18% in March, and Core 20, which fell from 3.42% in December to 3.31% in March. The CPI excluding perishable foods, fuels, and utilities increased from 3.46% to 3.70%. The average of these four indicators remained stable at 3.3% (Graph 3.1). In March, changes in spending behavior due to preventive isolation measures reduced consumption of goods and services other than those related to food and basic necessities, which translated to downward pressure on various indicators for underlying inflation. This lower demand and the fall in some international prices for raw materials would also have offset upward pressure associated with increased peso depreciation. As a result, annual change in March for core inflation was below the level projected by the technical staff in its previous report (3.25%).

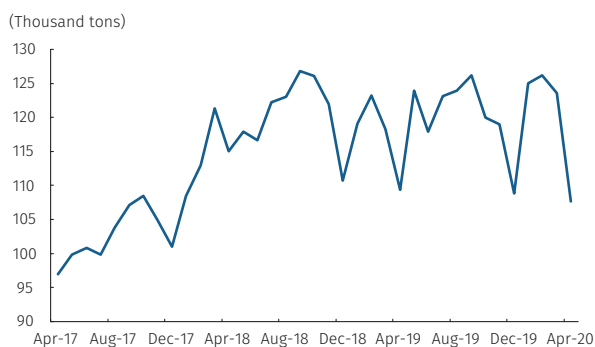
A strong rebound in food prices in March likely had more to do with temporary increases in demand than with issues related to agricultural supply. Food prices (which grew 5.2% in December 2019) increased significantly in

Graph 3.2
CPI for Food and its Components
(annual change)



Source: DANE; calculations by the Central Bank of Colombia.

Graph 3.3
Inventory in Storage Centers ^{a/}
(monthly average)



a/ April figures correspond to average of first three weeks of the month.
Source: DANE (SIPSA).

Graph 3.4
CPI for Tradable and Non-Tradable Goods, excluding Food and Regulated Items
(annual change)



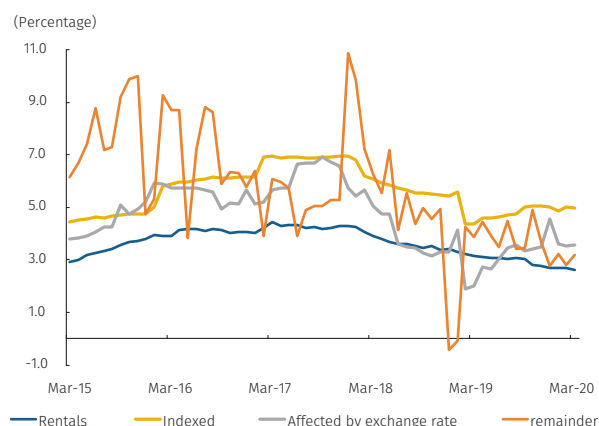
Source: DANE; calculations by the Central Bank of Colombia.

March (to 6%), above projections. The generalized rebound in prices affected the three food sub-baskets, though prices for food away from home only began to increase in March (Graph 3.2). Perishable food prices increased most significantly, and contributed most to the overall rise in food prices for the month (moving from 8.7% in December to 5.4% in February, before reaching 9.8% in March). This upturn likely had more to do with an atypical increase in demand, associated with the public health emergency, than with effects on supply, as the country's main supply centers registered historically high inventories in March (Graph 3.3). At the beginning of April, the storage supply indicator of the main food centers registered a decline that may have been related to reduced low collect which is typical of the period surrounding the Easter holiday, and a two-day closure of the main supply center in Bogotá for health reasons. The increase in the price of processed foods (6.5% annual change in March) maybe was driven by pass-through depreciation effects, which added to the impact of the extraordinary increase in demand over the last month.

Annual change for tradables excluding food and regulated items (EFR) for the first quarter remained relatively stable below 3%, while the annual adjustment in non-tradables EFR continued to fall (Graph 3.4). Annual change in tradables EFR, which grew 2.2% in December 2019, registered few adjustments in the first quarter, settling in March at 2.5%. The result was below expectations laid out in the January report. Aggregate demand, weakened by the health emergency, would have begun to offset an inflationary impulse caused by significant depreciation of the peso. Reversals in international oil prices and for other basic goods would also have offset an effect. Annual change in non-tradable EFR in March (3.3%) was below December levels (3.5%) and those forecast in the previous report, as the fall in demand created by social isolation measures, would have limited the price increases over the last month. Within this sub-basket, the annual variation in rentals maintained a downward trend with an annual adjustment in prices of 2.6% (Graph 3.5).

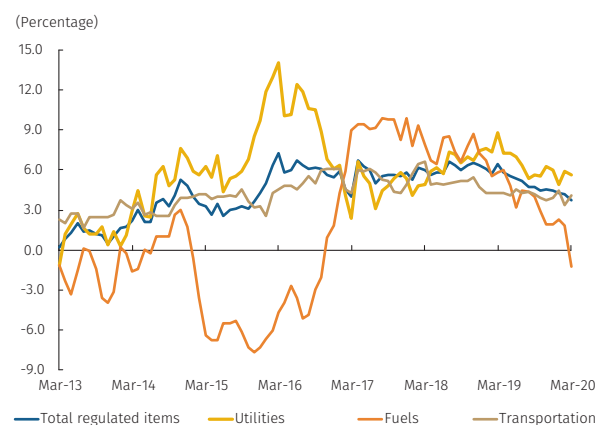
Prices for regulated items were affected by a significant decline in fuel prices in March, related to the fall in international oil prices. The annual adjustment in the CPI for regulated items (3.8%) has been decelerating since March 2019 (6.4%), but remains above 3% (Graph 3.6). Additional declines in fuel prices are expected in coming months, given that the government-decreed reduction in these prices in March was not fully transmitted and continues to pass through to the CPI. The annual change in utility rates decelerated between December (6%) and March (5.7%), in part due to the fall in oil prices (which

Graph 3.5
Components for Non-Tradable CPI excluding Food and Regulated Items (annual change)



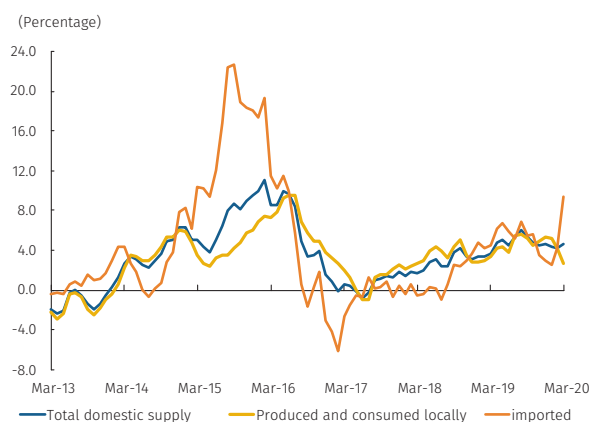
Source: DANE; calculations by the Central Bank of Colombia.

Graph 3.6
CPI for Regulated Goods and its Components (annual change)



Source: DANE; calculations by the Central Bank of Colombia.

Graph 3.7
PPI for Domestic Supply and its Components (annual change)



Source: DANE; calculations by the Central Bank of Colombia.

is reflected in gas and energy prices) and to recent measures implemented by the national government and local authorities to ease effects on household spending in light of the COVID-19 crisis.

In contrast to previous months, non-labor costs adjustment, measured by the annual change in the Producer Price Index (PPI) for domestic supply increased in March. The downward trend in annual PPI for domestic supply, observed in September of last year, ended in February (4.23%) and reversed course in March (4.62%) (Graph 3.7). This behavior was due to the strong annual adjustment in PPI for imported goods (from 4.15% in February to 9.35%), depreciation of the peso relative to the dollar. The fall in oil prices largely explains the decline in the PPI for produced and consumed goods locally (from 4.26% in February to 2.62%). It is possible that annual changes in the PPI for domestic supply will continue above those for the CPI moving forward, as peso depreciation has historically passed through to producers more quickly and to a greater degree than inflation has passed through to consumers. This is due in part because of the different baskets of goods and services involved⁸. Additionally, the pass-through effect of nominal depreciation on consumer prices may be diminished due to an observed and expected decline in private consumption and a possible reduction in sales margins.

3.2 Growth and Domestic Demand

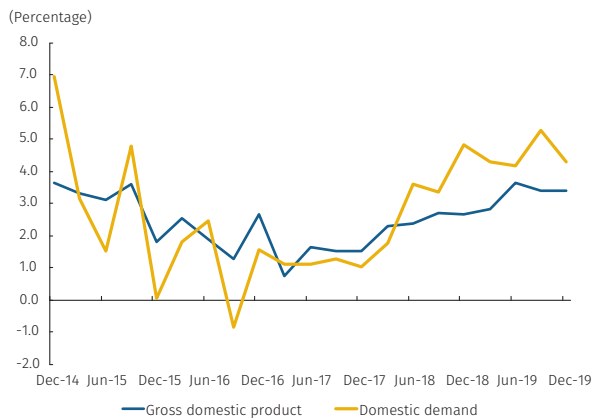
The COVID-19 pandemic and the social distancing measures taken to contain it resulted in an abrupt decline in economic activity in March, marking a significant change in output trends. At the close of 2019 and through the first two months of 2020, economic activity continued to recover from an adjustment produced by a decline in terms of trade in the middle of the last decade. As a result, first-quarter GDP growth is now expected to undergo significant deceleration, behavior that just two months ago would have been impossible to foresee.

3.2.1 GDP at the End of 2019

The Colombian economy continued to display significant dynamism in the fourth quarter of 2019. Growth for the year as a whole outpaced both 2018 levels and those for the majority of countries in Latin America. According to Colombia's national statistics agency (DANE), growth in seasonally adjusted, calendar corrected GDP closed

8 For example, the PPI contains raw materials imports that are paid in dollars and converted to pesos at the current exchange rate.

Graph 3.8
GDP and Quarterly Domestic Demand^{a/}
(annual change)

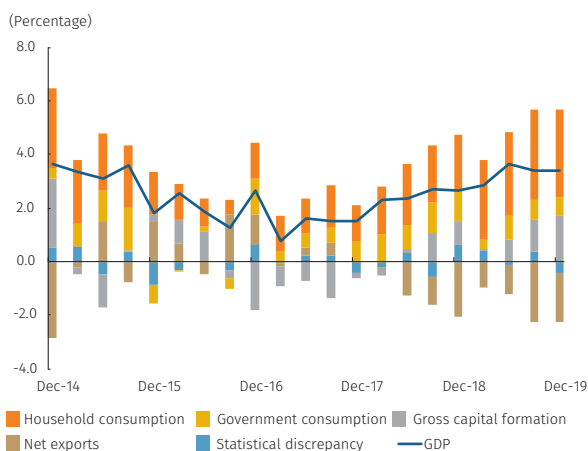


a/ seasonally adjusted and corrected for calendar effects.
Source: DANE; calculations by the Central Bank of Colombia.

the year at 3.4%, and grew through 2019 at a rate of 3.3%, higher than in 2018 (2.5%) (Graph 3.8). Colombia’s economic performance in 2019, which equals the estimated growth rate in the long run for the country, was its best since the end of an upward cycle in raw materials prices in 2014.

Domestic demand was the most significant driver of dynamism in 2019 (Graph 3.9), and continued to show significant growth at the close of the year, increasing above 4% for the fifth consecutive quarter. Domestic demand increased 4.5% for the year as a whole. Consumption and investment displayed similar rates, and in both cases performed better than in 2018.

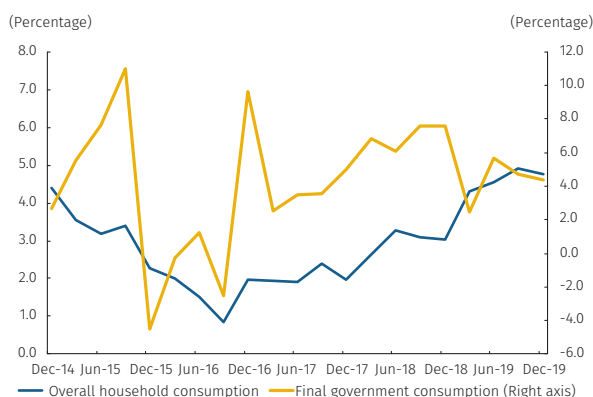
Graph 3.9
Quarterly GDP, Spending Side^{a/}
(annual change, contributions)



a/ seasonally adjusted and corrected for calendar effects.
Source: DANE; calculations by the Central Bank of Colombia.

As was the case in previous quarters, consumption growth outpaced GDP growth in the last three months of the year. This was driven by private consumption, which in the fourth quarter grew by 4.7%. Consumption increased 4.6% for the year as a whole, higher than levels registered in 2018 (3%). Relatively low interest rates and ample credit availability help explain the positive performance of household consumption. Strong growth in remittances from workers abroad (which increased income available to households) and immigration were also factors. For its part, public consumption grew significantly in 2019 (4.3%), driven by dynamic spending by local and regional governments in the last year of respective administrations. Nevertheless, growth decelerated compared to 2018, in line with fiscal rule compliance (Graph 3.10). Dynamism in overall consumption in the fourth quarter (4.6%) was better than the technical staff’s forecast in its last report.

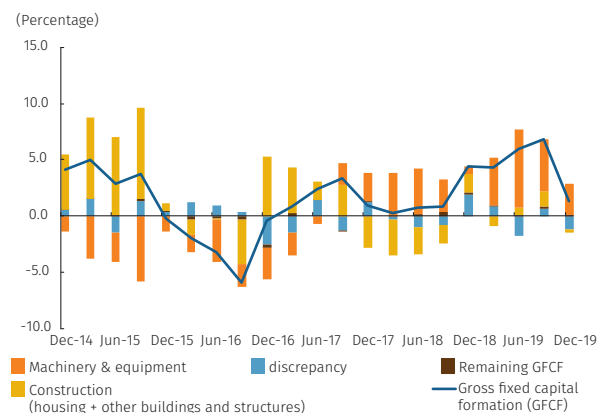
Graph 3.10
Overall Household and General Government Consumption^{a/}
(annual change)



a/ seasonally adjusted and corrected for calendar effects.
Source: DANE, calculations by the Central Bank of Colombia.

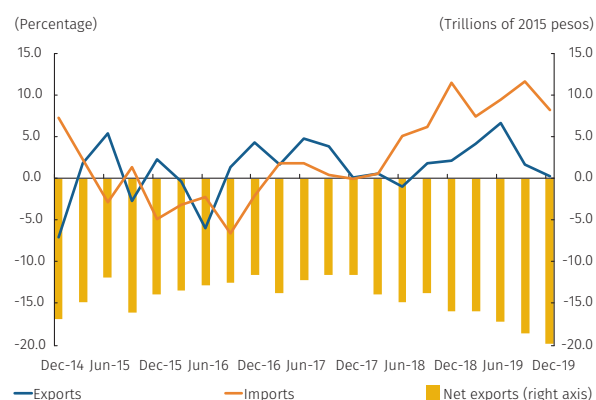
Deceleration at the end of the year suggests that the significant increase in investment observed in 2019 had a transitory element in the second and third quarters. All investment components registered growth in 2019 with the notable exception of housing, which has been in decline since 2016. Investment in machinery and equipment, and especially dynamism in spending on transportation equipment, drove investment performance through the course of the year (3.11). Much of this was made possible by the stimulus effects of the Financial Act of 2018 (*Ley de Financiamiento*) and the renewal of public transport fleets in multiple cities. Nevertheless, deceleration in machinery and equipment investment in the fourth quarter suggests that part of the previous growth had, as expected, been temporary. Construction investment performance, meanwhile, was mixed. Housing contracted amid a persistent excess in supply and moderate price increases, while, after a decline observed in 2018, investment in other buildings and structures recovered in line with public works construction.

Graph 3.11
Quarterly Gross Fixed Capital Formation^{a/}
(annual change, contributions)



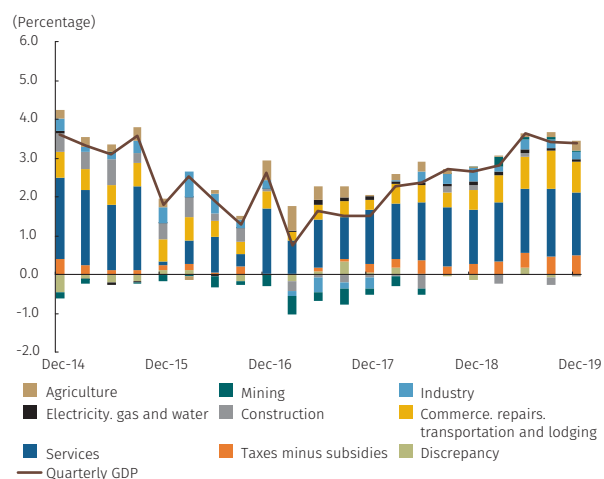
a/ seasonally adjusted and corrected for calendar effects.
Source: DANE; calculations by the Central Bank of Colombia.

Graph 3.12
Exports, Imports, and Trade Balance^{a/}
(annual change and trillions of 2015 pesos)



a/ seasonally adjusted and corrected for calendar effects.
Source: DANE; calculations by the Central Bank of Colombia.

Graph 3.13
Quarterly GDP, Supply Side^{a/}
(annual change and contributions)



a/ seasonally adjusted and corrected for calendar effects.
Source: DANE; calculations by the Central Bank of Colombia.

Exports, which had shown strong growth in the first half of 2019, decelerated in the second half and registered a decline at the end of the year. Moderation in the rate of growth in export sales was due primarily to a decline in oil and refined products exports in the fourth quarter of 2019, which partially offset performance at the beginning of the year. For 2019 as a whole, exports accelerated compared to 2018, with dynamism in coffee, gold, and services exports. Coal exports moderated their decline by volume for the year as well. Lower growth among Colombia's trade partners was a limiting factor in the performance of sales abroad.

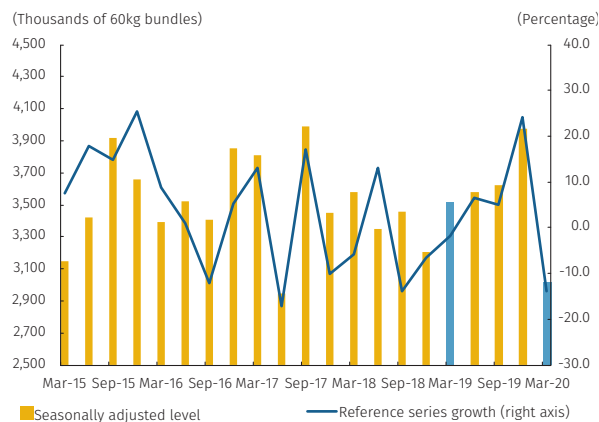
Imports gained ground as a contributing factor to GDP through 2019, though their growth slowed in the fourth quarter. Import contributions to GDP accelerated, growing at a rate of 9.2%. This performance was consistent with significant domestic demand for imported capital goods. As a result, the trade deficit in constant peso prices grew compared to 2018 levels (Graph 3.12). Nevertheless, at the end of 2019 international purchases decelerated as a result of reduced dynamism in the investment component of imports.

Public administration, education and health, trade, transportation and lodging, and financial and insurance activities showed the best supply-side performance in the fourth quarter and for 2019 as a whole (Graph 3.13). Retail in particular benefited from strong domestic demand and an increase in tourists and foreign migrants.

Other sectors showed positive but less significant growth, except for construction, which contracted. Oil, gas, and gold production, the last of which was driven by a significant increase in international prices, enabled moderate growth in mining. Coal production stagnated over the course of the year, affected by supply shocks, though it did show a positive annual growth rate in the fourth quarter thanks to a low base of comparison. Industrial manufacturing grew slightly (1.6% in the last quarter and for the year as a whole), similar to its performance in 2018. Oil refining contracted overall, affected by maintenance at the Cartagena refinery, but underwent two quarterly recoveries over the course of the year.

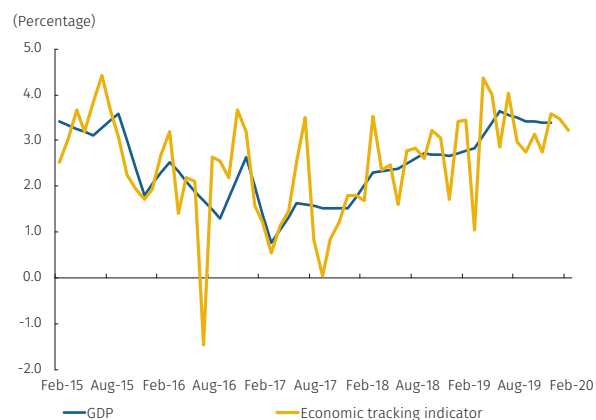
An increase in coffee production benefited agricultural sector performance at the end of 2019, though the sector grew only moderately (2%) over the course of the year. According to the National Federation of Coffee Growers, coffee production in the fourth quarter of 2019 was very positive, reaching 4.5 million bundles (Graph 3.14), an annual growth rate of 24.1%. That said, the performance of other cultivated goods and, to a lesser extent, livestock offset coffee performance to a significant degree.

Graph 3.14
Coffee Production
(quarterly and annual change)



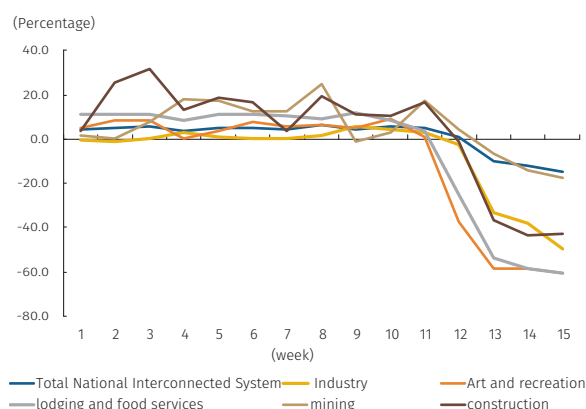
Source: National Federation of Coffee Growers; calculations by the Central Bank of Colombia.

Graph 3.15
GDP and Economic Tracking Indicator^{a/}
(annual change)



a/ seasonally adjusted and corrected for calendar effects.
Source: DANE; calculations by the Central Bank of Colombia.

Graph 3.16
Weekly Energy Demand, 2020
(total and unregulated by sector; annual change)



Note: annual change is calculated by equivalent weeks in 2019 and 2020, using Sunday as the first day of the week. Thus weeks 13 and 14 for 2020 comprise March 22-28 and March 29-April 4, respectively, and the corresponding weeks in 2019 comprise March 24-30 and March 31-April 6.
Source: XM; calculations by the Central Bank of Colombia.

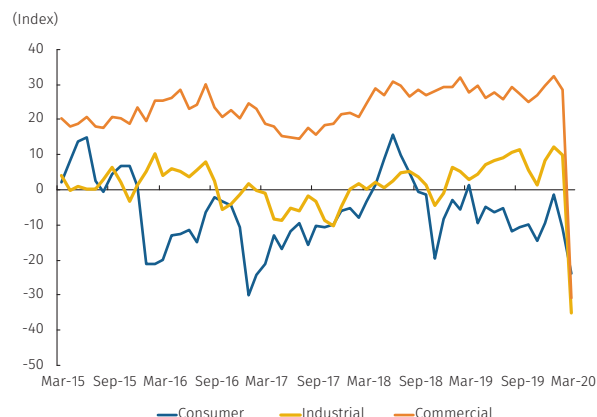
Construction was the only significant component of supply that contracted, both in the year as a whole and in the fourth quarter, as a result of a considerable decline in building construction. While public works saw their biggest expansion since 2014, driven primarily by the construction of highways, bridges, and tunnels associated with 4G construction projects and concessions, as well as inter-city roadwork, the building of residential and non-residential buildings underwent a pronounced decline in 2019 (-7.7%), with negative figures in each quarter of the year.

3.2.2 Early 2020 and the first Impacts of the Pandemic

Indicators available for the first two months of 2020 suggest that domestic demand maintained its strong rate of growth (especially in consumption), as estimated economic performance for the first quarter was better than forecast in the previous report (3.4%). DANE's economic tracking indicator registered average annual growth of 3.3% (in its seasonally adjusted and calendar corrected series) for January-February, a rate higher than the 3.2% seen in the fourth quarter of 2019 (Graph 3.15). Seasonally adjusted retail sales excluding fuel registered annual growth of 7.7% for the same period, representing an acceleration compared to 6.7% in the fourth quarter of 2019. Real industrial production grew at an annual average of 3% in January and February, above the 0.8% at the end of 2019. Average bi-monthly growth for the same period for total energy demand was 5%, compared to 3.7% in the fourth quarter.

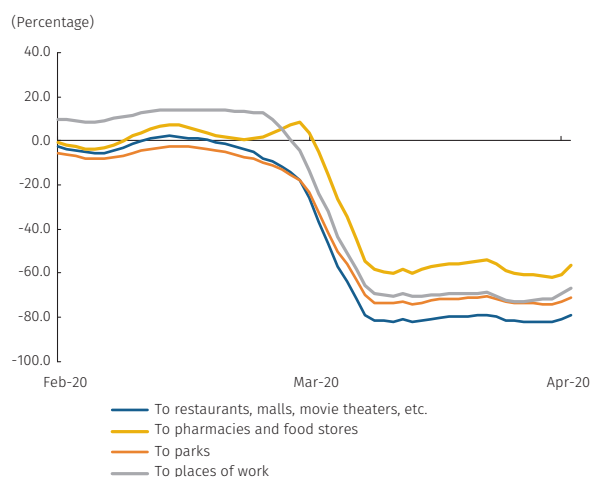
The above trends experienced a sharp disruption in March, as the effects of the COVID-19 public health emergency began to take hold. Total energy demand fell 0.6% in March, registering below -9% in the last two weeks of the month (weeks 13 and 14) (Graph 3.16). Various components of unregulated demand for energy shrunk in that period, whereas lodging and food services, cultural activities, and entertainment and recreation also showed pronounced declines. Consumer, industrial, and commercial confidence weakened considerably in the month, according to measurements by Fedesarrollo (Graph 3.17). The number of matriculated vehicles also fell (-38.9%), according to the RUNT transportation database. Commercial transactions declined at the end of the month, according to figures from various commercial banks. The Central Bank's regional economic pulse

Graph 3.17
Consumer, Industrial, and Commercial Confidence Indices



Source: Fedesarrollo.

Graph 3.18
Mobility Trend Reports in Colombia separated by Destination



Note: seven-day moving average
Sources: Google LLC "Google COVID-19 Community Mobility Reports: <https://www.google.com/covid19/mobility/> Accessed: <29/04/2020>

indicator⁹ and various mobility showed similar results (Graph 3.18).

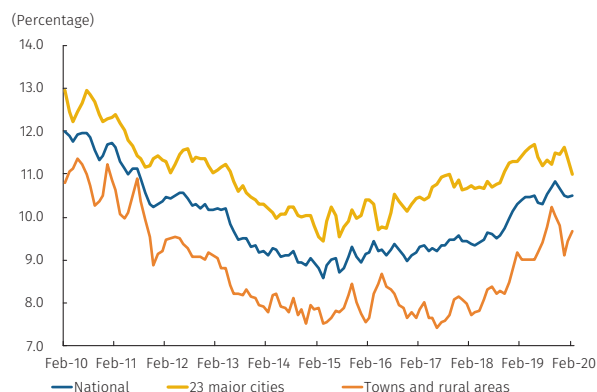
Increased risk of contagion began to affect consumer behavior at the beginning of March, and was reflected in changes in individual spending patterns. Consumers on average to privilege basic necessities, such as food, medicine, and cleaning products, rather than the purchase of durable and semi-durable goods, according to data from financial institutions. Consumption in entertainment, restaurants, and hotels also dropped. This was reinforced by government prohibitions on large events and calls for the reduction of social activities on March 12. These trends continued with regional mandatory quarantine drills and mandatory preventive isolation that began at the national level on March 25.

GDP growth estimates under current conditions are complex and subject to an unusual degree of uncertainty. Limited real-time information, a multiplicity of influencing factors, the absence of comparable historical data, and a lack of adequate tools makes measuring economic dynamism under current circumstances exceedingly difficult. Estimates in this report use an input-output matrix to account for the degree to which social isolation and confinement measures are having an effect on overall demand and consumption in intermediate sectors (see Box 1).

The Bank's technical staff estimates that GDP in the first quarter expanded by an annual rate of 2%, considering the effects of mandatory nationwide social isolation measures for seven days in March and information about spending behavior over the period. The estimate assumes that the bulk of the economic impact of COVID-19 in March affected private in private consumption and, to a lesser extent, imports and exports. The shock is not believed to have affected investment and public consumption to a significant degree over the period. By sector, the areas most affected by the early preventive isolation measures were likely artistic and recreational activities, lodging, and food services. As a result, social isolation in the first quarter of 2020 is believed to have led to significant deceleration and an eventual decline in domestic demand, though at annual rates that still outpaced those for GDP. The current second-quarter GDP growth project requires a significant downward revision

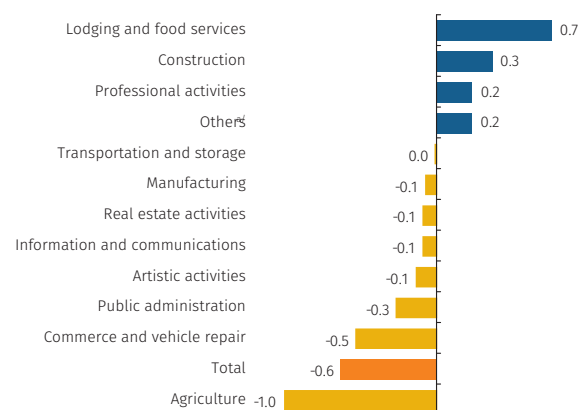
9 National and regional indicators included in the Central Bank's regional economic pulse are based on surveys conducted at different regional offices around the country. These are given to business leaders, directors and administrators of commercial entities, financial agents, industrial workers, union members, and other regional contacts. Publicly available information is also used.

Graph 3.19
Unemployment Rate (10 Feb to 20 Feb)
(seasonally adjusted moving quarter)



Source: DANE (GEIH); calculations by the Central Bank of Colombia.

Graph 3.20
Contribution to Annual Change in Employment
National Total (19 Feb to 20 Feb)



a/ Includes activities associated with mining extraction and quarries, electricity, gas and water supply, and financial and insurance activities
Source: DANE (GIHS); calculations by the Central Bank of Colombia.

compared to the forecast presented in the previous report (above 3%).

3.3 Labor Market¹⁰

The national unemployment rate remained stable in February 2020, before the COVID-19 health emergency affected the country, with a moderate recovery in major cities and a deterioration in rural areas. Total national unemployment rate (UR) at the end of last year was 10.5%¹¹, with a variation of 0.4 pp and -0.2 pp compared to the levels observed in December 2018 and the third quarter of 2019, respectively. In February 2020, this indicator showed relative stability at the national level, though with a heterogeneous performance based on geographical location (Graph 3.19). In the case of 23 largest cities and their metropolitan areas, the UR had dropped 0.6 pp compared with December 2019, and its behavior was in line with a higher economic growth (3.4% in the fourth quarter of 2019) and recent signs of recovery, according to the vacancy and hiring rates at that time. By contrast, the labor market in towns and rural areas continued to deteriorate, registering an increase in the UR because of the contraction in labor demand, measured by the employment rate (ER). This increase had been partly offset by reductions in labor supply in these areas

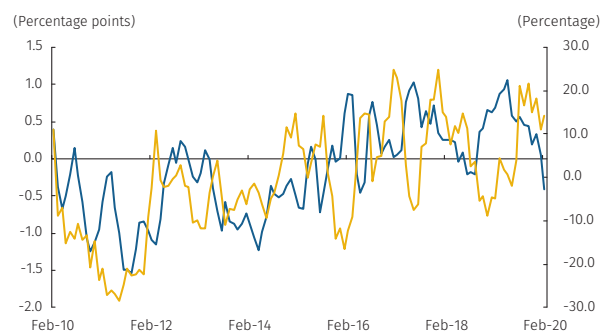
Before the public health emergency, job creation was concentrated in the lodging, food services, and construction sectors, while employment in agricultural sector had experienced the most significant contraction. For the moving quarter ending in February, observed employment growth in urban areas was in large part led by the formal sector, after their hiring rates had remained above separations rates for several months. Informal employment in urban areas also improved. The generation of new employment in the country was led by lodging, food services and construction sectors, which together contributed 1.1 pp to annual growth of employment (Graph 3.20). Nevertheless, the number of employed people at the national level registered a decline of 0.6% compared to the same period in 2019. This was a result, primarily, of a contraction in rural employment in the agricultural sector, explained by activities

10 Publication of labor market data for March coincided with the BDBR's April ordinary meeting.

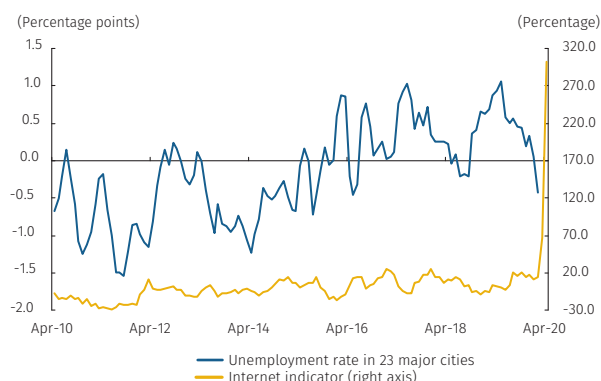
11 The labor market series is affected by seasonality, meaning that values are systematically higher or lower depending on the time of year. This phenomenon can be corrected through statistical techniques that enable comparisons between months in a single year. For that reason, the information presented in this section is seasonally adjusted and corresponds to the moving quarter of the series, given the statistical representativeness of the figures for some geographic domains in the GEIH.

Graph 3.21
Unemployment Rate (Annual Change in 23 Cities) and
Internet Indicator^{a/}

A. Data to February 2020



B. Data to April 2020



Note: with information available to April 24, 2020, the search index showed annual growth of 301.8% compared to April 2019.
a/ This indicator reflects search interest for the word “unemployment” relative to maximum levels on the graph in Colombia since 2007.
Sources: DANE (GEIH), Google Trends; calculations by the Central Bank of Colombia.

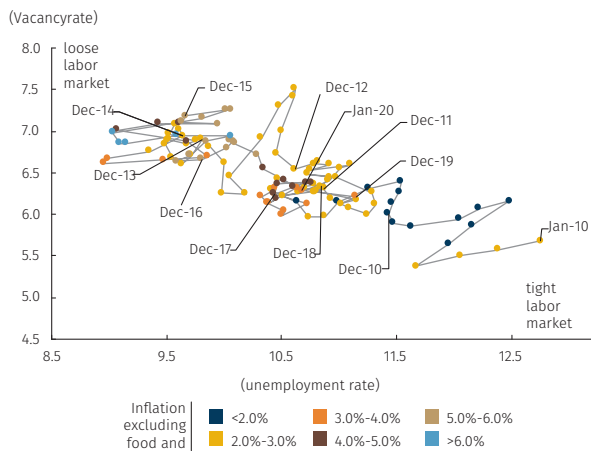
associated with mixed exploitation (agriculture and animal husbandry), support services and livestock. Employment related to cattle breeding had been affected by Colombia’s decertification, for some periods, as being free of foot-and-mouth disease, and due to the closure of some slaughterhouses since 2016.

The measures taken by the country to counteract the effects of the Covid-19 pandemic would significantly change the conditions of labor market, particularly in terms of urban and informal employment. The declaration of a health emergency after confirming the presence of Covid-19 in Colombia, and in particular confinement measures intended to contain the spread of the virus, would imply unprecedented adverse effects on economic dynamism and, therefore, on the pace of job creation and destruction in the country. Many sectors have been affected by mobility restrictions, but commercial activity, lodging, transportation, and entertainment are expected to experience the most significant impact. Together, those sectors represented 43% of national employment and 48% of urban employment in February 2020. In contrast to other periods of economic contraction, job losses are expected to be reflected not only in an increase in the unemployment rate, but also in an increase in the rate of inactivity, due to the impossibility of searching job. In addition, social isolation measures and restrictions on mobility would prevent informal and self-employment from acting as a buffer. Indeed, these segments represent some of the most affected and vulnerable workers given the outbreak’s effects on income. There is high uncertainty about the magnitude of the impact that this emergency will have on employment, since it depends on the depth and duration of the contraction in economic activity, which in turn is a function of the intensity and length of the isolation measures. In any case, real-time figures on labor market activity in other countries (numbers of unemployment benefit claims, internet searches, social security applications, etc.) already show significant signs of deterioration in their labor markets. In Colombia, indicators show a significant increase in internet searches for words associated with unemployment (Graph 3.21)¹².

The effects of the health emergency and its implications on employment suggest a loose urban labor market that will not be a source of inflationary pressures due

12 For more detailed analysis on the recent evolution of the labor market, see the Central Bank of Colombia’s Labor Market Report, available at <http://www.banrep.gov.co/es/reporte-mercado-laboral>, the current edition of which is focused on possible effects of COVID-19 on the principal indicators of the Colombian labor market.

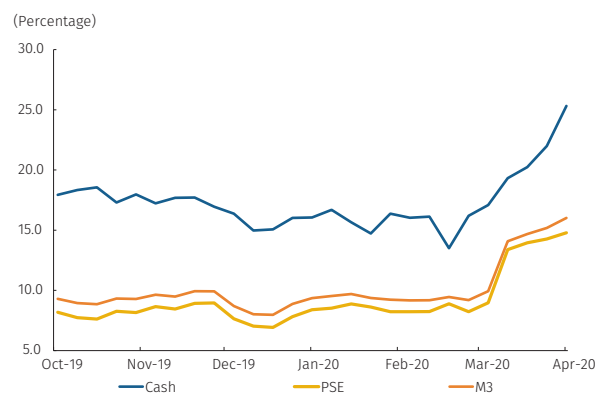
Graph 3.22
Beveridge Curve for 7 Major Cities



Note: seasonally adjusted, moving quarter, using the rate of vacancies estimated by the hiring methodology of the GEIH. See: Morales, L. F., y Lobo, J. (2017). *Estimating Vacancies from Firms' Hiring behavior: The Case of a Developing Economy*. Borradores de Economía, No. 1017. Source: DANE (GEIH), Central Bank of Colombia.

to salary costs. Labor market tightness, defined as the relationship between vacancies and the number of unemployed, increased slightly through January 2020. Set on the Beveridge curve (Graph 3.22), which shows the relationship between the vacancy rate and the unemployment rate, the labor market to that point was around its mid-point, under which remained loose. As the health emergency would involve a deterioration of the labor market and a transitory decrease in the labor income of some segments, this suggests a loose labor market through 2020, which will not be a source of inflationary pressure in the form of increased salary costs. Nevertheless, growing uncertainty about the depth and duration of the crisis' effects on employment leave a high degree of uncertainty about the magnitude of the slack in the labor market in 2020.

Graph 3.23
Weekly Monetary Aggregates
(annual change)



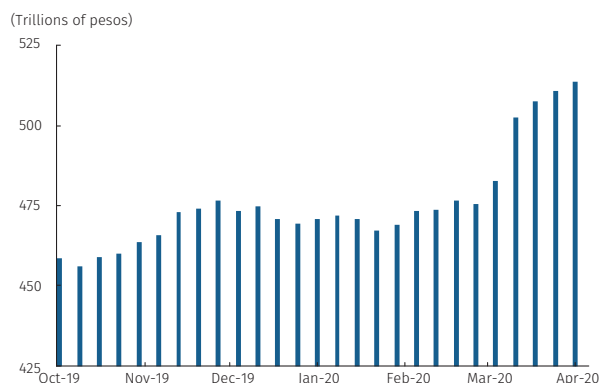
Source: Office of the Financial Superintendent of Colombia; calculations by the Central Bank of Colombia.

3.4 Monetary and Financial Markets

An increase in sight deposits and cash holdings reflects increased liquidity demand from diverse economic agents since the end of March. (Graphs 3.23 and 3.24).

The dual negative shocks of COVID-19 and the fall in oil prices have prompted some economic agents to seek more liquidity, which has been reflected in higher rates of growth in checking and savings accounts and cash holdings, while the demand for term deposits (CDs and bonds) has moderated significantly¹³.

Graph 3.24
Liabilities subject to Reserve Requirements (PSE)
(balance)



Source: Office of the Financial Superintendent of Colombia; calculations by the Central Bank of Colombia.

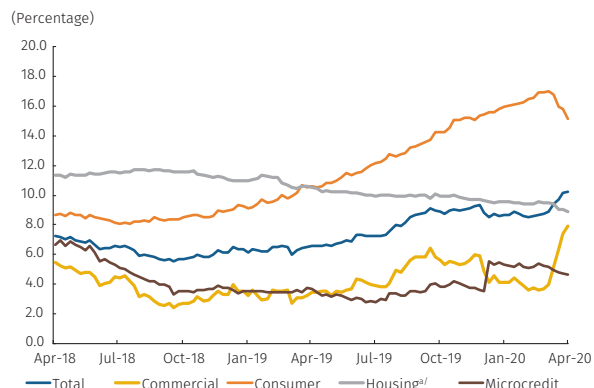
Business loans accelerated in March, while consumer loans disbursements declined (Graph 3.25).

The shock generated by the health crisis has had an impact on household credit demand, which has led to a deceleration of consumer and housing loans. Through the second quarter so far, commercial credit has experienced a significant upturn, likely related to increased demand for liquid resources on behalf of business sectors. In this environment, household interest rates have ceased to follow recent trends, save for a decline in credit card rates (Graph 3.26 and 3.27). Preferential commercial loan and construction interest rates increased, as other commercial interest rates remained relatively stable.

The Central Bank has significantly increased liquidity to guarantee the proper functioning of the payment system and public debt and credit markets. The Bank's policies to promote peso liquidity have concentrated on five fronts. First, a substantial increase in the amounts

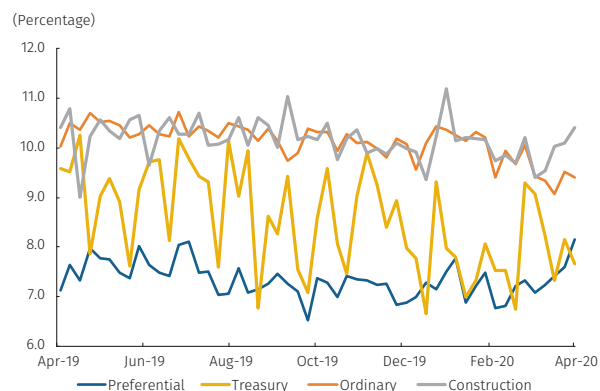
¹³ Between February 28 and April 10, annual growth in checking accounts and savings deposits accelerated from 8.3% to 32.0% and from 10.7% to 22.4% respectively. In the same period cash holdings grew from 13.5% to 25.3%. For its part, growth in term deposits grew from 6.9% to 3.5%.

Graph 3.25
Weekly Gross Portfolio in National Currency
(annual change)



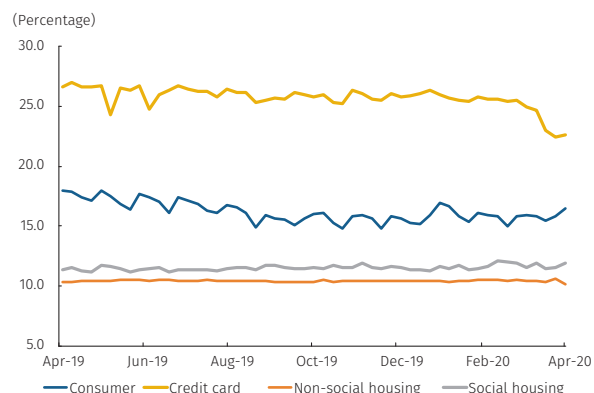
a/ housing adjusted: bank book plus securitizations
Source: Office of the Financial Superintendent of Colombia; calculations by the Central Bank of Colombia.

Graph 3.26
Weekly Commercial Interest Rates
(weighted averages)



Source: Office of the Financial Superintendent of Colombia; calculations by the Central Bank of Colombia.

Graph 3.27
Weekly Household Interest Rates
(weighted averages)



Source: Office of the Financial Superintendent of Colombia; calculations by the Central Bank of Colombia.

and maturities to which financial agents have access to liquidity, with the goal of ensuring that payments remain on course. Second, allowing for the use of qualified private debt securities (such as CDs, regular bonds, and commercial paper) in temporary expansion operations with the goal of widening the group of eligible assets to provide liquidity to the financial system. Third, allowing access to repos auctions to a wider group of financial firms. Fourth, authorizing the permanent injection of liquidity into the economy through the purchase of public debt securities and bonds issued by credit institutions (term deposit certificates and ordinary bonds). Finally, in accordance with policies aimed at providing more liquidity, the Bank reduced reserve requirements and allowed the use of so-called Solidarity Certificates in liquidity operations. These measures have helped maintain ample liquidity in the system, with one-day interests rate near, though occasionally below, the policy rate in the second quarter so far¹⁴. A detailed analysis of the measures adopted by the BDBR, the national government, and the Financial Superintendent are presented in Box 2.

Liquidity provided by the Central Bank, a lower policy rate, and measures by the national government to incentivize credit availability are aimed at mitigating the negative shocks produced by the health crisis. In addition to the liquidity measures adopted by the Central Bank, the national government has opened new lines of credit and a guarantees program to support businesses with working capital and liability consolidation¹⁵. What's more, the government, through the National Fund for Credit Guarantees, will offer hedges of 70% and 90% of the value of credit provided to independent workers, fintech firms, and micro, small, and medium-sized enterprises. Finally, the Financial Superintendent has temporarily implemented regulations to ease financial burden, make solvency requirements more flexible, and enable electronic payments¹⁶. Taken together, these measures should help mitigate negative shocks to the Colombian economy, guaranteeing ample levels of liquidity and favorable credit conditions.

14 Between 19 March and 17 April, the averages for the overnight policy rate (OPR) and the interbank reference indicator were below 11 bp and 12 bp, respectively, compared to levels registered for the policy rate.

15 For more detail see: https://www.supersociedades.gov.co/delegatura_aec/Documents/2020/CUADRO-LINEAS-CREDITO-OK.pdf, and <https://www.bancoldex.com/soluciones-financieras/lineas-de-credito> <https://innpulsacolombia.com/es/entrada/actualizado-ministerio-de-comercio-e-innpulsa-colombia-presentan-lineas-de-credito>

16 External memos 7-10, 14 issued between 17 and 30 March.

Annex 1

Macroeconomic Projections from Local and International Analysts

This annex presents a summary of the most recent projections provided by local and foreign analysts relating to primary economic indicators for 2020 and 2021. Participants had information current to April 20, 2020.

1. 2020 Projections

On average, local analysts project a contraction in economic activity of 2.2%. Average analyst expecta-

tions in the previous quarter's Monetary Policy Report projected growth of 3.2%. Foreign analysts projected an average GDP contraction of 1.5%.

Local analysts forecast average inflation at 3.4% at the end of the year, slightly higher than projected in the January report (3.3%). Foreign analysts project 3.2% inflation to finish the year. Both projections are slightly above the 3% target rate set by the Central Bank's Board of Directors (BDBR).

Box A1
2020 Projections

	Real GDP Growth (percentage)	Inflation CPI	Year-end nominal exchange rate	Nominal DTF (percentage)	Fiscal deficit (percentage of GDP)	Unemployment rate in thirteen cities (percentage)
Local analysts						
Alianza Valores ^{a/}	-4.8	4.0	4,000	3.2	6.3	28.0
ANIF	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Banco de Bogotá ^{a/}	-2.0	2.7	4,000	3.5	5.2	25.0
Bancolombia	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
BBVA Colombia ^{a/}	-3.1	3.4	3,840	3.0	5.8	15.3
BTG Pactual	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Corficolombiana ^{a/}	0.0	3.4	3,755	3.3	4.8	n.d.
Corredores Davivienda ^{a/b/}	-2.2	3.0	3,750	2.5	5.0	n.d.
Credicorp Capital ^{a/c/}	-1.7	3.6	3,500	3.1	5.5	16.0
Davivienda ^{a/}	-2.2	3.0	3,750	2.5	5.0	n.d.
Fedesarrollo	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Itaú ^{a/d/}	-1.4	3.7	4,150	3.0	4.1	12.0
Ultraserfinco ^{e/}	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Average	-2.2	3.4	3,843	3.0	5.2	19.3
Foreign Analysts						
Citigroup	0.5	n.d.	n.d.	n.d.	n.d.	n.d.
Deutsche Bank	-1.5	n.d.	n.d.	n.d.	n.d.	n.d.
Goldman Sachs	-2.5	2.9	3,800	n.d.	5.3	n.d.
JP Morgan	-2.5	3.4	3,950	n.d.	3.0	n.d.
Average	-1.5	3.2	3,875	n.d.	4.2	n.d.

n.a.: not available

a/ The deficit projection corresponds to the GNC

b/ Formerly Corredores Asociados

c/ Formerly Correal

d/ Formerly Corpbanca, until June 2017

e/ Formerly Ultrabursátiles

Source: Central Bank of Colombia (Electronic Survey)

Box A2
2021 Projections

	Real GDP Growth	Inflation CPI	Year-end nominal exchange rate
	(percentage)		
Local analysts			
Alianza Valores	4.2	3.6	3,750
ANIF	n.d.	n.d.	n.d.
Banco de Bogotá	3.0	3.0	3,950
Bancolombia	n.d.	n.d.	n.d.
BBVA Colombia	3.9	2.8	3,430
BGT Pactual	n.d.	n.d.	n.d.
Corficolombiana	6.3	3.0	3,557
Corredores Davivienda ^{a/}	n.d.	n.d.	n.d.
Credicorp Capital ^{b/}	2.5	2.8	3,300
Davivienda	n.d.	n.d.	n.d.
Fedesarrollo	n.d.	n.d.	n.d.
Itaú ^{c/}	4.9	3.0	3,950
Ultraserfinco ^{d/}	n.d.	n.d.	n.d.
Average	4.1	3.0	3,656
Foreign Analysts			
Citigroup	n.d.	n.d.	n.d.
Deutsche Bank	3.5	n.d.	n.d.
Goldman Sachs	4.5	3.0	3,200
JP Morgan	2.4	n.d.	n.d.
Average	3.5	3.0	3,200

a/ Formerly Corredores Asociados

b/ Formerly Correval

c/ Formerly Corpbanca, until June 2017

d/ Formerly Ultrabursátiles

n.a.: not available

Source: Central Bank of Colombia (electronic survey).

Local analysts expect the market exchange rate (MER) to end the year at an average of COP 3,843, higher than the COP 3,293 projected in the previous report. Foreign analysts project an average MER close to COP 3,875 at the end the year.

Local analysts forecast the fixed-term deposit rate at an average of 3%, and the unemployment rate at 19.3%.

2. 2021 Projections

On average, local analysts project economic growth for 2021 at 4.1%, while international analysts project 3.5%. Local and international analysts both project end-of-period price increase of 3%. Local analysis firms project the nominal exchange rate, on average, at COP 3,656, whereas international firms' average estimate was COP 3,200.

Annex 2

Primary Macroeconomic Forecast Variables

		Years										
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Exogenous variables												
External ^{a/}												
Trade partners GDP ^{b/}	Percentage, annual change, seasonally adjusted	4.8	5.1	4.0	3.6	2.8	2.1	1.6	2.6	2.5	1.4	[-9.0; -4.0]
Oil price (Benchmark Brent)	Dollars per barrel, average for period	80	111	112	109	99	54	45	55	72	64	[25; 45]
Federal funds (Fed) effective interest rate	Percentage, average for period	0.18	0.1	0.14	0.11	0.09	0.13	0.4	1	1.83	2.16	0.41
credit default swaps at 5 years for Colombia	Basis points, average for period	135	131	119	113	101	184	212	129	114	99	[200; 400]
Domestic												
Colombia real neutral interest rate	Percentage, average for period	1.6	1.5	1.3	1.0	0.9	1.1	1.3	1.1	1.3	1.2	
potential (trend) GDP	Percentage, annual change	4.5	4.6	4.5	4.4	4.1	3.4	2.8	2.5	2.5	2.7	
Endogenous variables												
Prices												
CPI Total	Percentage, annual change, end of period	3.17	3.73	2.44	1.94	3.66	6.77	5.75	4.09	3.18	3.80	[1.0; 3.0]
CPI excluding food ^{c/}	Percentage, annual change, end of period	2.82	3.13	2.40	2.36	3.26	5.17	5.14	5.01	3.48	3.37	
CPI tradables	Percentage, annual change, end of period	-0.29	0.80	0.77	1.40	2.03	7.09	5.31	3.79	1.09	2.24	
CPI non-tradables	Percentage, annual change, end of period	3.52	3.63	3.92	3.76	3.38	4.21	4.85	5.49	3.79	3.49	
CPI regulated items	Percentage, annual change, end of period	6.64	5.81	1.91	1.05	4.84	4.28	5.44	5.86	6.37	4.48	
CPI food ^{d/}	Percentage, annual change, end of period	4.09	5.27	2.52	0.86	4.69	10.85	7.22	1.92	2.43	5.20	
CPI perishables	Percentage, annual change, end of period	10.96	7.73	-3.90	-0.16	16.74	26.03	-6.63	5.84	8.88	8.66	
CPI processed	Percentage, annual change, end of period	2.31	4.50	2.83	-0.24	2.54	9.62	10.74	-0.91	-0.08	5.04	
CPI food away from home	Percentage, annual change, end of period	4.52	5.60	4.90	3.26	3.51	5.95	8.54	5.21	3.68	4.38	
Core inflation indicators												
CPI excluding food	Percentage, annual change, end of period	2.82	3.13	2.40	2.36	3.26	5.17	5.14	5.01	3.48	3.37	
Core 20 CPI	Percentage, annual change, end of period	3.17	3.92	3.23	2.72	3.42	5.22	6.18	4.87	3.23	3.42	
CPI excluding perishable food, fuel and utilities	Percentage, annual change, end of period	2.65	3.18	3.02	2.19	2.76	5.93	6.03	4.02	2.76	3.46	
CPI excluding food and regulated items ^{e/}	Percentage, annual change, end of period	1.80	2.38	2.55	2.74	2.81	5.42	5.05	4.76	2.64	3.10	[1.0; 3.0]
Average of all core inflation indicators	Percentage, annual change, end of period	2.61	3.15	2.80	2.50	3.06	5.43	5.60	4.66	3.03	3.34	
MER	Pesos per dollar, average for period	1,899	1,848	1,798	1,868	2,000	2,741	3,055	2,951	2,955	3,282	
Inflation gap in the real interest rate	Percentage, average for period	-3.3	-1.6	-3.4	-1.0	-0.6	8.6	2.1	-1.9	-1.0	3.4	
Economic activity												
Gross domestic product	Percentage, annual change, s.a.c.e.	4.5	6.9	3.9	5.1	4.5	3.0	2.1	1.4	2.5	3.3	[-7.0; -2.0]
Final consumption spending	Percentage, annual change, s.a.c.e.	5.1	5.7	5.5	5.4	4.3	3.4	1.6	2.3	3.7	4.6	
final household consumption spending	Percentage, annual change, s.a.c.e.	5.1	5.5	5.6	4.6	4.2	3.1	1.6	2.1	3.0	4.6	
final government overhead spending	Percentage, annual change, s.a.c.e.	5.2	6.5	4.8	8.9	4.7	4.9	1.8	3.6	7.0	4.3	
Gross capital formation	Percentage, annual change, s.a.c.e.	9.6	18.5	2.9	7.8	12.0	-1.2	-0.2	-3.2	2.1	4.3	
gross fixed capital formation	Percentage, annual change, s.a.c.e.	7.1	12.2	3.3	8.5	9.2	2.8	-2.9	1.9	1.5	4.6	
Housing	Percentage, annual change, s.a.c.e.	-3.8	2.4	-0.7	6.4	10.4	9.5	-0.2	-1.9	-0.4	-7.2	
Other buildings and structures	Percentage, annual change, s.a.c.e.	5.1	-0.9	4.4	12.3	9.6	10.2	0.0	4.6	-3.3	4.5	
Machinery and equipment	Percentage, annual change, s.a.c.e.	15.6	29.3	4.0	4.8	9.2	-9.3	-7.9	1.4	9.4	14.3	
Cultivated biological resources	Percentage, annual change, s.a.c.e.	2.8	11.2	-5.7	6.6	-1.3	2.3	13.1	0.3	5.6	0.5	
Intellectual property products	Percentage, annual change, s.a.c.e.	-0.5	13.1	8.0	19.6	5.1	1.3	-12.0	1.2	1.5	2.6	
Domestic demand	Percentage, annual change, s.a.c.e.	6.0	8.4	4.9	5.9	6.0	2.4	1.2	1.1	3.4	4.5	
Exports	Percentage, annual change, s.a.c.e.	2.1	12.3	4.5	4.7	-0.3	1.7	-0.2	2.6	0.9	3.1	
Imports	Percentage, annual change, s.a.c.e.	10.8	20.2	9.4	8.5	7.8	-1.1	-3.5	1.0	5.8	9.2	
Output gap ^{f/}	Percentage	-1.8	-0.3	0.5	0.0	1.0	0.8	0.1	-0.9	-1.2	-0.8	[-7.0; -3.0]
Short-term indicators												
Real industrial production	Percentage, annual change, seasonally adjusted	4.0	4.6	-0.2	-1.3	1.7	2.0	3.5	0.1	2.9	1.3	
Retail commerce sales, excluding food	Percentage, annual change, seasonally adjusted	13.5	10.5	3.0	4.0	9.2	2.9	1.6	-1.2	7.0	7.3	
Coffee production	Percentage, annual change in accumulated production for the period	14.2	-12.5	-0.8	40.6	11.5	16.8	0.4	-0.3	-4.5	8.8	
Oil production	Percentage, annual change, average for period	17.1	16.5	3.2	6.6	-1.9	1.6	-11.7	-3.7	1.4	2.4	
Labor Market ^{g/}												
National Total												
Unemployment rate	Percentage, seasonally adjusted, average for period	11.8	10.8	10.4	9.6	9.1	8.9	9.2	9.4	9.7	10.5	
employment rate	Percentage, seasonally adjusted, average for period	55.4	56.8	57.8	58.0	58.4	59.0	58.5	58.4	57.8	56.6	
overall participation rate	Percentage, seasonally adjusted, average for period	62.7	63.7	64.5	64.2	64.2	64.7	64.5	64.4	64.0	63.3	
Thirteen cities and metropolitan areas												
Unemployment Rate	Percentage, seasonally adjusted, average for period	12.4	11.4	11.2	10.6	9.9	9.8	10.0	10.6	10.8	11.2	
Employment rate	Percentage, seasonally adjusted, average for period	57.6	59.1	60.1	60.3	61.2	61.4	60.7	59.9	59.2	58.6	
Overall participation rate	Percentage, seasonally adjusted, average for period	65.7	66.7	67.6	67.5	67.9	68.0	67.5	67.0	66.4	66.0	
Balance of payments^{h/i/}												
Current account (A+B+C)	Millions of dollars	-8,732	-9,803	-11,362	-12,501	-19,764	-18,564	-12,036	-10,241	-13,047	-13,800	
percentage of GDP	Percentage, nominal terms	-3.0	-2.9	-3.1	-3.3	-5.2	-6.3	-4.2	-3.3	-3.9	-4.3	[-5.0; -2.0]
A. Goods and Services	millions of dollars	-2,164	636	-1,187	-3,164	-11,863	-18,267	-12,705	-8,447	-8,926	-12,167	
B. Primary income (factor income)	millions of dollars	-11,228	-15,490	-15,008	-14,224	-12,523	-5,727	-5,229	-8,405	-11,764	-10,309	
C. Secondary income (current account transfers)	millions of dollars	4,659	5,051	4,833	4,887	4,622	5,430	5,898	6,611	7,643	8,676	
Financial account (A+B+C+D)	millions of dollars	-9,332	-8,707	-11,553	-11,740	-19,292	-18,244	-12,273	-9,558	-12,415	-13,102	
Percentage of GDP	Percentage, nominal terms	-3.3	-2.6	-3.1	-3.1	-5.1	-6.2	-4.3	-3.1	-3.7	-4.1	
A. Foreign investment (I+II)	millions of dollars	-947	-6,227	-15,646	-8,558	-12,270	-7,506	-9,330	-10,147	-6,409	-11,279	
i. Foreign in Colombia (FDI)	millions of dollars	6,430	14,647	15,040	16,210	16,169	11,724	13,848	13,837	11,535	14,493	
ii. Colombian abroad	millions of dollars	5,483	8,420	-606	7,652	3,899	4,218	4,517	3,690	5,126	3,214	
B. Portfolio investment	millions of dollars	88	-6,171	-4,769	-7,438	-11,565	-9,166	-4,839	-1,617	1,297	506	
C. Other investment (loans and other credits and derivatives)	millions of dollars	-11,615	-51	3,457	-2,690	106	-1,988	1,731	1,661	-8,490	-5,662	
D. Reserve assets	millions of dollars	3,142	3,742	5,406	6,946	4,437	415	165	545	1,187	3,332	
Errors and omissions (E and O)	millions of dollars	-599	1,096	-190	761	472	320	-237	683	632	698	
Interest rates												
policy rate	Percentage, average for period	3.2	4.0	5.0	3.4	3.9	4.7	7.1	6.1	4.4	4.3	
policy rate expected by analysts ^{j/}	Percentage, average for period											3.4
IBR overnight	Percentage, average for period	3.2	4.1	5.0	3.4	3.8	4.7	7.1	6.1	4.3	4.3	
Commercial interest rate	Percentage, average for period	7.6	9.0	10.3	8.7	8.7	9.4	12.8	11.1	9.3	8.8	
Consumer interest rate	Percentage, average for period	18.0	18.2	19.2	17.9	17.3	17.2	19.2	19.4	17.9	16.5	
Mortgage rate	Percentage, average for period	13.1	13.0	13.2	11.1	11.1	11.0	12.4	11.6	10.6	10.4	

Note: In Colombia, there have been no antecedents of the negative effects of a pandemic such as Covid-19, nor of the monetary policy responses required facing such situation. This, together with the behavior of oil prices, causes the diagnosis and forecasts for the Colombian economy to be unusually uncertain. Therefore, this Report presents ranges instead of specific figures for growth forecasts, spare production capacity, and inflation. Figures in Bold correspond to a projection or assumption.

a/ The quarterly data in bold correspond to an assumed base built on the annual projection of each variable.

b/ The top 21 trade partners (excluding Venezuela) are included in calculations for non-traditional exports from Colombia in dollars.

c/ Calculations from the Central Bank of Colombia use new methodology; they exclude the division of food and sub-categories corresponding to food away from home.

d/ Calculations from the Central Bank of Colombia use new methodology; they include the division of food and sub-categories corresponding to food away from home.

e/ Calculations by Central Bank of Colombia with provisional classifications.

f/ Refers to the difference between observed GDP and potential (trend) GDP resulting from the 4G monetary policy model.

g/ Corresponds to the annual average of seasonally adjusted monthly figures.

h/ The results presented follow recommendations of the sixth version of the balance of payments manual proposed by the IMF. Consult additional information and methodological changes at <http://www.banrep.gov.co/balanza-pagos>.

i/ Results for 2018 and 2019 are preliminary.

j/ Corresponds to the median of analyst projections. These projections are calculated by taking the quarterly average of monthly responses from the survey of analyst economic expectations conducted by the Central Bank of Colombia in April 2020.

s.a.c.e.: seasonally adjusted and corrected for calendar effects.

Note: the values in bold correspond to a projection or assumption.

Annex 2 (continued)

Primary Macroeconomic Forecast Variables

		2016			
		T1	T2	T3	T4
Exogenous variables					
External ^{a/}					
Trade partners GDP ^{b/}	Percentage, annual change, seasonally adjusted	1.2	1.5	1.6	2.0
Oil price (Benchmark Brent)	Dollars per barrel, average for period	35	47	47	51
Federal funds (Fed) effective interest rate	Percentage, average for period	0.36	0.37	0.40	0.45
credit default swaps at 5 years for Colombia	Basis points, average for period	266	225	179	180
Domestic					
Colombia real neutral interest rate potential (trend) GDP	Percentage, average for period				
	Percentage, annual change				
Endogenous variables					
Prices					
CPI Total	Percentage, annual change, end of period	7.98	8.60	7.27	5.75
CPI excluding food ^{c/}	Percentage, annual change, end of period	6.20	6.31	5.92	5.14
CPI tradables	Percentage, annual change, end of period	7.38	7.90	7.20	5.31
CPI non-tradables	Percentage, annual change, end of period	4.83	4.97	4.85	4.85
CPI regulated items	Percentage, annual change, end of period	7.24	6.71	6.19	5.44
CPI food ^{d/}	Percentage, annual change, end of period	12.35	14.28	10.61	7.22
CPI perishables	Percentage, annual change, end of period	27.09	34.94	6.66	-6.63
CPI processed	Percentage, annual change, end of period	10.83	12.09	12.56	10.74
CPI food away from home	Percentage, annual change, end of period	7.53	8.11	9.18	8.54
Core inflation indicators					
CPI excluding food	Percentage, annual change, end of period	6.20	6.31	5.92	5.14
Core 20 CPI	Percentage, annual change, end of period	6.48	6.82	6.73	6.18
CPI excluding perishable food, fuel and utilities	Percentage, annual change, end of period	6.57	6.77	6.65	6.03
CPI excluding food and regulated items ^{e/}	Percentage, annual change, end of period	5.91	6.20	5.84	5.05
Average of all core inflation indicators	Percentage, annual change, end of period	6.29	6.52	6.29	5.60
MER	Pesos per dollar, average for period	3,262	2,993	2,950	3,016
Inflation gap in the real interest rate	Percentage, average for period	10.1	-0.1	-2.0	0.3
Economic activity					
Gross domestic product	Percentage, annual change, s.a.c.e.	2.5	1.9	1.3	2.6
Final consumption spending	Percentage, annual change, s.a.c.e.	1.6	1.3	0.4	3.3
final household consumption spending	Percentage, annual change, s.a.c.e.	2.0	1.5	0.8	2.0
final government overhead spending	Percentage, annual change, s.a.c.e.	-0.3	1.2	-2.5	9.6
Gross capital formation	Percentage, annual change, s.a.c.e.	3.7	4.7	-1.3	-7.3
gross fixed capital formation	Percentage, annual change, s.a.c.e.	-2.0	-3.2	-5.9	-0.4
Housing	Percentage, annual change, s.a.c.e.	-5.6	-0.5	-10.1	17.3
Other buildings and structures	Percentage, annual change, s.a.c.e.	-0.1	0.1	-3.9	4.1
Machinery and equipment	Percentage, annual change, s.a.c.e.	-4.7	-11.3	-6.7	-8.7
Cultivated biological resources	Percentage, annual change, s.a.c.e.	3.2	16.3	15.8	16.7
Intellectual property products	Percentage, annual change, s.a.c.e.	-8.8	-12.0	-13.6	-13.6
Domestic demand	Percentage, annual change, s.a.c.e.	1.8	2.4	-0.8	1.6
Exports	Percentage, annual change, s.a.c.e.	-0.3	-5.9	1.4	4.3
Imports	Percentage, annual change, s.a.c.e.	-3.1	-2.2	-6.7	-2.0
Output gap ^{f/}	Percentage	0.5	0.2	-0.1	-0.1
Short-term indicators					
Real industrial production	Percentage, annual change, seasonally adjusted	6.5	3.8	2.1	1.9
Retail commerce sales, excluding food	Percentage, annual change, seasonally adjusted	2.5	1.3	-0.9	3.4
Coffee production	Percentage, annual change in accumulated production for the period	8.9	1.1	-12.2	5.4
Oil production	Percentage, annual change, average for period	-7.4	-11.5	-13.3	-14.8
Labor Market ^{g/}					
National Total					
Unemployment rate	Percentage, seasonally adjusted, average for period	9.4	9.1	9.2	9.1
employment rate	Percentage, seasonally adjusted, average for period	58.7	58.4	58.4	58.6
overall participation rate	Percentage, seasonally adjusted, average for period	64.8	64.3	64.3	64.5
Thirteen cities and metropolitan areas					
Unemployment Rate	Percentage, seasonally adjusted, average for period	10.2	9.5	10.1	10.2
Employment rate	Percentage, seasonally adjusted, average for period	61.3	60.7	60.3	60.6
Overall participation rate	Percentage, seasonally adjusted, average for period	68.2	67.1	67.1	67.5
Balance of payments^{h/i/}					
Current account (A+B+C)	Millions of dollars	-3,439	-2,590	-3,466	-2,541
percentage of GDP	Percentage, nominal terms	-5.5	-3.7	-4.7	-3.2
A. Goods and Services	millions of dollars	-3,792	-2,757	-3,367	-2,789
B. Primary income (factor income)	millions of dollars	-1,018	-1,270	-1,509	-1,432
C. Secondary income (current account transfers)	millions of dollars	1,371	1,437	1,410	1,679
Financial account (A+B+C+D)	millions of dollars	-3,620	-3,154	-3,423	-2,077
Percentage of GDP	Percentage, nominal terms	-5.8	-4.6	-4.6	-2.6
A. Foreign investment (i+ii)	millions of dollars	-3,672	-2,726	-1,579	-1,353
i. Foreign in Colombia (FDI)	millions of dollars	4,684	3,638	2,256	3,269
ii. Colombian abroad	millions of dollars	1,012	913	677	1,916
B. Portfolio investment	millions of dollars	-856	-1,625	-975	-1,384
C. Other investment (loans and other credits and derivatives)	millions of dollars	810	1,352	-954	524
D. Reserve assets	millions of dollars	98	-155	85	136
Errors and omissions (E and O)	millions of dollars	-181	-564	43	465
Interest rates					
policy rate	Percentage, average for period	6.1	6.9	7.7	7.7
policy rate expected by analysts ^{j/}	Percentage, average for period				
IBR overnight	Percentage, average for period	6.1	6.9	7.7	7.7
Commercial interest rate	Percentage, average for period	11.7	13.0	13.4	13.2
Consumer interest rate	Percentage, average for period	18.5	19.0	19.5	19.6
Mortgage rate	Percentage, average for period	11.8	12.4	12.7	12.7

Note: In Colombia, there have been no antecedents of the negative effects of a pandemic such as Covid-19, nor of the monetary policy responses required facing such situation. This, together with the behavior of oil prices, causes the diagnosis and forecasts for the Colombian economy to be unusually uncertain. Therefore, this Report presents ranges instead of specific figures for growth forecasts, spare production capacity, and inflation. Figures in Bold correspond to a projection or assumption.

a/ The quarterly data in bold correspond to an assumed base built on the annual projection of each variable.

b/ The top 21 trade partners (excluding Venezuela) are included in calculations for non-traditional exports from Colombia in dollars.

c/ Calculations from the Central Bank of Colombia use new methodology; they exclude the division of food and sub-categories corresponding to food away from home.

d/ Calculations from the Central Bank of Colombia use new methodology; they include the division of food and sub-categories corresponding to food away from home.

e/ Calculations by Central Bank of Colombia with provisional classifications.

f/ Refers to the difference between observed GDP and potential (trend) GDP resulting from the 4G monetary policy model.

g/ Corresponds to the annual average of seasonally adjusted monthly figures.

h/ The results presented follow recommendations of the sixth version of the balance of payments manual proposed by the IMF. Consult additional information and methodological changes at <http://www.banrep.gov.co/balanza-pagos>.

i/ Results for 2018 and 2019 are preliminary.

j/ Corresponds to the median of analyst projections. These projections are calculated by taking the quarterly average of monthly responses from the survey of analyst economic expectations conducted by the Central Bank of Colombia in April 2020.

s.a.c.e.: seasonally adjusted and corrected for calendar effects.

Note: the values in bold correspond to a projection or assumption.

2017				2018				2019				2020	
T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2
2.3	2.5	2.8	2.9	2.9	2.8	2.3	2.1	1.6	1.4	1.5	1.0	.	.
55	51	52	62	67	75	76	68	64	69	62	62	51	51
0.70	0.95	1.15	1.20	1.45	1.74	1.92	2.22	2.40	2.40	2.19	1.64	1.26	1.26
144	130	127	113	99	113	110	132	121	104	90	83	125	125
4.69	3.99	3.97	4.09	3.14	3.20	3.23	3.18	3.21	3.43	3.82	3.80	3.86	3.86
5.13	5.12	4.71	5.01	4.05	3.81	3.71	3.48	3.26	3.15	3.28	3.37	3.18	3.18
5.59	4.41	3.41	3.79	1.80	1.83	1.57	1.09	0.90	1.17	1.65	2.24	2.47	2.47
5.33	5.21	5.21	5.49	4.76	4.27	4.13	3.79	3.29	3.36	3.53	3.49	3.29	3.29
4.05	6.01	5.68	5.86	6.01	5.82	6.03	6.37	6.42	5.33	4.74	4.48	3.78	3.78
3.65	1.37	2.22	1.92	0.98	1.74	2.05	2.43	3.26	4.46	5.58	5.20	5.99	5.99
-13.09	-14.72	-0.32	5.84	7.13	8.47	9.51	8.88	9.98	15.46	17.50	8.66	9.79	9.79
6.28	3.29	0.84	-0.91	-2.01	-0.91	-0.72	-0.08	1.43	2.18	3.57	5.04	6.46	6.46
8.94	7.62	6.01	5.21	3.32	3.13	3.32	3.68	3.43	3.80	4.12	4.18	3.92	3.92
5.13	5.12	4.71	5.01	4.05	3.81	3.71	3.48	3.26	3.15	3.28	3.37	3.18	3.18
6.01	5.31	4.87	4.87	4.04	3.58	3.23	3.09	3.09	3.28	3.51	3.42	3.31	3.31
5.61	5.07	4.31	4.02	2.99	2.71	2.81	2.76	2.57	2.87	3.21	3.46	3.70	3.70
5.44	4.87	4.44	4.76	3.49	3.23	3.04	2.64	2.38	2.54	2.87	3.10	3.04	3.04
5.55	5.09	4.58	4.66	3.64	3.33	3.28	3.03	2.82	2.96	3.22	3.34	3.31	3.31
2,923	2,919	2,977	2,987	2,860	2,841	2,961	3,164	3,134	3,241	3,340	3,411	3,532	3,532
-3.3	-3.3	-0.7	-0.91	-3.7	-3.9	-0.5	4.2	1.8	3.1	4.0	4.8	.	.
0.8	1.6	1.5	1.5	2.3	2.4	2.7	2.7	2.8	3.6	3.4	3.4	2.0	2.0
2.2	2.2	2.5	2.4	3.4	3.7	3.8	4.0	4.3	4.7	4.7	4.6	0.8	0.8
1.9	1.9	2.4	2.0	2.6	3.3	3.1	3.0	4.3	4.5	4.9	4.7	0.4	0.4
2.5	3.5	3.5	5.0	6.8	6.1	7.6	7.6	2.4	5.7	4.7	4.4	4.5	4.5
-3.1	-3.0	-5.8	-1.0	-1.2	0.6	4.9	4.2	0.1	3.8	5.4	7.7	9.5	9.5
0.8	2.4	3.3	0.9	0.3	0.7	0.8	4.4	4.3	5.9	6.8	1.3	2.9	2.9
9.1	-0.2	-1.5	-13.3	-5.7	-1.0	3.1	2.6	-7.0	-8.6	-5.6	-7.6	-2.2	-2.2
5.3	4.2	7.9	1.2	-4.7	-5.5	-5.5	2.7	1.6	6.6	6.6	3.3	8.7	8.7
-6.4	-2.2	6.4	8.2	13.0	13.7	9.6	2.0	12.9	21.4	14.0	8.8	0.0	0.0
20.0	-2.8	-10.6	-2.2	-3.0	4.6	14.0	7.5	4.0	2.0	1.1	-4.7	-0.2	-0.2
-2.9	1.8	3.3	2.8	1.8	2.2	0.4	1.7	1.3	0.9	3.3	5.0	5.1	5.1
1.1	1.1	1.3	1.0	1.8	3.6	3.3	4.8	4.3	4.2	5.3	4.3	2.6	2.6
1.7	4.7	3.8	0.1	0.5	-1.0	1.7	2.2	4.2	6.6	1.7	0.2	0.0	0.0
1.9	1.9	0.4	-0.1	0.6	5.1	6.2	11.5	7.4	9.4	11.6	8.2	4.0	4.0
-0.6	-0.8	-1.0	-1.2	-1.2	-1.3	-1.2	-1.2	-1.1	-0.9	-0.7	-0.6	.	.
-0.9	-0.2	1.2	0.3	2.9	2.5	3.6	2.5	0.8	3.0	0.7	0.8	.	.
-1.7	-0.6	-0.4	-2.0	5.9	5.8	7.0	9.0	5.6	8.3	8.9	6.6	.	.
13.0	-17.2	17.1	-10.1	-5.8	13.1	-13.8	-6.6	-1.9	6.6	4.9	24.1	-13.8	-13.8
-11.6	-5.2	1.5	1.9	0.7	1.2	1.1	2.6	5.3	3.2	1.4	-0.2	.	.
9.3	9.2	9.5	9.5	9.3	9.6	9.6	10.1	10.4	10.3	10.7	10.5	11.2	11.2
58.5	58.8	58.2	57.9	57.9	58.0	58.1	57.1	57.5	56.4	56.3	56.4	55.3	55.3
64.5	64.7	64.3	64.0	63.9	64.2	64.3	63.6	64.2	62.9	63.1	63	62.3	62.3
10.4	10.6	10.9	10.6	10.6	10.7	10.5	11.2	11.3	11.1	11.0	11.4	11.2	11.2
60.4	60.1	59.6	59.3	59.4	59.5	59.4	58.5	58.8	58.5	58.5	58.6	57.3	57.3
67.4	67.2	66.9	66.4	66.5	66.6	66.5	65.9	66.3	65.9	65.7	66.1	64.6	64.6
-3,506	-2,481	-2,725	-1,529	-2,841	-3,263	-3,203	-3,740	-3,543	-2,778	-3,956	-3,523	.	.
-4.7	-3.3	-3.5	-1.8	-3.5	-3.9	-3.8	-4.4	-4.5	-3.5	-4.9	-4.2	.	.
-2,584	-2,482	-2,283	-1,099	-1,487	-2,178	-2,282	-2,979	-2,684	-2,440	-3,979	-3,064	.	.
-2,343	-1,632	-2,128	-2,303	-2,977	-2,897	-2,878	-3,011	-2,658	-2,549	-2,289	-2,812	.	.
1,421	1,632	1,685	1,873	1,623	1,812	1,957	2,250	1,798	2,211	2,312	2,354	.	.
-2,922	-2,363	-2,675	-1,598	-2,562	-2,851	-3,434	-3,568	-3,340	-3,217	-3,423	-3,122	.	.
-4.0	-3.1	-3.4	-1.9	-3.2	-3.4	-4.0	-4.2	-4.2	-4.1	-4.2	-3.7	.	.
-1,797	-1,252	-4,148	-2,951	-935	-2,345	-2,469	-659	-2,635	-3,680	-1,760	-3,204	.	.
2,513	2,526	4,992	3,805	2,007	3,846	2,799	2,883	3,386	4,120	3,272	3,715	.	.
716	1,275	845	854	1,072	1,500	330	2,224	751	440	1,512	511	.	.
265	-1,983	-519	620	1,750	334	536	-1,323	-1,307	-178	265	1,726	.	.
-1,482	717	1,867	560	-3,514	-988	-1,670	-2,317	-1,750	114	-2,182	-1,845	.	.
93	154	126	173	137	150	169	732	2,351	526	254	201	.	.
584	117	50	-69	279	412	-231	172	203	-439	533	401	.	.
7.4	6.6	5.5	5.0	4.6	4.3	4.2	4.2	4.2	4.2	4.2	4.25	4.23	4.23
7.4	6.6	5.5	5.0	4.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2
12.8	11.6	10.6	10.0	9.4	9.4	9.3	9.0	9.1	9.0	8.9	8.5	8.4	8.4
20.1	19.7	19.0	18.7	18.7	17.9	18.0	17.3	18.0	17.2	16.0	15.5	15.8	15.8
12.5	12.3	11.3	10.9	10.8	10.6	10.5	10.4	10.4	10.5	10.4	10.4	10.4	10.4

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