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Monetary Policy in Colombia

Banco de la República (the Central Bank of Colombia) is required by the Constitution to maintain the purchasing power of Colombia's currency in coordination with general economic policy.[1] In order to fulfill this mandate, *Banco de la República'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 3.0% 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 3.0%.

The main instrument the BDBR uses to control inflation is the policy interest rate (overnight repo rate, or benchmark interest rate). Given that monetary policy actions take time to fully affect the economy and inflation,[2] 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 is 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 third 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, on the second business day. On the fourth business day following the Board meeting, the Bank's Deputy Technical Governor presents the MPR. This dissemination scheme[5] seeks to deliver relevant and up-to-date information to contribute to better decision-making by the agents of the economy.

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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, School 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 May 2023 meeting.

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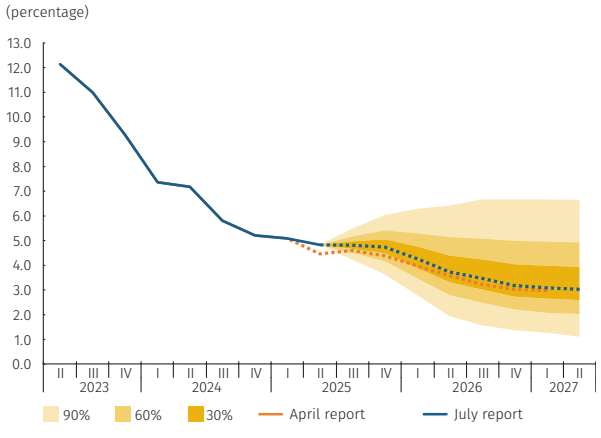
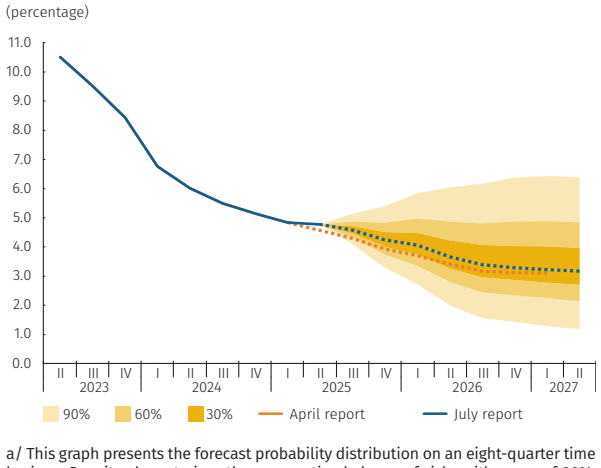
1. Summary

Graph 1.1
Consumer Price Index [a/b/]
(annual change; end-of-period)



a/ This graph presents the forecast probability distribution on an eight-quarter time horizon. Density characterizes the prospective balance of risks with areas of 30%, 60%, and 90% probability surrounding the central forecast (mode), through a combination of densities from the Patacon and the 4GM monetary policy models.
b/ The probability distribution corresponds to the forecast exercise from the July report.
Source: DANE – calculations and projections by *Banco de la República*.

Graph 1.2
CPI excluding food and regulated items [a/b/]
(annual change; end-of-period)



a/ This graph presents the forecast probability distribution on an eight-quarter time horizon. Density characterizes the prospective balance of risks with areas of 30%, 60%, and 90% probability surrounding the central forecast (mode), through a combination of densities from the Patacon and the 4GM monetary policy models.
b/ The probability distribution corresponds to the forecast exercise from the July report.
Source: DANE – calculations and projections by *Banco de la República*.

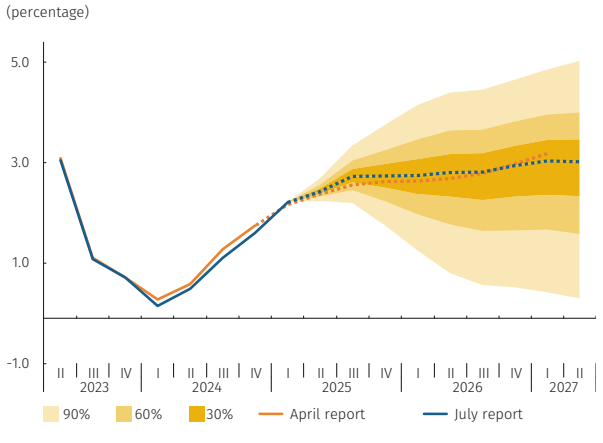
1.1 Macroeconomic Summary

In June, headline inflation (4.8%) fell while core inflation, excluding food and regulated items, remained stable (4.8%), both registering higher rates than those anticipated in the April Report. Consequently, the revised forecast path indicates a slower convergence of inflation to the 3% target. In the second quarter of this year, all the CPI's major groups, with the exception of the CPI for regulated items, experienced annual variations that surprised on the upside versus April Report estimates. In this same period, the most notable forecast error was recorded in the perishable foods group, explained by a more enduring upward price cycle, unexpected increases in fertilizers, and a greater pass-through of labor cost increases to associated prices within this category. In the regulated items group, the marginally lower-than-estimated result was primarily attributed to price adjustments in electricity services that fell short of expectations, as hydroelectric plants attracted a higher share of power generation. Concurrently, goods and services saw more limited upside surprises because of a continued dynamism in private consumption, a more pronounced pass-through of labor costs, rental prices experiencing a somewhat slower deceleration, and international goods prices that failed to drop as rapidly as expected. The integration of these upside surprises into the forecasts resulted in a slower-than-anticipated convergence of headline and core inflation to the 3% target than previously predicted in April. By the end of 2025, headline inflation would close at 4.7% and core inflation at 4.2%, versus the respective April forecasts of 4.4% and 3.9%. (Graphs 1.1 and 1.2). As such, in 2026, several important CPI groups, including rents, would be indexed to the higher inflation rate expected for yearend 2025. Nevertheless, both headline and core inflation are expected to continue declining over the forecast horizon, aided by the cumulative effects of monetary policy. This dynamic would be reflected in a persistently negative output gap through the end of 2026, which would contribute to the convergence of inflation toward the target. This projection assumes that minimum wage adjustments in 2026 will not be much higher inflation plus labor productivity growth. It also incorporates an expected slowdown in food inflation, driven by a higher base of comparison and the fading effects of previous adverse supply shocks. Thus, headline inflation is foreseen to end 2026 at 3.2% and core inflation at 3.3%, versus the 3.0% and 3.1% respective forecasts of the previous Report (Graphs 1.1 and 1.2). The projections remain highly uncertain, primarily due to the implications of the minimum wage increase for the remainder of the year and in 2026, the future dynamics

of the exchange rate, the effects of tariff escalations on global trade, supply shocks impacting both international and domestic food prices, the domestic supply of natural gas, and regulations concerning price adjustments for certain regulated goods and services.

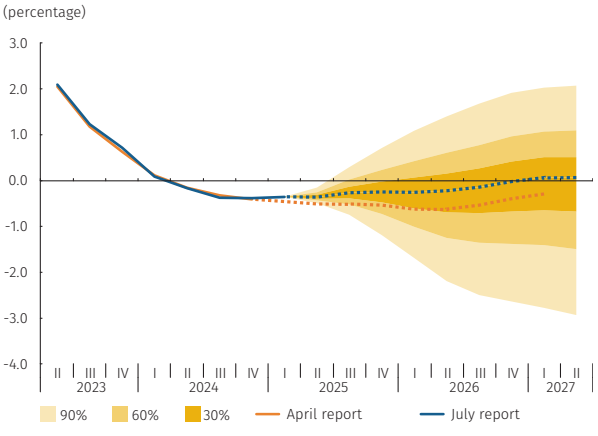
In contrast to the April Report's forecasts, economic growth for 2025 increased to 2.7% from the previous estimate of 2.6%, while that for 2026 decreased to 2.9% (formerly 3%). These expectations incorporate the more robust household consumption seen in the first half of 2025 as well as a more nuanced consequence of expected tariff increases by the United States on the Colombian economy. Annual GDP growth for the first quarter of 2025 (2.7%) exceeded expectations (2.5%) mostly due to the downward revision of GDP levels considered by DANE for the same period of the preceding year. Private consumption exhibited robust dynamics across all components, with quarterly and annual growth rates significantly surpassing outlooks. Fixed investment, on the other hand, performed far worse than expected on both an annual and quarterly basis, owing to a significant annual drop in investment in housing and other buildings and structures. The growth in exports and imports was below expectations. Available figures on economic activity for the second quarter suggest the economy would have grown at an annual rate of 2.6%, consistent with the April forecast, with domestic demand increasing at a rate of 4.1%, completing four quarters of annual increases well above those of the GDP. The strong activity noted in private consumption (4.5%) would have persisted during this period, as public consumption (0.7%) would have continued to slow, while fixed investment (3.0%) would have seen a quarterly and annual recovery. Imports (9.0%) would have weakened, while exports (2.3%) recorded a modest annual expansion rate, particularly because of a weak showing in coal and oil exports. During the second semester, factors such as the high price of various agricultural products, including coffee, the high levels of remittances from abroad, the strong behavior in foreign tourism, and the short-term effect of the real minimum wage increase, among others, would continue to stimulate households' disposable income and spending. The expected recovery of credit in an environment of lower real lending interest rates and moderation of credit risk would also contribute to GDP growth. Compared to the estimates made in April, the associated uncertainty surrounding the United States' policy of increased tariffs has waned, with less adverse consequences on the demand for goods exported by Colombia. Accordingly, the economic growth forecast for 2025 grew from 2.6% to 2.7% but fell from 3.0% to 2.9% for 2026 (Graph 1.3). The economic vitality described above would occur in a context of a gradual easing in domestic monetary policy, compatible with the convergence of inflation to the 3% target over the following two years. Moreover, the forecast horizon foresees excess

Graph 1.3
Gross Domestic Product, four quarter accumulation a/b/c/
(annual change)



a/ This graph presents the forecast probability distribution on an eight-quarter time horizon. Density characterizes the prospective balance of risks with areas of 30%, 60%, and 90% probability surrounding the central forecast (mode), through a combination of densities from the Patacon and the 4GM monetary policy models.
b/ Seasonally adjusted and corrected for calendar effects.
c/ The probability distribution corresponds to the forecast exercise from the July report.
Source: *Banco de la República.*

Graph 1.4
Output gap [a/b/c/] - Predictive Densities
(four-quarter accumulation)



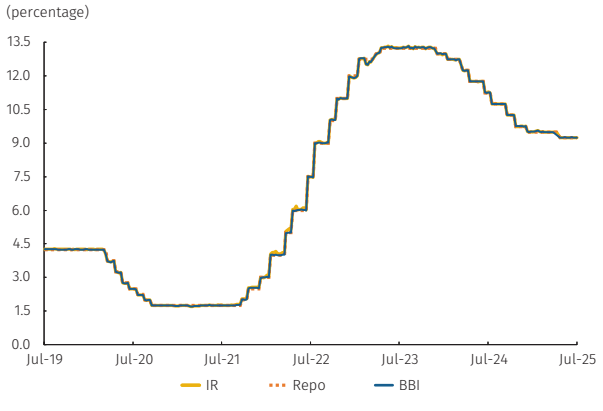
a/ The historical output gap estimate is calculated as the difference between observed GDP (four-quarter accumulation) and potential GDP (trend; four-quarter accumulation) based on the 4GM model.
b/ This graph presents the forecast probability distribution on an eight-quarter time horizon. Density characterizes the prospective balance of risks with areas of 30%, 60%, and 90% probability surrounding the central forecast (mode), through a combination of densities from the Patacon and the 4GM monetary policy models.
c/ The probability distribution corresponds to the forecast exercise from the July report.
Source: *Banco de la República.*

productive capacity somewhat lower than that estimated in the April Report (Graph 1.4). These estimates continue to be subject to a high degree of uncertainty owing to external factors, including global political and trade tensions and the ensuing response of financial markets and monetary policy in advanced economies, as well as domestic factors such as a weakening of public finances.

Colombia continues to face restrictive external financing conditions even as global trade tensions ameliorate, given the high international uncertainty arising from the ongoing conflicts in several regions of the world, the expected measured normalization of monetary policy in the United States, and the upward pressures on Colombia's risk premium. In contrast to the expectations and judgments included in the April Report, new trade negotiations between the United States and other economies like China, the U.K., and the European Union have resulted in a reduction in the expected tariffs; therefore, forecasts envision a less adverse effect on Colombia's relevant external demand. In June, the U.S. Federal Reserve (Fed) held its benchmark rate steady in the range of 4.25% and 4.5%, consistent with both market expectations and those of the Bank's technical staff. The Open Market Committee's (FOMC) new median outlook for the end of 2025 and 2026 points to a reduction in the economic growth forecast and an increased inflation expectation. As such, the FOMC continues to foresee two rate cuts in 2025 and only one decrease in 2026 (previously two), noting they would not reach the long-term interest rate level by the end of 2027. The trade-off between lower growth and expected higher inflation has increased volatility in the market's forecasts of the Fed's interest rate. Consequently, this Report assumes the Fed will cut interest rates slowly, consistent with its behavior of two (previously three) 25-basis-point (bps) cuts in 2025 and two of the same magnitude in 2026. Colombia's terms of trade are likely to continue to decline throughout the remainder of 2025 as a result of the anticipated and observed decrease in the international price of certain exported raw materials, including nickel, coal, and oil. Nevertheless, the prices of other commodities, such as coffee and gold, would remain high and partially offset the performance of mining and energy prices. The country's risk premium and its trend behavior have increased as a consequence of the aforementioned external conditions and the observed and projected further fiscal deterioration. It is expected that these factors will continue to exert upward pressure on sovereign risk perception over the forecast horizon, amid a mounting public debt-to-GDP ratio. The potential impact of external forecasts on the country is uncertain, as a result of the tensions in foreign trade, immigration, tariffs, and fiscal measures in the United States, conflicts in various regions of the globe, and domestic fiscal challenges, among other factors.

A restrictive stance of monetary policy continues to assist in the convergence of inflation towards the target; however, observed inflation and most measures of inflation expectations remain above 3%. The economic activity indicators for the second quarter of the year suggest that output will record two years of quarterly increases and an annual dynamic in demand for products and services far surpassing the GDP. The labor market continues to harbor an unemployment rate at levels that can be described as historically low. Employment is on a growth path, and the real increase in the minimum wage—far higher than the increase in productivity—has been manifest in price increases in several CPI groups. It is therefore anticipated that, even though the economy continues to possess excess productive capacity that contributes to the reduction of inflation, these excesses would be less significant in 2025 and 2026 than those anticipated in the April Report. Moreover, fiscal deterioration has increased the country's vulnerability to adverse external financing shocks and placed upward pressure on the economy's neutral interest rate. Simultaneously, inflation expectations for December 2025 and 2026 continue to markedly surpass 3%. Hence, inflation is expected to continue falling and draw closer to the 3% target, but at a slower pace than forecast in the April Report. The gradual decrease in inflation and diminished projected excess capacity align with a monetary policy approach that ought to remain restrictive throughout the forecast period to facilitate a drop in inflation and its convergence with the target over the next two years. The significant distance of inflation from the target, coupled with an imbalance of inflationary risks skewed to the upside, points to the need to continue a prudent monetary policy approach, especially in the context of robust private consumption and a dynamic labor market.

Graph 1.5
Monetary policy interest rate, interbank rate and BBI[a/]
(weekly data)



a/ IR: Interbank Rate. Repo: Monetary Policy interest rate. BBI: Benchmark Banking Indicator.
Sources: Financial Superintendency of Colombia and *Banco de la República.*

1.2 Monetary Policy Decision

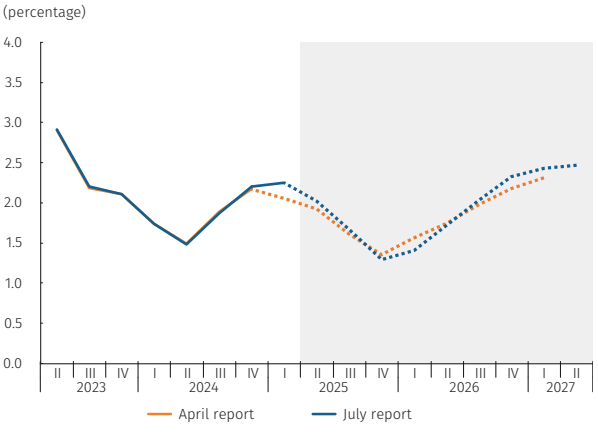
At its June and July 2025 meetings, the Board of Directors of *Banco de la República* (BDBR) decided by majority vote to maintain the monetary policy interest rate unchanged at 9.25% (Graph 1.5).

2 Macroeconomic forecasts and risk analysis[1]

2.1 International outlook

2.1.1 Foreign demand

Graph 2.1
Real GDP, main trade partners
(Annualized change, projections according to full-year assumption)



Sources: Bloomberg; statistics offices and central banks; calculations and projections by *Banco de la República*.

By 2025, external demand relevant to Colombia is projected to grow at a pace comparable to that of 2024, marking an upward revision from the April *Report*. In 2026, a modest recovery in external demand growth is anticipated (Graph 2.1). In their latest reports, the World Bank and the International Monetary Fund (IMF) forecast global growth slowing from 3.3% in 2024 to an estimated 2.9% and 3.0%, respectively, in 2025. This moderation occurs amid heightened trade tensions and political uncertainty, which have weighed on business and consumer confidence. In the United States, economic activity contracted by 0.5% in annualized quarterly terms in the first quarter of the year — largely on account of weakening private consumption and a sharp rise in imports, which counterbalanced substantial inventory accumulation amid tariff-related import anticipation.[2] Consumer confidence shows tentative improvement, driven by international trade negotiations, yet remains at low levels. Among other trading partners, economic activity in the euro area and Chile during the first quarter of 2025 exceeded expectations. Notably, China's economy grew 5.2% year-on-year in the second quarter—surpassing market projections—supported by expansionary monetary policy and a surge in exports in the context of ongoing trade talks with the United States. Partially offsetting these more positive developments, the Mexican economy has notably slowed. Diminished global trade uncertainty stemming from progress in U.S. trade discussions and a moderation in the effective tariff rate prompted an upward revision of the growth outlook for Colombia's trading partners: from 1.7% to 1.8% for 2025. The 2026 external demand growth rate for Colombia is expected to tick up slightly to 1.9%, a figure broadly in line with the data from the previous *Report*. Both estimates

1 The projections presented in this chapter are based on estimates from the Patacon and 4GM central forecast models. For more details on these models, see https://www.banrep.gov.co/es/node/149 and https://www.banrep.gov.co/en/4gm-new-model-monetary-policy-analysis-colombia

2 At the time of writing this report, preliminary figures showed that in the second quarter of 2025, U.S. GDP grew at an annualized quarterly rate of 3.0%, following a decrease of -0.5% in the previous quarter.

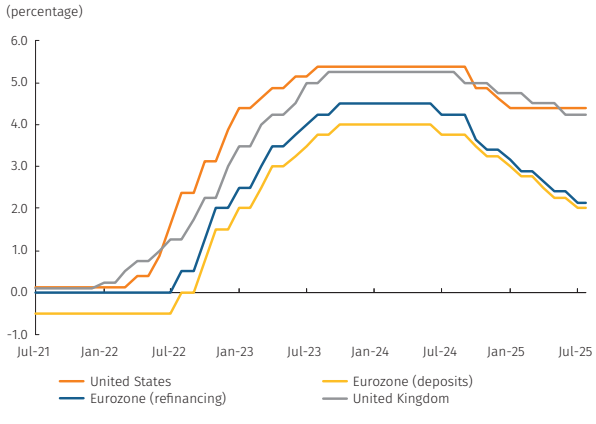
Table 2.1
Economic Growth among Major Trade Partners [a/]

Main partners	2023 (pre)	2024 (proj)	2025 (proj)	2026 (proj)
United States	2.9	2.8	1.5	1.4
Eurozone	0.5	0.8	1.1	1.2
China	5.2	5.0	4.5	4.0
Ecuador	2.0	-2.0	1.4	1.6
Braszl	3.2	3.0	1.9	1.7
Peru	-0.4	3.2	3.0	2.7
Mexico	3.4	1.2	0.1	1.1
Chile	0.6	2.4	2.2	2.2
All trade partners [a/]	2.5	1.8	1.8	1.9

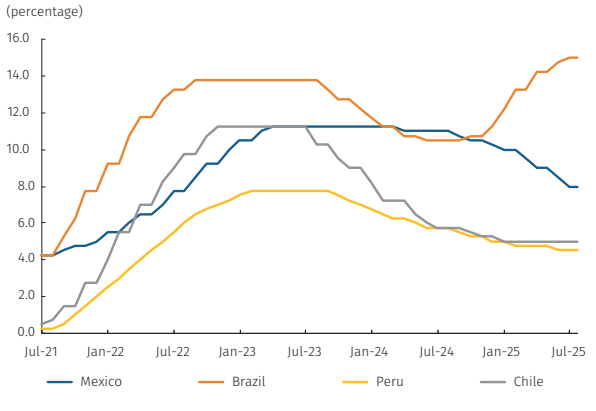
(pre): preliminary, (proj): projected
a/ Projections calculated based on the contribution of non-traditional trade.
Sources: Bloomberg; Focus Economics, statistics offices, and central banks (observed data); *Banco de la República* (projections and calculations).

Graph 2.2
Monetary policy interest rate, select main trading partners

A. Developed Economies



B. Latin America



Note: July 2025 includes data observed on the 23rd of said month.
Source: Bloomberg.

remain below the long-term historic average[3] (Table 2.1). Considerable uncertainty surrounds this projection due to the volatile trajectory of U.S. trade policy, the risk of declining global confidence, and the potential inflationary impact of tariff barriers which could slow monetary policy interest rate easing in major economies (Graph 2.2).

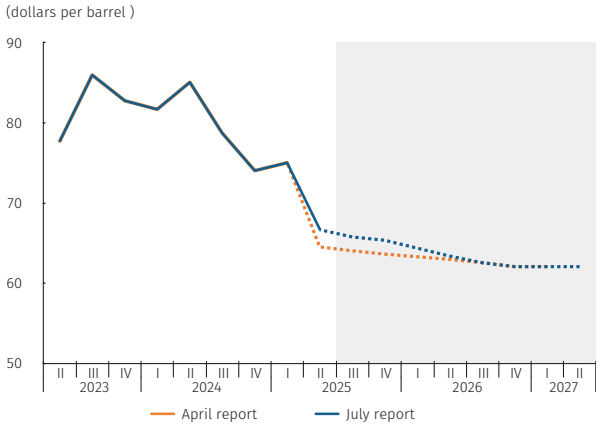
2.1.2 International prices

The oil price assumption for 2025 was revised marginally upward amid heightened uncertainty stemming from geopolitical tensions. Nevertheless, prices are still expected to follow a downward trend, reflecting the observed and anticipated increase in global oil supply (Graph 2.3). In the second quarter of the year, the average Brent crude price was close to USD 67 per barrel (bl), lower than the USD 75/bl recorded in the first quarter. This observed and projected downward trajectory partly reflects a sustained increase in production from non-Organization of the Petroleum Exporting Countries and its allies (OPEC+), led mainly by the United States, Guyana, Norway, and Brazil, along with rising extraction in most OPEC+ member countries, which have announced plans to accelerate the reversal of their voluntary production cuts.[4] The expected price decline is also supported by the growing accumulation of crude oil and petroleum product inventories driven by supply exceeding demand in OECD member countries, as well as by the anticipated adverse effects on global growth prospects from changes in U.S. trade policy, which would dampen demand. Even so, several factors would limit the drop in oil prices: stable oil and derivatives consumption in China, rising demand for jet fuel, and the observed decline in oil production in Iran and Russia. Moreover, persistent geopolitical tensions in the Middle East remain an upside risk to oil prices. Taking all these elements into account, the average Brent price is assumed to be close to USD 68/bl in 2025 (compared with USD 67/bl in the April *Report*) and USD 63/bl in 2026. Overall, uncertainty around oil prices remains high due to

3 Historically, the average annual growth in trading partners between 2001 and 2023 is 2.9%.

4 There are twelve member countries, along with the following allies (OPEC+): Azerbaijan, Bahrain, Brunei, Kazakhstan, Russia, Mexico, Malaysia, South Sudan, Sudan, and Oman. At its meeting on 05 July 2025, eight OPEP+ member countries decided to continue with the gradual phasing out of voluntary cuts, with an increase of close to 548,000 barrels per day for August 2025, a number higher than expected by markets. In its announcements, OPEC+ notes that the decision may be paused or reversed depending on market conditions.

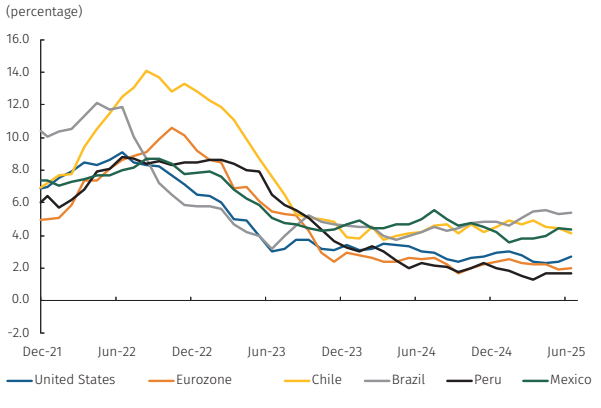
Graph 2.3
Assumed quarterly oil price



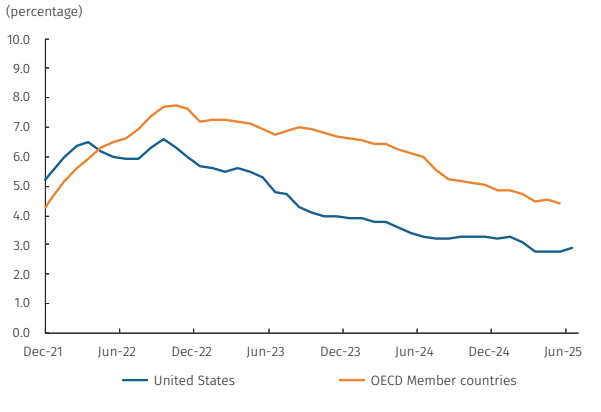
Source: Bloomberg; calculations and projections by *Banco de la República*.

Graph 2.4
Inflation, select main trading partners

A. Headline Inflation



B. Inflation excluding food and energy



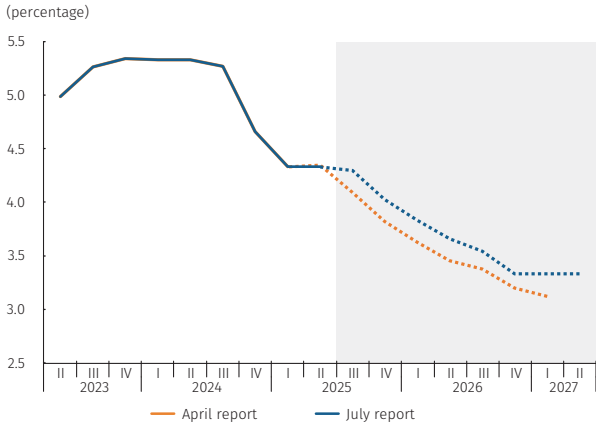
Source: Bloomberg and the Organization for Economic Cooperation and Development (OECD)

ongoing geopolitical conflicts, potential future OPEC+ decisions, and U.S. trade policies, all of which could continue to influence price dynamics.

Over the forecast horizon, Colombia's terms of trade are expected to moderate, in line with the projected downward trend in oil and other export prices. In 2025, the anticipated deterioration in the terms of trade would reflect lower international oil prices and moderating coal and ferronickel prices, along with a slight increase in U.S. dollar prices for imported intermediate goods. However, this decline would be less pronounced than projected in the previous *Report*, owing to higher expected gold prices and the marginal upward revision to the oil price for 2025 included in this *Report*. In 2026, the country's terms of trade would continue to decline, consistent with the projected reductions in international prices for oil, coal, and coffee.

In 2025, headline inflation in some economies is anticipated to remain above target, in a context of higher trade barriers and elevated uncertainty, which could intensify cost pressures. So far this year, global headline inflation has continued to moderate, albeit unevenly across countries. According to the latest OECD data, annual headline inflation for its members eased to 4.0% in May from 4.2% in April, its lowest level since June 2021. Core annual inflation stood at 4.4% in May, down from 4.6% in April. However, this overall moderation masks divergent regional dynamics: core inflation in the euro area continued to fall, while in some G7 economies it remained stable. In the United States, annual headline inflation rose to 2.7% in June from 2.4% in May, surprising markets to the upside. Core inflation also edged up to 2.9% in June from 2.8% in the prior month (Graph 2.4). This increase in headline inflation was driven mainly by a smaller annual decline in energy prices and higher annual food price adjustments. Service prices registered stable annual changes, while goods prices continued to rise, partly reflecting tariff effects. For the remainder of 2025, headline inflation in the United States is expected to remain above 2.0%, amid significant uncertainty over the impact of trade policy measures, elevated inflation expectations as reported in surveys, unfavorable base effects, and weaker economic growth compared to 2024. In this context, the World Bank's latest report notes that the global price outlook has become more uncertain, prompting an upward revision to its global inflation forecast from 2.7% to 2.9% for both 2025 and 2026. This reflects, in particular, the effects of trade barriers, survey-based increases in inflation expectations, and persistent

Graph 2.5
Assumed U.S. Federal Reserve quarterly interest rate



Source: Federal Reserve Bank of Saint Louis; calculations, and projections by *Banco de la República.*

inflationary pressures. The IMF, for its part, projects global inflation of 4.2% in 2025 and 3.6% in 2026.

2.1.3 International financial developments

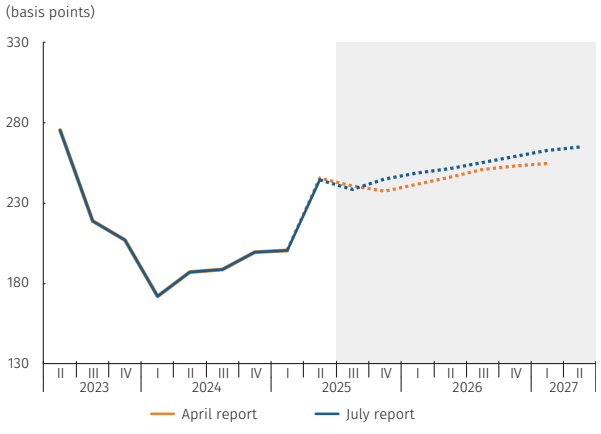
The assumed path for the U.S. monetary policy interest rate was revised upward, reflecting reduced trade uncertainty and improved U.S. growth prospects (Graph 2.5). At its June and July 2025 meetings, the Federal Open Market Committee (FOMC) kept the benchmark rate unchanged at a range of 4.25%–4.50%,[5] in line with both market expectations and the Bank's technical staff projections. The FOMC noted that tariffs are likely to pass through to domestic prices, although the timing, magnitude, and persistence of these effects remain highly uncertain, and that upside risks to inflation and inflation expectations remain significant. In this context, the medians of the FOMC's new projections for headline and core personal consumption expenditure (PCE) deflators were revised upward for 2025 and 2026.[6] Meanwhile, growth forecasts over the projection horizon were revised downward following weaker-than-expected first-quarter GDP data. Accordingly, the FOMC's median projection for the policy rate is still expected to stand at 3.9% by yearend 2025, but the forecast for yearend 2026 was revised slightly upward to 3.6%. Interest rate futures have remained relatively stable, broadly aligned with the Fed's cautious stance for 2025 and slightly less contractionary than its guidance for 2026.[7] Taking this into account, this *Report* revises upward the assumption for the U.S. policy rate, incorporating the monetary authority's cautious approach. For 2025, the baseline assumption now includes two 25 bp cuts, bringing

5 At its meeting on 05 June 2025, the European Central Bank (ECB) again reduced its main benchmark rate by 25 basis points to 2.0 % and its refinancing rate to 2.15%. Following its meeting on July 24, the ECB decided to maintain its benchmark rate unchanged. In its subsequent statement, the ECB noted inflation has returned to its target (in June, headline inflation in the eurozone stood at 2.0%) and that the economic outlook remains clouded amid high uncertainty surrounding U.S. tariff policy.

6 In the June 2025 report, the median FOMC projections for interest rates remained unchanged for the end of 2025 at 3.9%, but pointed to a smaller reduction for 2026, bringing it to 3.6% at the end of the year. Additionally, the median projection for total PCE rose from 2.7% to 3.0% for 2025 and from 2.2% to 2.4% for 2026, while for total CPI, the expected figure for 2025 increased from 2.8% to 3.1% and for 2026 from 2.2% to 2.4%, representing an upward revision for both baskets. Finally, the median projection for economic growth was revised downward, from 1.7% to 1.4% for the last quarter of 2025 and from 1.8% to 1.6% for the end of 2026.

7 By the end of 2025 and 2026, and with figures as of 21 July 2025, futures associated with the Fed's monetary policy interest rate stood at 3.93% and 3.14%, respectively, up from 3.43% and 3.10% respectively, as taken on April 21).

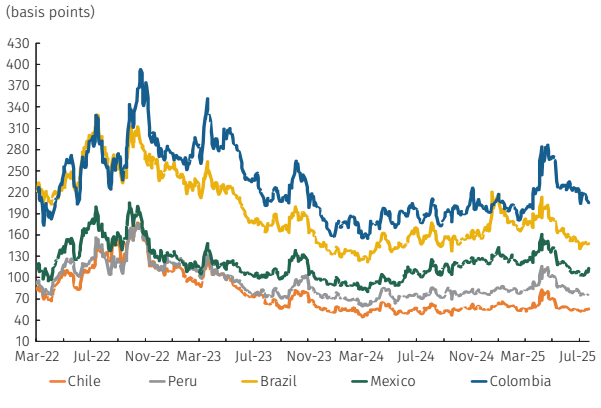
Graph 2.6
Colombia's assumed quarterly risk premium (CDS) a/



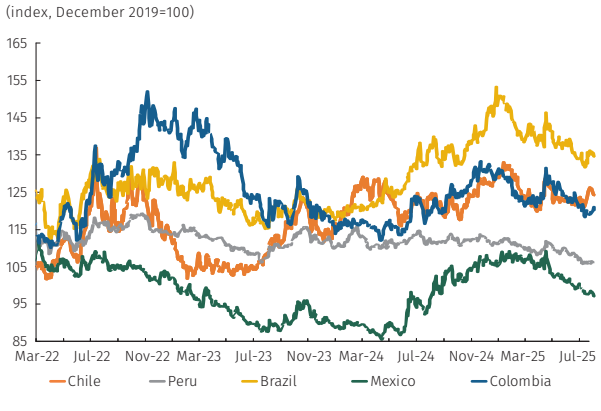
a/ Five-year credit default swaps.
Source: Bloomberg; calculations and projections by *Banco de la República.*

Graph 2.7
Behavior of nominal exchange rate and risk premium for select Latin American countries

A. Five-year credit default swaps



B. Nominal exchange rate



Note: Data to 23 July 2025.
Source: Bloomberg; calculations by *Banco de la República.*

the rate to a range of 3.75% to 4.00% by yearend. In 2026, two additional 25 bp cuts are assumed, lowering the rate to a range of 3.25% to 3.50% by yearend. This outlook remains subject to high uncertainty related to price dynamics, trade barriers, fiscal sustainability, and U.S. economic growth.

The forecast also assumes a higher risk premium for Colombia than in the April *Report* (Graph 2.6). In the second quarter, a combination of external and domestic factors pushed this indicator upward. Global uncertainty, particularly around U.S. trade policy announcements, triggered sharp financial market volatility, increased global risk perception, and tightened international financial conditions. Initially, this led to a broad increase in emerging market risk premiums. However, subsequent trade agreements between the United States and several countries moderated expectations about the extent of trade disputes, substantially easing perceived risks. As a result, regional peers such as Brazil, Chile, and Mexico saw their risk premiums fall to levels close to those before the uncertainty shock (Graph 2.7). In Colombia's case, however, the five-year credit default swap (CDS) did not return to its early-year levels as a result of sovereign credit rating downgrades and concerns over fiscal accounts, following the suspension of the fiscal rule and the projections in the Medium-Term Fiscal Framework (MFMP by its Spanish acronym), which foresee a significant increase in the fiscal deficit in 2025 and 2026,[8] alongside a sustained upward trajectory for public debt over the medium term—even under substantial fiscal adjustments. Consequently, Colombia's risk premium is now expected to remain higher than projected in the April *Report*, due to the country's challenging fiscal outlook, persistent global uncertainty, and potential fiscal pressures in the United States[9] that could keep global financing costs elevated. For 2025, the risk premium is projected to average 232 bps, rising to 255 bps in 2026.[10] This upward revi-

8 According to the MFMP presented in June, the estimated fiscal deficit for the National Central Government (GNC) in 2025 would rise from 5.1% to 7.1% of GDP, compared to the forecasts prepared for the Financial Plan. Similarly, the estimated fiscal deficit for the GNC in 2026 rose to 6.2% of GDP, compared to the 4.3% estimated in the MFMP presented the previous year.

9 The approval of a significant series of measures and tax cuts in the United States, enshrined in the law informally known as "One Big Beautiful Bill", could potentially put pressure on the cost of financing the U.S. federal government, which would translate into a general increase in the cost of debt and tighter financial conditions throughout the forecast horizon.

10 In the April *Report*, the forecast for Colombia's five-year CDs was 231 bps for 2025 and 248 for 2026.

sion reflects a persistently high-risk profile in a context of significant uncertainty over external financing conditions.

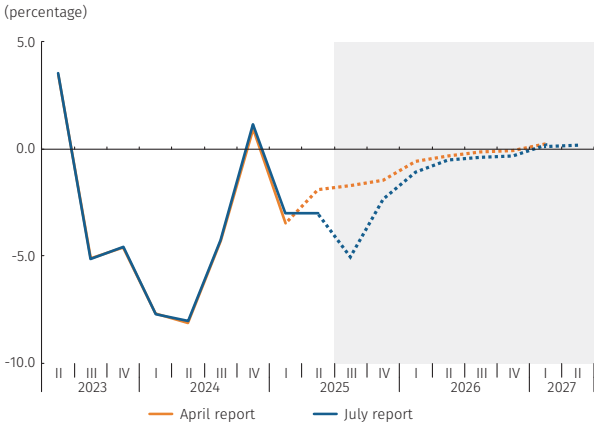
2.2 Macroeconomic Projections[11]

2.2.1 Inflation

Annual inflation is projected to remain stable throughout 2025 before declining in 2026, though at a slower pace than previously forecast, due to supply shocks and stronger domestic demand. In the second quarter of 2025, annual headline inflation fell less than anticipated in the April *Report*, reaching 4.8% in June versus the 4.5% expected (see Section 3.1 of this *Report*). This upward surprise—seen broadly across food, goods, and services sub baskets—combined with a less negative output gap (see Section 2.2.2 of this *Report*), prompted an upward revision to the forecast. Additional pressures from higher production and transport costs, including labor costs, and unexpected increases in some international prices are also weighing on the inflation outlook. Several of these factors would continue to affect annual inflation during part of the forecast horizon. The new forecast path also takes into account how some services CPI components are decreasing more slowly than anticipated, suggesting greater persistence. Under these conditions, inflation is now expected to remain stable for the rest of 2025 and resume its downward path in 2026, converging to the 3% target by mid-2027, but on a higher trajectory than that reported in the April *Report*. Disinflationary forces from monetary policy and exchange rate are expected to continue supporting the decline, over part of the forecast horizon (Graph 2.8), also assuming 2026 minimum wage adjustments close to inflation plus productivity gains. Additionally, this forecast assumes favorable weather for food supply and moderate electricity and gas tariff increases. As in the previous *Report*, this projection is subject to significant uncertainty and faces mainly upside risks (see Section 2.3 of this *Report*). Headline inflation is now forecast at 4.7% for December 2025 and 3.2% for December 2026, compared with 4.4% and 3.0% in April (Graph 2.9), figures that are higher than expected in the April Report (4.4% and 3.0%, respectively).

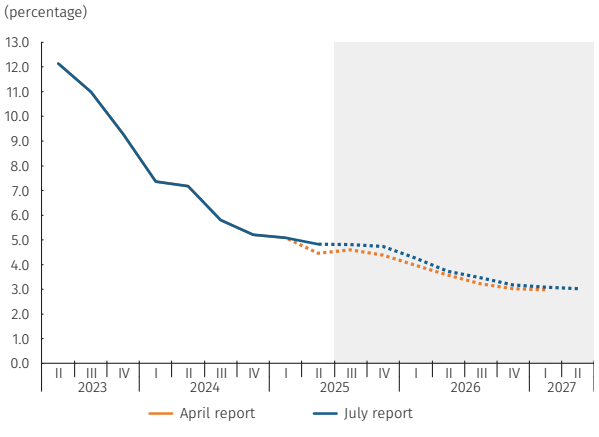
Core inflation is still expected to fall, but more slowly than in April, reflecting stronger domestic demand, persistent

Graph 2.8
Quarterly RER inflationary gap [a/]
(annual change, end-of-period)



a/ The real exchange rate (RER) inflationary gap captures inflationary pressures caused by the exchange rate. Positive values imply upward inflation pressures. The gap is calculated as the deviation in the real exchange rate relative to a non-inflationary trend estimate under the 4GM monetary policy model.
Source: *Banco de la República.*

Graph 2.9
Consumer Price Index (CPI)
(annual change, end-of-period)

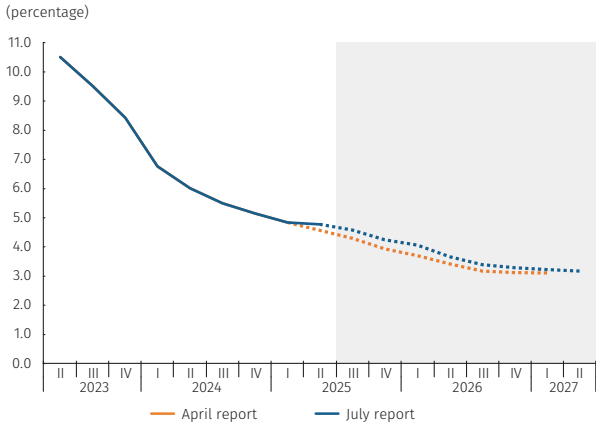


Source: DANE; calculations and projections by *Banco de la República.*

11 Projections are based on an active monetary policy wherein *Banco de la República*'s monetary policy interest rate is adjusted to guarantee alignment with the inflation target.

prices in some services, and cost pressures. The smaller projected decline in CPI excluding food and regulated items is due to less slack in the productive capacity, greater labor cost impacts, and other sub-basket specific factors. Higher-than-expected international prices have pushed up the non-food, non-regulated goods CPI.[12] In addition, a temporary yet unexpected increase in global transport costs has been observed in recent months, offsetting downward pressures from a more negative real exchange rate (RER) gap, causing sub-basket forecasts to be revised up. The forecast for the Services CPI, excluding food and regulated items, also increased, taking into account, in addition to the above, factors driven in part by slower rent declines linked to a weak housing supply. Higher inflation at the end of 2025 is expected to feed into 2026 via indexation. Consequently, this *Report* continues to forecast a steady decline in core inflation, albeit at a slower pace than had been projected in April. This estimate incorporates the cumulative effects of a restrictive monetary policy stance (contributing to disinflationary pressures from the TCR, a negative output gap, and declining inflation expectations) and maintains the assumptions of some reductions in international prices due to the reconfiguration of global trade, as well as the normalization of international freight rates. The CPI for goods (excluding food and regulated items) is expected to remain below 3% over the forecast horizon. In comparison, the services CPI (excluding food and regulated items) will decline gradually but remain above 3% through 2026. Core inflation for prices of goods and services (excluding food and regulated items) is now projected at 4.2% for December 2025 (3.9% in April) and 3.3% for December 2026 (3.1% in April) (Graph 2.10).

Graph 2.10
CPI excluding food and regulated items
(annual change, end-of-period)



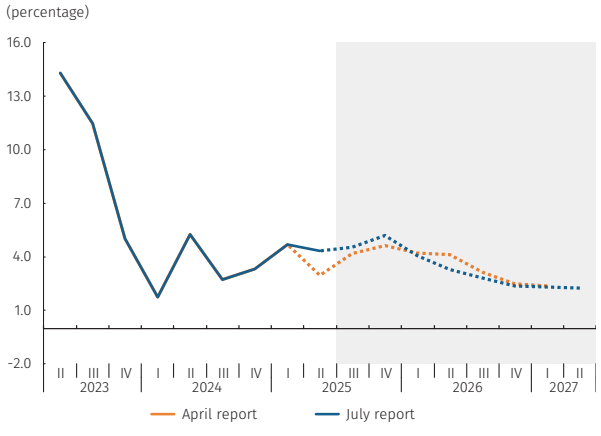
Source: DANE; calculations and projections by *Banco de la República*.

Food inflation is forecast to remain high through 2025, easing toward the target range in 2026. The forecast for this sub-basket has been revised up for 2025 with a slight downward turn for 2026, reflecting stronger-than-expected perishable food price increases in the second quarter, pointing to a longer-than-anticipated[13] agricultural cycle upswing and cost pressures from fertilizers and other inputs. Labor and international transport costs are also contributing to this increase. Over the coming quarters, the forecast path for

12 The April *Report* anticipated downward pressure on the prices of various goods imported from China, Europe, and other countries as a result of possible trade redirections due to U.S. tariff policies. So far, this increased supply of goods has not materialized, and international prices have risen, contrary to the expected reductions.

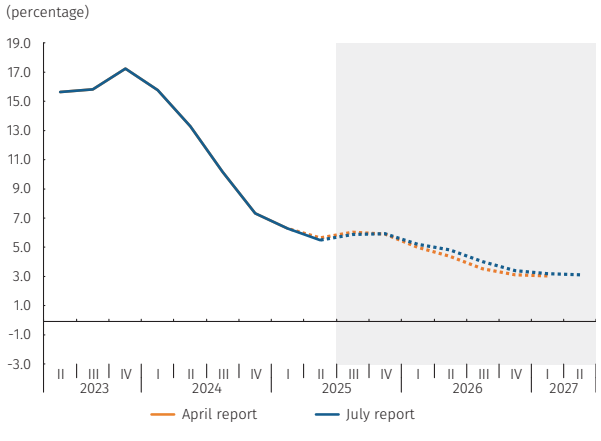
13 In recent years, this cycle has shown an unstable periodicity that differs from that observed before the pandemic.

Graph 2.11
CPI for foods
(annual change, end-of-period)



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

Graph 2.12
CPI for regulated items
(annual change, end-of-period)



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

Graph 2.13
Bank and stockbroker inflation forecast [a/]

a/ Corresponds to the median response of the Monthly Survey of Economic Analyst Expectations conducted by *Banco de la República.*
Source: DANE; calculations and projections by *Banco de la República.*

food inflation will fluctuate with the perishable food production cycle, which is anticipated to occur under normal weather and strong agricultural supply. Declining input and shipping costs, disinflationary pressures from the RER, and favorable base effects explain the lower 2026 path. The upward effect from "healthy taxes" for yearend 2025 would fade in 2026. Food CPI is now projected at 5.2% for December 2025 (4.6% in April) and 2.4% for December 2026 (2.5% in April) (Graph 2.11). This projection remains highly uncertain, given the behavior of perishable food production and distribution, a group subject to high volatility, and multiple supply shocks.

Regulated items inflation will remain high in 2025, driven by indexation and early-year gas tariff increases. Compared with the April *Report*, the short-term path has been lowered slightly, mainly due to smaller-than-expected adjustments in electricity tariffs, helped by favorable conditions for the generation of hydroelectric power and regulatory measures affecting this sector. Forecasts assume moderate gas and electricity tariff increases ahead. For 2026, the forecast has been revised upwards due to indexation from higher-than-expected 2025 inflation. Oil prices are expected to trend lower, though slightly above April projections, limiting pressure on gasoline prices. It should be noted that uncertainty surrounding the future of gas prices remains high, within the context of a market characterized by potential shortages of local gas supply, requiring greater imported quantities, which are costlier than their domestic counterpart. Given all of the above, the annual variation for regulated items would remain relatively high for the remainder of 2025, resuming a downward trend in 2026, driven by the effects of indexation to increasingly lower inflation rates. Consequently, CPI for regulated items is projected at 5.9% in December 2025 (unchanged from the April *Report*) and 3.4% in December 2026 (3.1% in April) (Graph 2.12).

Compared to April, short-term inflation expectations from surveys increased and remain above 3% over a two-year horizon. However, they continue to exhibit a downward trend toward the target as the time horizon lengthens. Expectations from economic analysts (Graph 2.13), obtained from *Banco de la República*'s monthly survey conducted between July 8 and 10, indicate that the median expectation for yearend 2025 was 4.7% for headline inflation and 4.4% for core inflation (4.5% and 4.2%, respectively, in April). Yearend 2026 expectations were unchanged at 3.8% and 3.6%, respectively. Two-year and five-year median expectations stood

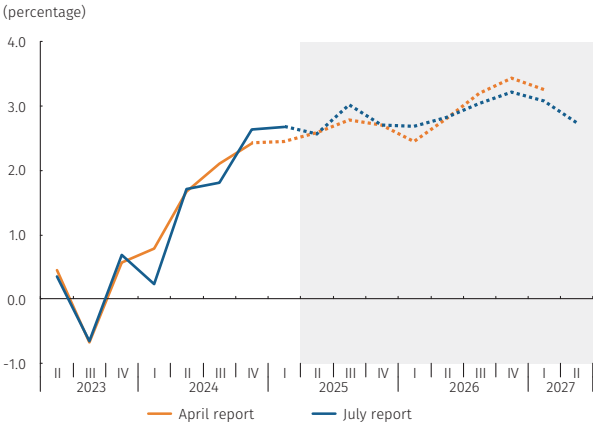
at 3.5% and 3.1%. Meanwhile, as of July 24, estimates based on government bonds (break-even inflation, BEI), adjusted for inflation and liquidity risk premiums, remained unaffected versus April's forecasts, at 3.3%, 3.4%, and 3.5% for two-, three-, and five-year horizons, respectively.[14]

2.2.2 Economic activity

The Colombian economy likely maintained a pace of expansion in the second quarter similar to that of the first, with domestic demand showing notable dynamism. This *Report* estimates that GDP grew by 2.6% year-on-year in the second quarter of 2025—broadly in line with the previous *Report's* projection—equivalent to an annualized quarterly growth of 2.8% in seasonally and calendar-adjusted terms (Graph 2.14). This estimate reflects strong performance across several leading indicators[15] during the quarter. In particular, the Economic Monitoring Indicator (ISE) posted average year-on-year growth of 2.6% in April and May (Graph 2.15), driven primarily by tertiary activities, which continued to expand both annually and monthly. Trade, transport, accommodation services, telecommunications, and arts and entertainment activities supported growth in this sector. The primary and secondary sectors also contributed positively—albeit more moderately—thanks to strong agricultural performance and a recent rebound in manufacturing. These gains occurred despite ongoing declines in the mining and construction sectors. On the expenditure side, indicators suggest that domestic demand continued to grow faster than GDP, led by private consumption, even as investment remained weak. Net external demand once again would have made a negative accounting contribution to annual GDP growth.

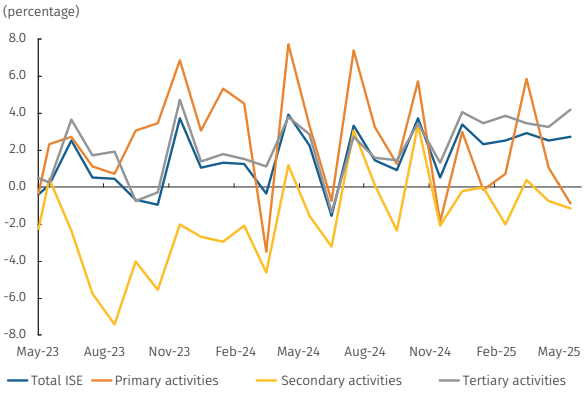
Household consumption would have remained the most dynamic component of expenditure, with strong year-on-year growth exceeding the projections in the previous *Report*. Private consumption is expected to have expanded at a similar annual rate to the first quarter, supported by indicators such as the ISE, May retail sales, and timelier data, including vehicle and motorcycle registrations, consumer

Graph 2.14
Quarterly GDP [a/]
(annual change)



a/ Seasonally adjusted and corrected for calendar effects.
Source: DANE; calculations and projections by *Banco de la República.*

Graph 2.15
Economic Tracking Indicator (ISE), and ISE by sectors [a/, b/]
(annual change)



a/ Seasonally adjusted and corrected for calendar effects.
b/ Primary activities: agriculture, hunting, forestry and fishing, mine and quarry exploitation. Secondary activities: manufacturing industries and construction. Tertiary activities: electricity, gas, and water supply; commerce, repairs, transportation and lodging; information and communications, financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support services; public administration and defense, education and health; arts and entertainment.
Source: DANE; calculations by *Banco de la República.*

14 The behavior of these measures in recent months may have been influenced by certain dynamics in the public debt market, such as recent auctions of UVR securities, the seasonality inherent in these instruments, and purchases by public entities.

15 These include energy demand, ground transportation freight traffic, regional economic pulse (PER), vehicle and motorcycle registrations, and commercial bank transactions, among others.

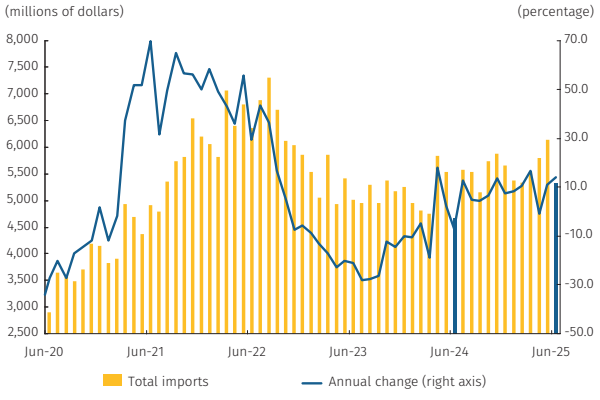
credit disbursements, and preliminary June imports of consumer goods. Notably, durable and semi-durable goods consumption likely posted annual accelerations and marked quarterly gains, while services consumption remained robust with positive annual growth. This strength was supported by the recovery of household disposable income from multiple sources, including wage earnings, remittances, tourism, and coffee-related income. More favorable credit conditions, such as lower consumer lending rates and reduced debt service burdens, along with gradually improving consumer confidence, also contributed. Public consumption, in contrast, is expected to show little change in either annual or quarterly terms, as suggested by June data from the General Budget of the Nation (PGN for its acronym in Spanish). Overall, total consumption in the second quarter is estimated to have grown both quarterly from already high first-quarter levels, and annually at a pace similar to that of the previous quarter.

Gross fixed capital formation grew slowly and remained at historically low levels, constrained by persistent challenges in construction segments. During the second quarter, investment saw a modest recovery in levels and slight annual growth. Performance varied across components: machinery and equipment investment was the most dynamic, with preliminary June imports data pointing to significant quarterly growth and a double-digit annual expansion. In contrast, construction investment remained weak, with housing investment showing a modest quarterly increase but another annual decline, as indicated by building census data, mortgage disbursements, and new home supply. A similar pattern is expected for other buildings and structures, although civil works driven by local projects such as the Bogotá metro and national road works under the 5G program showed moderate improvement alongside some recovery in non-residential buildings. Total gross capital formation likely increased both annually and quarterly, supported by expected growth in the component that includes statistical discrepancies and inventory changes, though at a slower pace than in the first quarter. Despite these gains, overall levels remained below the average of the last decade.

The continued strength of domestic demand drove higher imports and a wider trade deficit in real pesos. Imports in the second quarter exceeded those of the first quarter. They also grew year-on-year, with the strongest increases in durable consumer goods and capital goods, according to preliminary June data (Graph 2.16). Exports grew more slowly in both annual and quarterly terms (Graph 2.17). While volumes to May showed annual gains for industrial goods and agricultural products such as coffee, bananas, and other fruits, they also reflected declines in mining exports, notably coal and oil. In services, inbound air passenger data suggest no quarterly increase in foreign tourism, but annual growth was recorded due to a low base of comparison. As a result, the trade deficit in real pesos is estimated to have been greater than in both the first quarter and the same period last year, implying another negative accounting contribution from net external demand to annual GDP growth.

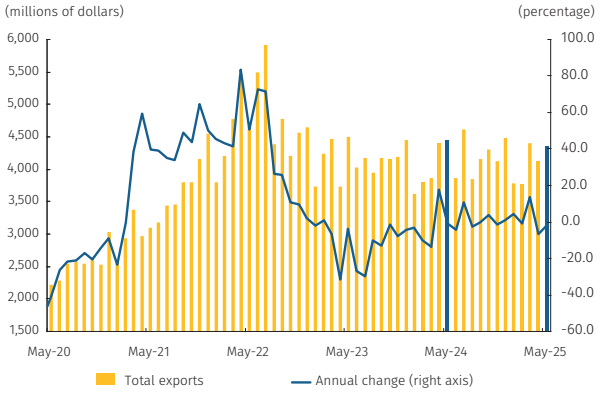
In the second quarter, agriculture and services continued to drive growth, offsetting a weaker performance of the mining and construction sectors. All

Graph 2.16
Total goods imports (CIF)
(monthly)



Source: DANE and DIAN (preliminary foreign trade data); calculations by *Banco de la República.*

Graph 2.17
Total goods exports (FOB)
(monthly)

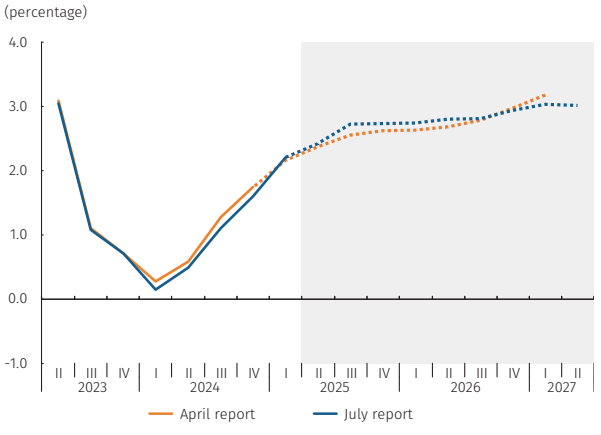


Source: DANE; calculations by *Banco de la República.*

three main economic sectors are expected to have expanded year-on-year and quarter-on-quarter, with tertiary activities remaining the most dynamic. Within services, arts, entertainment, and recreation saw notable boosts from concerts and events in major cities, as well as growth in online gambling and sports betting. Domestic trade and transport services also contributed positively, supported by higher real sales of durable goods (e.g., vehicles and motorcycles) and increased freight volumes by road and air. These gains outweighed ongoing weakness in the accommodation, restaurant, and bar sectors. Primary activities benefited from strong agricultural output, especially in export-oriented products and livestock. The mining sector, however, posted further declines in coal, oil, and certain metal ores such as ferronickel. Secondary activities grew both annually and quarterly, supported by manufacturing and civil works construction, though no significant advances were recorded in residential or non-residential building projects.

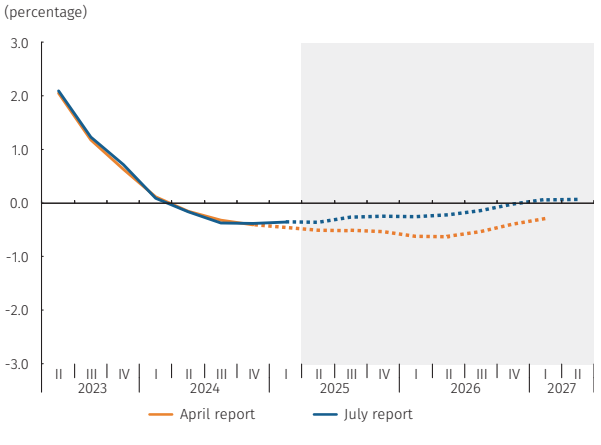
The Colombian economy is expected to maintain a growth rate in the second half of 2025 similar to that of the first half, with some acceleration in 2026—broadly following the trajectory projected in the previous *Report*. This *Report* continues to anticipate that domestic financing costs would decline gradually, and external financing would remain accessible, albeit under somewhat tighter conditions. The slight upward revision to trading partners' growth, linked to reduced U.S. tariff increases compared to initial announcements and uncertainty over their scope, should support external demand. Private consumption is projected to maintain favorable annual growth rates above those forecast previously, aided by recovering consumer confidence, easing inflation, reduced household debt burdens, and sustained income from coffee and remittances. Public consumption is not expected to grow significantly due to Central Government spending constraints, although the fiscal impulse—measured by the change in the general government primary balance—will remain substantial in 2025. Investment's contribution to GDP growth has been revised downwards, reflecting continued weakness in housing and non-residential building investment. However, gains are still expected from machinery and equipment and civil works construction, supported by regional and local projects and 5G infrastructure execution. Given these factors, GDP growth in 2025 is projected at 2.7%—slightly higher than the April *Report's* 2.6% forecast. For 2026, growth is projected at 2.9%, down slightly from 3.0% in April, partly due to a higher base of comparison. These forecasts remain subject to very high uncertainty, par-

Graph 2.18
GDP, four-quarter cumulative a/
(annual change)



a/ Seasonally adjusted and corrected for calendar effects.
Source: DANE; calculations and projections by *Banco de la República.*

Graph 2.19
Output gap a/
(four-quarter cumulative)



a/ The historical estimate of the output gap is calculated as the difference between observed GDP (four-quarter cumulative) and potential GDP (trend; four-quarter cumulative) from the 4GM model; for the forecast, it is calculated as the difference between the technical staff's GDP estimate (four-quarter cumulative) and potential GDP (trend; four-quarter cumulative) from the 4GM model.
Source: DANE; calculations and projections by *Banco de la República.*

ticularly in light of global trade and geopolitical conditions, as explained in Section 2.3.

The unemployment rate (UR) is anticipated to remain below its historical average and relatively stable for the rest of 2025. Data from the Integrated Household Survey (GEIH) as of May showed national employment at high and stable levels, while the inactive population had increased, reducing the overall participation rate (GTP) to 64%. Despite job stability, this lower labor supply pressure allowed the national UR to continue declining, reaching levels not seen since 2015. Specifically, for the rolling quarter ending in May, unemployment fell compared to February, standing at 8.9%.[16] Based on this labor market performance and the economic activity projections in this *Report*, the seasonally adjusted national aggregate unemployment rate for 2025 is estimated to range between 8.5% and 9.8%, with a central estimate of 9.2%. For urban areas, the unemployment rate is projected to average 9.1% (within the same range). These projections are lower than those presented in the previous *Report* for both geographic areas. As a result, estimates of the unemployment rate consistent with stable inflation (non-accelerating inflation rate of unemployment, NAIRU) suggest that the unemployment gap will remain negative through yearend, with gradual narrowing over the forecast horizon.

The strength of consumption, labor market performance, and recent inflation trends indicate lower excess productive capacity than estimated in the April *Report*. The output gap is expected to remain negative for much of the forecast horizon. For the first half of the year, excess productive capacity is estimated to have been smaller than previously reported in the April *Report* (Graph 2.19). This reflects stronger-than-expected private consumption, low fixed investment, a downward trend in the mining sector (partially captured in a lower estimate of potential GDP), and higher-than-anticipated headline and core inflation in the April Report. For the remainder of 2025, the output gap is projected to be somewhat less negative than in April, primarily due to the upward revision in economic growth driven mainly by robust private consumption. This adjustment is consistent with higher headline and core inflation paths than those forecast in the April *Report* and a lower unemployment rate. Specifically, this *Report* estimates the annual output gap for the second quarter of 2025 at around -0.4%,

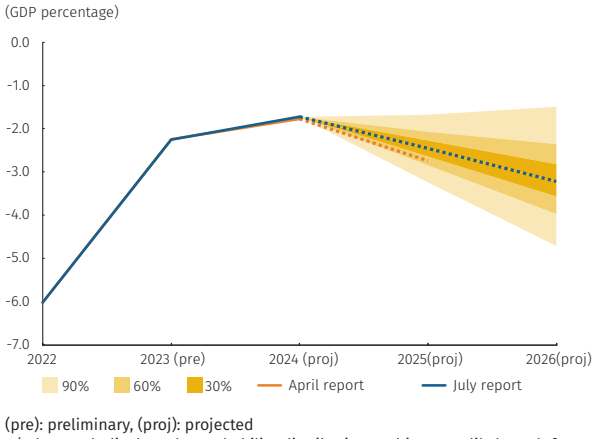
16 See Chapter 3 of this *Report* for additional information.

compared to -0.5% in April. By yearend, the annual gap is projected to narrow to about -0.2% (-0.5% in April), implying potential GDP growth of 2.6% (2.8% in April). By the end of 2026, the output gap is expected to close, versus the -0.4% estimated in the April *Report*. It should be noted that the gap and potential output estimates in this *Report* are subject to considerable uncertainty, stemming from potential effects of persistently low investment in some components, structural changes in the economy, and other factors (see Box 1).

2.2.3 Balance of payments

In 2025, the current account deficit is projected to widen to 2.5% of GDP, reflecting stronger economic growth, lower international prices for key commodity exports, and uncertainty over global trade policy (Graph 2.20).[17] This larger external imbalance compared to the previous year would stem mainly from a widening trade deficit in goods and services. For goods, the deficit is expected to deepen due to higher import outflows, driven by stronger domestic demand, along with lower revenues from oil and mining exports amid falling international prices and reduced local production. Despite an anticipated increase in external sales of coffee, gold, and non-traditional goods, total goods exports are expected to decline. The services deficit is also projected to widen moderately, as increased imports of tourism, transport, and financial services outpace the expected growth in tourism exports, which would benefit from a rising number of non-resident visitors to the country. A smaller primary income deficit and a larger current transfers surplus would partially offset these effects. The reduction in the primary income deficit would mainly reflect lower profit remittances abroad by oil and mining companies with foreign direct investment (FDI), while workers' remittances are expected to remain strong.[18]

Graph 2.20
Annual current account [a/, b/]
(four-quarter cumulative)



(pre): preliminary, (proj): projected
a/ The graph displays the probability distribution and its most likely path for an eight-quarter horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode), using primarily as reference the densities from the Patacon model.
b/ The probability distribution is derived from the forecasting exercise of the July *Report*.
Source: *Banco de la República.*

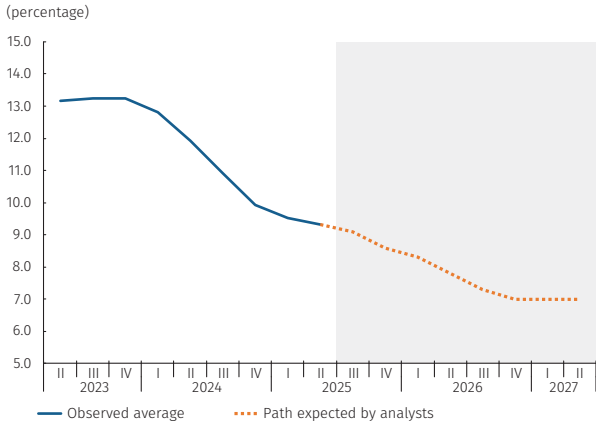
17 For the second quarter of 2025, a current account deficit of around 2.4% of GDP is projected, reflecting a widening of the external imbalance compared to the same period of the previous year and the first quarter of 2025. This result would be explained by a widening of the trade imbalance in goods and services compared to the previous year, which would be partially offset by a higher surplus from current transfers and a lower factor income deficit.

18 In 2025, remittances from workers are expected to increase, reflecting the high levels of Colombian migration observed between 2022 and 2024. According to figures from *Migración Colombia*, the net outflow of Colombians abroad during 2024 was approximately 315.000 people. Additionally, labor markets are expected to remain tight in several of the countries where Colombian migrants reside.

By 2026, the current account deficit is projected to widen further, reaching 3.2% of GDP. The trade deficit would increase as higher economic growth boosts imports of goods and services, while international prices for major commodity exports continue to ease. The primary income deficit is also expected to expand, mainly due to high interest payments on external debt, although this would be partly mitigated by a further decline in profit remittances abroad from oil and mining companies with foreign direct investment. The surplus in current transfers is anticipated to grow further, supported by still-robust remittances. From a savings–investment perspective, the projected widening of the external deficit in 2025 and 2026 is consistent with significant public-sector imbalances—driven by lower public-sector savings—and a reduction in the private-sector surplus, as private investment rises. The forecast for the current account balance remains highly uncertain, given volatility in global commodity prices, risks to domestic and global growth, uncertainty over the future of global trade policy, and the potential evolution of both domestic and external financial conditions, among other factors.

For both 2025 and 2026, Colombia is expected to maintain access to external financing, with foreign direct investment (FDI) remaining the primary funding source. Although FDI in the oil and mining sectors is projected to decline, this would be partly offset by increased investment in other sectors, supported by stronger domestic demand and local economic growth. The public sector is likely to contribute to external financing, consistent with the high fiscal deficit presented in the MFMP, while the private sector would remain a net external asset holder. This external financing environment will be shaped by U.S. interest rates that are expected to remain above pre-pandemic levels and a Colombian risk premium that is projected to stay above its historical average and follow an upward trend over the forecast horizon.

Graph 2.21
Monetary policy interest rate: average observed quarterly, and rate expected by analysts [a/]



a/ These projections are calculated based on the quarterly average of the current rate, as per the median response of the Monthly Survey of Economic Analyst Expectations conducted by *Banco de la República* for July 2025.
Source: *Banco de la República.*

2.2.4 Monetary policy and interest rates expected by analysts

The median analysts' expectation for the policy interest rate is 9.1% for the third quarter of 2025 and 8.6% for the fourth quarter (Graph 2.21). The median response to *Banco de la República's* monthly survey of analysts' expectations conducted in early July anticipates that the average policy rate in the third quarter of 2025 would be 9.1%. Analysts expect reductions in the monetary policy rate, although smaller than those anticipated in the April *Report*. They project an

average rate of 8.6% for the fourth quarter of 2025, and 7% for both the end of 2026 and the second quarter of 2027. Over an eight-quarter horizon, this projected path is higher on average than in the April 2025 survey, but lower than the path implied in the macroeconomic forecast presented in this *Report*. The latter incorporates a monetary policy response consistent with inflation converging to the target over the forecast horizon, along with an increase in the local real neutral interest rate (RNIR) due to an upward revision in the trend risk premium.[19] It is also worth noting that, by the end of 2026, the survey median anticipates headline inflation above the level projected by the Bank's technical staff.

2.3 Balance of macroeconomic risks

The balance of risks reflects lower overall uncertainty compared with the previous quarter, particularly on the external front. For inflation, upside risks dominate, while for GDP growth the outlook is mixed—tilted to the upside in 2025 but to the downside in 2026. The predictive density (PD) exercise[20] summarizes the risk balance across multiple variables within the macroeconomic forecast and shows reduced uncertainty for most external variables. This is mainly due to the smaller scope of U.S. tariff increases announced and implemented, compared with expectations three months earlier. On the domestic side, the main risk stems from the country's fiscal situation, which could generate upward pressure on the sovereign risk premium and its trend component beyond what is assumed in the central scenario. Despite the reduction in external uncertainty, the U.S. tariffs that did take effect could dampen global economic growth and raise inflationary pressures in the United States, prompting a more restrictive Federal Reserve policy stance. These factors could raise external financing costs, put upward pressure on the exchange rate, and increase the likelihood of a higher neutral interest rate than assumed in the baseline. Additional upward risks to inflation come from possible labor cost pressures in 2026, particularly if the minimum wage increases above the sum of inflation and productivity growth, and from supply constraints in food and regulated items markets. In terms of growth, while short-term upside risks stem from the strength of private consumption and the demand boost associated with a higher fiscal deficit, the outlook for the rest of the forecast horizon is shaped by the need for fiscal adjustment, lower external income and remittances in the event of a potential global slowdown, and the possible prolongation of restrictive monetary policy due to inflationary pressures. These factors shift the balance of risks to the downside, particularly in 2026.

19 The revision of the RNIR for Colombia is 11.9 bp on average for the forecast horizon compared to that considered in the April Report.

20 Technical details on the construction of the risk balance through the predictive density exercise can be found in the paper "*Caracterización y comunicación del balance de riesgos de los pronósticos macroeconómicos: un enfoque de densidad predictiva para Colombia*" (Méndez-Vizcaíno et al., 2021) and in Box 1 of the July 2021 *Monetary Policy Report*.

On the external front, upside risks dominate both the sovereign risk premium and external inflation, whereas the risks to trading partners' growth are tilted to the downside. Among the external risk factors considered in the probability distributions (PDs), the most significant is the upside risk linked to the country's sovereign risk premium, reflecting the deterioration of the domestic fiscal position. This risk intensified following the announcement of the suspension of the fiscal rule and the higher debt projections in the Medium-Term Fiscal Framework (MFMP, by its Spanish acronym) and has been reinforced by recent sovereign credit rating downgrades from S&P and Moody's at the end of June. These developments could increase the cost of external financing and exert upward pressure on the exchange rate. The persistence of this factor also adds to the upward trend in the risk premium, creating upward pressure on the Colombian neutral interest rate. In the United States, although not all tariff announcements from April were implemented, those that took effect have contributed to higher U.S. inflation and could slow global growth, posing downside risks to trading partners' growth projections. This factor may delay the Federal Reserve's monetary policy normalization process, implying moderate upside risks to its policy rate. Regarding international commodity prices, the forecast incorporates balanced risks: bearish factors such as increased crude oil supply from OPEC and non-OPEC producers are offset by bullish factors, including geopolitical tensions in oil markets and the potential impact of adverse weather events on food prices.

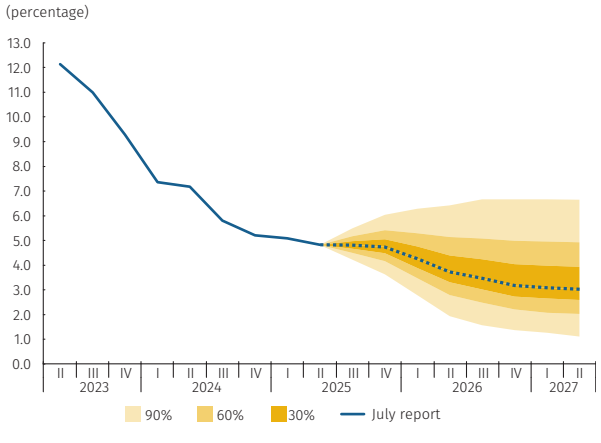
The balance of risks for headline and core inflation (excluding food and regulated items) is sloped to the upside, with the most notable risks related to labor costs, potential currency depreciation linked to fiscal challenges, and supply-side pressures in the energy sector. For both headline and core inflation, upside risks are concentrated in the baskets for services and regulated items—particularly in 2026—and, to a lesser extent, in food prices. In services, there is a risk that the minimum wage increase in 2026 could again significantly exceed inflation plus productivity growth, in a context of reduced working hours, putting upward pressure on labor costs. If economic agents anticipate this adjustment and incorporate it into their expectations, the convergence of inflation to the target could slow. In regulated items, upside risks are tied to structural issues in the energy sector, notably the potential insufficiency of local gas supply and delays in electricity infrastructure investment, both of which could drive up gas and electricity prices in 2026. In the food category, risks are moderately tilted upward due to potential transport cost increases from road closures caused by landslides and public order issues, as well as a possible diesel price adjustment. For goods, a significant upside risk arises from potential further peso depreciation due to fiscal deterioration; however, this is offset by the possibility of increased exports from Asian economies, particularly China, to other markets in response to U.S. trade restrictions, along with the potential pass-through of recent producer price reductions to consumers. As a result, risks in this category are balanced, though uncertainty remains high.

The balance of risks for economic activity is mixed—tilted upward for the second quarter of the year and downward for the remainder of the forecast horizon. For the second quarter, upside risks are supported by strong private

consumption, underpinned by a resilient labor market and high household confidence. This is consistent with the latest ISE data, which shows robust aggregate activity, particularly in the tertiary sectors. Beyond the second quarter, downside risks dominate, especially for investment, given the need for fiscal consolidation in the face of deteriorating public finances, lower remittance inflows amid potential global slowdown, and reduced value added in the mining and energy sector due to weaker international prices and domestic policies. Offsetting these risks, at least in the short term, are possible income gains from minimum wage increases and stronger-than-expected infrastructure investment, including projects such as the Bogotá metro. Additionally, the PD exercise endogenously incorporates risks related to the possibility of a more prolonged restrictive monetary policy stance in response to persistent inflationary pressures, which are considered more significant than the external downside risks to economic activity.

In summary, the overall balance of risks shows less uncertainty than in the previous *Report*, with upside risks prevailing for inflation (Graphs 2.22 and 2.23) and mixed upside risks for growth (Graphs 2.24 and 2,25) in the remainder of 2025 and downside for the rest of the forecast horizon. Under this scenario, there is a 90% probability that headline inflation will fall within a range of 3.6% to 6.0% by the end of 2025, and between 1.4% and 6.7% by the end of 2026. For

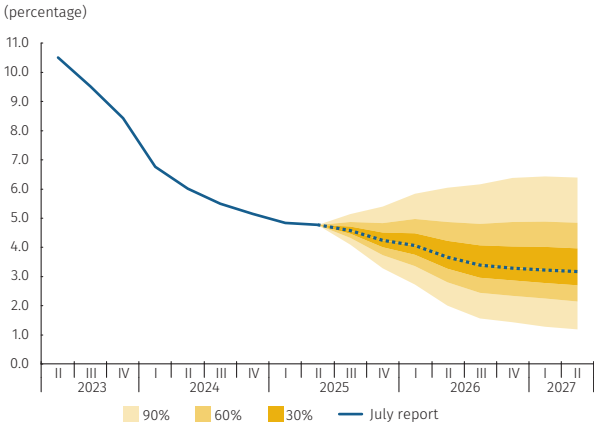
Graph 2.22
Consumer price index, predictive density a/, b/
(annual change, end-of-period)



	4Q 2025	2Q 2026	4Q 2026
Mode	4.7	3.7	3.2
< Mode	45%	38%	32%
	Intervals		
<2	0%	6%	11%
2 to 4	13%	40%	41%
>4	87%	55%	48%

a/ The graph displays the probability distribution and its most likely path on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode), using a combination of densities from the Patacon and 4GM models.
b/ The probability distribution is derived from the forecasting exercise of the July *Report*.
Source: DANE; calculations and projections by *Banco de la República*.

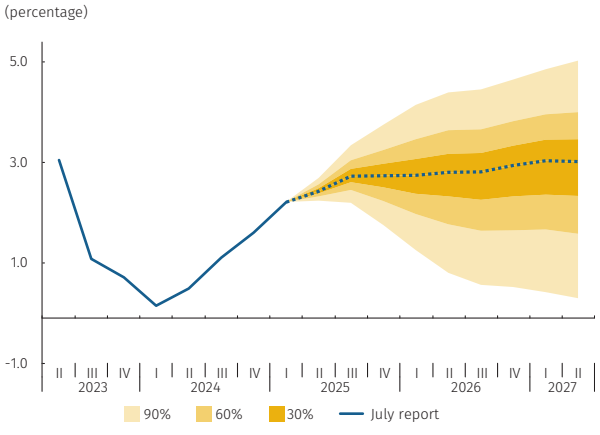
Graph 2.23
CPI excluding food and regulated items, predictive density a/, b/
(annual change, end-of-period)



	4Q 2025	2Q 2026	4Q 2026
Mode	4.2	3.7	3.3
< Mode	44%	40%	36%
	Intervals		
<2	0%	5%	11%
2 to 4	31%	46%	44%
>4	69%	49%	45%

a/ The graph displays the probability distribution and its most likely path on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode), using a combination of densities from the Patacon and 4GM models.
b/ The probability distribution is derived from the forecasting exercise of the July *Report*.
Source: DANE; calculations and projections by *Banco de la República*.

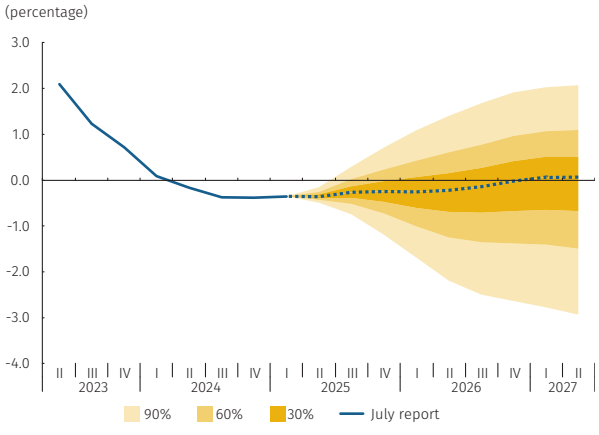
Graph 2.24
GDP, four-quarter cumulative, predictive density [a/, b/, c/]
(annual change)



	2Q 2025	4Q 2025	4Q 2026
Mode	2.4	2.7	2.9
< Mode	41%	50%	62%
	Intervals		
<1	0%	0%	11%
1 to 2	0%	11%	23%
2 to 3	100%	55%	30%
>3	0%	34%	36%

a/ The graph displays the probability distribution and its most likely path on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode), using a combination of densities from the Patacon and 4GM models.
b/ The probability distribution is derived from the forecasting exercise of the July *Report*.
Source: DANE; calculations and projections by *Banco de la República*.

Graph 2.25
Output gap, predictive density [a/, b/, c/]
(four-quarter cumulative)



	2Q 2025	4Q 2025	4Q 2026
Mode	-0.4	-0.2	0.0
< Mode	40%	51%	59%
	Intervals		
<-2	0%	0%	12%
-2 to 0	100%	67%	48%
0 to 2	0%	33%	35%
>2	0%	0%	4%

a/ The graph displays the probability distribution and its most likely path on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode), using a combination of densities from the Patacon and 4GM models.
b/ The probability distribution is derived from the forecasting exercise of the July *Report*.
Source: DANE; calculations and projections by *Banco de la República*.

core inflation, the same level of confidence implies a range of 3.3% to 5.4% at the end of 2025 and 1.4% to 6.4% at the end of 2026. The likelihood of headline and core inflation falling within the 2% to 4% target range by the fourth quarter of 2025 is estimated at 13% and 31%, respectively, and between 41% and 44% by the end of 2026. Regarding economic activity, annual GDP growth is projected, with 90% confidence, to range between 1.7% and 3.8% in 2025 and between 0.5% and 4.6% in 2026.

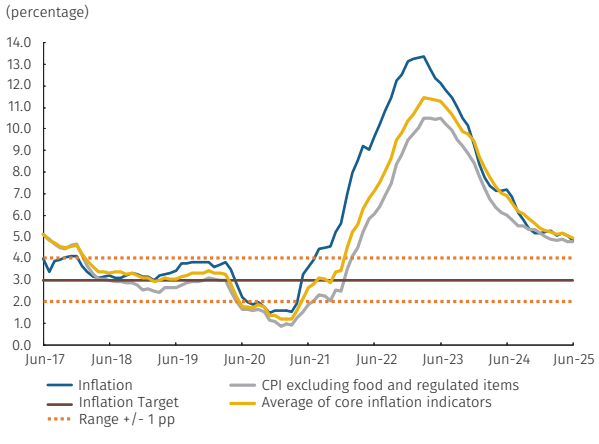
3. Current economic situation

3.1 Inflation and price behavior

In June, annual headline inflation once again began to fall after several months of stagnation, although it remained above the 3% target, primarily due to the persistence of core inflation rigidity. In June 2025, the consumer price index (CPI) recorded a year-on-year variation of 4.8%, after remaining relatively stable in previous months at around 5.1%. The June figure is the lowest since October 2021 and lower than the 5.1% value recorded in March. This behavior was explained by the reductions in the annual change seen in the regulated items segment, particularly due to the recent downward trend in utility rates adjustments and smaller-than-expected increases in the prices of perishable foods, which more than offset the rebound in the price adjustments of processed foods. Additionally, the exchange rate's behavior was comparatively positive in inflationary terms. Core inflation, measured as the annual variation of the CPI excluding food and regulated items, continued to hover at close to 4.8% between March and June (Graph 3.1), with the price of goods increasing year-on-year, offset by a fall in the annual price variation of services, owing to a favorable behavior of rent prices. Recent activity in the price of goods failed to mirror the year-on-year declines recorded in the producer price index (PPI), which in June stood at 2.0% versus the 4.5% observed in March. By component, both the domestic and imported constituents saw declines in their annual variations, from 5.1% to 2.4% and from 2.7% to 0.9%, respectively (Graph 3.2).[1] Despite the drop in headline inflation in June, both headline and core inflation ended at higher rates than those anticipated in April's *Report*. With the exception of regulated items, all baskets registered higher annual price adjustments than forecast in the previous *Report*, with the food group registering the largest upward surprise, mainly explained by the behavior of perishable foods.

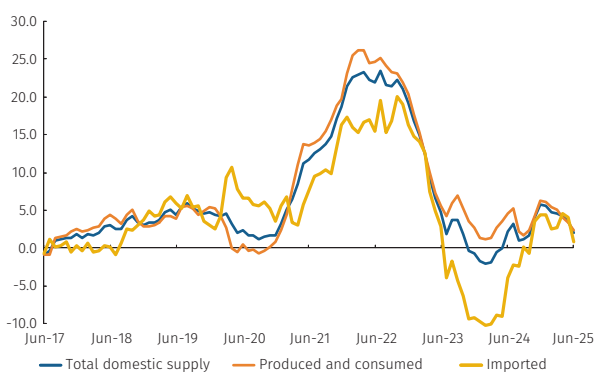
The annual change in the consumer price of goods increased during the second quarter, driven mainly by higher domestic transport costs and some international price increases. Although the annual adjustment in the price of goods rebounded between March (0.9%) and June (1.6%), surprising on the upside compared to the April *Report*, price adjust-

Graph 3.1
CPI and core inflation indicators
(annual change)



Sources: DANE and *Banco de la República*.

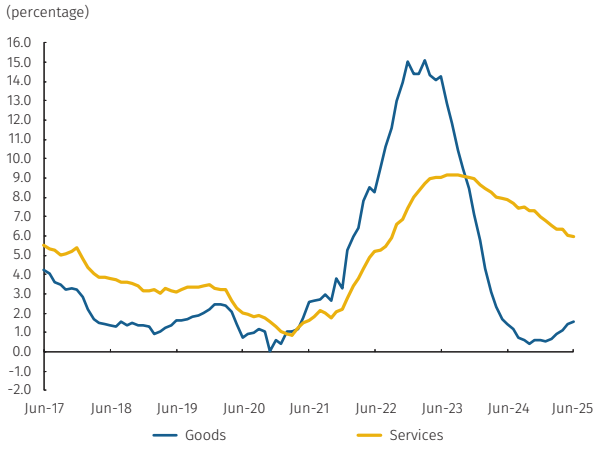
Graph 3.2
PPI by origin
(annual change)



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

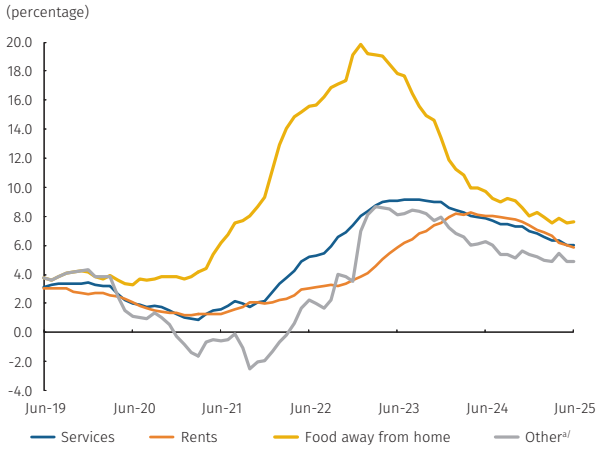
1 Annual producer inflation provisional data for June is supplied by DANE.

Graph 3.3
CPI for goods and services, excluding food and regulated items (annual change)



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

Graph 3.4
CPI for services, excluding food and regulated items and its components (annual change)



a/ This group mainly includes the following items: communication, recreation, and cultural services; education (non-regulated); miscellaneous services (hairdressing, childcare, financial, etc.); transportation; property management; domestic service; nightclubs and hotels; healthcare; and laundry services
Sources: DANE; calculations by *Banco de la República.*

ments continued to fall below 3% during this period (Graph 3.3) in an environment of disinflationary pressures resulting from the exchange rate's behavior and the negative output gap. However, certain goods included in the CPI have begun to reflect in their prices the increases seen in the value of gold during the year, affecting both gold and costume jewelry. The former was exacerbated by burdens from the recent boost in consumption activity, significant increases in labor costs, and logistics and transportation bottlenecks.

The annual variation seen in the services CPI continues its protracted downward trend, yet remains at high levels, well above the inflation target. The price adjustment of the services component of the family basket recorded a drop from values close to 7.0% at the end of 2024 to 6.4% in March and 6.0% in June 2025 (Graph 3.4). The moderation noted above was weaker than expected in the April *Report* and did not affect all items of this sub-basket. In particular, the annual adjustment of the rent CPI, which accounts for nearly 25% of the total basket and nearly 50% of the services basket, declined from 6.7% in March to 5.9% in June, a slower-than-expected decrease partly attributed to the limited supply of housing. However, there was minimal variation in the annual change of other services,[2] continuing at 4.9% for the period, despite the decreases observed in the higher education category. The persistently elevated variation in the prices of services continues to be fronted by food away from home, whose year-on-year changes continued high, yet relatively stable, between March (7.5%) and June (7.6%). This behavior would be associated with labor cost pressures resulting from increases in the minimum wage and the progressive reduction of the work week.[3] These factors not only affect the restaurant segment but are also placing upward pressure on the entire service sector and commerce in general.

During the second quarter, the annual adjustment of prices in the regulated items sub-basket decreased as a result of lesser pressures on utility rates. Between March and June, the annual change in the CPI of regulated items showed the largest decline among the main components of the family basket, dropping from 6.3% to 5.5%, which is lower than the expected 5.6% noted in April's Report. This behavior was mainly explained by more moderate adjustments in the prices of public services, whose annual levels dropped from 4.8% in March to 2.9% in June. The latter owing mostly to smaller rate increases for electricity services resulting from a reduced need for thermal generation, which is more costly, due to recent heavy rains, a recovery in reservoir levels,[4] and

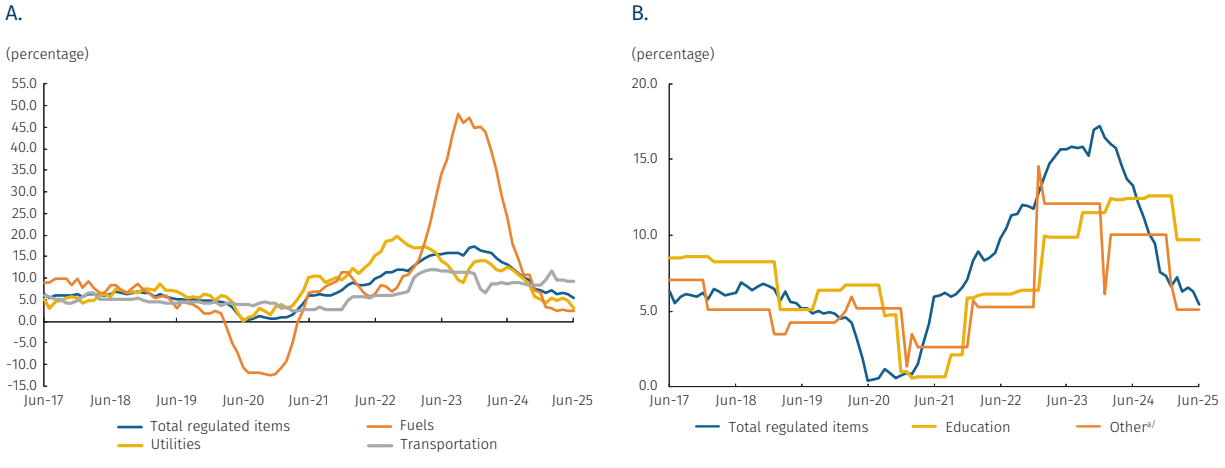
2 This group mainly includes: communication, recreation and cultural events; education (non-regulated); miscellaneous services (beauty salons, day care, financial services, etc.); transportation; building administration fees; domestic services; night and health clubs; laundry services.

3 See Law 2101 of 2021 of the Congress of the Republic, available in Spanish at https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=166506

4 Currently at capacity levels nearing 75%.

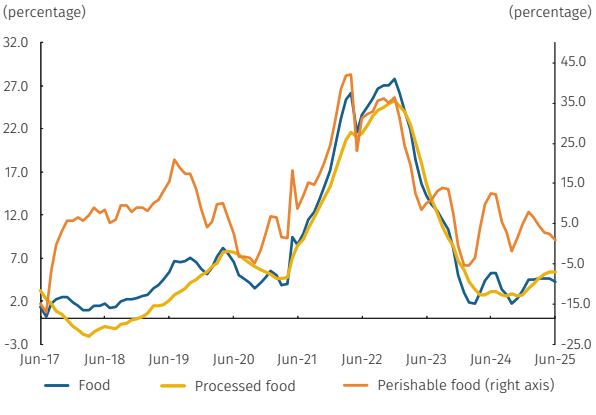
an increase in hydroelectric generation (Graph 3.5, panel A). Moreover, the fuels (2.5%), education (9.7%), transportation (9.4%), and others (5.1%) subgroups did not exhibit significant changes during the second quarter (Graph 3.5, panel B). The education and transportation groups, whose annual adjustments are the highest among the regulated groups, have been facing significant upward pressures during the year because of higher payroll costs resulting from the increase in the minimum wage and the reduction in the work week.

Graph 3.5
CPI for regulated items and its components
(annual change)



a/ Includes EPS affiliate co-payments, administrative certificates and documents, and professional fee payments
Sources: DANE; calculations by *Banco de la República.*

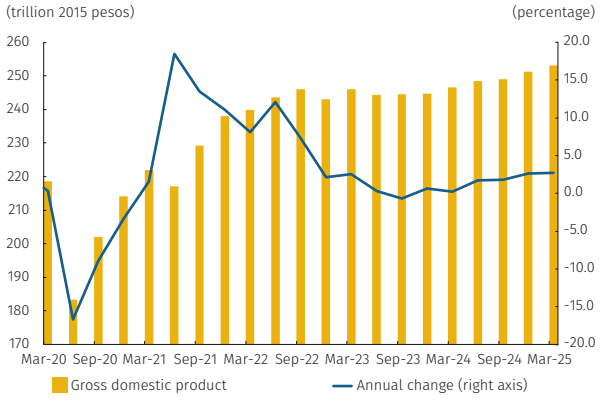
Graph 3.6
CPI for food and its components
(annual change)



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

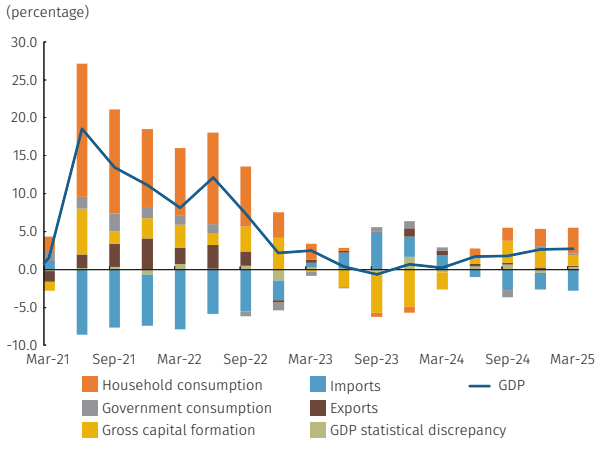
During the second quarter, there was a more minor year-on-year adjustment in overall food prices, though perishable and processed foods performed very differently. The annual change in the food CPI decreased between March (4.7%) and June (4.3%), though by less than that forecast in the April *Report* (3.0%). This moderation was partly due to recent downward pressures from an exchange rate that has been generating disinflationary pressures but was primarily attributable to greater food availability. The ample food supply was reflected in the behavior of the perishable food group, whose annual growth slowed significantly from 4.6% in March to barely 1.0% in June (Graph 3.6). In contrast, the processed food segment experienced an upward price dynamic, with adjustments that rose from 4.7% in March to 5.4% in June. This conduct was explained by a higher tax burden placed on products with high sugar content and ultra-processed products, as well as by increases in the international prices of cocoa, coffee, and oils. In particular, the subcategory of ultra-processed foods, which is burdened with the health tax, registered an annual price growth exceeding 9% in June, placing significant pressure on the entire processed food category.

Graph 3.7
Gross Domestic Product [a/]
(quarterly and annual change)



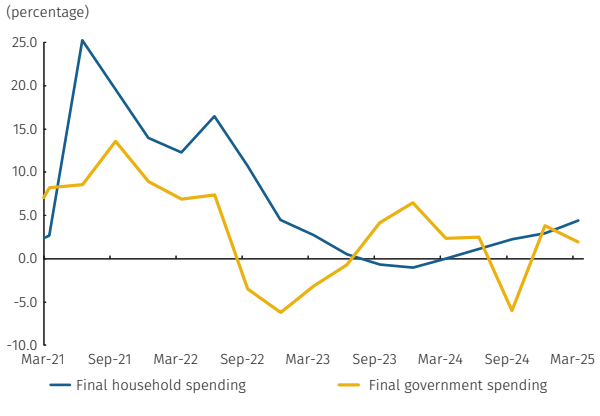
a/ Seasonally adjusted and corrected for calendar effects
Sources: DANE; calculations by *Banco de la República.*

Graph 3.8
Contributions to annual changes to quarterly GDP [a/]
(annual change, contribution)



a/ Seasonally adjusted and corrected for calendar effects
Sources: DANE; calculations by *Banco de la República.*

Graph 3.9
Final household and general government spending [a/]
(annual change)



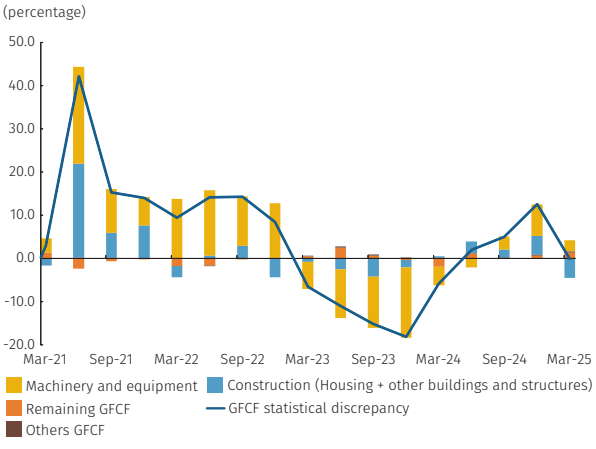
a/ Seasonally adjusted and corrected for calendar effects
Sources: DANE; calculations by *Banco de la República.*

3.2 Growth and domestic demand

During the first quarter of 2025, GDP continued on a favorable growth path, with a year-on-year expansion somewhat above expectations and surpassing that observed in 2024. In this period, annual economic growth reached 2.7%, with an annualized quarterly expansion of 3.2%, according to the seasonally and calendar-adjusted figures (Graph 3.7). Annual growth was higher than anticipated in the previous *Report* (2.5%), which was largely due to a downward revision in GDP levels calculated by DANE for the first quarter of 2024. Thus, Colombia's economic activity continued the gradual growth trend observed since the beginning of last year. On the expenditure side, and in line with expectations, domestic demand growth was favorable, primarily owing to the remarkable expansion of private consumption despite the low investment performance (Graph 3.8). All this against a backdrop of declining inflation, improved consumer and business confidence indices, favorable external demand, fiscal incentives, and the gradual easing of domestic monetary policy. On the supply side, arts and entertainment activities, agriculture and livestock, and trade, transportation, and hospitality services were the main drivers of annual GDP growth. In contrast, mining and quarrying, together with construction, were the sectors that saw the most significant declines in their growth figures.

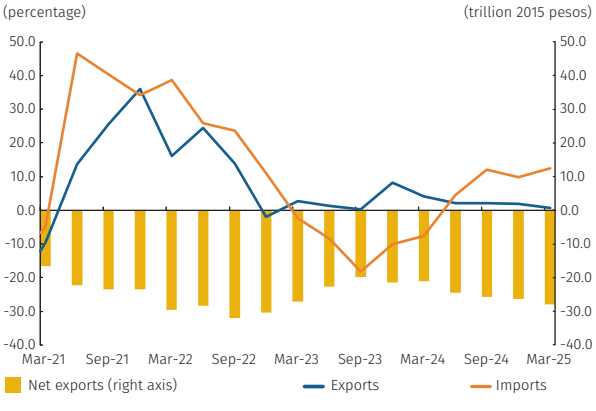
Domestic demand expanded at a significant pace, supported by stronger than expected private consumption, in marked contrast with the drop in investment. Total domestic spending accelerated in comparison with fourth quarter behavior and that seen overall in 2024, recording a significant annual upsurge in the first quarter (4.7%). The main contributor to this growth was private consumption, which continued to exhibit significant strength with considerably higher annual growth rates (4.4%) than those of the economy as a whole (Graph 3.9). Although, in general, all segments of household consumption performed very favorably, the highest annual growth rates were observed in the consumption of durable and semidurable goods. Services were the main participant in private consumption, with a reportedly more moderate annual increase, yet showing stable growth over the past years, allowing it to reach heights exceeding its pre-pandemic levels. The favorable dynamics of private consumption continue amid recovering disposable income, resulting from a significant inflow of remittances, a buoyant coffee income, and a substantial increase in the minimum wage in recent years, coupled with lower interest rates and gradual improvements in consumer confidence. Public consumption reached elevated levels in the first quarter, although slightly lower than those seen at yearend 2024, therefore resulting in smaller annual growth figures. Nevertheless, fiscal policy would be contributing to the growth in demand, as suggested by the expected increase in the government's primary deficit in 2025.

Graph 3.10
Quarterly gross fixed capital formation [a/]
(annual change, contributions)



a/ Seasonally adjusted and corrected for calendar effects
Sources: DANE; calculations by *Banco de la República.*

Graph 3.11
Exports, imports, and trade balance [a/]
(annual change and trillion 2015 COP)



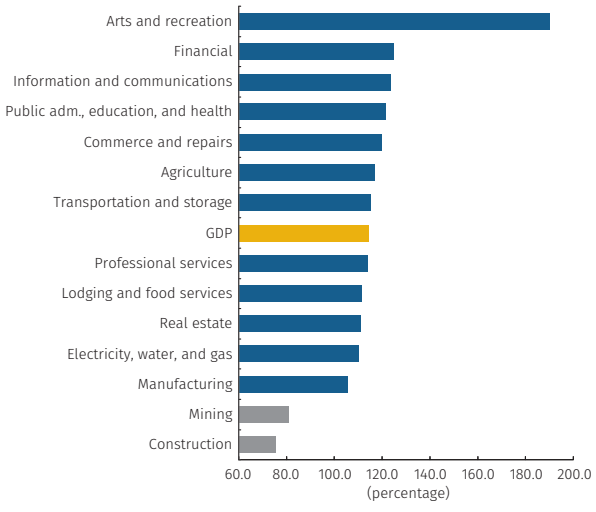
a/ Seasonally adjusted and corrected for calendar effects
Sources: DANE; calculations by *Banco de la República.*

The lackluster performance of investment in the first quarter was largely due to the poor performance observed in the construction sector. The leading cause of the poor performance of gross fixed capital formation, which fell by 0.1% annually in the first quarter, was investment in other buildings and structures (Graph 3.10). According to DANE, investment in this category fell year-on-year by 8.8% due to the drop in the non-residential buildings component; in contrast, the civil works component continued to grow in annual terms. An additional negative contributor was housing investment (-8.5% annual rate), whose outcome was mainly attributable to a lower rate of completion of works in the non-VIS segment (VIS is the low-income housing segment for its Spanish acronym). In contrast, investment in machinery and equipment continued at similar levels to those of the last quarter of 2024 and, because of a low base of comparison, registered an annual increase of 6.0%. The performance of machinery and equipment contrasts markedly with construction investment: while the former continues to surpass pre-pandemic levels, investment in other buildings and structures and housing continues to show significant lags with respect to this reference period. Finally, it should be underscored that total gross capital formation differed markedly from fixed capital formation in the first quarter (annual growth of 8.2%), due to a positive and significant statistical discrepancy component and variation in inventories, according to the most recent figures published by DANE.

Consistent with the rise of domestic demand, imports also grew significantly, leading to an increased trade deficit in constant pesos versus the previous year. During the first quarter, the favorable performance of private consumption and investment in machinery and equipment was reflected in a significant increase in imports (12.4% annualized and 8.9% quarterly annualized), mainly driven by imports of durable consumer goods and capital goods for industry. Exports in real pesos showed a low annual growth of 0.7%, limited by the poor performance of mining exports. This contrasted with the vigor of agricultural exports, whose growth was concentrated in coffee and flowers, and in manufacturing exports. Also noteworthy was the momentum of services exports, with a year-on-year growth of 7.1% in the first quarter, favored mainly by non-resident tourism. Given the above, the external trade deficit widened in the first quarter compared to the previous quarter and to the previous year (Graph 3.11). This, in turn, resulted in a continued negative accounting contribution by the trade deficit in constant pesos to annual GDP change.

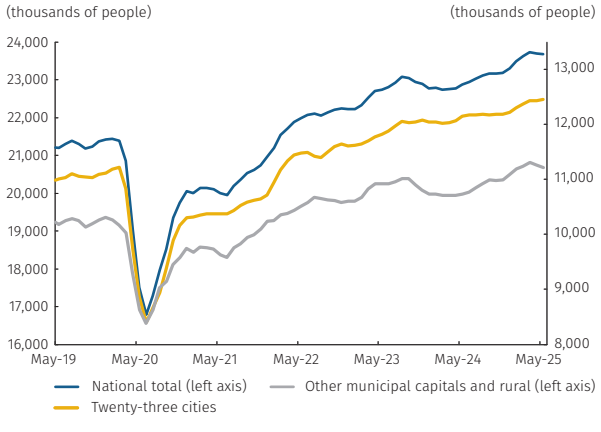
On the supply side, tertiary activities continued to show significant dynamism, leading economic growth and offsetting the poor performance observed in mining and most of the construction activities. Annual economic activity growth during the period was largely explained by the performance of tertiary activities, which grew by 3.7%. The relatively high levels reached by these activities are attributed to art and entertainment services (Graph 3.12), which have benefited from a boom in internet gaming and online gam-

Graph 3.12
Sectoral value-added levels in 1Q 2025 relative to 4Q 2019 a/
(4Q 2019 = 100%)



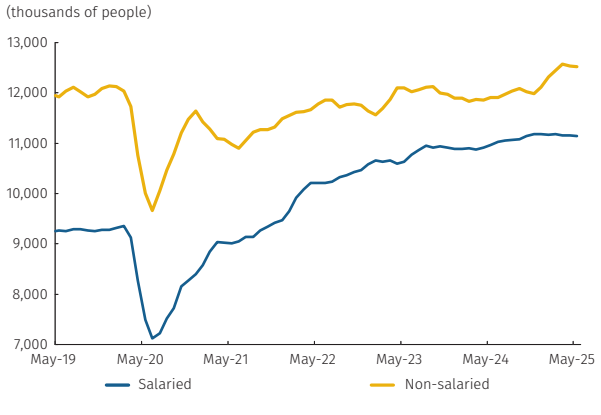
a/ Seasonally adjusted and corrected for calendar effects
Sources: DANE; calculations by *Banco de la República.*

Graph 3.13
Employed population by location



Note: Corresponds to rolling quarterly seasonally adjusted data
Sources: DANE (GEIH), calculations by *Banco de la República.*

Graph 3.14
Jobs by type of employment
(national total)



Note: Corresponds to rolling quarterly seasonally adjusted data
Sources: DANE (GEIH), calculations by *Banco de la República.*

bling, as well as the ample variety of concerts accessible in the country's main cities. The positive performance of the commerce, transportation, and lodging sector also stands out, driven by domestic sales, reaching real levels similar to those observed during the VAT-free day of 2022, on account of higher demand for durable goods such as motorcycles and land and air transportation services. The above are also supplemented by the improved performance of public administration, education, and health services, as well as financial and insurance services. The primary branches also contributed positively to annual growth, expanding by 1.7%, as a result of positive performance in agricultural activities associated with coffee and livestock, despite the setbacks recorded in the mining and energy sector, specifically in coal, oil, and other metalliferous minerals, such as nickel. In contrast, the secondary branches recorded year-on-year declines (-1.2%) due to the poor performance of the construction sector, especially the buildings segment, which fell by 6.5% annually.

3.3 Labor market[5,6]

The most recent labor market figures show that national employment continues to register significant annual growth, although it has stabilized at the margin. In the rolling quarter ending in May, the results of the Integrated Household Survey (GEIH for its Spanish acronym) reported a relative employment stability versus February (0.2%) figures, with an increase in the twenty-three main cities (0.6%), partially offset by a slight decline in rural areas (-0.2%) (Graph 3.13). In annual terms, national employment in May registered an increase of 3.4%,[7] driven by employment growth in other municipal capitals and rural areas (4.5%) and, to a lesser extent, in urban areas (2.5%). Year-on-year employment growth at the national level was seen in most sectors, with a greater contribution from commerce and lodging, transportation and communications, and agriculture and livestock.

By occupation, the annual employment growth was explained by the behavior of the non-salaried segment. In May, non-salaried employment showed a quarterly growth of 0.7% and an annual growth of 5.1% (Graph 3.14), consistent with the employment behavior noted in other municipal capitals and rural areas. In particular, the self-employed continue to be the most significant contributors to the annual growth of employment nationally. Meanwhile, the stagnation

5 For a more detailed analysis of the labor market, we invite you to consult *Banco de la República*'s Labor Market Report, available only in Spanish at https://www.banrep.gov.co/es/reporte-mercado-laboral

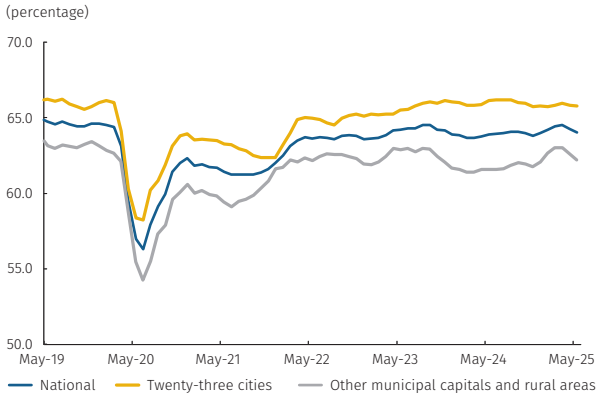
6 Labor market figures presented in this section of the Report primarily correspond to the rolling quarter ending May 2025.

7 In line with the behavior of employment, the employment rate has registered little change in recent months, reaching 58.3%.

of salaried employment has continued in recent months,[8] with a slight decline on the margin (-0-3% quarter-on-quarter in May). This stagnation was also echoed in other reporting sources for formal salaried employment, including the records of contributors to the Integrated Contribution Settlement Form (PILA for its Spanish acronym) and family compensation funds (CCF for its Spanish acronym). This behavior of the non-salaried segment (with a high informal component) and the salaried segment is reflected in the informal labor rate, which ended May at 56.1%.

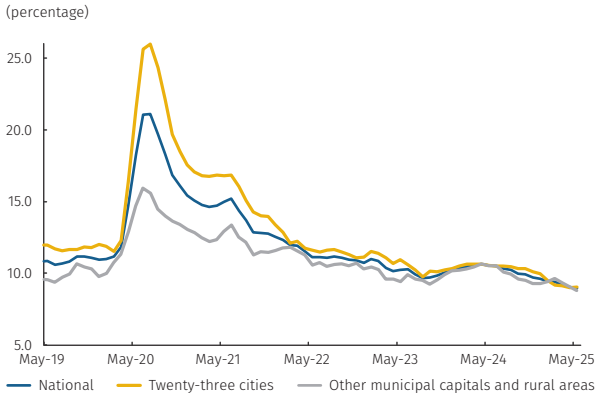
The national global participation rate (GPR) has decreased at the margin, mainly driven by the rural sector, mirroring the increase in the population outside the labor force. In May, the national aggregate GPR was 64%, similar to the levels seen in the same period of the previous year and 0.4 pp lower than February's results (Graph 3.15). By geography, the GPR in other municipal capitals and rural areas registered a quarterly drop of 0.8 pp, although it continues to register an annual drop of 0.6 pp. Meanwhile, the GPR in the twenty-three main cities continues to be stagnant. This evolution in the national aggregate is consistent with the recent increase in the population outside the labor force, or inactive, which grew by 1.0% annually and 1.5% quarterly. By gender, there was a decline at the margin in labor force participation by both men and women, standing at 76.5% and 52.6%, respectively.[9]

Graph 3.15
National global participation rate (GPR) rate by location



Note: Corresponds to rolling quarter seasonally adjusted data
Sources: DANE (GEIH), calculations by *Banco de la República.*

Graph 3.16
Unemployment rate by location



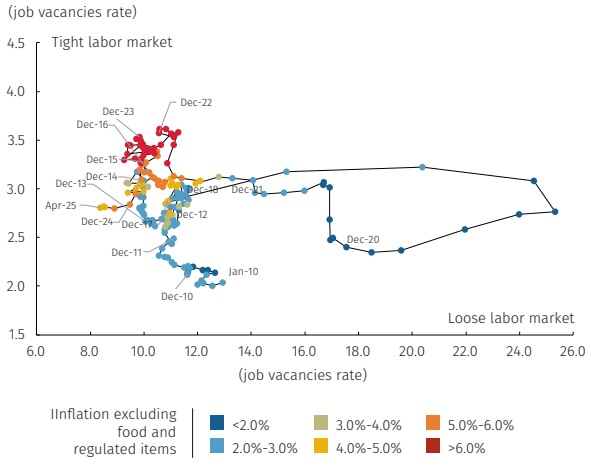
Note: Corresponds to rolling quarter seasonally adjusted data
Sources: DANE (GEIH), calculations by *Banco de la República.*

In recent months, the unemployment rate has continued to fall, favored by lessening pressure on the labor supply and relative employment stability. In the rolling quarter ending in May and based on seasonally adjusted data, the national employment rate was 8.9, a historic record below the average of the past two decades, unseen since the first half of 2015. In particular, this figure fell below the 10.5% recorded a year earlier and the 9.4% level seen in February. This decrease resulted from annual reductions of 1.5 pp in the urban unemployment rate and 1.7 pp in the unemployment rate registered in municipal capitals and rural areas, which stood at 9.1% and 8.8%, respectively (Graph 3.16). However, vast differences persist among the twenty-three main cities: Quibdó experienced the highest unemployment rate (30%) and Bucaramanga the lowest (7.7%). Compared to the previous quarter, the greatest decrease in the employment rate occurred in Valledupar (-2.8 pp), Florencia (-2.6 pp), and Montería (-2.5 pp). In comparison, the most significant increases occurred in Tunja (2.3 pp), Neiva (1.7 pp), and Medellín (0.9 pp). The unemployment gap by gender has closed in recent months, reaching 4.5 pp in May, compared to 5.1 pp in February, due to a greater decrease in the employment rate of women versus that of men.

8 In annual terms, salaried segment employment in the in May, registered on rolling quarter basis change of 1.6%.

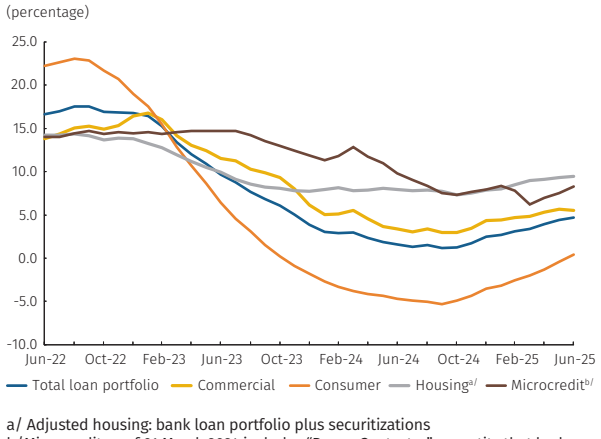
9 In annual terms, the GPR registered an increase of 0.4 pp for men and a slight fall of 0.1 pp for women.

Graph 3.17
Beveridge curve for the seven largest cities



Notes: Rolling quarter seasonally adjusted data. GEIH's vacancy rate is estimated based on hires according to Morales, Hermida, and Dávalos' methodology (2019)
Sources: DANE (GEIH), calculations by *Banco de la República.*

Graph 3.18
Gross loan portfolio in Colombian pesos
(annual change, monthly averages)



a/ Adjusted housing: bank loan portfolio plus securitizations
b/ Microcredit as of 01 March 2024 includes "Banco Contactar", an entity that had previously operated as "Corporación de Crédito Contactar" under the oversight of the Superintendency of Corporate Affairs
Sources: Financial Superintendency of Colombia, calculations by *Banco de la República.*

In recent months, job vacancy indicators continued their downward trend and reached pre-pandemic levels. Short-term hiring expectations remained in positive territory, while medium-term expectations suggest no change in formal employment. Short-term hiring expectations, obtained from Manpower Group's surveys, increased slightly and remained in positive territory, suggesting some positive activity for formal employment in the near future. Furthermore, medium-term expectations (six to twelve-month horizon), reported in *Banco de la República's* Quarterly Survey of Economic Expectations (ETE for its Spanish acronym), improved and were close to neutral, pointing to possible stability in the formal employment segment. With data to April, vacancy rates obtained from classified ads, the Public Employment Service (SPE for its Spanish acronym), and implied hiring expectations derived from the GEIH continued to fall, reaching pre-pandemic levels. The behavior of the unemployment rate and the vacancy rate in the urban domain, in light of the Beveridge curve[10] (Graph 3.17), suggests a certain tightness of the labor market, with registries falling on the left side of the curve as both the unemployment and the vacancy rates continued to decline. Finally, with data to April, real labor income of salaried and non-salaried workers continued on its upward path. In annual terms, increases of 6.3% for salaried workers and 8.7% for non-salaried workers were recorded.

3.4 Financial and monetary market

The loan portfolio continued to recover in the second quarter of 2025, in an environment of relatively stable interest rates and a slight improvement in risk indicators. During the year to date, a gradual recovery of the total loan portfolio continued, in an environment of: 1) improvements in the perception of credit demand and lower lending restrictions; 2) expectations of additional reductions in the benchmark rate, although not as marked as those expected at the beginning of the year; 3) real interest rates close to or in line with their historical averages; and 4) loan portfolio quality indicators that continued to improve, though they remain at historically high levels. The latter is reflected in favorable credit conditions that signal that credit will continue to recover and could reach positive real growth in the second half of the year, which could favor economic activity.

During the second quarter of the year, the loan portfolio continued to recover, reaching an annual growth of close to 5% in June, with increasingly smaller real contractions. In June, annual growth rates for all types of loans continued on upward paths, with positive figures and surpassing those of 2024 (Graph 3.18). The consumer loans portfolio continued to recover, registering a positive annual variation of 0.4% in June, after a year and a half of annual contractions. At the

10 The Beveridge curve is a graphical representation of the relationship between unemployment and the job vacancy rate.

same time, during the second quarter, commercial, housing, and microcredit saw annual growth rates slightly above those of the first quarter of the year (Graph 3.18). In real terms, the total loan portfolio continued to contract annually, although at a lower rate than that observed in the previous year, showing signs of recovery in all its modalities. Consumer credit was the only category that fell annually in real terms, but its negative annual variations ameliorated. The commercial portfolio remained stable compared to the levels observed in the first half of 2024. The housing and microcredit credit categories saw positive real annual growth rates, with mortgage credit continuing to accelerate at the margin. On the other hand, surveys on credit availability regarding banking entities, with information as of March 2025, showed favorable signals, with improvements in the perception of both credit supply and demand. However, requirements continue to be rigorous[11] in an environment of still-high loan portfolio risk levels. On the demand side, there are favorable signals reflected in the positive ETE data on the perception of loan availability to April.[12] Disbursements for all loan categories during the year to date were higher than those recorded in 2024, which would bolster the recovery of the loan portfolio in a context of lower household indebtedness in relation to their disposable income and amid lower interest rates.

Table 3.1
Interest rates
(average monthly, percentage)

	Dec-23	Jun-24	Dec-24	Mar-25	Jun-25
Interbank					
MPR	13.18	11.75	9.70	9.50	9.25
TIB overnight	13.13	11.75	9.70	9.50	9.25
BBI overnight	13.13	11.75	9.70	9.50	9.25
BBI 1-month	13.10	11.47	9.44	9.45	9.24
BBI 3-months	12.81	11.01	9.20	9.31	9.17
BBI 6-months	12.35	10.49	8.86	9.12	9.06
BBI 12-months		9.65	8.40	8.80	8.87
Deposits					
Savings	6.23	5.36	4.30	4.30	4.04
DTF 90-days	12.63	10.14	9.22	9.26	8.94
CDT* 180-days	12.90	10.33	9.43	9.25	9.11
CDT 360-days	13.19	10.75	9.73	9.89	9.55
CDT > 360-days	12.71	11.32	9.97	10.26	10.16
Credit					
Preferential	17.05	13.65	11.92	11.78	11.59
Ordinary	17.93	15.66	13.13	13.35	12.79
Non-public housing purchases	17.06	14.71	11.42	12.07	11.96
Public housing purchases	15.41	13.42	11.38	11.64	11.50
Personal loan consumption	28.16	24.73	21.18	21.16	20.46
Payroll loan consumption	19.83	18.14	16.58	16.79	16.76
Credit card	34.70	29.22	24.59	23.40	24.11

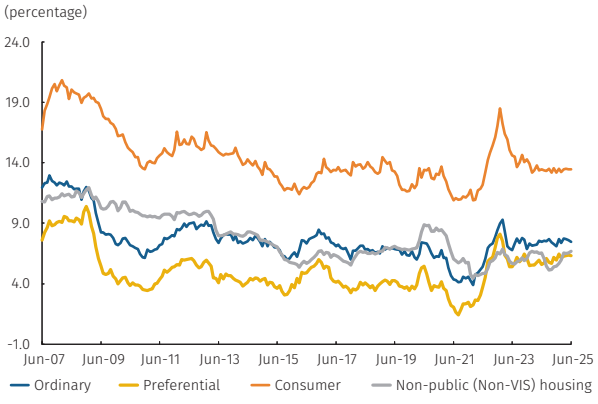
*CDT (term deposit certificates)
Sources: Financial Superintendency of Colombia, calculations by *Banco de la República.*

Interest rates for savings and credit continued to channel the effects of monetary policy, remaining relatively stable during the second quarter of 2025 (Table 3.1). In this period, the Board of Directors of *Banco de la República* (BDBR) reduced the benchmark rate by 25 basis points (bps) in its April meeting. This adjustment was generally replicated by money market rates, particularly the interbank interest rate (TIB) and the overnight Benchmark Banking Indicator - BBI (IBR for its Spanish acronym). Since December 2024, and particularly since the April 2025 meeting, the gap between the benchmark and IBR rates at longer horizons than the overnight has narrowed, suggesting expectations of slower cuts in the monetary policy rate, reflected in the behavior of savings and credit interest rates. Indeed, the average CDT (term deposit certificate for its Spanish acronym) interest rate showed marginal reductions during the second quarter. Compared to December 2024, the drop in this rate was less than that of the benchmark rate, with CDT interest rates registering increases at terms beyond one year, partly due to expectations of lower inflation reductions and a slower pace of benchmark rate cuts (Table 3.1). Both nominal and real placement interest rates were relatively stable during the second quarter of 2025. In real terms, interest rates for households were below their historical averages, while com-

11 See *Banco dela República*'s Quarterly Survey of The Credit Situation in Colombia for the first quarter of 2025, available in Spanish at: https://www.banrep.gov.co/es/publicaciones-investigaciones/reporte-situacion-credito-colombia

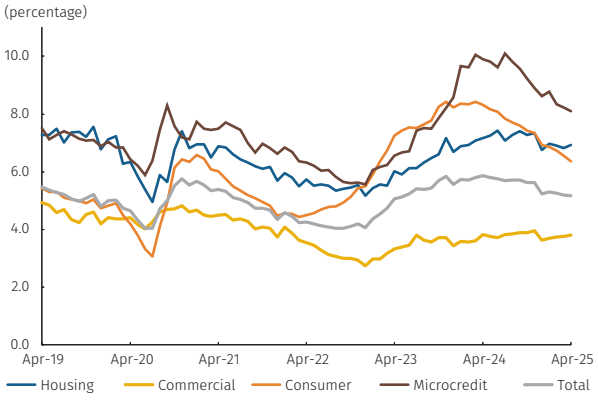
12 See *Banco dela República*'s Quarterly Survey of Economic Expectations for April of 2025, available in Spanish at: https://suameca.banrep.gov.co/estadisticas-economicas/#/encuestas

Graph 3.19
Real loan interest rates
(monthly average data deflated by the CPI excluding food)



Sources: Financial Superintendency of Colombia, calculations by *Banco de la República.*

Graph 3.20
NPL Indicator
(past due loan portfolio[a/] / total loan portfolio)



a/Refers to loans past-due over 30 days
Sources: Financial Superintendency of Colombia, calculations by *Banco de la República.*

mercial interest rates remained at levels close to or slightly above their historical averages (Graph 3.19).

The loan portfolio quality indicator continued to improve year-to-date, although it remains high. Profits of credit institutions continued to recover, and solvency levels remain well above the regulatory minimums. Twelve-month cumulative profits of credit institutions reached COP 10.7 trillion (t) in April 2025, growing by 65% versus the same period of the previous year (COP 6.5 t). This behavior is mainly attributable to lower provision expenses associated with a lower loan portfolio risk. The delinquency indicator of non-performing loans improved slightly so far this year, with the most considerable improvements seen in the consumer and microcredit loan portfolios. Nevertheless, the non-performing loans delinquency indicator remains elevated (Graph 3.20). Meanwhile, with data as of April, total (18.2%) and basic (15.2%) solvency levels of credit institutions continue stable and well above the regulatory minimums (9.0% and 4.5%, respectively).

Box 1: Adjusting long-term growth forecasting models to address Colombia's demographic shifts

Juan José Ospina
José David Pulido*

1. Introduction

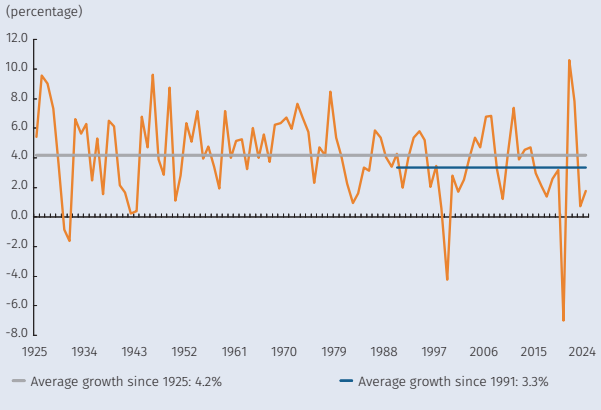
One of the central inputs for *Banco de la República's* macroeconomic forecasting models is the long-term rate of growth of the economy. In technical terms, this is known as steady-state growth, defined as the growth rate of the economy in the absence of new shocks, also understood as the reference convergence in terms of growth of gross domestic product (GDP) in the long run. Occasionally, dependent on the shocks that affected the economy, this convergence may occur beyond the forecast horizon.[1]

The two models currently used by the technical staff—Patacon and 4GM - (reference Gonzalez *et al.*, 2011, and Gonzalez *et al.*, 2020, respectively) —adjust this parameter at 3.3 %, a figure aligned with the average annual growth rate of the Colombian economy over the last three decades (Graph B1.1). However, the country's new demographic outlook, marked by a longer-lasting decline in the national birth rate and a more rapid aging of the population than foreseen a decade ago, suggests a structural slowdown in the buildup of effective labor, one of the main drivers of economic growth.

This phenomenon, which transcends the Colombian case and mirrors a global trend, forces us to reconsider the steady-state growth value, not only for the forecasting models currently in place but also for the new generation of models under construction (Avila-Montealegre *et al.*, 2025; Grajales-Olarte *et al.*, 2025; Ramos-Veloza *et al.*, 2025).

This Box presents the conceptual framework and quantitative estimates that support updating the long-term growth value to 2.65% annually. This quantification is part of a broader study on the macroeconomic effects of demographic shifts to be published by *Banco de la República* in 2026 within the journal "*Ensayos de Política Económica*" (Jaramillo *et al.*, 2026).

Graph B1.1
Annual GDP growth



Source: Calculations by *Banco de la República.*

* The authors are the Deputy Manager of Monetary Policy and Economic Information and Chief Advisor for the Macroeconomic Modelling Department of *Banco de la República*, respectively. The opinions are the authors' own and do not reflect those of the institution or its Board of Directors.

1 In general, it is possible that the economy's long-term growth does not coincide with its potential short-term growth, which may be affected by transitory supply shocks that maintain varying degrees of persistence.

2. Conceptual framework

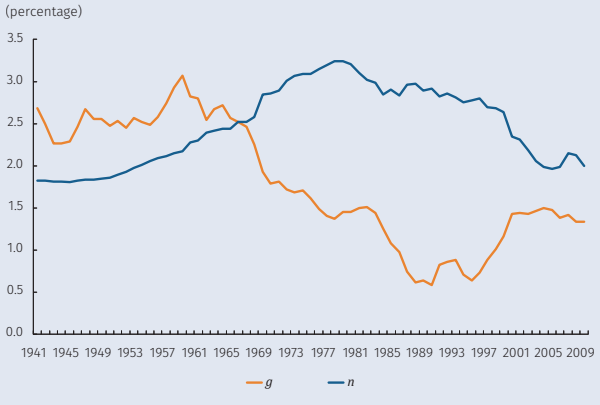
The theory of economic growth postulates that the economy's long-run output is determined by the accrual of factors of production (i.e., the aggregate quantity of capital, labor, etc.), as well as the efficiency with which these combine to generate output (i.e., the productivity of these factors of production). The most stylized growth theory model (Solow, 1956; Swan, 1956) postulates that, even when considering multiple factors of production,[2] the steady-state growth rate of output converges to the sum of two components: the average growth rate of the labor force (n) and the average growth rate of labor productivity, or output per worker(g).[3]

In practice, such average rates are usually measured over time windows (both past and forward-looking) long enough to capture the cyclical patterns of the economy. Using GDP data and hours worked by employed individuals, collected and spliced for the last hundred years,[4] Graph B1.2 illustrates the changes in n and g computed over thirty-year rolling intervals.[5] In the latter, each point on the graph refers to the corresponding average for the thirty-year interval of the specific year.

Graph B1.2 illustrates how n has been steadily decreasing since the early 1980s, in line with the slower population growth rate and a continual decline in the number of hours worked per employed individual. This drop occurred despite an increase in the labor participation rate resulting from the growing inclusion of women in the labor market. In terms of g, three different intervals are seen: the first, until the mid-sixties, with a growth rate nearing 2.5%; a second, exhibiting a downward trend, lasts until the end of the nineties; and a third, present during the whole of the 21st century, wherein labor productivity growth has remained relatively stable, hovering around 1.4% per year.

Demographic change, understood as the transition from a population structure characterized by high birth and mortality rates to one of low rates, implies a transformation in the age make-up of the population, particularly underscoring a process of population aging.[6] While the change in n may affect labor productivity growth—that is, the value of

Graph B1.2
Observed steady-state growth components [a/]



a/ The graph displays the rolling averages centered on 30-year windows of labor factor growth (total hours worked, n), and of labor productivity (g), employing only observed data. Consequently, for example, the 2009 data corresponds to the average of the 1994-2024 window.
Source: Calculations by *Banco de la República*.

2 The original Solow-Swan model considers two productive factors: capital and labor. The model can be extended to include additional productive factors, such as human capital (Mankiw et al., 1991), without altering steady-state growth. This occurs because, for an economy to maintain ensure state growth, productivity must increase the labor factor (in technical terms, be Harrod-neutral; see Uzawa, 1961).

3 Although at first glance this breakdown appears tautological, the determinants that explain each component are different in origin and, therefore, usually studied separately.

4 The analysis uses as its primary source the database constructed by Banco de la Republica for its centennial celebration (available in Spanish at https://www.banrep.gov.co/es/estadisticas-economicas/series-estadisticas-historicas-colombia), as well as own splices based on DANE's ENH (National Household Survey), ECH (Continuous Household Survey) and GEIH (Large Integrated Household Survey) labor statistics, and computation by Greco (1999}, based on Florez (1998}.

5 A literature review finds varying estimates of the average length of business cycles in Colombia, ranging from 6.8 years (Alfonso et al., 2014) to 10.1 years (Arango et al., 2025). Therefore, regardless of the point value of the cycle length, thirty-year periods ensure the averages are not biased by a single economic cycle phase. Moreover, this window size is consistent with the literature: for example, Rao (2010) uses twenty-to-thirty-year periods to measure steady-state variables, placing our windows at their upper bound.

6 For a detailed description of this phenomenon and its implications, see Lee (2003).

g (see, for example, Lee and Mason, 2009; Bloom *et al*., 2010)—its most notorious effect is seen in the dynamics of the effective labor force, namely the expected value of n in future years.[7] Accordingly, we present below two different methodologies to forecast the values of n and g over the next twenty years. For n, demographic shifts have an explicit impact, and it is estimated based on DANE population projections by age group, complemented with assumptions on the evolution of the leading labor market indicators. The values of g are exogenously forecasted using econometric techniques.

3. Forecast methodologies

For n, the average growth in hours worked by those employed (denoted as H) is calculated as the average centered on the thirty-year average rolling window for H_t, where the latter are forecast using:

$$H_t = PET_t \times TGP_t \times (1 - TD_t) \times \overline{h_t}$$

where PET_t corresponds to the working age population, TGP_t to the labor participation rate, and *TD* to the unemployment rate. Consequently, $PET_t \times TGP_t \times (1 - TD_t)$ equals the total employed, and $\overline{h}_t$ the average number of hours worked by the employed in the year. Each of these components is forecast individually. The PET_t is obtained from DANE's demographic projections based on the results of the 2018 National Population and Housing Census (CNPV for its Spanish acronym).[8] The TGP_t and TD_t are modeled based on their configuration by different age groups i derived from the same DANE projections, which take into account population aging, following the formula:

$$x_t = \sum_i s_{t,i} \bar{x}_i, \text{ para } x = TGP \; o \; TD$$

where $\bar{x}_t$ the average rate of age group i during the past ten years (excluding the pandemic[9]), and s_{ti} is age group i's share in the PET_t. Thus, the implicit assumption is that the labor indicators of each age group remain stable at the average values of the last decade.[10] Finally, the variable $\overline{h}_t$, the average number of hours worked for all employed individuals, recorded annual drops in 2023 and 2024, attributable in the formal segment to the regulatory change introduced by Law 2101 of 2021 that reduced the working day by one hour per year. Furthermore, its level should fall again in 2025 and 2026, proportional to the total hour series seen in 2023 and 2024, because this Law includes additional reductions of two hours per year during those years. From 2027 onwards, h_t it is assumed this variable will remain constant.

For g (average growth of labor productivity), we follow the methodology of Ochsner *et al*. (2024), employing statistical filters to isolate cyclical fluctuations from long-term trends in productivity and project them over long horizons. In particular, for productivity point forecasting, we use the econometric model of Chan *et al.* (2018), which has a highly flexible specification (for example, allowing for time-varying parameters and volatility, as well as the use of an external benchmark series), and it is estimated using Bayesian methods. Representing

7 Empirical evidence supports this relationship. For example, Aksoy et al. (2019), using a panel of countries, find that demographic composition has significant and persistent macroeconomic effects. In particular, a higher share of the working-age population is associated with higher rates of GDP per capita growth.

8 These population projections were updated in 2023 to reflect the effect of the Covid-19 pandemic on the various demographic components (fertility, mortality, and migration).

9 The Covid-19 pandemic created a temporary and abrupt disruption in the labor indicators, surpassing those recorded by economic activity (Bonilla *et al*., 2019), which distorts the averages. For a summary of the main margins of labor market adjustment during this period, see Pulido *et al*. (2024).

10 It is worth noting that certain structural forces that have influenced persistent trends in labor indicators in recent decades, such as the integration of women into the labor market and the compositional effects of internal migration to urban areas (which exhibit high employment, participation, and unemployment rates), are losing momentum. The gender disparity in participation has been stable over the past decade, and current unemployment rates are comparable between urban and rural areas. In this framework, it is appropriate to assume stability in labor indicators by age group, utilizing the averages from the past decade (excluding the pandemic).

annual labor productivity growth as *y*, the model of Chan *et al.* (2018) specifies:

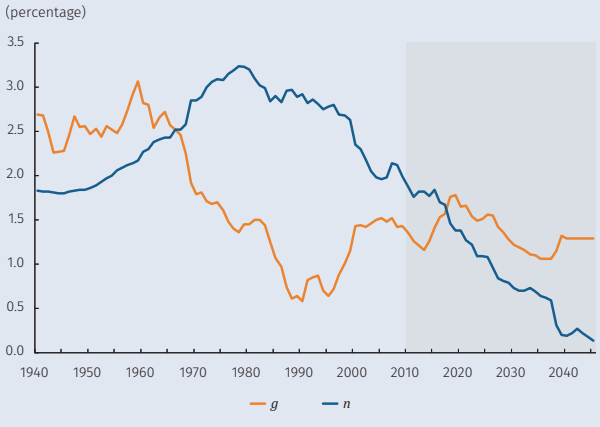
$$
\begin{aligned}
y_t - y_t^* &= b_t(y_{t-1} - y_{t-1}^*) + v_t, \\
z_t &= d_{0t} + d_{1t} y_t^* + \varepsilon_{z,t} + \psi \varepsilon_{z,t-1}, \quad \varepsilon_{z,t} \sim N(0, \sigma_z^2), \\
y_t^* &= y_{t-1}^* + u_t, \\
b_t &= b_{t-1} + \varepsilon_{b,t}, \quad \varepsilon_{b,t} \sim TN(0, \sigma_b^2), \\
d_{it} - \mu_{d_i} &= \rho_{d_i}(d_{i,t-1} - \mu_{d_i}) + \varepsilon_{d_i,t}, \quad \varepsilon_{d_i,t} \sim N(0, \sigma_{d_i}^2), \quad i = 0, 1, \\
v_t &= \lambda_{v,t}^{0.5} \varepsilon_{v,t}, \quad \varepsilon_{v,t} \sim N(0, 1), \\
u_t &= \lambda_{u,t}^{0.5} \varepsilon_{u,t}, \quad \varepsilon_{u,t} \sim N(0, 1), \\
\log(\lambda_{i,t}) &= \log(\lambda_{i,t-1}) + \nu_{i,t}, \quad \nu_{i,t} \sim N(0, \phi_i), \quad i = u, v.
\end{aligned}
$$

where y^* corresponds to the productivity growth trend and z equals the external reference variable. The model is estimated using labor productivity growth series as of 1940 (excluding pandemic-related outliers), a Markov Chain Monte Carlo (MCMC) sampling with 30,000 simulations (discarding the first 1,000), and the thirty-year centered rolling average of *y* as the benchmark *z*-series. The model's specific *y* forecasts are added to the observed values of productivity growth in recent years to compute *g* in year *t* as the average over the 30-year rolling windows, understood as: $g_t = \frac{1}{31}\sum_{i=t-15}^{t+15} y_i$.

4. Results and conclusions

Graph B1.3 shows the results of the *n* and *g* projections for the next twenty years. As in Graph B1.2, each point indicates the average calculated over a thirty-year rolling window centered on the indicated year. The demographic change would prolong the downward trend of *n* over the forecast horizon, explained by both the slowdown in the growth rate of the working-age population and by population aging, thus reducing the overall labor participation rate as the older age groups, which participate less in the labor market, gain relative weight. As for *g*, average labor productivity growth would remain at similar levels to those recorded so far this century, ranging from 1% to 1.5%. It is important to note, however, that the Bayesian forecasting model's results show a large amount of uncertainty, reflecting the difficulties of precisely projecting these types of variables.

Graph B1.3
Forecasts for steady-state growth components [a/]

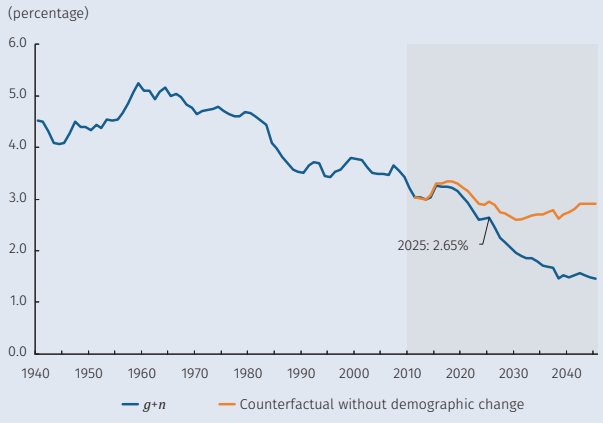


a/ The graph displays the rolling averages centered on 30-year windows of labor factor growth (total hours worked, *n*), and of labor productivity (*g*), employing both observed and forecast data. Consequently, for example, the 2025 data corresponds to the average of the 2010-2040 window, wherein the pre-2024 data is forecast using the aforementioned methodologies. The shaded area indicates that these figures were computed using estimates for one or more years.
Source: Calculations by *Banco de la República*.

Employing the projected values of *n* and *g*, Graph B1.4 offers the predicted steady-state growth for 2025, as well as its projection for the next twenty years. In 2025, such growth would be 2.65% (with a *g* value of 1.57% and *n* of 1.08%); consequently, in the absence of shocks, this would be the growth rate for the Colombian economy. Going forward, as demographic trends in population projections take shape, steady-state growth would continue to slow, reaching levels close to 1.5% at the end of the twenty-year horizon.

Graph B1.4 also illustrates a counterfactual scenario forecast in which demographic shifts would not materialize to visualize the influence of these changes on the estimates obtained. To construct this scenario, the *n* forecasts assume that the working-age population would continue to grow at the rate observed in 2025, and its average age composition would remain constant with the values seen over the past five years. Under this scenario, where demographic change does not occur,

Graph B1.4
Steady-state growth [a/]



a/ The shaded area indicates that these figures were computed using estimates for one or more years.
Source: Calculations by *Banco de la República*.

steady-state growth in 2025 would approach 3%, only slowing to 2.7 % at the end of the contemplated window. Thus, the impact of demographic shifts would imply a reduction of 0.35 percentage points (pp) in the current steady-state growth, and of 1.2 pp by 2045.

The results of this exercise confirm that, based on available information, it is necessary to readjust the steady-state growth values used in the technical staff's forecast models to reflect the new figure of 2.65%. This restatement process, initiated in this *Report*, is expected to be completed in the forecast models this quarter. However, it is essential to highlight that the projections suggest that, in the future, these estimates must once again be revised to reflect future changes in demographic variables, given recent birth-rate data that points to an even faster demographic shift than that projected by DANE (see Parra-Polanla and Ladino, 2025; Jaramillo *et al.,* 2026).

References

Aksoy, Y., H. S. Basso, R. P. Smith, and T. Grasl. "Demographic Structure and Macroeconomic Trends." *American Economic Journal: Macroeconomics* 11, no. 1 (2019): 193–222.

Alfonso, V., L. E. Arango, F. Arias, G. Cangrejo, and J. Pulido. "Business Cycles in Colombia, 1975–2011." *Lecturas de Economía* 78 (2013): 115–149.

Arango, L. E., J. J. Ospina, et al., eds. "Quantitative Characteristics of Business Cycles in Colombia." *Ensayos sobre Política Económica*, forthcoming, 2025.

Ávila-Montealegre, O., F. Castañeda-Valdés, J. Pulido, and J. A. Rincón-Galvis. "A New Keynesian DSGE Model for Monetary Policy Analysis in Colombia." Manuscript submitted for publication, *Banco de la República*, 2025.

Bloom, D. E., D. Canning, and G. Fink. "Implications of Population Aging for Economic Growth." *Oxford Review of Economic Policy* 26, no. 4 (2010): 583–612.

Chan, J. C. C., T. E. Clark, and G. Koop. "A New Model of Inflation, Trend Inflation, and Long-Run Inflation Expectations." Journal of Money, Credit, and Banking 50, no. 1 (2018): 5–53.

Flórez, C. E. Las transformaciones sociodemográficas en Colombia durante el siglo XX. Bogotá: TM Editores, *Banco de la República*, 2000.

González, A., A. Guarín, D. Rodríguez-Guzmán, and H. Vargas-Herrera. "4GM: A New Model for the Monetary Policy Analysis in Colombia." *Borradores de Economía* 1106 (2020). *Banco de la República*.

González, A., L. Mahadeva, J. D. Prada, and D. Rodríguez. "Policy Analysis Tool Applied to Colombian Needs: Patacón Model Description." *Ensayos sobre Política Económica* 29, no. 66 (2011): 222–245.

Grajales-Olarte, A., F. Hamann, S. Naranjo-Saldarriaga, and J. Pulido. "Policy Implications of Losing Credibility: Lessons from Colombia's Post-Pandemic Inflationary Surge." *Borradores de Economía* 1304 (2025). *Banco de la República*.

Greco. "Colombian Economic Growth in the Twentieth Century: Global Aspects." *Borradores de Economía* 134 (1999). *Banco de la República*.

Jaramillo, J., *et al.*, eds. "Economic Effects of Demographic Change in Colombia." *Ensayos sobre Política Económica*, forthcoming, 2026.

Lee, R. "The Demographic Transition: Three Centuries of Fundamental Change." *Journal of Economic Perspectives* 17, no. 4 (2003): 167–190.

Lee, R., and A. Mason. "Fertility, Human Capital, and Economic Growth over the Demographic Transition." *European Journal of Population* 26, no. 2 (2009): 159–182.

Mankiw, G., D. Romer, and D. Weil. "A Contribution to the Empirics of Economic Growth." *Quarterly Journal of Economics* 107, no. 2 (1992): 407–437.

Morales, L. F., L. Bonilla-Mejía, J. Pulido, L. A. Flórez, D. Hermida, K. Pulido-Mahecha, and F. Lasso-Valderrama. "Effects of the COVID-19 Pandemic on the Colombian Labour Market: Disentangling the Effect of Sector-Specific Mobility Restrictions." *Canadian Journal of Economics* 55, no. 51 (2022): 308–357.

Ochsner, C., E. Thiel, and C. Zuber. "Demographic Aging and Long-Run Economic Growth in Germany." *SSRN Working Paper* 4727797 (2024).

Parra-Polanía, J. A., and J. D. Ladino. "Fuerza de trabajo y envejecimiento poblacional." *Borradores de Economía* 1308 (2025). *Banco de la República*.

Pulido, J., H. Vargas-Herrera, and J. J. Ospina-Tejeiro. "The Labor Market in Colombia: Structural Features and the Role of Wages in the Post-Pandemic Inflationary Surge." *Borradores de Economía* 1232 (2023). *Banco de la República*.

Rao, B. B. "Estimates of the Steady State Growth Rates for Selected Asian Countries with an Extended Solow Model." *Economic Modelling* 27, no. 1 (2010): 46–53.

Ramos-Veloza, M., S. Naranjo-Saldarriaga, and J. Pulido. "Wage Dynamics, Unemployment, and Inflation: Enhancing 4GM Colombia's Semi-Structural Model." Manuscript submitted for publication, *Banco de la República*, 2025.

Solow, R. M. "A Contribution to the Theory of Economic Growth." *Quarterly Journal of Economics* 70, no. 1 (1956): 65–94.

Swan, T. "Economic Growth and Capital Accumulation." *Economic Record* 32, no. 2 (1956): 334–361.

Uzawa, H. "Neutral Inventions and the Stability of Growth Equilibrium." *Review of Economic Studies* 28, no. 2 (1961): 117–124.

Appendix 1
Macroeconomic Forecasts by local and Foreign Analysts[a/, b/]

	Unit	Jul-25	Dec-25	Jul-26	Dec-26	Jul-27
Headline CPI	Monthly variation (average)	0.18	n. a.	n. a.	n. a.	n. a.
CPI excluding food	Monthly variation (average)	0.17	n. a.	n. a.	n. a.	n. a.
CPI excluding food and regulated	Monthly variation (average)	0.18	n. a.	n. a.	n. a.	n. a.
CPI food	Monthly variation (average)	0.20	n. a.	n. a.	n. a.	n. a.
CPI regulated	Monthly variation (average)	0.13	n. a.	n. a.	n. a.	n. a.
Headline CPI	Annual variation (average), end of period	4.80[c/]	4.79	3.90	3.79	3.49
CPI excluding food	Annual variation (average), end of period	4.91[c/]	4.61	3.84	3.69	3.41
CPI excluding food and regulated	Annual variation (average), end of period	4.75[c/]	4.38	3.88	3.62	3.28
CPI food	Annual variation (average), end of period	4.30[c/]	5.07	3.78	3.56	3.55
CPI regulated	Annual variation (average), end of period	5.44[c/]	5.88	4.46	4.46	4.23
Nominal exchange rate	COP per USD, end of period	4.042	4.195	4.150	4.182	4.158
Monetary policy rate	Percentage, end of period	9,00	8,50	7,25	7,00	7,00

	Unidades	II-2025	III-2025	IV-2025	2025	I-2026	II-2026	III-2026	IV-2026	2026	I-2027	II-2027
GDP	Annual change, original series	2.5	2.7	2.5	2.6	2.8	2.8	2.9	3.0	2.9	2.9	n. a.
Unemployment	Thirteen cities, quarterly average	9.0	9.3	9.1	n. a.	9.6	9.7	9.4	9.0	n. a.	9.9	n. a.
IBR (90 days)	Effective annual rate, end of period	n. a.	8.7	8.5	n. a.	8.0	7.5	7.2	7.0	n. a.	7.0	7.0
Fiscal Deficit (GNC) [d/]	Share of GDP	n. a.	n. a.	n. a.	7.5	n. a.	n. a.	n. a.	n. a.	6.7	n. a.	n. a.
Direct Account Deficit[d/]	Share of GDP	n. a.	n. a.	n. a.	2.5	n. a.	n. a.	n. a.	n. a.	3.0	n. a.	n. a.

n.a.: Not available.
n.r.: Not relevant, given that the data has already been observed.
a/ The survey excluded the question related to the DTF starting with the April 2023 *Banco de la República's* Monthly Survey of Economic Analyst Expectations.
Expectations (EME for its Spanish acronym) conducted by *Banco de la República.*
b/ Is the response median to *Banco de la República's Monthly Survey of Economic Analyst Expectations*, except for the CPI and CPI excluding food, which are the response average.
c/ Data calculated based on the results of *Banco de la República's* Monthly Survey of Economic Analyst Expectations (EME).
d/ Positive values represent deficit and negative values represent surplus.
Sources: *Banco de la República*, Monthly Survey of Economic Analyst Expectations, conducted in July 2025.

Appendix 2
Main Macroeconomic Forecasting Variables

		Years										
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Exogenous variables												
External [a/]												
GDP of trading partners [b/]	Percentage, annual var., seasonally adjusted	1.6	3.2	2.5	1.5	-6.6	8.2	3.7	2.5	1.8	**1.8**	**1.9**
Oil price (Brent benchmark)	Dollars per barrel, average of the period	45	55	72	64	43	71	99	82	80	**68**	**63**
Federal funds effective rate (Fed)	Percentage, average for the period	0.4	1.0	1.8	2.2	0.4	0.1	1.7	5.0	5.1	**4.2**	**3.6**
5-year Credit Default Swap for Colombia	Basis points, average for the period	212	129	114	99	142	142	259	246	187	**232**	**254**
Internal												
Neutral real interest rate for Colombia	Percentage, average for the period	1.6	1.3	1.3	1.2	1.3	1.5	1.9	2.2	2.4	**2.7**	**3.1**
Potential GDP for Colombia (trend)	Percentage, annual change	2.8	2.4	2.4	2.4	-0.1	3.9	3.6	2.8	2.7	**2.6**	**2.7**
Endogenous variables												
Prices												
Total CPI [c/]	Percentage, annual change, end of period	5.7	4.1	3.2	3.8	1.6	5.6	13.1	9.3	5.2	**4.7**	**3.2**
CPI excluding food [d/]	Percentage, annual change, end of period	5.5	5.0	3.5	3.5	1.0	3.4	10.0	10.3	5.6	.	.
CPI for goods (excluding food and regulated items)	Percentage, annual change, end of period	5.9	3.2	1.4	2.2	0.6	3.3	15.0	7.1	0.6	.	.
CPI for services (excluding food and regulated items)	Percentage, annual change, end of period	5.3	5.4	3.1	3.5	1.3	2.2	7.4	9.0	7.0	.	.
CPI for regulated items	Percentage, annual change, end of period	5.6	6.3	6.7	4.8	0.7	7.1	11.8	17.2	7.3	**5.9**	**3.4**
CPI for food [e/]	Percentage, annual change, end of period	6.7	0.5	1.9	5.8	4.8	17.2	27.8	5.0	3.3	**5.2**	**2.4**
CPI for perishable food	Percentage, annual change, end of period	-6.6	5.8	8.9	8.7	2.5	24.4	36.4	-0.5	5.1	.	.
CPI for processed food	Percentage, annual change, end of period	10.7	-0.9	-0.1	5.0	5.4	15.3	25.3	6.7	2.8	.	.
Core inflation indicators [f/]												
CPI excluding food	Percentage, annual change, end of period	5.5	5.0	3.5	3.5	1.0	3.4	10.0	10.3	5.6	.	.
Core CPI 15	Percentage, annual change, end of period	6.0	4.2	3.2	3.8	1.9	4.4	11.6	9.5	5.4	.	.
CPI excluding food and regulated items	Percentage, annual change, end of period	5.5	4.7	2.6	3.1	1.1	2.5	9.5	8.4	5.2	**4.2**	**3.3**
Average of all core inflation indicators	Percentage, annual change, end of period	5.7	4.6	3.1	3.4	1.3	3.4	10.4	9.4	5.4	.	.
Representative market exchange rate	Pesos per dollar, average for the period	3,053	2,951	2,957	3,282	3,691	3,747	4,257	4,330	3,921	.	.
Real exchange rate Inflationary gap	Percentage, average for the period	2.5	-1.7	-0.7	3.6	6.8	2.1	6.7	1.5	-4.7	**-3.4**	**-0.6**
Economic activity												
Gross domestic product (sats)*	Percentage, annual change, sats	2.1	1.4	2.6	3.2	-7.2	10.8	7.3	0.7	1.6	**2.7**	**2.9**
Final consumption expense	Percentage, annual change, sats	1.6	2.3	4.0	4.3	-4.2	13.8	9.0	0.6	1.4	.	.
Household final consumption expenditure	Percentage, annual change, sats	1.6	2.1	3.2	4.1	-5.0	14.7	10.8	0.4	1.6	.	.
General government final consumption expenditure	Percentage, annual change, sats	1.8	3.6	7.4	5.3	-0.8	9.8	1.0	1.6	0.7	.	.
Gross capital formation	Percentage, annual change, sats	-0.2	-3.2	1.5	3.0	-20.7	11.6	16.0	-16.0	5.2	.	.
Gross fixed capital formation	Percentage, annual change, sats	-2.9	1.9	1.0	2.2	-23.6	16.7	11.5	-12.7	3.2	.	.
Housing	Percentage, annual change, sats	-0.2	-1.9	-0.4	-8.9	-32.7	39.8	2.0	-4.4	-2.4	.	.
Other buildings and structures	Percentage, annual change, sats	0.0	4.6	-3.5	1.1	-30.8	0.9	-4.3	-5.5	9.6	.	.
Machinery and equipment	Percentage, annual change, sats	-7.9	1.4	8.6	12.3	-13.3	23.3	30.5	-22.6	1.7	.	.
Cultivated biological resources	Percentage, annual change, sats	13.1	0.3	-3.1	7.9	-1.8	-0.9	-12.5	5.0	8.2	.	.
Intellectual property products	Percentage, annual change, sats	-12.0	1.2	1.5	-0.7	-8.3	3.4	7.3	2.0	-0.3	.	.
Domestic demand	Percentage, annual change, sats	1.2	1.1	3.5	4.0	-7.5	13.4	10.3	-2.5	2.0	.	.
Exports	Percentage, annual change, sats	-0.2	2.6	0.6	3.1	-22.5	14.6	12.5	3.1	2.5	.	.
Imports	Percentage, annual change, sats	-3.5	1.0	5.8	7.3	-20.1	26.7	24.0	-9.9	4.4	.	.
Product gap [g/]	Percentage	0.3	-0.8	-0.6	0.2	-7.2	-0.8	2.8	0.7	-0.4	**-0.2**	**0.0**
Short-term indicators												
Real production of manufacturing industry	Percentage, annual change, seasonally adjusted	3.5	0.0	2.9	1.3	-8.1	16.2	10.5	-4.8	-2.5	.	.
Retail trade sales, excluding fuels or vehicles	Percentage, annual change, seasonally adjusted	2.0	-0.1	5.4	8.1	-1.6	12.1	9.4	-3.9	1.6	.	.
Coffee production	Percentage, annual change, cum. for period	0.4	-0.3	-4.5	8.8	-5.8	-9.5	-11.9	2.4	23.4	.	.
Oil production	Percentage, annual change, period average	-11.9	-3.6	1.3	2.4	-11.8	-5.8	2.4	3.0	-0.6	.	.
Labor market [h/]												
Total national												
Unemployment rate	Percentage, annual change, period average	9.5	9.7	10.0	10.9	16.7	13.8	11.2	10.2	10.2	**9.2**	.
Occupancy Rate	Percentage, annual change, period average	60.5	60.0	59.1	57.7	50.4	53.1	56.5	57.6	57.4	.	.
Overall participation rate	Percentage, annual change, period average	66.9	66.4	65.7	64.8	60.4	61.5	63.6	64.1	63.9	.	.
Thirteen cities and metropolitan areas												
Unemployment rate	Percentage, annual change, period average	10.3	11.0	11.1	11.5	19.1	15.2	11.4	10.4	10.1	**9.1**	.
Occupancy Rate	Percentage, annual change, period average	61.7	60.5	59.6	58.8	50.8	53.8	58.1	59.5	59.9	.	.
Overall participation rate	Percentage, annual change, period average	68.8	67.9	67.1	66.4	62.7	63.5	65.5	66.3	66.7	.	.
Balance of payments [i/ j/]												
Current account (A + B + C)	Millions of dollars	-12,587	-9,924	-14,041	-14,809	-9,267	-17,949	-20,879	-8,296	-7,225	**-10,828**	**-14,520**
Percentage of GDP	Percentage, nominal terms	-4.4	-3.2	-4.2	-4.6	-3.4	-5.6	-6.0	-2.2	-1.7	**-2.5**	**-3.2**
A. Goods and services	Millions of dollars	-13,451	-8,762	-10,556	-14,148	-13,105	-20,001	-16,094	-7,786	-9,473	**-15,154**	**-19,226**
B. Primary income (factor income)	Millions of dollars	-5,312	-8,046	-11,442	-9,716	-4,950	-8,723	-17,086	-13,432	-13,260	**-12,591**	**-13,186**
C. Secondary income (current transfers)	Millions of dollars	6,177	6,883	7,957	9,055	8,788	10,775	12,301	12,922	15,507	**16,917**	**17,892**
Financial account (A + B + C + D)	Millions of dollars	-12,339	-9,625	-12,954	-13,298	-8,113	-16,693	-20,466	-7,849	-5,839	.	.
Percentage of GDP	Percentage, nominal terms	-4.4	-3.1	-3.9	-4.1	-3.0	-5.3	-5.9	-2.1	-1.4	.	.
A. Foreign investment (ii - i)	Millions of dollars	-9,341	-10,011	-6,172	-10,836	-5,725	-6,381	-13,799	-15,525	-9,693	.	.
i. Foreign Investment in Colombia (FDI)	Millions of dollars	13,858	13,701	11,299	13,989	7,459	9,561	17,182	16,794	14,269	.	.
ii. Colombian abroad	Millions of dollars	4,517	3,690	5,126	3,153	1,733	3,181	3,384	1,269	4,576	.	.
B. Portfolio investment	Millions of dollars	-4,945	-1,800	862	24	-1,768	-4,595	427	8,663	2,451	.	.
C. Other investment (loans, other credits, and derivatives)	Millions of dollars	1,781	1,641	-8,831	-5,820	-4,949	-6,371	-7,665	-2,705	-2,191	.	.
D. Reserve assets	Millions of dollars	165	545	1,187	3,333	4,328	654	571	1,718	3,593	.	.
Errors and omissions (E&O)	Millions of dollars	247	299	1,087	1,510	1,153	1,256	413	447	1,386	.	.
Interest rates												
Policy interest rate [k/]	Percentage, period average	7.1	6.1	4.4	4.3	2.9	1.9	7.2	13.0	11.4	.	.
Policy rate expected by analysts [l/]	Percentage, period average										**9.1**	**7.6**
IBR overnight	Percentage, period average	7.1	6.1	4.3	4.3	2.9	1.9	7.2	13.0	11.4	.	.
Commercial interest rate [m/]	Percentage, period average	12.8	11.1	9.3	8.8	7.4	6.2	13.3	18.7	11.7	.	.
Consumer interest rate [n/]	Percentage, period average	19.2	19.4	17.9	16.5	15.0	14.3	21.1	27.9	18.5	.	.
Mortgage interest rate [o/]	Percentage, period average	12.4	11.6	10.6	10.4	10.1	9.1	12.9	17.7	11.8	.	.

Note: values in bold are forecasts or assumptions.
sats: seasonally adjusted time series, modified to eliminate the effect of seasonal and calendar influences.
a/ Quarterly data in bold are assumptions based on the annual forecast of each variable.
b/ Calculated with the main trading partners (excluding Venezuela) weighted by their share of trade.
c/ The medium term forecast corresponds to the average of the estimates obtained from the technical staff's central models (4GM and PATACON).
d/ Calculations by *Banco de la República*; excluding the CPI item weight for food and non-alcoholic beverages. Consult González, E.; Hernández, R.; Caicedo, E.; Martínez-Cortés, N.; Grajales, A.; Romero, J. (2020). "Nueva clasificación del Banrep de la canasta del IPC y revisión de las medidas de inflación básica en Colombia", *Borradores de Economía*, No. 122, *Banco de la República*, available at: https://investiga.banrep.gov.co/es/be-1122.
e/ Calculations by *Banco de la República*; equal to the division of the CPI of food and non-alcoholic beverages produced by DANE (not including the subclasses corresponding to meals outside the home). See González, E.; Hernández, R.; Caicedo, E.; Martínez-Cortés, N.; Grajales, A.; Romero, J. (2020). "Nueva clasificación del Banrep de la canasta del IPC y revisión de las medidas de inflación básica en Colombia", Working Papers on Economics, No. 122, *Banco de la República*, available at: https://investiga.banrep.gov.co/es/be-1122.
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h/ Rates are calculated based on seasonally adjusted annual populations.
i/ The results presented follow the recommendations of the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6). See additional information and method changes at http://www.banrep.gov.co/ balance-payments.
j/ Results for 2022 and 2023 are preliminary
k/ Corresponds to the average annual monetary policy interest rate calculated with the working days of the series.
l/ These projections are calculated as the average of the interest rate that would be in effect in each year according to the median of the monthly responses to the Monthly Survey of Economic Analyst Expectations (EME) conducted by *Banco de la República* in July 2025.
m/ Weighted average of interest rates on ordinary, treasury and preferential loans.
n/ Does not include loans granted through credit cards.
o/ Corresponds to the weighted average of interest rate of the disbursements in COP and UVR (real value unit for its Spanish acronym) for the acquisition of No VIS housing (housing that is not social interest housing).

Appendix 2 (continuation)
Main Macroeconomic Forecasting Variables

		2019		2020				2021	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Exogenous variables									
External [a/]									
GDP of trading partners [b/]	Percentage, annual var., seasonally adjusted	1.8	1.3	-1.1	-15.7	-6.6	-3.0	0.6	18.7
Oil price (Brent benchmark)	Dollars per barrel, average of the period	62	62	51	33	43	45	61	69
Federal funds effective rate (Fed)	Percentage, average for the period	2.2	1.7	1.2	0.1	0.1	0.1	0.1	0.1
5-year Credit Default Swap for Colombia	Basis points, average for the period	90	83	125	206	132	104	110	131
Internal									
Neutral real interest rate for Colombia	Percentage, average for the period								
Potential GDP for Colombia (trend)	Percentage, annual change								
Endogenous variables									
Prices									
Total CPI [c/]	Percentage, annual change, end of period	3.8	3.8	3.9	2.2	2.0	1.6	1.5	3.6
CPI excluding food [d/]	Percentage, annual change, end of period	3.4	3.5	3.3	1.4	1.6	1.0	1.1	2.7
CPI for goods (excluding food and regulated items)	Percentage, annual change, end of period	1.8	2.2	2.4	0.7	1.2	0.6	1.1	2.6
CPI for services (excluding food and regulated items)	Percentage, annual change, end of period	3.4	3.5	3.2	2.0	1.9	1.3	0.9	1.6
CPI for regulated items	Percentage, annual change, end of period	5.0	4.8	4.3	0.4	1.2	0.7	1.5	5.9
CPI for food [e/]	Percentage, annual change, end of period	6.5	5.8	7.2	6.5	4.1	4.8	3.9	8.5
CPI for perishable food	Percentage, annual change, end of period	17.5	8.7	9.8	2.5	-3.4	2.5	1.6	8.7
CPI for processed food	Percentage, annual change, end of period	3.6	5.0	6.5	7.8	6.4	5.4	4.6	8.5
Core inflation indicators [f/]									
CPI excluding food	Percentage, annual change, end of period	3.4	3.5	3.3	1.4	1.6	1.0	1.1	2.7
Core CPI 15	Percentage, annual change, end of period	3.7	3.8	3.6	2.2	2.3	1.9	1.7	3.4
CPI excluding food and regulated items	Percentage, annual change, end of period	2.9	3.1	3.0	1.6	1.7	1.1	0.9	1.9
Average of all core inflation indicators	Percentage, annual change, end of period	3.3	3.5	3.3	1.7	1.9	1.3	1.2	2.7
Representative market exchange rate	Pesos per dollar, average for the period	3,338	3,412	3,540	3,850	3,731	3,662	3,559	3,695
Real exchange rate Inflationary gap	Percentage, average for the period	3.9	4.9	5.5	11.8	6.5	3.3	-0.2	2.1
Economic activity									
Gross domestic product (sats)*	Percentage, annual change, sats	3.2	3.0	0.4	-16.7	-9.0	-3.4	1.6	18.5
Final consumption expense	Percentage, annual change, sats	4.4	5.2	3.9	-14.4	-7.5	1.1	3.7	21.8
Household final consumption expenditure	Percentage, annual change, sats	4.3	5.4	4.5	-16.9	-8.5	0.9	2.7	25.3
General government final consumption expenditure	Percentage, annual change, sats	5.1	4.3	1.0	-3.0	-2.6	1.6	8.2	8.6
Gross capital formation	Percentage, annual change, sats	5.7	-4.7	-11.2	-31.2	-17.4	-23.1	-5.7	33.3
Gross fixed capital formation	Percentage, annual change, sats	1.9	-4.2	-12.6	-41.3	-24.9	-15.0	3.0	42.1
Housing	Percentage, annual change, sats	-7.8	-13.4	-25.6	-47.8	-30.0	-26.0	22.7	63.8
Other buildings and structures	Percentage, annual change, sats	1.3	-6.5	-11.2	-49.7	-37.1	-24.3	-13.8	30.9
Machinery and equipment	Percentage, annual change, sats	10.2	3.0	-5.4	-37.2	-9.3	1.4	8.2	55.6
Cultivated biological resources	Percentage, annual change, sats	14.9	1.6	2.6	1.7	-7.9	-3.0	5.8	1.2
Intellectual property products	Percentage, annual change, sats	-1.3	1.2	-3.5	-9.8	-10.9	-9.1	-3.8	4.0
Domestic demand	Percentage, annual change, sats	4.7	3.0	0.4	-17.9	-9.7	-2.8	1.6	24.4
Exports	Percentage, annual change, sats	2.0	-3.3	-6.6	-30.5	-28.2	-24.5	-9.7	13.7
Imports	Percentage, annual change, sats	10.9	-1.1	-5.1	-33.7	-25.7	-15.5	-5.0	46.6
Product gap [g/]	Percentage	0.0	0.2	-0.4	-3.9	-6.1	-7.2	-7.1	-4.6
Short-term indicators									
Real production of manufacturing industry	Percentage, annual change, seasonally adjusted	0.8	0.9	-1.6	-23.6	-7.3	0.1	6.8	27.7
Retail trade sales, excluding fuels or vehicles	Percentage, annual change, seasonally adjusted	9.4	8.9	6.7	-14.9	-3.6	5.5	4.2	19.4
Coffee production	Percentage, annual change, cum. for period	4.9	24.1	-13.8	-1.9	-3.6	-4.6	13.3	-24.7
Oil production	Percentage, annual change, period average	1.4	-0.2	-2.1	-15.7	-15.4	-14.1	-14.6	-5.1
Labor market [h/]									
Total national									
Unemployment rate	Percentage, annual change, period average	11.2	10.9	11.8	21.1	18.4	15.4	14.6	15.2
Occupancy Rate	Percentage, annual change, period average	57.2	57.5	55.7	44.4	49.0	52.7	52.7	51.9
Overall participation rate	Percentage, annual change, period average	64.4	64.6	63.1	56.3	59.9	62.3	61.8	61.2
Thirteen cities and metropolitan areas									
Unemployment rate	Percentage, annual change, period average	11.3	11.6	11.9	25.2	21.8	17.3	16.8	16.7
Occupancy Rate	Percentage, annual change, period average	58.7	58.7	57.0	44.1	48.9	53.3	53.5	53.1
Overall participation rate	Percentage, annual change, period average	66.2	66.4	64.6	58.9	62.6	64.5	64.3	63.8
Balance of payments [i/ j/]									
Current account (A + B + C)	Millions of dollars	-4,303	-3,467	-2,295	-1,962	-2,013	-2,997	-3,105	-4,047
Percentage of GDP	Percentage, nominal terms	-5.3	-4.2	-3.1	-3.6	-3.0	-4.0	-4.0	-5.5
A. Goods and services	Millions of dollars	-4,406	-3,607	-3,098	-2,651	-3,263	-4,092	-3,688	-5,022
B. Primary income (factor income)	Millions of dollars	-2,301	-2,298	-1,369	-1,029	-1,172	-1,380	-1,867	-1,652
C. Secondary income (current transfers)	Millions of dollars	2,404	2,438	2,173	1,718	2,422	2,475	2,450	2,627
Financial account (A + B + C + D)	Millions of dollars	-3,740	-2,706	-1,735	-1,938	-1,857	-2,584	-2,789	-3,761
Percentage of GDP	Percentage, nominal terms	-4.6	-3.3	-2.3	-3.5	-2.8	-3.4	-3.6	-5.1
A. Foreign investment (ii - i)	Millions of dollars	-1,678	-2,880	-1,924	-1,725	-258	-1,818	-1,438	-1,013
i. Foreign Investment in Colombia (FDI)	Millions of dollars	3,163	3,342	3,175	1,371	844	2,069	2,307	1,997
ii. Colombian abroad	Millions of dollars	1,485	462	1,251	-353	586	251	869	984
B. Portfolio investment	Millions of dollars	137	1,551	-168	-3,429	323	1,506	1,319	-6,089
C. Other investment (loans, other credits, and derivatives)	Millions of dollars	-2,453	-1,579	528	627	-2,127	-3,976	-2,860	3,167
D. Reserve assets	Millions of dollars	254	202	-171	2,590	205	1,705	190	174
Errors and omissions (E&O)	Millions of dollars	563	761	560	25	155	413	316	287
Interest rates									
Policy interest rate [k/]	Percentage, period average	4.3	4.3	4.2	3.3	2.2	1.8	1.8	1.8
Policy rate expected by analysts [l/]	Percentage, period average								
IBR overnight	Percentage, period average	4.3	4.3	4.2	3.2	2.2	1.7	1.7	1.7
Commercial interest rate [m/]	Percentage, period average	8.9	8.5	8.4	8.3	7.0	6.2	6.0	5.7
Consumer interest rate [n/]	Percentage, period average	16.0	15.5	15.8	15.5	14.8	14.2	14.0	13.7
Mortgage interest rate [o/]	Percentage, period average	10.4	10.4	10.4	10.4	10.2	9.6	9.2	8.9

Note: values in bold are forecasts or assumptions.
sats: seasonally adjusted time series, modified to eliminate the effect of seasonal and calendar influences.
a/ Quarterly data in bold are assumptions based on the annual forecast of each variable.
b/ Calculated with the main trading partners (excluding Venezuela) weighted by their share of trade.
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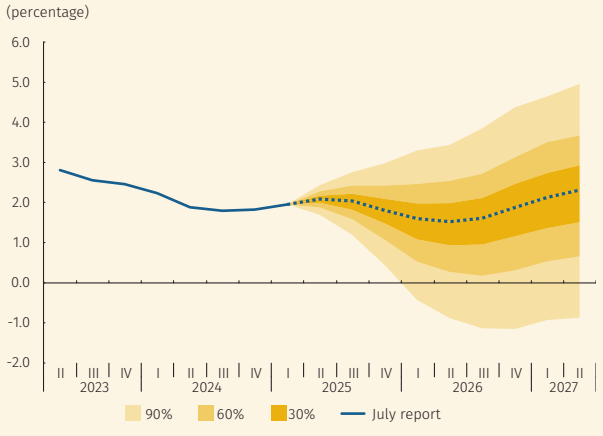
n/ Does not include loans granted through credit cards.
o/ Corresponds to the weighted average of interest rate of the disbursements in COP and UVR (real value unit for its Spanish acronym) for the acquisition of No VIS housing (housing that is not social interest housing).

2021		2022				2023				2024				2025				2026				2027	
Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
8.8	6.3	5.1	4.0	3.2	2.5	2.6	2.9	2.2	2.1	1.7	1.5	1.9	2.2	2.3	**2.0**	**1.7**	**1.3**	**1.4**	**1.7**	**2.0**	**2.3**	**2.4**	**2.5**
73	80	98	112	98	89	82	78	86	83	82	85	79	74	75	67	**66**	**65**	**64**	**63**	**63**	**62**	**62**	**62**
0.1	0.1	0.1	0.8	2.2	3.7	4.5	5.0	5.3	5.3	5.3	5.3	5.3	4.7	4.3	4.3	**4.3**	**4.0**	**3.8**	**3.7**	**3.5**	**3.3**	**3.3**	**3.3**
143	185	209	238	275	314	283	275	219	207	172	187	189	199	201	245	**238**	**245**	**249**	**252**	**255**	**259**	**263**	**265**
4.5	5.6	8.5	9.7	11.4	13.1	13.3	12.1	11.0	9.3	7.4	7.2	5.8	5.2	5.1	4.8	**4.8**	**4.7**	**4.3**	**3.7**	**3.5**	**3.2**	**3.1**	**3.0**
3.0	3.4	5.3	6.8	8.3	10.0	11.4	11.6	10.9	10.3	8.8	7.6	6.5	5.6	5.2	4.9	.	.	.	.	.	.	.	.
3.0	3.3	6.4	8.3	11.6	15.0	15.1	14.3	10.4	7.1	3.1	1.4	0.6	0.6	0.9	1.6	.	.	.	.	.	.	.	.
2.0	2.2	3.8	5.2	5.9	7.4	8.7	9.0	9.1	9.0	8.3	7.9	7.5	7.0	6.4	6.0	.	.	.	.	.	.	.	.
5.9	7.1	8.3	9.8	11.5	11.8	14.7	15.6	15.8	17.2	15.8	13.3	10.2	7.3	6.3	5.5	**5.9**	**5.9**	**5.2**	**4.8**	**4.0**	**3.4**	**3.2**	**3.1**
12.4	17.2	25.4	23.6	26.6	27.8	21.8	14.3	11.5	5.0	1.7	5.3	2.7	3.3	4.7	4.3	**4.5**	**5.2**	**4.1**	**3.3**	**2.8**	**2.4**	**2.3**	**2.2**
14.8	24.4	41.9	31.2	35.5	36.4	19.7	10.1	13.9	-0.5	-3.4	12.5	2.9	5.1	4.6	1.0	.	.	.	.	.	.	.	.
11.7	15.3	20.7	21.5	24.1	25.3	22.5	15.6	10.7	6.7	3.4	3.2	2.7	2.8	4.7	5.4	.	.	.	.	.	.	.	.
3.0	3.4	5.3	6.8	8.3	10.0	11.4	11.6	10.9	10.3	8.8	7.6	6.5	5.6	5.2	4.9	.	.	.	.	.	.	.	.
3.8	4.4	6.9	8.4	10.0	11.6	12.4	11.6	10.3	9.5	7.6	7.1	6.2	5.4	5.3	5.1	.	.	.	.	.	.	.	.
2.3	2.5	4.5	6.1	7.5	9.5	10.5	10.5	9.5	8.4	6.8	6.0	5.5	5.2	4.8	4.8	**4.6**	**4.2**	**4.1**	**3.7**	**3.4**	**3.3**	**3.2**	**3.2**
3.0	3.4	5.6	7.1	8.6	10.4	11.4	11.2	10.2	9.4	7.7	6.9	6.1	5.4	5.1	4.9	.	.	.	.	.	.	.	.
3,847	3,882	3,910	3,919	4,384	4,812	4,758	4,424	4,044	4,074	3,921	3,919	4,097	4,348	4,190	4,178	.	.	.	.	.	.	.	.
3.4	3.3	2.5	1.4	7.8	15.3	12.0	3.5	-5.1	-4.6	-7.7	-8.0	-4.3	1.1	-3.0	-3.0	**-5.1**	**-2.3**	**-1.1**	**-0.5**	**-0.4**	**-0.3**	**0.2**	**0.2**
13.5	11.1	8.1	12.1	7.4	2.2	2.5	0.3	-0.7	0.7	0.2	1.7	1.8	2.6	2.7	**2.6**	**3.0**	**2.7**	**2.7**	**2.8**	**3.0**	**3.2**	**3.1**	**2.7**
18.5	12.8	11.5	14.9	8.4	2.2	1.7	0.2	0.2	0.2	0.0	1.4	1.2	3.3	4.0	**4.0**	.	.	.	.	.	.	.	.
19.6	13.9	12.3	16.4	10.7	4.5	2.8	0.5	-0.7	-1.0	0.0	1.2	2.2	3.0	4.4	**4.5**	.	.	.	.	.	.	.	.
13.6	8.9	6.9	7.4	-3.5	-6.2	-3.1	-0.7	4.2	6.5	2.3	2.5	-6.0	3.9	1.9	**0.7**	.	.	.	.	.	.	.	.
8.5	15.7	16.4	7.3	17.2	23.7	-1.5	-12.0	-25.9	-23.3	-11.6	4.3	18.6	13.3	8.2	**5.0**	.	.	.	.	.	.	.	.
15.3	14.0	9.4	14.1	14.3	8.4	-6.5	-11.0	-15.1	-18.1	-5.8	2.0	5.1	12.5	-0.1	**3.0**	.	.	.	.	.	.	.	.
31.4	47.9	1.4	4.7	7.1	-4.5	5.3	-4.6	-8.4	-9.2	-6.3	-0.8	-6.5	4.9	-8.5	**-4.2**	.	.	.	.	.	.	.	.
-0.4	-1.1	-8.7	-0.9	5.2	-11.4	-6.4	-6.0	-9.6	0.4	5.7	10.6	11.5	10.7	-8.8	**-3.7**	.	.	.	.	.	.	.	.
23.7	15.2	34.1	34.0	25.0	29.4	-12.8	-21.7	-23.9	-31.7	-9.4	-4.4	6.6	17.0	6.0	**11.7**	.	.	.	.	.	.	.	.
-4.2	-6.7	-16.2	-16.3	-12.0	-4.3	1.3	7.0	7.4	4.7	3.0	4.9	11.6	13.3	11.2	**9.3**	.	.	.	.	.	.	.	.
8.3	5.7	8.3	9.3	6.9	5.0	-0.5	2.3	3.7	2.4	4.6	-1.6	-4.1	0.1	0.3	**1.3**	.	.	.	.	.	.	.	.
16.7	12.9	12.9	13.5	10.2	4.8	1.1	-2.3	-5.4	-3.3	-2.0	1.7	4.2	4.4	4.7	**4.1**	.	.	.	.	.	.	.	.
25.7	36.1	16.2	24.5	13.9	-1.9	2.7	1.4	0.3	8.2	4.1	2.1	2.1	2.0	0.7	**2.3**	.	.	.	.	.	.	.	.
40.2	34.3	38.8	25.8	23.7	11.0	-2.3	-8.4	-18.1	-10.1	-7.6	4.5	12.2	9.8	12.4	**9.0**	.	.	.	.	.	.	.	.
-2.6	-0.8	0.3	1.9	3.0	2.8	2.7	2.1	1.2	0.7	0.1	-0.2	-0.4	-0.4	-0.4	**-0.4**	**-0.3**	**-0.2**	**-0.3**	**-0.2**	**-0.1**	**0.0**	**0.1**	**0.1**
20.0	12.9	11.9	20.9	7.0	3.6	-1.2	-4.6	-7.2	-6.0	-4.5	-3.1	-1.8	-0.4	1.0	.	.	.	.	.	.	.	.	.
15.8	10.6	12.6	22.1	6.0	-0.9	-2.0	-5.4	-4.5	-3.5	-3.6	-0.8	3.4	7.7	11.6	.	.	.	.	.	.	.	.	.
-1.9	-18.8	-16.3	9.7	-18.2	-17.0	-0.7	-14.3	-2.1	24.9	3.5	30.3	22.9	33.9	35.7	-19.9	.	.	.	.	.	.	.	.
-0.1	-1.7	-0.1	5.1	1.3	3.6	3.2	3.7	3.7	1.5	0.7	1.0	-1.0	-2.9	-2.1	-6.4	.	.	.	.	.	.	.	.
12.8	12.5	11.9	11.1	11.1	10.7	10.4	10.3	9.7	10.3	10.5	10.5	10.0	9.6	9.2	**8.9**	**9.2**	**9.3**	.	.	.	.	.	.
53.4	54.2	55.9	56.6	56.7	56.7	57.2	57.7	58.2	57.3	56.9	57.2	57.7	57.8	58.6	.	.	.	.	.	.	.	.	.
61.2	62.0	63.5	63.7	63.8	63.6	63.9	64.3	64.5	63.9	63.7	63.9	64.1	64.0	64.5	.	.	.	.	.	.	.	.	.
14.0	13.1	12.2	11.3	11.0	10.9	11.0	10.4	9.8	10.2	10.5	10.3	10.0	9.7	9.0	**8.9**	**9.2**	**9.3**	.	.	.	.	.	.
54.3	54.4	57.5	58.0	58.4	58.4	58.7	59.2	60.1	59.8	59.6	60.0	60.1	59.9	60.7	.	.	.	.	.	.	.	.	.
63.2	62.6	65.5	65.3	65.6	65.5	65.9	66.1	66.7	66.6	66.6	66.9	66.8	66.3	66.8	.	.	.	.	.	.	.	.	.
-4,835	-5,962	-5,397	-4,748	-6,109	-4,624	-2,807	-2,082	-1,546	-1,861	-1,945	-1,449	-1,572	-2,259	-2,290	.	.	.	.	.	.	.	.	.
-6.0	-6.9	-6.3	-5.3	-6.9	-5.6	-3.5	-2.4	-1.6	-1.8	-1.9	-1.4	-1.5	-2.1	-2.2	.	.	.	.	.	.	.	.	.
-5,259	-6,032	-4,957	-3,046	-4,418	-3,673	-2,175	-2,055	-1,403	-2,153	-1,931	-2,232	-2,270	-3,040	-2,943	.	.	.	.	.	.	.	.	.
-2,339	-2,865	-3,617	-4,531	-4,795	-4,144	-3,727	-3,056	-3,508	-3,141	-3,345	-3,114	-3,376	-3,625	-3,196	.	.	.	.	.	.	.	.	.
2,763	2,935	3,176	2,829	3,104	3,193	3,094	3,029	3,365	3,434	3,331	3,897	4,073	4,206	3,849	.	.	.	.	.	.	.	.	.
-4,504	-5,640	-5,037	-4,952	-5,736	-4,741	-2,591	-2,699	-1,376	-1,182	-1,601	-1,102	-1,098	-2,038	-1,835	.	.	.	.	.	.	.	.	.
-5.6	-6.5	-5.8	-5.5	-6.5	-5.8	-3.2	-3.1	-1.4	-1.2	-1.6	-1.1	-1.0	-1.9	-1.7	.	.	.	.	.	.	.	.	.
-2,528	-1,402	-3,651	-3,661	-2,959	-3,529	-3,600	-5,442	-3,335	-3,148	-2,527	-1,669	-2,483	-3,014	-2,454	.	.	.	.	.	.	.	.	.
2,707	2,550	4,934	5,043	3,113	4,092	4,164	5,335	3,838	3,457	3,683	2,807	3,348	4,431	3,142	.	.	.	.	.	.	.	.	.
179	1,149	1,284	1,382	154	563	563	-107	503	309	1,156	1,138	866	1,417	689	.	.	.	.	.	.	.	.	.
851	-675	1,866	-759	-233	-447	1,111	1,520	4,527	1,504	1,416	-276	3,490	-2,178	3,042	.	.	.	.	.	.	.	.	.
-2,981	-3,697	-3,379	-606	-2,703	-976	-467	824	-3,026	-35	-1,441	-71	-3,150	2,472	-2,987	.	.	.	.	.	.	.	.	.
154	135	127	74	159	210	366	399	457	496	951	914	1,046	682	564	.	.	.	.	.	.	.	.	.
331	322	360	-203	374	-117	217	-617	170	678	344	347	475	220	456	.	.	.	.	.	.	.	.	.
1.8	2.4	3.7	5.7	8.6	10.8	12.5	13.2	13.3	13.2	12.8	11.9	10.9	9.9	9.5	9.3	.	.	.	.	.	.	.	.
																9.1	**8.6**	**8.3**	**7.8**	**7.3**	**7.0**	**7.0**	**7.0**
1.8	2.4	3.7	5.7	8.6	10.8	12.5	13.2	13.3	13.2	12.8	11.9	10.9	9.9	9.5	9.3	.	.	.	.	.	.	.	.
6.0	6.9	8.6	10.8	14.2	17.8	19.9	18.6	18.6	18.0	16.2	15.1	14.2	13.0	12.7	12.6	.	.	.	.	.	.	.	.
14.3	14.8	16.7	19.1	22.9	27.2	30.1	28.5	26.7	26.3	23.9	22.5	21.2	20.0	19.5	19.3	.	.	.	.	.	.	.	.
9.0	9.3	9.9	11.5	13.4	16.4	18.2	18.1	17.5	17.1	16.4	14.9	12.8	11.6	11.7	12.0	.	.	.	.	.	.	.	.

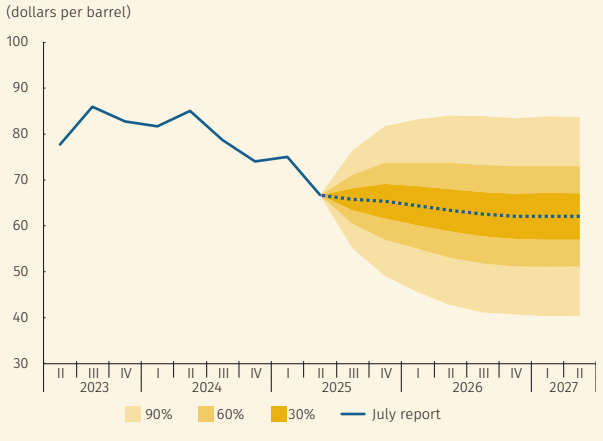
Appendix 3
Predictive Densities for other relevant Macroeconomic Forecasting Variables

Graph A3.1
Quarterly assumptions of 12-month growth of trading partners based on annual projections, predictive density[a/]



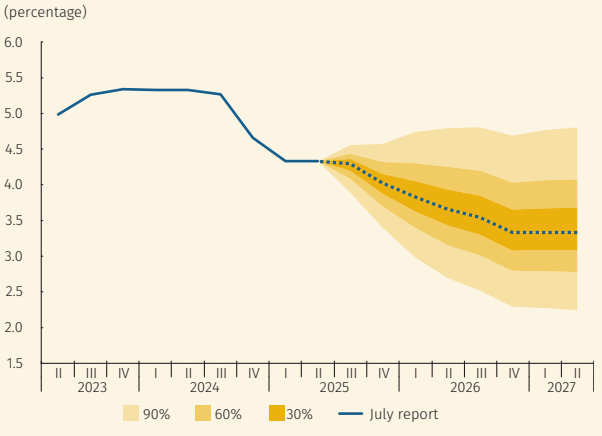
a/ The graph displays the probability distribution and its most likely path on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode).
Sources: Bloomberg, statistics bureaus, central banks; Calculations and projections by *Banco de la República*.

Graph A3.2
Quarterly oil price assumption, predictive density[a/]



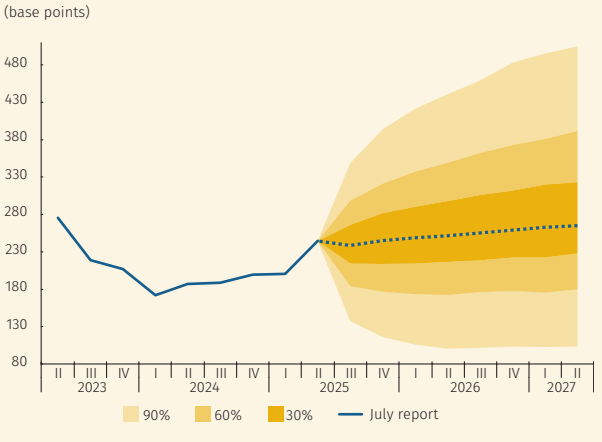
a/ The graph displays the probability distribution and its most likely path on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode).
Source: Bloomberg, calculations and projections by *Banco de la República*.

Graph A3.3
U.S. Federal Reserve quarterly interest rate assumption, predictive density[a/]



a/ The graph displays the probability distribution and its most likely path on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode).
Source: Federal Reserve Bank of Louis, calculations and projections by *Banco de la República*.

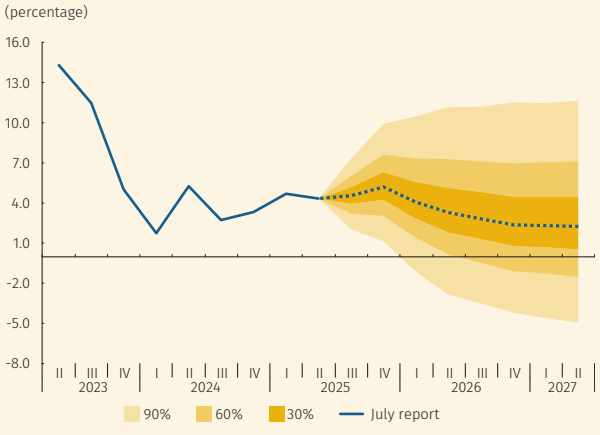
Graph A3.4
Colombia's quarterly risk premium (CDS) assumption, predictive density[a/,b/]



a/ Five-year credit default swaps
b/ The graph displays the probability distribution and its most likely trajectory on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode), using a combination of densities from the Patacon and 4GM models.
Source: Bloomberg, calculations and projections by *Banco de la República*.

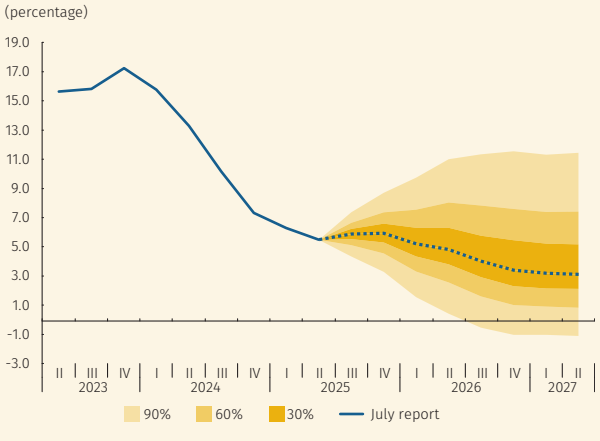
Appendix 3 (continuation)
Predictive Densities for other relevant Macroeconomic Forecasting Variables

Graph A3.5
CPI for foods, predictive density [a/]
(annual change, end-of-period)



a/ The graph displays the probability distribution and its most likely trajectory on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode), using a combination of densities from the Patacon and 4GM models.
Source: calculations and projections by *Banco de la República*.

Graph A3.6
CPI for regulated items, predictive density [a/]
(annual change, end-of-period)



a/ The graph displays the probability distribution and its most likely trajectory on an eight-quarter forecast horizon. Densities characterize the balance of potential risks with areas of 30%, 60% and 90% probability around the central forecast (mode), using a combination of densities from the Patacon and 4GM models.
Source: calculations and projections by *Banco de la República*.

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