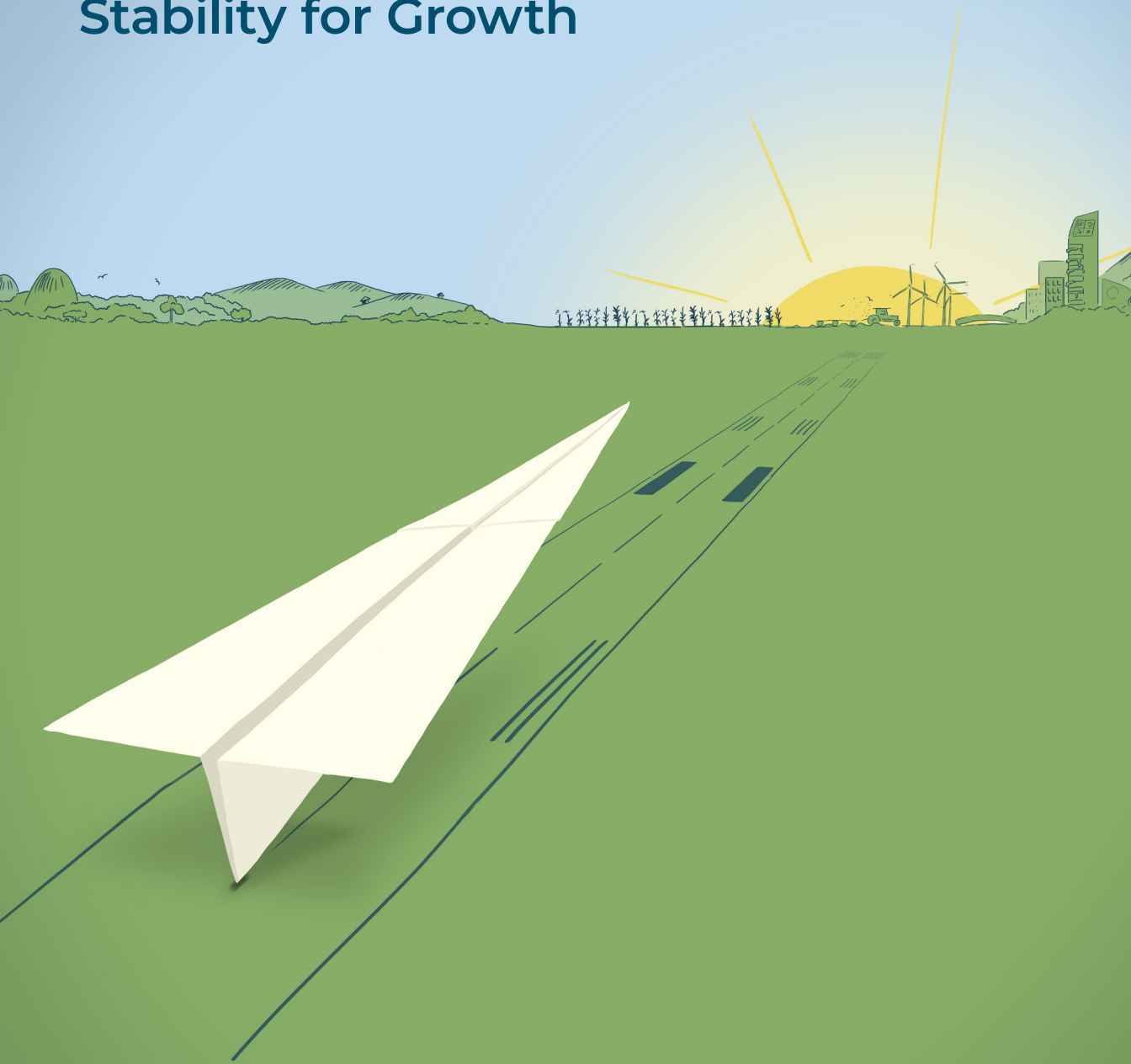
READY FOR TAKE-OFF?

Building on Macroeconomic Stability for Growth



Arturo J. Galindo
Alejandro Izquierdo

IDB

2024 Latin American and Caribbean Macroeconomic Report

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Building on Macroeconomic Stability for Growth

Coordinated by
Arturo J. Galindo
Alejandro Izquierdo

Inter-American Development Bank

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Preface

Global economic performance in 2023 outperformed expectations. Growth worldwide, significantly more robust than initially predicted, was a key driver for the economies of Latin America and the Caribbean. Our region achieved an estimated 2.1% growth rate, exceeding early 2023 predictions by over 1 percentage point. Large countries like Brazil and Mexico provided relevant enhancements to regional growth.

As inflationary pressures ease globally and interest rates begin to decrease, countries in the region are well-positioned to consolidate their fiscal accounts. Primary balance gaps have been closed on average; now, overall balance gaps must follow suit. The combination of stronger fiscal positions, robust financial regulation and supervision, and the reaffirmed strength of central banks paints an optimistic picture of the region's macroeconomic stability. The region has reached a possible inflection point if it enacts reforms and seizes opportunities in this favorable context.

The region faces a pressing productivity challenge with long-run growth hovering around 2%. This rate is insufficient to meet the rising demands of Latin America and the Caribbean's growing population. Bridging this gap requires urgent efforts to enhance productivity growth and improve human capital, areas where the region lags other emerging economies. Addressing these issues requires comprehensive reforms designed to mitigate various risks and foster a secure environment for long-term private investment.

Abundant opportunities lie ahead for Latin America and the Caribbean. Countries are poised to contribute significantly to global challenges like climate change, food security, and the clean energy transition. The robustness of monetary and financial policy institutions and potential fiscal strengthening—a process still needing reforms in many countries—lays a foundation for leveraging these opportunities. However, to seize this opportunity, the region must also focus on reforms: developing deeper financial markets, more formal and competitive labor markets, a better-qualified workforce, stronger property rights protection, stronger competition in key markets, and enhanced rule of law enforcement. These efforts are vital to attract capital and boost the long-term productivity growth Latin America and the Caribbean needs.

This year's Latin American and Caribbean Macroeconomic Report delves into the primary challenges the region will confront in 2024 across monetary, fiscal, and financial domains as well as challenges to long-run growth. Chapter 1 provides an overview and outlines risk scenarios for the global economy and our region. Chapter 2 examines

long-term growth, focusing on productivity dynamics. Chapter 3 addresses fiscal issues, including strategies to sustain the region's fiscal consolidation trend. Chapter 4 explores monetary policy, inflation trends, and central bank challenges in reducing interest rates as efficiently as they were increased. Finally, Chapter 5 assesses risks in financial markets, both external and domestic, and offers strategies to manage potential financial vulnerabilities. Each chapter concentrates on the critical challenges in its respective area and proposes policy actions to navigate current uncertainties, mitigate the risks of exacerbating the region's triple challenge of high social demands, low growth, and the need for fiscal consolidation, and lays the groundwork for addressing these issues in the medium term.

Eric Parrado
Chief Economist

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Eric Parrado, Chief Economist and General Manager of the Research Department, and Eduardo Cavallo of the Research Department provided valuable comments and advice.

The principal authors of each chapter are as follows:

Chapter 1 Arturo J. Galindo
Chapter 2 Cézar Santos
Chapter 3 Alejandro Izquierdo and Oscar M. Valencia
Chapter 4 João Ayres
Chapter 5 Arturo J. Galindo and Alejandro Izquierdo

Additional contributors to each chapter are as follows:

Chapter 1 Carlos Álvarez, Leandro Andrián, Eduardo Cavallo, Carolina Celis, David Evans, and Carolina Rivas.
Chapter 2 Vanessa Alviarez and Alejandro Izquierdo
Chapter 3 Martín Ardanaz and Alejandro Rasteletti
Chapter 4 Vanessa Alviarez and Alejandro Izquierdo
Chapter 5 Martha Elena Delgado

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Tom Sarrazin oversaw the production process of the report. Rita Funaro edited the English manuscript. Alberto Magnet translated the report into Spanish, and Hilda Lemos into Portuguese. Fayre Makeig proofread the English manuscript. Ana Paula Nothen Ruhe reviewed the report in Portuguese.

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CHAPTER 1

The Economic Outlook

Latin American and Caribbean economies outperformed expectations in 2023, with GDP growth reaching 2.1%, exceeding initial forecasts by one percentage point. Stronger global economic expansion propelled this growth. Within the region, proactive policies helped strengthen the macroeconomic position of Latin American and Caribbean economies; central banks moved swiftly to raise interest rates, which helped curb inflation faster than in other regions. Prudent fiscal policies—exemplified by narrowing primary balances—and resilient financial markets also contributed to better-than-expected performance. Amidst the growth uptick, the job market showed improvement, with employment rates recovering and participation rates stabilizing. Looking ahead to 2024, as global economic growth is projected to ease, the region's growth will likely decelerate. As of December 2023, market analysts predicted 1.6% growth for the region in 2024, with a return to long-term average 2% growth in 2025. This chapter delves into global and regional growth prospects, assesses the risks confronting Latin American and Caribbean countries, and explores various growth scenarios.

The Global Context

Global growth has been slowing gradually after a substantial recovery to 6% in 2021 following the worst part of the COVID-19 pandemic; in 2022, it fell to 3.5% and is expected to reach 3% in 2023 and 2.9% in 2024.[1] The United States, which started the year with fears of stagflation, improved its growth outlook significantly during 2023. In January 2023, forecasters expected U.S. growth to reach only 0.3% in 2023.[2] This outlook was revised upward throughout the year and reached 2.5%, surpassing 2022's growth level. Due to lower demand and high interest rates in the United States and abroad, private forecasters expect growth to diminish to 1.3% and 1.7% in 2024 and 2025, respectively. The scenario of a soft landing in the United States following the inflationary surge in 2021-2022 now prevails.

In response to the impact of the war in Ukraine and the rise in energy prices, growth in the Eurozone was significantly below the 3.3% rate reached in 2022. Private

[1] IMF (2023a).

[2] Bloomberg average of private forecasters.

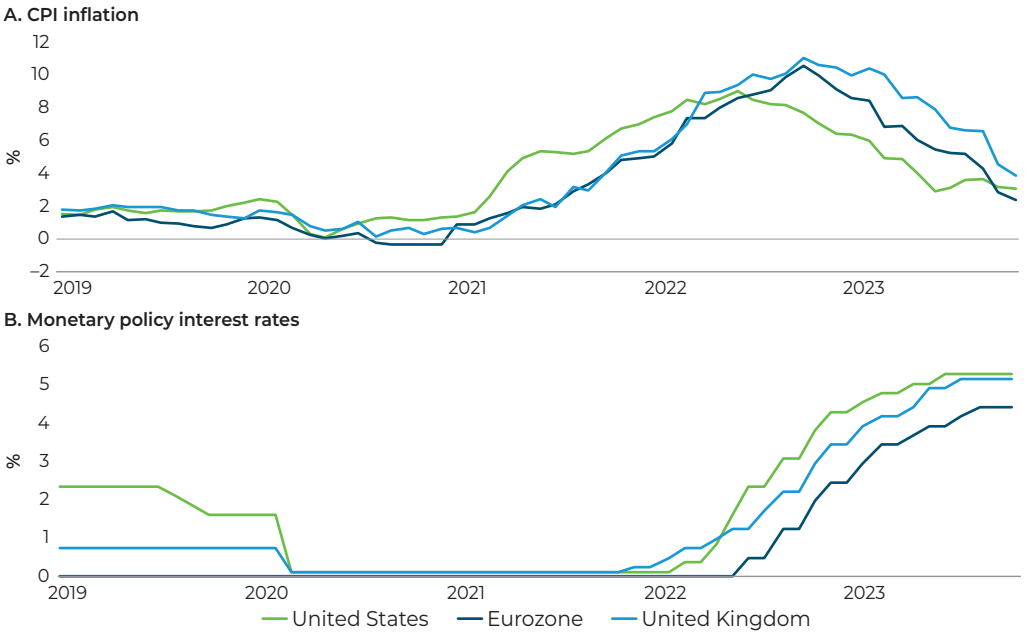
forecasters estimate it reached 0.5% in 2023 and will remain low in 2024 at 0.7%. Expectations of growth in China improved slightly throughout 2023 despite stress in real estate markets. In January, private forecasters were expecting 4.6% growth, and the year ended with 5.1%.

Compared to other regions, growth in China remains high. In 2024 and 2025, growth is expected to reach 4.5%, but it is unlikely to repeat the 10% average growth rate of the century's first 15 years. Demographic headwinds, slowing exports, and a deflating housing market limit short- and long-term growth outlooks. According to UN statistics, the number of workers per retiree in China in 2000 was 10; now, it is half that, and by 2035, it is expected to be 3. Also, demand for Chinese imports from the United States is falling swiftly. The IMF Balance of Payments statistics show that while representing nearly 20% of total U.S. imports before 2020, in 2023, they made up only 12% and were surpassed by imports from Mexico. The real estate sector, which comprises nearly 25% of GDP in China, remains in turmoil. In 2023, the S&P China A 1800 Real Estate Sector Index, a stock price index for Chinese real estate companies, fell 30% following a 20% decline in 2022.

Inflation and policy responses to contain it were probably the main macroeconomic policy concerns during 2022 and 2023. Inflationary pressures grew because of the demand surge following the COVID-19 pandemic. Moreover, expansionary fiscal and monetary policies adopted during the pandemic were later fueled by rapidly rising oil prices brought on by Russia's invasion of Ukraine. This led to extraordinary inflation rates in advanced economies (Figure 1.1, Panel A). In June 2022, consumer price inflation in the United States reached 9.1%. In October 2022, it peaked at 10.6% in the Eurozone and 11.1% in the United Kingdom. In response, monetary policy interest rates were aggressively increased. From their minimum values during COVID-19, rates increased by 525, 450, and 525 basis points in the United States, the Euro area, and the United Kingdom, respectively (Figure 1.1, Panel B). Combined with other factors, such as lower demand for U.S. treasury bonds from the private and official sectors worldwide, the rise in policy interest rates has been transmitted to the rest of the yield curve, increasing the global cost of financing. Though slowly, inflation has responded to the rise in policy rates. Even if core inflation has remained sluggish, expectations about near-term reductions of monetary policy interest rates are rising. For example, according to the Chicago Mercantile Exchange Group's FedWatch Tool, the probability of reducing the policy rate by at least 25 basis points by the end of the second quarter of 2024 exceeds 70%.

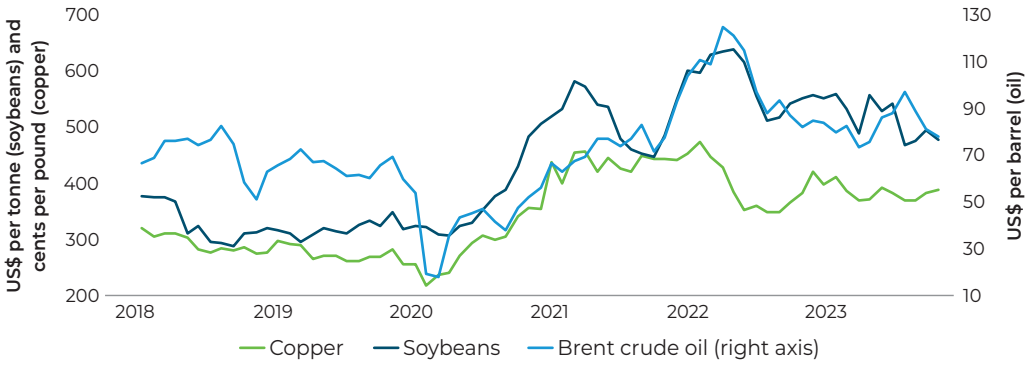
Commodity prices, particularly oil prices, were volatile during 2023. Despite a temporary increase following the eruption of the conflict in the Gaza Strip, they remained on a downward trend that followed the hike after Russia's invasion of Ukraine (Figure 1.2). The combination of lower demand due to slower expected growth in 2024 and a greater supply of crude oil, thanks to record output from the United States, Guyana, and Brazil, will likely keep oil prices stable despite lower production in OPEC countries. According to

FIGURE 1.1 • Inflation and Policy Rates in Advanced Economies



Source: Bank for International Settlements.
Note: CPI = consumer price index.

FIGURE 1.2 • Key Commodity Prices



Source: IDB staff calculations based on Bloomberg.

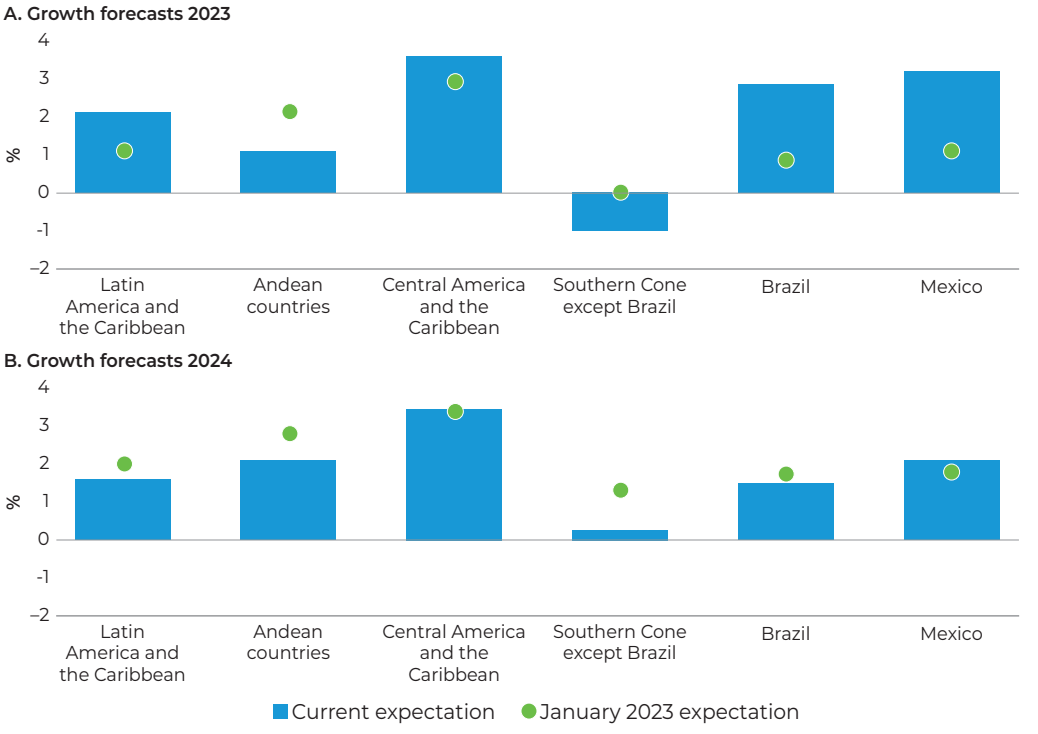
the International Energy Agency, OPEC's oil market share dropped to 51% in December 2023—the lowest level since 2016.

Growth Dynamics in Latin America and the Caribbean

Global developments impacted Latin America and the Caribbean. The region bounced back strongly after the pronounced recession in 2020 brought on by the COVID-19 pandemic.

After growing over 7% in 2021 and 4.1% in 2022, growth was expected to slow down significantly in 2023. However, as the year evolved, forecasts for 2023 were upgraded. In January, private forecasters estimated that the region's growth in 2023 would be close to 1.1%. This projection was driven mainly by the assumption of a hard landing in the United States. As the year progressed and evidence of a resilient U.S. economy became evident, growth prospects were revised upward, and the latest numbers suggest that growth reached 2.1% (Figure 1.3, Panel A). A better-than-expected performance of the U.S. economy led to better outcomes in Brazil, Mexico, Central America, and the Caribbean. In the Andean countries, growth perspectives deteriorated continuously throughout the year due to political uncertainty and the El Niño climate phenomenon (Box 1.1), and in the Southern Cone region excluding Brazil, droughts in Argentina and Uruguay also affected growth expectations negatively. In line with a deterioration of the global growth outlook, for 2024, the region is expected to grow slightly less than in 2023. As 2023 progressed, the outlook for 2024 deteriorated slightly for the region and most subregions (Figure 1.3, Panel B). Current forecasts put growth at close to 1.6% in 2024.

FIGURE 1.3 ● Growth Forecasts for Latin America and the Caribbean (2023–2024)



Source: IDB staff calculations based on Latin American Consensus Forecasts.
Note: The figures report growth forecasts for 2023 and 2024 in each month of 2023. The countries included are Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, and Venezuela. Figures are averages weighted by GDP.

BOX 1.1 • Effects of the "El Niño" Phenomenon on Andean Countries

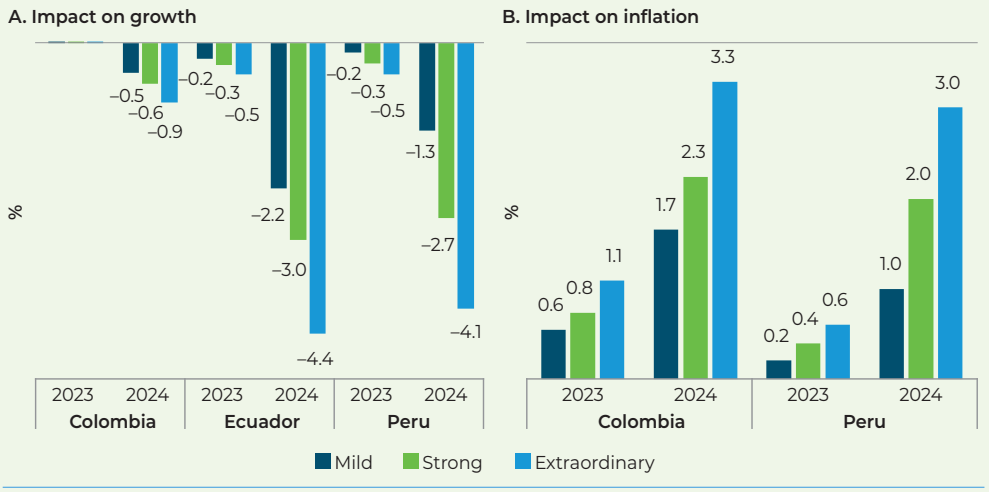
Changes in the surface temperature of the Pacific Ocean characterize the El Niño phenomenon or El Niño-Southern Oscillation (ENSO). ENSO conditions can be categorized based on the impact zone and occurrence. The National Oceanic and Atmospheric Administration (NOAA) monitors the Pacific Ocean's surface temperatures, dividing the equatorial strip into four quadrants (Niño 1, Niño 2, Niño 3, and Niño 4). This categorization identifies two types of El Niño: Global El Niño, focusing on the combined Niño 3 and 4 quadrants (central Pacific Ocean), and Coastal El Niño, concentrating on the combined Niño 1 and 2 quadrants (eastern Pacific Ocean) near the South American coast.

Climatic anomalies caused by El Niño have produced negative socioeconomic consequences in the past in the Andean region countries. Since 1950, three major El Niño events have been identified: 1982-1983, 1997-1998, and 2016-2017. El Niño can be categorized by magnitude and impact into weak, moderate, strong, and extraordinary categories. The 1982-1983 event is categorized as extraordinary, the 1997-1998 event as strong, and the 2016-2017 event as moderate.

In Ecuador and Peru, impacts have included excessive rainfall, floods, and reduced agricultural productivity, leading to higher food prices and infrastructure damage. Ecuador experienced significant agricultural and construction sector impacts, with the 1997-1998 ENSO causing unemployment and health risks. Peru's agriculture and fishing suffered from lower crop yields and fishing disruptions. In Colombia, ENSO reduced energy supply, mainly affecting hydroelectric generation and agriculture, unlike the excessive rainfall in other countries. This led to increased energy tariffs and food prices, pressuring overall inflation.

By estimating dynamic multipliers from VARX models for the countries in the region, Álvarez et al. (2024) estimate the impact of different intensities of an El Niño event in 2024 on inflation and growth in Andean countries. The magnitude of the impacts ultimately depends on the event's intensity. Regarding GDP in 2024, Peru and Ecuador are expected to be the most affected, with deviations in growth between 1.3 and 4.4 percentage points for moderate and extraordinary El Niño, respectively. Colombia's negative impact may be smaller, between 0.5 and 0.9 points (see Figure 1.1.1, Panel A). In terms of inflation, Colombia's increase is expected to be between 1.7 and

FIGURE 1.1.1 • Impact of El Niño in Andean Countries



Source: Álvarez et al. (2024).

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BOX 1.1 • Effects of the "El Niño" Phenomenon on Andean Countries *(continued)*

3.3 points, while Peru's is estimated between 1.0 and 3.0 points (See Figure 1.1.1, Panel B). Ecuador shows no significant inflationary effects. These countries geographic and economic structural differences are critical factors in these varied dynamics.

The varied effects of El Niño on countries in the region, and on specific productive sectors in these countries, underscores the need for tailored approaches to counteract the economic implications of climatic phenomena. Strategies might include using resources for infrastructure reconstruction, subsidies for affected sectors, or conditional subsidies to mitigate the transient effect of higher prices. Economic adaptability and policymaking are crucial in countering negative impacts and strengthening resilience against these events. Investing in climate-resilient infrastructure to reduce the vulnerability of key economic sectors is also emphasized.

Continuous monitoring and updating of El Niño effects are essential to better understand the complex interconnections between climate change and local economies. Ongoing research on these phenomena and proactive preventive policies addressing each country's unique challenges are fundamental.

Inflation, which had increased strongly in the region through 2021 and 2022, reaching a maximum of 9.6% in the median country, descended rapidly in most countries in 2023. Central banks reacted aggressively to contain it by raising policy interest rates, which, coupled with the fall in commodity prices, allowed inflation to fall back from its peak. In response, by the end of 2023, most countries had already started reducing their policy rates.

Global capital markets have remained open for most Latin American and Caribbean countries. Sovereign bond issuance reached nearly US$38 billion in 2023, US$8 billion more than in 2022 (Table 1.1). At the same time, financial conditions remained tight for governments and the private sector, largely because of the rise in global interest rates. Average yields on external sovereign bonds in the region increased from around 5.3% in 2021 to over 8% in late 2023, almost exclusively due to higher yields of U.S. treasuries. During 2023, bond spreads over U.S. treasuries remained stable for the region. Figure 1.4 illustrates the upward movement in bond yields, decomposing the yield into the spread and the corresponding U.S. treasury yield. As discussed in Chapter 3, higher interest rates are a key challenge to fiscal policy and fiscal consolidation in Latin America and the Caribbean.

In tandem with growth dynamics, overall employment in the region continued its upward trend since the pandemic (Figure 1.5, Panel A). Employment growth slowed in 2022, but the second half of 2023 showed the highest employment growth in three years. Together with the rise in employment, the proportion of the population participating in the labor market stabilized in 2023 (Figure 1.5, Panel A).[3] Evidence from

[3] According to the IDB Labor Market Observatory, labor market participation varied across the region, ranging from above 70% in Bolivia and Paraguay to 60% or below in Argentina and Costa Rica. For more information, see https://observatoriolaboral.iadb.org/.

TABLE 1.1 • Sovereign Debt Issuance

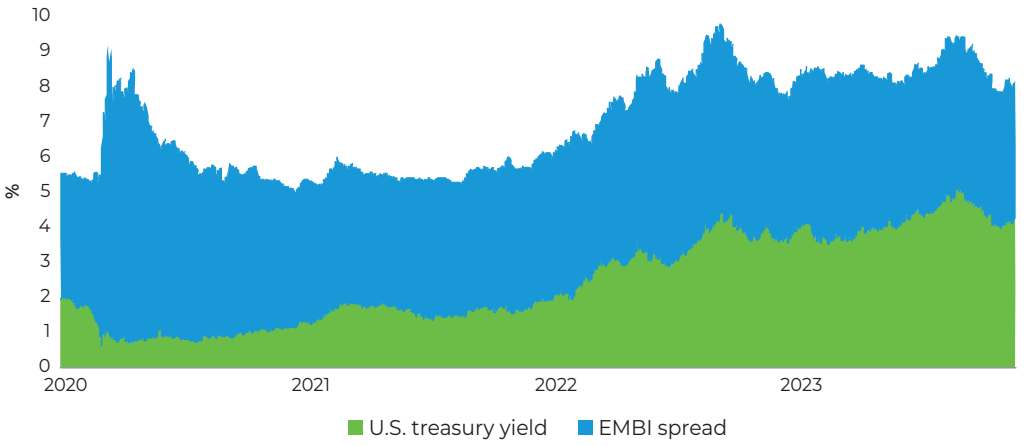
Country	2022		2023		Credit ratings Jan 2024 (S&P/Moody's/Fitch)	
	Millions of US$	GDP %	Millions of US$	GDP %	Credit rating	Outlook
Argentina	—	—	—	—	CCC-/Ca/CCu	NEG/STABLE/.
Barbados	—	—	—	—	B-/B3/B	POS/STABLE/POS
Belize	—	—	—	—	B-/Caa2/.	STABLE/STABLE/.
Bolivia	850	1.9	—	—	CCC+/Caa1/B-	NEG/NEG/NEG
Brazil	—	—	4,250	0.2	BB/Ba2/BB	STABLE/STABLE/ STABLE
Chile	6,000	2.0	3,946	1.1	A/A2/A-	NEG/STABLE/STABLE
Colombia	1,624	0.5	4,700	1.3	BB+/Baa2/BB+	STABLE/STABLE/ STABLE
Costa Rica	—	—	3,000	3.5	BB-/B1/BB-	STABLE/POS/STABLE
Dominican Republic	3,564	3.1	3,053	2.5	BB/Ba3/BB-	STABLE/POS/POS
Ecuador	—	—	—	—	B-/Caa3/CCC+	STABLE/STABLE/.
El Salvador	—	—	—	—	B-/Caa3/CCC+	STABLE/STABLE/.
Guatemala	500	0.5	1,565	1.5	BB/Ba1/BB	STABLE/STABLE/ STABLE
Honduras	—	—	—	—	BB-/B1/.	STABLE/STABLE/.
Jamaica	—	—	302	1.6	BB-/B1/B+u	STABLE/POS/POS
Mexico	9,439	0.6	6,941	0.4	BBB/Baa2/BBB-	STABLE/STABLE/ STABLE
Nicaragua	—	—	—	—	B/B3/B-	STABLE/STABLE/POS
Panama	4,800	6.3	2,400	2.9	BBB/Baa3/BBB-	NEG/STABLE/NEG
Paraguay	501	1.2	500	1.1	BB/Ba1/BB+	STABLE/POS/STABLE
Peru	—	—	4,485	1.7	BBB/Baa1/BBB	NEG/NEG/NEG
Suriname	—	—	978	27.6	CCC+/Caa3/WD	STABLE/STABLE/.
The Bahamas	385	3.0	—	—	B+/B1/.	STABLE/STABLE/.
Trinidad and Tobago	—	—	560	2.0	BBB-/Ba2/.	STABLE/POS/.
Uruguay	2,200	3.1	1,267	1.7	BBB+/Baa2/BBB	STABLE/POS/STABLE
Venezuela	—	—	—	—	NR/C/WD	./STABLE/.
Total	29,863		37,948			

Source: Bloomberg.
Note: Refers to sovereign debt issuance in international markets.

around the region suggests that women were more likely to lose jobs during the pandemic than men, and slower to recover them.[4] By mid-2022, growth in employment for

[4] See Bustelo et al. (2023).

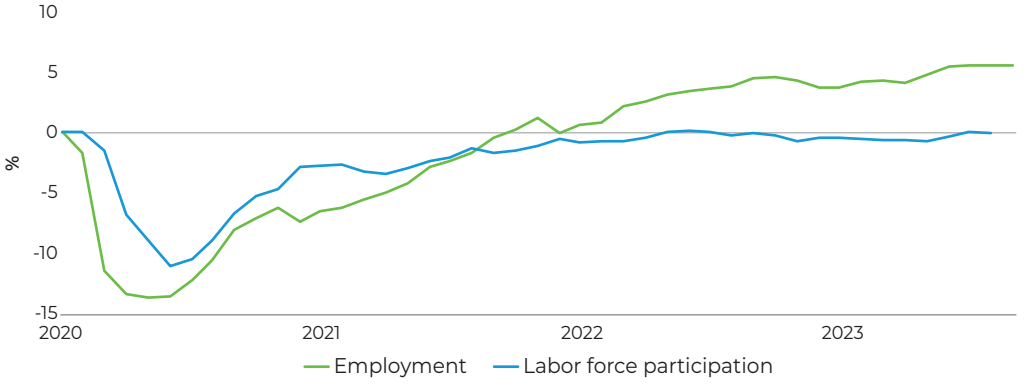
FIGURE 1.4 • Sovereign Bond Yields in Latin America and the Caribbean



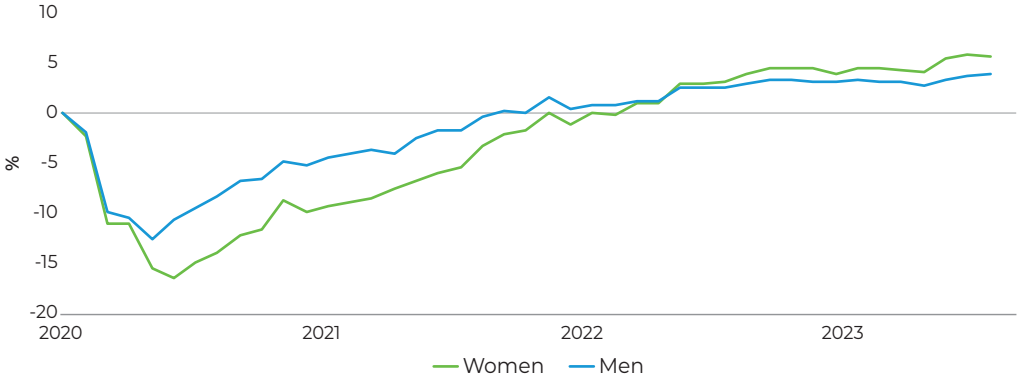
Source: IDB staff calculations based on JP Morgan's Emerging Market Bond Index as reported in Bloomberg.

FIGURE 1.5 • Evolution of Labor Markets in Latin America and the Caribbean

A. Employment and labor force participation growth



B. Employment growth by sex



Source: IDB staff calculations based on IDB Labor Market Observatory, accessible at https://observatoriolaboral.iadb.org/.
Note: Employment and labor force participation growth are relative to February 2020. Estimates use data from Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay.

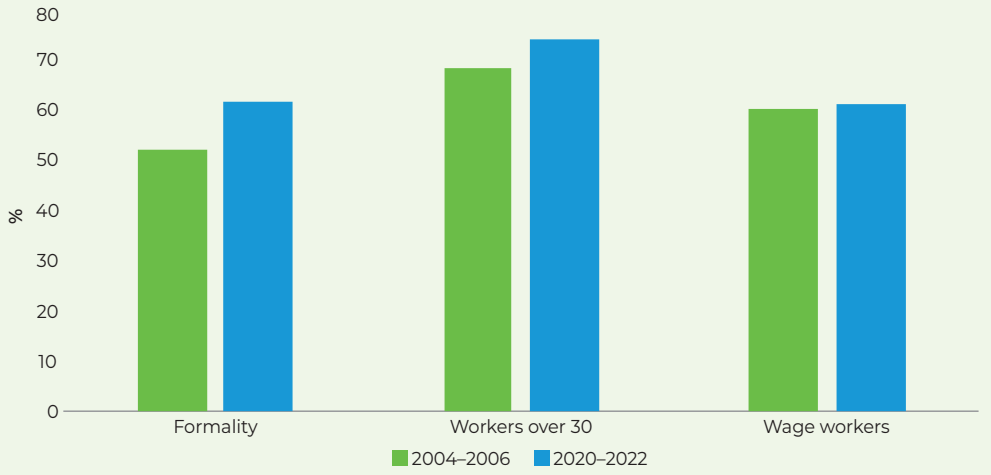
women began to exceed that of men (Figure 1.5, Panel B), suggesting a gradual recovery to pre-pandemic levels from the exacerbation of labor market inequalities during the pandemic. But women's labor force participation remains significantly lower than men's, with the largest gaps in lower-middle-income countries[5] (see Box 1.2 for a discussion of medium- to long-term trends in labor markets). As discussed in Chapter 2,

BOX 1.2 • Labor Market Trends

Labor markets have largely recovered from the COVID-19 crisis and longer-term trends have returned to the foreground. Over time, demographic changes will make improving GDP per capita through increased employment more difficult. In short, a lower percentage of people will be of working age, meaning that fewer people will contribute to growth through jobs. Specifically, the total dependency ratio (people below or above working age divided by the working age population) will soon increase, after decades of falling continuously. Defining the working age as 15-64, the dependency ratio in Latin America and the Caribbean fell from 0.88 in 1965 and is expected to reach a minimum of 0.48 in 2027.[a] This figure is projected to then increase to 0.83 in 2100. Some combination of higher wages or strengthened social policy will soon have to compensate for the imminent unfavorable demographic trends.

Another noteworthy long-term trend is the increase in labor formality. Formality for wage workers is growing over the long run, with increases in the proportion of wage workers contributing to pensions in nearly every country in the region (Figure 1.2.1). Even for independent work-

FIGURE 1.2.1 • Labor Market Indicators



Source: IDB's Labor Markets and Social Security Information System, available at https://www.iadb.org/en/sharing-knowledge/data/social-data/sims.
Note: Estimates use data from Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay. Formality is measured by the percentage of workers who contribute to a pension. Workers over 30: Percentage of workers over the age of 30. Wage workers: wage workers as percent of total workers.

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[5] Berniell, Fernández, and Krutikova (2023).

BOX 1.2 • Labor Market Trends *(continued)*

ers, the proportion contributing to pensions is rising, albeit starting from much lower levels. But in the short run, informality has shown a resurgence in 2023 as the primary driver of new job growth. Women are less likely to have formal jobs, primarily due to lower labor market participation. Women in the labor market are—on average—as likely to be in formal employment as men.[b] The labor market is also aging, with a higher proportion of workers over age 30 in every country in the region.

Other changes, despite common narratives to the contrary, are slow to affect the overall labor force. Freelancing has not replaced wage work in any substantive way (Figure 1.2.1). Some countries have seen increases in wage work (Costa Rica, Paraguay, Peru) and others have experienced decreases (Bolivia and Ecuador), but the shifts are modest. Likewise, there is no systematic shift towards workers spending less time at their jobs: the proportion of workers who have less than a year at their current job is roughly the same as two decades ago. Finally, if anything, workers are slightly less likely to be juggling multiple jobs now than they were at the turn of the century. Workers in certain demographic groups may be more affected by these trends.

While average education levels have increased in countries across the region—e.g., a 50% increase in the proportion of workers with 14 years of education over the past 15 years[c]—there is reason for concern regarding the skills acquired during those years of education. In the 2022 Program for International Student Assessment (PISA), three-quarters of students in the region had "low performance" in mathematics: even in Chile and Uruguay, the countries in the region with the best math performance, more than 50% of students performed in the low category. More than half of students in the region were unable to read a simple text, double the result for OECD countries.[d] International comparisons reveal much greater skills deficits in Latin America and the Caribbean than in some other developing regions, such as Central Asia or East Asia and the Pacific.[e] While education yields a wide range of benefits, education's growth and productivity benefits are most clearly linked to learning outcomes.[f,g] Prior to the 2018 implementation of the same test, most countries in the region were improving their measures of skills. Still, since then math scores in most countries have either stagnated or declined, likely partly due to school closures during the pandemic.[h] Inequalities within countries persist in educational outcomes as well: while girls often outpace boys in educational attainment in the region, indigenous children, especially indigenous girls, complete primary and secondary school at much lower rates.[i] Improving the quality of skills in the region—and ensuring broad opportunity to gain those skills—is an essential input to boosting productivity going forward.

[a] Custom data from the United Nations Population Division Data Portal, available at https://population.un.org/DataPortal/.
[b] See Araujo et al. (2024).
[c] Calculations using the Labor Markets and Social Security System of the Inter-American Development Bank, comparing the 2004-2006 period to 2020-2022 using simple (unweighted) averages for 15 Latin American and Caribbean countries.
[d] See Arias Ortiz et al. (2023a).
[e] See Gust, Hanushek, and Woessmann (2024).
[f] Hanushek and Woessmann (2012).
[g] Hanushek and Woessmann (2008).
[h] See Arias Ortiz et al. (2023b).
[i] See Araujo et al. (2024).

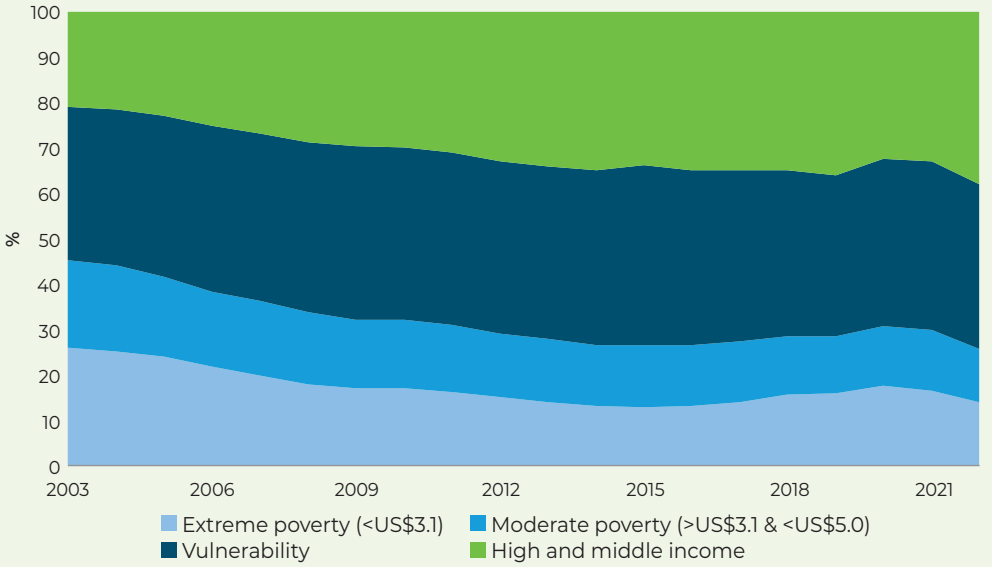
BOX 1.3 • Trends in Poverty and Inequality

Latin America and the Caribbean enjoyed a steady reduction in poverty during the first two decades of the century. Strikingly, this reduction was consistent across both extreme and less severe measures of poverty; the proportion of households with middle incomes grew consistently over the period (Figure 1.3.1). In 2020 and 2021, with the COVID pandemic and the associated slowdown of economic activity, the region suffered a slight uptick in extreme poverty—taking it back to 2014 levels—but 2022 numbers suggest a strong recovery in poverty alleviation, to numbers below those seen in 2019. Still, more than one in five people in the region remain in poverty (or extreme poverty).

Inequality likewise showed gains between 2000 and 2015, with only modest changes between 2015 and 2020 (Figure 1.3.2). Yet Latin America and the Caribbean remains the most unequal region in the world.[a]

The region's ongoing inequality challenge translates to unevenly distributed poverty across groups. Women are slightly more likely to be poor than men, and Afrodescendants and indigenous populations are roughly twice as likely to be in poverty as the rest of the population. This reflects a combination of longer-term inequalities and the potentially enduring adverse effects of the COVID crisis on vulnerable groups.[b]

FIGURE 1.3.1 • Population by Income



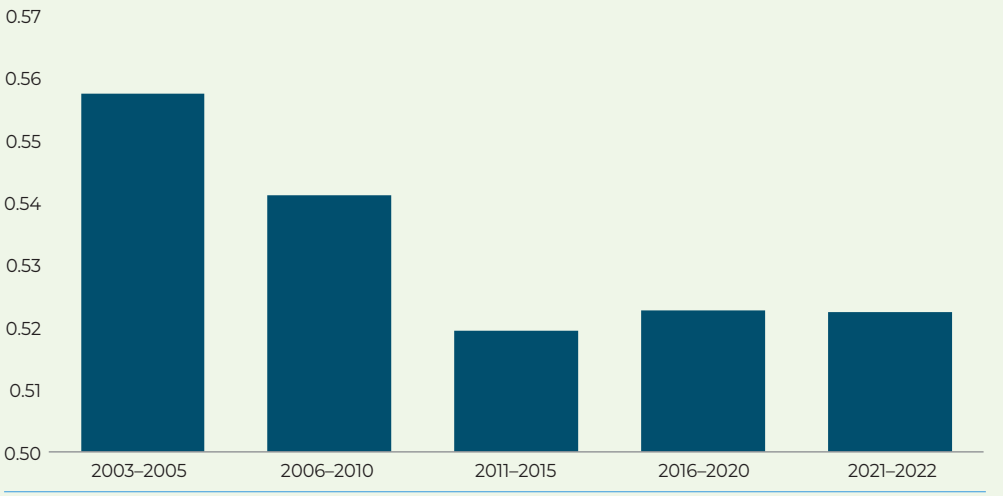
Source: IDB staff calculations based on 2023 data of IDB's Data and Indicators from Latin America and the Caribbean database, available at https://www.iadb.org/en/knowledge-resources/data/social-data.
Note: Reported values are population-weighted averages that include Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay. The values presented in this figure include interpolated data for years in which information was not available.

[a] See Dabalen (2023).
[b] See Bustelo et al. (2023).

(continued on next page)

BOX 1.3 • Trends in Poverty and Inequality *(continued)*

FIGURE 1.3.2 • Evolution of the Gini Coefficient



Source: IDB staff calculations based on 2023 data of IDB's Data and Indicators from Latin America and the Caribbean database, available at https://www.iadb.org/en/knowledge-resources/data/social-data.
Note: Reported values are population-weighted averages that include Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay. The values presented in this figure include interpolated data for years when information was not available.

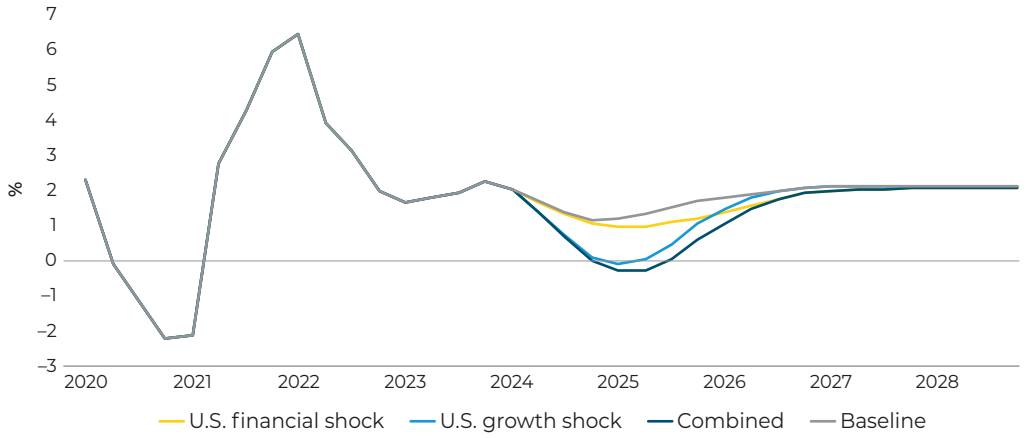
overcoming these labor market disparities is crucial to increasing long-term economic and productivity growth in the region, and an essential step to return to decreasing poverty and inequality trends (see Box 1.3).

Regional Growth Scenarios

A statistical model of the global economy reveals how several global shocks might impact Latin America and the Caribbean.[6] This analysis uses the average expectations of private analysts as its baseline. These forecasts suggest a decline in U.S. growth in 2024 to 1.3%, with U.S. inflation continuing to decline and ending the year at 2.7%. Private forecasters anticipate 1.6% growth for Latin America and the Caribbean in 2024. This modest growth expectation is influenced by several factors, including lower global growth, high interest rates (at least in the year's first half), stable commodity prices, gradual fiscal consolidation, and relatively high debt levels (see Chapter 3).

[6] The model is a global vector autoregression or G-VAR. Please refer to Cesa-Bianchi et al. (2012) and Powell (2012) for further model details. For the purposes of this analysis, Latin America and the Caribbean includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Jamaica, Mexico, Nicaragua, Paraguay, Peru, and Trinidad and Tobago.

FIGURE 1.6 ● U.S. Growth and Financial Shocks



Source: IDB staff calculations based on IMF (2023a) and Bloomberg.
Note: Scenarios are generated using a Global Vector Auto-Regression Model (G-VAR). The shock to U.S. GDP is 1.6% while the shock to the financial sector in the United States is 8%.

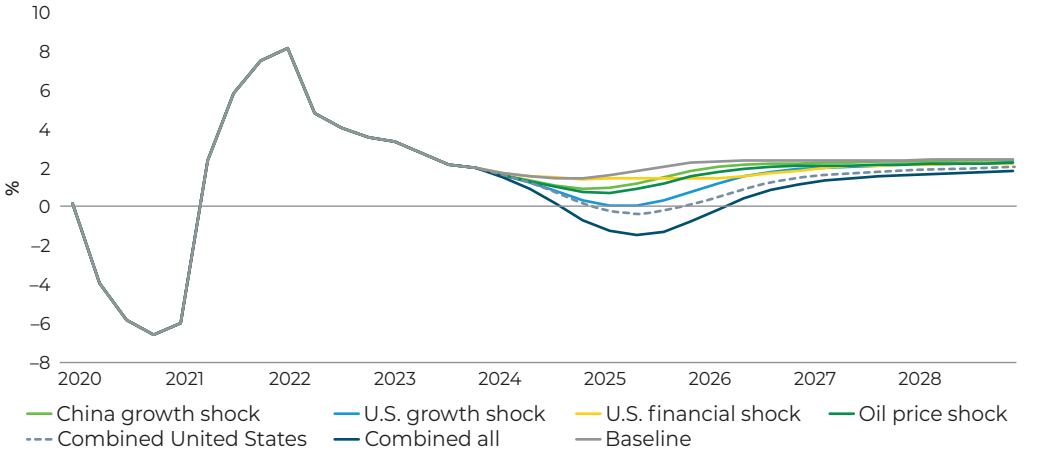
This baseline scenario presents substantial risks, particularly if U.S. growth rates fall below expectations. A stressed scenario for the U.S. economy would have growth at one standard deviation (1.6%) below the expected growth rate over the four quarters of 2024 as well as persistent inflationary pressures that keep inflation above the Federal Reserve's 2% target and force delays in cutting monetary policy reference rates.[7] This situation could lead to a more prolonged period of high interest rates and a correction in U.S. equity prices.[8] Such financial and growth shocks could trigger a contraction in the United States, resulting in negative growth in the last quarter of 2024 and through mid-2025, rebounding after that, and converging to long-run growth by the end of 2026. This baseline and the potential negative U.S. scenario are depicted in Figure 1.6.

Shocks to U.S. growth and financial markets carry significant implications for growth in Latin America and the Caribbean. The shocks outlined above on growth and financial markets in the United States could provoke a recession in Latin America and the Caribbean starting in the first quarter of 2025 and extending through the third quarter of the same year, hitting a minimum of –0.4% in the second quarter of 2025. The region would return to positive growth rates at the end of 2025 and converge slowly to long-term 2% growth by 2028. The dotted line in Figure 1.7 illustrates these results for Latin America and the Caribbean.

[7] The standard deviations used as shocks are obtained from the quarterly time series of annual growth from 1995Q1 to 2020Q1. The stagflation scenario that would ensue would be temporal, as GDP would return to growth in 2025.

[8] The financial shock is calibrated at the equivalent reduction in equity prices consistent with a 100 basis point increase in monetary policy rates. The shock is applied in the second half of 2024, when markets predict that interest rates will fall.

FIGURE 1.7 • Growth Scenarios for Latin America and the Caribbean



Source: IDB staff calculations based on LatinFocus, IMF (2023a), and Bloomberg.
Note: Scenarios are generated using a Global Vector Auto-Regression Model (G-VAR). The shock to United States growth is 1.6% and China growth is 3.5%, the shock to the U.S. financial sector is 8%, and the oil price shock is 18%. Latin America and the Caribbean includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Jamaica, Mexico, Nicaragua, Paraguay, Peru, and Trinidad and Tobago.

In addition to the shocks above, the growth dynamics in China and commodity markets may also affect the region. A scenario in which growth in China is one standard deviation lower than the 4.5% currently projected by private analysts for 2024 and oil prices fall half a standard deviation below those outlined by future prices, is also depicted in Figure 1.7. The red continuous line depicts the accumulated impact of these and the U.S. shocks. In this scenario, average growth in 2024 would fall to –0.7% and remain negative throughout 2025, reaching a minimum of –1.5% in the second quarter of 2025. The region would recover slowly, returning to the long-term value after 2028.

The impact of the shocks stemming from the United States would be felt acutely in Mexico, given the close trade and other links between the two countries; Mexico could lose an average of 1.6 percentage points of GDP growth each year for three years (2024 to 2026 inclusive) relative to the baseline. Combining all shocks, Mexico could lose 2.1 percentage points. Brazil, a larger economy and more diversified in terms of its external linkages, would lose 1.6 percentage points of GDP growth on average for each of the three years with the combined shock. The GDP growth losses resulting from the shocks emanating from the United States relative to the baseline are detailed in Table 1.2.

As expected, given the pattern of GDP losses, Mexico would suffer notably in terms of growth; in the negative scenario, Mexico would suffer a recession, with –0.7% growth in 2024 and –1.3% in 2025. Brazil would also dip into recession in 2024 but of a smaller magnitude (–0.2% growth in 2024 and –0.4% in 2025). All subregions would record negative growth in 2024 and 2025 except for Central America and the Caribbean, probably because they are mostly oil importers. Growth rates under both the baseline and the

TABLE 1.2 ● Estimated Annual Losses in GDP (2024–2026) Relative to Baseline

Region and country	Baseline average growth (2024–2026)	U.S. growth shock	China growth shock	U.S. financial shock	Oil price shock	Combined shock
Latin America and the Caribbean	1.9	–1.0	–0.4	–0.4	–0.5	–2.0
Southern Cone except Brazil	1.6	–1.2	–0.5	–0.4	–0.7	–2.4
Central America and the Caribbean	2.9	–0.7	–0.3	–0.3	–0.3	–1.5
Brazil	1.9	–0.8	–0.3	–0.3	–0.5	–1.6
Mexico	2.2	–1.1	–0.2	–0.6	–0.4	–2.1

Source: IDB staff calculations.
Note: Scenarios are generated using a Global Vector Auto-Regression Model (G-VAR). The shock to United States growth is 1.6% and China growth is 3.5%, the shock to the U.S. financial sector is 8%, and the oil price shock is 18%. Southern Cone except Brazil includes Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, and Peru. Central America and the Caribbean corresponds to Costa Rica, El Salvador, Jamaica, Nicaragua, and Trinidad and Tobago. Latin America and the Caribbean includes the two groups, Brazil, and Mexico.

TABLE 1.3 ● Growth Rates in the Baseline and Negative Scenario

	2023	2024		2025		2026	
Region and country	Baseline	Baseline	Negative scenario	Baseline	Negative scenario	Baseline	Negative scenario
Latin America and the Caribbean	2.1	1.6	–0.7	2.3	–0.8	2.3	1.1
Southern Cone except Brazil	–0.1	0.8	–1.3	2.6	–0.9	2.6	0.3
Central America and the Caribbean	3.7	3.1	1.2	2.6	0.7	2.7	1.9
Brazil	2.9	1.5	–0.2	2.0	–0.4	2.1	1.2
Mexico	3.2	2.1	–0.7	2.1	–1.3	2.3	2.0

Source: IDB staff calculations.
Note: Scenarios are generated using a Global Vector Auto-Regression Model (G-VAR). The shock to United States growth is 1.6%, China growth is 3.5%, the shock to the U.S. financial sector is 8%, and the oil price shock is 18%. Southern Cone, except Brazil, includes Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, and Peru. Central America and the Caribbean correspond to Costa Rica, El Salvador, Jamaica, Nicaragua, and Trinidad and Tobago. Latin America and the Caribbean includes the two groups, Brazil, and Mexico.

negative scenario, which combines all shocks described above, are detailed in Table 1.3. Nonetheless, tourism-dependent economies, which suffered more than others during the pandemic given travel restrictions, may again be impacted because of lower growth in advanced economies, mainly the United States. This specific transmission channel may not be fully captured in the statistical model.

A Region of Opportunities in a World of Challenges

Latin American and Caribbean countries can play a pivotal role in the global economic landscape, impacting climate change mitigation, food security, and the burgeoning

clean energy sector. The region's natural endowments, most notably the Amazon rainforest, are paramount in the global fight against climate change. The Amazon, which absorbs 25% of CO_2 sequestered by terrestrial ecosystems, is an indispensable component in worldwide climate regulation efforts.[9] Additionally, Latin America and the Caribbean's contribution to global food security is significant, with the region's agricultural output capable of producing food for 1.3 billion individuals and constituting 40% of the world's net food exports.[10] In the context of the escalating shift towards renewable energy, Latin America and the Caribbean stands at the forefront, deriving 30% of its energy from renewable sources—notably surpassing the global average.[11] Natural resource-based industries in the region are poised to become linchpins for economic complexity and diversification, encompassing clean fuels and bio-economy sectors.[12] The region's wealth in minerals, including nickel, graphite, and lithium, presents vast opportunities in the context of the global energy transition. The potential for exporting green hydrogen to meet Europe's future demands further underscores this strategic role.

The convergence of technological advancements, shifting consumer preferences, and evolving international regulations creates a space for leveraging the region's natural resource base. Natural resource-based industries could serve as springboards for economic complexity and diversification of clean fuels, bioeconomy, biorefineries, etc.

Transitioning to a net-zero emissions economy opens significant economic opportunities for Latin American and Caribbean businesses. This shift requires a comprehensive transformation of supply chains, services, and business models to enable the decarbonization of production processes globally. Capitalizing on these opportunities for Latin American and Caribbean countries will demand a suite of economic reforms integrating demand, supply, and systemic policy instruments, mainly targeting emission-intensive sectors. Demand-side measures include environmental standards and carbon taxation, while supply-side initiatives could focus on supporting research, development, and innovation through financial incentives and capacity building.

Still, economic reforms aimed at enhancing regional productivity growth are essential to capitalize on untapped opportunities (see Chapter 2). Aggregate productivity is a weighted average of the productivity of individual firms. Therefore, if larger firms are more productive and invest and grow while unproductive firms shrink and eventually exit, aggregate productivity will rise. Any distortions that prevent such a dynamic will lower average productivity compared to its potential. Unfortunately, there is evidence of such distortions in the region, at least in countries with good data. High

[9] See Gatti et al. (2021) for a discussion.
[10] See FAO and IFPRI (2023).
[11] See Energy Institute (2023).
[12] See Nidhi et al. (2023).

effective taxes on larger firms (the most productive), which are the focus of enforcement efforts, high labor taxes (pushing firms to hire informally), special tax regimes, product market distortions, lack of competition, and credit frictions may all stunt the growth of productive firms. The result is a proliferation of small, informal, low-productivity firms that employ most workers and a significant amount of capital, dragging down aggregate productivity.

Productivity-enhancing reforms could catalyze productive diversification, enhance economic resilience, and promote sustainable growth. Effective implementation of these reforms requires bolstering institutional and governance capacities and enhancing technical and scientific capabilities within the region's science, technology, and innovation ecosystem. They may also take advantage of a geographical shift of supply chains towards economies that are physically closer to the United States.

Despite advances in green technologies, the adoption rate in the region remains low. While climate tech diversifies geographically, the distribution of companies and investments is uneven. Although climate tech companies are established in more than 65 countries globally, they are significantly concentrated in only eight countries, none of which are in Latin America or the Caribbean.[13] Policies that could entice adoption include financial incentives designed to help entrepreneurs develop novel solutions or adapt existing ones to local contexts. Successful implementation will also require workers with the skills needed for a greener economy, not only in new occupations that may arise but also in existing occupations where tasks will change as firms transition to greener technologies.

If the positive growth surprises[14] of the large countries of the region were to become permanent thanks to their successfully taking advantage of these opportunities, and if growth in the coming years were to exceed current expectations by the same amounts as in 2023, then Latin American and Caribbean growth could jump from 1.6% and 2.3% in 2024 and 2025 to 2.9% and 3.6%, respectively, thereby increasing the long-run average. While this is just a hypothetical scenario, what lies behind it is the opportunity to grasp the global scenario and exploit the comparative advantages of the region to pivot to higher long-term growth rates—a key ingredient to consolidate macroeconomic stability and reduce poverty and inequality in the region.

Navigating the Road Ahead

In 2023, the global scenario presented a favorable environment for Latin American and Caribbean countries. This period of relative stability and higher-than-expected global

[13] These countries are Australia, Canada, China, France, Germany, India, the United Kingdom, and the United States. Together, these eight countries are the headquarters for approximately three-fourths of global climate tech companies (Deloitte, 2023).

[14] Growth surprises in Brazil and Mexico in 2023 were near 2 percentage points.

growth allowed the region to capitalize on favorable international conditions. However, transitioning into 2024, uncertainty pervades the region. Despite these uncertainties, the coming years hold the potential for a pivotal moment in the economic history of Latin America and the Caribbean.

A key factor in this potential pivot is the implementation of reforms to bolster productivity growth. As highlighted in Chapter 2, productivity growth in the region is distressingly low. Addressing this issue is crucial for long-term economic prosperity. Shifts in global value chains and the accompanying foreign direct investment that follows create opportunities for the region to overcome part of its productivity challenges. In addition, the region has demonstrated commendable resilience in maintaining macroeconomic stability, an essential ingredient for sustainable growth. This stability is a testament to the effective policies and measures adopted by the countries in the region.

Furthermore, as detailed in Chapter 3, fiscal policy in the region has successfully reduced primary deficits, thus containing increases in overall deficits in a context of high interest rates. Work will need to continue in this direction to ensure sustainability. This strength is expected to be further bolstered as global interest rates continue their downward trend. The proactive stance against inflation, as discussed in Chapter 4, showcases the region's advances in macroeconomic policy. Latin American and Caribbean countries were among the fastest in the world to implement contractionary policies to curb inflation, achieving this with notable success.

In addition to these measures, the region has made significant strides in strengthening financial regulations. This proactive approach aims to fortify the financial system against potential instabilities. As a result, the region appears well-equipped to absorb economic shocks without repeating past financial crises (see Chapter 5).

However, it's important to acknowledge that risks still loom, particularly on the fiscal front. These could lead to volatile capital flows (Chapter 5), posing challenges to the region's economic stability. Moreover, central banks in the region may find it difficult to lower interest rates quickly if advanced economies do not do the same soon, as lower interest rates in Latin America and the Caribbean may trigger capital outflows and exchange rate depreciation. Nevertheless, the overall trend is positive. Numerous opportunities exist; if seized, this period could be a turning point in the region's economic history. By continuing to pursue sound fiscal policies and focusing on productivity-enhancing reforms, Latin America and the Caribbean can not only navigate the uncertainties of 2024, but also lay the groundwork for a prosperous and stable future.

CHAPTER 2

The Productivity Paradox: Challenges and Opportunities

The pursuit of robust economic growth in Latin America and the Caribbean stands out as a priority for policymakers navigating diverse challenges. At the heart of the region's growth challenges lies a critical factor: strikingly low productivity growth rates. The meager progress in productivity poses a barrier, impeding the ability of Latin American and Caribbean countries to achieve robust and sustainable economic growth. Tackling this fundamental challenge becomes crucial for policymakers aiming to confront the complex dynamics influencing the region's economic landscape.

Disparities in the quality of human capital are apparent, adding another layer to a complex set of challenges. While access to education has expanded, questions about the quality of education persist. How can countries ensure their populations have more years of schooling and benefit from a high-quality education that fosters productivity and innovation? The answers to these questions hold profound implications for the region's ability to compete globally and navigate the demands of a rapidly evolving global economy.

The region's economic challenges become even more apparent when examining suboptimal capital allocation. This issue, which goes beyond mere quantity and delves into capital distribution across firms, is pivotal in constraining the region's economic potential. The misalignment of resources raises critical questions about the efficiency of capital distribution, prompting closer examination of its implications for the broader economic landscape. Since resources are not optimally distributed, the potential for economic growth is compromised, and disparities in productivity among firms take center stage as a significant impediment to unlocking the region's full economic potential. This underscores the importance of addressing the overall quantity of capital and ensuring its optimal distribution for sustained economic development.

A few countries in the region have been able to position themselves in the high-middle-income development stage and, on average, the contribution of productivity to growth in countries that were able to jump to higher-income-per-capita groups has been larger. However, they need to keep up with their investments in productivity determinants if they want to avoid a middle-income trap.

Explaining Growth in Latin America and the Caribbean and Beyond

Growth-accounting frameworks are useful for decomposing growth into distinct components, including capital accumulation, changes in schooling, labor force expansion, and total factor productivity (TFP), and identifying how each contributes to growth. For policymakers in Latin America and the Caribbean, this approach provides a structured and insightful means to identify the specific areas that require attention and intervention.

Table 2.1 compares the growth experiences of countries in Latin America and the Caribbean with those of advanced economies and emerging Asia between 1960 and 2019, right before the COVID-19 crisis. The first thing to note is that Latin American and Caribbean countries exhibited slower growth than other regions. The average yearly growth rate in the region during this period was 1.77%, whereas advanced economies grew at 2.57%, and emerging Asia grew much faster at 4.55%.

The overall growth for the different sets of countries is decomposed into various components, as reported in Table 2.1. For the average Latin American and Caribbean country, labor grew faster than in advanced economies and emerging Asia. Schooling also exhibited a faster growth rate in Latin America and the Caribbean than in advanced economies and slightly slower than in emerging Asia. Physical capital demonstrates a similar trend, growing faster than in advanced economies but slower than in emerging Asia. The most significant difference, however, is in productivity. Essentially, all of the growth disparities between Latin American and Caribbean countries and economies in other regions can be attributed to variations in productivity. While productivity grew steadily in advanced economies and emerging Asia (1.43% and 2.31%, respectively), it remained essentially stagnant in Latin America and the Caribbean, growing only 0.06%. This is particularly worrisome, given that this analysis spans a long period: 1960–2019. Over six decades, productivity in Latin America and the Caribbean has shown minimal growth, raising concerns about the region's economic development.

A similar exercise can be conducted separately for Caribbean and Latin American countries, as reported in Table 2.1. The overall picture is similar: Caribbean countries exhib-

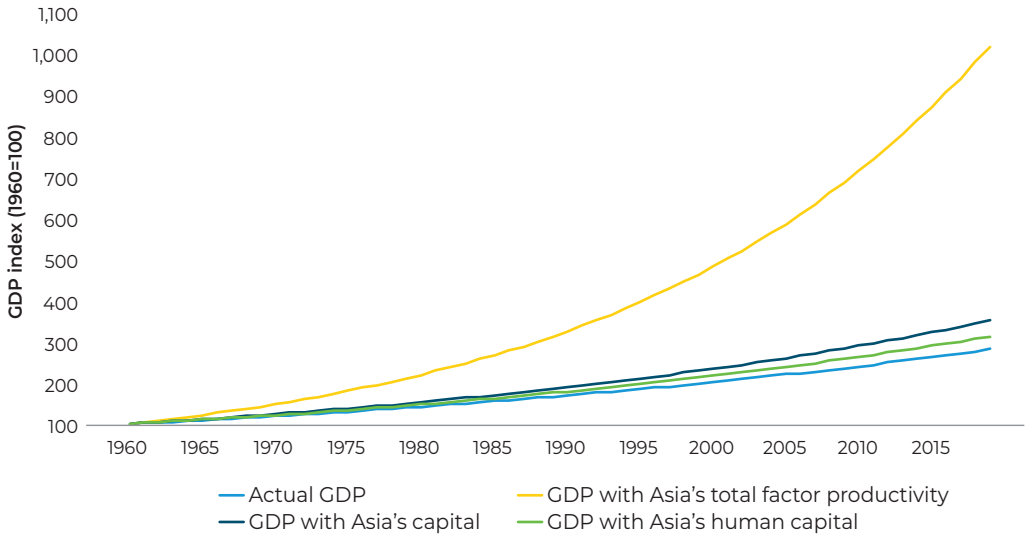
TABLE 2.1 • Contributions to Growth (1960–2019)

	GDP growth	Productivity	Capital	Schooling	Labor
Advanced Economies	2.57	1.43	0.01	0.79	0.32
Emerging Asia	4.55	2.31	0.50	1.18	0.57
Latin America and the Caribbean	1.77	0.06	0.11	0.99	0.61
Latin America	1.85	0.17	0.05	1.00	0.64
Caribbean	1.30	–0.62	0.56	0.94	0.42

Source: IDB staff calculations based on Penn World Tables version 10 data.
Note: Values are percentages.

ited a slightly lower growth rate than their Latin American counterparts, with rates of 1.3% versus 1.85%. Most inputs grew at a comparable pace in the two subregions; the Caribbean experienced faster growth in capital but slightly lower growth in schooling and labor. The primary distinction, once again, lies in productivity. While Latin American countries posted modest growth in productivity of 0.17%, productivity in the Caribbean actually declined –0.62%. These results underscore the distinct growth trajectories of developing economies in Latin America and the Caribbean compared to those in Asia over the last six decades, with emerging Asian countries experiencing significantly faster growth. Notably, these Asian nations enjoyed faster growth in productivity, physical capital, and human capital. A pertinent question is, how would Latin America and the Caribbean's GDP have performed if each of these production inputs had increased at the same pace as in emerging Asia? Figure 2.1 provides insights from this hypothetical scenario. Over the 60-year period, Latin America and the Caribbean's GDP nearly tripled. However, if schooling in the region had grown as rapidly as Asia's, its GDP would have been 11.4% higher. With Asia's growth in physical capital, Latin America and the Caribbean could have been 24.7% wealthier. While these figures are substantial, the crucial factor is productivity. If Latin America and the Caribbean's productivity had kept pace with emerging Asia's, its GDP would have been 3.6 times larger. Considering that Latin America and the Caribbean's actual GDP per capita accounted for approximately 25% of that of the United States in 2019, achieving this higher-productivity scenario would position the region at 90% of the U.S. level, significantly narrowing the development gap. Thus, the

FIGURE 2.1 ● Latin America and the Caribbean's Actual and Counterfactual GDP with Emerging Asia's Production Factors



Source: IDB staff calculations based on data from Penn World Tables version 10 and Barro and Lee (2013).

primary challenge holding back Latin America and the Caribbean's economic performance is its low productivity growth.

Growth in Latin America and the Caribbean: Jumpers versus Nonjumpers

Despite the lackluster performance of average productivity contributions to growth in Latin America and the Caribbean, a relevant distinction can be made using findings from Izquierdo et al. (2016). Using clustering techniques, a world sample of countries was divided into four income per capita groups: low-income, middle-income, high-middle-income, and high-income per capita. Latin American and Caribbean countries populate the first three categories, but none has yet jumped to development. Ordered probit estimation techniques help identify which productivity determinant—health, education, integration and trade, labor markets, capital markets, infrastructure, or innovation—increases the likelihood of jumping to the next cluster the most for each group.

Estimates show that from 1990 to 2019 only a few countries in the sample were able to jump to the next cluster: Panama (2004), Costa Rica (2005), Dominican Republic (2010), Bolivia, Colombia (2011), Peru (2012), and Paraguay (2017). Restricting the sample to these countries reveals a relevant separation for Latin America and the Caribbean: while contributions to growth stemming from capital accumulation, schooling, and labor are quite similar between jumpers and non-jumpers (i.e., countries that remained in the same cluster throughout the sample period), productivity's contributions to growth are positive for jumpers, but negative for nonjumpers (Table 2.2); thus, productivity is key for sustained growth leading to development.

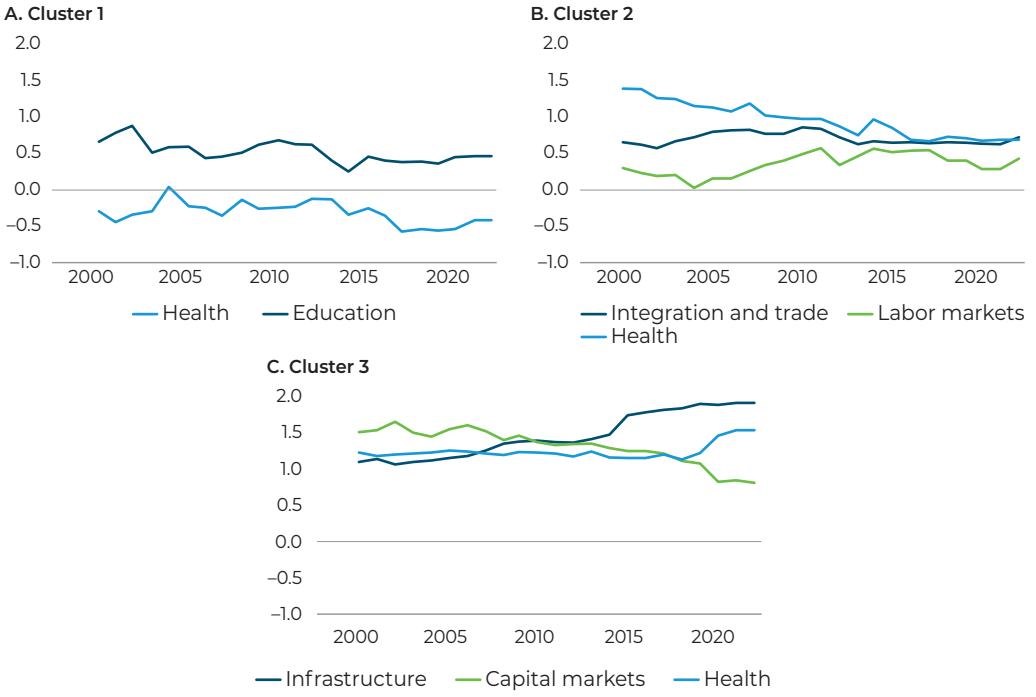
Given these results, it is worth reviewing where each cluster stands in terms of the productivity determinants that significantly increase the likelihood of jumping to the next income per capita group. Gaps in these productivity determinants are measured relative to the next group. Consider cluster 1 (comprised of Honduras and Nicaragua), for which key priorities are education and health. For this group, the health gap has been closed, but the education gap is still large relative to cluster 2 (Figure 2.2, Panel A). However, given their good performance in health, the model estimates that members of this group have, on average, a very high probability of jumping to the next cluster (Table 2.3).

TABLE 2.2 • Contributions to Growth: Jumpers vs. Nonjumpers

1990-2019	GDP growth	Productivity	Capital	Schooling	Labor
Jumpers	2.02	0.33	–0.10	1.09	0.71
Nonjumpers	1.45	-0.17	0.16	0.91	0.53

Source: IDB staff calculations based on Izquierdo et al. (2016).
Note: Values are percentages.

FIGURE 2.2 • Gaps in Productivity Determinants for Clusters 1, 2, and 3



Source: IDB staff calculations using data from Izquierdo et al. (2016).
Note: The figures show gaps in productivity determinants of each cluster relative to the next cluster, measured in standard deviations.

TABLE 2.3 • Cluster Probabilities and Priorities for Productivity and Income

	Standard deviations needed to reach 75% probability	Probability of jumping to the next cluster
Cluster 1		
Education	0.8	100.0
Health	0.8	
Total	1.5	
Cluster 2		
Integration and trade	0.5	
Labor markets	0.3	45.0
Health	0.2	
Total	1.0	
Cluster 3		
Capital markets	1.3	
Infrastructure	1.4	0.1
Health	1.1	
Total	3.7	

Source: IDB staff calculations based on Izquierdo et al. (2016).

A similar analysis for cluster 2 relative to cluster 3 shows that gaps remain in all three productivity determinant priorities (trade, labor markets, and health; Figure 2.2, Panel B). Therefore, the probability of jumping to the next cluster is average (about 45%).[1] The group would need to invest the equivalent of 1 standard deviation in priorities (adding integration and trade, and health) to boost its probability of jumping to 75%.

Perhaps the most striking result comes from analyzing performance in cluster 3.[2] Gaps in all three key productivity determinants (capital markets, infrastructure, and health) are quite big (Figure 2.2, Panel C), and the likelihood of the group as a whole jumping to developed cluster 4 is almost nil (Table 2.3). The group would have to invest in 3.7 standard deviations (adding all three priorities) to reach a 75% probability of jumping to development. The message is clear: there is indeed a high-middle-income trap for this group and paying attention to productivity determinants is key. On a positive note, several countries have moved into cluster 3—some as recently as 2017—indicating good performance in some countries in the region. However, the challenge remains for these countries to continue their path of income-per-capita gains now that they have moved one step further up the development ladder.

Under the Hood of Productivity

The primary factor contributing to the slower growth of Latin American and Caribbean countries is lagging aggregate productivity. This conclusion derives from examining other crucial components affecting aggregate output: human and physical capital. However, the previous analysis only considers the overall quantity of both human and physical capital. Human capital is assessed based on the average years of schooling in different countries without accounting for its quality. Additionally, the way in which the total stock of physical capital is distributed among various firms in the economy can significantly influence a country's output. To delve deeper into productivity, the quality of human capital and the allocation of physical capital across countries must be assessed.

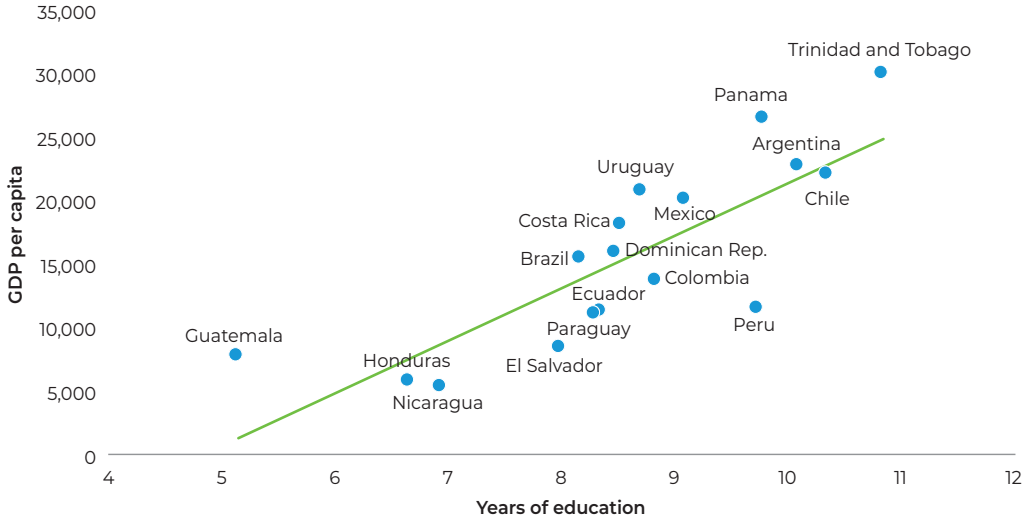
The Quality of Human Capital

Measuring the quantity of human capital through average years of schooling in the population is relatively straightforward—counting years provides a tangible measure. On the other hand, gauging the quality of human capital poses a more intricate challenge. To start, what is the quality of education? Defining the quality of education itself presents a complex task. Some studies use the results from test scores (e.g., Hanushek and

[1] Cluster 2 is comprised of Bolivia, Ecuador, El Salvador, Guatemala, and Jamaica.

[2] Cluster 3 includes Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Mexico, Panama, Paraguay, Peru, and Uruguay. Venezuela is excluded due to lack of data.

FIGURE 2.3 • GDP per Capita and Years of Education



Source: GDP per capita from the Penn World Tables v.10 and years of education from Barro and Lee (2013).

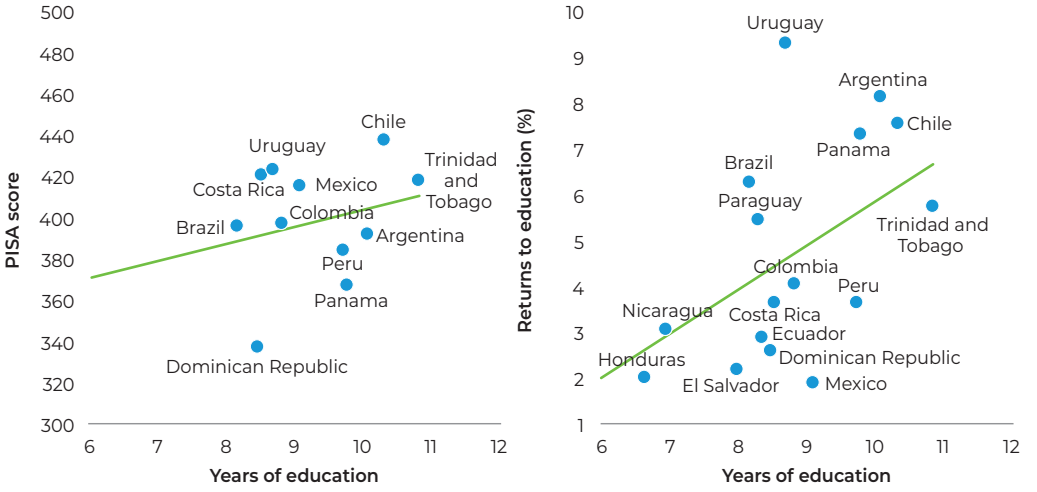
Woessmann, 2011), while others use the market returns to one year of education (e.g., Schoellman, 2012).

Countries with high GDP per capita also have a high average number of years of schooling (see Figure 2.3 for countries in Latin America and the Caribbean). This is a measure of the quantity of schooling. How about the quality of human capital?

Test scores offer one method for gauging the quality of education across countries. One of the most widely used internationally comparable standardized test scores is the Programme for International Student Assessment (PISA), administered by the Organisation for Economic Co-operation and Development (OECD). PISA focuses on examining 15-year-old pupils in reading, mathematics, and science. Figure 2.4, Panel A shows results from PISA test scores (averaged for 2006, 2009, 2012, and 2018) plotted against average years of schooling.

Another approach for measuring quality is to assess how the labor market compensates for additional education through higher salaries. For instance, comparing the wages of two workers—e.g., one with 8 years of education and the other with 9 years—reveals the market return on education. This comparison can, in principle, be extended across countries. However, the challenge arises as economies differ in various dimensions, not just in the quality of education. To address this, Schoellman (2012) proposes a novel method. He examines migrants from different countries worldwide who completed their studies in their home countries and now work in the United States. Since these individuals work in the same place, higher salaries suggest better education quality. Results of this analysis are presented in Figure 2.4, Panel B. For example, Uruguay

FIGURE 2.4 • Quantity and Quality of Education



Source: Years of education from Barro and Lee (2013), PISA scores from OECD and returns of education from Schoellman (2012).

shows a market return of 9.3% for an extra year of education, while Honduras demonstrates less than 2%. Once again, a positive correlation emerges between the quality and quantity of education.

A common element displayed in both Figure 2.4, Panel A, and Figure 2.4, Panel B, is a positive correlation between years of schooling and either measure of quality of human capital. Moreover, countries with low GDP per capita tend to have less schooling and lower quality of education—measured either as results from PISA scores or returns to education.

In summary, high GDP per capita in Latin America and the Caribbean correlates with increased schooling. Yet, examining human capital quality using both PISA test scores and the market return of education uncovers a dual challenge: lower GDP per capita countries have fewer years of schooling and lower human capital quality. Hence, countries must strive to improve access to education for their population and improve its quality. The quality of education across countries can regress quickly, and governments must work to avoid this.

The quality of education declined in multiple countries during the COVID-19 pandemic (see Table 2.4). All six Latin American and Caribbean countries surveyed in 2006 and 2018 improved their test scores during this period. However, in half of the ten countries surveyed in 2018 and 2022 test scores declined during the pandemic. Widespread school closures during the pandemic are a potential explanation for this backsliding (World Bank, 2022). Yet, absenteeism is not exclusive to major disruptions like the COVID-19 pandemic; pupils in Latin America and the Caribbean often miss school for day-to-day reasons such as crime (Monteiro and Rocha, 2017).

TABLE 2.4 • PISA Test Scores over Time

Country	2006	2018	2022
Argentina	382	395	395
Brazil	384	400	397
Chile	431	438	434
Colombia	381	406	401
Costa Rica		415	404
Dominican Republic		334	350
Mexico	409	416	407
Panama		365	379
Peru		402	402
Uruguay	422	424	425

Source: OECD.

The Allocation of Physical Capital

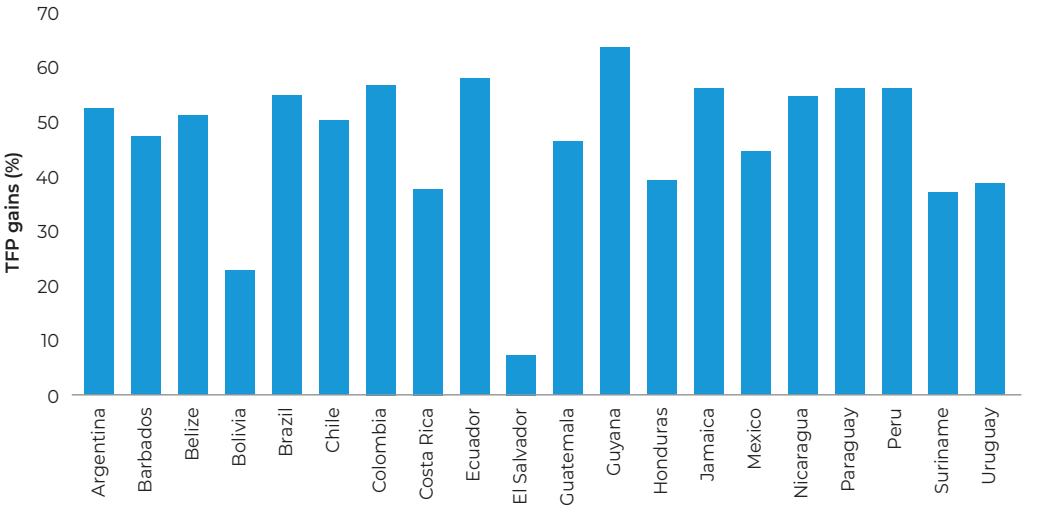
Countries in Latin America and the Caribbean consistently exhibit lower GDP per capita compared to wealthier nations. This disparity is largely attributed to lower levels of total factor productivity (TFP), a measure of efficiency capturing how effectively inputs are converted into outputs in an economy. While various factors contribute to lower TFP in the region, a critical aspect is the suboptimal capital allocation across firms. This issue is about the overall quantity of capital and its distribution, hindering the region's economic potential.

Capital is inefficiently allocated when resources are not distributed optimally across firms. This misallocation manifests in several ways, such as favoring established firms over innovative startups or channeling capital towards politically connected enterprises rather than those with higher growth potential. This misalignment limits the ability of businesses with the potential for high productivity to access the necessary resources, impeding overall economic growth.

Efficient capital allocation across firms in an economy entails equalizing the marginal product of capital across all firms. Thus, even if firms differ in productivity levels, the last unit of capital used should be equally productive across them. If this does not happen and, for instance, the last unit of capital in one firm yields a higher return than in another, reallocating capital from the less productive to the more productive firm can lead to increased TFP as the economy becomes more productive overall. With higher TFP, GDP grows.

To examine capital allocation in an economy, comprehensive firm-level data encompassing input use and output production is essential. Microdata from various countries in the region can be used to evaluate the potential increase in TFP achievable through a more efficient capital allocation across firms. Figure 2.5 reports the results of an exer-

FIGURE 2.5 • Total Factor Productivity Gains from More Efficient Allocation of Capital



Source: IDB staff calculations based on WBES data.

cise using World Bank Enterprise Survey (WBES) data to construct alternative scenarios with an efficient capital allocation, as in Hsieh and Klenow (2009).[3] For several countries, it provides the percentage gains in aggregate TFP were capital to be allocated efficiently across the different firms surveyed by WBES in each economy. The gains are large. For several countries, allocating capital efficiently could result in TFP levels more than 50% higher than their current levels. Consequently, this increased TFP can potentially raise GDP per capita in these countries significantly.

In sum, the suboptimal allocation of capital across firms is a critical factor hindering economic potential in Latin America and the Caribbean. Reallocating capital from less productive to more productive firms can boost TFP and increase overall productivity, subsequently leading to higher GDP. Why is capital not being allocated efficiently in the region? What can policymakers do to ensure capital finds its way to its most productive uses? In general, what policies are conducive to higher productivity?

Policies for Boosting Productivity

Governments can implement several general policies to boost productivity. They can also implement other policies that may favor certain groups, firms, or sectors. Consequently, such policies may hamper productivity growth. Both types of policies can be found across

[3] The WBES surveys consist of nationally representative surveys conducted at the firm level. Top managers and business owners are interviewed using a globally standardized questionnaire, covering a wide array of topics related to the business environment, as well as the characteristics and performance measures of surveyed firms.

different corners of the economy: labor markets, credit markets, tax systems, international trade, the welfare state, etc.[4] This set of policies may impact economies in profound ways.

It Is well known that the size distribution in developing countries is skewed towards small firms.[5] Compared to more developed economies, countries in Latin America and the Caribbean feature a higher proportion of small firms in their economies. This fact may point to policies that incentivize firms to remain small, the so-called "size-dependent policies." Government policies that impose restrictions on the size of large establishments or firms, or promote small ones, lead to lower output and output per establishment as well as large increases in the number of establishments.[6] There is related evidence for Latin American and Caribbean countries as well. For instance, size-dependent policies in Peru are costly for the economy and lead to lower wages, profits, and output.[7] One example of such policies is preferential tax treatment for smaller firms. Though such a tax treatment aims to boost formalization, it can also incentivize firms to remain small to take advantage of lower and simplified taxes.[8]

Formalization is an important issue in the region. Countries in Latin America and the Caribbean also face substantial regulation, heavy taxation, and several costs of doing business in the formal sector (payroll costs, firing costs, etc.). This is often used to explain the large informal sector—a lower-productivity sector—in these countries. Such heavy regulation has been shown to negatively affect firms' growth in Brazil, keeping them smaller than their optimal size.[9] In Mexico, studies have found that better enforcement of tax collection would spur formality and increase its output by as much as 34%.[10] Similarly, shifting resources from the informal to the formal sector increases TFP in Latin America and the Caribbean.[11] Therefore, governments in the region must strive to encourage formalization while at the same time guaranteeing that their regulation does not stifle firm growth. Tax codes that are easier to comply with and do not focus extensively on firm size can also be more size-neutral policies that do not disincentivize firm growth, allowing the emergence of larger firms.[12]

Trade barriers can lead to misallocation.[13] Protectionist measures, such as tariffs or quotas, can shield inefficient domestic industries from international competition, allowing them to persist despite lower productivity. This protectionism may discourage the reallocation of capital to more productive sectors, contributing to misallocation. Additionally,

4 See Pagés (2010).
5 For a discussion, see Hsieh and Olken (2014).
6 See Guner, Ventura, and Xu (2008).
7 See Dabla-Norris et al. (2018).
8 A discussion can be found in Álvarez, Pessoa, and Souza (2022).
9 See Brotherhood et al. (2023).
10 See Leal Ordóñez (2014).
11 See Busso, Fazio, and Levy Algazi (2012).
12 See Busso, Madrigal, and Pagés (2012).
13 A discussion can be found in De Loecker et al. (2016).

trade barriers can limit access to global markets, reducing the incentives for firms to innovate and improve productivity, further perpetuating suboptimal capital allocation. Public policies should also work to provide the necessary infrastructure of ports and airports to facilitate trade.[14] Access to global markets should be available to all firms, not only a few. Hence, public policy should emphasize pro-competition policies that level the playing field across all enterprises and fight monopolies and market power.[15] Shifting global value chains present the region with an important opportunity now (see Box 2.1). As key value chains move to Latin America and the Caribbean, and FDI follows those value chains, relevant opportunities for productivity growth are also available for the region.

Imperfect credit markets can also lead to the misallocation of capital across firms in an economy. When credit markets are imperfect, firms with high growth potential or innovative ideas may face difficulties accessing financing, while less productive or established firms may enjoy preferential access. This disparity hampers the efficient allocation of capital to its most productive uses, as promising ventures are stifled by inadequate funding. Moreover, imperfect credit markets can perpetuate the survival of inefficient firms, preventing the necessary reallocation of resources to more productive enterprises. As a result, the economy's overall productivity may suffer, leading to long-term consequences for growth and development. Cavalcanti et al. (2023b) show that high and dispersed interest rate spreads for Brazilian firms imply a high degree of misallocation that can cost up to 39% of the country's GDP. Thus, policymakers must encourage a more competitive credit market that can provide firms with cheaper credit. For example, a pro-competition policy aimed at Brazil's banking sector during the 2010s led to a decline in interest rates for consumer loans (Cavalcanti et al., 2023a).

Finally, policies that foster more competition in different sectors of the economy can also boost productivity by restricting the market power of large firms.[16] Such effects also play a role in the region. Ahumada et al. (2021) argue that infrastructure policy must be supported by regulatory and competition policies to promote productivity improvements in the sector. Moreover, when Benavente and Zuñiga (2022) study the impact of market competition on firm innovation in Chile and Colombia, they stress the importance of competition regulations and policy to support firm innovation. The aggregate implications of such pro-competition policies can be large. Armangue-Jubert, Guner, and Ruggieri (2023) find that making labor markets in developing countries as competitive as those in advanced economies can increase GDP per capita by up to 70% in poorer countries. Given this evidence, it is crucial for governments in the region to strengthen their pro-competition efforts. For instance, antitrust regulatory agencies are key players in promoting fair competition in an economy. The gains from such policies appear very large.

[14] See Pagés (2010) and Cavallo, Powell, and Serebrisky (2020).

[15] See Pagés (2010).

[16] See De Loecker, Eeckhout, and Unger (2020).

BOX 2.1 • Shifting Landscape of Global Value Chains: Opportunities for Latin America and the Caribbean

Low productivity levels in Latin America and the Caribbean are attributed to various factors, including a focus on less dynamic sectors and difficulties creating and adapting technologies. Foreign direct investment (FDI) is a crucial avenue for the region to overcome these challenges and drive economic growth by boosting productivity. However, there are clear obstacles to efficiently attracting, adapting to, and reaping the benefits of this technology. Addressing these challenges involves providing incentives for bringing these investments home, strengthening the institutional environment and regulatory framework, and developing the necessary capabilities to absorb foreign technologies successfully.[a]

Undoubtedly, there are many challenges, which should not be underestimated. But opportunities should not be overlooked either. External factors are reshaping the landscape of global value chains, favoring the region. Growing global tensions and recent crises have provoked responses from governments and corporations. Events like Brexit, U.S.-China trade tensions, and the conflict in Ukraine have prompted companies to adjust their production locations and sourcing patterns to navigate uncertainties. The U.S. government has also responded with initiatives such as the Inflation Reduction Act (IRA) and Creating Helpful Incentives to Produce Semiconductors (CHIPS) Act, which together devote more than US$400 billion to strengthening regional semiconductor supply chains, reducing greenhouse gas emissions, and boosting demand for electric vehicles and clean energy technologies. The region's attractiveness stems from its proximity to U.S. and Canadian markets, a relatively young and skilled workforce, wage cost advantages compared with some Asian manufacturing hubs, broad free trade agreements, and lower transport costs.[b]

The region is experiencing unprecedented growth in foreign direct investment (FDI), cross-border mergers and acquisitions, and foreign investment announcements. Total FDI to the region surged by US$70.5 billion in 2022, marking a remarkable 51.17% increase (Figure 2.1.1, Panel A). FDI inflow to Latin America and the Caribbean reached approximately US$208.5 billion, surpassing pre-pandemic levels and slightly exceeding its peak in 2011 (US$201.3 billion). The number of greenfield FDI announcements rose by 14.46%, with 1,409 new projects announced in 2022. In 2023, while Asia and Africa experienced a decline in FDI, Latin America and the Caribbean maintained its position, with an increase of less than US$1 billion. This positions Latin America and the Caribbean as the only developing region not registering negative growth in FDI inflows in 2023.

However, the upward trend observed in recent years exhibits substantial variations across sectors and countries. Mexico, Brazil, and Costa Rica emerge as frontrunners in renewable energy, automotives, and semiconductors. Similarly, the investment positions of the United States in Latin America and the Caribbean in 2022 are concentrated primarily in Mexico and Brazil. The distribution of FDI positions in the region reflects differences in country sizes. It highlights the persistent unequal distribution of U.S. FDI positions in the region when measured relative to each country's GDP (Figure 2.1.1, Panel B).

Therefore, to fully reap the benefits of this surge in foreign investment, it's crucial to look beyond direct investment and consider the increased demand for services, materials, and intermediate inputs from other Latin American countries. Emphasizing the implications of the relationship between cross-border investment and international trade becomes essential, particularly in a world where production processes are dispersed globally across multiple stages.

The ongoing FDI trends are also reflected in international trade dynamics. The current surge in foreign direct investment prioritizes reducing risks associated with lengthy and dis-

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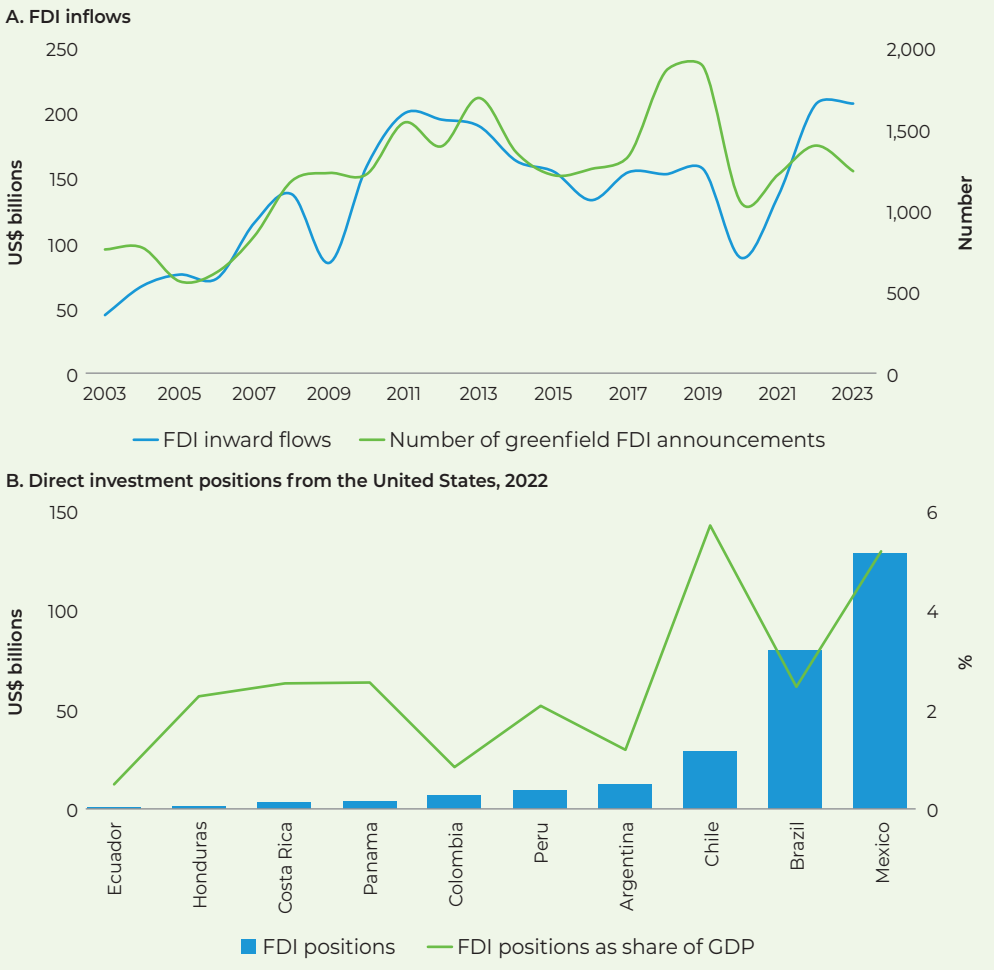
BOX 2.1 • Shifting Landscape of Global Value Chains: Opportunities for Latin America and the Caribbean *(continued)*

FIGURE 2.1.1 • Foreign Direct Investment Inflows and U.S. Investment Positions in Latin America and the Caribbean



Source: UNTACT data, BEA data, and IDB staff calculations.

persed global value chains, especially in host countries entangled in diplomatic tensions with the investing economy. For instance, evidence of this shift is apparent in imports by the primary trade partner of the region, the United States. Imports of "Machinery, mechanical appliances, and parts," "Electrical machinery and electronics," and "Cars, tractors, trucks, and parts thereof" individually contribute to over 10% of total U.S. imports and collectively exceed 40%. Figure 2.1.2 illustrates a decline in China's share in these sectors over recent years, with Latin America and the Caribbean's share notably increasing in the automobile industry by 8 percentage points, at the expense of Canada. While all regions have expanded their exports to the United States, the growth

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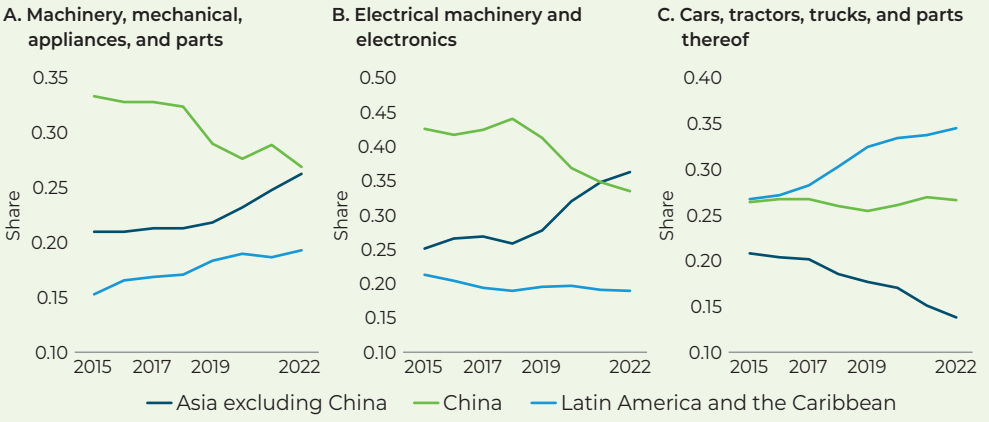
BOX 2.1 • Shifting Landscape of Global Value Chains: Opportunities for Latin America and the Caribbean *(continued)*

FIGURE 2.1.2 • U.S. Imports of Machinery, Electrical Equipment, and Vehicles



Source: UN Comtrade and IDB staff calculations. Only regions with more than 10% of the market share in U.S. imports are included. The table calculates mid-point annual growth rates.

rate of Latin America and the Caribbean's exports has significantly outpaced China, though it is still below the rest of Asia. Interestingly, China exhibited lower (and sometimes negative) growth rates in 2022 compared to 2021.

Seizing Opportunities

Can other nations in the region leverage the opportunities arising from the reshaping of global value chains driven by risk management and geopolitical considerations? The key might lie in the trade connections within global value chains. Compared to local firms, subsidiaries of foreign multinationals rely more on imports. So, Latin American and Caribbean countries exporting intermediate inputs related to sectors boosted by foreign investments in Mexico and Brazil could seize these opportunities.

For instance, the "Cars, tractors, trucks, and parts thereof" sector in Mexico has attracted substantial foreign direct investment. As illustrated in Figure 2.1.3, this sector contributes US$111 billion to Mexico's exports, representing 23.4% of the total. The automotive industry relies on intermediate products such as "insulated wire," "integrated circuits," and "engine parts." Mexico imports 10% of its "insulated wire" from Latin America and the Caribbean, with Nicaragua accounting for 7.6%, Honduras 0.74%, and El Salvador 0.32%. Remarkably, these exports represent 8 to 9% of the total exports of some Latin American and Caribbean nations, with significant shares also directed to the United States, Canada, Guatemala, and Costa Rica.

These findings have two significant implications. First, Latin America and the Caribbean represents a modest yet significant share of the total import needs of countries directly impacted by FDI. This can be seen as an indicator of the indirect, yet readily available, benefit of the recent FDI trend through the demand for intermediate inputs required by these specific country-sector pairs. Second, concerning the total exports of these intermediates, the demand from countries like Mexico constitutes a sizable fraction. However, a substantial share is directed elsewhere. This

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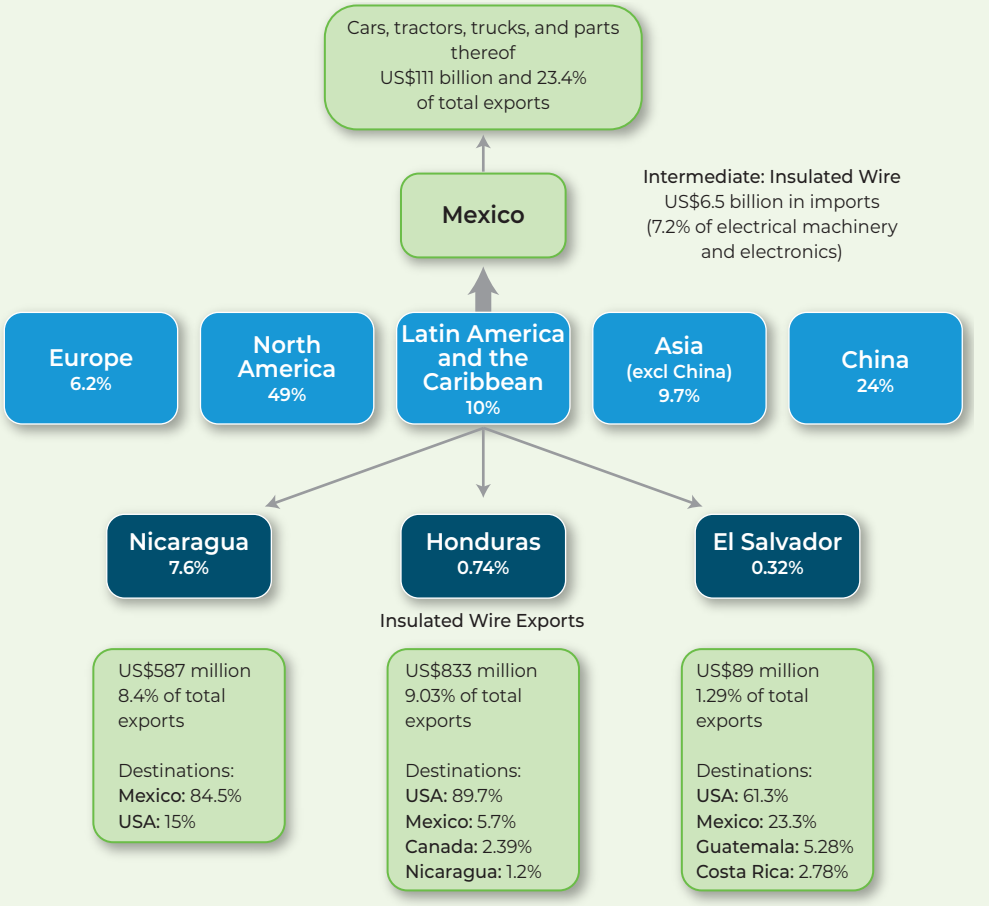
BOX 2.1 • Shifting Landscape of Global Value Chains: Opportunities for Latin America and the Caribbean *(continued)*

indicates that the relatively small share of Latin American and Caribbean products in Mexico's import basket is likely not indicative of capacity constraints.

Can Latin America and the Caribbean compete with China and the rest of Asia? Table 2.1.1 illustrates export prices by country for insulated wire.[c] The average Latin American and Caribbean country is a competitive participant in this sector, with an average price of US$20.8, which is lower than China and Europe. Countries such as Honduras and El Salvador have unit prices below those in Asia (excluding China). While lower prices may signal competitiveness due to reduced costs, they can also indicate a lower level of quality. However, with average wages in Latin America and the Caribbean below those in other regions, at least part of the lower price can be attributed to a lower cost of production.[d]

FIGURE 2.1.3 • Mexico: Intermediate Imports of Motor Vehicles, Parts and Accessories



Source: UN Comtrade, World Input Output Tables, and IDB staff calculations. Average monthly earnings of employees in US$, ILOSTAT.

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BOX 2.1 • Shifting Landscape of Global Value Chains: Opportunities for Latin America and the Caribbean *(continued)*

Also, the efforts led by the U.S. government to reshore some production closer to home and away from China involve meeting specific content requirements. Notably, the Inflation Reduction Act (IRA) substantially revised U.S. law on tax credits for electric vehicles; for qualification, final assembly must occur in North America, and a significant proportion of the components and minerals in the battery must be manufactured or assembled in North America (components) or in a country with which the United States holds a free trade agreement (minerals). The region can capitalize on these opportunities in two ways. First, it can take advantage of the six free trade agreements the United States has with more than 12 countries in the region. Second, Latin America, as a key supplier of crucial minerals for clean energy technologies, can leverage its well-established mining sector to explore new minerals. This diversification is crucial for global initiatives to prevent shortages and bottlenecks that could impede the progress of clean energy transitions. While the region is already a major producer of lithium, copper, and other essential materials, it has an opportunity to expand into rare earth elements and nickel, specifically for electric vehicles and wind turbines.

Still, a significant challenge for the region, which could impede efforts to leverage the favorable winds of foreign direct investment, is its low level of intraregional trade. Despite existing regional trade agreements like the Southern Common Market (Mercosur), the Andean Community (CAN), the Caribbean Community and Common Market (CARICOM), the Central American Common Market (CACM), and the Latin American Integration Association (ALADI), the lack of harmonization among them, especially concerning rules of origin, may hinder the region's potential integration into global value chains. The prospects of Latin America and the Caribbean capitalizing on current opportunities depend on tapping into its advantageous geographical position, which is achievable by facilitating low tariffs and transportation costs for trade and services within the region.

TABLE 2.1.1 • Exports of Insulated Wire

	Latin America and the Caribbean				Asia		Europe
Sector: Insulated wire	**All**	**Nicaragua**	**Honduras**	**El Salvador**	**China**	**Excluding China**	**All**
Unit price	20.8	21	11.5	10.8	27.9	12.3	31.5
Wages	565	576	447	346	812	983	3,060

Source: UN Comtrade, World Input Output Tables, and IDB staff calculations. Average monthly earnings of employees in US$, ILOSTAT.

[a] Recent papers have shown the positive effects of foreign direct investment directly and its spillovers to the economy. See, for example, Van Patten and Méndez (2022) and Alfaro-Ureña et al. (2022).
[b] The region and the six free trade agreements (FTAs) the United States has with 12 countries: Mexico and Canada under the United States–Mexico–Canada Agreement (2020); Chile (2004); Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic under the Dominican Republic–Central America–United States FTA (2006-2009); Peru (2009); Colombia (2012); and Panama (2012); and an Agreement on Trade and Economic Cooperation (ATEC) with Brazil since 2011. Notice that the United States has free trade agreements with all its major Latin American and Caribbean partners except Brazil.
[c] Prices are measured through weighted unit values. Unit values are calculated as the ratio of value and quantity exported at a HS6 level of disaggregation. Then, they are weighted by the relative importance of each 6-digit sector in a given four-digit sector.
[d] Wages are measured in U.S. dollars and PPP.

A Comprehensive Approach

As Latin America and the Caribbean strives for robust economic growth, this chapter underscores the multifaceted challenges encompassing education quality, the efficient allocation of capital, and overarching policy frameworks. Addressing these challenges requires a comprehensive approach, where education resilience, trade openness, regulatory reforms, and credit market competitiveness become keystones. By navigating these complexities, Latin American and Caribbean policymakers can foster an environment conducive to sustained and inclusive economic growth.

CHAPTER 3

Recalibrating Fiscal Policy in Challenging Times

After the COVID-19 pandemic and subsequent fiscal adjustments, average primary balances in Latin America and the Caribbean steadily improved, ultimately exceeding pre-pandemic levels. As of 2023, the regional average primary balance was –0.1% of GDP, substantially better than –4.8% at the worst point of the pandemic. It is even an improvement over the pre-pandemic level of –1% of GDP. This is a relevant achievement, as most COVID-related expenditure increases have been phased out—a stark contrast to the 2009 fiscal expansion, almost two-thirds of which went toward higher salaries and permanent transfers that were difficult to reverse and led to long-lasting primary fiscal deficits.[1]

Despite this adjustment in the primary balance, the overall balance stands at –2.8% of GDP, which is very much in line with the pre-pandemic level of –3.4% of GDP. Several factors contributed to this performance, principally the rise in interest rates in world markets to fight inflation (see Figure 3.1); thus, fiscal efforts must continue to compensate for tighter financial conditions.

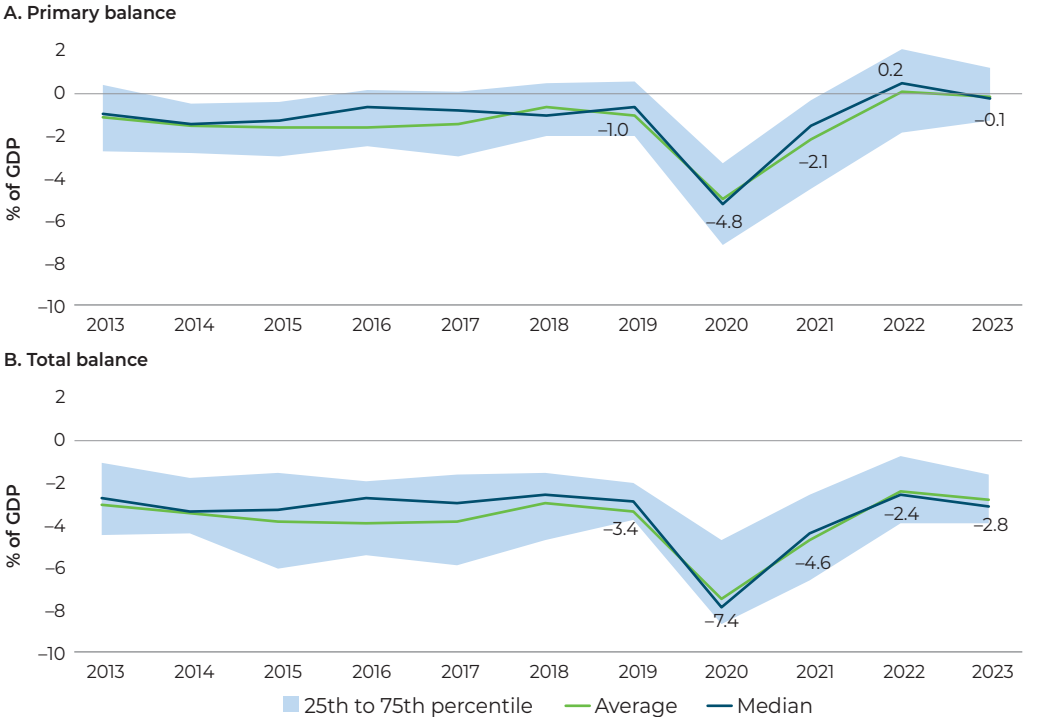
Moreover, the overall situation has deteriorated marginally compared to 2022. The decline in the primary balance is due to reduced fiscal revenues caused by the economic slowdown, high inflation, and a decrease in GDP growth from 4.1% in 2022 to 2.1% in 2023. The decrease in fiscal revenues is evident in 16 of the region's 25 countries. While primary expenditure remained relatively stable, some reallocation of resources has occurred: current expenditure has declined 0.2 percentage points while capital expenditure has increased in 17 of 25 countries (see Figure 3.2). Governments responded to economic challenges by prioritizing investment to stimulate growth, but its impact will depend on overcoming bottlenecks in project processes (Llempen-López et al., forthcoming).

The Slowdown in Public Debt Adjustment

As a result of the region's fiscal adjustment efforts, public debt is on the decline and is approaching pre-pandemic levels (see Figure 3.3, Panel A). From 2020 to 2023, the

[1] See Ardanaz and Izquierdo (2020).

FIGURE 3.1 • Fiscal Balances in Latin America and the Caribbean

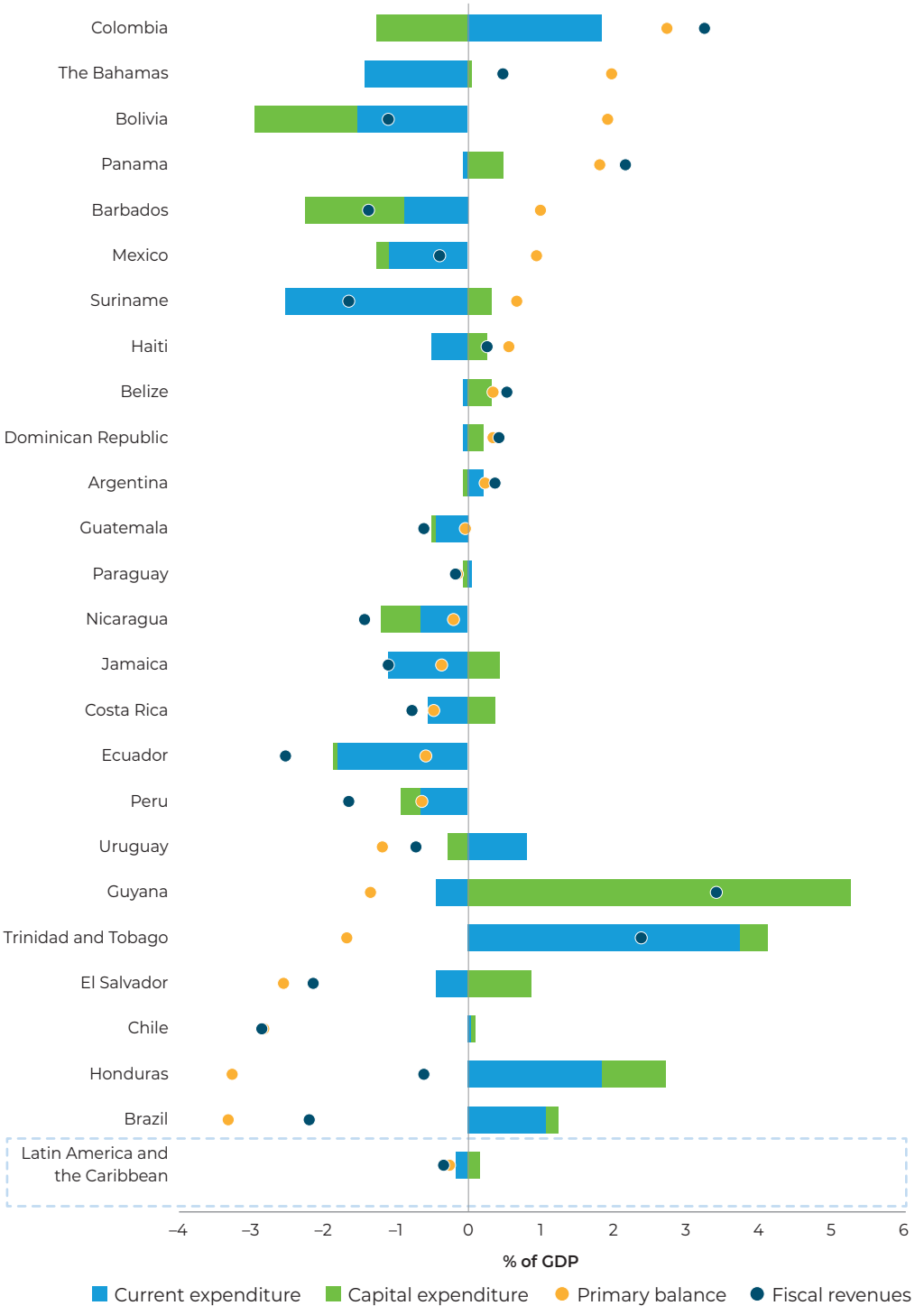


Source: IDB staff calculation based on IMF (2023b).
Note: The figures include data for all IDB borrowing countries except Venezuela.

average country experienced an 11-percentage-point decrease in the debt-to-GDP ratio. However, the reduction in 2023 was less marked than that of the preceding two years, with an average decline of 1.6 percentage points of GDP, in contrast to 4.6 percentage points in both 2021 and 2022. The deceleration in debt reduction reflects a combination of factors, including slower GDP growth due to economic deceleration, and lower inflation rates influenced by prevailing monetary policy (see Figure 3.3, Panel B). While growth significantly reduced public debt in 2022, contributing with 3.5 percentage points, its impact decreased to 1.7 percentage points in 2023. This trend was particularly notable in tourism-dependent economies compared to commodity-dependent and diversified economies, where the decrease in growth was less pronounced.

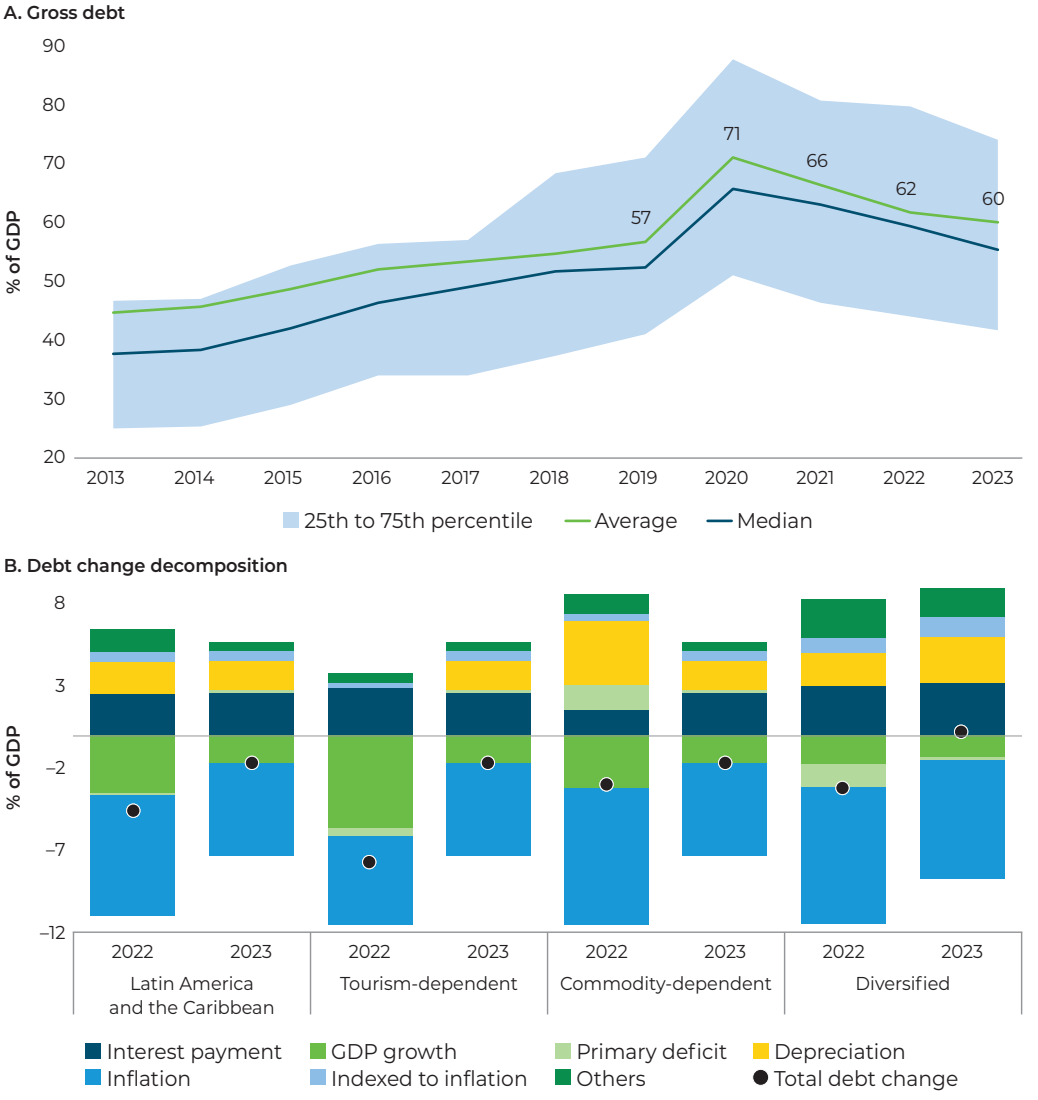
Robust monetary policies in 2022 significantly curtailed inflationary pressures, the primary force behind the reduction in the actual value of debt. While this remains a key factor in the decline in public debt in 2023, its contribution is 1.8 percentage points lower than in 2022. Exchange rate depreciation has had varying effects on debt reduction: diversified economies experienced an additional 1.0 percentage point increase in the

FIGURE 3.2 • Shifts in Primary Balances 2023 vs. 2022



Source: IDB staff calculation based on IMF (2023b).
Note: The figures include data for all IDB borrowing countries except Venezuela.

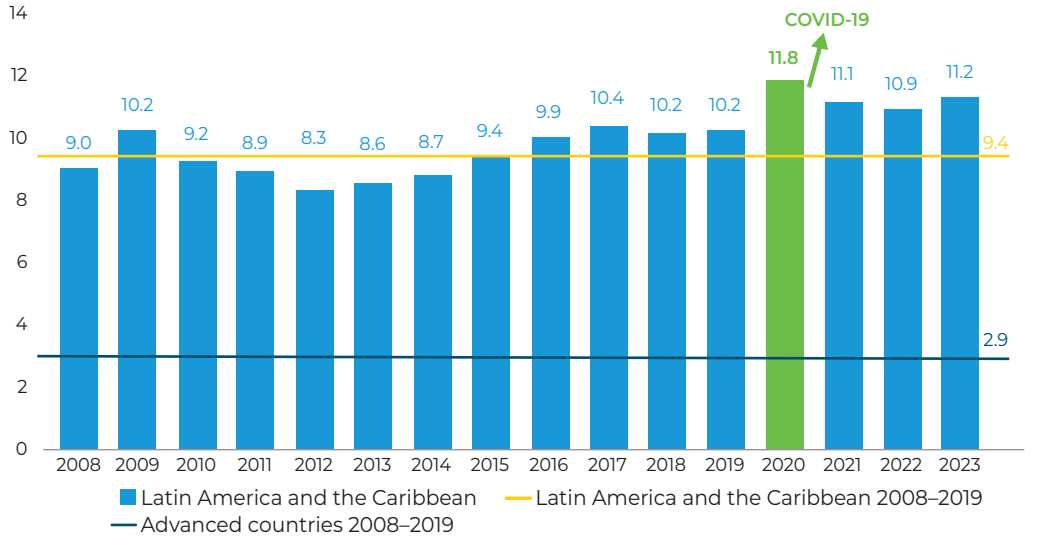
FIGURE 3.3 • Public Debt Dynamics in Latin America and the Caribbean



Source: IDB staff calculation based on IMF (2023a), IMF (2019), and IDB (2022).
Note: Latin America and the Caribbean includes all IDB borrowing countries except Venezuela. Tourism-dependent countries include The Bahamas, Barbados, Belize, Dominican Republic, Haiti, Jamaica, Panama, and Uruguay. Commodity-dependent countries include Bolivia, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, and Suriname. Diversified economies include Argentina, Brazil, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Trinidad and Tobago.

debt burden, tourism-dependent economies an extra 1.9 percentage points, and commodity-dependent economies faced a smaller impact of depreciation on debt increase. These developments underscore the risk associated with the proportion of debt denominated in foreign currency—something to consider when central banks start lowering interest rates and exchange rates depreciate.

FIGURE 3.4 • Debt Affordability



Source: IDB staff calculation based on IMF (2023a). The horizontal lines indicate 2008-2019 interest as a percentage of revenues.
Note: Includes all IDB borrowing countries except Venezuela.

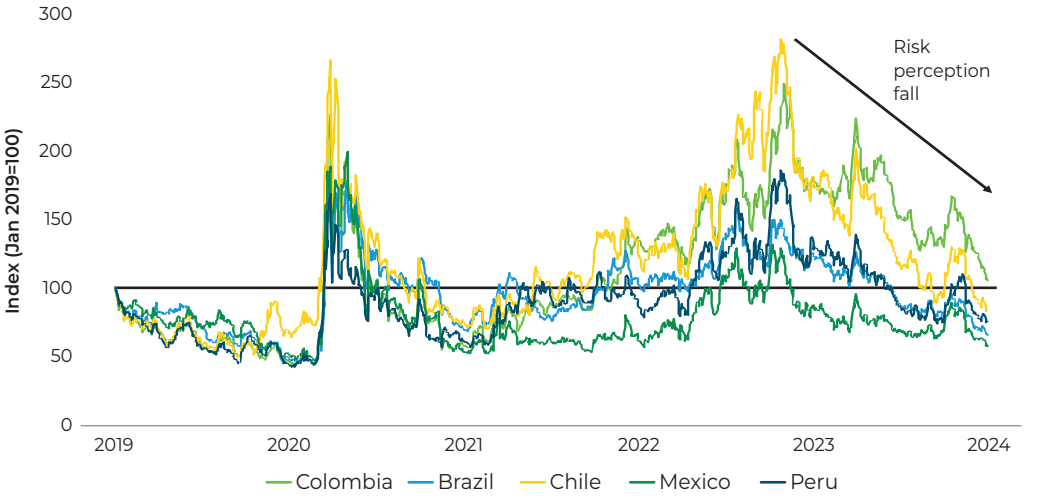
Interest payments do not substantially alleviate the debt burden for most countries, and the unfavorable conditions for accessing public debt persist due to declining fiscal revenues (see Figure 3.4). Debt affordability, though gradually improving since 2020, remains considerably below historical levels and is far below those in advanced countries. However, by 2023, the trend was reversed, resulting in a 0.3 percentage point increase in the interest-to-revenue ratio with higher interest rates and lower revenues.

Despite the ongoing higher financing costs across most countries, risk perception has improved, particularly in the major economies of the region. This improvement is thanks to fiscal adjustments and the early action of countries to address inflation challenges (Figure 3.5).

The Goal: Preserving Fiscal Consolidation Plans

Figure 3.6 illustrates debt-to-GDP trajectories for Latin American and Caribbean countries, factoring in economic growth, fiscal plans, interest rates, and commodity prices aligned with the baseline presented in Chapter 1. The baseline scenario foresees a 3% reduction in the average country's debt-to-GDP ratio, reaching 56% by 2026 and reflecting post-pandemic recovery and fiscal consolidation. However, economic challenges, high interest rates, and slower growth may hamper further progress. In a more stressful scenario, intensified shocks disrupting fiscal consolidation could push debt above the baseline, reaching 62% of GDP by 2026.

FIGURE 3.5 ● Credit Default Swaps (LAC 5)



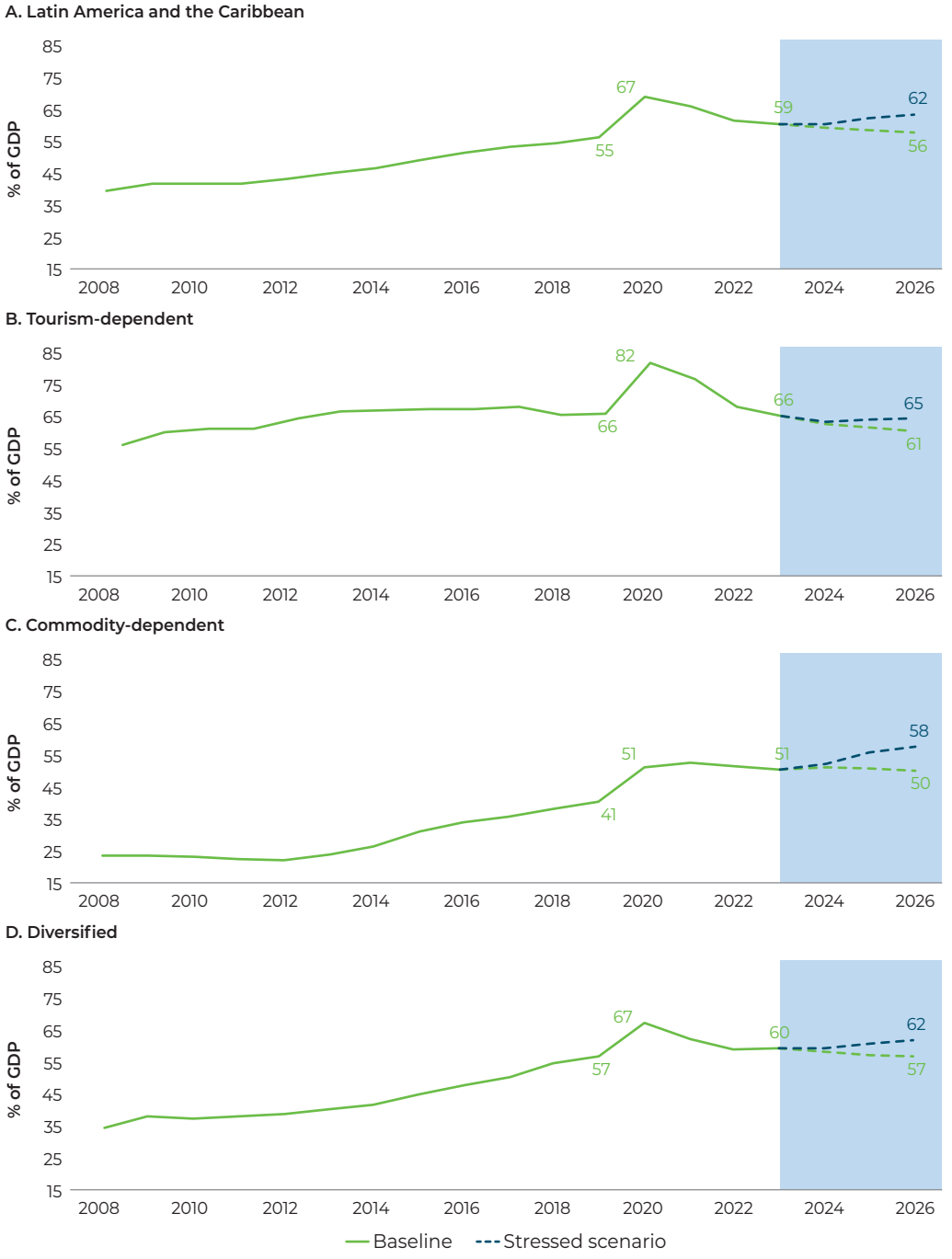
Source: IDB staff calculation based on Bloomberg. Data for January 1, 2019, to December 18, 2023.

Debt-to-GDP trajectories vary across country groups in Latin America and the Caribbean (Figure 3.6). Tourism-dependent countries achieve swift fiscal consolidation, reducing debt to 61% of GDP by 2026. Commodity-dependent economies face volatility, stabilizing debt at 50%, 14 points above the prudent level. Diversified economies see a moderate decline to 57% of GDP in 2026. In higher-stress scenarios, estimated debt ratios vary by 4 to 8 points of GDP above the baseline. Regarding fiscal accounts, the baseline scenario indicates stable convergence of the primary balance to 0.3% of GDP by 2026 (Figure 3.7). Withdrawal of COVID-19 fiscal stimuli drives this trend. However, in higher-stress scenarios, the potential for an increase in primary deficits could widen the gap by up to 1 percentage point by 2026.

Tourism-dependent countries have quickly revitalized their fiscal accounts, maintaining an average surplus of 0.8% of GDP (Figure 3.7). Countries like Jamaica and Barbados have implemented successful measures contributing to medium-term fiscal sustainability.[2] Commodity-dependent countries that have benefited from stable commodity prices may consolidate their primary balance to –0.3% of GDP by 2026 in the baseline scenario. However, the deficit could worsen by 2% if there is heightened macroeconomic stress. Diversified economies facing spending pressures expect to maintain a primary

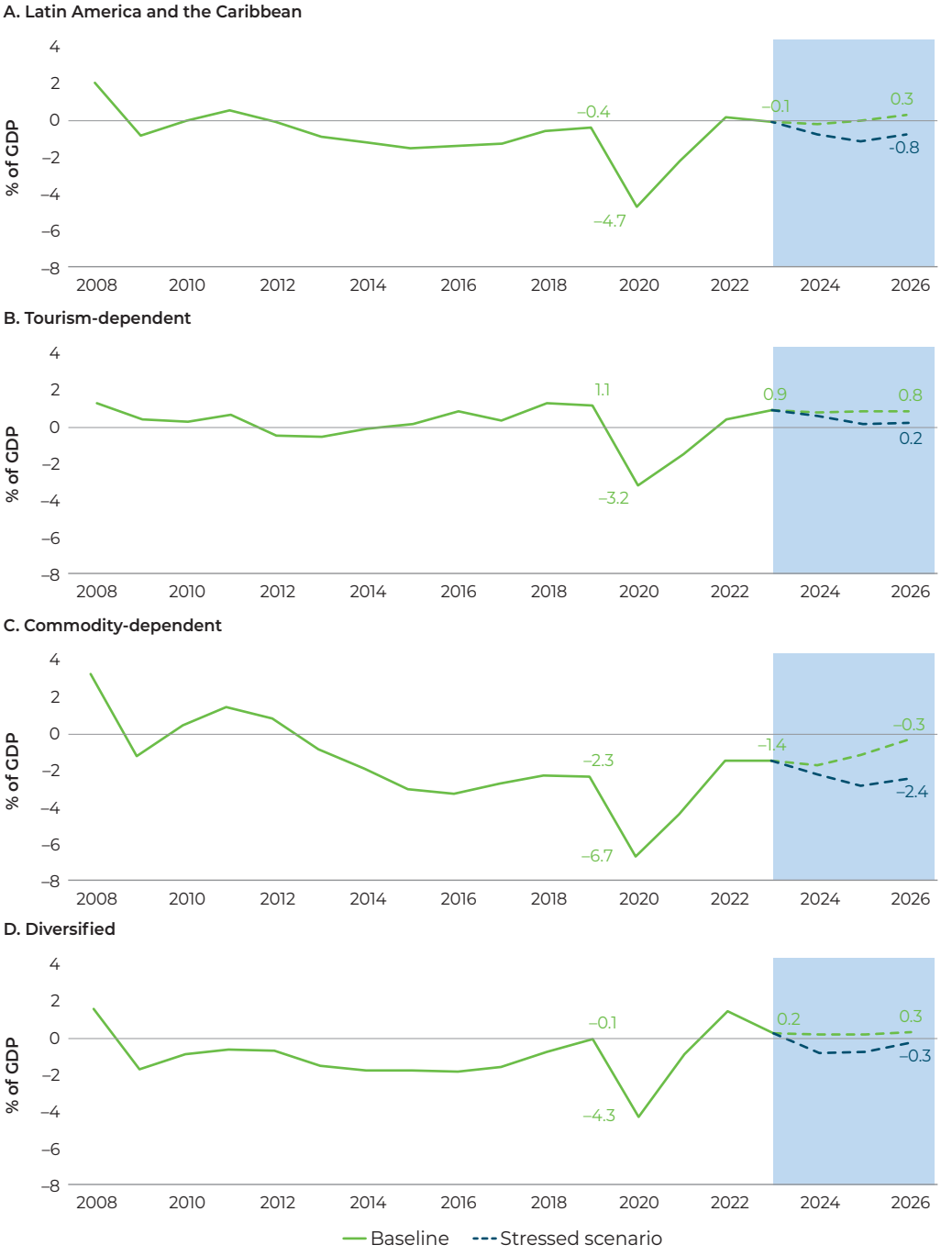
[2] Barbados has been implementing the Barbados Economic Recovery and Transformation (BERT) Plan since 2018 with the support of two consecutive IMF programs. The plan originally included measures for upfront fiscal consolidation, effective debt restructuring, and structural measures to support growth, and it was updated in 2022 to include a stronger focus on climate mitigation and adaptation. Jamaica maintains an Economic Program Oversight Committee (EPOC) comprised of various sectors (private sector, academia, and trade unions) to monitor the country's fiscal discipline commitments.

FIGURE 3.6 • Scenarios for Gross Debt



Source: FISLAC-IDB staff scenarios and calculations with observed data from IMF (2023b) and FocusEconomics (2023).
Note: The shaded area indicates forecast scenarios (2024-2026). Latin America and the Caribbean include all IDB-borrowing countries except Venezuela. Tourism-dependent countries include The Bahamas, Barbados, Belize, Dominican Republic, Haiti, Jamaica, Panama, and Uruguay. Commodity-dependent countries include Bolivia, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, and Suriname. Diversified economies include Argentina, Brazil, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Trinidad and Tobago.

FIGURE 3.7 • Scenarios for Primary Balance



Source: FISLAC-IDB staff scenarios and calculations with observed data from IMF (2023b) and FocusEconomics (2023).
Note: The shaded area indicates forecast scenarios (2024-2026). Latin America and the Caribbean include all IDB-borrowing countries except Venezuela. Tourism-dependent countries include The Bahamas, Barbados, Belize, Dominican Republic, Haiti, Jamaica, Panama, and Uruguay. Commodity-dependent countries include Bolivia, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, and Suriname. Diversified economies include Argentina, Brazil, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Trinidad and Tobago.

balance of 0.3% of GDP. However, under adverse conditions, their primary deficits may be as high as 1% of GDP in 2024–2026.

El Niño's Tantrum Might Upset Fiscal Accounts

In 2023, El Niño, characterized by elevated sea temperatures, had a significant impact on Latin America and the Caribbean, and continued repercussions are expected in 2024. Over the past decade, ocean temperatures consistently surpassed the 1991–2023 average; three distinct El Niño episodes were identified (2016, 2020, and 2023) based on NOAA's ONI index. Beyond meteorological effects, El Niño adversely affects fiscal conditions, hampers economic growth, and raises inflation in the region (see Box 1.1). Historically, it has influenced weather patterns, affecting sectors like agriculture, and impacting economies that face declines in exports or rises in imports of food products. The consequences extend to lower hydroelectric production and increased weather-related disasters like floods and landslides, causing severe damage to infrastructure (IMF, 2023b).

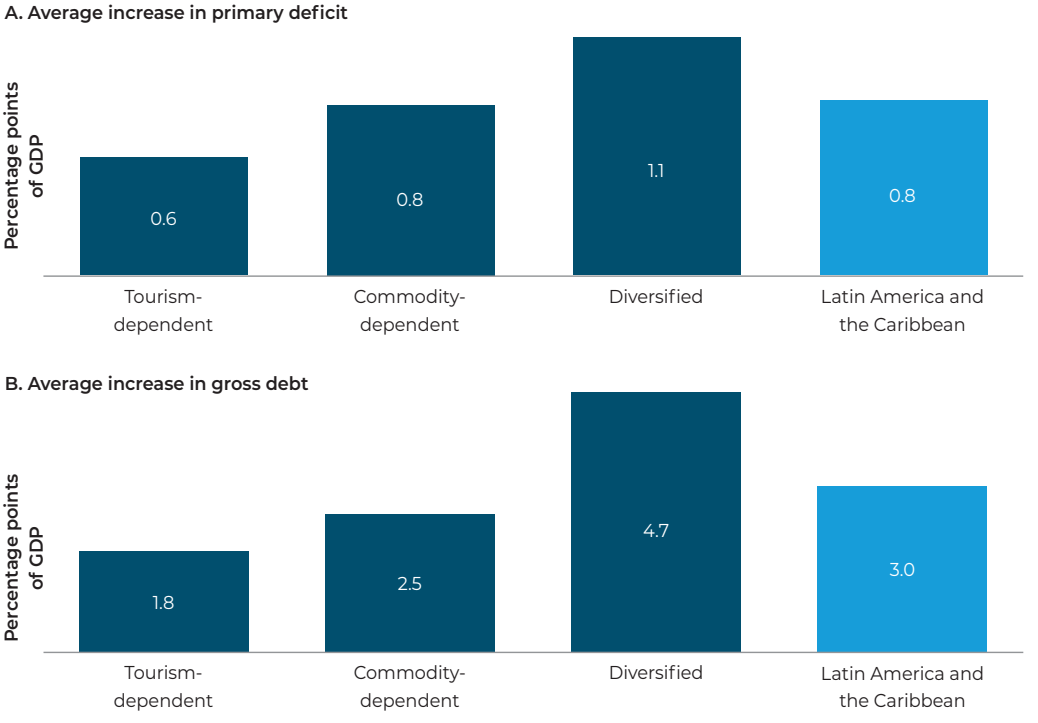
Figure 3.8 illustrates the average impact of climate-induced weather shocks in Latin America and the Caribbean, categorizing countries into groups and projecting the effects over a 3-year period. Using the FISLAC model, simulations consider each country group's most significant El Niño episodes as climate shocks. Tourism-dependent economies faced a major heat event in 2023, with a 0.53°C deviation in ocean temperature. Diversified economies experienced their most intense episode in 2016, with a 0.71°C deviation, while commodity-dependent economies encountered their most substantial episode in 2020, with a 0.5°C deviation.

For the average country in the region, the impact of these weather anomalies is notable but moderate, resulting in a 3% increase in debt as a percentage of GDP compared to the baseline scenario (see Figure 3.8). This is attributed to an estimated increase in the fiscal deficit of 0.8% of GDP. These findings align with Delgado, Eguino, and Lopes (2021), who argue that at least one extreme weather event per year in the region is associated with a decline in fiscal balances.

Diversified economies suffer the most significant impact from climate-induced shocks, primarily due to lower agricultural and hydroelectric production, along with potential damage to capital and infrastructure. In this scenario, both the primary deficit and gross debt increase an average 1.1% and 4.7% of GDP, respectively. The decline in the balance is attributed to a 0.5 percentage-point average decrease in revenues, driven by the economic slowdown prompted by the shock. Additionally, public spending increases 0.6 percentage points as governments allocate resources to mitigate damage to productive activity and capital stock.

Tourism- and commodity-dependent countries experience a measured impact on fiscal accounts, with potential increases in the primary deficit of approximately 0.6 and

FIGURE 3.8 • Fiscal Impact of Weather Anomaly Shocks (Average Impact for the Next Three Years)



Source: FISLAC-IDB staff scenarios and calculations.
Note: The average climate shock effect is calculated for 2024-2026, and the difference from the baseline scenario is calculated. Latin America and the Caribbean include all IDB-borrowing countries except Venezuela. Tourism-dependent countries include The Bahamas, Barbados, Belize, Dominican Republic, Haiti, Jamaica, Panama, and Uruguay. Commodity-dependent countries include Bolivia, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, and Suriname. Diversified economies include Argentina, Brazil, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Trinidad and Tobago.

0.8 percentage points of GDP, respectively, leading to corresponding upticks in debt of 1.8 and 2.5 percentage points. A deteriorating primary balance, driven by increased public transfers to address the climate shocks, underscores the trajectory of debt, partially offset by inflationary pressures. These findings highlight the importance of integrating public investment in adaptation and mitigation into the climate change agenda as a complementary policy option that aims to reduce the exposure of the region to these risk sources while maintaining fiscal sustainability.

Fiscal Challenges for Latin America and the Caribbean

In a context of low growth, high debt-to-GDP ratios, substantial fiscal gaps, and weather-related shocks, Latin America and the Caribbean faces a substantial fiscal challenge. Moreover, against a backdrop of international interest rates expected to remain "higher for longer," as indicated by the Federal Reserve and other central banks, the feasibility

of monetary easing in Latin America and the Caribbean looks increasingly challenging (see Chapter 4). Consequently, swift closure of fiscal gaps is crucial for sustainability and to complement monetary policy.

Given the region's subdued growth prospects, governments will need to implement pro-inclusive growth reforms that demand additional resources. Hence, creating additional fiscal space is imperative to secure sufficient financing for policies to promote higher inclusive and sustainable growth across the region.

Yet another critical consideration is the potential drag of higher public debt on growth. Powell and Valencia (2023) emphasize that while public debt isn't inherently detrimental, elevated levels can hinder market access, displace productive public expenditures, raise domestic interest rates, and reduce private sector investment, leading to lower economic growth. In particular, rapid surges or "debt spikes" can have a substantial negative impact: each successive year marked by a debt spike results in an additional 1.5 percentage-point decline in growth.

Addressing the triple need for fiscal adjustment, increased fiscal space, and debt reduction demands a multifaceted policy approach, including effective fiscal rules, strategic taxation decisions, and more efficient public spending.

Rules-Based Fiscal Frameworks: A Key Tool for Sustainability

Ensuring sustainability requires addressing structural and cyclical concerns. Fiscal rules are an essential tool to tackle both. They tackle cyclical concerns—as they put a constraint on spending so that it does not correlate with the business cycle (Andrián et al., 2023)—as well as structural concerns, for at least two reasons: 1) since current spending in Latin America and the Caribbean tends to increase with the cycle in good times and is downward inflexible, public investment bears the brunt of adjustment in bad times, thereby introducing structural problems in expenditure composition, which is systematically biased against public investment (Ardanaz and Izquierdo, 2022). Fiscal rules restrict spending in the upper phase of the cycle, thereby correcting this structural problem; 2) to the extent that they work, fiscal rules stabilize debt-to-GDP ratios and ensure sustainability.

However, not all fiscal rules work. The mere existence of a fiscal rule does not guarantee sustainability, as even the regional leaders in this respect (Chile, Colombia) have been unable in the past to successfully stabilize debt-to-GDP ratios. Loopholes in determining the structural primary balance—overlooking previous performance—or optimistic commodity price forecasts can compromise debt sustainability, even if structural rules are otherwise followed to the letter.

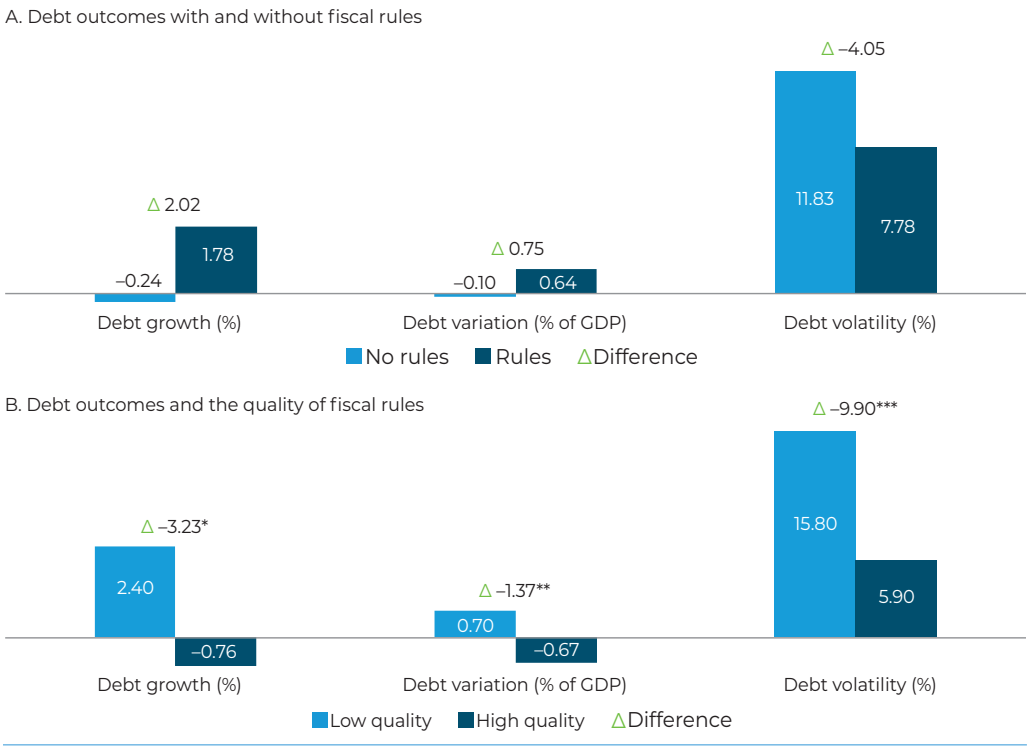
Similarly, simply imposing a fiscal rule is insufficient to ensure sustainability, measured in terms of public debt growth, changes in debt-to-GDP ratios, or debt volatility. Ardanaz, Cavallo, and Izquierdo (2023) show, paradoxically, that public debt growth and

changes in debt-to-GDP ratios are worse for countries that have a fiscal rule than for those that do not (see Figure 3.9, Panel A).[3]

How can this be reconciled with policy recommendations pushing for fiscal rules? It all boils down to the quality of fiscal rules. Rules with strong institutional backing, a solid legal basis, flexibility against shocks, and good monitoring and enforcement mechanisms can make a significant difference. High-quality fiscal rules stabilize debt growth and reduce debt volatility (see Figure 3.9, Panel B). Average yearly debt growth in countries with high-quality rules is 3% lower than in countries with low-quality rules. Their yearly debt variation is 1.4 points of GDP smaller, and their volatility is nearly two-thirds lower than in countries with low-quality rules.

An index of the quality of fiscal rules (defined using the aforementioned components) shows that emerging economies—including Latin America and the Caribbean—are about 30% behind advanced economies in terms of quality. Thus, setting up high-quality fiscal rules in the region is critical.

FIGURE 3.9 • Debt Outcomes of Fiscal Rules and Their Quality



Source: IDB staff estimates.

[3] See also Andrián et al. (2023), and Gomez-Gonzalez, Valencia, and Sanchez (2024) for similar results.

Where do countries in Latin America and the Caribbean stand in terms of fiscal rules? Table 3.1 displays the countries in the region with running fiscal rules and their main characteristics. Currently, 14 countries have fiscal rules in place, some of which date back to the early 2000s, but most of which were established from 2009 onwards. Most rules cover the general government, and include some flexibility measures, mainly through escape clauses. Only a few follow structural targets and display investment protection provisions.

Countries in the region, prompted by concerns over public debt sustainability, are either implementing or planning fiscal consolidation programs. In this context, the adoption of rules-based fiscal frameworks holds the potential to not only sustain the gains of fiscal adjustment over time but also to mitigate the perception of sovereign risk (Gomez-Gonzalez, Valencia, and Sánchez, 2024). Post-pandemic, policymakers face the dilemma of whether to reinstate previous fiscal rules, recalibrate targets, or embark on more profound reforms to their fiscal responsibility frameworks. What critical factors should policymakers consider when enhancing rules-based fiscal frameworks?

TABLE 3.1 ● Fiscal Rules in Latin America and the Caribbean

	Type of rule							Flexibility features		
	Balance	Expenditure	Debt	Revenue	Year	Coverage	Legal basis	Escape clause	Structural target	Investment protection (direct/ indirect)
Bahamas	✓	✓	✓		2018	CG	S	✓		✓
Brazil	✓	✓			2000/2023	CG	S	✓		
Chile	✓		✓		2001/2022	CG	S		✓	
Colombia	✓		✓		2021	CG	S	✓	✓	
Costa Rica		✓			2018	NFPS	S	✓		✓
Ecuador	✓	✓	✓		2020	CG	S	✓		
El Salvador	✓	✓	✓	✓	2016/2018	NFPS	S			
Honduras	✓	✓			2016	NFPS	S	✓		✓
Jamaica	✓		✓		2010/2017	GG	S	✓		
Mexico	✓	✓			2009/2014	CG	S	✓		
Panama	✓		✓		2009/2020	NFPS	S	✓		
Paraguay	✓	✓			2015	CG	S			
Peru	✓	✓	✓		2000/2016	CG	S	✓		✓
Uruguay	✓	✓			2020	CG	S	✓	✓	

Source: IDB staff elaboration.
Note: GG = general government; CG = central government; NFPS = nonfinancial public sector; S = statutory.

Debt Anchors for Risk Mitigation

Amid sharp debt increases, recent reform proposals of fiscal frameworks emphasize the need for a public debt "anchor" to guide the conduct of fiscal policy over the medium term.[4] Setting the ceiling of the fiscal anchor requires identifying a maximum debt threshold or limit for sustainability and calibrating a "prudent" debt level such that a safety margin or buffer ensures that debt remains below the limit even in the presence of adverse shocks. After obtaining the debt ceiling, it is important to define operational fiscal rule targets to gradually guide public debt toward its desired level. For instance, the fiscal rule should incorporate the response of fiscal balance targets based on current debt levels and the debt limit. Countries can implement a feedback mechanism based on the outstanding amount of public debt, applying more adjustment pressure as outstanding debt levels increase beyond prudent levels. By doing so, countries can ensure that debt does not grow to levels that undermine fiscal sustainability with an embedded self-regulating mechanism.

To illustrate the potential benefits of introducing debt anchors in fiscal rules, Figure 3.10 presents results from a dynamic stochastic general equilibrium (DSGE) model calibrated for different types of Latin American and Caribbean economies that simulates the evolution of interest payments and public debt under alternative fiscal frameworks, relative to a baseline scenario where fiscal rules do not constrain fiscal policy. Overall, results show that primary balance and debt levels are lower over the medium term when fiscal policy is guided by a debt anchor.

Model simulations offer the capability to conduct a Conditional Value at Risk (Co-Var) analysis.[5] This analytical approach quantifies the countries' contributions to fiscal sustainability in the region by adhering to typical fiscal rule targets and steering clear of unsustainable paths in public debt. Moreover, embracing prudent debt levels can result in supplementary savings for macro-fiscal risk mitigation.[6]

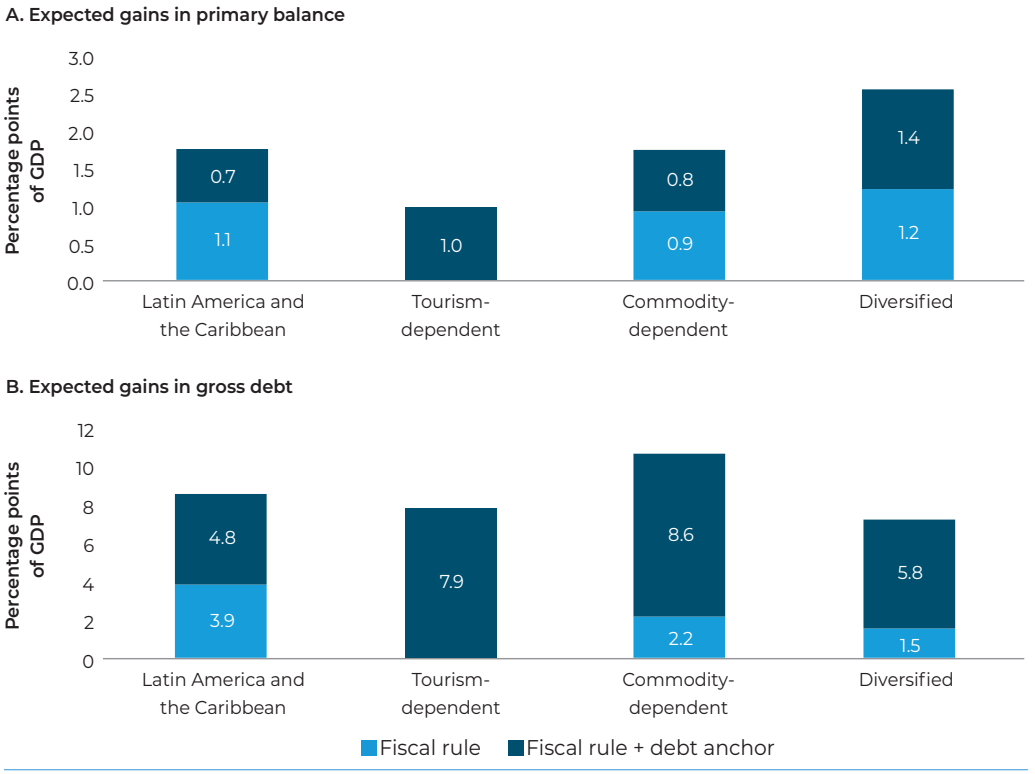
Figure 3.10 illustrates that adopting fiscal responsibility measures substantially mitigates primary deficit and debt increases following macro-fiscal shocks. For tourism-dependent countries, adhering to a debt anchor could lead to a primary deficit reduction of up to 1 percentage point of GDP and a debt reduction of 8 percentage points, compared to a scenario with no rule in the event of a high fiscal stress shock. In commodity-dependent countries, rule compliance alone yields savings of nearly 1 percentage point

[4] See Caselli et al. (2022) and Eyraud et al. (2018).

[5] The Co-Var analysis measures the differential between the average value of deciles 8 and 9 of the forecast of the scenarios with fiscal rule and anchor at prudent debt levels compared to the baseline scenario (without rules). Since the highest deciles of these variables are consistent with the highest risk levels for fiscal sustainability, they are understood as situations of maximum fiscal stress.

[6] See Powell and Valencia (2023).

FIGURE 3.10 ● Expected Gains in Risk Mitigation Due to Convergence to Fiscal Rules and Prudent Debt Levels



Source: FISLAC-IDB staff estimates.
Note: Latin America and the Caribbean includes all IDB-borrowing countries except Venezuela. Tourism-dependent countries include The Bahamas, Barbados, Belize, Dominican Republic, Haiti, Jamaica, Panama, and Uruguay. Commodity-dependent countries include Bolivia, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, and Suriname. Diversified economies include Argentina, Brazil, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Trinidad and Tobago.

of GDP in the primary deficit and 2 percentage points in debt. However, converging to their prudent levels (36% of GDP) could result in an additional gain of 0.8 and 8.6 percentage points of GDP, respectively. Diversified economies also experience positive effects; converging to the rule's targets and their prudent debt levels (46% of GDP) translates to a cumulative gain of 2.6 percentage points of GDP in the primary deficit and almost 7 percentage points in debt.

Fiscal Rule Flexibility and Public Investment Protection

Fiscal rules may have unintended and sometimes adverse consequences on public spending composition. This is so because pressure to comply with aggregate numerical targets provides incentives for policymakers to cut spending items that may be less salient

to voters, but may have long-term payoffs, such as productive public investment, which is the adjustment variable by default despite its large fiscal multiplier.

Flexible fiscal rules are defined herein following Guerguil, Mandon, and Tapsoba (2017) as rules that are either structural, have escape clauses, or are friendly to public investment. Such rules have proven to be useful in protecting public investment from cuts during fiscal adjustment. In fact, investment can be completely protected when flexible fiscal rules are present, but falls by an average 10% during adjustment in countries that lack such flexibility (see Ardanaz et al., 2021a).

Rules that protect public investment are worth highlighting because the literature has shown that fiscal multipliers for public investment are much larger than those for current spending. They are thus very relevant for safeguarding economic activity, particularly during recessions when investment is typically cut (Ardanaz and Izquierdo, 2022). Indeed, the fiscal multiplier for public investment is close to 2 (Izquierdo et al., 2019) and can be even larger in countries with a low public capital stock.

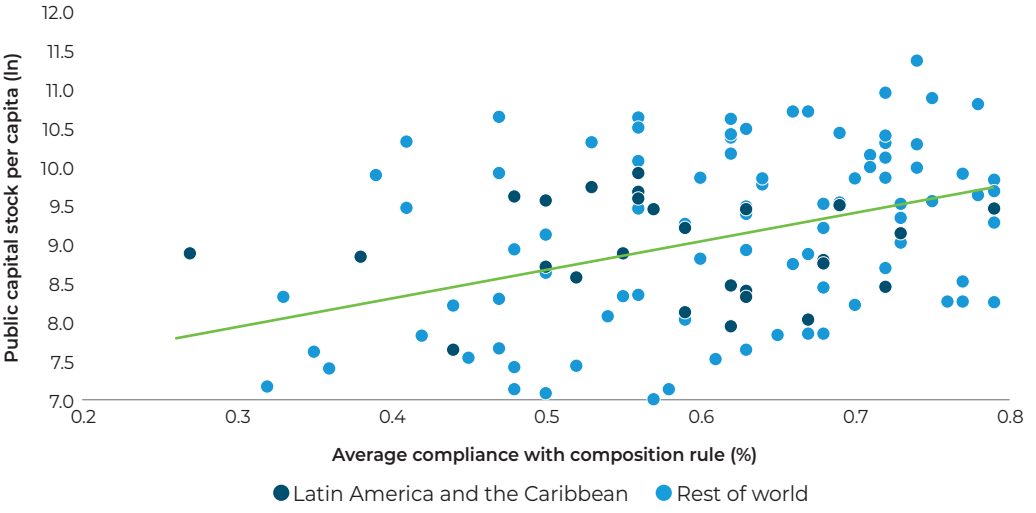
A complementary route to protect public investment may include the incorporation of limits to current expenditure growth in fiscal rules. For example, Peru amended its fiscal rule in 2018 to include an additional component limiting real current expenditure growth—net of maintenance spending—to that of real GDP.[7] This report draws upon the Izquierdo, Pessino, and Vuletin (2018) approach. It combines spending composition and GDP growth data for a large sample of countries to evaluate the extent to which complying in practice with a rule that limits the growth of current spending to the long-term growth of the economy (e.g., the Peruvian rule) is correlated with better macroeconomic performance. Results show that countries that fulfill this condition most of the time have, on average, higher economic growth levels and lower macroeconomic volatility than those that fulfill this condition less frequently. In addition, the higher the extent of fulfillment with such a "composition" rule on average, the larger the resulting level of public capital stock per capita at a later date (see Figure 3.11). Thus, for countries considering building up their public capital stock to complement private investment and increase productivity, composition fiscal rules can be beneficial.

Escape Clauses and the Return to Rules

The incorporation of escape clauses has proven valuable in enhancing flexibility. However, while most fiscal rules explicitly outline the conditions under which the rule can be temporarily suspended, they are less clear about reentry conditions. This presents a challenge for the region, as limited guidance on the process and timing for reestablishing the rule poses sustainability risks.

[7] See Mendoza Bellido et al. (2021).

FIGURE 3.11 • Compliance with Composition Rule and Size of Public Capital Stock



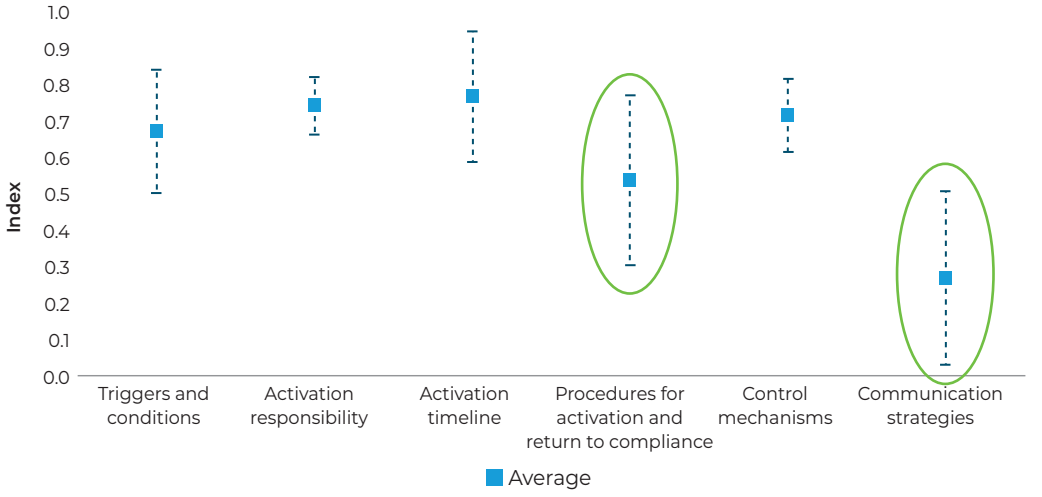
Source: IDB staff elaboration based on Izquierdo, Pessino, and Vuletin (2018) and IMF Public Capital Stock dataset.
Note: Compliance is measured as the percentage of years in which the growth rate of current spending remains below the growth rate of GDP.

Where do countries in the region currently stand in terms of implementing escape clauses? To accommodate the fiscal policy response to the COVID-19 pandemic, countries with escape clauses in their fiscal rules promptly activated them. Conversely, those without such clauses suspended their rules in 2020 and subsequent years. Well-defined escape clauses typically include: 1) a limited and clearly defined set of events triggering the clause's operation, 2) time limits on how long fiscal policy can deviate from the rule targets, and 3) a requirement for fiscal policy to return to the targets after the escape clause activation period, possibly offsetting accumulated deviations (see Eyraud et al., 2018).

A recent assessment by Ulloa-Suarez, Valencia, and Guerra (forthcoming) of escape-clause provisions across the region indicates that the third dimension is often not well-specified. Specifically, escape clauses frequently lack guidance on returning to compliance in post-crisis contexts. An index of escape clause clarity reveals that, on average, Latin American countries have a margin of improvement of 40% in defining their escape clauses, especially in refining requirements for effective activation and return to compliance and communication strategies (Figure 3.12). These improvements could strengthen fiscal discipline and maintain investor confidence, especially after unforeseen economic shocks.

Looking ahead, countries should consider revising their escape clause provisions to require governments to present specific action plans and time such plans so as to ensure a return to compliance with fiscal rules within a specific period following the clause's termination. Periodic reporting on the plan's execution, along with explanations and justifications for any unavoidable deviations, should also be required.

FIGURE 3.12 • Escape Clause Clarity in Latin America and the Caribbean



Source: Ulloa-Suarez and Valencia (2022).
Note: The figure presents the average score in each dimension for the 13 countries in the sample. The dotted lines around these averages represent a 70% confidence interval.

Beyond Design: The Role of Compliance

Even well-designed fiscal rules are ineffective in improving fiscal outcomes if they consistently lack compliance. Across the region, the average compliance rate with fiscal rules was 60% between 2000 and 2020 but has fluctuated considerably.[8] Compliance rates have ranged from over 80% to below 20%. These differences have clear implications for debt dynamics and financial market conditions sensitive to fiscal policy decisions: periods of compliance are associated with less frequent debt acceleration episodes, lower sovereign bond spreads, and higher credit ratings.[9] In contrast, the mere adoption of a fiscal rule does not seem sufficient to sway market reactions, as fiscal performance between rule adopters and non-adopters does not present significant differences (see Figure 3.13).

Complementary Fiscal Institutions

Fiscal rules are one component of a comprehensive fiscal framework; hence, their design cannot be improved in isolation from the quality of the overall policy framework. Credible medium-term fiscal frameworks and independent fiscal councils are complementary fiscal institutions that, together with numerical rules, can support the goal of safeguarding fiscal sustainability.

[8] See Valencia and Ulloa-Suarez (2022).
[9] See Ardanaz, Ulloa-Suarez, and Valencia (2023).

FIGURE 3.13 ● Compliance with Fiscal Rules and Performance

Source: FISLAC-IDB staff calculation based on Ardanaz, Ulloa-Suarez, and Valencia (2023).

Medium-Term Fiscal Frameworks

Fiscal authorities could also benefit from another feature that has been adopted by central banks in recent times: forward guidance. Market expectations are key when assessing the impact of policy, so guiding markets in terms of plans for fiscal policy can be helpful in anchoring expectations. Such is the role of medium-term fiscal frameworks (MTFF), which extend the horizon for fiscal policymaking beyond the annual budgetary calendar. This tool should identify and communicate the changes or reforms that will ensure a path to fiscal sustainability, and fiscal rules should translate such plans into policy actions through the budget process.

A key pre-condition for MTFF to work is that they provide credible projections of main macroeconomic and fiscal variables. In this regard, the quality of growth and fiscal forecasts varies widely across the region. First, several countries present overoptimistic GDP growth projections in budget plans that tend to exceed private forecasts. Moreover, fiscal projections reveal a tendency to overestimate budget balances due to underestimation of expenditures and overestimation of revenues. As a result, observed public debt ends up being higher than initially projected.

Fiscal Councils

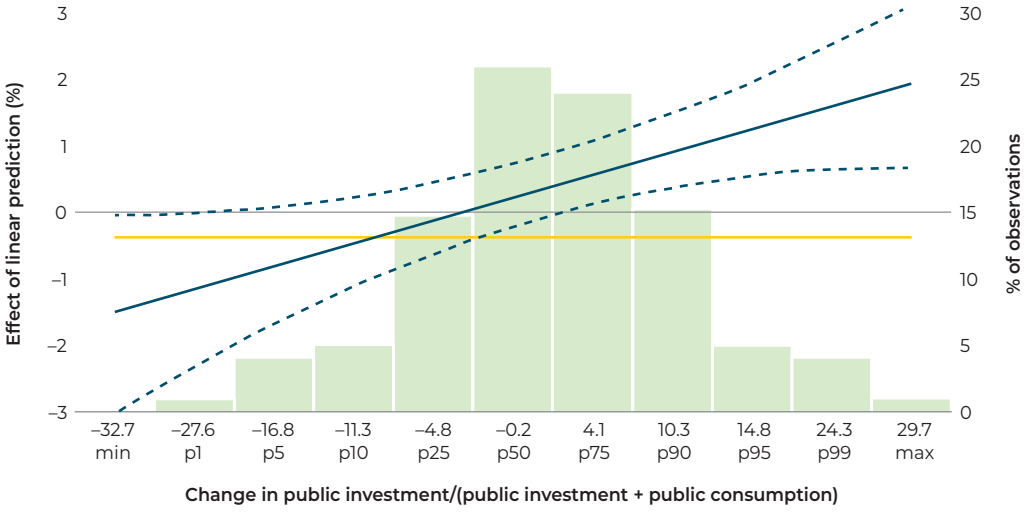
While many fiscal rules include formal sanctions in cases of non-compliance, they are of limited effectiveness when political incentives are not aligned with fiscal discipline. This situation requires building and strengthening institutions that bolster compliance, such as independent fiscal councils. Fiscal councils are often nonpartisan, technical bodies entrusted with a public finance watchdog role to strengthen the credibility of fiscal policies and ensure fiscal sustainability. Fiscal councils in the region have mostly materialized in the aftermath of the global financial crisis. They oversee compliance with fiscal rules, providing opinions about a government's fiscal forecasts and performance, among other tasks. Their statements are public and, as such, may inflict reputational costs for noncompliance.

However, and in contrast to central banks, whose compliance with inflation targets has clear implications for the general public, the consequences of government compliance with fiscal rules are less well understood. Thus, the disciplining effect is limited. Moreover, resources and technical capacity are often not proportional to the formal tasks assigned to fiscal councils, further limiting their effectiveness. For example, while a comparison between the formal remit of fiscal councils across Latin America and OECD countries suggests they are in charge of similar duties, councils are usually understaffed in the region, in contrast to the OECD, where the size of staff increases with the number of functions. Thus, strengthening the set of tools, resources, and staff available to councils in Latin America and the Caribbean would improve their role and discipline in fiscal policy. Councils could, for example, participate in preparing forecasts and perhaps even intervene in recalibrating targets of fiscal rules after a prolonged period of noncompliance. Giving fiscal councils the power to increase incentives for fiscal rule enforcement, both by imposing reputational costs on governments that deviate from the rule as well as by having a say following periods of noncompliance on how the rule will be enforced, would be highly beneficial for fiscal sustainability.

Policies in Times of Adjustment

Given higher post-COVID public debt levels, higher interest rates worldwide that have not allowed governments to close their fiscal gaps yet, and the need to make room for reforms and implementation of climate goals, governments will undoubtedly have to redouble their efforts on fiscal consolidation. How should consolidation be carried out? Across-the-board cuts are not the best answer as inefficiencies vary from sector to sector. Moreover, some spending cuts are more recessionary than others. A key insight to consider when deciding on these cuts is the treatment of public investment. A recent study suggests that fiscal adjustments that protect public investment are typically less

FIGURE 3.14 ● GDP Response to Fiscal Consolidation Protecting Public Investment



Source: Ardanaz et al. (2021b).

recessionary and can even be expansionary when public investment increases its share in the budget (see Ardanaz et al., 2021b). These results are due to the strong complementarity of public and private investment. When public investment is protected—meaning the share of public investment in primary spending does not fall or may even increase during fiscal adjustment—output will not fall and might even increase in response to a fiscal adjustment three years after fiscal consolidation. Figure 3.14 shows that fiscal consolidation is not recessionary when investment is protected and may even be expansionary when the ratio of public investment in primary spending increases following consolidation.[10]

Advancing in the consolidation of fiscal accounts will require interventions on various fronts in current spending that seek to minimize possible negative impacts on growth and equity. The specific measures to implement will depend on each country's context. However, IDB's 2018 flagship report on public spending identified three common key areas that should be addressed in the years ahead: 1) better targeting of transfers and subsidies with a social purpose (cash transfers, noncontributory pensions, energy subsidies, and tax expenditures on food, drugs, and housing), which in many cases reach individuals who in principle do not qualify for those subsidies; 2) reducing leakages in public sector purchases; and 3) bringing public sector salaries in line with those in the private

[10] Investment protection is defined as a case in which the share of public investment (PI) in primary spending [defined as the sum of public investment (PI) and public consumption (PC)] is constant or even increases following fiscal adjustment. Investment protection occurs when the ratio PI/(PI+PC) either remains constant or increases following fiscal consolidation.

sector, particularly for lower-productivity public sector positions.[11] These measures can substantially reduce inefficiencies in public spending, producing important savings that amount on average to 4.4% of GDP.[12]

In addition to improving the efficiency of public spending, the region should strengthen the management of tax revenues, prioritizing measures that reduce evasion and tax expenditures. Regarding evasion, estimates indicate that this phenomenon could generate tax revenue losses that average 6% of GDP (ECLAC, 2020). Reducing these high levels of evasion requires continuing efforts to strengthen tax administrations, particularly regarding digital transformation processes, allowing new technologies to increase control and facilitate tax compliance (Reyes-Tagle, Dimitropoulou, and Rodríguez Peña, 2023).

Regarding tax expenditures, preferential treatment in the different taxes currently implies significant revenue losses, and often, they do not end up contributing efficiently to the objective for which they were created. One clear example is the value-added tax (VAT). In Latin America and the Caribbean, VATs tend to have reduced or zero rates on several goods and services, costing governments in the region an average of 2.1% of GDP (Rasteletti and Saravia, 2023). Despite being introduced to reduce tax burdens among lower-income households, most of these measures end up benefiting higher-income households (Pessino et al., 2023). To achieve the original goal, it would be more effective and less costly to refund lower-income households for the full VAT they pay instead of having reduced or zero tax rates on many goods and services. These targeted VAT refund policies, often called personalized VAT, are already being implemented in some countries in the region, such as Uruguay and Ecuador. Future VAT reforms should reduce preferential treatment on goods and services and protect low-income households through VAT refunds. This type of reform has the potential to alleviate poverty and increase the progressivity of tax systems as it reduces price distortions and increases VAT collection at the same time.

Other tax expenditures that countries in the region should review are those related to preferential treatment in corporate income taxes, mainly aimed at attracting foreign direct investment. These incentives will be less effective as countries begin implementing the global minimum tax agreed upon in the Inclusive Framework on BEPS (base erosion and profit shifting), coordinated by the Organisation for Economic Co-operation and Development (OECD). Introducing these global minimum taxes will imply that large multinational companies in the region will pay little or no tax on profits because tax benefits might end up being taxed in the countries where their headquarters are located.

[11] Some types of adjustment cuts are more palatable to voters than others. For example, public employment or wage bill cuts are strongly favored, whereas cuts on social assistance are not. See Ardanaz et al. (forthcoming) for more details.

[12] See Izquierdo, Pessino, and Vuletin (2018).

Governments should eliminate preferential treatment or introduce a national minimum tax to prevent profits generated in the region from being taxed by third countries that have implemented global minimum taxes. Colombia has already moved in this direction. Other Latin American and Caribbean countries should also introduce the global minimum tax in their jurisdictions. Preliminary conservative estimates suggest that the revenue impact of introducing a global minimum tax could exceed US$3 billion annually for Latin America and the Caribbean (Barreix et al., 2022).

CHAPTER 4

Monetary Policy

Central banks in Latin America and the Caribbean responded promptly and robustly to the global inflation surge in 2021. They launched tightening cycles ahead of other emerging and more advanced economies, implementing significant interest rate hikes. Consequently, inflation rates in the region have declined markedly, nearing their targets, while medium-term inflation expectations remain anchored. This success has allowed central banks in the region to start easing cycles ahead of those in the United States and the Eurozone, which have maintained steady policy rates in their latest meetings.

Despite the potential for further policy rate reductions in Latin America and the Caribbean amid lower commodity prices, within-target inflation, and fiscal consolidation, caution is warranted. Escalating conflicts in the Middle East could reverse the commodity price decline, and the trajectory of U.S. interest rates remains uncertain. Large policy rate reductions could face capital outflows, exchange rate depreciation, and upticks in inflation if inflation expectations do not remain anchored. Moreover, tensions between fiscal and monetary authorities are likely to persist, with higher financing costs affecting fiscal policies. Nevertheless, central bank independence, which deserves credit for the current decline in inflation rates, is imperative and must be preserved.

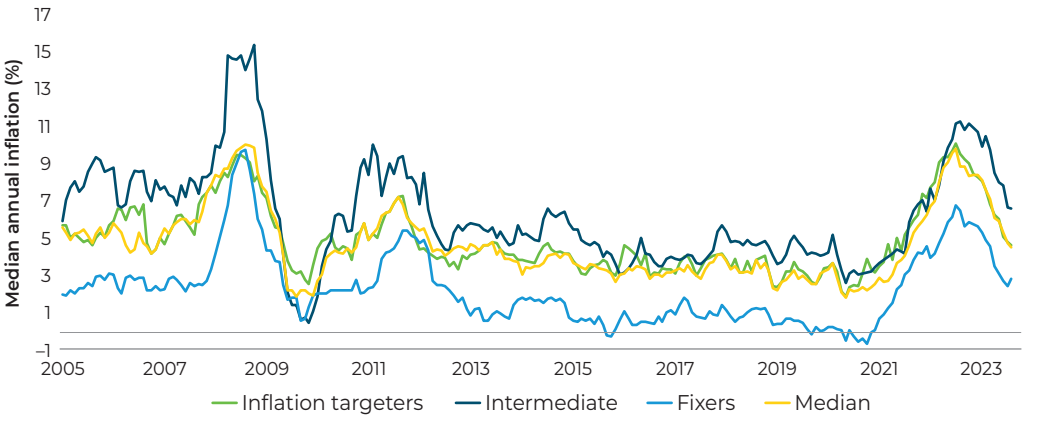
Inflation Overview

The inflation surge in 2021 was highly synchronized across countries in the region, and the same holds true for the subsequent decline in inflation rates observed throughout 2023.[1] The median annual inflation rate in the region rose from 2.9% in January 2021 to peak at 9.8% in July 2022. Since then, it has decreased to 3.8% as of December 2023 (Figure 4.1). This pattern is consistent even among countries with different monetary policy regimes.

Countries pegging their currencies to the dollar—the fixers—have exhibited the lowest median inflation rates since 2005. However, their inflation dynamics since 2021 closely resemble those of countries employing either an inflation targeting regime

[1] This synchronization was highlighted in last year's report (Galindo and Nuguer, 2023b).

FIGURE 4.1 • Median Inflation Rates across Different Monetary Regimes



Source: IDB staff calculations based on central bank data and Haver Analytics.
Notes: This figure depicts median inflation rates for different exchange regimes. Inflation Targeters: Brazil, Chile, Colombia, Mexico, and Peru; Recent IT: Costa Rica, Dominican Republic, Guatemala, Jamaica, Paraguay, and Uruguay; Intermediate: Argentina, Bolivia, Haiti, Honduras, Nicaragua, Trinidad and Tobago, and Suriname; Fixers: The Bahamas, Barbados, Belize, Ecuador, El Salvador, Guyana, Panama.

(inflation targeters) or a combination of policies (intermediate). From January 2021 to July 2022, median inflation rates accelerated by approximately 610 to 750 basis points across groups, followed by a decrease of around 410 to 540 basis points since then. The intermediate group experienced the most substantial increase in inflation rates, with the median peaking at 11.3% in August 2022, before receding to 5.2% in December 2023.

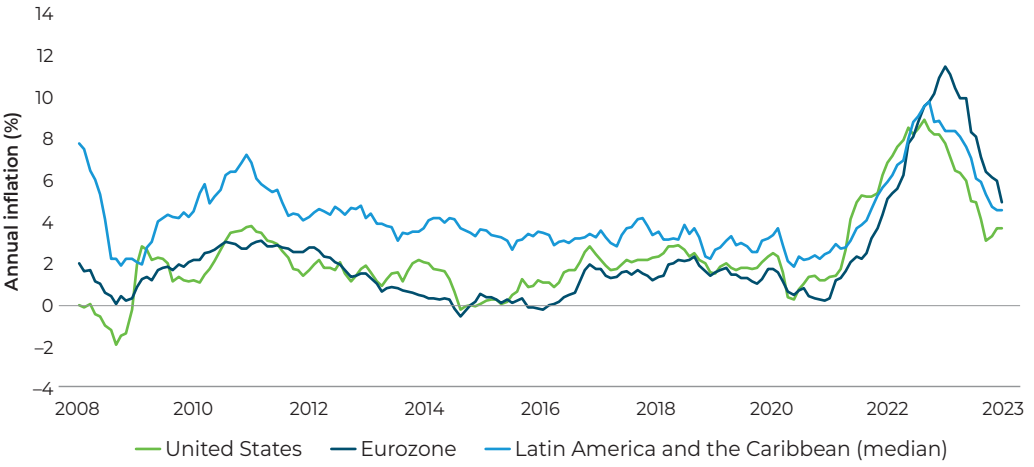
The comparison of the median inflation rate in the region with those of the United States and the Eurozone reveals the presence of a global factor influencing recent inflation dynamics (Figure 4.2, Panel A).[2] This aligns with the behavior of commodity prices, significantly impacted by supply constraints, heightened demand post COVID-19, and the war in Ukraine. By mid-2022, price indices for commodity groups like energy, agriculture, metals, and minerals had surged over 50% compared to pre-pandemic levels (Figure 4.2, Panel B). Notably, energy prices rose by over 100%, with oil (WTI) prices climbing from approximately US$55 pre-pandemic to over US$110 by mid-2022.

However, commodity prices began receding in the second half of 2022 and have continued to decline into 2023 (see Box 4.1). Combined with policy responses by central banks in Latin America and the Caribbean and measures to consolidate fiscal balances (Chapter 3), lower commodity prices have contributed to a decline in inflation rates across the region. Current inflation rates are significantly lower than their mid-2022 peaks but still exceed pre-2021 levels and their targets. Key questions are whether this pattern will persist and what efforts are required to return inflation to its targets.

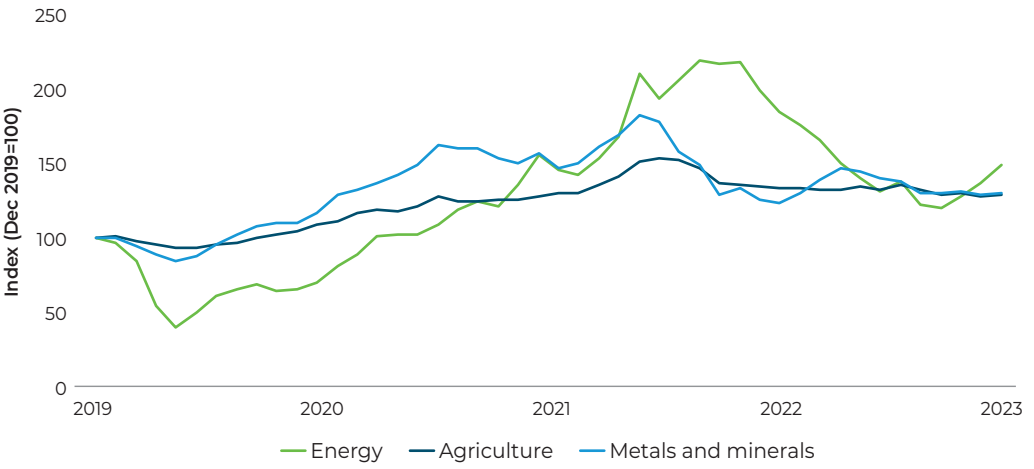
[2] See Ayres and Chanto (2022), Ayres et al. (2023a), and Ayres et al. (2023b).

FIGURE 4.2 • Global Component in Inflation Dynamics

A. Inflation rates in Latin American and the Caribbean, the United States, and the Eurozone



B. Inflation in commodity prices



Source: IDB staff calculations for annual inflation based on central bank data and Haver Analytics. For index of commodity prices, World Bank's Pink Sheet database.
Note: Median headline inflation for Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Guatemala, Guyana, Honduras, Haiti, Mexico, Nicaragua, Panama, Paraguay, Peru, El Salvador, Trinidad and Tobago, and Uruguay.

The surge in inflation was initially concentrated in food and energy prices, extending to the broader economy and elevating core inflation (Figure 4.3, Panel A). This trend was consistent across countries in the region and around the world, underscoring a global influence.[3] An essential question is whether core inflation will continue to decrease as energy and food prices retreat. Understanding the magnitude and persistence of

[3] See Galindo and Nuguer (2023a).

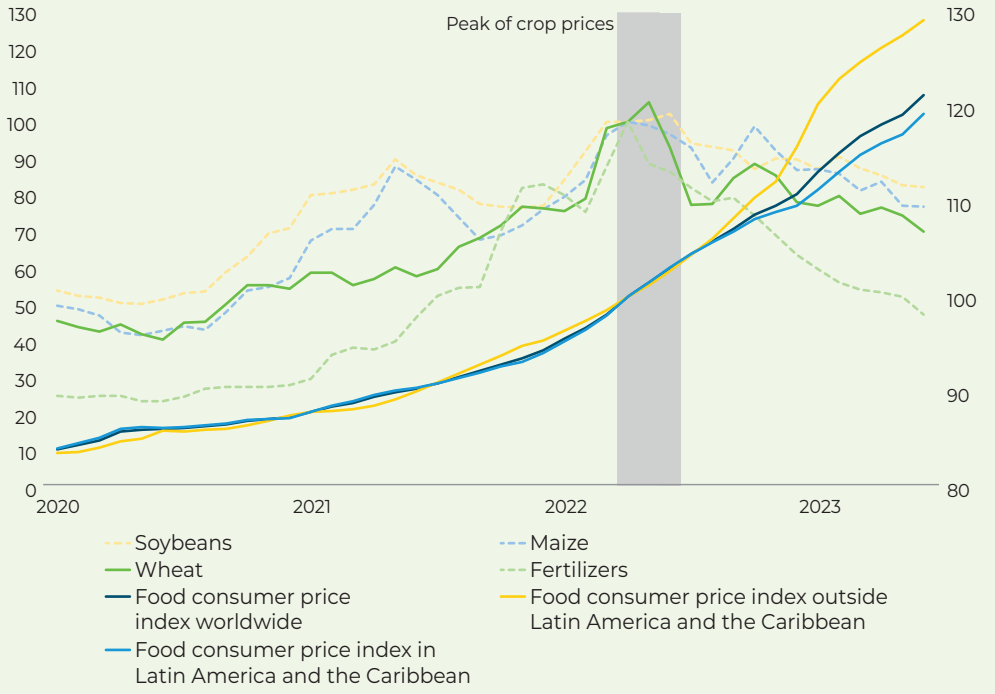
BOX 4.1 • Crops, Fertilizers, and Food Inflation

In recent years, high prices for global agricultural commodities such as maize, wheat, and soybeans drove up food prices for consumers (food CPI) around the world. Poorer households were particularly affected as they spend a higher fraction of their limited budget on food. The decline in agricultural commodity prices in recent months, however, did not provide them necessary relief. Food CPI did decrease, but at a much slower pace, showing a great deal of persistence (Figure 4.1.1).

To understand this apparent asymmetry in the relationship between crop prices and food CPI, Alviarez et al. (forthcoming) show the importance of distinguishing whether the changes in crop prices are due to demand or supply shocks. After the pandemic, global crop prices rose as demand rebounded, while supply remained somewhat constrained. The rise in food CPI was then largely due to a set of demand shocks. In contrast, the recent downturn in global crop prices is associated with supply catching up, rather than a decline in demand. As a result, the recent drop in food CPI is more closely linked to shocks on the supply side.

The econometric analysis in Alviarez et al. (forthcoming) reveals that the pass-through from global crop prices to food CPI in an average country is much greater when the change in crop prices is demand-led, compared to the pass-through induced by supply shocks. Hence, the apparent asymmetry in the relationship between crop prices and food CPI may arise from differences in the underlying causes of the change in crop prices—whether due to supply or demand shocks—and the composition of these shocks.

FIGURE 4.1.1 • Food Inflation, Crop Prices, and Fertilizer Prices



Note: IDB staff calculations with data from the World Bank Commodity Prices "Pink Sheet", and FAOSTAT.

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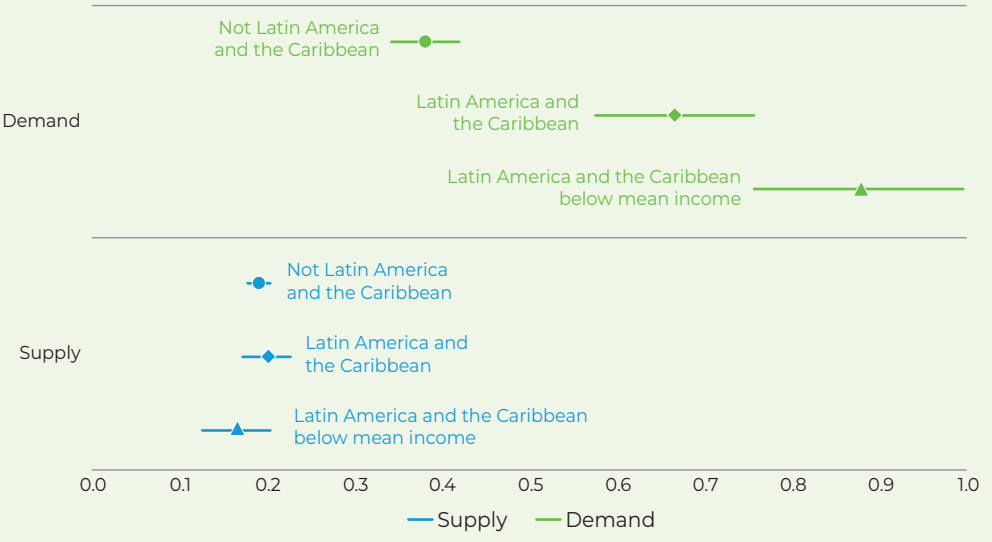
BOX 4.1 • Crops, Fertilizers, and Food Inflation *(continued)*

Figure 4.1.2 illustrates the pass-through of a 1% increase in the price of maize on food CPI, depending on whether the increase in the crop price was due to a demand or supply shock for three groups of countries: non-Latin American and Caribbean countries, Latin American and Caribbean countries, as well as for countries in the region with per-capita incomes below the regional average. For all three country groups, the impact of a change in maize prices is smaller if that change is driven by supply shocks. In contrast, when the changes in crop prices result from demand shocks, the pass-through is significantly greater and varies more widely across countries. Therefore, if the most recent decline in crop prices is largely a result of supply catching up, the decline in food CPI may take longer and be relatively weak.

FIGURE 4.1.2 • Maize Prices and the Food Consumer Price Index: Average Pass-through of a 1% Price Shock



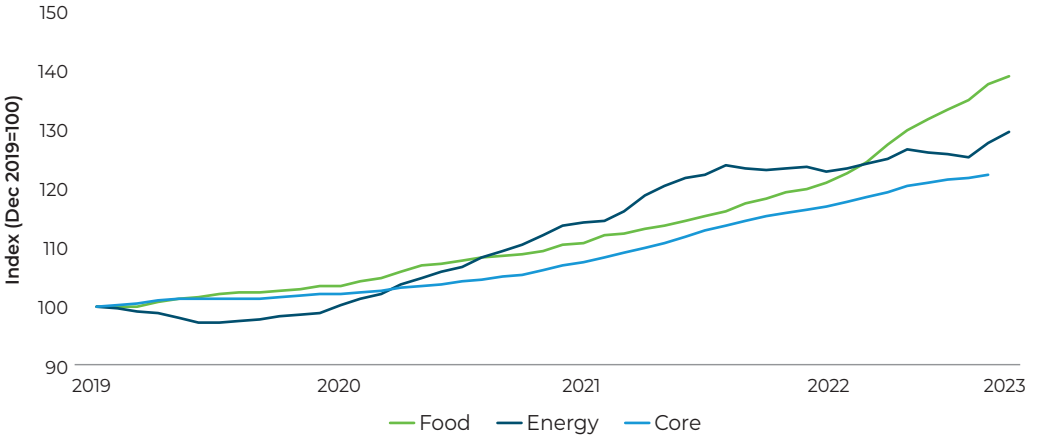
Source: See Alviarez et al. (forthcoming).

second-round effects is crucial, particularly as elevated energy and food prices permeate other sectors of the economy.

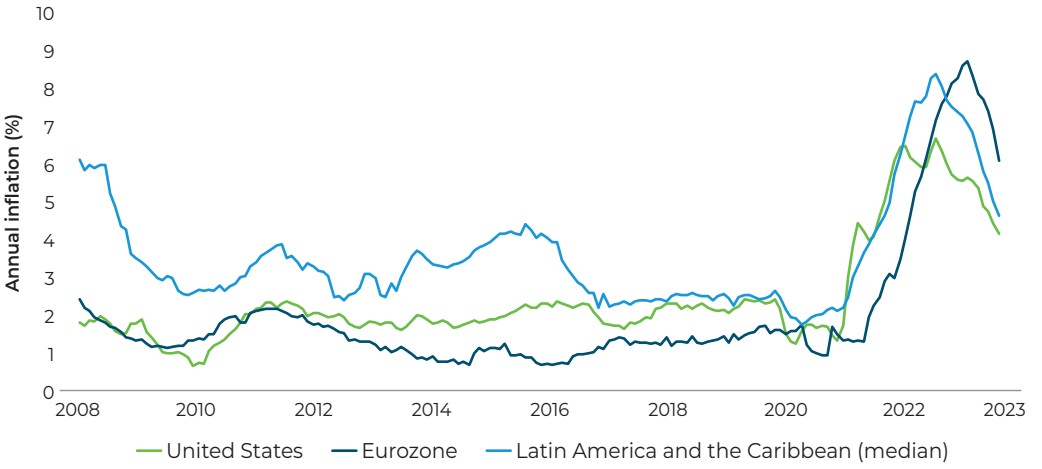
Notably, energy price shocks explain much of the recent variability not only in headline inflation but also in core inflation. In response to an energy price shock, core inflation increases, but less and with more delay than headline inflation (Box 4.2). Median core inflation in Latin America and the Caribbean peaked at 8.4% in September 2022, two months after the zenith of median headline inflation (Figure 4.3, Panel B). This suggests that, as long as commodity prices remain stable, global inflationary pressures will eventually wane, providing space for central banks to continue lowering their rates. Nevertheless, this scenario is uncertain given recent developments in the Middle East and demands close monitoring by central banks.

FIGURE 4.3 • The Components of Headline Inflation

A. Median food and energy inflation in Latin America and the Caribbean



B. Core inflation rates in Latin America and the Caribbean, the United States, and Eurozone



Source: IDB staff calculations based on central bank data and Haver Analytics.
Note: Median food, energy and core inflation for Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Peru. Median annual core inflation (Panel B) for Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Trinidad and Tobago, and Uruguay.

Moreover, even though food and energy prices have stabilized, and inflation rates are approaching their targets, the relative prices of food and energy items are still above their pre-2021 levels despite the decline in commodity prices (see Box 4.2). Relative to December 2019, the price of energy with respect to core inflation is 6% higher. This raises significant redistributive issues, as poorer households spend disproportionately more on those consumption items.[4]

[4] See Cavallo and Powell (2021) and Nuguer and Powell (2020).

BOX 4.2 • Commodities Shock and Core Inflation

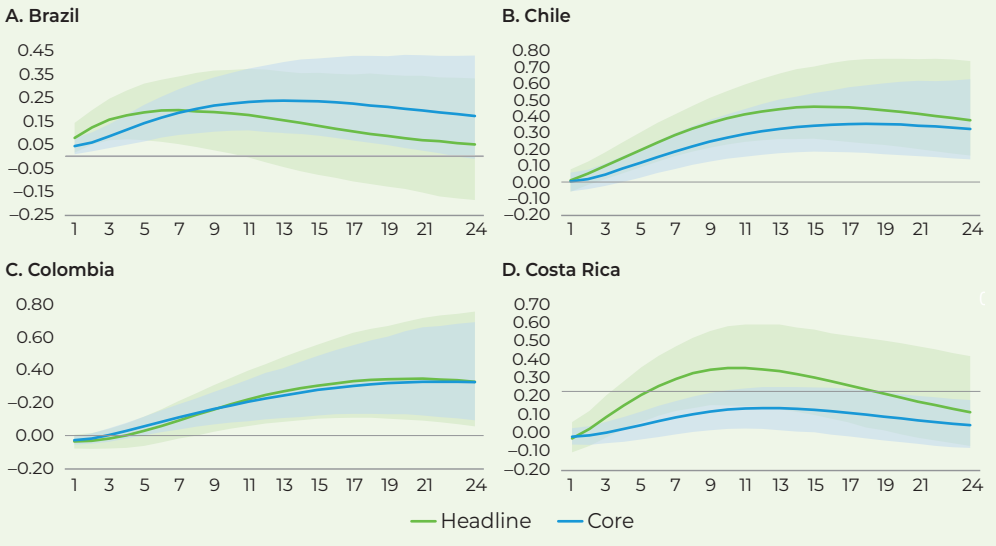
The Bayesian-VAR (structural vector autoregressive) model in Galindo and Nuguer (2023a) is extended to estimate the impact of commodity price shocks on core inflation. This model includes the 12-month accumulated variation of global energy and food commodity prices as well as domestic variables: nominal exchange rate depreciation, headline inflation, inflation expectations for 12 months ahead, and core inflation. The estimate was carried out for countries that have adopted inflation-targeting regimes and have data available for all variables since 2008.

The study reveals that for most countries, core inflation responds positively but less than headline inflation to energy price shocks. In Colombia, the immediate response of underlying prices is almost the same as general prices. Furthermore, for all countries, core inflation's response to an oil price shock is delayed. On average, headline inflation peaks 11 months after energy price shocks, while core inflation reaches its maximum four months later. This finding suggests that the drop in oil prices that started in 2022 can help bring the more persistent part of inflation closer to the target. However, it also highlights the risks that recent developments in the Middle East pose for inflation moving forward.

The energy price shock was a significant driver of core inflation from 2019 to 2023 in all countries, whereas the variation in global food prices played a modest role in most cases. On average, the exogenous variation in oil prices explains 21% of core inflation variation, while agricultural commodity prices explain 8%. Additionally, the impact of food prices on core inflation varies more across countries than energy prices. For countries like Costa Rica and the Dominican Republic that rely more on importing commodities, the global food inflation variation explains, on average, 19% of changes in underlying inflation.

In sum, these findings imply that even the most stable inflation component can be impacted by recent fluctuations in global commodity prices. The magnitude of this impact varies based on a nation's status as a commodity exporter or importer, as well as the adoption of policies to mitigate the transmission of energy shocks to domestic fuel prices. Therefore, the decline in commodity prices on a global scale could help both headline and core inflation converge towards the target.

FIGURE 4.2.1 • Impulse-Response Function of Inflation to Energy Price Shock



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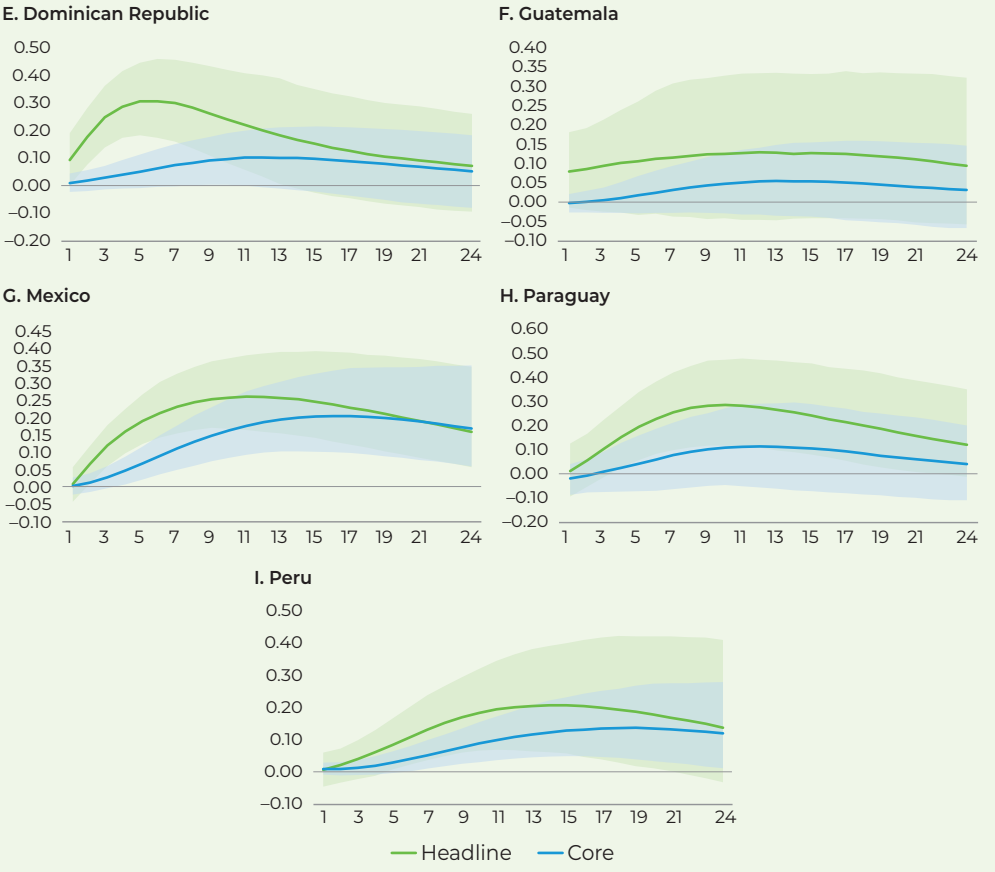
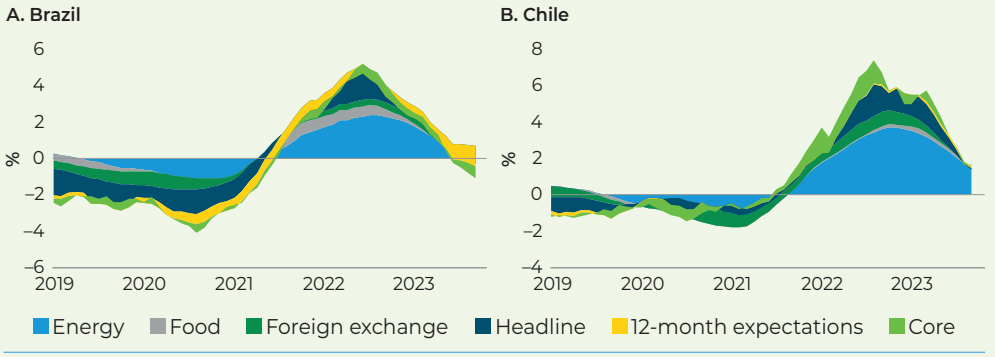
BOX 4.2 • Commodities Shock and Core Inflation *(continued)*

FIGURE 4.2.1 • Impulse-Response Function of Inflation to Energy Price Shock



Source: IDB staff calculations based on Haver Analytics and central bank data.
Note: Response of headline and core inflation to a one standard deviation shock to energy commodity prices. The median values and 95% confidence intervals are reported.

FIGURE 4.2.2 • Historical Decomposition: Core Inflation



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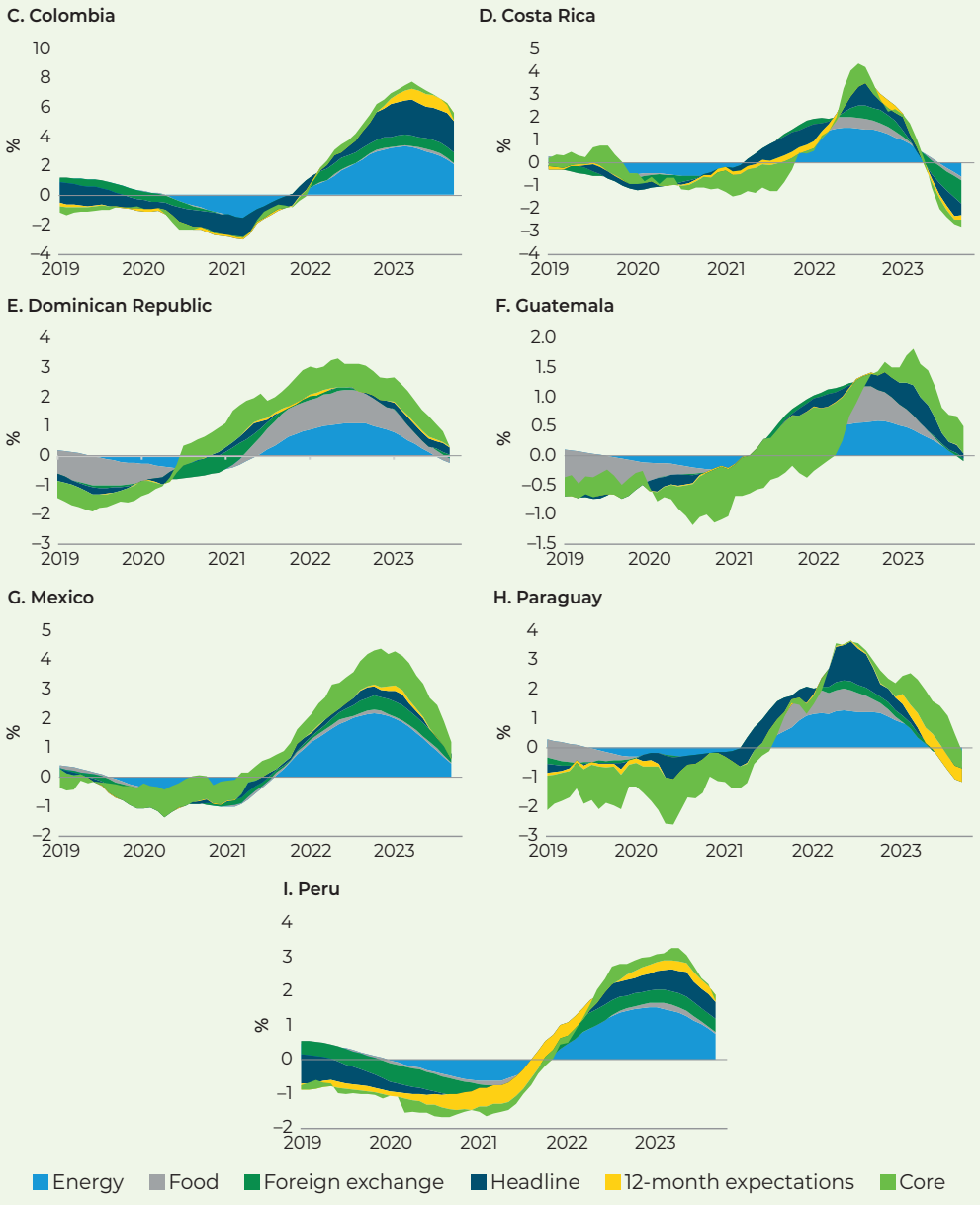
BOX 4.2 • Commodities Shock and Core Inflation *(continued)*

FIGURE 4.2.2 • Historical Decomposition: Core Inflation



Source: IDB staff calculations based on Haver Analytics and central bank data.
Note: The figures depict the decomposition of core inflation for each country explained by the B-VAR model estimated following Galindo and Nuguer (2023a). The different area colors correspond to each of the shocks in the B-VAR model.

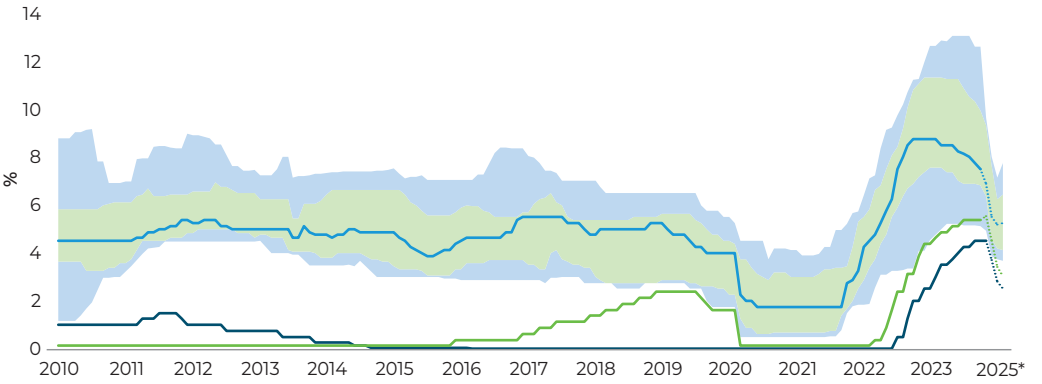
The Monetary Policy Reaction to Tame Inflation

Central banks in Latin America and the Caribbean that adhere to inflation target regimes responded swiftly and decisively to the inflation surge in 2021, effectively maintaining their credibility and curbing inflation.[5] The median policy rate in the region began its ascent in October 2021, reaching 8.8% by October 2022—up 700 basis points from the 1.8% rate in the first half of 2021 (Figure 4.4, Panel A). Brazil's central bank led the charge, initiating its tightening cycle in March 2021 and increasing policy rates significantly from 2% in February 2021 to 13.75% in August 2022—an overall surge of 1175 basis points.

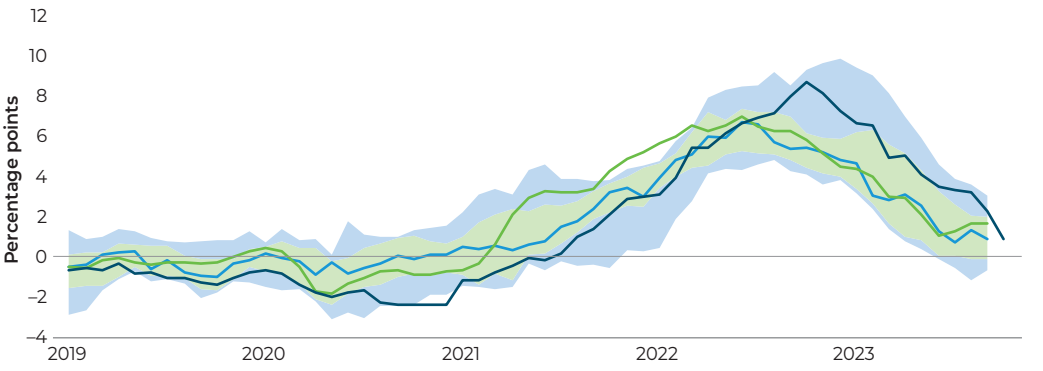
In contrast, the U.S. Federal Reserve Bank and the European Central Bank only commenced their tightening cycles in March 2022 and July 2022, respectively. U.S. policy

FIGURE 4.4 • Policy Rates and Inflation Dynamics across Regions

A. Policy rates in Latin America and the Caribbean, United States, and Eurozone



B. 12-month inflation rates relative to the target for Latin America and the Caribbean, United States, and Eurozone



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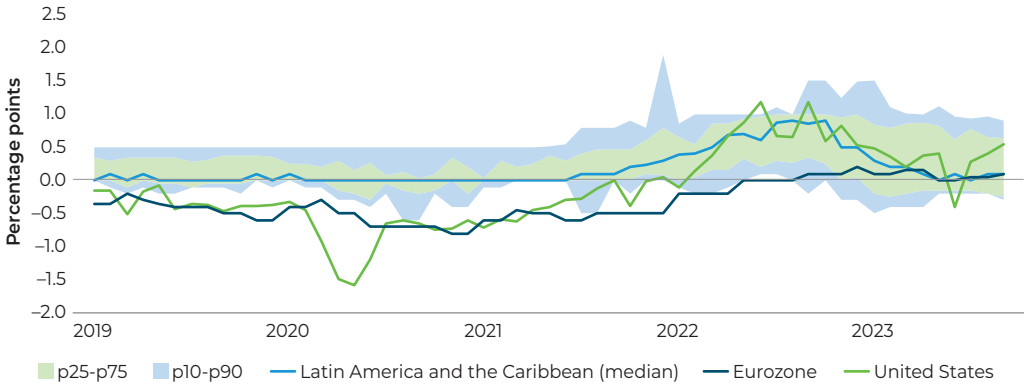
[5] Countries with central banks in Latin America and the Caribbean that adhere to inflation target regimes are Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Guatemala, Jamaica, Mexico, Paraguay, Peru, and Uruguay.

FIGURE 4.4 ● Policy Rates and Inflation Dynamics across Regions *(continued)*

C. 12-month inflation expectations two years ahead relative to the target for Latin America and the Caribbean, United States, and Eurozone



Source: IDB staff calculations based on central bank data and Haver Analytics.
Note: Median policy rate, inflation rate, and expected inflation for Brazil, Chile, Colombia, Mexico, Peru, Costa Rica, Dominican Republic, Guatemala, Jamaica, Paraguay, and Uruguay. * denotes forecast.

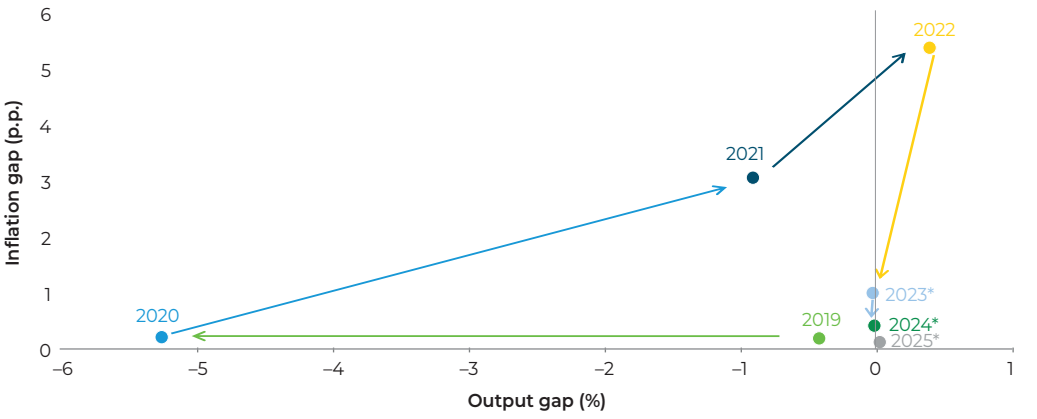
rates increased from the 0%–0.25% range in February 2022 to the 5.25%–5.5% range in July 2023—an overall uptick of approximately 525 basis points. In the Eurozone, rates rose from 0% in June 2022 to 4.5% in September 2023—an overall increase of 450 basis points.

Despite the different policy rate dynamics, inflation patterns were remarkably similar across these regions. Annual inflation rates were around 7pp above target in mid-2022, but by the end of 2023 they were already within the usual 2pp band (Figure 4.4, Panel B). The same is true for inflation expectations. While annual two-year ahead inflation expectation remained either below or within the target in the Eurozone, it reached 1pp above target in the United States and in the median Latin American and Caribbean country (Figure 4.4, Panel C). But by the end of 2023, they had all returned to target, although inflation expectations in the United States increased most recently. Therefore, the policies adopted by the central banks were enough to tame inflation and re-anchor inflation expectations.

When comparing the policy rate, inflation, and inflation expectations of Latin America and the Caribbean to those in the United States and Eurozone, the conclusion is that the median central bank in Latin America and the Caribbean was more responsive to the recent inflation surge. Its success paved the way for central banks in the region to embark on easing cycles, with the median policy rate starting to decrease in March 2023 and standing at 7% as of December 2023.[6] However, despite anchored inflation expectations and current inflation proximity to targets, policy rates in the region are

[6] Costa Rica was the first country to start its easing cycle, in March 2023.

FIGURE 4.5 • Inflation and Output Gaps



Source: IDB staff calculations based on IMF (2023a) and central bank data.
Notes: Inflation gap is the deviation of annual inflation from the target in percentage points; output gap is the deviation of annual output from its potential level. Paraguay is not included in this figure due to lack of output gap data. * denotes projections from IMF (2023a).

anticipated to decline only gradually in the coming years. Market expectations foresee the median policy rate at 5.3% and 4.9% at the end of 2024 and 2025, respectively—levels still above pre-pandemic rates of around 4%. This likely reflects market expectations of a gradual reduction in policy rates in the United States and Eurozone, together with concerns about the fiscal situation in the face of higher debt levels. Central banks in the region are expected to exercise caution to prevent significant reductions in interest rate differentials with respect to more advanced economies, which could trigger capital outflows, exchange rate depreciations, and inflationary pressures.

While market expectations foresee elevated policy rates and a return of inflation to target in the following years, output gaps in the region are expected to hover around zero (Figure 4.5). At first, the remarkable closing of output gaps since 2020 was associated with larger deviations of inflation from targets. But since 2022, the output gap has neared zero while inflation deviations shrank significantly. This underscores how central banks have effectively facilitated a soft landing—increasing policy rates to control inflation without inducing a recession (negative output gaps).

Central banks have also relied on other tools to achieve their monetary and financial stability goals. That was particularly true during COVID-19, when central banks significantly expanded their balance sheets with an array of policies designed to inject liquidity into their economies. Such policies included reductions in reserve requirements and direct subsidized lending to the private sector through monetary financing.[7] Most central banks started to offset that expansion in 2022 and continued to do so in 2023.[8]

[7] See Cavallo and Powell (2021), and Neumeyer and Powell (2021).
[8] See Galindo and Nuguer (2023b).

TABLE 4.1 • Expansion of Central Bank Balance Sheets since December 2019

	Assets			Liabilities				
	Net credit to foreigners (net of foreign exchange valuation)	Net credit to banks	Net credit to government	Monetary base	Sterilization liabilities	Other net liabilities	Total assets = liabilities	Last observation
Country	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Chile	0.3	10.4	0.3	1.1	8.1	1.8	11.0	October 2023
Bolivia*	–8.3	4.7	14.5	7.6	0.0	3.4	11.0	April 2023
Jamaica	8.6	–0.2	0.1	2.3	4.6	1.6	8.5	October 2023
Peru	5.1	0.3	–1.5	0.3	0.4	3.3	3.9	October 2023
Costa Rica	2.0	1.4	0.2	0.3	–0.8	4.2	3.7	October 2023
Paraguay	4.4	–0.5	–0.8	–0.3	0.3	3.1	3.1	October 2023
Colombia	1.3	–0.1	0.5	–1.2	0.1	2.8	1.7	October 2023
Mexico	1.3	–0.1	0.6	1.8	–2.0	2.1	1.8	October 2023
Brazil	–1.5	–1.0	2.4	–0.4	0.3	0.1	–0.1	September 2023
Uruguay	3.5	–0.1	–5.7	–2.1	1.1	–1.2	–2.2	October 2023

Source: IDB staff calculations based on IMF and central banks' data.
Note: * corresponds to data from the International Financial Statistics (IFS) of the IMF.

Table 4.1 ranks countries according to the expansion of their balance sheets with respect to December 2019 as a share of GDP. In most cases, central bank balance sheets expanded only mildly with respect to December 2019, indicating that most central banks moved towards renormalization without posing significant risks to their financial systems.[9] In the case of Peru, for example, total assets/liabilities of its central bank as a share of GDP has increased 3.9 pp of GDP since the end of 2019. While its central bank adopted contractionary policies that helped to renormalize the balance sheet, the increase in nominal GDP between the last quarters of 2019 and 2023, mostly due to inflation, also played a significant role.

For the cases of Chile, Bolivia, and Jamaica the expansion of the balance sheet has been more persistent and pronounced. In the case of Chile, the balance sheet still reflects

[9] See Chapter 5 on Financial Stability.

the policies implemented during COVID-19; its central bank provided subsidized credit to banks to assist the productive sector, financed mostly with the issuance of sterilization liabilities. In Bolivia, the central bank has provided credit to the government financed either through monetary expansion or reduction of its foreign reserves. In Jamaica, the increase in the balance sheet simply reflects the acquisition of foreign reserves.

Higher Rates for Longer?

Central banks across Latin America and the Caribbean are confronted with a pivotal policy dilemma centered on the pace and extent of their easing cycles, specifically regarding policy rate reductions. While the majority of central banks in the region have begun to reduce policy rates, both markets and policymakers anticipate a gradual decline in rates, as illustrated in Figure 4.4, Panel A. This scenario underscores a delicate equilibrium.

On a positive note, several factors provide central banks with the latitude to advocate for more pronounced policy rate reductions. Notably, inflation rates are approaching their targets, inflation expectations have been successfully re-anchored, fiscal consolidation measures have been enacted, and commodity prices have retreated. Collectively, these factors create a favorable environment for central banks to drive policy rates even lower. Moreover, current interest rates impose significant costs on governments and firms to service their debt, making further rate cuts a potential source of relief.

Conversely, concerns arise about potential adverse consequences associated with substantial rate cuts. A significant lowering of rates could precipitate exchange rate devaluation due to capital outflows, leading to a resurgence of inflation. This concern is accentuated by the expectation that the Federal Funds Rate may remain relatively high in 2024; that could induce capital outflows when existing interest rate differentials are reduced as interest rates are lowered in the region. However, that Latin American and Caribbean currencies appreciated significantly while interest rate differentials were high may indicate the opposite once central banks in the region reduce interest rates further.[10] Additionally, worries persist about the fiscal capacity of governments in the region to manage higher debt levels, compounding the adverse consequences of capital outflows. In this context, further fiscal consolidation is a potential solution that provides central banks with greater flexibility to implement deeper rate cuts.

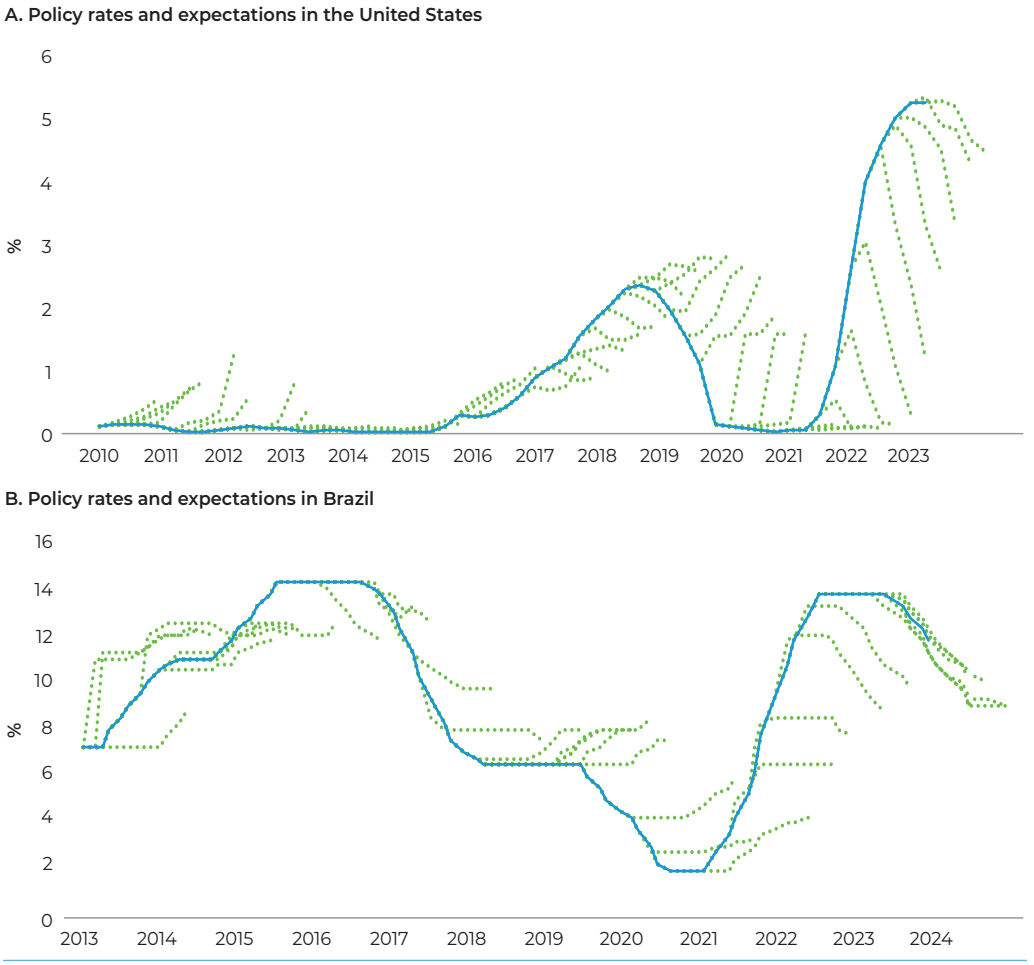
Examining the historical series of policy rates in the United States, coupled with expectations, reveals a tendency for markets to anticipate higher rates in the future, which may not materialize, especially preceding the commencement of easing cycles (Figure 4.6, Panel A). In the monetary tightening cycle that began in 2016, for exam-

[10] As of December 2023, the average appreciation of Latin American and Caribbean currencies among inflation targeters exceeded 12%, with respect to their exchange rate in December 2021, with some currencies appreciating as much as 24%.

ple, markets initially expected the cycle to end sooner than it did. However, when the tightening cycle concluded, markets continued projecting higher rates into the future. In the second quarter of 2019, right before the easing cycle began, markets anticipated rates to be around 2.4% and 2.6% in the third and fourth quarters of that year, respectively; instead, rates were 2% and 1.5%. The difference between the expected and realized rates in this short interval was substantial, suggesting that an inflationary monetary policy shock took place. Still, it is worth noting that inflation remained low.

Brazil followed a similar pattern over the last decade (Figure 4.6, Panel B). During the tightening cycles in both 2014 and 2021, markets expected the tightening to end sooner than it did. And in July 2019, right before another easing cycle began, markets expected

FIGURE 4.6 • Expected Versus Realized Policy Rates in the United States and Brazil



Source: IDB staff calculations based on central bank data.
Note: Solid lines correspond to realized 3-month U.S. T-Bill and Brazilian policy rate. Dotted lines represent professional forecasters expectations for 3-month U.S. T-Bill and policy rate in Brazil.

interest rates to remain at 6.5% until the end of that year. In contrast, rates reached 4.5% by December 2019. Again, that suggests an inflationary monetary policy shock, which did not translate into higher inflation.

These patterns suggest that central banks may surprise markets with more substantial policy cuts without necessarily causing an increase in inflation. However, interest rates are currently much higher than in the past, and interest rate reductions may need to be larger, perhaps putting more pressure on inflation. Finally, while fiscal authorities advocate for lower rates to reduce financing costs, preserving central bank independence—a crucial achievement in Latin America and the Caribbean—is paramount. Central banks have demonstrated their ability to control inflation while supporting governments during crises, such as the COVID-19 pandemic. The recent moderation in inflation and the re-anchoring of inflation expectations underscore the importance of granting central banks the autonomy to independently conduct their monetary policies.

A Cautious Approach to Lowering Interest Rates

Even though Central Banks in the region may end up surprising markets with the rate at which they lower interest rates, so far they have been cautious in their approach. Important reasons may lie behind this strategy.

A clear pattern that emerged when inflation targeters in the region swiftly increased interest rates in response to rising inflation is that their currencies appreciated substantially in the subsequent quarters. Table 4.2 depicts exchange rate appreciation for the different country groups from peak to trough, starting in December 2021. It shows that average appreciation for inflation targeters was nearly 13%, and as high as 24% for some countries, while it was lower for the intermediate group.This appreciation was helpful to fight inflation.

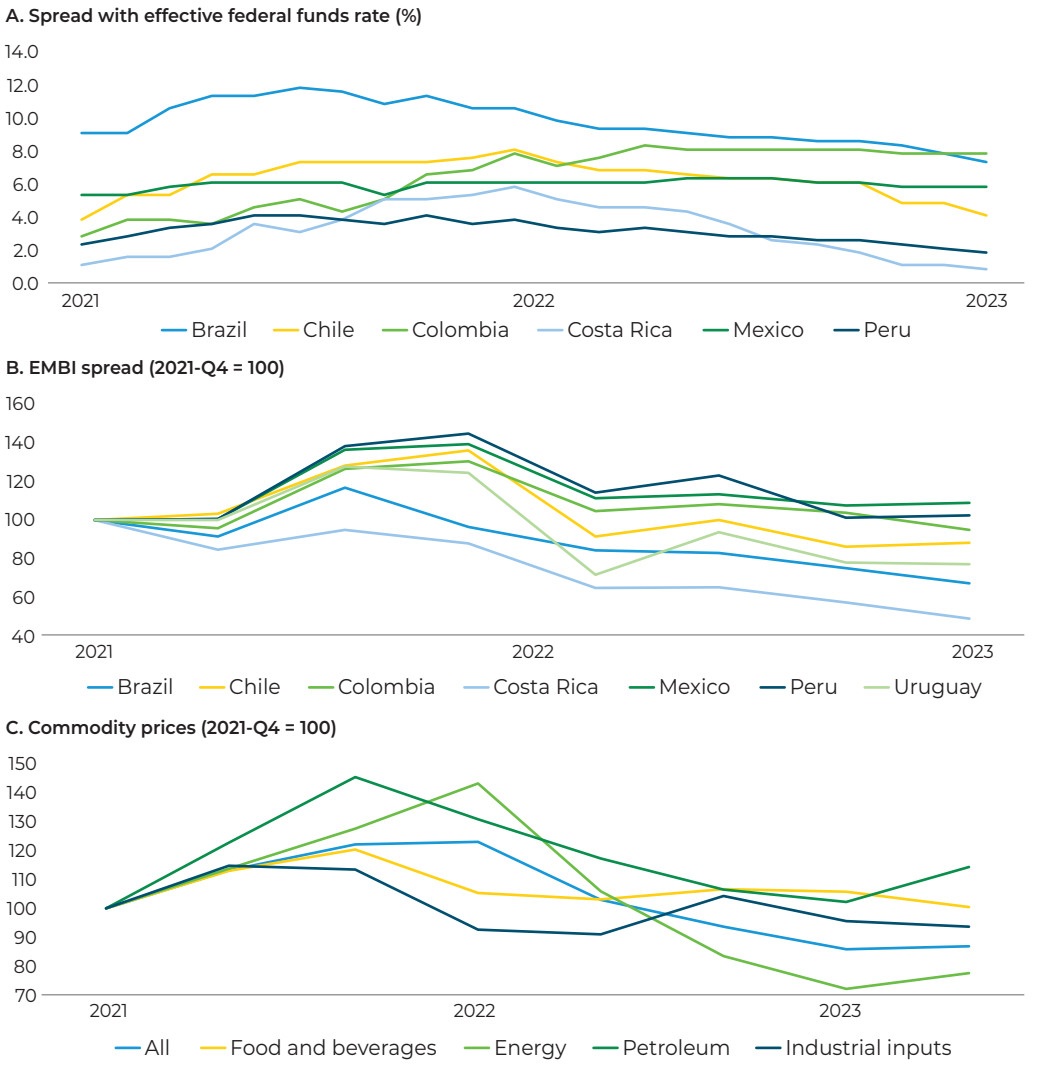
Exchange rates appreciated in a context of substantial central bank policy rate differentials with the United States (see Figure 4.7, Panel A). These differentials have remained large despite interest rate increases in the United States. The source of this apprecia-

TABLE 4.2 ● Exchange Rate Appreciation in Latin America and the Caribbean (December 2021 = 100)

	Peak	Average Trough	Appreciation
Inflation targeters	105.3	92.7	12.5
Intermediate	154.2	153.7	0.5
Latin America and the Caribbean	112.9	108.2	4.7

Source: IDB staff calculations based on IMF (2023a), IFS, and national sources.
Note: Excludes Guyana and Venezuela in all cases. Inflation targeters include Brazil, Chile, Colombia, Mexico, Peru, Costa Rica, Dominican Republic, Guatemala, Jamaica, Paraguay, and Uruguay. Intermediate group is composed of Argentina, Bolivia, Haiti, Honduras, Nicaragua, Suriname, and Trinidad and Tobago.

FIGURE 4.7 • Central Bank Policy Rate Spreads, EMBI Spreads, and Commodity Prices



Source: IDB staff calculations using data from Bloomberg, IMF IFS, and national sources.

tion seems to relate more to financial flows than to real flows. As a matter of fact, central bank policy rate spreads remained high, EMBI spreads fell (Figure 4.7, Panel B), while commodity prices decreased (Figure 4.7, Panel C) throughout this period.

Moreover, as indicated in Table 4.3, the correlation between the exchange rate and the financial account was relevant during the appreciation period for several of the seven inflation targeters analyzed here.[11] In many cases, portfolio flows seem to have been a key source of this correlation.

[11] Appreciation rates exceeded 5% in the countries selected for this exercise.

TABLE 4.3 • Financial Account Correlation with Exchange Rates in Peak-to-Trough Period

Country	Financial account correlation	Top three indicators (when available)		
		First	Second	Third
Brazil	–0.53***	Portfolio investment	Reserve assets	
Chile	–0.74**	Portfolio investment		
Colombia	–0.59	Portfolio investment	Other investment	Reserve assets
Costa Rica	0.27	Reserve assets		
Mexico	–0.16	Financial derivatives	Other investment	Reserve assets
Peru	–0.73***	FDI		
Uruguay	0.16	FDI		

Source: IDB staff calculations based on IMF (2023a), IFS, and national sources.
Note: Correlations are calculated using available periods at the time of estimation. *** 1%, ** 5% significance.

These results offer some guidance now that central banks are starting to lower policy rates as inflation is tamed. If the United States takes time to lower policy rates, smaller interest rate differentials stemming from reduced policy rates in Latin America and the Caribbean may lead to financial outflows and exchange rate depreciation. In turn, this may be at odds with bringing down inflation to desired inflation target bands, particularly if the exchange rate pass-through is sizeable. This factor may lie behind recent central bank caution in lowering policy rates and the adoption of a gradual approach to interest rate reduction.

CHAPTER 5

Financial Markets

Financial markets have been under stress since the onset of the COVID-19 pandemic. Initially, the effects of the pandemic itself were to blame; afterward, the inflationary spike and the required policy response were the culprits. In the context of higher interest rates in developed countries, financial flows to Latin America and the Caribbean decelerated in 2023. Lower current account deficits and trade deficits throughout the region accompanied this trend. Similarly, credit in domestic markets slowed down, and the composition of assets of financial institutions remains biased against private credit risks.

This chapter discusses the major challenges and potential risks Latin America and the Caribbean faces in international and domestic financial markets. Despite important financial shocks in the United States, financial markets in Latin America and the Caribbean have proven to be resilient. However, high interest rates must be constantly monitored in emerging markets, since they can be accompanied by substantial capital flow volatility. Moreover, Latin America and the Caribbean remains vulnerable to sudden stops, given external and fiscal gaps in need of correction.

Trends in External Accounts

Latin America and the Caribbean faced somewhat tighter financial conditions in the context of higher international interest rates and a soft landing in developed economies. Against this background, the median country's current account deficit improved from 2.3% of GDP in 2021 to 1.6% in third quarter 2023 (Figure 5.1).[1] Current account deficits shrunk in most countries of the region. Be it at the 25th percentile or the 75th percentile of the distribution, the correction trend in the current account deficit is clear and contrasts with the current account deficit expansion that prevailed in 2022.[2] However, some exceptions remain: tourism-dependent economies exhibited larger current account deficits in 2023.

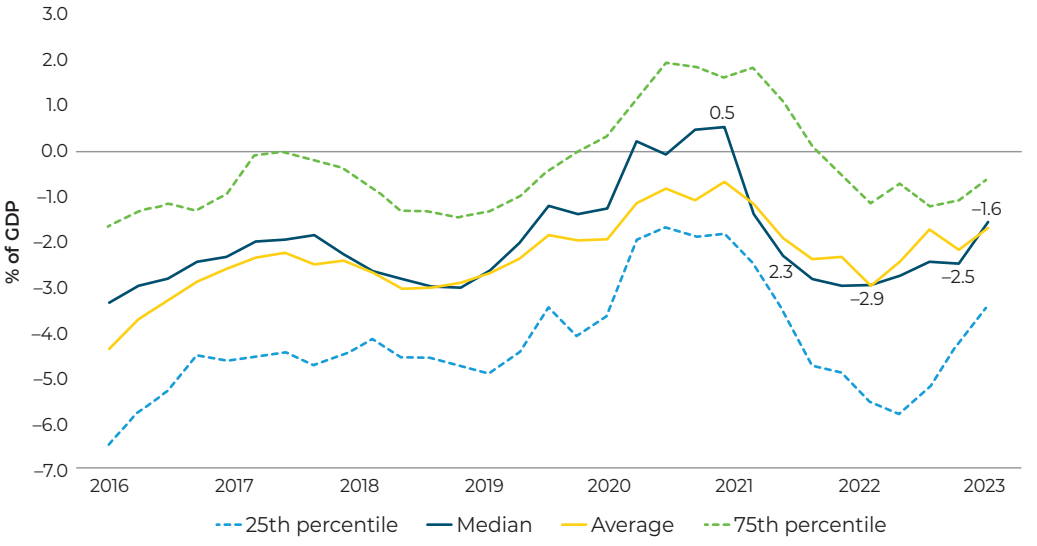
Narrowing current account deficits in the median country came hand in hand with improving trade balances: –2.4% of GDP for the median country in third quarter 2023

[1] While the region has exhibited a current account recovery, it is expected to end 2023 with a median current account deficit exceeding 2% of GDP (IMF, 2023a).

[2] Guyana is excluded from all the analyses in this section due to its recent oil discoveries and the resulting structural transformation.

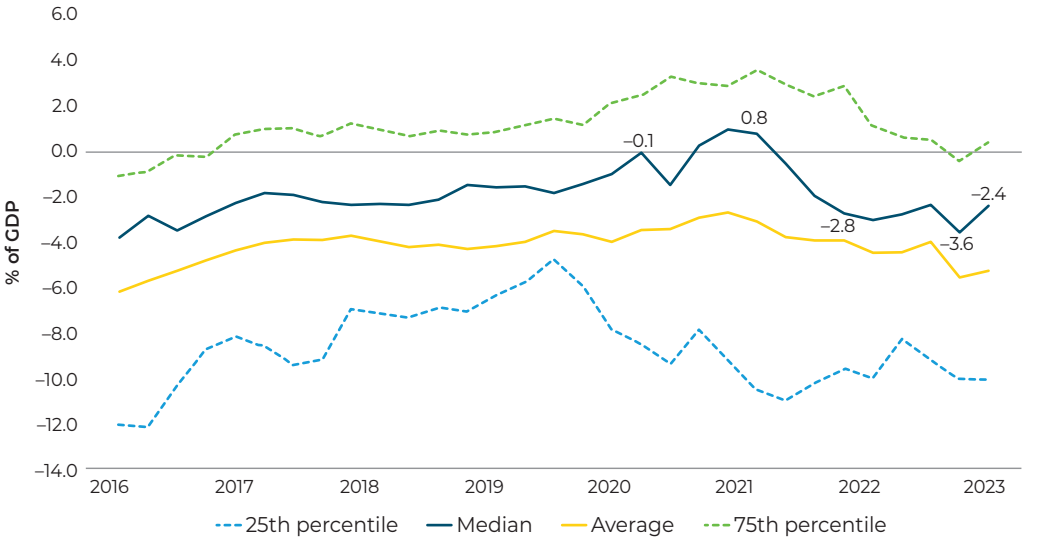
compared to –3.1% of GDP in third quarter 2022 (Figure 5.2). However, there is more heterogeneity in the trade balance distribution. For instance, at the 75th percentile, the trade balance worsened. Similarly, in tourism-dependent countries, as well as those heavily influenced by remittances, trade balances also deteriorated relative to 2022.

FIGURE 5.1 ● Current Account Balance



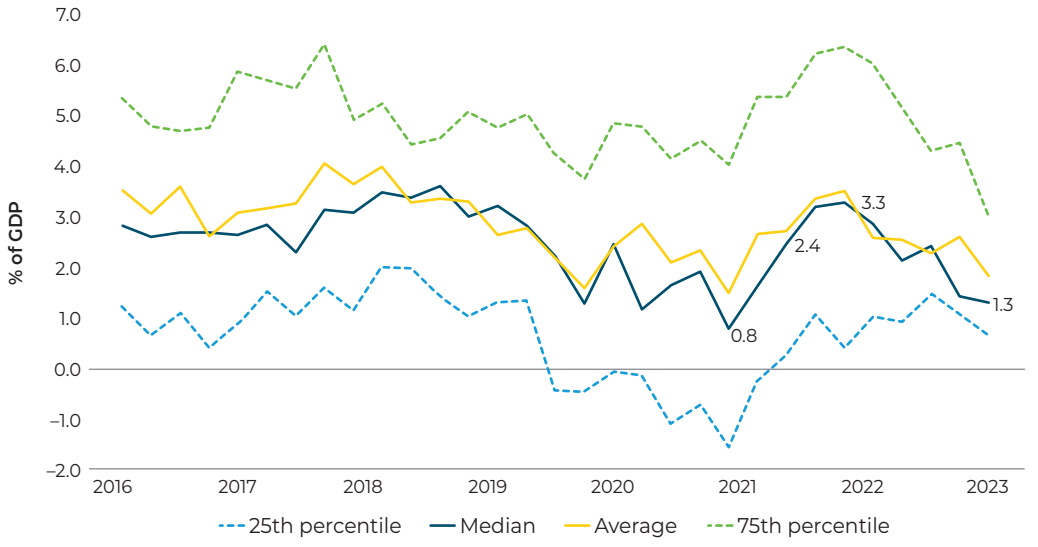
Source: IDB staff calculations based on data from IMF Balance of Payments Statistics and national sources.
Note: 2023 includes latest available observation.

FIGURE 5.2 ● Trade Balance



Source: IDB staff calculations based on data from IMF Balance of Payments Statistics and national sources.
Note: 2023 includes latest available observation.

FIGURE 5.3 • Financial Account Balance



Source: IDB staff calculations based on data from IMF Balance of Payments Statistics and national sources.
Note: 2023 includes latest available observation.

The financial account of the median country in the region contracted from 3.3% of GDP (third quarter 2022) to 1.3% of GDP (third quarter 2023), reflecting tighter financial conditions (Figure 5.3). However, international financing remained available for the region. In 2024, current account deficits are expected to narrow for the median country, as is the need for external financing (Figure 5.4, Panel B). Nevertheless, ensuring access to external financing will require continued focus on fiscal consolidation as a key policy objective (see Chapter 3).

The region's principal external financing source for 2024 is foreign direct investment (FDI), which is expected to contribute 2.2% of GDP to current account deficit financing. FDI is generally more stable than portfolio or other types of investment, particularly during periods of global economic uncertainty. This stability was helpful for the region in 2023. However, FDI is not immune to fluctuations, especially in economies closely tied to commodity sectors, as FDI tends to follow commodity price trends. This is something to monitor in 2024, as commodity prices have been volatile recently.

The additional source of financing that stands out is "other investment" flows, which include multilateral debt. Given the region's expected economic downturn in 2024 and the typical countercyclical nature of this financing, multilateral debt is likely to offset a portion of the expected decrease in private capital inflows (see "other investment" in Figure 5.4, Panel B, which illustrates changes in the financing of the current account deficit). On the other hand, portfolio investment is expected to be relevant in only a few countries.

FIGURE 5.4 • External Financing (2024)

Source: IDB staff calculations based on data from IMF (2023a).
Note: Barbados, Trinidad and Tobago, and Venezuela are excluded due to lack of data and Guyana due to the structural break in the series.

Risk of a Sudden Stop

Although current account and trade imbalances have declined, and capital inflows have been slowing down, high global rates and risk premia could lead to more volatility than usual in capital flows and, therefore, risks remain for financing the current account. Although the median current account deficit for the first three quarters of 2023 was about 2.1% of GDP, some countries in the region are running current account deficits exceeding 11% of GDP, pointing to several cases where a sudden stop in financing could be an important issue.

It is not uncommon for emerging markets to go through episodes of financial stress following periods of high inflation and global interest rates. Given this tendency, how likely is a sudden stop in the region today? Table 5.1 shows the main drivers of the probability of a sudden stop, as identified by the literature; current account deficits, overall fiscal balances, and domestic liability dollarization increase the likelihood of a sudden stop while international reserves decrease that likelihood.[3]

The state of these variables is compared to 2019—right before the COVID crisis in 2020—and 2007—the eve of the Global Financial Crisis—two periods during which the region successfully avoided a sudden stop.

Although Latin America and the Caribbean made important strides in closing primary fiscal gaps (see Chapter 3), the increase in the interest bill in 2023 led to significant

TABLE 5.1 ● Leading Macroeconomic Indicators of a Sudden Stop in Latin America and the Caribbean

	Fiscal balance			Current account balance			Liability dollarization*			Reserves		
% of GDP	2007	2019	2023(p)	2007	2019	2023(p)	2007	2019	2023(p)	2007	2019	2023(p)
IT pioneers	–0.8	–2.7	–3.5	0.0	–3.5	–1.9	6.1	9.2	7.9	10.1	16.5	15.6
More recent IT	0.0	–2.5	–3.2	–5.0	–0.9	–2.0	15.7	18.4	17.9	13.9	19.5	19.7
Intermediate	1.3	–3.7	–1.9	2.1	–1.1	–0.6	22.6	21.5	21.1	16.0	16.3	22.3
Fixers	–0.2	–3.1	–3.1	–7.2	–2.6	–4.5	37.1	43.1	49.8	6.9	11.7	11.0
Regional median	0.1	–2.9	–3.1	0.9	–1.3	–2.7	19.1	19.0	17.9	12.9	16.3	15.6

Source: IDB staff calculations based on IMF (2023a), IFS, and national sources.
Note: All reported values are medians. Excludes Guyana, Barbados, and Venezuela in all cases. IT (inflation targeting) pioneers include Brazil, Chile, Colombia, Mexico, and Peru. More recent IT comprises Costa Rica, Dominican Republic, Guatemala, Jamaica, Paraguay, and Uruguay. Intermediate group is composed of Argentina, Bolivia, Haiti, Honduras, Nicaragua, Suriname, and Trinidad and Tobago. The Fixers group is The Bahamas, Belize, Ecuador, El Salvador, and Panama. (*) Liability dollarization data are available for Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, and Uruguay. (p) Latest available observation.

[3] See Calvo, Izquierdo, and Mejía (2008), and Calvo, Izquierdo, and Loo-Kung (2012).

overall fiscal deficits, which are now slightly bigger than in 2019 but substantially larger than in 2007; inflation targeting (IT) pioneers showed larger imbalances than other groups. Similarly, the region has been narrowing its current account deficit position. Still, current account deficits remain larger than in both other comparison periods; in this area, IT pioneers have done a better job closing this gap than other groups. Almost all groups in the region have lowered their domestic liability dollarization levels, reducing the regional median for 2023. On the other hand, international reserves have fallen for the median country in 2023 relative to 2019 but remain larger than in 2007.

How should these results be read? On average, and except for domestic liability dollarization, all determinants of the likelihood of a sudden stop have deteriorated; thus, caution and monitoring of risks are advisable. Moreover, observed levels of international reserves are below optimal levels to insure against sudden stops. Thus, countries in the region must continue to close fiscal and external gaps, while accumulating reserves.

Credit and the Domestic Financial Sector

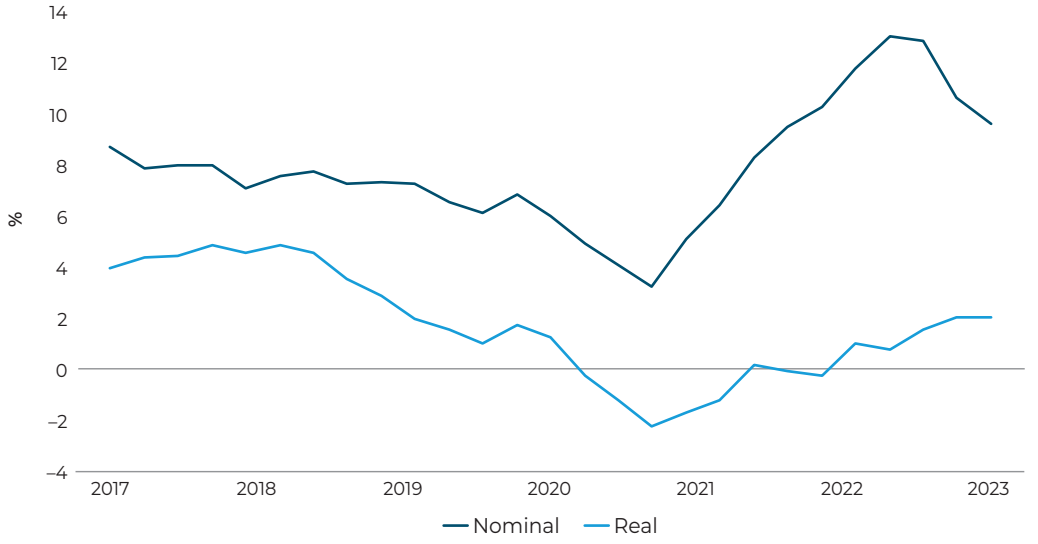
During the COVID-19 pandemic, credit from banks in Latin America and the Caribbean decelerated. Lending contracted markedly during this period as unknown risks grew for financial institutions and borrowers alike.[4] However, as the pandemic subsided, the credit market demonstrated a notable resurgence (Figure 5.5). In 2022, nominal credit growth in the region peaked at an impressive 13%. In real terms, credit shifted from contraction to a 1% growth rate by the end of 2022. This upturn signaled a promising recovery.

However, recent economic shifts, particularly interest rate increases to combat rising inflation, impacted the recovery. These actions, as expected, led to a deceleration in credit growth. The once-peaked growth rate of 13% has slowed to approximately 10% by the third quarter of 2023. This deceleration of credit expansion reflects the increased cost of borrowing, which has slowed down the momentum gained in the post-pandemic phase and contributed to the rise in inflation. The link between shifts in monetary policy rates and credit demand and supply conditions is strong in several countries in the region (Box 5.1). Credit will regain momentum as inflationary pressure eases and monetary policy rates are relaxed. However, given the lags with which monetary policy affects the credit market, a recovery is unlikely in 2024, which may be one of the factors explaining the meager outlook for the year (Chapter 1).

Despite the slower dynamics in credit growth, the financial health of banking systems in Latin America and the Caribbean appears robust when assessed using traditional

[4] See Cavallo et al. (2022), Galindo and Powell (forthcoming), Galindo and Nuguer (2023a), and Powell and Rojas-Suárez (2020) for discussions on the dynamics of credit markets during COVID-19.

FIGURE 5.5 • Credit Growth



Source: IDB staff calculations based on IMF's International Financial Statistics.
Note: The sample includes Argentina, The Bahamas, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Suriname, Trinidad and Tobago, and Uruguay. The figure reports the average values of economy-wide aggregates across the countries included in the sample.

BOX 5.1 • Monetary Policy and Credit Conditions

One of the channels through which monetary policy affects inflation is the credit channel. As defined by Bernanke and Gertler (1995), this channel refers to how changes in monetary policy, through adjustments in monetary policy interest rates and reserve requirements, impact inflation via credit mechanisms. This channel includes two primary sub-channels: the cost of capital channel, associated with credit demand, and the broad credit channel, associated with credit supply.

The demand channel refers to the fact that monetary policy affects the level of market interest rates—the cost of capital—which determines investment and consumption decisions. This, therefore, modifies credit demand choices. The supply credit channel is more complex since it works in two different ways. One is the bank lending channel, which operates through the balance sheets of financial intermediaries, such as banks and other lenders. When monetary policy affects policy interest rates, it alters the external finance premium for lenders, thereby influencing their ability to extend credit. This impact on the supply of credit directly results from monetary policy changes.

The second, denominated the balance sheet channel, works through the impact of changes in monetary policy interest rates on the value of assets held by households and firms, which can be used as loan collateral (such as housing for mortgage loans and other assets for corporate loans) or on their overall net worth. Variations in monetary policy can alter these values, affecting the ability of borrowers (both firms and households) to access credit. In this case, the perceived risk and the borrowers' net worth influence lending conditions and credit availability.

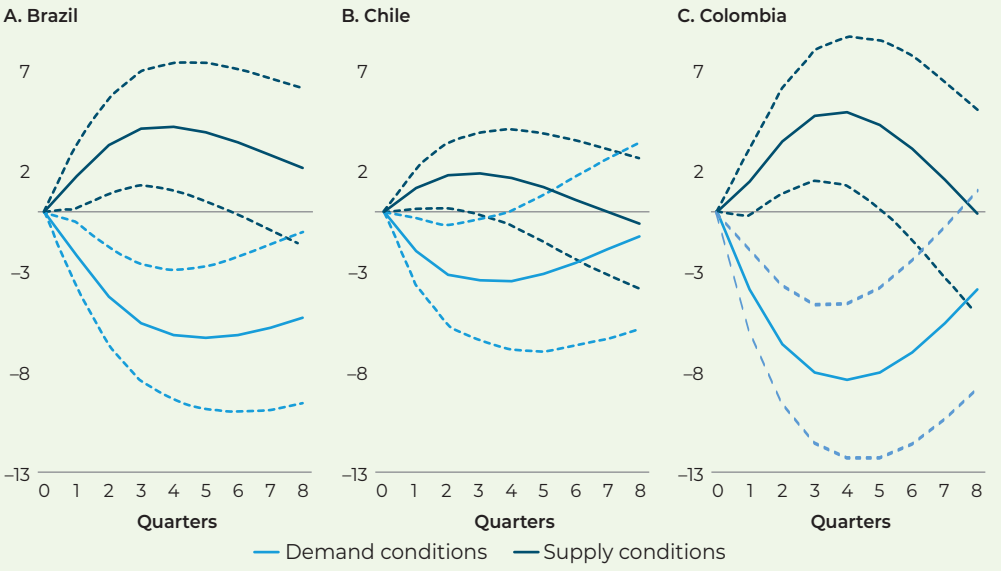
Following previous work for Europe and the United States by Ciccarelli, Maddaloni, and Peydró (2015), Bebczuk, Delgado, and Galindo (forthcoming) estimate Bayesian VAR models to assess how

(continued on next page)

BOX 5.1 • Monetary Policy and Credit Conditions *(continued)*

monetary policy changes affect credit markets in some Latin American and Caribbean countries. They use Central Bank Surveys of credit market conditions to explore how changes in monetary policy interest rates affect the supply and demand for credit in Brazil, Chile, and Colombia. They find that a 1 percentage point increase in monetary policy rates decreases the demand for credit (blue lines of Figure 5.1.1), simultaneously increasing the stringency of credit-granting decisions by financial intermediaries (green lines of Figure 5.1.1). The combination of these factors contributes to reducing credit expansions and allows the credit channel of monetary policy to operate.

FIGURE 5.1.1 • Shocks to Monetary Policy Rates and Credit Market Conditions

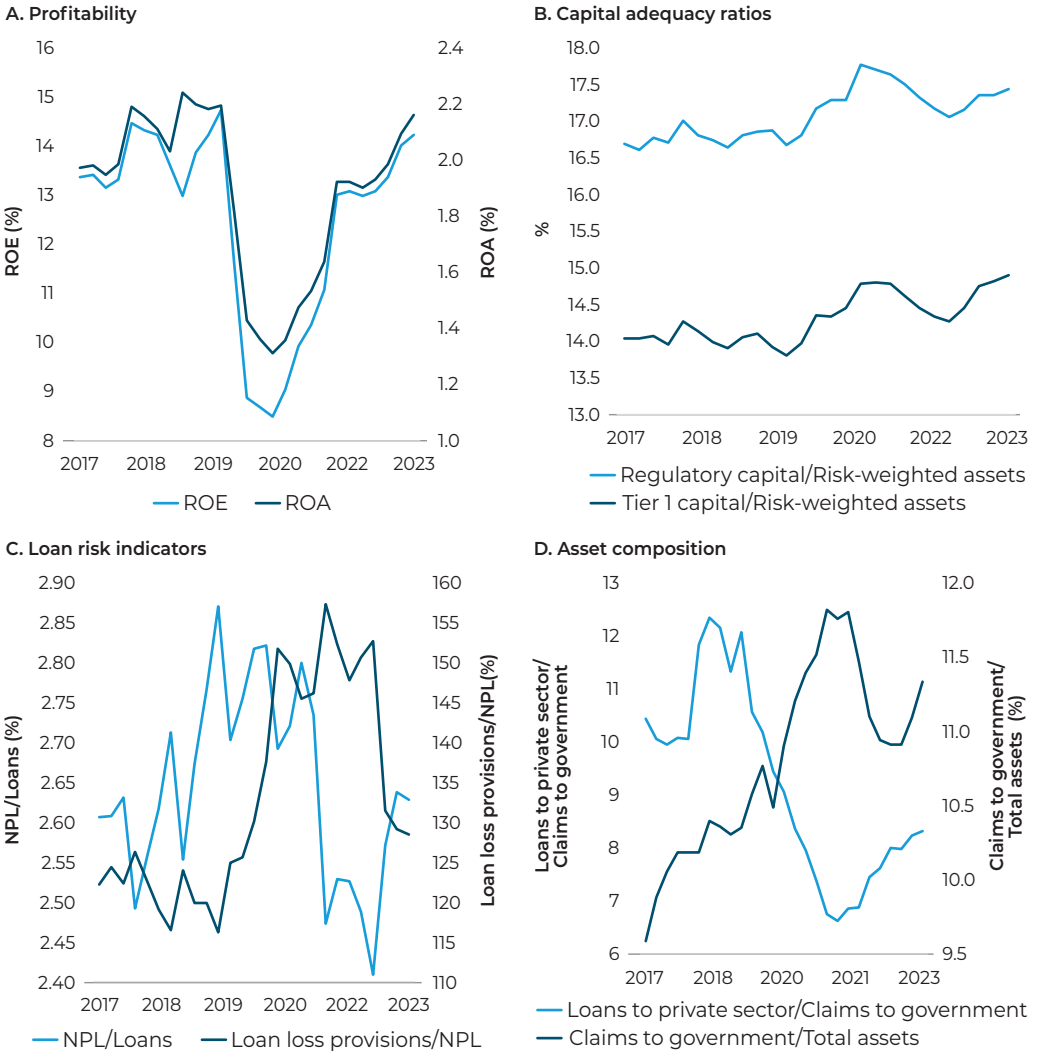


Source: Bebczuk, Delgado, and Galindo (forthcoming).
Note: The figures plot the response of credit demand and supply conditions to a 1 percentage point shock to the policy interest rate. The underlying model is a VAR that includes the log of GDP, the log of consumer prices, the measures of demand and supply conditions, and the monetary policy reference rate, and it is estimated with Bayesian methods. The demand and supply conditions are extracted from surveys conducted by central banks to assess the state of financial markets. An increase in the measure of supply conditions means that the share of intermediaries that apply more stringent financial criteria to grant credit increased. A 1-point rise should be interpreted as a net increase of 1% of intermediaries that have tightened their standards. A decrease in the demand conditions index indicates the net share of intermediaries that consider that the balance sheets of firms and households have deteriorated. A 1-point decrease should be interpreted as a 1% rise in the net share of financial intermediaries, considering that borrowers' strength has deteriorated.

financial health indicators. One of the key markers of this resilience is the return to pre-COVID levels of profitability, as evidenced by return on assets (ROA) and return on equity (ROE). These indicators have rebounded to pre-pandemic levels (Figure 5.6, Panel A). This recovery in profitability is a positive sign, suggesting that banks have effectively navigated the challenges posed by the pandemic and subsequent economic fluctuations.

Another encouraging sign is the steady increase in capital adequacy indicators in terms of both total and Tier 1 capital (Figure 5.6, Panel B). These measures are crucial as

FIGURE 5.6 • Banking System Indicators



Source: IDB staff calculations based on IMF's Financial Soundness Indicators for profitability, capital adequacy ratios, loan risk indicators, and risk-weighted assets. For public and private sector claims, IMF's International Financial Statistics.
Note: The sample includes Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, and Uruguay. The figure reports the average values of economy-wide aggregates across the countries included in the sample. ROE = return on equity; ROA = return on assets; NPL = nonperforming loans.

they reflect banks' ability to withstand financial stress and absorb losses. The consistent rise in these indicators since the pandemic indicates that banks in the region have been building stronger financial buffers, thereby enhancing their resilience against potential shocks. This is a vital aspect of financial stability, especially amid economic uncertainty.

While the amount of capital banks hold in the region appears adequate, its value ultimately depends on its high quality. The Basel III accord on financial regulation and

supervision stresses the importance of capital quality. Latin American and Caribbean countries have swiftly adopted Basel III (Box 5.2). More than half of the countries in the region now use some version of Basel III in their capital requirements framework, include conservation buffers in their requirements, and have either countercyclical capital buffers or provisioning. Moreover, almost all have moved towards a stringent definition of Tier 1 capital, mostly based on common equity, and 60% have included a leverage ratio in addition to their traditional capital requirement.[5] These developments, combined with liquidity requirements in over 60% of the region's countries, suggest that regulatory frameworks have positively adjusted to international standards.

While nonperforming loans (NPLs) have inched up during 2023, they remain at relatively low levels (Figure 5.6, Panel C). Nonperforming loans are loans in default or close to default, and an increase in such loans can be a concern for financial stability.

BOX 5.2 • Capital Regulation in Latin America and the Caribbean

In recent years, at least since the global financial crisis in 2008, there has been ample discussion of what constitutes high-quality capital. The Basel Committee on Banking Supervision in 2011 released an upgraded comprehensive set of banking regulations, primarily focused on enhancing the stability of the global banking system through stringent capital requirements, known as the Basel III accord. Key among these is the need for banks to maintain higher capital ratios, ensuring they have a stronger financial buffer against potential losses. The emphasis on the quality of capital is also heightened, with a greater focus on Tier 1 capital, particularly Common Equity Tier 1, which includes assets like common shares and retained earnings. Additionally, Basel III introduces the concept of countercyclical buffers, designed to be built up in good economic times and utilized during periods of financial stress, helping banks maintain credit flow during downturns.

The accord also includes a non-risk-based leverage ratio to curb excessive leverage in the banking sector. Leverage ratios present a significant advantage in the banking regulatory framework, particularly complementing risk-weighted capital requirements. Their simplicity and transparency make them easy to calculate and understand, offering a clear measure of a bank's leverage without the complexities and potential manipulations of risk-based models. They are an essential check against underestimating risks, a potential shortcoming of measures based on risk-weighted assets. They also facilitate more straightforward comparisons and benchmarking of banks across various regions, ensuring that a bank's asset growth is appropriately balanced with its equity base, contributing to a more robust regulatory environment.

Complementing the capital requirements, Basel III sets forth minimum liquidity standards, such as the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), to ensure banks have sufficient liquid assets for short-term obligations and encourage stable long-term funding.

Based on a survey of Central Banks and Financial Supervisors in Latin America and the Caribbean, Celis, Galindo, and Rojas-Suárez (forthcoming) highlight how the region has advanced in adopting key Basel III regulations. Table 5.2.1 summarizes some findings and shows how countries in Latin America and the Caribbean have adopted capital and liquidity prudential regulations.

(continued on next page)

[5] See Celis, Galindo, and Rojas-Suárez (forthcoming) for details.

BOX 5.2 • Capital Regulation in Latin America and the Caribbean *(continued)*

TABLE 5.2.1 • Capital and Liquidity Regulations in Latin America and the Caribbean

Country	Regulatory framework for capital requirements	Conservation capital buffer	Countercyclical buffer	Leverage ratio	Liquidity coverage ratio	Net stable funding ratio
Argentina	Basel II/III	Yes (2.5%)	Yes (0–2.5%)	Yes (Tier I capital)	Yes	Yes
The Bahamas	Basel III	Yes (2.5-5.0%)	Yes (0-4.0%)	Yes (Total capital)	No	No
Belize	Basel II/III	No	No	No	No	No
Brazil	Basel III	Yes (2.5%)	Yes (0-2.5%)	Yes (Tier I capital)	Yes	Yes
Chile	Basel II/III	Yes (2.5%)	Yes (0-0.5%)[c]	Yes (Common equity)	Yes	Yes
Colombia	Basel III	Yes (1.12%)[a]	No[d]	Yes (Tier I capital)	Yes	Yes
Costa Rica	Basel I/II	No[b]	No[d]	No	Yes	No
Dominican Republic	Basel I	No	No	No	No	No
Ecuador	Basel I	Yes (1.0-3.5%)	Yes (0.5-2.5%)	No	No	No
El Salvador	Basel I	No	No	No	No	No
Honduras	Basel I/III	Yes (2.5%)	No	Yes (Tier I capital)	Yes	No
Jamaica	Basel I/III	No	No	Yes (Tier I capital)	Yes	No
Mexico	Basel I/III	Yes	Yes (0.2-2.5%)[d]	Yes (Tier I capital)	Yes	No
Panama	Basel III	No[b]	Yes (1.25-2.5%)[d]	Yes (Tier I capital)	Yes	No
Paraguay	Basel I/II	No	No	No	No	No
Peru	Basel III	Yes (0.62%)[a]	Yes (0-2.5%)[d]	Yes (Tier I capital)	Yes	No
Trinidad and Tobago	Basel II/III	No	Yes (0-2.25%)	Yes	No	No
Uruguay	Basel II/III	Yes	No[d]	Yes (Total capital)	Yes	Yes

Source: Celis, Galindo, and Rojas-Suárez (forthcoming).
Note: [a] Colombia up to 2.5% by 2024; Peru up to 2.5% by 2026. [b] Costa Rica and Panama will implement conservation buffers in 2025 and 2024 respectively. [c] Chile will increase countercyclical buffer to 2.5% by 2025. [d] Has countercyclical provisions.

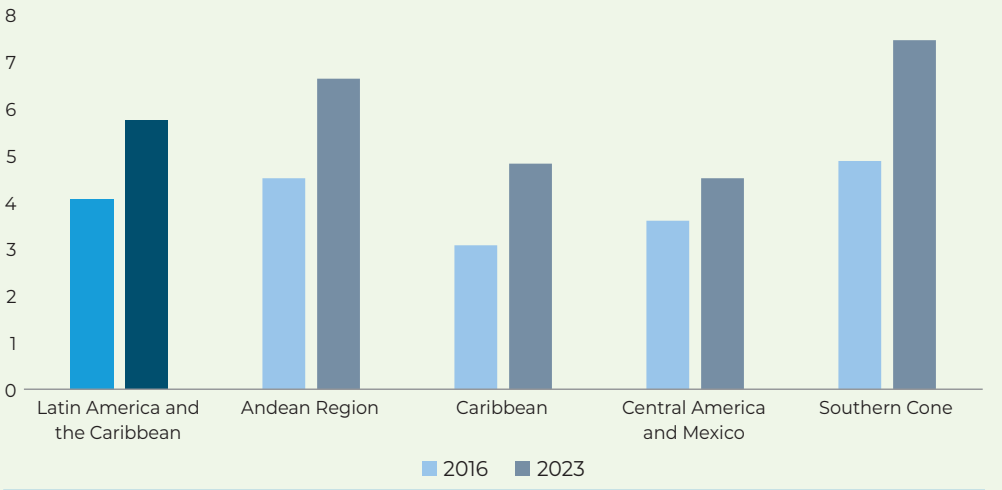
While most countries have adopted some form of Basel III capital regulations for at least a part of the financial sector (mainly banks), adopting liquidity management tools has been slower. A notable aspect is the adoption of leverage ratios. The ideal leverage ratio is one based on the most stringent quality of capital: common equity.

When comparing key dimensions of financial regulation in several countries in the past few years, Celis, Galindo, and Rojas-Suárez (forthcoming) find notable improvements in almost every country during the last decade. The authors construct an index that measures the quality of Tier 1 capital, the existence of conservation buffers, the use of countercyclical capital buffers or provisions, the existence of requirements of leverage ratios, the use of Basel III liquidity-related standards, and if stress tests are regularly conducted; they use a survey of central banks and supervisors in 2023, and compare it with a World Bank survey carried out in 2016 (Figure 5.2.1).

(continued on next page)

BOX 5.2 • Capital Regulation in Latin America and the Caribbean *(continued)*

FIGURE 5.2.1 • Financial Regulation Index (0–9)



Source: 2016 data from World Bank Survey reported in Anginer et al. (2019), 2023 data from Celis, Galindo, and Rojas-Suárez (forthcoming).
Note: This index evaluates the capital adequacy regulatory regime in force in each country, the items deducted from Tier 1 regulatory capital, whether there is a conservation and countercyclical buffer (or provisions), and requirements on the leverage ratio. Also, it assesses the extent to which Basel III's liquidity-related standards, including the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR), have been implemented in the country's regulatory framework. Lastly, this index evaluates whether stress tests are conducted regularly. Andean Region includes Colombia, Ecuador, and Peru; the Caribbean: includes Bahamas, Jamaica, and Trinidad and Tobago; Central America and Mexico includes: Belize, Costa Rica, Dominican Republic, El Salvador, Honduras, Mexico, and Panama; Southern Cone includes: Argentina, Brazil, Chile Paraguay, and Uruguay.

However, the fact that NPLs seem adequately covered by loan loss provisions is reassuring. As of third quarter 2023, in the average country, loan loss provisions stood at 130% of nonperforming loans. The adequate coverage of NPLs by loan loss provisions indicates that banks have taken prudent measures to manage credit risks, especially during the COVID-19 pandemic, further underscoring the overall health of the financial systems in Latin America and the Caribbean.

A distinctive feature during the COVID-19 pandemic was a shift towards holding public sector assets (Figure 5.6, Panel D) and away from private sector risks. Due to high uncertainty about the performance of firms and households during the pandemic and consistent with the contraction in real credit, banks increased the weight of government bonds, usually classified as risk-free in most jurisdictions, in their assets. As economies moved out of the COVID-19 recession, the share of public bonds started to decrease, but it ticked up again as uncertainty and expectations of a future economic downturn rose.

The shift in the composition of assets can be problematic from various perspectives. On the one hand, a smaller share of private sector risks in the balance sheet reduces the development impact that banks achieved primarily by transforming deposits into

loans that foster productivity growth. Additionally, higher exposure to government bonds may pose risks to financial intermediation because of the volatile nature of bond prices.

The crisis of Silicon Valley Bank and other U.S. banks at the beginning of 2023 exemplifies the potential risks associated with banks holding government bonds. This situation underscores the complexities in financial risk management and the multifaceted nature of banking vulnerabilities. It's not merely the holding of government assets on balance sheets that can contribute to fragility, but a combination of several factors, including:

1. Significance of government asset holdings: The risks become more pronounced when the holdings of government assets are substantial.
2. Mark-to-market accounting: If bond holdings are not marked to market (i.e., recorded at their current market value) in the bank's balance sheets, then this can lead to significant losses when these assets need to be sold, especially in response to sudden liquidity demands.
3. Regulatory framework for asset classification: Risks are exacerbated when regulations do not impose strict guidelines on how financial assets are classified (whether in the trading book or held-to-maturity book) and allow indiscriminate movement between these classifications.
4. Liquidity coverage and capital requirements: The absence of liquidity coverage provisions, such as those outlined in Basel III, and the lack of capital requirements to cover market risks, can heighten the risk factor.
5. Strength of stress testing in supervision: Weak use of stress testing as a supervisory tool can leave banks more vulnerable to sudden market shifts.

However, according to Celis, Galindo, and Rojas-Suárez (forthcoming), in most countries in Latin America and the Caribbean, these risk factors are mitigated by current regulations and supervisory practices, such as including market risks in required capital ratios, implementing strict liquidity requirements for intermediaries, determining how assets should be recorded in books favoring valuations at market prices, limiting how intermediaries are allowed to shift assets between the book and the held-to-maturity books, and regularly conducting stress tests. This implies that the risks associated with banks' increased holdings of government bonds are considerably limited in the region, thanks to robust regulatory and supervisory frameworks. This distinction highlights how different regulatory environments can significantly influence the risk profiles of financial institutions.

The Need for Coordinated Policy Action

The recent global economic landscape has been marked by rising inflation, leading to significant hikes in interest rates and a shift towards more risk-averse portfolio manage-

ment amid intense geopolitical uncertainties. This shift has notably compressed financial markets in emerging economies. Despite the reduction in volume, foreign capital has continued to flow into these markets, albeit at a notably higher cost, as detailed in Chapter 1. In this context, Latin American and Caribbean countries grappling with higher current account deficits may need to enact policies to narrow these gaps. With international reserves at lower levels than in past stress episodes, these countries must consolidate their fiscal and external positions to reduce vulnerabilities to sudden capital outflows.

Domestically, credit markets also show signs of a slowdown, responding effectively to recent contractionary monetary policies. However, the balance sheets of financial intermediaries in the region remain heavily weighted towards public debt holdings, with less allocation to private sector credit. This trend, while potentially risky, as illustrated by the recent challenges faced by Silicon Valley Bank and other institutions in the United States, is mitigated in the region by strong regulatory and prudential practices. These practices prevent similar events in Latin America and the Caribbean. Furthermore, while prudential indicators have deteriorated—a common trend during economic slowdowns—they still remain solid.

Ensuring financial sector stability is paramount to prevent potential issues in weaker banks from escalating into systemic problems. Authorities must remain vigilant and prepared to address a wide range of potential risks, especially in a climate where uncertainty is high, and risks constantly emerge. For policymakers, the challenge is to effectively combine macroeconomic actions, such as consolidating external and fiscal positions, with financial sector-specific policies. These may include adopting Basel III-type liquidity requirements and capital buffers, among others. Such measures are essential to foster a healthy financing system that contributes significantly to long-term productivity growth in the region.

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