Fiscal Policy at the Time of a Pandemic: How have Latin America and the Caribbean Fared?[1]

Fiscal policy in Latin America and the Caribbean (LAC) is being put to test at different stages of the COVID-19 pandemic—from the initial response through the expected recovery. This chapter first describes fiscal positions in LAC at the onset of the pandemic and summarizes emergency lifelines that were announced to cushion the economic fallout of lockdowns on households and firms. These lifelines amount to 8 percent of the region's GDP. Although deep recessions are expected, the chapter shows next that these exceptional measures are playing a key role in mitigating the effects of the pandemic. If fully implemented, the fiscal measures would increase the region's level of real GDP by about 6½ -7 percent within a year. As economies gradually reopen, but under uncertainty about the pandemic's course and its effects, fiscal policy actions could focus on gradually scaling down lifelines. At this stage, fiscal stimulus should support the recovery where fiscal space is available, but with clear commitments to medium-term consolidation. Credibility of these strategies should be safeguarded through commitment devices, such as fiscal rules and the passing of legislation (for example, "pre-approval" of future tax reforms) to ensure sustainability. Over the medium term, when the pandemic is under control, policy should focus on rebuilding fiscal space and facilitating the transformation of the economy through growth-friendly and inclusive adjustments, given the pandemic's potentially lasting scarring effects on the economy. Enhancements to automatic stabilizers, including safety nets, would foster a more inclusive recovery.

Introduction

The COVID-19 pandemic has been taking a heavy human toll and leading to an economic recession of historical proportions in Latin America and the Caribbean (LAC). It is an unprecedented global synchronized shock and a public health crisis with no medical solution yet. The level of real GDP for 2020 in the region is expected to be about 9 percent lower than what was forecast in early-2020. A large fraction of this output loss is projected to persist in 2021 and there is considerable uncertainty about the legacy effects of the crisis (October 2020 *Regional Economic Outlook: Western Hemisphere*).

In the wake of the pandemic, governments in the region have announced packages of fiscal support, including increased health spending and a wide range of "emergency lifelines" to help businesses stay afloat and households navigate this difficult juncture, on top of the automatic stabilizers on both revenue and expenditure sides.[2] These emergency lifelines include tax cuts and deferrals, direct transfers to vulnerable households (including expansion of existing programs), relaxation of eligibility requirements and expansion of unemployment insurance schemes, wage subsidies and loans to support payrolls, and loan guarantees, among others.

Taken together, the announced measures in LAC amount, on average, to 8 percent of GDP (Figure 1). When compared to fiscal stimulus during the Global Financial Crisis (GFC) and its aftermath, the fiscal support in LA5[3] countries is noticeably larger and more frontloaded. Fiscal actions in response to the pandemic in most LAC economies are similar to what was announced in other emerging market

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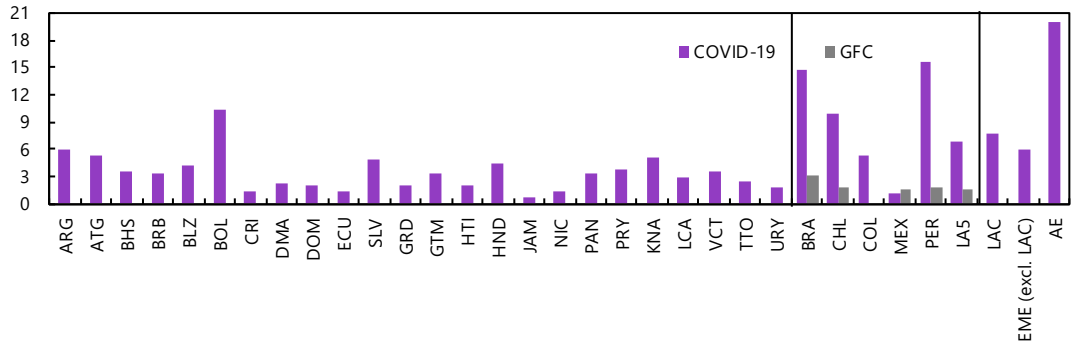
[1]This chapter was prepared by a team led by Ali Alichi (WHD) under the guidance of Hamid Faruqee (WHD). The team comprised Antonio David and Metodij Hadzi-Vaskov (WHD), Keiko Honjo (RES); Roberto Perrelli and Mehdi Raissi (FAD). It benefited from excellent research support by Genevieve Lindow and Danjing Shen (WHD). Mauricio Cárdenas (previous Finance Minister of Colombia) was the external advisor to the project.

[2]The fiscal policy instruments studied in this chapter only reflect part of the overall economic policy response to the pandemic in LAC. For example, most central banks in the region have loosened monetary policy, including through unconventional measures, and provided liquidity support to the banking system (October 2020 *Regional Economic Outlook: Western Hemisphere*, Chapter 1).

[3]LA5 consists of Brazil, Chile, Colombia, Mexico, and Peru.

economies (EMEs), in terms of size, but tend to be more modest than fiscal measures announced in advanced economies (AEs). Nonetheless, the extent and composition of policy support has varied considerably across the region, depending on how hard the pandemic has hit each country, fiscal space, and effectiveness of automatic stabilizers (including safety nets), among other country-specific factors.

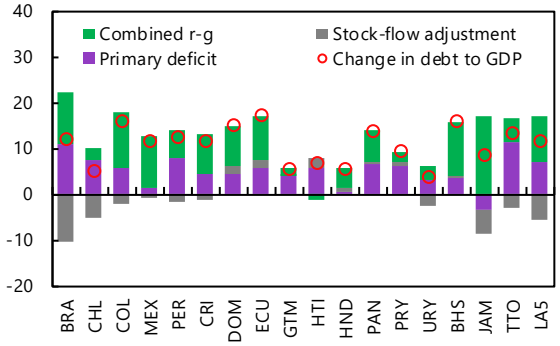
Figure 1. Discretionary Fiscal Measures in GFC (implemented) and COVID-19 (announced)
(Percent of GDP)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Shows the sum of above-the-line, below-the-line, and off-budget (incurrence of contingent liabilities, including guarantees and quasi-fiscal operations) announced measures. Data labels use International Organization for Standardization (ISO) country codes. COVID-19 = coronavirus disease; AE = advanced economies; EME = emerging market economies; LAC = Latin America and the Caribbean; LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru).

As a result of these discretionary fiscal actions, weaker economic activity, as well as the operation of automatic stabilizers, public debt levels in the region are expected to increase sharply in 2020. (Figure 2). A simple decomposition shows that adverse developments in terms of the real interest rate and economic growth differentials (*r-g*), which also include the effects of exchange rate depreciation on foreign-currency-denominated debt, are expected to increase debt ratios by over 12 percent of GDP in the LA5. Higher primary deficits would also add another 6 percent of GDP to debt, but this effect is partially compensated by other factors (stock-flow adjustment).[4]

Figure 2. Drivers of Change in Government Debt, 2020
(Percent of GDP)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Real interest rate-growth differential (combined r-g) is adjusted for exchange rate changes. Data labels use International Organization for Standardization (ISO) country codes. LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru).

The chapter addresses the following questions: how were the fiscal positions of LAC economies at the onset of the pandemic? What did fiscal policy responses to the pandemic include and how effective were they? What are the implications of these policy packages on growth and public finances? Finally, what are the appropriate fiscal strategies to follow, as economies partially reopen and over the medium term?

[4]"Stock-flow adjustment" is a residual category that typically captures one-off factors. For example, in the case of Brazil in 2020, it captures in part the use of cash reserves, which reduces the need for new debt issuance.

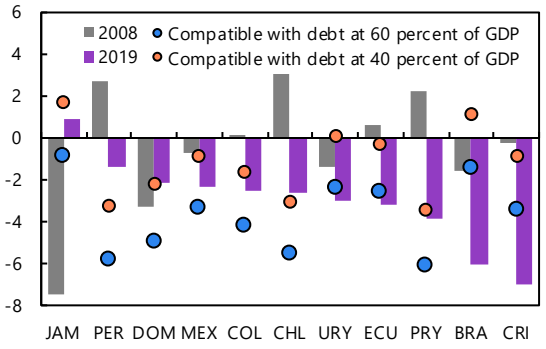
Fiscal Positions Before and Transmission Channels of the Pandemic

Limited Fiscal Buffers

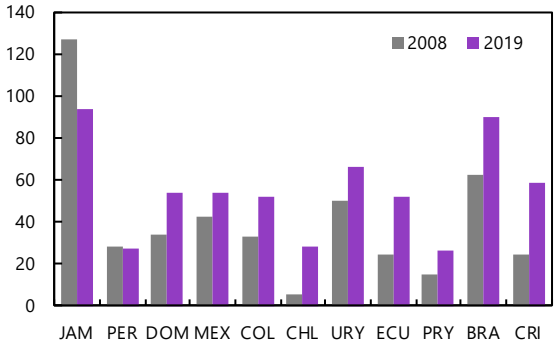
The majority of countries in the region faced the pandemic with more vulnerable fiscal positions—higher fiscal deficits and public debt as percent of GDP—than before the Global Financial Crisis (GFC; Figure 3). This was partly driven by the end of the commodity super-cycle that had lowered fiscal revenues in commodity producers (while expenditures remained relatively high) and partly due to low growth and high real interest rates, adjusted for exchange rate depreciation (Annex 1). Moreover, fiscal space was already constrained in some countries in the region. For example, in Brazil and Costa Rica, the overall fiscal deficit prevailing in 2019 was already much larger than the one that would be compatible with a debt level target of 60 percent of GDP, if maintained over a 10 year period—an indicative but by no means definitive measure of fiscal space[5] (Figure 3, panel 1).

Figure 3. General Government Fiscal Balance and Debt at the Onset of GFC (2008) and COVID-19 (2019)

1. General Government Fiscal Balance (Percent of GDP)



2. General Government Debt (Percent of GDP)

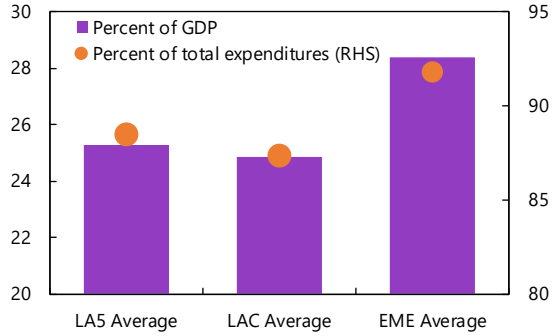


Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Definitions of government debt varies across countries. For definitions of government coverage, see October 2020 *Regional Economic Outlook: Western Hemisphere*, Appendix Table 2. Data labels use International Organization for Standardization (ISO) country codes. COVID-19 = coronavirus disease; GFC = Global Financial Crisis.

[5]The overall fiscal balance compatible with a certain target level of debt over a 10-year period is given by the following:
$\left[\frac{-\gamma}{(1+\gamma)((1+\gamma)^{10}-1)}\right]((1+\gamma)^{10}d^{*}-\mathrm{d}_0)$
where, γ is the nominal GDP growth rate, d^{*} is the debt-to-GDP ratio target, and d_0 is the initial level of debt to GDP ratio i.e. the one prevailing in 2019 (see the discussion in Escolano, 2010). γ is given by a weighted average of nominal GDP growth in local currency units and in U.S. dollars (with weights given by the share of foreign currency debt in total debt) over the period 2023-2025. GDP growth rates are calculated based on projections by the IMF's October 2020 WEO database.

The limited fiscal space in the region also reflects low levels of fiscal revenues as percent of GDP and as a percent of expenditures. Over 2017-2019, average government revenues in the LA5 and LAC, at about 25 percent of GDP, were 3 percentage points of GDP lower than emerging market economies' average. Similarly, during this period, revenues in LAC and LA5 were about 88 percent of expenditures, compared to more than 91 percent of expenditures in emerging market economies (Figure 4).

Figure 4. Total Government Revenue in LA5, LAC, and EME, Average 2017–19

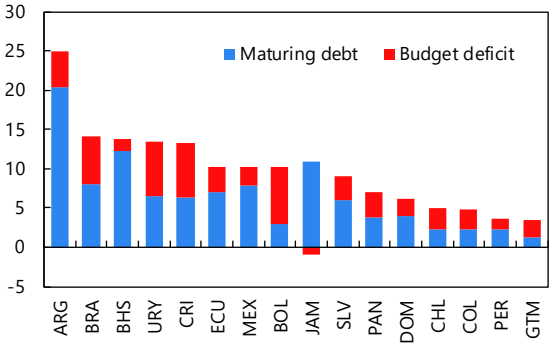


Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Simple average. Somalia and Syria are excluded for EME calculations. Data labels use International Organization for Standardization (ISO) country codes. EME = emerging markets economies; LAC = Latin America and the Caribbean; LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru); RHS = right-hand scale.

Financing and Fiscal Vulnerabilities

Gross financing needs coming into the crisis were generally high in the region—exceeding 10 percent of GDP in many economies—consistent with the picture of limited fiscal space (Figure 5). This is to a large extent because of financing needs related to high levels of maturing debt (over 6 percent of GDP in many countries).

Figure 5. Gross Financing Needs, 2019
(Percent of GDP)



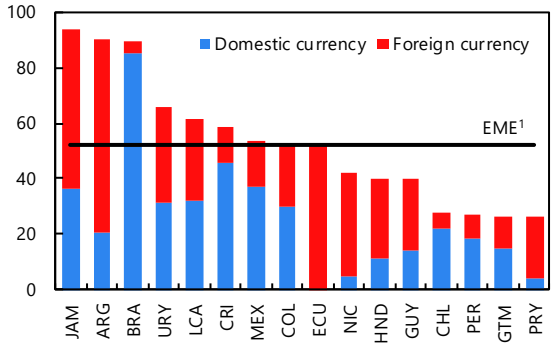
Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Data labels use International Organization for Standardization (ISO) country codes.

Moreover, some structural features of public debt in the LAC countries may have increased vulnerabilities to shocks. As of 2019, the average share of foreign-currency-denominated debt in total debt in the region exceeded 50 percent (Figure 6, panel 1).Notwithstanding, in Brazil, Chile, Costa Rica, Mexico and Peru, the shares of foreign--denominated debt in total debt are well below 50 percent. Average maturity of debt is short in some countries, including Ecuador and Brazil. Nonetheless, it appears that a few countries, notably Uruguay and Peru, have successfully lengthened the average maturity profile of public debt (Figure 6, panel 2).

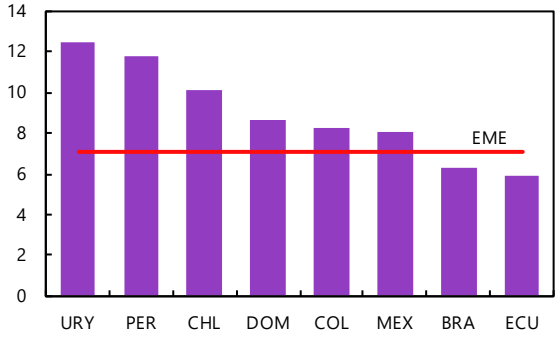
Foreign investors' participation in local debt markets provides more depth and transparency but could also be an additional source of vulnerability. It can make local debt markets more susceptible to sudden shifts in global market sentiment during periods of high market volatility and uncertainty. As Figure 7 illustrates, since 2014 foreign investors' participation has increased significantly in Colombia (from low levels), declined in Brazil and Mexico (albeit from high levels in the case of the latter) and fluctuated around high levels in Peru. Compared to other EMEs, Peru stands out as having a relatively high foreign investors' participation rate.

Figure 6. Currency Composition and Maturity Profile of Public Debt in LAC

1. General Government Gross Debt, 2019
(Percent of GDP)



2. Average Residual Maturity of Public Debt, 2019[2]
(Years)

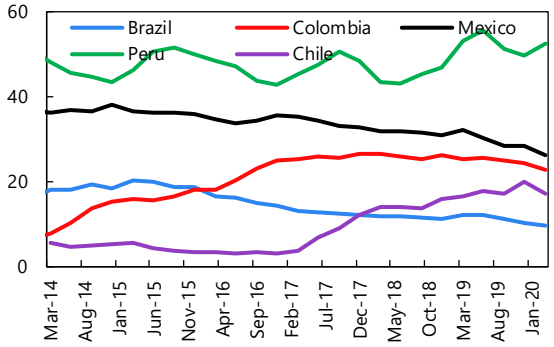


Sources: Bloomberg Finance L.P.; IMF, World Economic Outlook database; and IMF staff calculations.
Note: Data labels use International Organization for Standardization (ISO) country codes. EME = emerging market economies; LAC = Latin America and the Caribbean.
[1]Fiscal year US dollar nominal GDP-weighted average.
[2]Refers to government securities. EME is weighted by nominal GDP converted to US dollars at average market exchange rates.

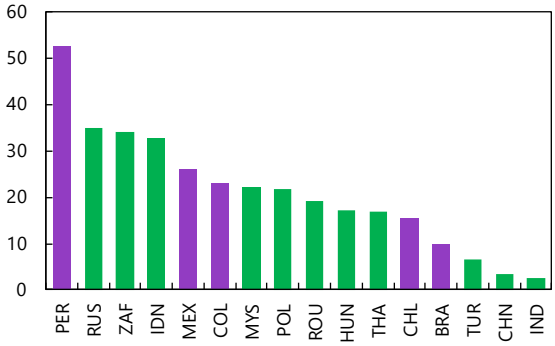
Figure 7. Foreign Ownership in Local Currency Government Debt Markets

(Percent of total)

1. Selected LAC



2. Emerging Market Economies, 2020Q1



Sources: Haver Analytics; national authorities; and The Institute of International Finance.
Note: Data labels use International Organization for Standardization (ISO) country codes. LAC = Latin America and the Caribbean.

Transmission Channels: In What Ways Is COVID-19 Affecting Fiscal Positions in the Region?

The economic fallout of the COVID-19 pandemic is having significant consequences for fiscal positions in the region through a variety of channels:

- *Slower economic activity and increased government spending.* Containment measures, shutdowns of entire sectors, and social distancing have led to a "sudden stop" in labor supply and associated declines in sectoral and aggregate demand. The ensuing sharp decline in economic activity, both domestically and in trading partners, has caused a reduction in tax bases and revenues and triggered higher unemployment and social safety net spending. Weaker activity has also resulted in lower global prices in some commodities, especially oil, leading to lower commodity-related investment and lower fiscal receipts in exporting countries. At the same time, the provision of discretionary lifelines to households and firms against the pandemic have resulted in higher government expenditures.

- *Capital outflows, higher risk aversion, and exchange rate depreciation*. Capital outflows increased the cost and lowered the availability of funding, more so than during the GFC and in other EMEs, in the beginning of the pandemic, but have since partially reversed or stopped (October 2020 *Regional Economic Outlook: Western Hemisphere*). Large capital outflows have also led to large exchange rate depreciations, which have adverse effects on gross debt in countries with a large share of foreign-currency-denominated debt.

Fiscal Policy Responses During the Great Lockdown

The pandemic can be characterized in three distinct phases—a lockdown or containment phase; a gradual reopening under uncertainty regarding the evolution of the pandemic; and a post-pandemic phase. The acute phase of the COVID-19 crisis comprises the period in which lockdowns are fully in place. The role of fiscal policy at this stage is focused on protecting lives and livelihoods (Chapter 1 of the April 2020 *Fiscal Monitor*). In that context, governments in the region have taken the following measures:

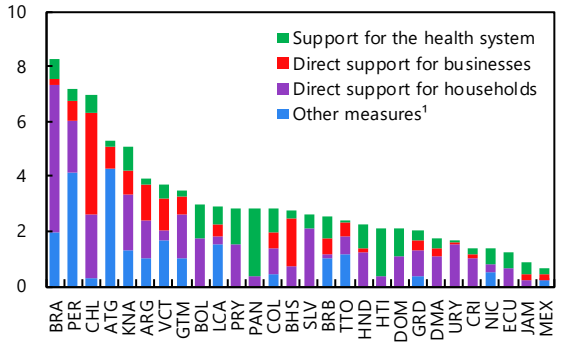
Discretionary Measures: Health Spending and Emergency Lifelines

During the containment phase, the first policy priority has been to accommodate higher spending on health care and emergency services. The second priority has involved the adoption of timely, temporary, and targeted fiscal actions to protect households and firms, including in hard-to-reach informal sectors. Such support is likely to provide an effective cushion to output and essential consumption because it alleviates the drop in incomes for people with limited savings and reduces the likelihood of bankruptcies of viable firms. Overall, these actions could limit a health crisis from generating large scarring effects on the economy. However, given their significant fiscal costs, these measures should also be transparently embedded in medium-term fiscal frameworks ("do whatever it takes but make sure to keep the receipts").

The differential size of spending and revenue actions partly reflects varying degrees of fiscal space across the LAC countries. For example, Chile's and Peru's fiscal strengths have enabled them to offer large emergency lifelines. Notwithstanding its weaker public sector balance sheet, Brazil has also announced a large fiscal support package. Among the LA5 countries, Mexico stands out for its modest fiscal actions despite its capacity to do more, especially if combined with a commitment to increased tax capacity over the medium term. Emergency lifelines include above-the-line spending and revenue measures, and below-the-line financing and off-budget actions (incurrence of contingent liabilities) such as guarantees:

- *Above-the-budget-line actions:* A large share of interventions falls on the spending side, mostly towards supporting households (Figure 8). Above-the-line measures include increased health spending (all countries), wage subsidies/complements (all LA5), expanded social safety nets (Brazil, Chile, Colombia, Peru), and enhanced

Figure 8. Announced COVID-19 Above-the-Line Discretionary Fiscal Support Measures
(Percent of GDP)

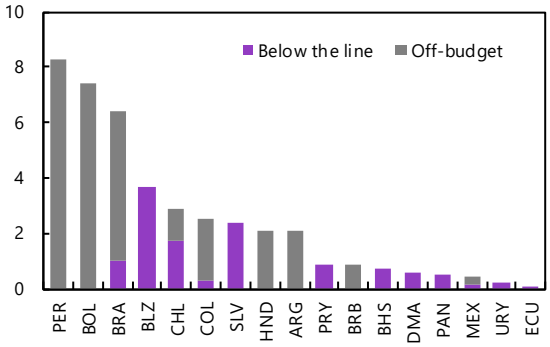


Sources: National authorities; and IMF staff calculations.
Note: Does not include tax deferrals and anticipation of benefits, which typically have small effects on an annual basis. Data labels use International Organization for Standardization (ISO) country codes. COVID-19 = coronavirus disease.
[1]In Peru, this includes mostly capital spending, while in Brazil it mostly includes support to local governments.

unemployment benefits (Chile, Colombia).[6] Some countries (Peru) also announced public investment programs to support activity. Most of the measures aimed at supporting households (transfers) are being implemented (notably in the LA5), while some countries have experienced delays in the implementation of investment plans and in health expenditure. Revenue-side measures, which are more limited in scope, are mostly aimed at supporting businesses. These include suspension of corporate income tax payments (Chile, Colombia), temporary elimination of financial transaction tax (Brazil), elimination of road tolls during quarantines, as well as VAT and tariffs on certain products and services for a limited time (Colombia).

- *Below-the-line and off-budget actions.*[7] Many firms have had to shoulder the operational costs of their businesses (including paying wages), while facing large revenue losses and risking closures owing to liquidity problems. In response, governments are providing below-the-line cashflow support to firms in the form of loans, equity injections, asset purchases, and debt assumptions. In addition, governments are taking off-budget actions consisting of incurring contingent liabilities, such as credit guarantees, and quasi-fiscal operations, including loans by state-owned banks (Figure 9). Some of these measures are reflected in financing operations and raise government debt ratios. Others may not have upfront cashflow effects but nonetheless could bring fiscal risks in the future. Below-the-line and/or off-budget actions were heavily used in Peru, Bolivia, and Brazil (between 6.5 to 8 percent of GDP) in 2020 and to a lesser extent in Belize, Chile, Colombia, El Salvador, Honduras, and Argentina (between 2 and 3.5 percent of GDP).

Figure 9. Announced COVID-19 Below-the-Line and Off-Budget Discretionary Fiscal Support Measures
(Percent of GDP)



Sources: National authorities; and IMF staff calculations.
Note: Below-the-line measures include loans, equity injections, asset purchases or debt assumptions. Off-budget measures refer to the incurrence of contingent liabilities including guarantees and quasi-fiscal operations. For most countries, the loan guarantees include the total potential amount of loans covered by the guarantees; for Chile and Colombia, the amount corresponds to the capital committed for such purposes. Data labels use International Organization for Standardization (ISO) country codes. COVID-19 = coronavirus disease.

The Role of Automatic Stabilizers

Another important dimension of the fiscal response to the pandemic is the operation of automatic stabilizers. Automatic stabilizers include, on the revenue side, features such as progressive income taxes and, on the spending side, unemployment benefits and social safety nets (SSN). These support aggregate demand promptly when economic activity slows, reach those who are most affected, and come to an end when conditions improve. In addition, stronger automatic stabilizers reduce the need for substantially

[6]The policy response in LAC has focused mostly on expanding social safety nets (that is, increasing the coverage and generosity of existing programs), which accounted for 70 percent of the social protection measures introduced in response to COVID-19 (Brollo, forthcoming). Cash transfers have been the most commonly used tool in the region, accounting for more than 40 percent of the social safety net measures.

[7]"Below-the-line" measures generally involve creation of assets, such as loans or equity in firms. Equity injections or loans to firms may have little or no upfront impact on the fiscal deficit unless they have a concessional component, but they can increase debt or reduce liquidity. Government guarantees granted to banks, firms, or households usually have no immediate upfront cost in the form of deficit or debt unless the expected cost is budgeted, but they create a contingent liability, with the government exposed to future calls on guarantees. A loan default or loss in equity would reduce the government's assets, whereas a call on a guarantee would increase public debt, as the guaranteed debt is assumed by the government. These would reduce government net worth (assets net of liabilities)—see the April 2020 *Fiscal Monitor,* Chapter 1, Box 1.1.

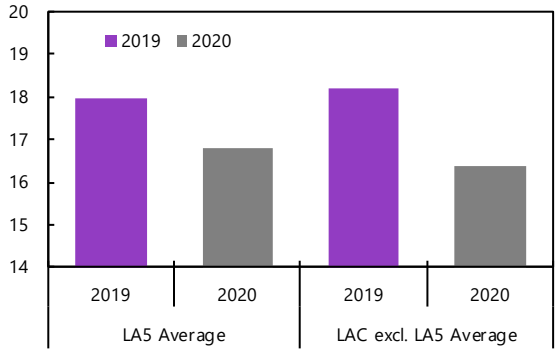
larger discretionary actions, and lower lags between shocks and policy responses that stem from policymaking and legislative processes. In response to the COVID-19 pandemic, the need for emergency lifelines have been sizable, albeit lower for countries with stronger automatic stabilizers. In addition to the effects of automatic stabilizers and discretionary fiscal actions, deficit-to-GDP ratios are also affected by the "mechanical" effect of changes in the denominator, that is, a given unchanged nominal spending envelope representing a larger share of GDP as output shrinks, without providing any automatic income/demand stabilization.

Automatic stabilizers have historically accounted for 30 percent of total fiscal stabilization—measured as the responsiveness of the overall budget balance to the output gap—in emerging market and developing economies, compared to one-half in advanced economies (Chapter 3 of the April 2015 *Fiscal Monitor*). The role of automatic stabilizers for fiscal stabilization during the COVID-19 crisis can be better assessed ex-post once the extent of scarring is more established (output gap estimates are fine-tuned) and the effects of the pandemic on revenues are clearer.

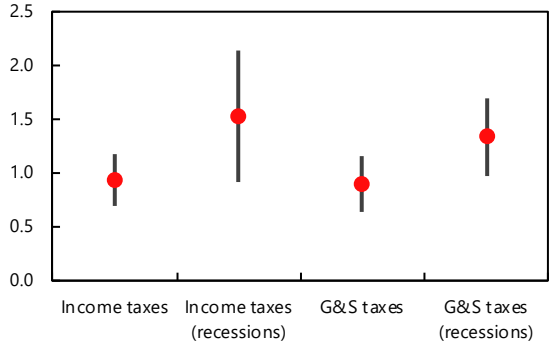
Tax revenues are expected to decrease by about 1 percent of GDP in the LA5 and by about 2 percent of GDP in the rest of the region in 2020 compared to 2019 (Figure 10, panel 1; also see Annex Figure 2.1 for projections of components of tax revenues). Amid generally limited recent discretionary tax measures beyond intra-year effects, lower tax revenues in the region in 2020 can be mostly attributed to automatic stabilizers. Traditional approaches to forecasting revenues may underestimate the tax revenue decline in the current episode, given that the pandemic's effects are highly asymmetric across sectors (IMF, 2020a). On the demand-side, the pandemic is likely to affect consumption disproportionately compared to a typical recession. Therefore, the decline in tax revenues could be more pronounced given that indirect taxes represent a relatively larger share of revenues. In fact, tax revenue projections for 2020 are reflecting in part these issues (Figure 10, panel 1 and Annex 2).

Figure 10. Tax Revenues and Elasticities

1. General Government Tax Revenues (Percent of GDP)



2. Elasticities of Tax Revenues to GDP (Point estimates and one standard error bands)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Simple average. Data labels use International Organization for Standardization (ISO) country codes. G&S = goods and services; LAC = Latin America and the Caribbean; LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru).

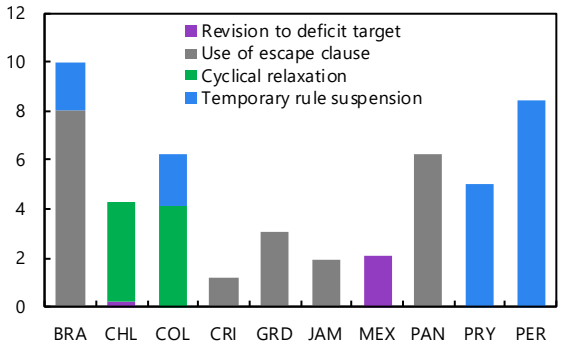
Automatic stabilizers on the tax revenue side would likely gain further prominence in the current crisis/recession. The size of revenue-side stabilizers may be constrained by the nature of tax structures in LAC, which rely more heavily on indirect taxes than income taxes (on average, income taxes account for about 33 percent of total tax revenues in LAC compared to over 50 percent in AEs). Nonetheless, historical evidence (including from the GFC) for the region suggests that tax elasticities relative to changes in GDP increase considerably during recessions. Elasticities of tax revenues to GDP are around 1 for both income and goods and services (G&S) taxes, but increase markedly to 1.5 in the case of income taxes and 1.3 in the case of G&S taxes during recessions (Figure 10, panel 2, and Annex 2). This

is in part because people and firms struggle to comply with their tax obligations during difficult times (Sancak, Velloso, and Xing 2010).

Flexibility of the Fiscal Rules

The flexibility of fiscal frameworks in the region has been tested by the pandemic. Fiscal reactions have been broadly consistent with countries' fiscal responsibility frameworks without the ad-hoc measures or adjustments seen during the GFC (see IMF, 2015). The fiscal rules' built-in adjustments for cyclical factors—such as commodity prices and the output gap—have provided considerable fiscal relaxation in Chile and Colombia. Most countries with escape clauses[8] resorted to them, while Colombia, Paraguay and Peru temporarily suspended their fiscal rules. Chile and Mexico revised their deficit targets for 2020 (Figure 11).[9] It will be important to ensure the use of flexibility is temporary and done transparently, including by explaining the size of the deviation and process to return to the rule, to preserve the credibility of the fiscal framework.

Figure 11. Policy Relaxations Relative to Fiscal Rules, 2020
(Percent of GDP)



Sources: Country reports; national authorities; and IMF staff calculations.
Note: Data labels use International Organization for Standardization (ISO) country codes.

Quantifying the Effects of Above-the-Line Fiscal Measures

This section quantifies the macroeconomic effects of the above-the-line discretionary fiscal measures announced in 2020. Firstly, it discusses how the pandemic might have affected the effectiveness of fiscal policy. Subsequently, a structural model is used to quantify the effects of policies on GDP and debt. It should be emphasized at the outset that the exercise is to quantify the "announced" measures. While quantification of the "implemented" measures is more desirable, it is hampered at this stage mainly because of incomplete information on implementation progress in some countries of the region.

How Has COVID-19 Affected the Effectiveness of Fiscal Policy?

Empirical evidence suggests that fiscal multipliers tend to be higher during crises relative to "normal" times (see Annex 3 for a review of the literature). However, COVID-19 is a unique global shock, which has resulted in a deep and synchronized downturn. On the one hand, there are indications of large output gaps and demand deficiency, which *a priori* would point to *higher* fiscal multipliers relative to normal times. On the other hand, the COVID-19 shock also entails important disruptions to the supply-side ("great lockdown"), which would suggest a *more muted* impact for fiscal policy at least in the containment phase. This is because the shutdown of sectors dampens some of the traditional effects of fiscal policy as the average propensity to consume is lower and there are no second-round effects (Guerrieri and others, 2020).

[8]Among LA5, only Chile does not have an escape clause in place.
[9]The escape clause to Brazil's expenditure ceiling allowed additional above-the-line fiscal measures of about 8 percent of GDP, and the temporary rule suspension allowed an additional 2 percent of GDP. In Chile, the structural fiscal balance target was changed from -3.3 percent of GDP in January 2020 to -3.5 percent of GDP in mid-2020. For Peru, the chart shows the authors' projection of the additional deficit allowed.

Increased uncertainty might also lower the effectiveness of policies, given its impact on private investment and consumption behavior.[10] Faria e Castro (2020) goes even further and argues that in the containment phase of the pandemic, it might not even make sense to evaluate the effectiveness of fiscal policy in terms of GDP stabilization, given that the shutdown was intentional. He argues instead for evaluating fiscal policy in terms of household income and employment stabilization and shows in a model calibrated to the U.S. economy that unemployment insurance is the most effective instrument to stabilize household incomes, while liquidity assistance to firms would be more effective in stabilizing employment.

The crisis has also brought to the forefront the issue of income distribution (Furceri and others, 2020). High levels of inequality and informality are prevalent in the region. Auerbach and others (2020) show that output effects of *general* transfers to households are smaller with higher levels of inequality. Lack of access to financial markets imply that *targeted* transfers to liquidity-constrained low-income households should be particularly impactful and a higher share of such households in an economy would imply higher fiscal multipliers. [11] Transfers to informal sector households might be harder to implement in practice. Lemaire (2020) finds that informality reduces the size of multipliers. In low informality settings, fiscal multipliers can be as high as 2 over a two-year horizon, whereas in high informality settings they are close to zero.

Simulation Results

WHDMOD[12] is used to quantify the effects of above-the-line measures on real GDP and government debt in the LAC region. Starting with the pre-COVID-19 scenario, embodied in the January 2020 WEO projections for the LAC countries, fiscal balance in each country is shocked by the size of the discretionary policy responses announced in that country in 2020, accounting for the different policy instruments used (spending and revenue type). Simulations do not take account spillovers from the rest of the world into LAC. The differences of this new scenario and the pre-COVID-19 scenario would be purely the effect of the announced discretionary COVID-19 above-the-line fiscal policies on growth and government debt. These are presented below.

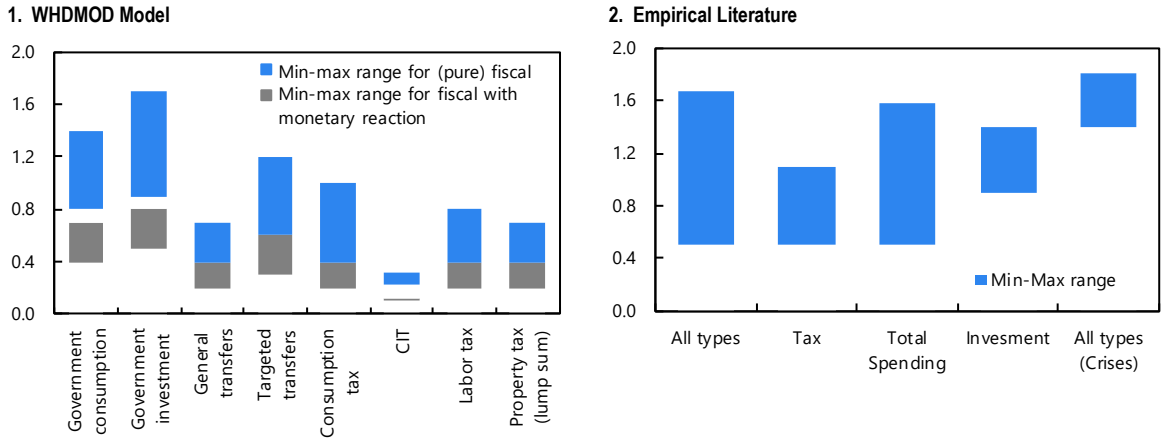
The simulations distinguish between various components of the fiscal support packages. On the expenditure side, a distinction is made among policy measures that affect: (i) government consumption; (ii) targeted transfers (to selected households); (iii) general transfers (to all households); and (iv) government investment, while on the revenue side among measures that pertain to: (i) consumption taxes/VAT; (ii) corporate income taxes(CIT); (iii) labor taxes (including personal income taxes, PIT) and social security contributions; and (iv) property taxes. On the expenditure side, fiscal multipliers are smallest in the case of general transfers, larger for targeted transfers and government consumption, and largest in the case of investment (Figure 12). Among revenue measures, consumption, labor and property taxes have higher impact on economic activity than corporate income taxes. The impact of fiscal measures is larger when they are purely fiscal (with no monetary reaction to inflationary effects of the fiscal expansion; Figure 12). We use the purely fiscal multipliers in our simulations, because our exercise is only to quantify the effects of fiscal policy. In this juncture monetary policy is clearly supporting the economies of the region and the case of monetary reaction (where monetary policy tightens as a reaction

[10]In particular, as (labor) income becomes more uncertain, one would expect an increase in precautionary savings. Moreover, there are risks of new waves of Covid-19 contagion, generating heightened economic uncertainty. Hysteresis effects are also likely to occur as the pandemic produces structural changes, unemployment increases, and liquidation of otherwise-viable firms.
[11]Recent evidence on targeted transfers in Brazil during the pandemic seems to support this hypothesis (IMF, 2020b).
[12]WHDMOD is a structural model calibrated in accordance with the literature and the unique country-specific characteristics of the LAC countries. It is a module of the IMF's Flexible System of Global Models (see Andrle and others, 2015).

to a fiscal expansion) is not pertinent. WHDMOD's multipliers used in this chapter are in line with those of the empirical literature (Figure 12).[13]

The simulation results show that fiscal policy measures have likely prevented a more severe economic downturn (Figure 13). For the region, the effects of the announced above-the-line fiscal measures on real GDP are sizable—especially within a year—raising the region's level of real GDP by about 5 percent. Among individual LA5 economies, the effects on the level of GDP range between less than 0.5 percentage points in Mexico to close to 8 percent in Brazil and Peru. The impact of fiscal support packages on real GDP in other LAC economies (which are modeled individually in WHDMOD) is generally smaller than the median of LA5, consistent with the differential sizes and compositions of the packages. Over the medium term, the effects of above-the-line fiscal policy measures on GDP dissipate, as most economies are expected to unwind the stimulus and embark on partial consolidation. The initial boost to activity materializes through a jump in consumption as a result of the increase in transfers and income support measures, while the fiscal packages provide a considerable stimulus through investment over the outer years. On the other hand, another legacy of these fiscal support measures would be an increase in government debt, commensurate to the size and composition of the packages in each country.

Figure 12. Fiscal Multipliers
(Impact on real GDP; percent deviation from baseline)



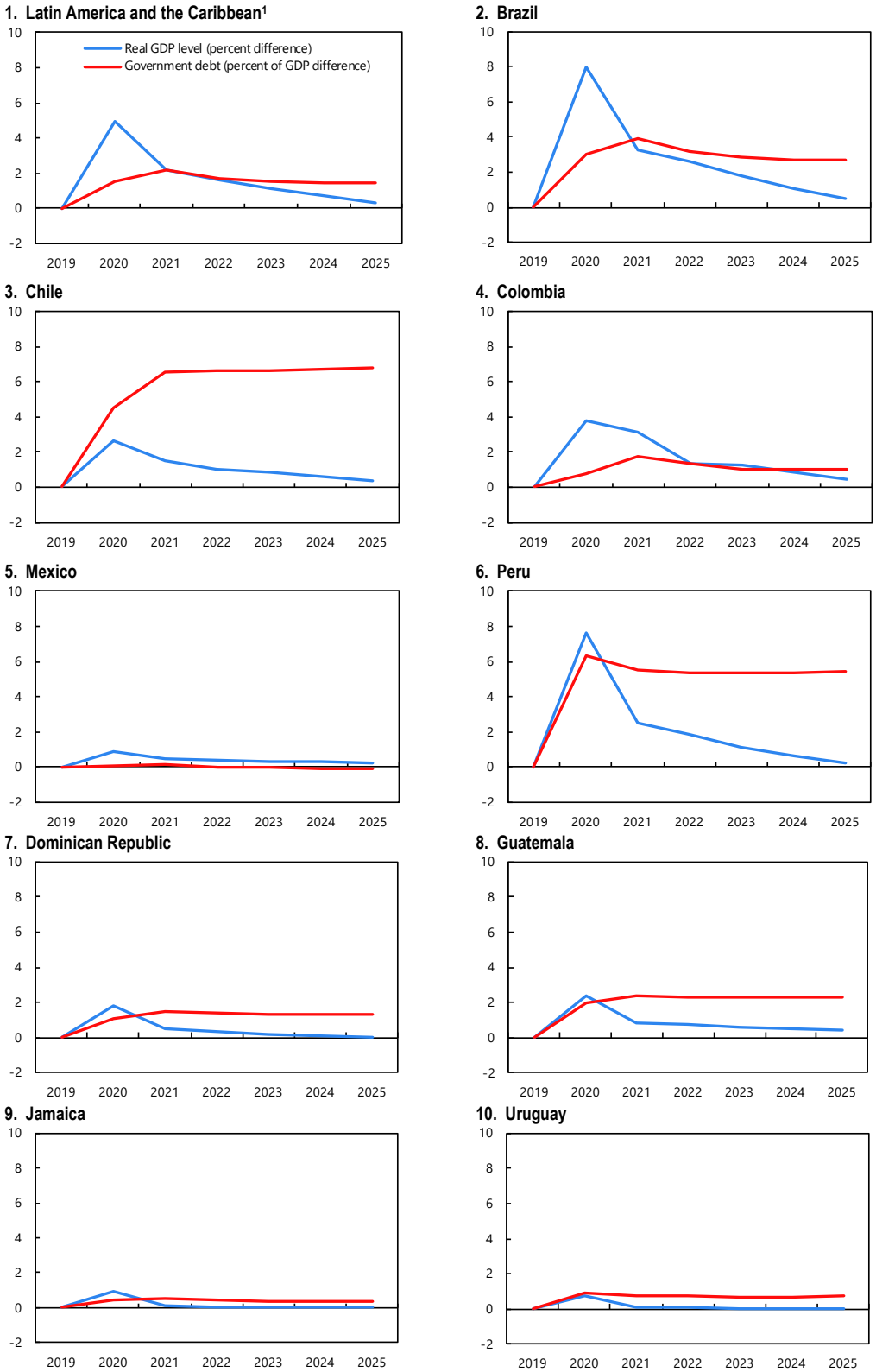
Sources: WHDMOD; Carrière-Swallow, David, and Leigh (forthcoming); and IMF staff calculations.
Note: Estimates for crises periods are not specific to LAC. CIT = corporate income tax; LAC = Latin America and the Caribbean

The differential GDP effects of above-the-line fiscal packages across the LAC economies during the pandemic can be attributed to the packages' sizes, durations (e.g., temporary or permanent), and compositions (given different multipliers of different policies, Figure 12), as well as the economies' degree of trade openness. More open economies have relatively larger leakages through imports, and therefore, relatively smaller impact on economic activity, all other things being equal. An observation that might initially strike as a "puzzle" in Figure 13, is that the GDP effect for Chile's large above-the-line policy package (Figure 8) appears to be too small. The reasons for this are: the composition of Chile's announced measures has a relatively high weight on low-multiplier measures; and that Chile is the most open economy in LA5.

[13]Additional simulation exercises, including on quantification of effects of the COVID shock itself, can be found in Alichi and others (forthcoming).

Figure 13. Impact of COVID-19 Lifelines on Real GDP and Debt in LAC: WHDMOD Model Simulations

(Percent deviation from baseline)

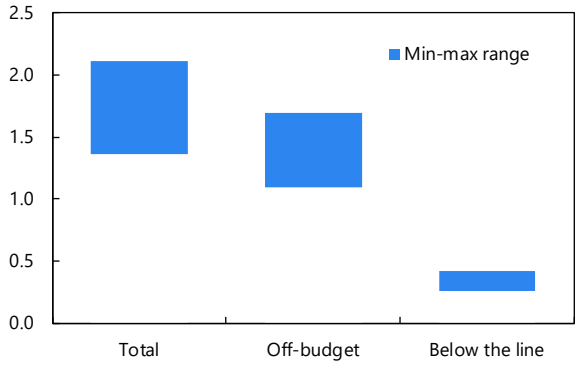


Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: COVID-19 = coronavirus disease.
[1]Includes Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Guatemala, Jamaica, Mexico, Peru, and Uruguay.

Estimates of the Effects of Below-the-line and Off-Budget Measures

The literature on the macroeconomic effects of below-the-line and off-budget measures is sparser than studies focusing on more traditional fiscal policy instruments. In a recent analysis for the United States, Lucas (2016) estimates that increases in output associated with changes in these "credit" instruments can vary substantially depending on whether the economy is in a normal or distressed period, as the share of agents facing credit constraints tends to be higher during the latter.

Figure 14. Effects of Below-the-Line and Off-Budget Measures on Real GDP in LAC
(Percent deviation from baseline)



Sources: National authorities; and IMF staff calculations.
Note: Below-the-line measures include loans, equity injections, asset purchases or debt assumptions. Off-budget measures refer to the incurrence of contingent liabilities including guarantees and quasi-fiscal operations. LAC = Latin America and the Caribbean.

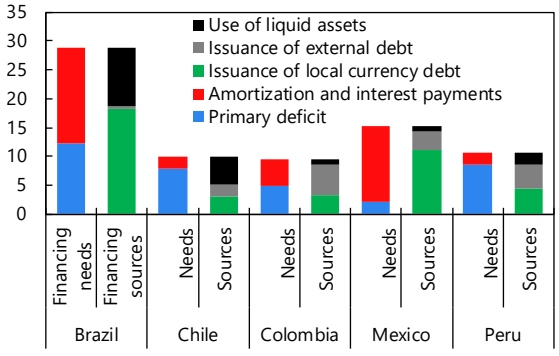
Figure 14 depicts "back-of-the-envelope" calculations for the effects of announced below-the-line, and off-budget measures on real GDP for countries in LAC. To calculate the effects of these measures (such as the credit lines extended by public banks in Brazil to SMEs), we use the multiplier estimates reported in Lucas (2016) for programs run by the U.S. Small Business Administration and other traditional federal credit programs (excluding housing finance and student loans); these range from 0.5 to 0.8. For credit guarantee programs, a multiplier of about 0.2 on the total guaranteed amount is used, which would correspond to a multiplier above unity on the capital put aside for the credit-guarantee programs.

Countries in the region would have faced even worse recessions in the absence of such programs. Overall, GDP could have been between 1½ to 2 percent smaller. Put together, the above- and below-the-line, and off-budget measures, if fully implemented, would have a sizable macroeconomic effect, raising the region's level of real GDP by about 6½ -7 percent within a year.

Projected Gross Financing Needs and Sources for 2020 in the LA5

Implementation of the support packages is expected to lead to large fiscal deficits, which—combined with scheduled amortizations and interest payments—are likely to result in large financing needs in 2020 (Figure 15). Among the LA5 countries, gross financing needs range from more than 25 percent of GDP in Brazil and 15 percent of GDP in Mexico, to about 10 percent of GDP in Chile, Colombia, and Peru. All the LA5 countries are expected to be able to fill a sizable part of their needs through issuance of local currency debt, while Colombia and Peru resort relatively more to issuance of external debt. Moreover, Brazil and to a lesser extent Chile have relied heavily on the use of liquid assets.

Figure 15. Financing Needs and Financing Sources, 2020
(Percent of GDP)

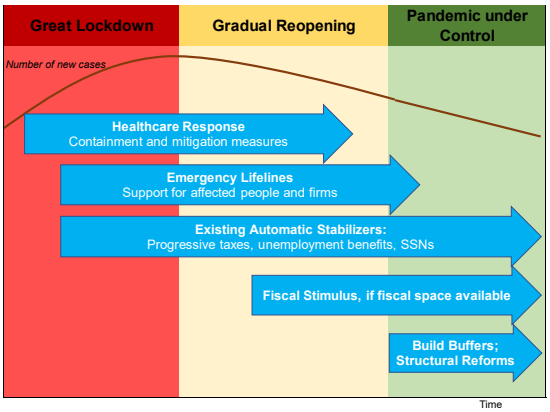


Sources: National authorities; and IMF staff calculations.

Fiscal Policy after the Great Lockdown

As economies gradually reopen, policymakers should facilitate the recovery through fiscal stimulus, where fiscal space is available. When the pandemic is under control, fiscal policy should focus on rebuilding fiscal space and facilitating the transformation of the economy through growth-friendly and inclusive adjustments (Figure 16).

Figure 16. Fiscal Policy at Different Stages of the Pandemic



Sources: October 2020 *Fiscal Monitor;* and IMF staff calculations.

Fiscal Policy During Partial Re-Openings

With substantial cyclical slack, the role of fiscal policy at this stage is to facilitate the resumption of activity and continue the protection of the most vulnerable. Countries could benefit from fiscal stimulus, where fiscal space is available. This should be accompanied by explicit and well-communicated commitments to rebuild fiscal buffers in the medium term. A temporary increase in the debt-to-GDP ratio is unlikely to reduce long-term growth if there is reassurance, backed by commitment and action, that the increase in government debt and deficits will be corrected.[14]

Fiscal space will be the crucial factor in calibrating the extent of fiscal stimulus to help sustain economic recovery:

- *Countries with fiscal space.* As uncertainty regarding the recovery and possible scarring effects of the pandemic is high, policy makers should follow a gradual approach in withdrawing emergency lifelines, while improving their targeting. To facilitate the recovery, governments should plan to provide broad-based stimulus. This could include, for example, temporary payroll tax cuts to incentivize firms to hire, time-bound value-added or sales tax reductions to bring forward consumption, temporary cost-based incentives to encourage private investment, as well as additional public investment, in particular in repair and maintenance activities.
- *Countries with limited fiscal space.* As governments unwind the emergency lifelines, the priority would be to preserve measures with the largest social impact (e.g., health care, unemployment benefits/social assistance) and increase the efficiency of spending, as well as revenue mobilization, and exploring further low-cost financing sources (such as from multilateral institutions). Structural adjustments, to increase fiscal space, should be postponed to after the pandemic is under control.

The LA5 countries have already formulated the following measures to support the recovery in the gradual-reopening phase of the crisis:

[14]Moreover, the global nature of the COVID-19 pandemic and the synchronicity of its macroeconomic effects might justify tolerance for higher debt levels temporarily. Chudik and others (2017) argue that there is no compelling evidence for a universally applicable threshold effect in the relationship between public debt and growth if one accounts for global interdependencies and common factors/shocks.

- In Brazil, the authorities extended until the end of this year some of the lifelines, such as transfers to low-income households and informal workers ("*Auxilio Emergencial*") and support for formal employment.
- In Chile, the announced measures include a temporary reduction of the corporate income tax rate for SMEs from 25 percent to 12.5 percent, and a 100 percent instantaneous depreciation allowance for new investment projects.
- In Colombia, emergency lifelines of about 2.5 percent of GDP are expected to be scaled down in 2021. Nonetheless, transfers to health providers are expected to be retained in order to cover for individuals without jobs and medical insurance.
- In Mexico, limited support through public works and urban development projects (estimated at about 0.2 percent of GDP) is envisaged during the gradual reopening phase.
- In Peru, a public works program has been put in place, while the government has been expanding its credit support programs for specific sectors and has introduced a new cash transfer program for households. In addition, the government has also announced new subsidies on households' electricity bills and public transportation.

Legacies of the Pandemic for Public Finances

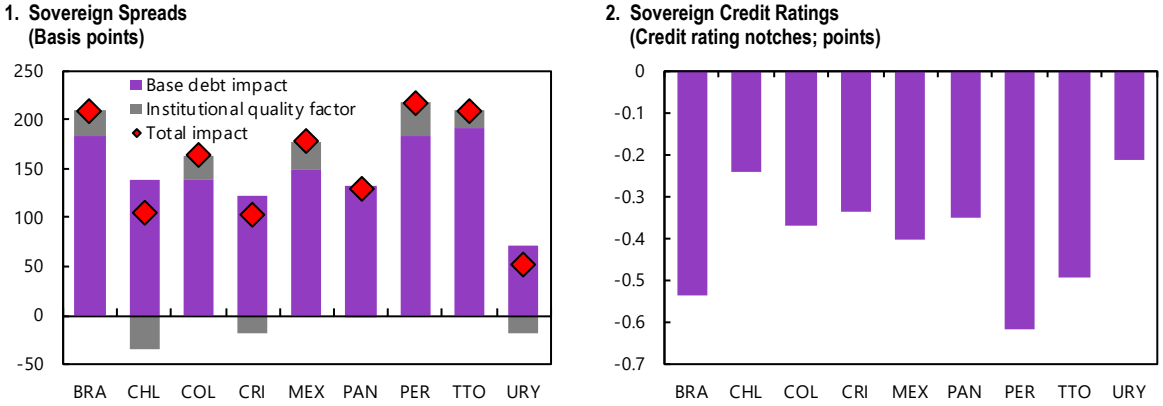
In addition to its scarring effects on the real economy, the pandemic will likely have legacy effects on public finances, including:

Increased Future Financing Costs and Higher Debt Intolerance

Financing costs may be affected by the pandemic, going forward. Evidence shows that the evolution of sovereign spreads and credit ratings in the aftermath of debt surges can shape investors' tolerance for public debt (Hadzi-Vaskov and Ricci, 2019 and forthcoming). Historically, a 1 percent of GDP increase in public debt is associated with an increase in sovereign EMBI spreads of 8-14 basis points in the LA5—conditional on institutional quality (Figure 17, panel 1)— and a deterioration in credit ratings (Figure 17, panel 2). The pandemic-related increase in public debt, if not reversed, would imply higher sovereign spreads in Chile (by 100 basis), Colombia and Mexico (by 160-180 basis points), and Brazil and Peru (by 200 basis points). While institutional quality is not assumed to change in the short term, the analysis suggests that economies with relatively stronger institutions are likely to benefit from them (in terms of spreads) and economies with weak institutions to be further disadvantaged by them during debt surges. The surge in debt could result in half-a-notch worse credit ratings in general, with the effect being somewhat larger in countries with relatively higher expected debt increases. These estimates are based on historical relationships, and it would remain to be seen if they still would be appropriate for the COVID-19 pandemic too. Nonetheless, several economies in LAC have already faced downgrades since the start of the pandemic. These include Bahamas, Bolivia, Chile, Costa Rica, Ecuador, Mexico, and Trinidad and Tobago.[15] In addition, the outlook deteriorated for several others, including Brazil, Colombia, Dominican Republic, Jamaica, and Panama.

[15]In some cases (e.g., Mexico) the downgrades might not have been directly related to the pandemic.

Figure 17. Impact of Public Debt Surges on Sovereign Spreads and Credit Ratings

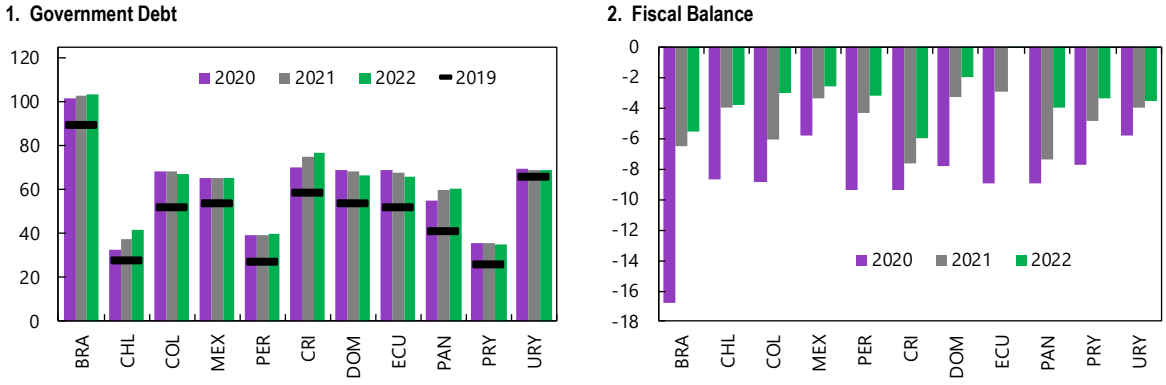


Sources: Bloomberg Finance L.P.; Fitch Ratings; Hadzi-Vaskov and Ricci (2019 and forthcoming); IMF, World Economic Outlook database; Standard and Poor's; World Economic Forum; and IMF staff calculations.
Note: Institutional quality is measured by the score in *"Institutions"* (1st pillar) of the 2017 Global Competitiveness Index. Data labels use International Organization for Standardization (ISO) country codes.

Elevated Government Debt Levels

Government debt ratios, which are projected to increase by more than 10 percent of GDP in the region in 2020 (Figure 2), are expected to remain elevated, going forward (Figure 18, panel 1). By 2022, gross debt to GDP is projected to remain above the 2019 level in most LAC countries. The elevated debt ratios are in part a result of high deficits (Figure 18, panel 2).

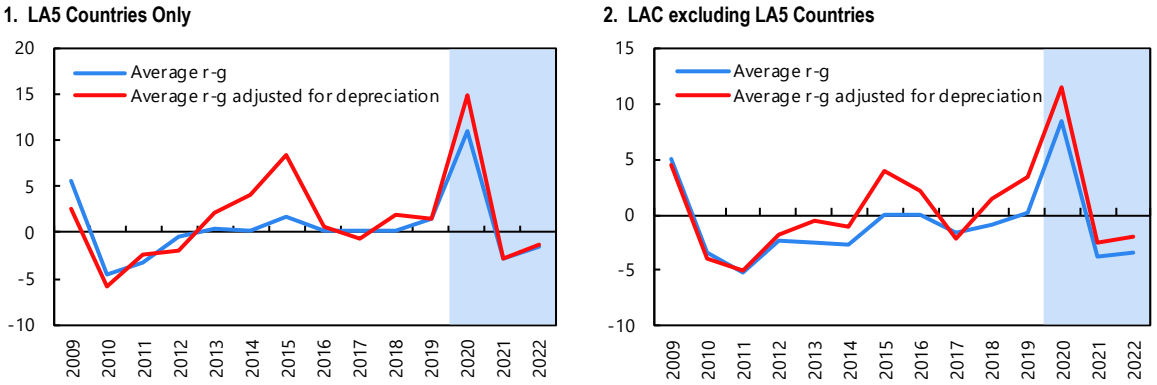
Figure 18. Medium-term General Government Debt and Overall Fiscal Balances in LAC
(Percent of GDP)



Source: IMF, World Economic Outlook database.
Note: Data labels use International Organization for Standardization (ISO) country codes. LAC = Latin America and the Caribbean.

Another contributing factor is the interest rate-growth differentials, which are expected to exceed 7½ and 2 percent, respectively, in the LA5 (Figure 19, panel 1) and rest of the region (Figure 19, panel 2) in 2020. While the differentials are expected to turn negative in 2021-2022, their sizes are not large enough to have a substantial effect on debt ratios. Moreover, historical evidence shows that (average) interest rate-growth differentials have frequently been negative and are not higher prior to sovereign defaults than in normal times (Mauro and Zhou, 2020). In fact, marginal (rather than average) government borrowing costs often rise abruptly and sharply prior to defaults, suggesting that negative interest rate-growth differentials do not necessarily ensure favorable debt dynamics, going forward.

Figure 19. Interest Rate-GDP Growth Differentials in LAC
(Percent)

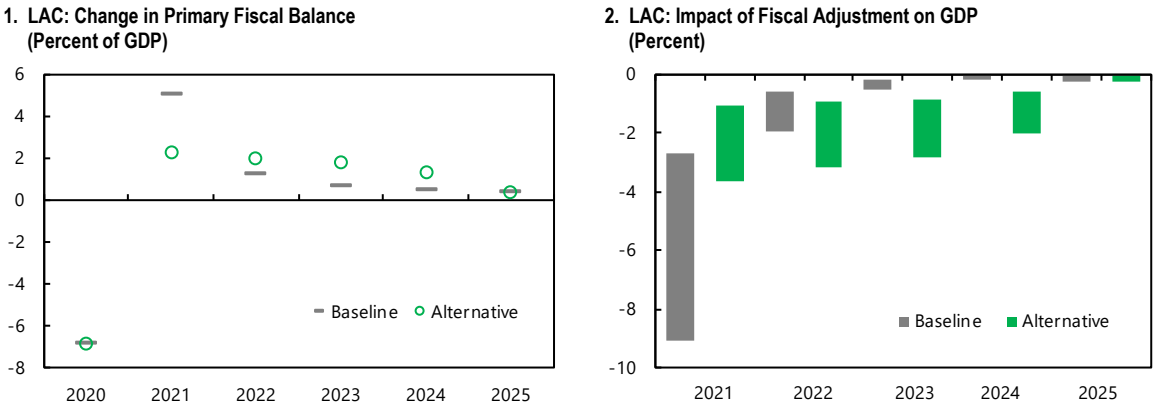


Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Simple average. Argentina is excluded in panel 2. Data labels use International Organization for Standardization (ISO) country codes. LAC = Latin America and the Caribbean; LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru).

A Looming Policy Reversal

The policy measures discussed previously, and the economic contraction will lead to a sharp widening of fiscal deficits in 2020 across the region. This is expected to be followed in many LAC countries by a sharp policy reversal—a substantial increase of their fiscal balances. IMF staff's "baseline" WEO projections, which are based on current plans of the authorities, suggest this reversal. LAC's fiscal impulse—measured by the change in the primary fiscal balance—is expected to turn from a loosening of about 7 percent of GDP in 2020 to a tightening of about 5 percent of GDP in 2021, followed by additional moderate tightening over the medium term (Figure 20, panel 1; grey lines). These suggest that in the baseline forecast, fiscal policy will be a major headwind against the recovery in 2021 in LAC, lowering the region's GDP between 3 to 9 percent depending of the composition of the fiscal adjustment. However, beyond 2021, fiscal policy will only have small negative growth effects (Figure 20, panel 2; grey bars).

Figure 20. Policy Reversal (Baseline) and Avoiding It (Alternative)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: LAC = Latin America and the Caribbean. Bars represent ranges for the whole LAC region.

The region should strive for an "alternative" scenario (Figure 20, panel 1, green circles) with more gradual adjustment than the "baseline", perhaps anchored by fiscal rules or fiscal "forward guidance" backed by credible medium-term fiscal strategies. Such an alternative scenario will be more growth-friendly than the baseline in the initial years after the worst of the pandemic has passed, with a drag of

only 1-3 percent of GDP in 2021-22 (Figure 20, panel 2, green bars). To provide credibility to these more gradual plans, countries could consider passing of legislation (such as "pre-approval" of tax reforms) to ensure that fiscal consolidation occurs over the medium-term. It should be emphasized that Figure 20 provides only an illustrative example for avoiding the expected policy reversal. The exact size and speed of adjustment policies depend on each country's specific circumstances, including their fiscal space and access to financing.

Medium-term Fiscal Strategies—After the Pandemic Is Under Control

This is the last phase, in which effective prevention (e.g., vaccination) and/or medical treatments are widely available, the pandemic is under control, and the recovery is well underway. The role of fiscal policy at this stage is to rebuild fiscal buffers, as well as facilitate fiscal policy/framework reforms that would address the legacy effects of the COVID-19 crisis as well as other long-standing structural issues.

Rebuilding Fiscal Buffers

In many countries, past easing cycles were not followed by a commensurate normalizing or rebalancing. The end-result has been a permanent increase in current spending that has proved hard to reverse as growth recovered (Figure 21). Governments should reprioritize spending based on the needs of their countries and towards efficiency gains. While in many cases overall spending should be curtailed, in most cases there is scope to increase capital and social spending.

In many, if not all the LAC countries, debt has to be stabilized or reduced over the medium term to provide buffers against possible future adverse shocks. Cross-country evidence suggests that a persistent accumulation of government debt is associated with lower growth in the long term (Chudik and others 2017), contrary to a temporary increase in debt, which is unlikely to lower growth in the long term.[16]

Undertaking Fiscal Policy/Framework Reforms

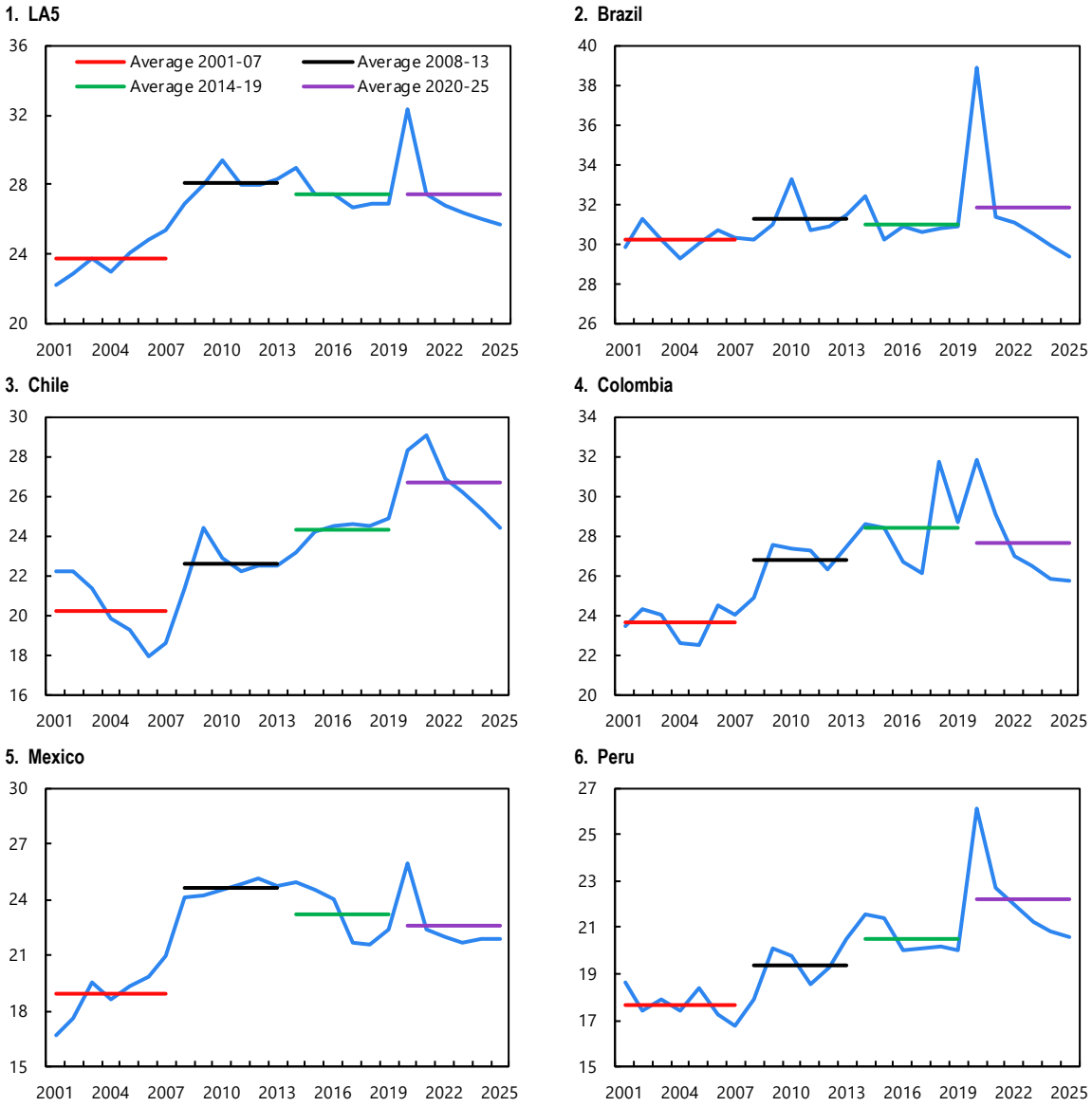
Beyond the need for budgetary adjustment, fiscal policy strategies should consider the following structural reforms in the wake of the pandemic:

Safeguarding Social Protection and Enhancing Automatic Stabilizers

Social protection should be safeguarded, and in several cases enhanced, to reduce income inequality while boosting growth post-COVID-19 pandemic. Automatic stabilizers (beyond income stabilization through taxes) would also be more effective if unemployment benefits and social safety nets were strengthened in the region. This would enhance macroeconomic resilience, as a higher share of liquidity-constrained households would be able to smooth their consumption more effectively when facing income shocks (McKay and Reis 2016). This is all the more important as the underlying reasons for social tensions—which flared up in 2019 and subsequently subsided—persist and may in some cases be exacerbated by the pandemic.

[16]Continuous debt accumulation can harm economic growth through several channels, such as "crowding out" private investment, higher long-term interest rates, more aggressive future taxation, and possibly weaker investor sentiment and greater uncertainty. Specifically, a persistent increase in the debt-to-GDP ratio at an annual pace of 3 percent is eventually associated with annual GDP growth outcomes that are 0.2 to 0.3 percentage points lower on average.

Figure 21. Primary Government Expenditures
(Percent of GDP)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru).

A good social safety net usually has four attributes (Grosh and others 2008; April 2020 Fiscal Monitor). First, it provides broad coverage and adequate benefits to vulnerable groups in a progressive way within the overall tax-benefit system (IMF 2019)—that is, offers more generous benefits to the poorest beneficiaries. Second, it is cost effective by avoiding program fragmentation and beneficiary overlaps. Third, it preserves work incentives and enhances human capital by linking transfers to required or voluntary programs such as public works, obtaining health care, and attending education and training. Fourth, it is financially sustainable within the overall expenditure envelope and consistent with other social protection programs.

Social safety nets in LA5 (and likely in other LAC) countries have significant gaps in terms of coverage of lower income groups and benefit levels (generosity) in some countries (Ahmed Hannan, Honjo, and

Raissi, forthcoming). Programs are often fragmented, involve beneficiary overlaps, and lack appropriate incentive features. Moreover, the burden of income support is placed on SSNs, as very few of the poor are covered by unemployment insurance. In some LAC countries, SSNs can be improved by expanding coverage in a cost-effective manner through proxy-means targeted transfers, whereby targeting is improved by giving households a score based on a statistical algorithm that predicts incomes or consumption or poverty (Coady and Le 2020) and in others by decreasing transfer levels and duplications, once countries strengthen their administrative capacity. The relatively large leakage of benefits to higher-income groups in Chile, Mexico, and Colombia increases the importance of strengthening progressive income tax systems to claw back these benefits from high-income groups. The LAC countries can also use instruments that are effective in reaching individuals who are most in need, including in the informal sector. These instruments include mobile money, in-kind transfers (such as in education and health), use of existing social registries where applicable, and use of community-based methods to identify those in need. There is also significant scope for introducing or improving unemployment insurance schemes in LAC (IMF, 2020b). An example is the extension of Mexico City's unemployment benefits scheme to the whole country.

Mobilizing Revenues

Considering that social spending is expected to be safeguarded in LAC, raising revenues will be indispensable to securing fiscal sustainability over the medium term. In this regard, there is significant scope for tax reforms in several LAC countries, including Colombia, Mexico, and Peru. Depending on specific country cases, tax reforms should also center on policy and administration actions that could improve tax collections, rationalize inefficient and regressive income tax expenditures, and raise the top personal income tax brackets.

Improving Fiscal Frameworks

The pandemic also highlighted some necessary adjustments in the fiscal frameworks/rules of the region. Some countries still need to develop credible operational rules, such as enforceable deficit targets. Fiscal frameworks for the vast majority of the LAC countries could benefit from complementing the operational rules with a medium-term nominal anchor, such as a debt ceiling. Importantly, while the use of escape clauses provided the necessary flexibility to confront the crisis, it is crucial to ensure that such deviations are temporary and that, the fiscal frameworks in the LAC countries have adequate correction mechanisms (not only for deviations from the operational rule but also from debt thresholds), in the context of medium-term projections.

Investing to Boost Potential Growth

LAC governments should consider boosting public investment, within frameworks that ensure fiscal sustainability. Potential GDP growth had already weakened notably in the region before the pandemic, partly due to low productivity, demographic headwinds, and other structural issues. The scars from the pandemic will likely make potential growth even weaker. Scaling up public investment gradually could play an important role in addressing these challenges and accelerating the transformation to more resilient and sustainable economies, especially if accompanied by improvements in public investment management (*Chapter 2, October 2020 Fiscal Monitor*). Policymakers should prepare a pipeline of carefully appraised investment projects and start investment planning for the new priorities of the post-pandemic economy. In that context, they could focus on investment in health care, digital infrastructure, and climate change adaption and mitigation.

Concluding Remarks

Most Latin American and Caribbean economies faced the pandemic in 2020 with less fiscal space than they had at the onset of the global financial crisis in 2008. Some even faced high debt sustainability risks before the pandemic. Over the past decade, the end of the commodity super-cycle had lowered fiscal revenues, while expenditures remained relatively high. Slow economic growth, high real interest rates, and exchange rate depreciation have also contributed to lower fiscal space in the region.

The region's governments have responded by increasing health spending and providing lifelines to households and firms. Lifelines have generally been substantial but varying in size and type (above or below-the-line or off-budget) across countries. Automatic stabilizers have also helped as additional cushions for the economies. Countries with well-established fiscal rules have benefitted from built-in adjustments for cyclical factors, escape clauses, or deficit-target revisions to obtain the needed fiscal relaxation since the pandemic started.

Simulations suggest that the announced above-the-line measures, if fully implemented, would prevent a more severe economic downturn, raising the region's real GDP by about 5 percent within a year—relative to the case if these measures were not implemented. The impact on economic activity in each country depends on the size and composition of the packages, whether it is temporary or persistent, and the degree of openness of the economy. Overall, the impact of above-the-line discretionary measures is expected to dissipate over the medium term as many LAC economies unwind the stimulus and embark on fiscal consolidation. Back-of-the-envelope calculations suggest that the announced below-the-line and off-budget measures, if fully implemented, would add another 1½ to 2 percent in the short term to the region's real GDP level, bringing the total real GDP effect of policies to 6½-7 percent. However, implementation of policies would most likely be less than 100 percent in many cases, leading to more moderate GDP effects than estimated above.

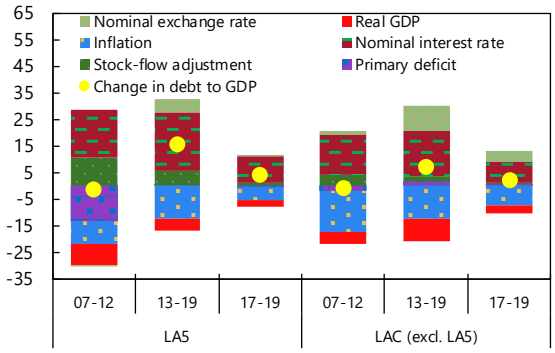
As lockdowns are gradually lifted, with substantial cyclical slack and displaced workers, fiscal policy should be geared towards boosting demand with stimulus to support the resumption of activity. The size of fiscal stimulus would depend on each country's fiscal space. A looming policy reversal in some countries in the short term should be avoided through more gradual consolidation to ensure sustainability over the medium-term. These supportive policies should be accompanied by clear and credible commitments to future consolidation/sustainability. Fiscal rules will play an important role. Countries where fiscal rules were suspended due to the crisis should clearly communicate commitments to restore rules, conditional on the state of the recovery. In that context, it might be desirable to formally embed correction mechanisms within the existing fiscal rules, if these are not already present. Moreover, the passing of legislation to ensure fiscal consolidation over the medium term (such as "pre-approval" of future tax reforms) would also help as a commitment device that increases current fiscal space.

After the pandemic is under control, the role of fiscal policy will be to rebuild fiscal buffers, as well as undertake fiscal policy/framework reforms that would address the legacy effects of the COVID-19 crisis as well as other long-standing structural issues. These include safeguarding social protection, strengthening the automatic stabilizers, raising revenues, better calibrating the fiscal rules, and gradually scaling-up public investment to boost potential growth and accelerate the transformation to more resilient and sustainable economies.

Annex 1. Debt Dynamics in the Region Before the Onset of the Pandemic

A historical decomposition of debt dynamics indicates that during 2007-2012 primary balances contributed to reduce debt to GDP ratios, but this did not continue in the more recent period. A deterioration in primary balances, a widening of the real interest rate-economic growth differentials, and exchange rate depreciations were the main drivers of the increase in public debt observed over 2013-2019 across several economies in LAC (Annex Figure 1.1). The debt to GDP ratio increased cumulatively by over 15 percentage points of GDP in the LA5 countries over this period, compared to about 7 percentage points of GDP for the rest of the region. In the LA5 countries, the interest rate-growth differential accounted for a cumulative increase of about 5 percent of GDP over 2013-2019 compared to an increase of about 1.5 percent of GDP in the previous period. For the rest of the region, exchange rate depreciation played a significant role in the increase in debt (accounting for over 9 percent of GDP, compared to 5 percent of GDP for LA5 economies).

Annex Figure 1.1. Drivers of Change in Public Debt
(Percent of GDP)

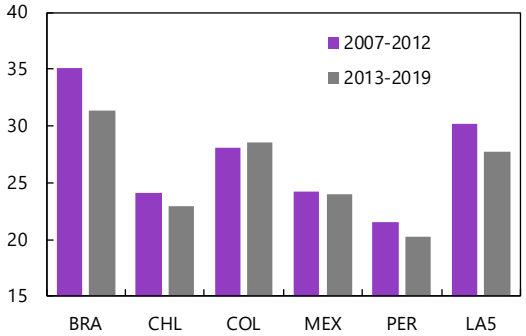


Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: LA5 is the US dollar nominal GDP-weighted average of Brazil, Chile, Colombia, Mexico, and Peru. LAC (excluding LA5) refers to the aggregate constructed in the same way for the other countries in the region, excluding Venezuela.

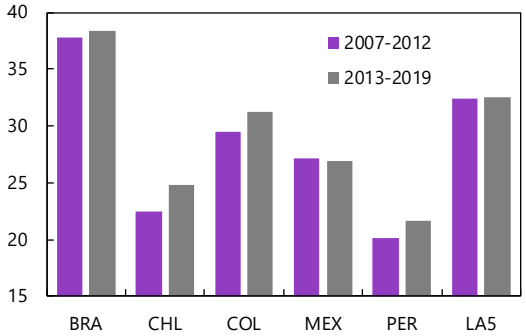
This deterioration in LA5 primary balances after 2012 was driven by a number of factors, which included the end of the commodity super-cycle, the sluggish economic growth in the region, and more recently policies to address social tensions and migration from Venezuela that have affected, in particular, Chile and Colombia. For example, for LA5, the average revenues to GDP ratio fell from over 30 percent during 2007-2012 to less than 28 percent over 2013-2019, while overall expenditures to GDP remained broadly constant in most countries (Annex Figure 1.2). However, despite this general picture, Chile, Colombia, and to a lesser extent Peru, experienced rapid increases in expenditures in the latter period.

Annex Figure 1.2. Changes in Revenues and Expenditures for the General Government in LA5 Countries

1. Average Revenues to GDP Ratio over Different Time Periods (Percent)



2. Average Expenditures to GDP Ratio over Different Time Periods (Percent)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Data labels use International Organization for Standardization (ISO) country codes. LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru).

Annex 2. Automatic Stabilizers in LAC

Automatic stabilizers primarily include, on the revenue side, progressive income taxes and, on the spending side, unemployment benefits and social safety nets (SSN).

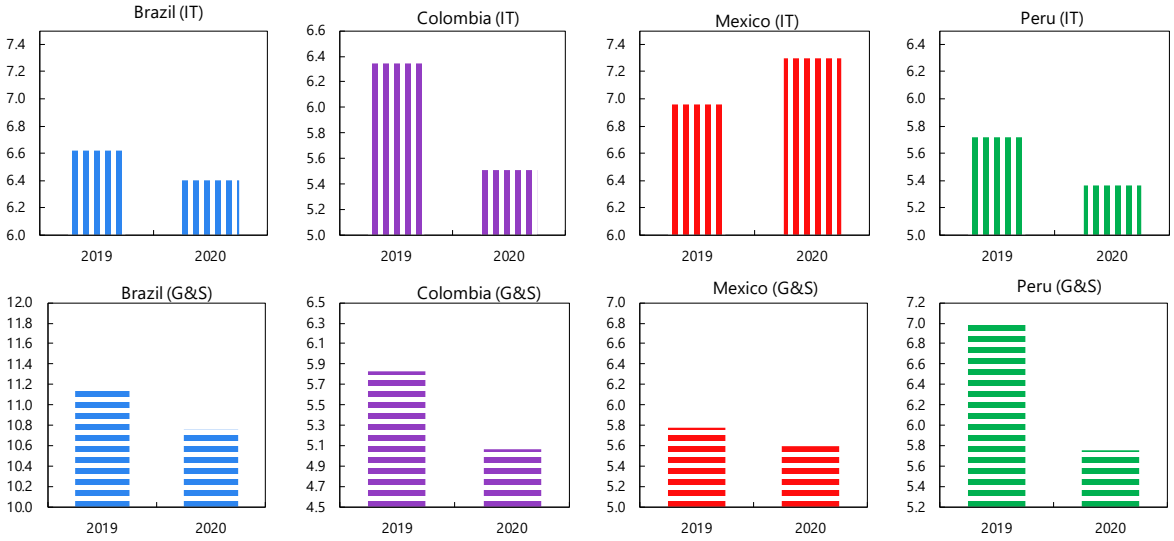
Progressive taxes. The design of a country's tax system—which reflects economic considerations as well as redistribution objectives—affects the volatility of output and employment. For example, a progressive income tax system helps stabilize aggregate demand because taxpayers pay lower taxes in a recession than in a boom, so that their consumption and investment will fluctuate less. Moreover, the impact of a recession on net wages is cushioned, thereby, people are less likely to drop out of the labor force or to work fewer hours. Among various taxes, those on income respond the most to the economic cycle, reflecting the progressive rate structure for personal income taxes and the close link to profitability for corporate income taxes (Baunsgaard and Symansky 2009).

To shed further light on the size of automatic stabilizers on the revenue-side, the chapter estimates heterogeneous panel regressions on data for 18 countries in LAC using the common correlated effects estimator proposed by Pesaran (2006). Log changes in income taxes or taxes on goods and services (G&S) are regressed on changes in log GDP, also including common factors, and a time trend.

Historical evidence indicates that revenues are likely to be much more sensitive to changes in GDP in recessions than in normal times. The estimates point to elasticities of around 1 for both types of taxes for the entire sample that spans of 1991-2019 (Figure 10, panel 2). Nonetheless, when focusing on periods of recessions (defined as periods when output gap is negative), the point estimates of the elasticities increase markedly to 1.5 in the case of income taxes and 1.3 in the case of G&S taxes. This differential in elasticities is in line with the evidence on the elasticity of VAT revenues to changes in final consumption for a broader set of countries discussed in IMF (2020b). Nonetheless, the COVID-19 shock is substantially different from a typical recession and there is high uncertainty regarding the magnitude of elasticities of tax revenues relative to their respective bases in the current context.

In line with these elasticity estimates, the main tax revenue components for larger economies in LA are generally projected to decline as a share of GDP in 2020 (Annex Figure 2.1). On income taxes (IT), Mexico is the only exception with an increase in IT revenues as a share of GDP, given a strong revenue performance in the first 9 months of 2020 and the fact that the realized elasticities in Mexico have been better than previous crisis episodes (the GFC or the 1994 crisis) owing to a series of tax administration initiatives or the payoffs from previous ones. The latter includes abolishing the right to offset excess tax credits against other taxes, strengthened sanctions against tax fraud, and focusing strategically on large taxpayers. In contrast, Colombia is projected to register a relatively larger decline in its IT revenues, as a share of GDP, reflecting the impact of the corporate tax reform approved in 2019, which is projected to reduce IT revenues in 2020 by about 0.5 percent of GDP. On taxes on goods and services (G&S), the ratios to GDP decline for all economies, with the magnitude of the declines reflecting country-specific factors. Peru's ratio is projected to decline relatively more than others, reflecting the impact of lockdown-related adjustments of consumption (beyond the usual income effect).

Annex Figure 2.1. Tax Revenue Components
(Percent of GDP)



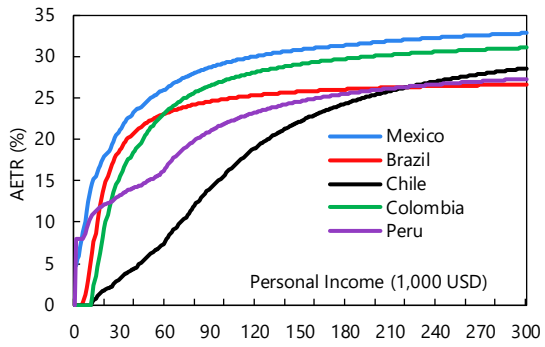
Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: G&S = overall taxes on goods and services; IT = overall income tax.

In the LA5 countries, featuring a relatively high degree of informality, the size of automatic stabilization of income taxes is toward the lower end of the OECD range of 20-50 percent of income shocks (OECD, 2019). Raising the progressivity of personal income taxes would, in principle, enhance automatic stabilizers in the LA5 countries. This increase, though, needs to be balanced against disincentives to labor supply (McKay and Reis 2016).

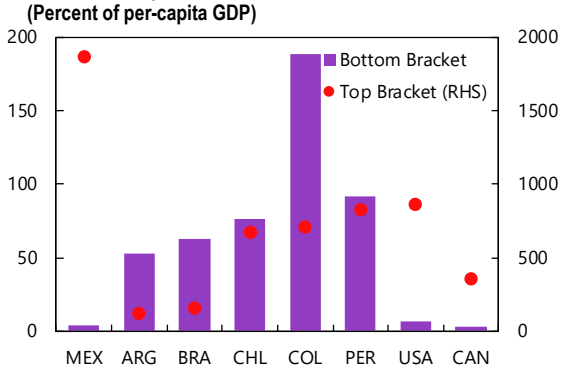
Considering the average effective tax rate by personal income level (Annex Figure 2.2, panel 1), there is room for improvements in progressivity of income taxation in Chile and Peru. In addition, broadening the revenue base in all the LA5 countries could foster income stabilization. In Mexico, tax expenditures for CIT and PIT accounted for 1.5 percent of GDP in 2019. At least 0.7 percent of GDP of these tax expenditures are inefficient or regressive and could be rationalized while the threshold for the top PIT bracket should be lowered (Annex Figure 2.2, panel 2).

Annex Figure 2.2. Progressivity and Brackets of PIT

1. Progressivity
(Percent)



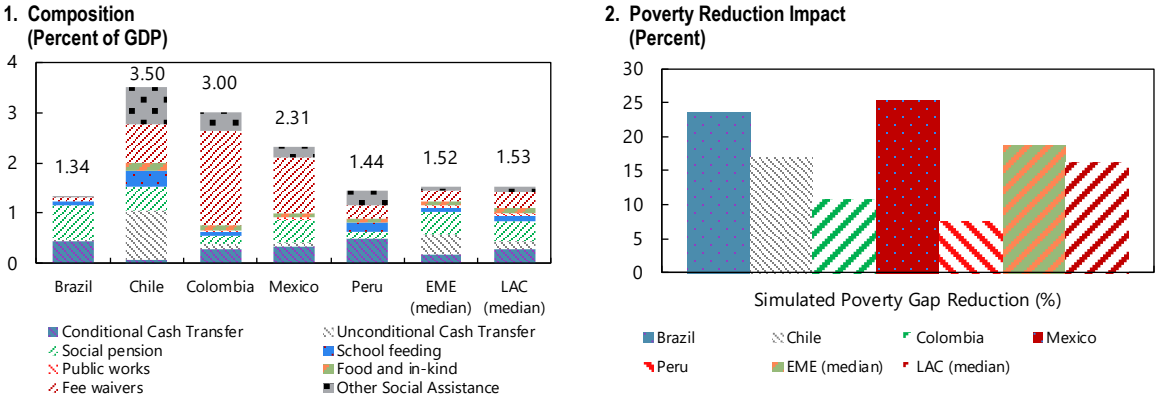
2. Bottom and Top Brackets
(Percent of per-capita GDP)



Sources: IBFD data; FAD Revenue Analysis Tool; Ahmed Hannan and others (forthcoming); and IMF staff calculations.
Note: Lines in panel 1 show the average effective tax rate (AETR) by personal income level. Data labels use International Organization for Standardization (ISO) country codes. RHS = right-hand scale.

Unemployment benefits and social safety nets (SSN) can (1) reinforce spending-side automatic stabilizers and (2) protect households by providing income support in difficult times and reducing poverty gaps—the distance between the poverty line and the average income of poor households. Recent research shows that well-designed unemployment benefit systems and SSNs can play a large role in the stabilization of aggregate demand because such payments are directly tied to consumption of low-income households (McKay and Reis 2016; Dolls, Fuest, and Peichl 2012). In the LA5 countries, while unemployment benefits systems are underdeveloped (or non-existent in some countries), SSNs are relatively large (Annex Figure 2.3, panel 1).[1] Moreover, SSNs have contributed to a reduction of poverty gaps by 7–25 percent across the LA5 countries (Annex Figure 2.3, panel 2).

Annex Figure 2.3. Composition and Poverty Reduction Impact of SSNs



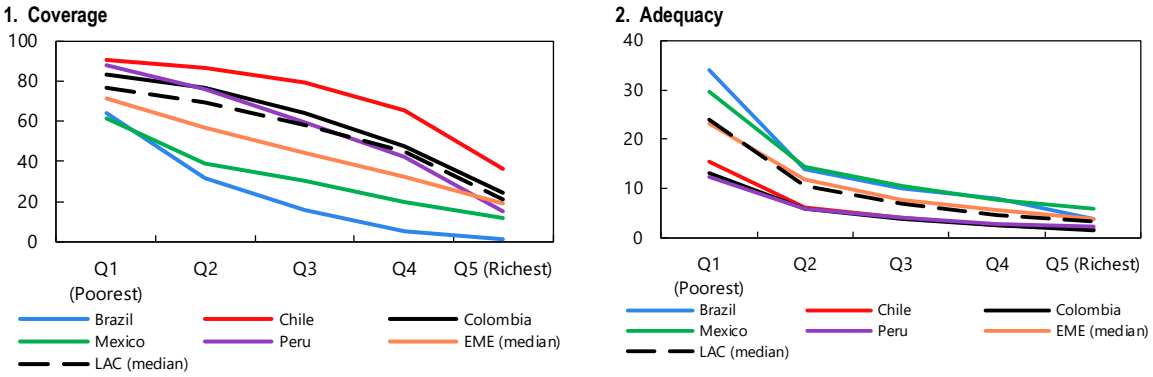
Sources: ASPIRE (World Bank); national authorities; and IMF World Economic Outlook database.
Note: In panel 1, apart from Mexico, which reports the size of its SSN in 2020, all the other numbers are the latest available before the outbreak of COVID-19. LAC = Latin America and the Carribean; EME = emerging markets economies. In panel 2, simulated percentage change reduction in poverty gap owing to social safety net programs. The calculation is: (poverty gap pre transfer- poverty gap post transfer) / poverty gap pre-transfer.

The choice of instruments, coverage of the poor, adequacy of benefits, and targeting of SSNs vary significantly across the LA5 countries (Annex Figures 2.4 and 2.5). All these features of the SSNs give rise to tradeoffs between the extent of automatic stabilization, poverty-gap reduction, and fiscal cost. In Chile and Colombia (Brazil and Mexico), while SSNs cover a large (small) share of the poorest quintile of the population, the adequacy of benefits for the poorest quintile is relatively low (high). The leakages to the rich in Chile and Colombia are larger than Brazil and Mexico. In terms of targeting, Brazil stands out for its relatively high benefits/beneficiary incidence (Annex Figure 2.5).

[1]SSNs are noncontributory transfer programs aimed at low-income households or the vulnerable (World Bank 2018, IMF 2019). They are financed from government revenues and include (1) cash transfers, food stamps, child allowances, and social pensions; (2) in-kind transfers; (3) income-support schemes for low-income households, conditional on education or health; (4) public works; and (5) fee waivers, including for health care.

Annex Figure 2.4. Coverage and Adequacy of Social Safety Net Programs by Quintile

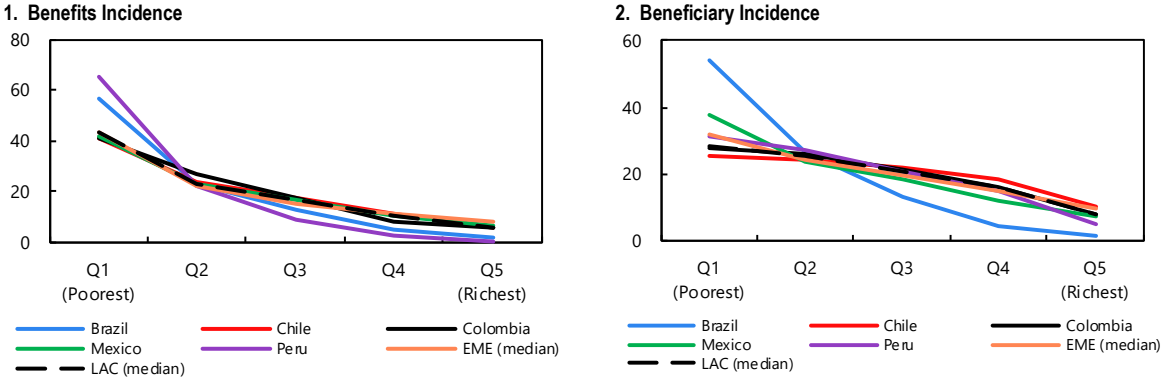
(Percent)



Source: IMF FAD Social Protection & Labor - Assessment Tool (SPL-AT).
Note: Coverage measures the percentage of the quintile that receives a SSN benefit. Adequacy of benefits measures the total transfer amount received by all beneficiaries in the quintile as a percent of the pre-transfer total income/expenditure of beneficiaries (in that quintile). Calculations are based on pre-COVID-19 information. EME = emerging market economies; LAC = Latin America and the Caribbean.

Annex Figure 2.5. Targeting of Social Safety Net Programs by Quintile

(Percent)



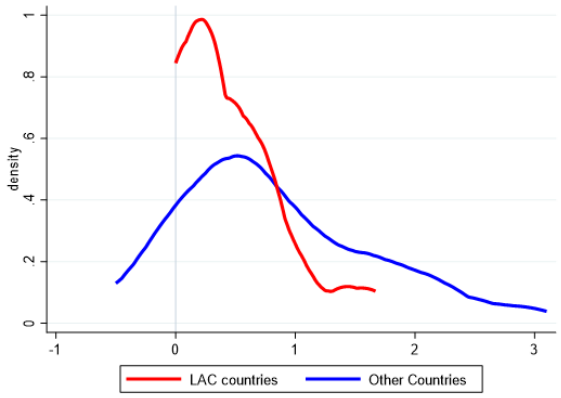
Source: IMF FAD Social Protection & Labor - Assessment Tool (SPL-AT).
Note: Benefits incidence measures the percentage of benefits going to each quintile of the pre-transfer welfare distribution relative to the total benefits going to the population. Beneficiary incidence measures the percentage of program beneficiaries in a quintile relative to the total number of beneficiaries in the population. The indicator is estimated by program type and by quintiles of the pre-transfer welfare distribution. Calculations are based on pre-COVID-19 information. EME = emerging market economies; LAC = Latin America and the Caribbean.

Annex 3. Empirical Estimates of Fiscal Multipliers: Is Latin America Different?

To anchor some of the assumptions used in the model simulations, we briefly review empirical estimates of fiscal multipliers with a special focus on the LAC countries. There is a vast literature on the impact of fiscal policy actions on output, which yields a wide range of estimates of fiscal multipliers. Annex Figure 3.1 depicts kernel density estimates of fiscal multipliers from a sample of 147 estimates, including 44 for LAC economies.[1] The definition of the fiscal multiplier itself varies across studies; hence, to facilitate comparison, we use estimates that reflect the fiscal multiplier as the cumulative change in GDP over a two-year horizon in response to cumulative changes in fiscal policy.

Annex Figure 3.1. Empirical Estimates of Fiscal Multipliers

(Distribution of cumulative fiscal multiplier estimates at the two-year horizon)



Source: IMF staff calculations based on 147 estimates.

The way that fiscal policy shocks are identified plays an important role in accounting for the large dispersion of estimates. Conventional statistical approaches to identify discretionary fiscal policy actions, such as the use of changes in cyclically-adjusted primary balances or the estimation of structural vector autoregression (SVAR) models, typically introduce bias in the analysis of the causal effects of fiscal policy due to measurement error and endogeneity problems (i.e. incorrectly assuming that changes in government revenue and spending are uncorrelated with other short-term developments affecting output). Frequently, this leads to an underestimation of the size of the effects of fiscal policy, particularly on the tax side.

Given these concerns, we focus our discussion below and in the main text on studies that have employed more "careful" techniques to identify fiscal shocks (namely, the narrative approach, identification through forecast errors, or sign restrictions in VAR models, among others) and/or have been published in academic journals (Figure 12). Typically, when such studies are considered, fiscal multiplier estimates tend to be close to 1 over a two-year period, i.e. a one percent of GDP fiscal expansion (contraction) will lead to a one percent increase (reduction) in GDP. This is in line with the evidence based on narrative fiscal shocks for a sample of 14 LAC economies presented in Carrière-Swallow, David, and Leigh (forthcoming).

When considering different types of fiscal policy instruments, the evidence for the LAC economies points to higher multipliers for public investment compared to other types of spending and taxes. In particular, using forecast errors to identify fiscal shocks, IMF (2018) finds that multipliers for capital spending in LAC economies would amount to 1.4, compared to multipliers of around 0.5 for current spending.

As discussed in previous sections, the fiscal lifelines implemented by governments in response to the pandemic involved in many cases increases in transfers to households. Careful studies estimating specific

[1]This chapter extends the original sample of estimates analyzed in Carrière-Swallow and others (forthcoming) by adding the results following the narrative approach reported in that paper; estimates from Izquierdo and others (2019); IMF (2018) for capital spending multipliers; Cloyne and others (2020) for multipliers under different degrees of monetary policy accommodation; Corsetti and others (2012); and Koh (2017) for multipliers during periods of crises.

multipliers for government transfers in LAC are scarce. Nevertheless, using the narrative approach to identify fiscal shocks in a sample of OECD economies, Alesina and others (2017) estimate a multiplier of 0.3 for government transfers over a two-year horizon, which is in line with multipliers obtained by these authors for other types of government spending. In an earlier extensive survey of the literature on fiscal multipliers, Gechert (2015) reported an average of around 0.4 for multipliers for government transfers, albeit this is the mean of estimates across different horizons and studies employing different methodologies.

The model simulations presented in this chapter, as well as economic theory, suggest that interactions between monetary and fiscal policy matter for the size of fiscal multipliers and in particular, monetary policy reaction to inflationary effects of a fiscal expansion should decrease the magnitude of the effects of fiscal policy on output. This is confirmed by empirical evidence presented by Cloyne, Jorda and Taylor (2020). Using narrative fiscal consolidation shocks for a sample of advanced economies, these authors find that the fiscal multiplier at any point in time depends crucially on the monetary policy response, even after controlling for other factors. Fiscal multipliers can be as low as zero and as large as two over a period of three years depending on the degree of monetary policy offset.

Finally, another theme of the multiplier literature that has gained relevance during the pandemic is whether fiscal multipliers are different during the times of crises. Financial crises in particular tend to intensify borrowing constraints and may cause deep recessions that would bring monetary policy to the zero lower bound, thus impairing monetary policy reaction (Corsetti and others, 2012). In general, empirical estimates indicate that fiscal multipliers tend to be substantially higher during crisis periods with average estimates amounting to 1.5 over two years, although no LAC specific estimates are considered. For example, in a large sample of 120 countries and using SVAR models with sign restrictions, Koh (2017) finds that long-run fiscal multipliers would be as high as 1.8 during crisis periods compared to multipliers of around 0.6 in normal times.

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