

## FISCAL POLICIES TO ADDRESS THE COVID-19 PANDEMIC

*Countries have made ample use of fiscal measures to protect lives and livelihoods against the health and economic fallout from the coronavirus disease 2019 (COVID-19) pandemic and to nurture the nascent reopening of economies in a highly uncertain environment. The drastic fiscal measures taken so far have been necessary, state-dependent, diverse, and costly. In general, these fiscal measures have mitigated the negative effects of the pandemic on health and economic outcomes. Although public debt levels are at record highs, further support is necessary to protect people who cannot make a living under the current circumstances and to promote a strong recovery. Fiscal policy should be tailored to different phases of the pandemic, adapting to evolving needs to protect people, support demand, facilitate the transformation to the post-pandemic economy, and ensure debt sustainability.*

## Introduction

The COVID-19 pandemic has prompted an unprecedented fiscal response worldwide to support health systems and provide lifelines to vulnerable households and firms. Fiscal measures announced as of September 11, 2020, are estimated at \$11.7 trillion globally, or close to 12 percent of global GDP. Half of these measures have consisted of additional spending or forgone revenue, including temporary tax cuts, and the other half liquidity support, including loans, guarantees, and equity injections by the public sector. The size and composition of fiscal support has varied vastly by country (Figure 1.1), reflecting in part countries' available fiscal space. Advanced economies and large emerging markets account for the bulk of the global fiscal response for three reasons. First, they were hit earlier and harder by the health crisis. Second, their central banks were able to provide massive monetary stimulus and purchase government or corporate securities while retaining credibility to deliver low inflation. Third, their treasuries were able to finance larger deficits at low interest rates. The fiscal response in low-income developing countries, which were hit later by the health crisis, has largely been on budget and smaller because of tighter financing constraints.

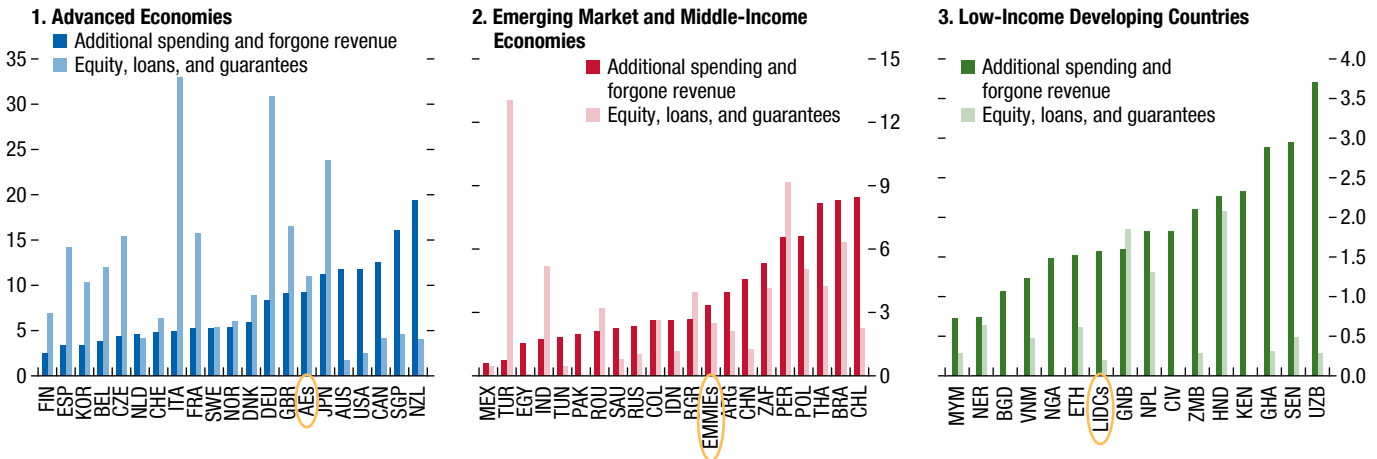
The fiscal response, coupled with the sharp decline in output and government revenue, will push public debt to levels close to 100 percent of GDP in 2020 globally, the highest ever (Figure 1.2). Central banks in several advanced economies and emerging market and middle-income economies have facilitated the fiscal response by directly or indirectly financing large portions of their country's debt buildup (Figure 1.3). In low-income developing countries, financing constraints have been modestly alleviated by debt relief and concessional financing from the official sector.

The increase in sovereign debt has added to global debt vulnerabilities that existed before the pandemic. Total private and public debt in the Group of Twenty (G20) has trended upward over the past two decades and reached almost 240 percent of GDP at the end of 2019, with private debt increasing steadily from 2014 to almost 150 percent of GDP at the end of 2019 (Figure 1.4). The long-term decline in borrowing costs and the expectation that interest rates will remain low has enabled governments in advanced economies and many emerging markets to carry higher debt loads by moderating debt-service burdens relative to GDP (Figure 1.5). Governments have also taken advantage of the interest rate decline to gradually extend the maturity of government bonds (Figure 1.6).

However, with bankruptcies on the rise, some private debt could migrate to the public sector through bailouts (Box 1.1). In addition, 54 percent of low-income countries were deemed to be in debt distress or at high risk of debt distress as of September 2020, up from 51 percent at the end of 2019.

On the whole, the massive fiscal support undertaken since the start of the COVID-19 crisis has saved lives and livelihoods. Public health policies that contained the spread of the disease were particularly effective because they also supported the recovery by restoring confidence and permitting a safe reopening of activity. Cash transfers were vital for the poor, who spent them largely on necessities. Unemployment benefits supported consumption for people who lost their main source of income. Even so, many policies that provided essential

**Figure 1.1. Discretionary Fiscal Response to the COVID-19 Crisis in Selected Economies**  
(Announced measures as of September 11, 2020, in percent of GDP)

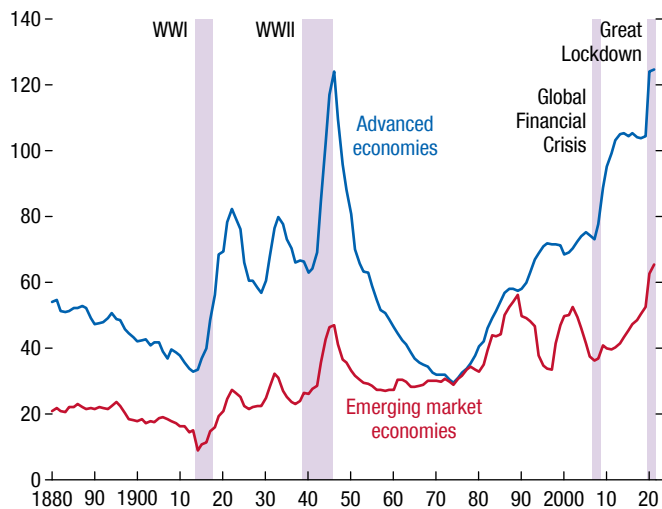


Sources: *Fiscal Monitor* Database of Country Fiscal Measures in Response to the COVID-19 Pandemic (<https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19>); and IMF staff estimates.  
Note: The timeframe for the announced measures is country specific, but the bulk of the measures announced so far are short-term crisis-response measures to be implemented in 2020–21. Country group averages are weighted by GDP in US dollars adjusted by purchasing power parity. Data labels use International Organization for Standardization country codes. AEs = advanced economies; COVID-19 = coronavirus disease 2019; EMMIEs = emerging market and middle-income economies; LIDCs = low-income developing countries.

support in the short-term may have long-term implications. Wage subsidies preserved jobs and worker-firm relations but may slow labor market reallocation when new vacancies emerge. Temporary tax deferrals and cuts have supported liquidity, but there is a risk they

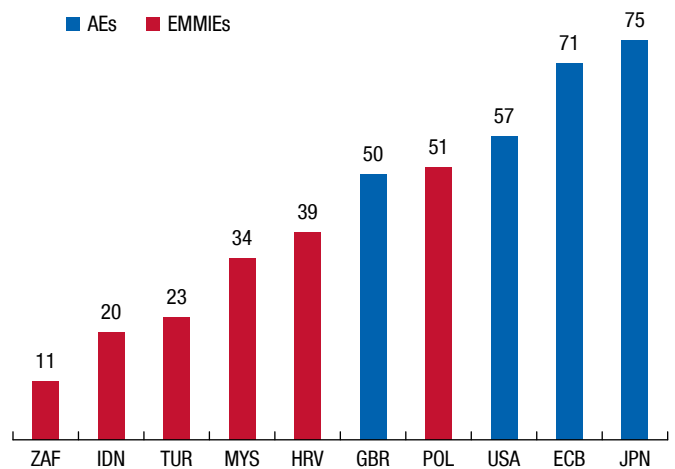
will become permanent, at the expense of government revenues. While equity injections have often been necessary to prevent bankruptcies, particularly in hard-hit strategic firms, they could delay sectoral reallocation that is crucial for the recovery. Direct or guaranteed loans

**Figure 1.2. Historical Patterns of General Government Debt**  
(Percent of GDP)



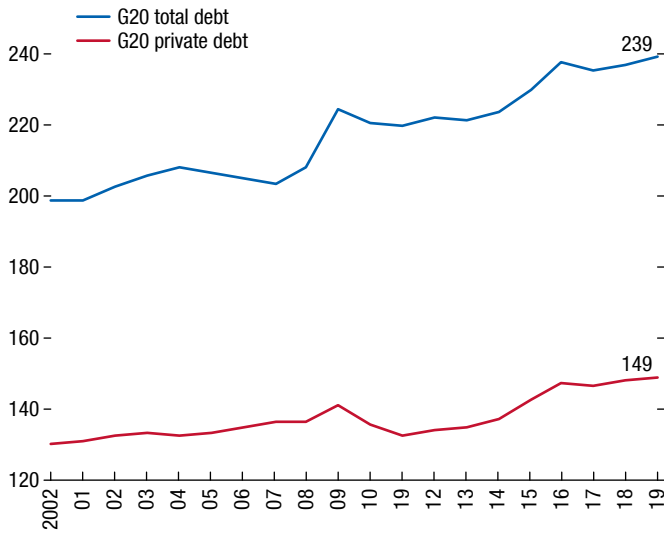
Sources: IMF, Historical Public Debt Database; IMF, World Economic Outlook database; Maddison Database Project; and IMF staff calculations.  
Note: The aggregate public-debt-to-GDP series for advanced economies and emerging market economies is based on a constant sample of 25 and 27 countries, respectively, weighted by GDP in purchasing-power-parity terms. WWI = World War I; WWII = World War II.

**Figure 1.3. Central Bank Purchases of Government Debt**  
(Percent of central government marketable securities or debt issued since February 2020)



Sources: Country authorities; US Federal Reserve Economic Data; Haver Analytics; and IMF staff calculations.  
Note: Data labels use International Organization for Standardization country codes. AEs = advanced economies; EMMIEs = emerging market and middle-income economies.

**Figure 1.4. G20 Total Public and Private Debt, 2002–19**  
(Percent of GDP)

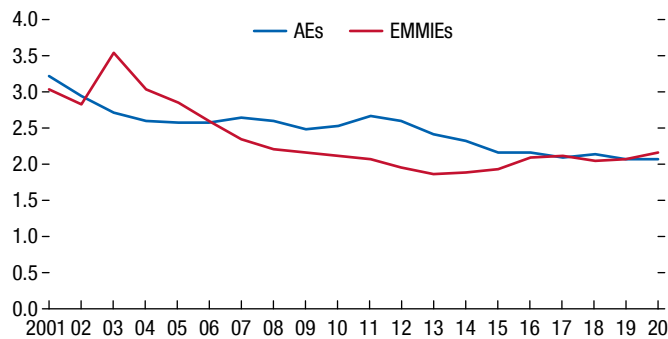


Source: IMF, Global Debt Database.  
Note: G20 = Group of Twenty.

have so far had low take-up, partly reflecting administrative constraints and conditionality as well as the private debt overhang. The ultimate impact of these loans on economic activity and public finances will depend on their further take-up and future repayment, but their announcement has helped boost confidence and activity, which has also contributed to their low take-up to date.

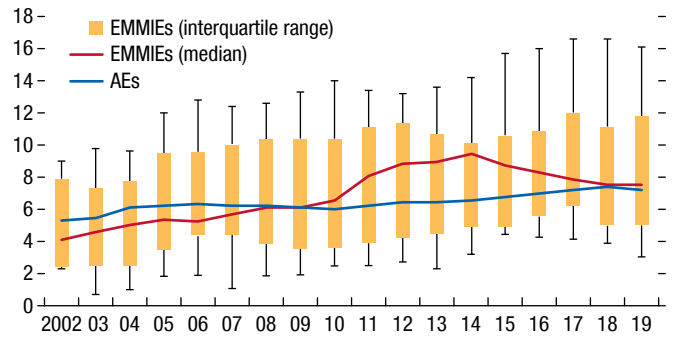
Record-high public debt levels limit the room for further fiscal support, particularly in countries where borrowing costs or access to financing impose constraints. However, more needs to be done

**Figure 1.5. General Government Interest Expenditure-to-GDP Ratio, 2001–20**  
(Percent of GDP)



Source: IMF, World Economic Outlook database.  
Note: AEs = advanced economies; EMMIEs = emerging markets and middle-income economies.

**Figure 1.6. Average Remaining Maturity of Government Bonds, 2002–19**  
(Years; median across country groups)

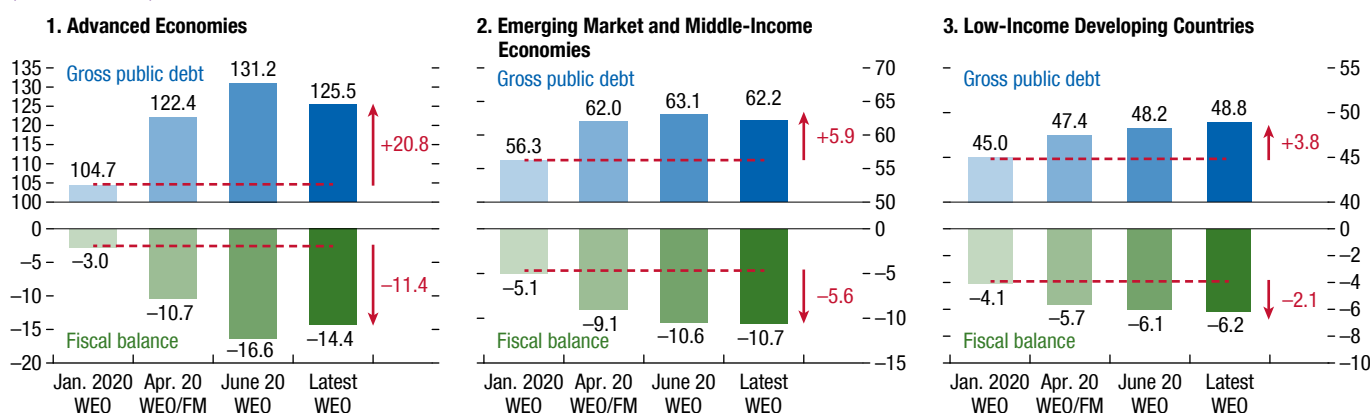


Sources: Haver Analytics; and national authorities.  
Note: AEs = advanced economies; EMMIEs = emerging market and middle-income economies.

to prevent a large rise in poverty and income inequality, and promote a strong recovery amid heightened uncertainty. Fiscal policy will have to deliver more with less, putting a premium on careful design and implementation. At the same time, governments will need to be innovative and flexible, as many will have to address the deep scars from the crisis, including large rises in unemployment, public and corporate debt, and bankruptcies.

Fiscal policy will need to adapt as countries proceed through different phases of the pandemic: (1) outbreak with lockdowns; (2) partial reopening; and (3) high degree of control with medical advances. At the time of this writing (September 2020), most countries are in phase 2, with differing rates of contagion and control of the virus, but several countries that were hit relatively late or where contagion has progressed strongly are still in phase 1. Policies will need first to respond to the immediate health crisis, but over time foster the economic recovery and address the long-term challenges of the post-pandemic economy. Where lockdowns are extensive, fiscal policy has appropriately sought to do whatever it takes to save lives and livelihoods. Where lockdowns are eased, public health remains the number one priority, but policymakers have also begun to face the question of the appropriate pace of reducing lifelines to avoid an excessive increase in debt. When the health crisis is contained, the emphasis will shift to exiting from exceptional government interventions and to ensuring the sustainability of public finances while building resilience against future shocks and addressing preexisting challenges such as inequalities and global warming.

**Figure 1.7. Forecasts for General Government Gross Debt and Fiscal Balances, 2020**  
(Percent of GDP)



Sources: IMF, WEO database; and IMF staff estimates.

Note: Data are as of July 24, 2020. Country groups are weighted by GDP in current US dollars adjusted for purchasing power parity. FM = Fiscal Monitor; WEO = World Economic Outlook.

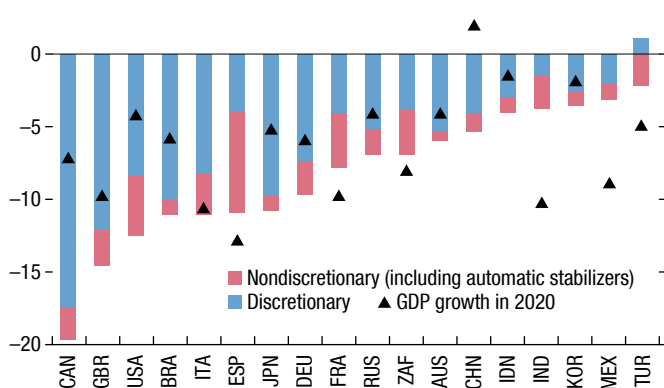
The remainder of Chapter 1 reviews recent developments and the outlook for public debt, deficits, and finance across countries; provides a closer look at discretionary fiscal policy responses to the pandemic; discusses fiscal risks and uncertainty; and presents a broad roadmap for the overall fiscal strategy to navigate tentative reopenings, economic recovery, and transformation toward a more inclusive and resilient postpandemic economy.

### Fiscal Developments and the Outlook: Doing Whatever It Takes

Sizable discretionary support, along with a sharp contraction in output and an ensuing fall in revenues, has led to a surge in government debt and deficits (Tables 1.1 and 1.2). The fiscal support has been massive and swift, and much larger than the fiscal response to the global financial crisis. During the containment phase, new debt financed much of the fiscal response. The projected increases in countries' debts and deficits have been revised upward since the beginning of the year (Figure 1.7). In addition, more fiscal actions are likely as policymakers respond to the ongoing uncertainty over the course of the pandemic and the economic fallout.

Discretionary fiscal policy measures are not the only factors driving the rise in public debt. Nondiscretionary items—mainly “automatic” declines in tax revenues and surges in expenditures (such as unemployment benefits) that occur as economies contract—are projected to account for one-third of general government deficits of the G20 in 2020 (Figure 1.8). Moreover, in advanced economies the projected economic contraction in 2020 will add 7 percentage points to the ratio of general government debt to GDP (as negative economic growth results in a large and positive gap between the interest rates on government debt and growth,  $r - g > 0$ ) (Figure 1.9). However, under current projections, the public debt ratio is expected to stabilize in 2021 (except in *China* and the *United States*), spurred by a strong rebound in economic activity projected in the baseline, against a backdrop of stable and low interest rates.

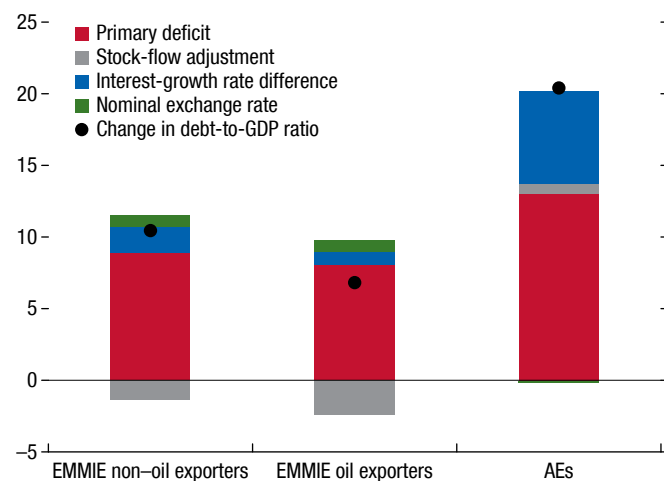
**Figure 1.8. Change in G20 Deficits, 2020**  
(Percent of GDP)



Sources: IMF, World Economic Outlook database; and IMF staff estimates.

Note: Discretionary fiscal support is measured as the change in the cyclically adjusted primary balance; nondiscretionary fiscal support is the residual. The allocation between discretionary and nondiscretionary measures should be considered indicative because output gap estimates, which are used to derive the cyclically adjusted primary balance, are subject to a high degree of uncertainty. Argentina and Saudi Arabia are excluded because of data limitations; Spain is a permanent invitee. Data labels use International Organization for Standardization country codes. G20 = Group of Twenty.

**Figure 1.9. Change in Public Debt, 2020**  
(Percent of GDP)



Sources: IMF, World Economic Outlook database; and IMF staff estimates.

Note: AEs = advanced economies; EMMIE = emerging market and middle-income economy.

### Advanced Economies: Fiscal Policy on the Front Line

In 2020, headline fiscal deficits in advanced economies are expected to be over four times higher (in percent of GDP) than in 2019. Double-digit increases are projected in the overall-deficit-to-GDP ratio in one third of advanced economies. *Canada* and the *United States* lead the group, with anticipated budget deficits of almost one-fifth of their GDP in 2020 (Table 1.1).

Spending increases and revenue decreases almost equally drive the deficit expansions in advanced economies. The medians of the projected real increase in spending and real decrease in revenue are 4.5 and 3.5 percentage points of 2019 GDP, respectively. The fall in revenues mainly reflects the economic collapse, as average revenues relative to GDP are projected to remain at prepandemic levels in 2020. Discretionary measures in response to the pandemic (including support to people and firms beyond preexisting automatic stabilizers) account for most of the spending increase.<sup>1</sup> Advanced economy

<sup>1</sup>As of mid-July 2020, the Group of Seven (G7) countries had also committed \$20 billion in vaccine and therapeutics research for COVID-19. This amount includes an increase of \$11.25 billion for the science budget of the National Institutes of Health and the national laboratories funded by the Department of Energy's Office of Science in the *United States*; a €5 billion spending plan for COVID-19 research and development in *France*; a joint pledge of \$3 billion by *France, Germany, Japan, and the United Kingdom* to find a COVID-19 vaccine; and \$160 million in grants to COVID-19 research projects

governments have also provided unprecedented off-budget assistance in the form of liquidity support and guarantees to firms that do not have a direct effect on current budget deficits.

These measures were complemented by quantitative easing measures put in place by some advanced economies' central banks, including purchases of corporate bonds (Bank of England, Bank of Israel, Bank of Japan, European Central Bank, US Federal Reserve), and commercial paper (Bank of Canada, Bank of England, Bank of Japan) and potentially quasi-fiscal activities such as participation in bank loans to corporations (US Federal Reserve) or the purchase of corporate bonds in the primary market (Bank of Canada, US Federal Reserve) or secondary market (Bank of Japan).

Many advanced economies announced additional fiscal packages over the summer as the fallout from the pandemic lingered.<sup>2</sup> The packages blended continued support for those most affected by the crisis, with broader fiscal stimulus for nascent recoveries. To encourage reallocation, some recovery packages contained support for innovation (*France*), training (*Australia, France*), and green growth (*France, Germany, Italy, Japan, Korea, United Kingdom*) (Box 1.2) or expanded digital infrastructure (*Germany, Korea, Japan*). *Germany's* package also included broad-based stimulus, such as a six-month cut in the value-added tax (VAT) rate starting on July 1 and a temporary additional child benefit (Figure 1.10, panel 1). In the *United States*, negotiations for another stimulus package are ongoing as of this writing.

The steady stream of fiscal measures and the economic contraction will push the average general government debt to 126 percent of GDP in 2020. Compared with 2019, general government debt is projected to increase close to 30 percentage points of GDP in *Italy, Japan, and Spain*, driven predominantly by large existing debt stocks coupled with the fall in economic activity, and more than 20 percent of GDP in the *United States*, driven by on-budget fiscal measures.

in *Canada*. The estimate does not include the budget for COVID-19 research and development in *Italy, Germany, or the United Kingdom* because there are no specified allocations within their overall budgets.

<sup>2</sup>On July 21, European Union leaders approved a €750 billion recovery fund, the "Next Generation EU" fund. See the June 2020 *WEO Update* for additional details.



**Table 1.1. General Government Fiscal Balance, 2012–25: Overall Balance**  
(Percent of GDP)

	2012	2013	2014	2015	2016	2017	2018	2019	Projections					
									2020	2021	2022	2023	2024	2025
<b>World</b>	<b>-3.8</b>	<b>-2.9</b>	<b>-2.9</b>	<b>-3.3</b>	<b>-3.5</b>	<b>-3.0</b>	<b>-3.1</b>	<b>-3.9</b>	<b>-12.7</b>	<b>-7.6</b>	<b>-5.9</b>	<b>-5.1</b>	<b>-4.8</b>	<b>-4.5</b>
<b>Advanced Economies</b>	<b>-5.5</b>	<b>-3.7</b>	<b>-3.1</b>	<b>-2.6</b>	<b>-2.7</b>	<b>-2.4</b>	<b>-2.7</b>	<b>-3.3</b>	<b>-14.4</b>	<b>-6.9</b>	<b>-4.6</b>	<b>-3.7</b>	<b>-3.4</b>	<b>-3.3</b>
United States <sup>1</sup>	-8.0	-4.6	-4.1	-3.6	-4.4	-4.6	-5.8	-6.3	-18.7	-8.7	-6.5	-5.6	-5.4	-5.5
Euro Area	-3.7	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	-0.6	-10.1	-5.0	-2.7	-2.1	-1.8	-1.8
France	-5.0	-4.1	-3.9	-3.6	-3.6	-2.9	-2.3	-3.0	-10.8	-6.5	-5.3	-4.9	-4.7	-4.7
Germany	0.0	0.0	0.6	1.0	1.2	1.4	1.8	1.5	-8.2	-3.2	0.6	0.8	1.0	1.0
Italy	-2.9	-2.9	-3.0	-2.6	-2.4	-2.4	-2.2	-1.6	-13.0	-6.2	-3.9	-2.7	-2.5	-2.5
Spain <sup>2</sup>	-10.7	-7.0	-5.9	-5.2	-4.3	-3.0	-2.5	-2.8	-14.1	-7.5	-5.8	-4.7	-3.9	-4.4
Japan	-8.6	-7.9	-5.6	-3.8	-3.7	-3.1	-2.5	-3.3	-14.2	-6.4	-3.2	-2.8	-2.6	-2.7
United Kingdom	-7.6	-5.5	-5.6	-4.6	-3.3	-2.5	-2.3	-2.2	-16.5	-9.2	-7.1	-5.8	-5.1	-4.4
Canada	-2.5	-1.5	0.2	-0.1	-0.5	-0.1	-0.4	-0.3	-19.9	-8.7	-5.4	-3.0	-1.4	-0.3
Others	0.4	0.2	0.2	0.1	0.7	1.4	1.3	0.0	-6.8	-4.3	-2.5	-1.6	-1.1	-0.8
<b>Emerging Market and Middle-Income Economies</b>	<b>-0.9</b>	<b>-1.5</b>	<b>-2.4</b>	<b>-4.3</b>	<b>-4.8</b>	<b>-4.2</b>	<b>-3.8</b>	<b>-4.9</b>	<b>-10.7</b>	<b>-9.2</b>	<b>-8.1</b>	<b>-7.5</b>	<b>-6.9</b>	<b>-6.3</b>
Excluding MENAP Oil Producers	-1.9	-2.3	-2.7	-4.0	-4.3	-4.1	-4.0	-5.1	-10.7	-9.3	-8.3	-7.7	-7.1	-6.5
Asia	-1.6	-1.8	-1.9	-3.3	-3.9	-4.0	-4.5	-6.1	-11.4	-11.0	-10.0	-9.2	-8.5	-7.7
China	-0.3	-0.8	-0.9	-2.8	-3.7	-3.8	-4.7	-6.3	-11.9	-11.8	-10.9	-10.0	-9.1	-8.1
India	-7.5	-7.0	-7.1	-7.2	-7.1	-6.4	-6.3	-8.2	-13.1	-10.9	-10.0	-9.6	-9.3	-9.1
Europe	-0.7	-1.5	-1.4	-2.7	-2.9	-1.8	0.4	-0.7	-7.2	-4.5	-3.4	-3.4	-3.3	-3.2
Russia	0.4	-1.2	-1.1	-3.4	-3.7	-1.5	2.9	1.9	-5.3	-2.6	-1.0	-1.0	-1.0	-0.5
Latin America	-2.9	-3.2	-5.0	-6.8	-6.2	-5.5	-5.2	-4.1	-11.1	-5.3	-4.2	-3.9	-3.8	-3.7
Brazil	-2.5	-3.0	-6.0	-10.3	-9.0	-7.9	-7.2	-6.0	-16.8	-6.5	-5.6	-5.6	-5.9	-5.9
Mexico	-3.7	-3.7	-4.5	-4.0	-2.8	-1.1	-2.2	-2.3	-5.8	-3.4	-2.6	-2.5	-2.5	-2.5
MENAP	5.6	3.9	-1.4	-7.4	-9.6	-5.7	-2.9	-3.9	-9.7	-7.0	-5.3	-4.6	-4.1	-3.6
Saudi Arabia	11.9	5.6	-3.5	-15.8	-17.2	-9.2	-5.9	-4.5	-10.6	-6.0	-4.0	-2.9	-1.6	-0.4
South Africa	-4.4	-4.3	-4.3	-4.8	-4.1	-4.4	-4.1	-6.3	-14.0	-11.1	-7.9	-5.6	-4.2	-3.1
<b>Low-Income Developing Countries</b>	<b>-2.0</b>	<b>-3.3</b>	<b>-3.1</b>	<b>-3.7</b>	<b>-3.7</b>	<b>-3.6</b>	<b>-3.4</b>	<b>-4.0</b>	<b>-6.2</b>	<b>-5.1</b>	<b>-4.5</b>	<b>-4.1</b>	<b>-3.9</b>	<b>-3.7</b>
Nigeria	0.3	-2.2	-2.0	-3.2	-4.0	-5.4	-4.3	-4.8	-6.7	-5.0	-5.1	-4.4	-4.5	-4.6
<b>Oil Producers</b>	<b>2.8</b>	<b>1.4</b>	<b>-0.4</b>	<b>-4.1</b>	<b>-5.3</b>	<b>-2.9</b>	<b>0.1</b>	<b>-0.6</b>	<b>-10.7</b>	<b>-5.7</b>	<b>-3.8</b>	<b>-2.8</b>	<b>-2.2</b>	<b>-1.6</b>
<b>Memorandum</b>														
World Output (percent)	3.5	3.5	3.5	3.4	3.3	3.8	3.5	2.8	-4.4	5.2	4.2	3.8	3.6	3.5

Source: IMF staff estimates and projections.

Note: All country averages are weighted by nominal GDP converted to US dollars (adjusted by purchasing power parity only for world output) at average market exchange rates in the years indicated and based on data availability. Projections are based on IMF staff assessments of current policies. In many countries, 2020 data are still preliminary. For country-specific details, see "Data and Conventions" and Tables A, B, C, and D in the Methodological and Statistical Appendix. MENAP = Middle East, North Africa, and Pakistan.

<sup>1</sup> For cross-country comparability, expenditure and fiscal balances of the United States are adjusted to exclude the imputed interest on unfunded pension liabilities and the imputed compensation of employees, which are counted as expenditures under the 2008 System of National Accounts (2008 SNA) adopted by the United States but not in countries that have not yet adopted the 2008 SNA. Data for the United States in this table may thus differ from data published by the US Bureau of Economic Analysis.

<sup>2</sup> Including financial sector support.

### Emerging Market and Middle-Income Economies: Doing More with Less

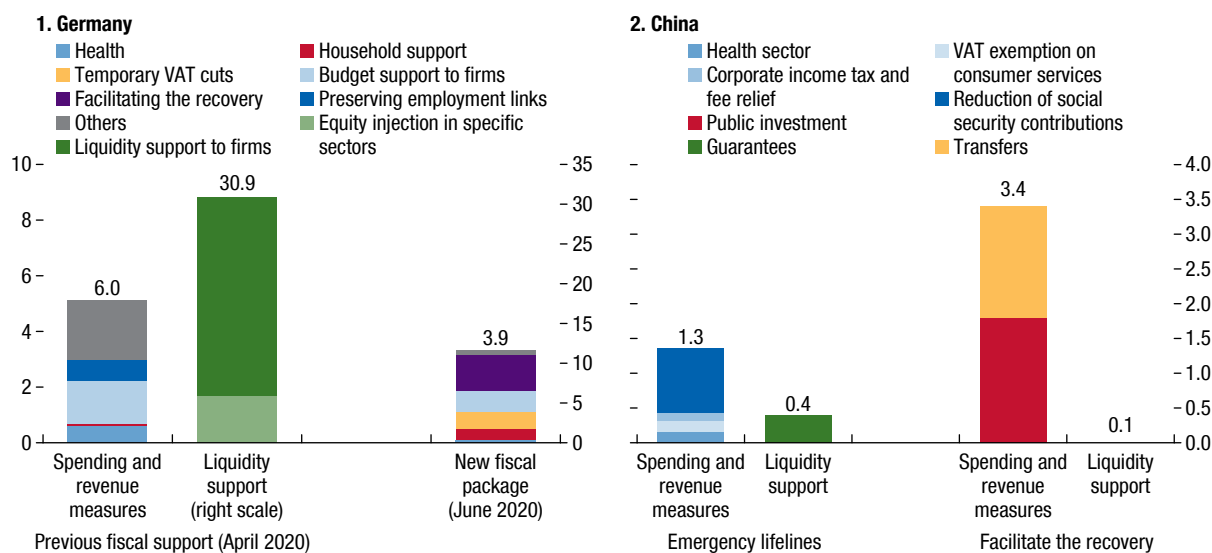
In emerging market and middle-income economies, the overall fiscal deficit is projected to widen by about 6 percentage points of GDP in 2020 compared with 2019—almost half as large as the increase in advanced economies. On average, the budget balance for oil exporters is expected to weaken by about 7 percentage points of GDP and the balance for non-oil exporters by 6 percentage points of GDP. And unlike in advanced economies, revenue drops contribute considerably more to the deficit increase—the projected median revenue decrease is about 3½ percentage points of 2019 GDP and the projected expenditure increase is more than 1 percent-

age point of 2019 GDP. Average revenues relative to GDP are projected to increase 0.7 percentage point of GDP in 2021, though they will remain below pre-pandemic levels.

Among non-oil exporters, there is heterogeneity in the expected fiscal developments. Deficit increases are pronounced in *Brazil* (almost 11 percentage points of GDP) and *South Africa* (almost 8 percentage points of GDP), with COVID-19-related discretionary fiscal measures contributing more than 8 and 5 percentage points of GDP, respectively.<sup>3</sup> Because of support and stimulus measures, *China's* deficit is projected to

<sup>3</sup>Net COVID-19-related discretionary fiscal measures in South Africa are about 3.2 percent of GDP after expenditure reprioritization.

**Figure 1.10. Composition and Evolution of Fiscal Support, April 2020 versus June 2020**  
(Percent of GDP)



Sources: *Fiscal Monitor* Database for Fiscal Measures in Response to the COVID-19 Pandemic (<https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19>); and IMF staff estimates.

Note: New fiscal package for Germany announced in June contained measures for 2020–21. The numbers indicate the size of the fiscal support in percent of GDP. COVID-19 = coronavirus disease 2019; VAT = value-added tax.

expand by 5.6 percentage points of GDP, somewhat less than in the aftermath of the global financial crisis (Figure 1.10, panel 2). Conversely, *Egypt's* deficit relative to GDP is projected to remain broadly flat, as it has faced annual gross financing requirements exceeding 35 percent of GDP, which has likely constrained its fiscal response to the pandemic. And *Pakistan's* deficit is estimated to have tightened for its fiscal year that ended in June 2020 as COVID-19 impacted only the fourth quarter and the capacity to scale up spending was limited.

For oil-exporting countries, the average fiscal deficit is projected to widen by 7 percentage points of GDP. Oil price declines feed into an expected median fall in real revenues of 5 percentage points of 2019 GDP, while the median of the real change in expenditures is close to zero. In *Saudi Arabia*, to partially offset a fall in oil-related revenues of almost 7 percentage points of GDP, the authorities pared back spending on wage allowances to civil servants, increased customs duties on imports, and tripled the VAT rate to 15 percent.

Fiscal space considerations, including financing constraints, have likely tempered fiscal responses to the pandemic in emerging market and middle-income economies relative to advanced economies. Despite record-low global interest rates and an increase in risk appetite, the demand for short-term local currency debt

is weak among this group, though investment-grade emerging markets are able to issue long-term debt in foreign currency. Financing has come from a variety of sources, including borrowing internationally, drawing down buffers, purchasing of government debt by central banks, or increasing taxes. Following the US Federal Reserve's announcement of open-ended asset purchases in late March, Eurobond issuance by emerging markets soared to US\$140 billion in the first half of 2020 compared with US\$95 billion in 2019. Several emerging market central banks have introduced or boosted their purchase of government debt through quantitative easing (*Croatia, Indonesia, Philippines, Poland, Turkey*), although the amounts are far lower as a share of GDP than in advanced economies (see Chapter 2 of the October 2020 *Global Financial Stability Report*). Some have also tapped extrabudgetary funds or sovereign wealth funds (*Chile, India, Russia*),<sup>4</sup> raised fuel excise taxes (*India*), imposed a digital tax on foreign firms (*Indonesia*), or increased the VAT rate (*Saudi Arabia*).

Most emerging market and middle-income economies will emerge from the pandemic with higher debt vulnerabilities. Average general government debt in this group, as a share of GDP, is expected to increase

<sup>4</sup>*Russia's* National Welfare Fund resources offset a decline in government oil revenues as established in the fiscal rule.

to more than 62 percent in 2020 from 53 percent in 2019, driven by both fiscal measures and economic contraction. Among large non-oil exporters, *Brazil*, *India*, and *South Africa* have the largest projected increases in debt ratios, by 12, 17, and 17 percentage points, respectively (Table 1.2). Among oil exporters, debt ratios in *Ecuador* and *Oman* are expected to increase by 17 and 18 percentage points, respectively.<sup>5</sup> Off-budget and quasi-fiscal measures could also add to fiscal vulnerabilities. State-owned enterprises have helped support the economy through greater lending to companies and households (*Brazil*) or by undertaking quasi-fiscal operations such as temporarily reducing electricity tariffs or waiving port fees (*China*).

### Low-Income Developing Countries: Constrained by Financing

The headline deficit in low-income developing countries is projected to widen by more than 2 percentage points of GDP in 2020 compared with 2019. However, the average masks heterogeneity. At one extreme, the primary deficit relative to GDP is projected to widen by 6 percentage points or more in some countries as a result of pandemic-related expenditures (*Republic of Congo*, *Ghana*, *Kyrgyz Republic*, *Moldova*, and *Mozambique*), including cash or food transfers to the poorest. Conversely, some budgets are projected to tighten, generally reflecting cuts in primary expenditures (*Democratic Republic of the Congo*, *Sudan*, *Timor-Leste*, *Zambia*). Fiscal expansions have been contained in other countries owing to cost-effective control measures against the pandemic (*Vietnam*) or the use of off-budget measures and capital spending reductions (*Bangladesh*).

Oil-exporter revenues have been hard hit, particularly from the sharp fall in crude oil prices in early 2020. Revenues of oil exporters in real terms are projected to decline, on average, by 15 percent (driven by *Republic of Congo*, *Nigeria*, and *Yemen*) compared with a real decline of 9 percent, on average, in non-oil exporters. Conversely, several countries' real revenues are projected to increase by more than 5 percent (*Burkina Faso*, *Chad*, *Haiti*, *Niger*, *Senegal*) (Figure 1.11). The increases are driven by grants that

contribute to covering humanitarian needs or the cost of their fiscal responses to the pandemic.

Many low-income and developing countries are cutting expenditures. Reflecting limited financing options, aggregate expenditures relative to GDP are projected to decrease relative to the January 2020 *World Economic Outlook Update* forecast, driven by downward revisions in some of the larger countries (*Côte d'Ivoire*, *Uganda*, *Vietnam*). In real terms, almost half of low-income developing countries are projected to cut total spending, and about 60 percent are expected to cut capital spending in 2020 from 2019 levels.

As the pandemic continues to unfold, some economies are boosting their fiscal responses when financing and debt conditions allow. Since the June 2020 *World Economic Outlook Update*, examples of further fiscal response include *Sudan* announcing a quasi-universal basic income program financed with official support. In July, *Nigeria* revised its 2020 budget to reallocate more resources to COVID-19-related spending. *Angola* also increased several taxes in July and is considering other non-oil revenue measures to fully offset pandemic-related tax relief measures. Moreover, supplementary budgets included more health spending (*Papua New Guinea*) or additional transfers to help states respond to the crisis (*Somalia*).

Countries entered this pandemic with growing debt levels and debt-service burdens, which has likely constrained their fiscal response to the pandemic. Debt service relative to tax revenues will exceed 20 percent in over half of low-income developing countries in 2020 and 2021 (Figure 1.12). Public debt is expected to remain elevated in 2021 because countries will still face daunting spending needs to meet their development goals. The debt and debt-service picture is complicated by the growing reliance on nonconcessional debt. Commercial credit has more than doubled as a percentage of external low-income developing country debt, rising from less than 8 percent to more than 19 percent from 2010 to 2018. Moreover, debt restructuring may be required to stabilize debt in some countries. The official sector has stepped up with bilateral debt relief (through implementing debt service suspensions by the G20 and Paris Club creditors under the Debt Service Suspension Initiative), debt relief from international financial institutions (for example, the IMF's Catastrophe Containment and Relief Trust), and financing to help the poorest countries cover COVID-related expenditures. Projected disbursements

<sup>5</sup>*Ecuador* restructured its international bonds totaling \$17.4 billion (19 percent of GDP) in August 2020. The operation significantly reduces debt service, generating a net present value reduction of about 44 percent at a 10 percent discount rate.



**Table 1.2. General Government Debt, 2012–25**  
(Percent of GDP)

	2012	2013	2014	2015	2016	2017	2018	Projections							
								2019	2020	2021	2022	2023	2024	2025	
<b>Gross Debt</b>															
<b>World</b>	<b>79.6</b>	<b>78.3</b>	<b>78.6</b>	<b>79.7</b>	<b>82.7</b>	<b>81.4</b>	<b>81.7</b>	<b>83.0</b>	<b>98.7</b>	<b>99.8</b>	<b>100.3</b>	<b>100.5</b>	<b>100.4</b>	<b>100.1</b>	
<b>Advanced Economies</b>	<b>106.8</b>	<b>105.3</b>	<b>104.8</b>	<b>104.2</b>	<b>106.8</b>	<b>104.5</b>	<b>104.0</b>	<b>105.3</b>	<b>125.5</b>	<b>125.6</b>	<b>125.6</b>	<b>125.8</b>	<b>125.7</b>	<b>125.5</b>	
United States <sup>1</sup>	103.3	104.9	104.5	104.6	106.6	105.7	106.9	108.7	131.2	133.6	134.5	135.2	136.0	136.9	
Euro Area	90.7	92.6	92.8	90.9	90.0	87.6	85.7	84.0	101.1	100.0	98.4	97.0	95.6	94.3	
France	90.6	93.4	94.9	95.6	98.0	98.3	98.1	98.1	118.7	118.6	120.0	121.3	122.3	123.3	
Germany	81.1	78.7	75.7	72.2	69.2	65.0	61.6	59.5	73.3	72.2	68.5	65.5	62.6	59.5	
Italy	126.5	132.5	135.4	135.3	134.8	134.1	134.8	134.8	161.8	158.3	156.6	154.9	153.8	152.6	
Spain	86.3	95.8	100.7	99.3	99.2	98.6	97.6	95.5	123.0	121.3	120.4	119.3	118.1	118.8	
Japan	228.7	232.2	235.8	231.3	236.4	234.5	236.6	238.0	266.2	264.0	263.0	262.8	263.0	264.0	
United Kingdom	83.2	84.2	86.2	86.9	86.8	86.2	85.7	85.4	108.0	111.5	113.4	115.3	116.4	117.0	
Canada <sup>1</sup>	85.4	86.1	85.6	91.2	91.7	90.5	89.7	88.6	114.6	115.0	114.7	112.8	110.0	106.2	
<b>Emerging Market and Middle-Income Economies</b>	<b>37.0</b>	<b>38.2</b>	<b>40.3</b>	<b>43.7</b>	<b>46.5</b>	<b>48.1</b>	<b>50.1</b>	<b>52.6</b>	<b>62.2</b>	<b>65.0</b>	<b>67.5</b>	<b>69.2</b>	<b>70.4</b>	<b>71.1</b>	
Excluding MENAP Oil Producers	39.4	40.7	43.1	45.7	48.1	49.7	51.8	54.1	63.7	66.7	69.2	71.0	72.1	72.7	
Asia	39.6	41.3	43.4	44.9	47.1	49.0	50.6	53.8	63.7	67.8	71.4	74.0	75.7	76.6	
China	34.4	37.0	40.0	41.5	44.3	46.4	48.8	52.6	61.7	66.5	71.2	74.6	76.8	78.1	
India	67.7	67.4	66.8	68.8	68.7	69.4	69.6	72.3	89.3	89.9	89.5	89.0	88.6	88.2	
Europe	25.3	26.2	28.2	30.5	31.4	29.6	29.3	29.0	37.8	38.8	39.2	39.5	40.1	40.7	
Russia	11.2	12.3	15.1	15.3	14.8	14.3	13.5	13.9	18.9	19.0	18.5	18.2	18.0	17.9	
Latin America	47.1	47.8	50.1	53.9	57.4	62.3	69.7	70.8	81.6	81.0	80.9	80.6	80.3	80.0	
Brazil <sup>2</sup>	62.2	60.2	62.3	72.6	78.3	83.7	87.1	89.5	101.4	102.8	103.5	103.8	104.2	104.4	
Mexico	42.7	45.9	48.9	52.8	56.7	54.0	53.6	53.7	65.5	65.6	65.4	65.2	65.0	64.9	
MENAP	23.3	23.6	23.4	33.2	40.4	40.1	40.0	44.7	53.4	53.8	53.5	53.2	53.4	53.2	
Saudi Arabia	3.0	2.1	1.6	5.8	13.1	17.2	19.0	22.8	33.4	34.3	34.1	33.0	34.4	35.5	
South Africa	41.0	44.1	47.0	49.3	51.5	53.0	56.7	62.2	78.8	82.8	85.7	87.3	86.9	85.2	
<b>Low-Income Developing Countries</b>	<b>29.4</b>	<b>30.9</b>	<b>31.5</b>	<b>35.3</b>	<b>37.9</b>	<b>42.4</b>	<b>42.9</b>	<b>43.3</b>	<b>48.8</b>	<b>49.7</b>	<b>49.1</b>	<b>48.4</b>	<b>47.7</b>	<b>46.8</b>	
Nigeria	17.6	18.3	17.5	20.3	23.4	25.3	27.7	29.1	35.0	35.5	36.2	36.5	37.0	37.4	
<b>Oil Producers</b>	<b>30.9</b>	<b>30.9</b>	<b>31.4</b>	<b>37.6</b>	<b>41.4</b>	<b>42.3</b>	<b>44.2</b>	<b>45.6</b>	<b>57.6</b>	<b>58.0</b>	<b>58.0</b>	<b>57.6</b>	<b>57.2</b>	<b>56.5</b>	
<b>Net Debt</b>															
<b>World</b>	<b>65.9</b>	<b>65.1</b>	<b>65.4</b>	<b>66.8</b>	<b>69.5</b>	<b>68.2</b>	<b>68.7</b>	<b>69.5</b>	<b>87.4</b>	<b>88.1</b>	<b>88.9</b>	<b>89.0</b>	<b>89.0</b>	<b>89.3</b>	
<b>Advanced Economies</b>	<b>76.9</b>	<b>76.0</b>	<b>75.9</b>	<b>75.9</b>	<b>77.6</b>	<b>76.0</b>	<b>76.1</b>	<b>76.7</b>	<b>96.1</b>	<b>96.4</b>	<b>97.3</b>	<b>97.5</b>	<b>97.7</b>	<b>98.3</b>	
United States <sup>1</sup>	80.8	81.5	81.2	80.8	81.8	81.9	83.2	84.0	106.8	107.3	109.5	110.2	111.4	113.8	
Euro Area	73.2	75.7	75.9	74.7	74.3	72.1	70.4	69.2	85.1	84.7	83.7	82.8	81.8	80.9	
France	80.0	83.0	85.5	86.3	89.2	89.4	89.3	89.4	110.0	109.8	111.2	112.5	113.5	114.6	
Germany	59.6	58.6	55.0	52.2	49.3	45.5	42.7	41.1	54.1	54.2	51.2	48.8	46.3	43.8	
Italy	114.6	120.0	122.3	123.1	122.4	122.0	122.9	123.0	148.8	146.1	144.7	143.4	142.6	141.5	
Spain	71.8	80.8	85.2	84.9	86.1	84.5	82.7	81.3	106.9	106.4	106.3	105.9	105.3	106.4	
Japan	145.3	144.7	146.6	146.4	152.0	149.8	153.5	154.9	177.1	178.9	178.6	178.5	178.7	179.7	
United Kingdom	74.8	75.9	78.0	78.4	77.8	76.7	75.9	75.4	98.1	101.6	103.5	105.3	106.5	107.1	
Canada <sup>1</sup>	28.9	29.7	28.5	28.4	28.7	27.9	26.5	25.9	46.4	48.4	48.4	47.4	45.2	42.9	
<b>Emerging Market and Middle-Income Economies</b>	<b>22.7</b>	<b>22.9</b>	<b>24.3</b>	<b>28.7</b>	<b>34.5</b>	<b>35.7</b>	<b>36.8</b>	<b>38.8</b>	<b>48.9</b>	<b>51.5</b>	<b>52.8</b>	<b>53.6</b>	<b>54.1</b>	<b>54.3</b>	
Emerging G-20	21.9	21.7	23.1	26.1	32.0	35.1	36.3	38.1	48.2	...	...	...	...	...	
Asia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Europe	32.0	31.6	29.7	28.7	31.0	30.0	30.5	29.7	39.9	42.8	44.0	44.9	46.1	47.3	
Latin America	29.6	29.7	32.3	35.7	41.1	43.3	44.0	45.3	56.7	59.3	60.8	61.8	62.7	63.2	
MENAP	-2.5	-3.4	-0.1	15.5	28.9	28.8	31.5	37.8	48.3	49.9	50.5	51.5	51.3	50.4	

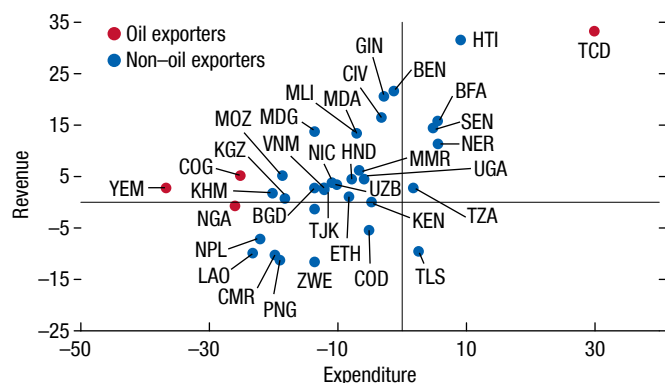
Source: IMF staff estimates and projections.

Note: All country averages are weighted by nominal GDP converted to US dollars (adjusted by purchasing power parity only for world output) at average market exchange rates in the years indicated and based on data availability. Projections are based on IMF staff assessments of current policies. In many countries, 2020 data are still preliminary. For country-specific details, see "Data and Conventions" and Tables A, B, C, and D in the Methodological and Statistical Appendix. MENAP = Middle East, North Africa, and Pakistan.

<sup>1</sup> For cross-economy comparability, gross and net debt levels reported by national statistical agencies for countries that have adopted the 2008 System of National Accounts (Australia, Canada, Hong Kong SAR, United States) are adjusted to exclude unfunded pension liabilities of government employees' defined-benefit pension plans.

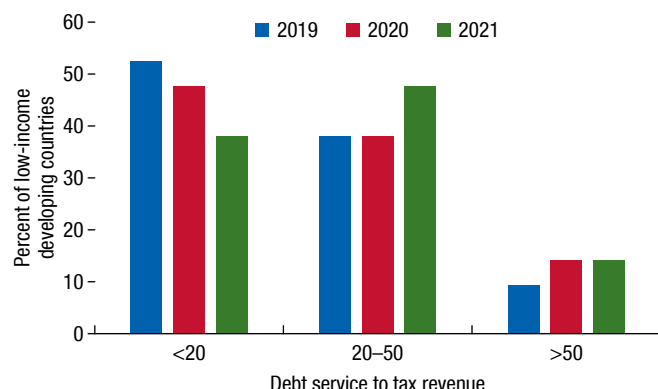
<sup>2</sup> Gross debt refers to the nonfinancial public sector, excluding Eletrobras and Petrobras, and includes sovereign debt held on the balance sheet of the central bank.

**Figure 1.11. Revenue and Expenditure, 2019–20**  
(Projected real change, GDP deflator)



Source: IMF, World Economic Outlook database.  
Note: Data labels use International Organization for Standardization country codes.

**Figure 1.12. Debt Service, 2019–21**  
(Percent)



Source: IMF, World Economic Outlook database.

from the multilateral development banks to countries eligible for the IDA 19 (plus *Angola*) from April to December 2020 amount to US\$45 billion—more than six times the total debt service (US\$7 billion).<sup>6</sup> Even so, more than half of low-income developing countries are now in debt distress or at high risk of debt distress.

### Fiscal Response to the Pandemic: A Preliminary Assessment

The April 2020 *Fiscal Monitor* called for large, timely, temporary, and targeted fiscal support for the people and viable firms most affected by the COVID-19 crisis, including those in hard-to-reach informal sectors. Many governments have indeed deployed large and timely measures. But timeliness has often come at the expense of targeting, and durations were often extended because of continued lockdowns. The size, composition, and evolution of fiscal support have varied widely because of country circumstances (see Box 1.3 for a closer look at the various types of fiscal measures introduced to date and their beneficiaries). On average, countries that put in place strong containment measures such as mobility restrictions before total cases of COVID-19 reached 100 ultimately deployed smaller fiscal packages (Figure 1.13, panel 1). Fiscal support was larger for countries with higher income per capita (Figure 1.13, panel 2). Whereas countries with initially high sovereign bond spreads deployed smaller on-budget support (Figure 1.13, panel 3),

<sup>6</sup>IDA 19 refers to the World Bank Group’s International Development Association 19 replenishment.

those with initially high public debt deployed larger off-budget support (Figure 1.13, panel 4). Fiscal policy actions have been massive in advanced economies but constrained by financing for many emerging markets and, especially, low-income developing countries. Reaching the affected groups has also been challenging in countries with large informal sectors.

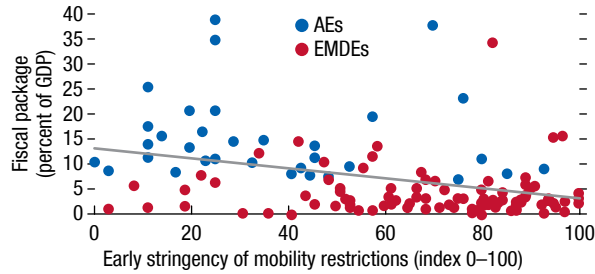
Overall, the fiscal measures deployed so far have helped mitigate the health and economic fallout from the COVID-19 crisis, more so in advanced economies where average fiscal support has been larger. Although there is high uncertainty, based on the projected decline in per capita incomes, 100 million to 110 million people globally would be expected to enter extreme poverty relative to the pre-COVID projection, reversing the decades-long declining trend. Additional social assistance—supporting directly the poor and helping limit the recession—is expected to have a modest impact, containing the increase to 80 million to 90 million (Figure 1.14).<sup>7</sup> The impact would be concentrated

<sup>7</sup>The projections for per capita incomes are based on the June 2020 *World Economic Outlook Update*. The recent revision to the global outlook (as in the October 2020 *World Economic Outlook*) suggests that the global poverty estimates at the time of this writing (September 2020) are likely to be at the lower end of the range, although individual countries where 2020 growth has been marked down from June could see an increase in poverty projections. Global estimates are subject to high uncertainty and could be affected by data revisions in a few countries with large populations. The estimates are comparable to those by the World Bank (<https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty>) in June 2020 that projected a rise in the extreme poverty headcount of 70 million to 100 million relative to the pre-COVID-19 estimates, adjusting for 2019 growth revisions. The World Bank estimated that the headcount would be higher if income inequality also rises.

**Figure 1.13. Discretionary Fiscal Response to the COVID-19 Crisis and Country Preconditions**

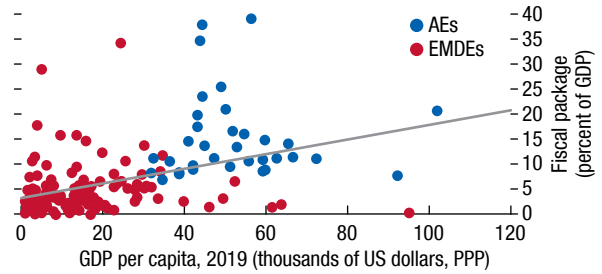
**1. Fiscal Support and Stringency of Early Containment**

Countries that swiftly put in place stronger containment measures ultimately deployed smaller fiscal packages.



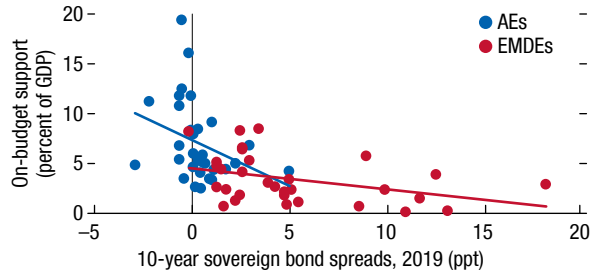
**2. Fiscal Support and Initial Income per Capita**

Whereas total fiscal support was larger for countries with higher income per capita ...



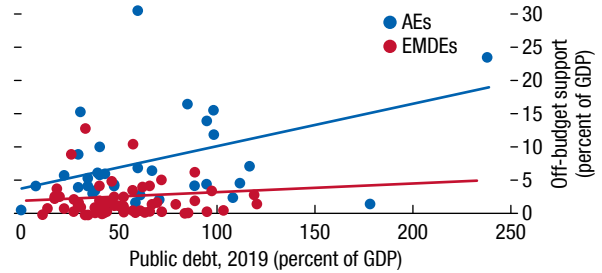
**3. Fiscal Support and Initial Sovereign Spreads**

... countries with initially high sovereign bond spreads deployed less on-budget support ...



**4. Fiscal Support and Initial Public Debt**

... and countries with initially high public debt levels deployed more off-budget support.

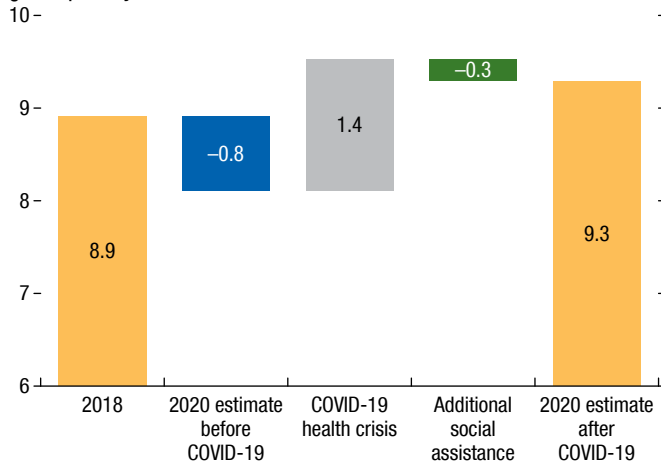


Sources: OxCGRT Database; IMF, World Economic Outlook database; *Fiscal Monitor* Database of Country Fiscal Measures in Response to the Covid-19 Pandemic (<https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19>); and IMF staff estimates.

Note: Sovereign spreads are computed over 10-year US Treasury bond yields for non-European economies and 10-year German bund yields for European economies. Gray trend lines in panels 1 and 2 refer to both AEs and EMDEs; blue and red trend lines in panels 3 and 4 refer to AEs and EMDEs, respectively. AEs = advanced economies; COVID-19 = coronavirus disease 2019; EMDEs = emerging market and developing economies; PPP = purchasing power parity; ppt = percentage point.

**Figure 1.14. Global Extreme Poverty Rate**  
(Percent of total population)

Additional social assistance has helped mitigate the potential increase in global poverty.



Sources: IMF, World Economic Outlook database; Gentilini and others 2020; World Bank PovcalNet database; and IMF staff estimates (see Online Annex 1.1). Note: COVID-19 = coronavirus disease 2019.

largely in emerging market and developing economies in sub-Saharan Africa and South Asia (Online Annex 1.1). Moreover, income inequality within countries is expected to increase as the pandemic affects low-income individuals disproportionately (Palomino, Rodriguez, and Sebastian 2020). The impact of the pandemic and ensuing lockdowns on people’s lives, livelihoods, jobs, and businesses has been devastating. But outcomes would have been much worse without the public health and fiscal measures put in place, as outlined below.

*Public health measures* that contain the spread of the virus are effective tools to support the recovery because they save lives, restore confidence, and boost activity (Chetty and others 2020). Countries that responded to the pandemic with “smart” containment measures, including early, localized, and stringent mobility restrictions, together with large-scale testing, tracing, and public information campaigns, have lost fewer lives from the pandemic and are projected to better contain the adverse impact on economic activity and budget balances (Fotiou and Lagerborg,

2020; see also Online Annex 1.2). Although the cost of virus prevention and treatment depends on the capacity of health systems and the effectiveness of containment measures, estimates suggest that increasing intensive-care capacity by one-fifth (excluding capital costs) and testing capacity to twice per individual in a year would cost between 0.3 and 0.5 percent of GDP in selected advanced economies (*G7, Korea, Spain*) (de Bidegain and others 2020). The current as well as the capital costs associated with strengthening pandemic preparedness are likely higher in emerging market and developing economies with weaker health systems (see Chapter 2 and Online Annex 2.7).

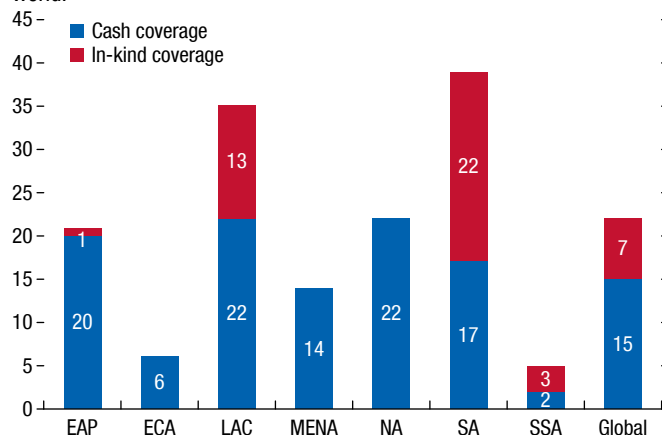
*Nonhealth fiscal measures* have served varying objectives and faced different trade-offs, as outlined below.

*Cash transfers* have been particularly effective in protecting the poor and have had a larger impact on total consumption when targeted to those most in need or most likely to spend, such as the unemployed. In the *United Kingdom*, for instance, the increase in the means-tested universal credit allowance is estimated to fully offset the adverse impact of the pandemic on poverty (Bronka, Collado, and Richiardi 2020). In the *United States*, however, higher-income households that received “stimulus checks” under the Coronavirus Aid, Relief, and Economic Security Act have spent less than lower-income households that received those checks, and on goods less affected by the lockdown, such as durables, limiting the aggregate impact (Baker and others 2020; Chetty and others 2020). *Unemployment benefits* were found to be more effective than “stimulus checks” in reaching those households with a higher propensity to consume additional resources (Bayer and others 2020; Faria-e-Castro 2020; Chetty and others 2020).

*Cash and in-kind transfers* have provided better coverage of vulnerable households than unemployment benefits in emerging market and developing economies with larger informal sectors. In many parts of the world, coverage of social assistance was expanded quickly to address the pandemic (Figure 1.15). Some countries (*India, Togo, Turkey*) expanded existing cash benefits rapidly, transparently, and safely, using citizen identification systems linked to socioeconomic databases and digital payment platforms (Prady 2020; Una, Allen, and others 2020; Una, van Eden, and others 2020). Some low-income developing countries with administrative and financial constraints effectively provided in-kind (food) assistance to informal workers

**Figure 1.15. Increase in the Coverage of Social Assistance**  
(Percent of population)

Coverage of social assistance was expanded quickly in many parts of the world.



Source: Gentilini and others 2020.

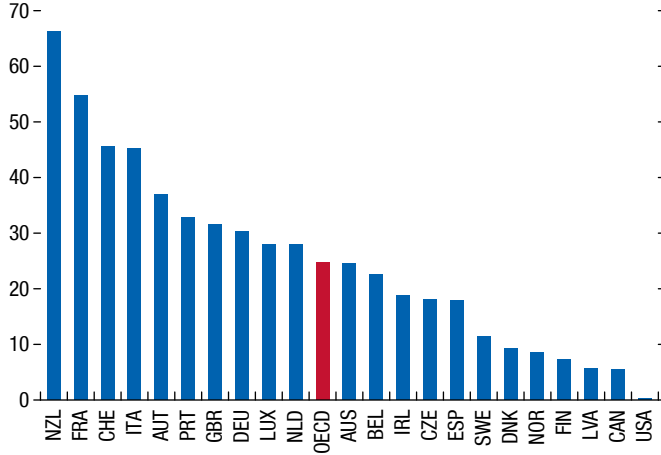
Note: EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; NA = North America; SA = South Asia; SSA = sub-Saharan Africa.

and people in need through community organizations (*Nepal, Rwanda*). In Latin America, existing social safety nets were expanded to better cover the structurally poor with low incomes and assets; however, those who might fall into poverty temporarily—such as informal lower-middle-income workers who lost jobs—were often not reached by cash transfers or unemployment benefits, highlighting the need for expanding coverage of social insurance (Busso and others 2020).

*Wage subsidies* for furloughed workers or businesses with revenue losses have been particularly effective in preserving employment linkages, but if maintained for too long after reopenings they could delay the required reallocation in labor markets. The take-up of job retention schemes averaged one-quarter of employees in Organisation for Economic Co-operation and Development (OECD) economies, exceeding half of employees in two cases (*France, New Zealand*) (Figure 1.16). In *Denmark*, firms reported fewer job separations because of the strong take-up of wage subsidies (Bennedsen and others 2020). Headline unemployment rates increased less in economies that channeled more labor market support through wage subsidies (*Australia, United Kingdom*) rather than unemployment benefits (*Canada, United States*) (Tetlow, Pope, and Dalton 2020). In addition, replacement rates in job retention schemes tended to be higher than in unemployment benefit

**Figure 1.16. Take-Up of Job Retention Schemes**  
(Percent of employees)

Participation in job retention schemes reached one-quarter of employees in OECD countries, and more than half in a few countries.



Source: OECD 2020e.

Note: Data refer to the end of May 2020, except for Luxembourg and Switzerland (end of April 2020). Take-up rates are calculated as a percentage of dependent employees in the fourth quarter of 2019. OECD = Organisation for Economic Co-operation and Development.

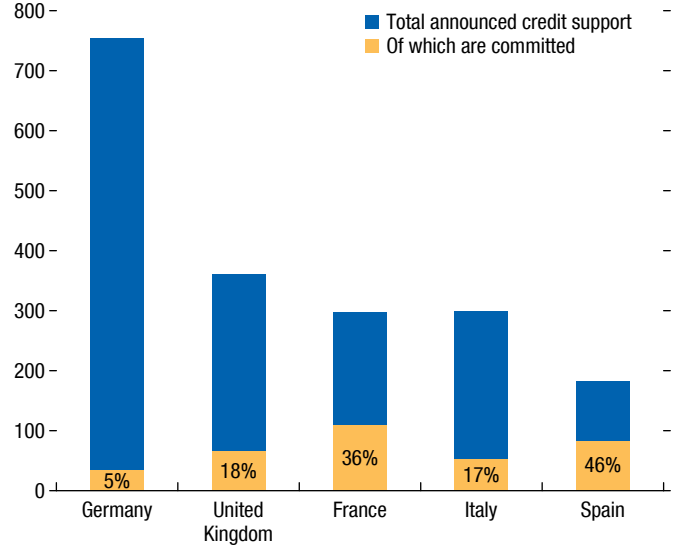
schemes (OECD 2020d). However, it may be that wage subsidies in Europe have postponed, rather than averted, a larger mass job loss, because the subsidies will be phased out eventually—after more than a year in some cases (*France, Germany*). About one-fifth of persons enrolled in short-time work schemes in the five largest European economies are in hard-hit sectors and face elevated risk of unemployment when support is phased out (Utermöhl, Ozyurt, and Subran 2020). About one-third of pandemic-induced firm-level layoffs in the *United States* are estimated to be permanent, requiring job reallocations. Overextended job retention schemes and overly generous unemployment benefits could delay such reallocations (Barrero, Bloom, and Davis 2020).<sup>8</sup>

*Loans and guarantees*, including through public corporations, have aimed to provide liquidity to cash-strapped businesses, but so far many countries report low take-up (for example, *Germany, Italy, United Kingdom*) (Figure 1.17). On the supply side, this could reflect administrative capacity constraints or program conditionality; on the demand side it could reflect

<sup>8</sup>Ganong, Noel, and Vavra (2020) find that two-thirds of beneficiaries under the US Federal Pandemic Unemployment Compensation Program received unemployment benefits greater than lost earnings.

**Figure 1.17. Take-Up of Guaranteed Loans**  
(In billions of euros and percent of total)

Take-up of guaranteed loans has been low, with no calls on guarantees reported yet.



Source: Anderson, Papadia, and Véron 2020.

Note: Data are as of the end of June 2020. For Germany, the take-up refers to the new KfW guarantees only.

liquidity buffers in less-affected sectors and firms and the availability of other forms of government support, such as grants and wage subsidies (Anderson, Papadia, and Véron 2020). Private debt overhang and elevated uncertainty are also likely drivers. In the *United States*, forgivable loans under the Paycheck Protection Program, contingent on businesses maintaining employment at precrisis levels, also had a low take-up initially (Cororaton and Rosen 2020), partly reflecting administrative complexities. The program has had a modest effect on employment in small businesses, likely because it was the less-affected businesses primarily receiving these loans (Chetty and others 2020). For small and medium enterprises (SMEs), low utilization can also be attributed to design issues, such as large loan size and low coverage of guarantees. In the *United Kingdom*, the number of SME loans was 20 times higher under the Bounce Back Loan Scheme, which had a lower maximum loan size and a higher government guarantee than the previously announced Coronavirus Business Interruption Loan Scheme (Dreyer and Naygaard 2020). In the *euro area*, banks reported that government guarantees played a significant role in keeping credit standards favorable for SMEs (European Central Bank 2020). The mere existence and large size



of loan and guarantee programs likely support market confidence and economic activity as well, and may in turn help explain low take-up thus far.

*Equity injections* have often been necessary to prevent bankruptcies of hard-hit strategic firms, such as national airlines, albeit with the risk of delaying sectoral reallocation that is crucial for the recovery. In some cases (*New Zealand, Singapore*), governments provided convertible loans to national airlines with options to convert bonds into common equity, which ensures that the risks and rewards are better shared by the state and shareholders (OECD 2020c). In *France*, airline support was combined with conditionality on cutting emissions, which helps with “greening” the recovery (Box 1.2). Although the green (emissions-reducing) component of fiscal responses has been limited, climate-relevant measures may become more prominent as countries shift their attention from the emergency to the recovery.

*Tax measures* in response to the pandemic have consisted largely of deadline extensions and payment deferrals (OECD 2020f; Djankov and Nasr 2020) that have supported household and firm liquidity, albeit to a lesser extent than debt moratoriums and wage subsidies, given that tax burdens are already limited by lower sales and profits (OECD 2020b). Moreover, these deferred taxes may not be recovered in full if they are merely delaying severe cash flow problems, creating fiscal risks for governments. Tariff waivers on medical supplies (*Colombia, Vietnam*)—although tariff rates are already low in many countries—and quick release procedures at customs (*Philippines*) have expedited imports of essential goods. Accelerated VAT refunds (*France, Indonesia*), new and expanded loss carryback rules (*China, New Zealand, Japan*), and accelerated depreciation deductions (*Australia*) have eased business cash flow needs. Reduced social security contributions (*Argentina, China, France, Korea*) have protected the most vulnerable and affected households and firms. Nevertheless, tax-based support may be less effective in some emerging market and developing economies because of its limited reach to informal sectors.

*Payment forbearance policies*, on the other hand, such as moratoriums facilitated by government support or public enterprises on payments of mortgages (*United States*), utilities (*Argentina, Colombia, Japan*), rents (*China*), or loans (*Argentina, Turkey*) have provided short-term relief to households and businesses, including in informal sectors.

## Magnified Fiscal Risks

Sizable fiscal risks stem from a protracted economic downturn, volatile global financial conditions amid high and rising public and private debt, abrupt commodity price movements, and the announced contingent liabilities. In addition, quantitative easing and quasi-fiscal activities by central banks could lead to a deterioration in central bank balance sheets if supported firms default on central bank holdings of their bonds or commercial paper not covered by a government guarantee. The following are some of the magnified fiscal risks in the face of the current crisis:

- *A protracted economic downturn*: Absent herd immunity or the development and widespread availability of effective therapies or a vaccine, outbreaks and the associated fear remain possible, constraining the recovery (see the October 2020 *World Economic Outlook*). Private demand may not materialize as projected into 2021, leading to a prolonged recession. This could mean more bankruptcies, further deterioration in bank balance sheets and fiscal support for banks, and greater need for fiscal resources to support and retrain unemployed workers. Under these circumstances, firms that received support in early 2020 may no longer be viable and budget resources should shift elsewhere.
- *Tightening of financial conditions*: The rapid growth in sovereign and private debt stocks, particularly among nonfinancial corporations, and the need to service those debts, has left government budgets and private entities more exposed to changes in financing conditions. If financial markets tighten abruptly, perhaps because investors lose confidence after seeking safe haven assets, many countries and companies could see their borrowing costs spike (see the October 2020 *Global Financial Stability Report*). Similarly, local currency depreciation would add to debt costs for countries and companies with debt denominated in foreign currencies. In low-income developing countries, low revenue mobilization as a result of large informal sectors and weak administrative systems will compound debt servicing problems. These developments could lead to further concerns about sovereign and corporate credit risk and debt sustainability, reinforcing the effects of a financial tightening.
- *Commodity market volatility*: Commodity price fluctuations impact commodity exporters and

importers differently. A sharp fall in oil prices would further undermine the already-stretched budgets of oil exporters but could also provide importers with some relief.

- *Contingent liabilities.* Although new guarantees remain largely untapped by firms to date, the use of guarantees may accelerate and the stock of guarantees could eventually be called in an adverse scenario, adding substantially to debt vulnerabilities. Quantification of the risk from guarantees and other contingent liabilities (for example, public-private partnerships) is challenging while the pandemic is ongoing. It would depend on country-specific factors, including the overall size of the guarantee program, the projected value of guarantees issued, the expected duration of the downturn (which would affect the likelihood of borrower default), and the estimated recovery rate in the event of default.

To a lesser extent, there are also *upside risks*, including the rapid development and wide distribution of a safe, affordable, and effective vaccine; changes in economic structures that boost productivity through new techniques or technologies; or a normalization that proceeds faster than expected in areas that have reopened without sparking new outbreaks of infections. Realization of these outcomes would imply a faster economic recovery than expected, thereby reducing the necessary fiscal support.

## Fiscal Roadmap for the Recovery

Public policies to bring the pandemic under control are of paramount importance: developing vaccines and treatments and ensuring their universal access at low cost as soon as possible is the best way to safeguard the economy and public finances, both globally and for individual countries. Multilateral coordination is vital in this regard and in providing financial support for developing economies that have been hard hit by the global recession and are struggling with limited resources.

Another important anchor for fiscal policy will be to revive growth and job creation. This will be critical to reverse the rise in poverty and inequality, and will also help improve public finances. To achieve these objectives fiscal strategies will need to be flexible and adapt to the three phases of the pandemic: (1) the outbreak with lockdowns; (2) partial reopening; and

(3) a high degree of control of the virus through medical advances. This section outlines the broad fiscal policy strategies, challenges, and trade-offs in each phase, focusing on the second and third phases (see the April 2020 *Fiscal Monitor* and the June 2020 *World Economic Outlook Update* on policies for phase 1). Dividing the crisis into phases is intended to illustrate the main policy challenges, but different countries will enter each phase at different times, individual country circumstances may differ in the same phase, and setbacks are likely to occur (for example, localized outbreaks or a new wave of infections leading to widespread lockdowns).

Table 1.3 summarizes the general applicability of fiscal measures during each phase. Policymakers will need to tailor those measures to country-specific conditions. Throughout, it is crucial to ensure full transparency (including a good communication strategy), good governance, and costing of all fiscal measures, especially given their size, exceptional nature, and speed of deployment.

### Phase 1: The Outbreak with Lockdowns

In this phase, fiscal policy is largely devoted to fully accommodating additional health and emergency services to fight the pandemic, and providing lifelines to protect the most affected people and firms. As discussed earlier, measures include wage subsidies to preserve jobs and unemployment benefits for those who lost their jobs, as well as deferred tax collection, subsidized loans, and loan guarantees to allow firms to “hibernate.” Given the urgency, governments should use all available tools—for example, expanding social protection schemes to protect the most vulnerable groups (including informal workers)<sup>9</sup> and financing for SMEs (for instance, through public banks). Fiscal measures should be complemented with actions by central banks and regulators (for example, delaying bankruptcies or evictions from homes). Effective health measures together with prompt and continued government support can limit the scarring from the crisis and facilitate the recovery in the next phases.

<sup>9</sup>When capacity constraints make it difficult to expand existing social assistance programs, countries often resort to alternative approaches, including cash transfers targeted at specific regions or population groups (for example, the elderly or informal sector workers), or subsidies for key goods and services such as food, health, transportation, and utilities. See also Online Annex 1.3.

**Table 1.3. Fiscal Strategies during Different Phases of the Pandemic**

Fiscal Measures	1. Widespread Lockdowns	2. Gradual Reopening	3. Post-COVID-19 Recovery
<b>Household Income Support</b>			
Cash or in-kind transfers	Yes, they likely have the largest multipliers, particularly for basic necessities and public services	Transition and better target to those in need	Reconsider within the reforms to enhance social protection systems
Unemployment benefits	Expand coverage and extend duration	Refine the benefits to preserve work incentives as unemployment returns to normal levels	Key components when enhancing social protection systems
<b>Employment Measures</b>			
Short-term work-/ job-retention schemes	Yes, they can help preserve jobs and worker-firm relationships	Reduce use of these programs to encourage moving to new jobs if needed	Reduce access for prolonged cases
Temporary hiring subsidies	Not yet	Plan or initiate if supply disruptions have largely eased	Transition to active labor market policies (for example, retraining)
Active labor market policies	Not yet	Initiate with programs that improve labor skills (education, digitalization)	Yes, tailored to structural transformation in the post-COVID-19 economy
<b>Public Investment</b>			
	Planning for next phase	Could boost maintenance and public works; plan for next phase, emphasizing job creation and green recovery	Scale up quality investment with sustainable financing
<b>Tax Measures</b>			
Temporary deferral of taxes and social security payments	Yes, to protect cash flows for households and firms	Targeted deferrals, depending on taxpayers, pandemic developments, and strength of recovery	No, but could engage taxpayers as part of debt restructuring
General income tax cuts	No, because they largely benefit those not in need	No, because those benefiting are less likely to spend the additional income and because the cuts likely favor firms with profits	Consider as part of the stimulus package depending on fiscal space; could bring stronger effect if targeted to cash-constrained households
Accelerated depreciation or loss-carry backward	Not yet	Yes, to firms that resume activity	Yes
Progressive taxes	Consider, especially if financing is limited	Consider, especially if financing is limited	Yes, choice of instruments should conform to good tax law design; greater progressivity of taxes and ensuring highly profitable firms pay appropriate taxes helps finance other measures and may ease social tensions
<b>Other Liquidity Support</b>			
Loans, guarantees	Yes, could be partially conditional on preserving jobs, with restrictions on dividends/ executive pay	Refine with declining generosity	Tighten for a timely exit and manage fiscal risks
Solvency support (equity injections)	Yes, with dividend restrictions and imposing losses to shareholders	Interventions on systemic and strategic firms; restrictions on dividends/executive pay	Aim for a timely exit
Debt restructuring	No, possible debt moratorium	Prepare streamlined restructuring framework and mediation mechanism for a speedy workout	Yes, to facilitate reallocation and timely exit of nonviable firms

Source: IMF staff compilation.

Note: Appropriate fiscal responses will be country-specific depending on the fiscal space, the development of the pandemic, and the strength of the recovery. Measures included here are not exhaustive and will need to be adapted to the specific tax and benefit systems of individual countries. For countries with less-developed social protection systems, other measures, such as in-kind provision of food and basic public services may be introduced. COVID-19 = coronavirus disease 2019.

## Phase 2: Gradual Reopening under Uncertainty

Public health remains the top priority to ensure a sustainable reopening of the economy. Economic activity will remain depressed if the easing of social distancing measures is not accompanied by public confidence that the pandemic is being brought under control (Chetty and others 2020; Fang, Nie, and Xie 2020). Resources should be directed to fund smart containment strategies comprising intensive testing and tracing, localized mobility restrictions, and real-time risk assessment. As governments start to lift the mobility restrictions and costly wide-ranging lifelines introduced in phase 1, fiscal policy will have to remain flexible, given the risk of new waves of infection. Removing government support too fast could also prolong the recession and worsen poverty and inequality. Policies should ensure a safe resumption of activity for consumers, workers, and firms amid a challenging environment.

Replacing the lifelines with broader fiscal stimulus measures is unlikely to be cost-effective because the recovery is expected to be uneven, with supply disruptions and depressed demand concentrated in certain sectors because of health concerns.<sup>10</sup> As such, a generalized cut in taxes, for example, would have limited impact on promoting growth and jobs and could put public finances under stress. A better alternative, for countries with fiscal space, could be to accelerate job-intensive public investments such as maintenance or public works, since such initiatives are less disrupted by social distancing restrictions and can crowd in private investment.

As many countries have limited fiscal space, resources should be prioritized toward safeguarding enhanced safety nets and reopening the economy. The focus should be on creating a safe work environment,<sup>11</sup> helping workers find new jobs, and helping viable but still-vulnerable firms reopen after a period of large revenue losses and rising leverage. Reprioritization of spending, which could include containing the public

sector wage bill (Garcia-Escribano and Abdallah 2020), will likely be needed, especially in countries for which borrowing constraints are tighter.

Governments may also need to consider revenue-enhancing measures, including both increasing tax compliance and the progressivity of taxes on more affluent and less-affected groups, as well as reforms to modernize business taxation. The latter would include the design of international corporate taxation on a multilateral cooperative basis to respond to the challenges of the digital economy. The design of corporate income taxes to appropriately capture very high profits of firms in a rapidly changing economy, including those that made windfall profits during the crisis, can help finance priority areas such as health and social safety nets, thereby safeguarding social cohesion during a crisis that has disproportionately hurt the most vulnerable groups. Tax policy options include increasing tax rates on higher bracket incomes, capital income higher end property, or wealth. In addition, the lower oil price level facilitates increases in taxes (or reductions in subsidies) on fuel, which in emerging market and developing economies will impact mostly the well-off.

As activity resumes and health risks diminish, however, exceptional support should be phased out or modified to facilitate people moving to new and more productive jobs. Job retention programs can be reduced, and job search requirements can be reintroduced. Governments can also increase programs for online training and learning to help the unemployed, which could be complemented by hiring incentives to create new jobs (Baqae and Farhi 2020; OECD 2020e). Linking unemployment benefits to local unemployment rates would steer support to the hardest-hit areas, including those affected by new lockdowns or mobility restrictions. More generally, introducing or making permanent enhanced automatic stabilizers and social protection (for example, paid sick leave and extension of unemployment benefits to self-employed or temporary workers) can provide timely support and unwind automatically as conditions improve.

## Selective Support to Firms to Help Them Reopen

Government support to firms coming out of the lockdown phase with high leverage and mounting losses would limit defaults that would otherwise

<sup>10</sup>Although fiscal multipliers are usually larger in recessions driven by low aggregate demand (see the April 2020 *World Economic Outlook*), the impact of broad-based fiscal measures would be limited in this phase of the pandemic because supply remains constrained and low demand in contact-intensive sectors is caused by concerns about contagion.

<sup>11</sup>For example, measures to increase digitalization among SMEs, including training of workers and grants or loans to adopt new technologies (*Argentina, Japan, Korea, Spain*), could promote a faster shift to digital operations and encourage telework.

undermine the economic recovery and exacerbate unemployment. In this phase, however, government support should be more selective in order to limit costs and avoid standing in the way of necessary economic adjustments or distorting competition. Governments should also have a clear exit strategy as the economy recovers. Support should be directed to otherwise viable firms whose operations are impaired by health risks or social distancing restrictions, or to firms whose operations are crucial for the economy to function. To limit fiscal costs and risks to taxpayers, the fiscal strategy could include risk-sharing with investors and creditors (investors will not get involved if a firm is unviable). Examples might include the following:

- *Liquidity support* such as government loans and guarantees could be extended, especially if banks remain reticent to lend, but the generosity of such support should gradually be reduced (for example, use of partial guarantees and more access conditions).
- *Solvency support* should give priority to systemic firms where bankruptcies could disrupt supply chains or the provision of critical services (for example, hospitals, utilities) and to prevent a wave of SME defaults given potentially large spillover effects (Harris and others 2020). Existing shareholders should bear much of the burden; government support should include conditions (for example, caps on executive compensation and bans on dividends and share buybacks) and could be in exchange for equity participation.<sup>12</sup>

*Support for SMEs* is particularly important because of their vulnerabilities, weight in total employment, and complexity given the sheer number and diversity of firms. This is especially the case for SMEs with high debt burdens or that have difficulty raising new equity. Temporary debt repayment moratoriums (OECD 2020a) or the temporary suspension of insolvency rules can provide short-term relief (*Egypt, Ghana, Kazakhstan*). Longer-lasting options include securitizing SMEs' debt to help them access capital

<sup>12</sup>For example, government support in the *United States* during the global financial crisis was subject to executive compensation restrictions. Financial institutions that received support faced restrictions on dividend payouts and share buybacks. To minimize distortions to competition, the *European Union* prohibited firms from using state aid to cross-subsidize activity.

markets with government guarantees (*Portugal*) or government buying securitized SME debt (*Australia*), providing equity or hybrid instruments (for example, convertible bonds), or providing government financial support to help corporate debt restructurings for SMEs (Blanchard, Philippon, and Pisani-Ferry 2020). In many developing economies, SMEs are often harder to reach because they operate in the informal sector. Countries are channeling support through institutions that serve these groups, such as micro-credit institutions and informal sector organizations. Governments can, for example, provide grants or guarantees for bank lending to formal and informal microenterprises and SMEs (*Gambia, Malaysia*) or give temporary relief on payments such as rent and utilities. In some cases, these measures may need to be accompanied by direct support to informal workers.

### Phase 3: The Pandemic under Control

When vaccines and therapies become widely accessible, the goal will be to promote an inclusive and green recovery and structural transformation of the economy, while addressing the legacies of the crisis, including by unwinding government interventions and tackling higher corporate and public debt.

### Support the Recovery while Ensuring Debt Sustainability

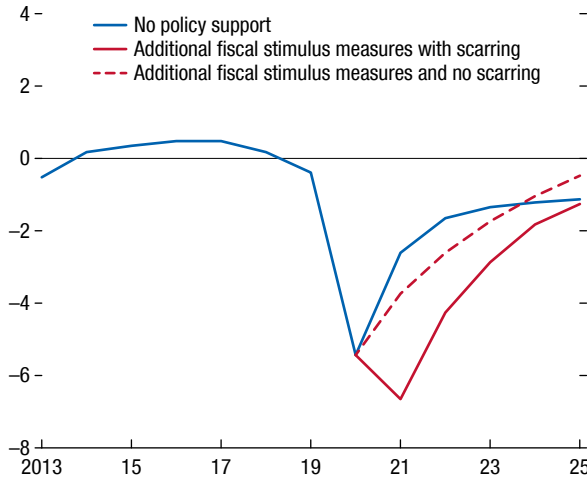
The appropriate stance of fiscal policy will depend on access to financing, debt levels, and the extent of the scarring of the economy (long-lasting damage from bankruptcies, disrupted supply chains, and discouraged workers dropping out of the labor force).<sup>13</sup> Given the large deficits and jump in debt levels, countries will need to rebuild fiscal buffers over the medium term. However, tightening too fast could undermine the recovery and efforts to foster job creation, which is critical to reduce poverty. For countries with fiscal space and deeper scarring, temporary expansionary measures—implying a slower reduction in the fiscal deficit and a further increase in debt in the short term—would appropriately balance the pro-growth

<sup>13</sup>Such scarring—or “hysteresis” in the economic literature—reflects persistent declines in potential output caused by a temporary shock (Blanchard and Summers 1986; Cerra and Saxena 2008), in this case the pandemic.



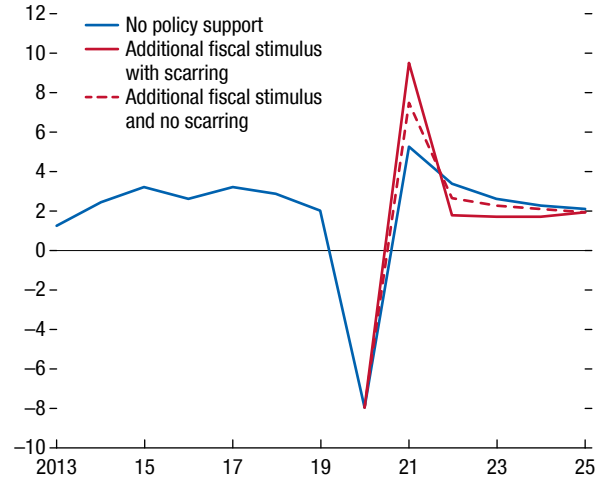
**Figure 1.18. Pace of Fiscal Adjustment, 2013–25**  
(Normative structural primary balance in percent of potential GDP)

Concerns with long-term scarring from the pandemic justify more gradual fiscal adjustment ...



**Figure 1.19. Economic Growth, 2013–25**  
(Percent change in GDP)

... allowing for a stronger economic recovery.



Sources: Fournier 2019; and IMF staff estimates.

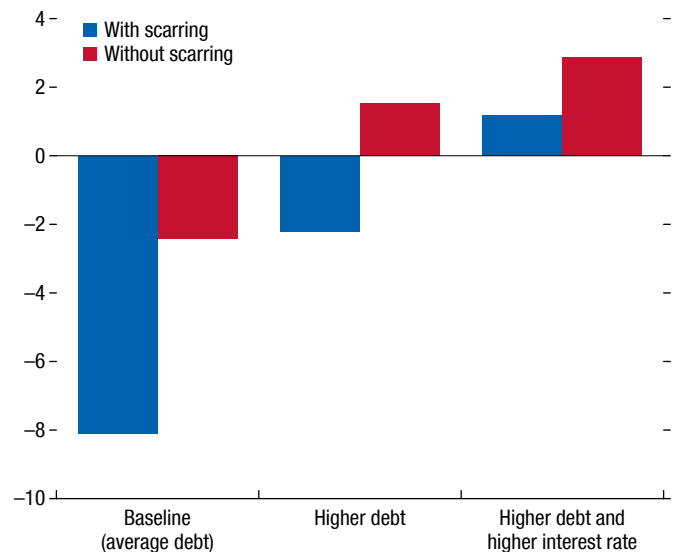
Note: Figure 1.18 shows a normative fiscal adjustment path with discretionary stimulus in the first few years for an advanced economy with an average debt level (baseline) at 80 percent of GDP. Figure 1.19 shows the GDP growth path for each adjustment path. Scarring reflects a permanent negative effect of a large negative output gap on the level of potential output (see Online Annex 1.4). The simulations show desirable policies based on a model where governments pursue both economic stability and debt sustainability.

and debt sustainability objectives over the medium term (Figures 1.18 and 1.19).<sup>14</sup> For countries with limited fiscal space—especially those with tighter financing constraints—fiscal deficits would need to be reduced faster to prevent debt distress or increases in borrowing costs that could derail the recovery (Figure 1.20).

For many developing economies, a significant impact of the crisis has been through sizable external shocks that involve further challenges. For example, for countries with a large share of government debt denominated in foreign currency, a more cautious fiscal stance will be needed because of possible effects of a currency depreciation (Online Annex 1.4). Countries with greater reliance on sectors facing more persistent negative impacts will face the greatest challenge: managing a weaker economy with tighter fiscal constraints (for example, receipts from oil exports or tourism may

**Figure 1.20. Fiscal Support and Scarring**  
(Normative change in structural primary balance relative to no-policy-change scenario over 2021–23 in percent of potential GDP)

The appropriate pace of adjustment also depends on initial debt levels and financing constraints.



Sources: Fournier 2019; and IMF staff estimates.

Note: The figure shows differences in adjustments for higher debt levels, interest rates, and scarring (hysteresis) relative to baseline (Figure 1.18). The high debt level is at 140 percent of GDP. High interest cost refers to an addition of 1 percent compared with the baseline on average. Scarring reflects a permanent negative effect of a large negative output gap on the level of potential output (see Online Annex 1.4). The simulations show desirable policies based on a model where governments pursue both economic stability and debt sustainability.

<sup>14</sup>Figures 1.18 through 1.20 show normative model simulations of desirable policies for a government that pursues both economic stability and debt sustainability. A large countercyclical fiscal response is recommended in the present environment given the large recession, but the size will depend on how close public debt is to levels that could trigger a debt crisis or loss of market access. At lower debt levels, the degree of scarring reinforces the motive to counter negative shocks. See also Online Annex 1.4.

remain depressed for longer). Under these circumstances, the composition of fiscal adjustment will become central to avoid undermining the recovery (see later discussion).

For many emerging market and developing economies, the pandemic has imposed a major setback in their plans to achieve the Sustainable Development Goals (SDGs) by 2030. The setback points to the urgency of making renewed efforts to reach those objectives. These countries will need to boost revenue capacity and seek sustainable financing, including development aid. Many low-income developing countries are in or at high risk of debt distress, and some will require upfront adjustments. The international community's cooperation will be critical for some of these economies to recover from the pandemic and to achieve the SDGs, especially to reduce poverty and hunger. This includes support for debt relief (for example, the Debt Service Suspension Initiative), including private sector participation.

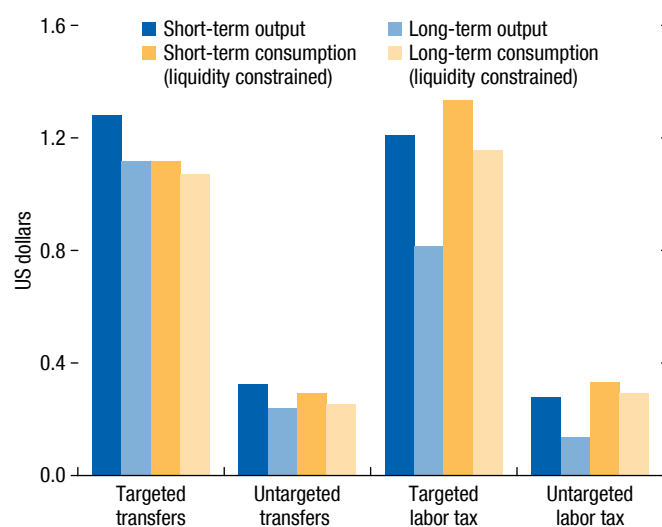
### Stimulus Measures Should Be Cost-Effective and Targeted to Lower-Income Households

As supply disruptions diminish, a temporary fiscal stimulus could have a powerful multiplier effect on aggregate demand and output. This is particularly the case in countries that face low interest rates partly because of a savings glut, reflecting high savings levels among high-income households and low private investment given the uncertain outlook. High public debt levels and precautionary savings, however, could reduce multipliers (Ilzetzi, Mendoza, and Vegh 2013; Fotiou, Shen, and Yang 2020).

The choice of fiscal instruments will determine the impact of any fiscal package on economic growth and job creation. Targeted transfers (for example, enhanced social safety nets) and income tax cuts for low-wage workers can boost consumption in the poorest households, resulting in higher short-term multipliers (Figure 1.21; Online Annex 1.5).<sup>15</sup> Temporary provisions for accelerated depreciation or investment tax credits can reduce the cost of capital and encourage frontloading of

<sup>15</sup>The multiplier estimates assume an environment of low growth and low interest rates, and one in which poorer households are cash constrained.

**Figure 1.21. Targeted Measures Have a Greater Impact (Fiscal Multipliers) on Output**  
(Increase in output per US\$1 of stimulus)



Source: IMF staff estimates.

Note: The tax multipliers plotted are converted such that a positive number refers to an increase in a variable in response to a tax cut measure. Short (long)-term multipliers refer to cumulative multipliers at the end of one (five) years (see Online Annex 1.5 for details).

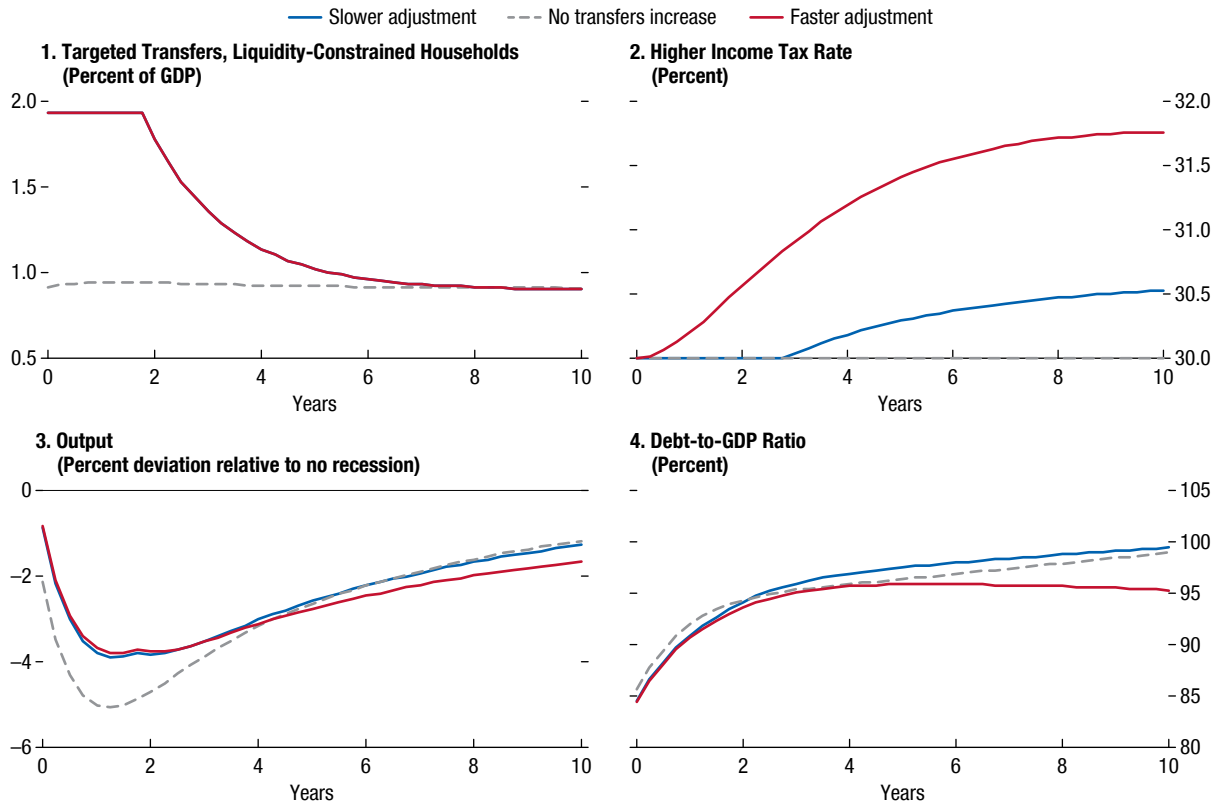
private investment (Rochelle and Rudd 2011; Zwick and Mahon 2017). Meanwhile, active labor market policies (including those that help workers acquire new skills) would support reallocation of workers to more productive and better-quality formal jobs and higher earnings.

For countries with limited space to borrow, combining fiscal instruments could help achieve policy objectives while containing public debt. An option to reduce the consumption and output drop in the short term would include, for example, a rise in targeted transfers to protect the most vulnerable, financed by progressive income taxes. The tax increases could be legislated now to become effective a few years later (Figure 1.22), or they could be implemented immediately if reducing debt is urgent. Another option is to finance additional public investment with higher indirect taxes (see also Chapter 2).

### Unwind Government Interventions in the Corporate Sector

As the recovery gets under way, unwinding the large public interventions in firms and managing the associ-

**Figure 1.22. Impact of a Fiscal Package on Output and Government Debt**  
(Percent)



Source: IMF staff estimates.

Note: The figure shows three scenarios: (1) no fiscal package (no additional transfers and no tax increases); (2) slower adjustment, which includes a fiscal package of higher transfers and a gradual increase in taxes on the high-income group as debt rises; and (3) a faster adjustment scenario where higher transfers and taxes are raised from year 1 and more aggressively as debt rises (see Online Annex 1.5). The output impact is relative to a scenario without the pandemic (no recession).

ated fiscal risks becomes a priority.<sup>16</sup> An effective debt resolution system, including a streamlined restructuring framework and institutional capacity to manage a large number of bankruptcies, can promote a smooth reallocation of resources to more productive uses (Bergthaler and others 2015; Liu, Garrido, and DeLong 2020). Governments, as one of the main creditors for SMEs, can also directly facilitate the debt restructuring process, but this would require accepting losses from unpaid taxes and loans granted during the pandemic.<sup>17</sup>

<sup>16</sup>Government ownership tends to be associated with weaker firm performance and can distort competition, ultimately undermining economic growth (see the April 2020 *Fiscal Monitor*).

<sup>17</sup>The debt restructuring should be authorized by legislation and the process surrounding the restructuring should be carefully circumscribed in order to ensure appropriate accountability and transparency.

### The Recovery Can Enable Building a More Inclusive and Green Economy

The present crisis has exposed the risks of inaction and the need for ambitious reform agendas—including investment in human and physical capital—to make crises less frequent and damaging, and make economies more resilient by addressing poverty and inequality, as well as climate change. As economies become more digital and firms and sectors are transformed, ensuring that the post-pandemic economy becomes more inclusive and green will require reorienting expenditures toward investment in people and raising equitable revenues.

- Progressive income taxation and education and health spending are two of the most important fiscal policy tools for addressing income inequality (October 2017 *Fiscal Monitor*). In particular, reducing health and

education gaps, through reallocating public education and health spending to the poor, can contribute to reducing inequality and promoting economic growth.

- Moreover, investment in physical capital will need to be increased and reoriented toward job-rich, highly productive, and greener activities (Chapter 2). Likewise, tax systems will need to be reshaped to finance these priorities in ways that maintain social cohesion and help to curb carbon emissions.

*Enhance social protection systems.* The crisis has laid bare structural gaps in social protection systems contributing to a rise in inequality. The broader policy goal is to ensure that all have access to basic goods (for example, food and shelter) and services (for example, health and education) during crises. Additional spending is needed on social protection, which could be partly financed by progressive taxes. For example, an additional 1 percentage point of social spending to GDP can reduce extreme poverty headcount by 6 percentage points on average across emerging market and developing economies (Online Annex 1.1). Even when social spending cannot be increased, some countries have scope to consolidate inefficient and fragmented programs to enhance capacity to reach larger shares of the population.

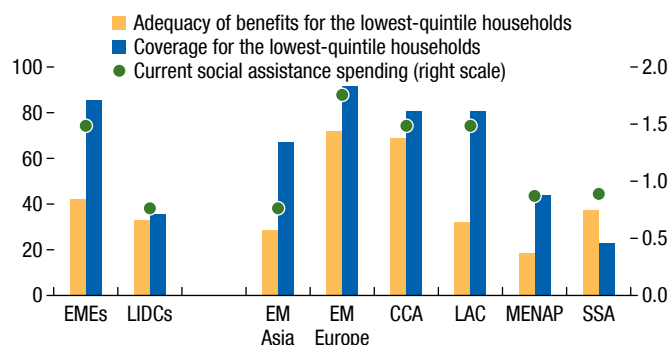
Emerging market and developing economies that have less-developed safety nets can strengthen the capacity to reach, target, and deliver benefits to the most vulnerable households (Figure 1.23, Online Annex 1.1). This involves reliable universal identification systems, safe and transparent delivery, and up-to-date and integrated socioeconomic data to help identify vulnerable households and provide timely and adequate safety nets (for example, digital transfers). Advanced economies with stronger safety nets need to improve the outcomes of existing programs by extending coverage through enhanced means testing and better preserving work incentives (McKay and Reis 2016; Landais, Michailat, and Saez 2018).

*Invest in a green and sustainable future.* Reducing emissions and adapting to climate change remain critical and urgent challenges when the pandemic is under control (see the October 2020 *World Economic Outlook*). The recovery from the current

### Figure 1.23. Adequacy and Coverage of Social Protection Programs

(Percent, left scale; percent of GDP, right scale)

Social protection programs in low-income developing countries have low coverage and in many emerging market developing economies provide insufficient benefits.



Sources: World Bank PovcalNet database; IMF, World Economic Outlook database; and IMF staff estimates (see Online Annex 1.1).

Note: Adequacy is the total transfers received by beneficiaries as a share of the pretransfer total income in the lowest-income quintile of individuals. Coverage is the share of the lowest-quintile individuals who receive social protection benefits. CCA = Caucasus and Central Asia; EM = emerging market; EMEs = emerging market economies; LAC = Latin America and the Caribbean; LIDCs = low-income developing countries; MENAP = Middle East, North Africa, Afghanistan, and Pakistan; SSA = sub-Saharan Africa.

health crisis is an opportunity to move away from the precrisis growth model, especially regarding climate change. Government plans to promote the recovery are an opportunity to accelerate the transition to a low-carbon economy (The Coalition of Finance Ministers for Climate Action 2020). More robust carbon pricing should be at the core of the policy response: it encourages people and firms to reduce energy use and shift to cleaner alternatives. It also generates revenues that can be used as part of a fiscal package that is both efficient and equitable (see the October 2019 *Fiscal Monitor*). Other key measures include reducing subsidies or tax incentives for emissions-intensive activities, and investing in clean energy infrastructure, which can create new jobs, and likely crowd in private sector investment (Chapter 2).

The next chapter develops one element of the fiscal roadmap for the recovery in greater depth: investment for a more resilient, more inclusive, and greener economy.

**Box 1.1. Private Debt and Public Sector Risk**

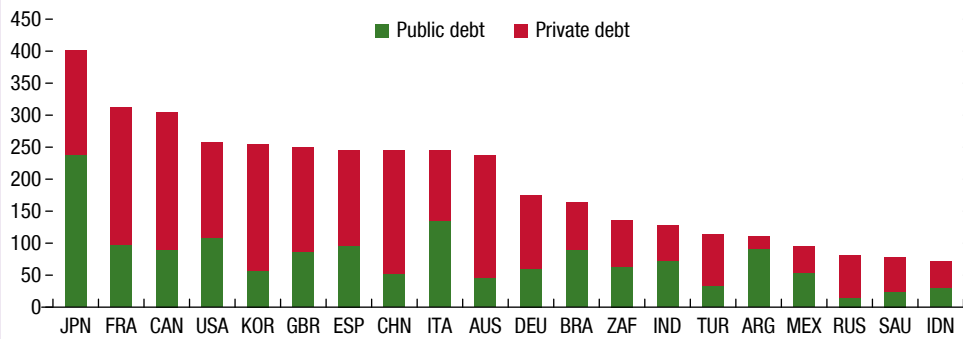
Private sector debt vulnerabilities were elevated before the coronavirus disease 2019 (COVID-19) pandemic. Nonfinancial corporate and household debt has trended upward for two decades, reaching almost 150 percent of GDP in 2019 and exceeding public debt by a large margin in most Group of Twenty countries (Figure 1.1.1). The quality of corporate debt had also been deteriorating in many countries even before the pandemic. Corporate speculative-grade debt as a share of total corporate debt—a leading indicator of corporate sector distress—was nearly 50 percent in *China* and the *United States* and even higher in *Italy* and the *United Kingdom* (see the April 2019 and October 2019 *Global Financial Stability Reports*). These factors may have limited the size and scope of government support to firms during the COVID-19 crisis.

The monetary policy response to the pandemic has sustained the issuance of corporate debt. The first half of 2020 saw the most intense burst of capital-raising in history, with \$5.4 trillion secured by companies across the globe, including \$3.9 trillion since the start of March. But signs of corporate liquidity pressures and growing corporate solvency risk are mounting (see the October 2020 *Global Financial Stability Report*). The US high-yield bond market has already surpassed leverage levels seen during the 2008 financial crisis in terms of the ratio of companies’ gross debt to their earnings before interest, tax, depreciation, and amortization.

Several studies warn against the risks of excessive private borrowing (Gourinchas and Obstfeld 2012; Jordà, Schularick, and Taylor 2016; Koo 2008; Reinhart and Rogoff 2011). Excessive private debt can suppress growth and migrate to the public sector balance sheet through three channels: (1) direct public support to the corporations or their creditors, (2) calls on public guarantees on private debts, or (3) countercyclical fiscal response to corporate deleveraging episodes (Mbaye, Moreno Badia, and Chae 2018). For example, cumulative gross support to financial institutions in 37 countries following the global financial crisis was \$3.5 trillion (Igan and others 2019). Since the start of the COVID-19 pandemic, some banks have already started to provision more for expected losses on their loans (see the June 2020 *Global Financial Stability Report Update*). Also, in response to the pandemic, governments have announced guarantee programs equivalent to \$3.8 trillion that could be exercised.

Risks from high private debt may ultimately require fiscal action to help repair private balance sheets (see the October 2016 *Fiscal Monitor*). Also, policies that support equitable and rapid bankruptcy procedures can help. For strategic or systemic firms with unsustainable debt, it may be in the public interest for governments to absorb some of the debt. However, direct support for firms should not bail out owners (Bernardo, Talley, and Welch 2016). Looking forward, public policies that encourage debt accumulation, such as the deductibility of interest for tax purposes, could be reconsidered (De Mooij 2012).

**Figure 1.1.1. Total Debt in G20 Countries, 2019**  
(Percent of GDP)



Source: IMF Global Debt Database.  
Note: Data labels use International Organization for Standardization country codes. G20 = Group of Twenty.



### Box 1.2. How Green Is the Fiscal Response to the COVID-19 Crisis?

Fiscal policy across the globe has rightly focused on fighting the economic crisis induced by the coronavirus disease 2019 (COVID-19) pandemic. But the need for decisive policy action to address the climate change crisis remains. Given the large size and range of countries' fiscal responses, decisions made now may shape the climate for decades. An initial assessment, however, indicates that little of the response to the COVID-19 crisis to date has been "green".

The greenness of the fiscal response has varied across the Group of Twenty (Figure 1.2.1). *France* allocated almost 1 percent of GDP to green measures, whereas many countries had no climate-positive (green) measures or significant climate-negative (red) measures. Green measures were mostly direct budget expenditures such as incentives for more energy-efficient vehicles (*China, France, Italy*). Countries have also provided loans and grants for green investments, such as cleaning inactive oil wells in *Canada*, modernizing commercial vehicles in *Germany*, and building climate-resilient infrastructure in *Japan*. Negative measures have been

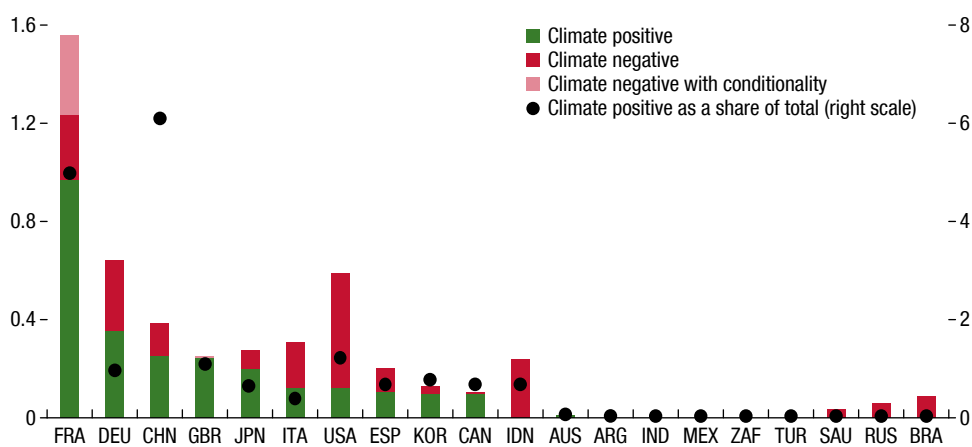
mainly bailouts, such as those for airlines in *Brazil, China, and France*. To date, only *France* attached significant green conditionality to its bailout.

With countries still shaping their post-pandemic policies and moving from crisis containment to recovery, there is great scope and need to green the response. Indeed, the *European Union* announced a 30 percent green spending target for its 5.5 percent of GDP stimulus package. Undertaking and publishing climate impact assessments and introducing green budgeting would also increase transparency, awareness, and accountability for climate-sensitive policymaking.

As examples of what can be done, following the global financial crisis, *Korea* launched a multiannual large-scale infrastructure program with a focus on climate-relevant public infrastructure (for example, river restoration) (Kamal-Chaoui and others 2011); and the *United States* leveraged its support of auto firms to introduce tougher emissions standards in a "green-bargain" with the industry (Weiss and Weidman 2012; Strecker and Meckling 2020).

**Figure 1.2.1. Climate Relevance of Fiscal Measures in the G20 Related to the COVID-19 Crisis**

(Percent of GDP, left scale; percent of total, right scale)



Source: IMF staff.

Note: Data labels use International Organization for Standardization country codes. Measures are categorized into positive and negative policy "archetypes," based on the climate relevance of specific activities. A similar methodology is applied in the Greenness of Stimulus Index (<https://www.vivideconomics.com/casestudy/greenness-for-stimulus-index>).

**Box 1.3. An Unprecedented Fiscal Response: A Closer Look**

The global fiscal response to the pandemic has been unprecedented. By September 11, 2020, countries had announced discretionary fiscal measures averaging close to 12 percent of GDP. The size and scope of fiscal support has varied vastly across countries.

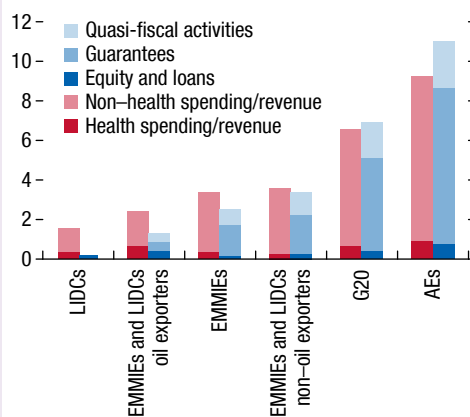
In *advanced economies*, where the pandemic hit earlier and harder, and where financing conditions are favorable, direct budget support committed through September 11 is equivalent to 9.3 percent of GDP (Figure 1.3.1). A large part of this support is aimed at workers and their employers (Figure 1.3.2) through wage subsidies (*Australia, Canada, Japan*), including short-term work schemes (*France, Germany, Spain, United Kingdom*), and forgivable loans contingent on employment protection (*United States*). Support to households has also been significant, including the expansion in size, eligibility, or duration of unemployment benefits (*France, Japan, Spain, United States*); sickness, family, and childcare benefits (*Japan, Spain, United Kingdom, United States*); and cash transfer schemes (*Canada, Japan, Spain, United States*). Another 11 percent of GDP has been committed to liquidity support: examples include equity injections, particularly for the hardest-hit companies such as airlines (*France, Germany, Scandinavia*), and to a larger extent, loans and

guarantees (*France, Germany, Italy, Spain*), often through quasi-fiscal activities (*Japan, Korea*).

In *emerging market and middle-income economies*, where the severity of the pandemic and financing conditions have varied widely, total fiscal support through September 11 amounts to about 6 percent of GDP, 3.5 percentage points of which is committed on budget. Oil exporters facing a double shock from the pandemic and low oil prices have on average deployed smaller fiscal packages (Figure 1.3.1), prioritizing health spending in some cases (*Iran, Saudi Arabia*). Among emerging markets, budget measures have consisted largely of public works (Figure 1.3.2), typically aimed at infrastructure investment to support the recovery (*Argentina, China, Indonesia*). Also playing a significant role in fiscal packages have been job retention schemes, including forgivable loans (*Mexico, Russia*) and wage subsidies (*Argentina, Saudi Arabia, Turkey*), as well as support to households through expanded unemployment benefits (*China, Indonesia, Russia*) and targeted cash and in-kind benefits (*Argentina, Brazil, India, South Africa*). Public sector equity injections, loans, and guarantees have on average been modest compared with those in advanced economies, exceeding 5 percent of GDP in only a few cases (*Brazil, Peru, Turkey*).

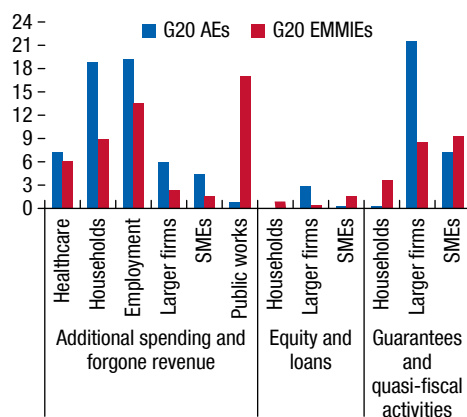
**Figure 1.3.1. Breakdown of Fiscal Support, by Type**

(As of September 11, 2020; percent of GDP)



**Figure 1.3.2. Distribution of Fiscal Support, by Beneficiary**

(As of September 11, 2020; percent of total)



Sources: *Fiscal Monitor* Database of Country Fiscal Measures in Response to the COVID-19 Pandemic (<https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19>); and IMF staff estimates. Note: Country group averages are weighted by GDP in US dollars adjusted by purchasing power parity. AEs = advanced economies; COVID-19 = coronavirus disease 2019; EMMIEs = emerging market and middle-income economies; G20 = Group of Twenty; LIDCs = low-income developing countries; SMEs = small and medium enterprises.

**Box 1.3 (continued)**

In *low-income developing countries*, where the pandemic has hit later and financing constraints are tighter, total fiscal support announced through September 11 is 1.8 percent of GDP, largely through budgetary measures. Of these, spending on health services has amounted to 0.3 percent of GDP.

A large share of fiscal support has also been allocated to protecting households, including cash and in-kind (food) transfers (*Bangladesh, Ethiopia, Kenya, Nigeria, Senegal*), temporary unemployment benefits (*Honduras, Vietnam*), and utility (water, electricity) subsidies (*Ghana, Senegal*).

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